



North College MAX BRT

Final Plan Report



February
2023

PREPARED FOR



CONSULTANT TEAM



INSTITUTE
FOR THE BUILT
ENVIRONMENT



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Executive Summary

The North College MAX Bus Rapid Transit (BRT) Plan makes recommendations for the future of transportation and land use on North College Avenue, from approximately Willow Street to Terry Lake Road. MAX BRT on North College Avenue is an important project to emerge from the city's Transit Master Plan and is consistent with City Council Priorities and Strategic Plan objectives, Our Climate Future, and the city's equity goals.

The future vision for the corridor is that it will:



Be a **gateway** into the City of Fort Collins.



Include a **safe, comfortable, and convenient** transportation network for people taking transit, using active modes, and driving.



Stay **affordable** for residents and local businesses.



Grow in a way that **protects the natural environment and the local community.**



Provide ample **services, places to live, employment opportunities, and spaces for recreation.**



Display its own unique local character.

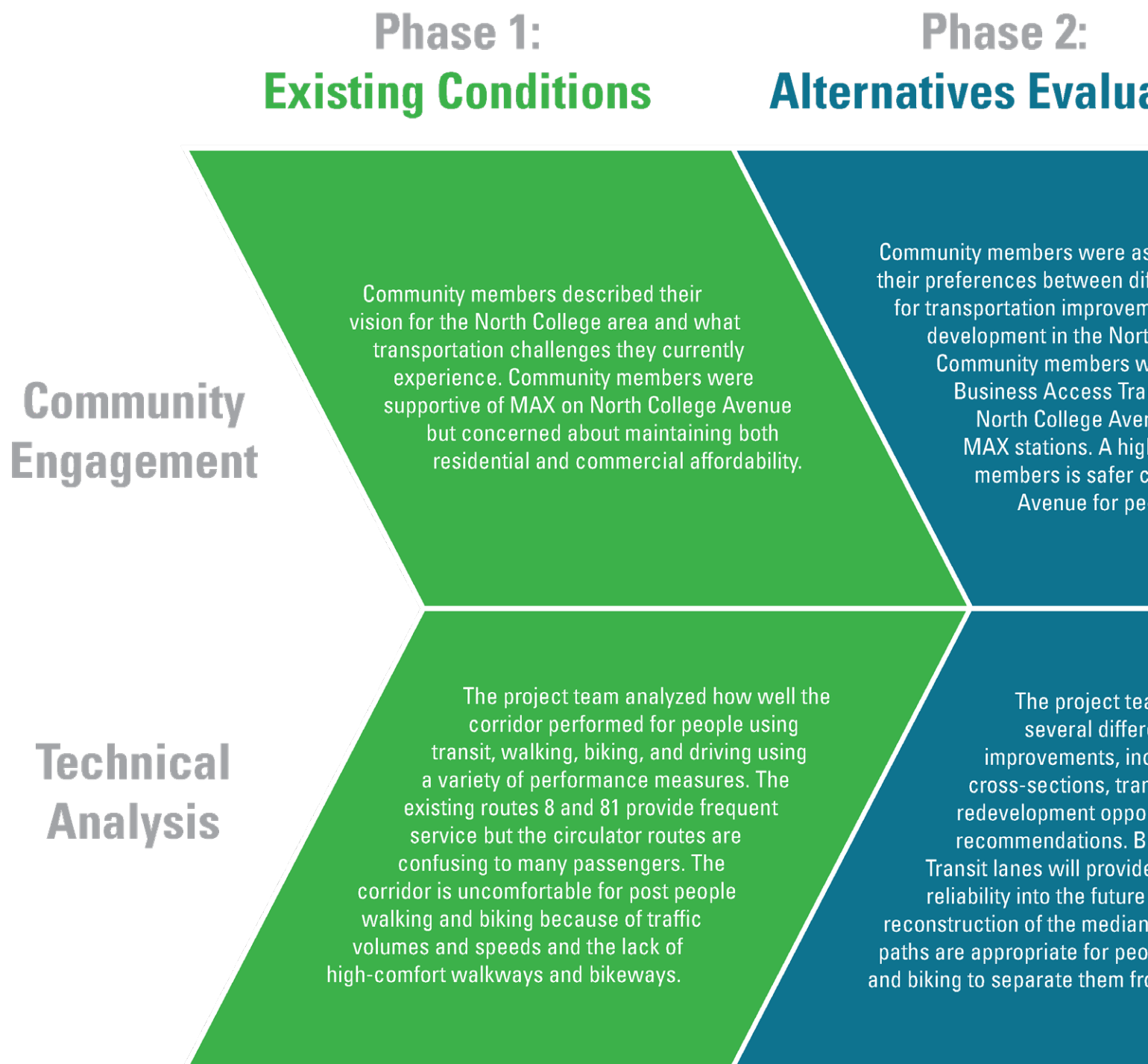


The project's three phases of community engagement each involved 300-500 individuals to shape this plan. Additionally, the project team completed a robust technical process including existing conditions analysis, alternatives evaluation, and final recommendations. This plan's recommendations are supported both technically and by the community because of this process.

The key elements of MAX BRT on North College Avenue are BRT service with Business Access Transit (BAT) lanes, MAX stops and stations, and shared use paths for people walking and biking. Transit Oriented Development (TOD) urban design and land use strategies will increase the area's population and employment. Lastly, a host of strategies will help preserve and increase affordability in the North College area as the area grows. Transportation and land use change in the area will happen over time. The plan's most significant cost, the construction of BRT on North College Avenue, is estimated to cost \$22 million in 2022 dollars.

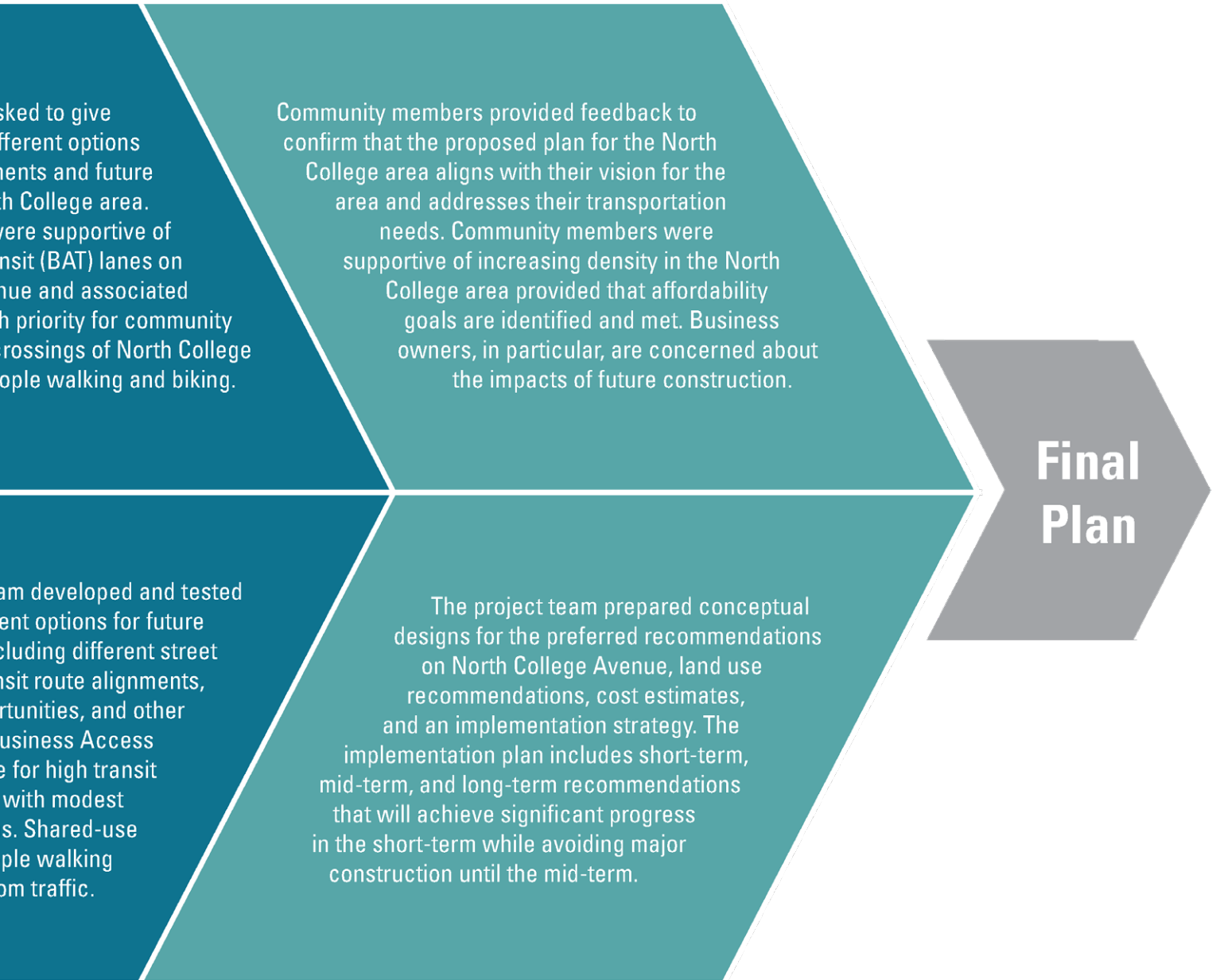
The plan development process included robust community involvement and technical analyses, both of which occurred across three phases.

Figure I: Plan Development Process



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Phase 3: Final Recommendations



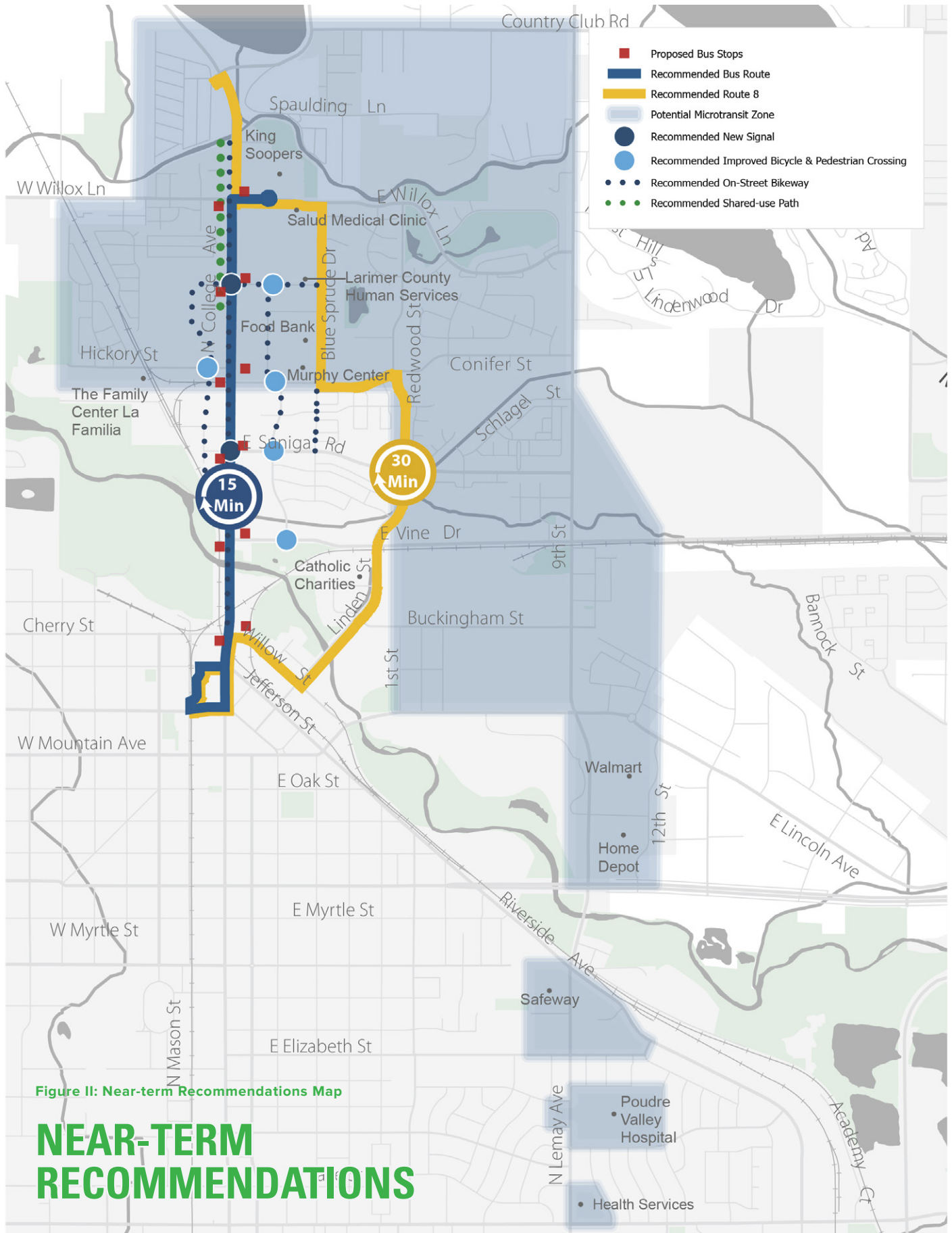


Table I: Near-term Recommendations Summary

Near-term Plan Recommendations Summary

Near-term investments will cost approximately \$3 million in capital costs and \$750,000 per year in operating costs for microtransit service.

- Create a new high frequency bus route on North College Avenue in the existing general purpose travel lanes at 15-minute frequency
- Consolidate existing local bus stops on North College Avenue at signalized intersections
- Realign route 8 to serve Blue Spruce Drive, Redwood Street, and Linden Street at 30-minute frequency
- Implement a micro-transit zone in the North College area to serve places not well-served by fixed-route transit
- Construct access infrastructure for people walking and biking, including segments of shared use path north of Hibdon Court, new signals on North College Avenue, interim protected bike lanes on North College Avenue, and improved bikeways, walkways, and crossings along streets parallel and connecting to North College Avenue
- As development and redevelopment occur, construct access infrastructure for people walking and biking along Mason Street and Red Cedar Circle
- Adopt amendments to the Mason Street realignment identified in the Master Streets Plan
- Implement Transit Oriented Development (TOD) strategies including a TOD overlay; change setback and height standards; establish connectivity, outdoor space, and dominant block face requirements; adjust Architectural Standards; and create incentives to preserve existing commercial buildings
- Implement strategies to preserve and increase affordability, including applying the Urban Renewal Authority's tools, requiring considerable public benefits from metro districts, rezoning the North College Mobile Home Park, leveraging the city's land bank, and establishing an affordable housing goal for the area

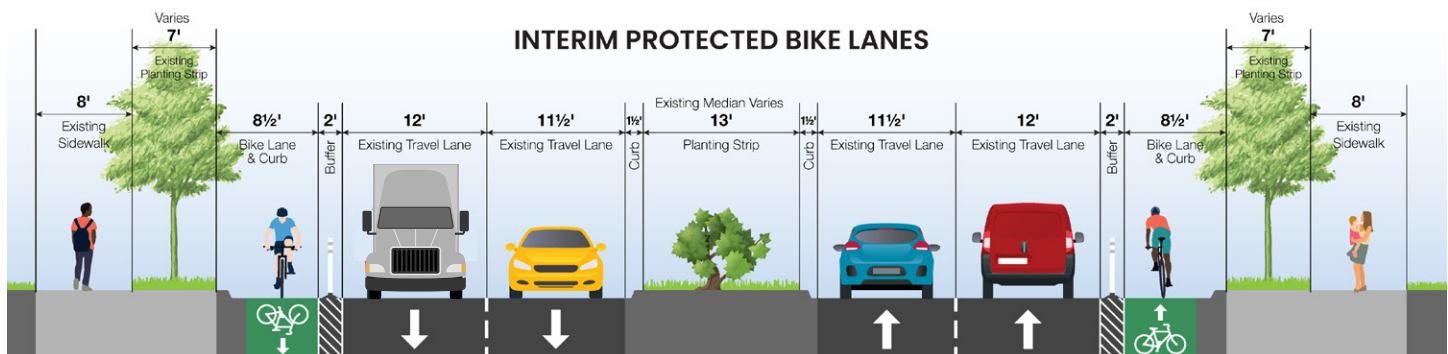
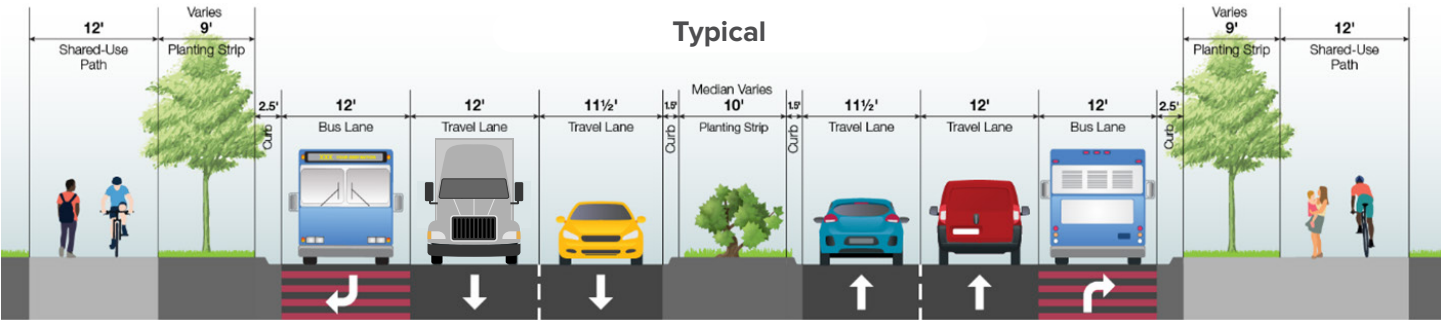
Figure III: Interim Protected Bike Lane Cross-section



Table II: Mid-term Recommendations Summary

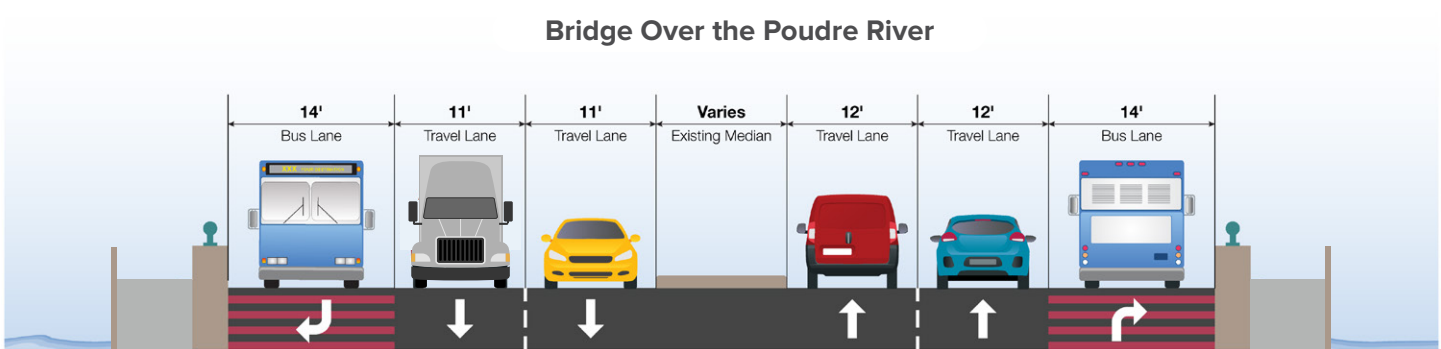
Mid-term Plan Recommendations Summary
<p>Mid-term transit investments will cost approximately \$22 million. Multiple conditions could create the conditions for the mid-term transit investments. The purposes for a phased approach with conditions are to effectively allocate scarce city resources and to postpone construction impacts to property owners who endured construction just seven years ago.</p> <p>Conditions are: corridor ridership approaches 1,000 boardings per day; intersection approaches (e.g., northbound approach, southbound approach) on North College Avenue experience level of service F conditions; corridor population and employment approximately doubles from current levels, or major rehabilitation maintenance of the corridor creates an opportunity to “one-build” the project.</p> <ul style="list-style-type: none">• Construct Business Access Transit (BAT) lanes, MAX stations with mobility hubs, and complete shared-use paths on North College Avenue• Acquire property for and construct a bus turn-around north of Terry Lake Road• Increase bus frequency (15-minutes on North College Avenue and 15-minutes on Route 8) and service hours• Create a mobility hub near the Willox Lane roundabout in conjunction with redevelopment of the former Albertson’s• Construct medians south of Conifer Street• Provide regional stormwater detention• New regional transit to Wellington

Figure V: Typical North College Avenue BAT Lane Cross-section



*At signalized intersections, turn lanes will replace the median.

Figure VI: North College Avenue Cross-section at Poudre River Bridge



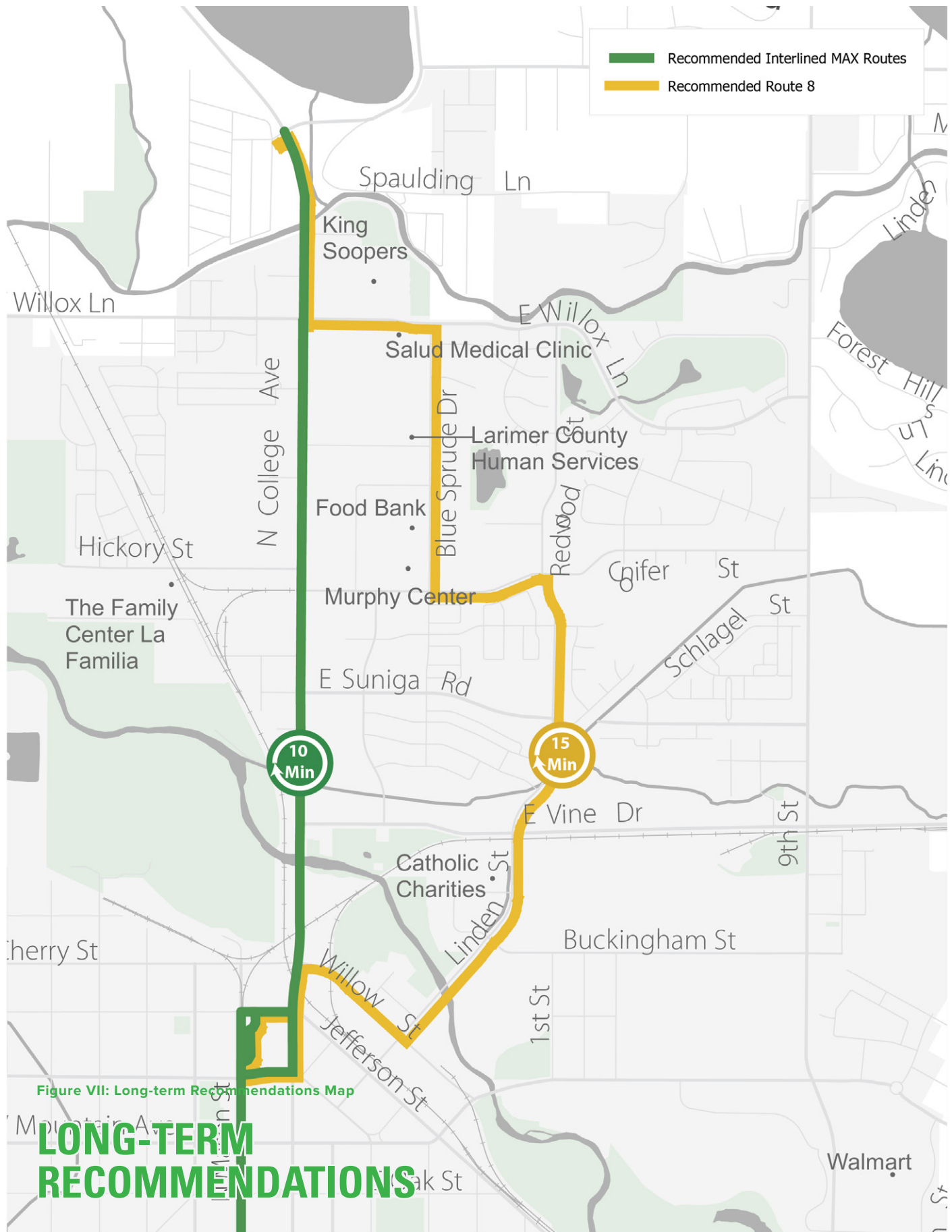


Table III: Long-term Recommendations Summary

Long-term Plan Recommendations Summary
<p>Long-term interlining is estimate to cost an additional \$750,000 per year in operating costs. Long-term interlining of MAX on North College Avenue with MAX on Mason Street could be triggered if North College Avenue ridership approaches 1,500 boardings per day.</p> <ul style="list-style-type: none">• Increase MAX frequency to 10-minutes and evaluate feasibility of interlining MAX on North College Avenue with MAX on Mason Street

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Introduction

Introduction

MAX BRT on North College was chosen as a priority to support our commitment to equity and climate action and because the area is growing in terms of population, employment, and transit ridership.

This report includes the final recommendations for the future of North College Avenue and the commercial areas and neighborhoods surrounding it. The process for the North College MAX Bus Rapid Transit (BRT) Plan began in February of 2021. This process included three separate phases of community engagement, an existing conditions assessment, and an evaluation of different transportation and land use alternatives. The final recommendations for the North College area presented in this report were developed from community members input received and the technical analysis conducted. This report summarizes the process that led to these recommendations and presents the final transportation, development, and funding recommendations. Additionally this plan includes potential phasing and funding sources for all recommendations.

WHY THE NORTH COLLEGE MAX BRT PLAN?

MAX BRT on North College Avenue was chosen as a priority because of the growth and development in north Fort Collins that is occurring today and anticipated to continue for the foreseeable future. This additional growth of residents and workers will require improvements to the multi-modal transportation network in order to maintain efficiency of transportation in the area and shift more people to active modes, including walking, biking, and e-scooters, and public

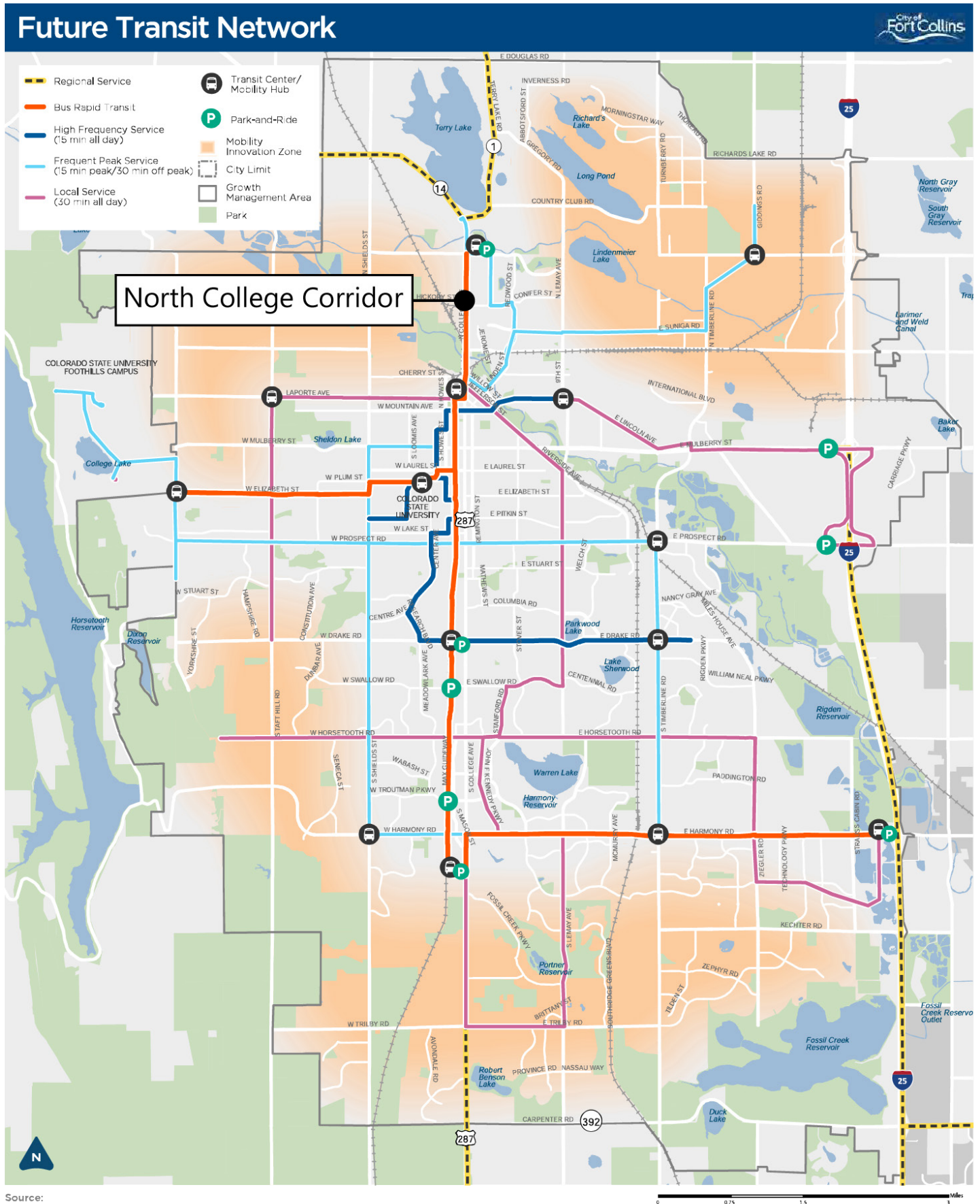
transportation modes when possible. In addition, the city has an opportunity now to help guide new development in the area to better serve community goals like preserving and increasing affordable housing and commercial space, support multi-modal transportation, provide services that support the local community, and increase open space. Furthermore, North College Avenue is a priority for increased transit investments because routes 8 and 81 (which loop through the North College area) are currently some of the most used transit routes in the city.

Equity considerations are a priority when planning in the North College area given the area's high concentration of social service providers, low-income residents, and Spanish speaking populations.

The North College MAX BRT Plan was prioritized for completion over other transit corridors in the city because it presents an opportunity to plan ahead for anticipated growth in north Fort Collins while also addressing existing equity concerns by identifying needed improvements to the multi-modal transportation networks, existing land use policies, and funding and incentives for implementation of these improvements.

The MAX BRT Plan builds on previous planning efforts like the Transit Master Plan and aims to contribute to many of the city's goals including elements of the Council's strategic objectives, the city's climate action goals, and the city's commitment to improving equitable processes and outcomes across the city.

Figure 1: 2019 Transit Master Plan Future Transit Network



TRANSIT MASTER PLAN



The North College MAX BRT was identified as part of the future transit network in the *Fort Collins Transit Master Plan (2019)*. As part of the North College MAX BRT the proposed MAX station adjacent to the King Soopers at 1842 North College Avenue was identified as a future transit center and mobility hub with a park-and-ride. The transit recommendations in this plan are similar to those presented in the *Transit Master Plan* with some adjustments made based

on community input and alternatives evaluation findings. **Figure 1** displays the future transit network from the 2019 plan. The North College MAX route completes the north-south MAX corridor through Fort Collins, creating a spine of rapid transit traversing the city. North College Avenue is a high priority in the city, after West Elizabeth Street which has the city's highest ridership outside of the MAX corridor, and above Harmony Road which has lower ridership and less transit-supportive urban form.

The *Transit Master Plan* also outlines the relationship between land use density

and viability of different transit solutions (see **Figure 2**). In general, areas with higher densities of residents and jobs generate higher demand for transit ridership which requires greater capital investment in transit and more frequent transit service. This concept is key to this study and provided a foundation for the analysis of existing and projected land use development in the North College area and how improvements to the area's land use policies could support a future MAX BRT route on North College Avenue. Today, the North College Avenue area's density is in the range of Mixed Neighborhoods.

Figure 2: 2019 Transit Master Plan - Land-use Densities and Supported Transit Service

Land Use				Transit	
Land Use Type	Example	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
 Downtowns & High Density Corridors		>45	or >25	 BRT  High Frequency Bus  Local Bus	 10 minutes or better
 Urban Mixed-Use		30-45	or 15-25	 BRT  High Frequency Bus  Local Bus	 10-15 minutes
 Neighborhood & Suburban Mixed-Use		15-30	or 10-15	 Local Bus	 15-30 minutes
North College Current Conditions					
 Mixed Neighborhoods		10-15	or 5-10	 Local Bus  Micro-Transit	 30 minutes On demand
 Single Family Neighborhoods		<10	or <5	 Rideshare  Micro-Transit	On demand

CITY COUNCIL PRIORITIES & STRATEGIC PLAN OBJECTIVES

This plan also aims to address City Council's priorities and help work towards the strategic outcomes listed in the Council's *2022 Strategic Plan*. Below is a list of the strategic outcomes most relevant to the recommendations put forth in this plan:



Neighborhood Livability & Social Health

- **1.1:** Increase housing supply and choice and address inequities in housing to ensure that everyone has healthy, stable housing they can afford.
- **1.6:** Transform regulations and revise procedures to increase clarity and predictability to ensure new development advances adopted City plans and policies.
- **1.8:** Preserve and enhance mobile home parks as a source of affordable housing and create a safe and equitable environment for residents.



Culture & Recreation

- **2.5:** Ensure safety and access to and within City parks, natural areas, paved trails, and cultural and recreation facilities for visitors and employees.



Economic Health

- **3.1:** Collaborate with local and regional partners to achieve economic resilience in Northern Colorado.
- **3.3:** Support local businesses by engaging in opportunities for business revival with a focus on the Recovery Plan.



Environmental Health

- **4.1:** Intensify efforts to meet 2030 climate, energy and 100% renewable electricity goals that are centered in equity and improve community resilience
- **4.2:** Improve indoor and outdoor air quality.



Safe Community

- **5.1:** Improve overall community safety while continuing to increase the level of public trust and willingness to use emergency services.
- **5.5:** Provide and maintain reliable utility services and infrastructure that directly preserve and improve public health and community safety.



Transportation & Mobility

- **6.1:** Improve safety for all modes and users of the transportation system to ultimately achieve a system with no fatalities or serious injuries.
- **6.2:** Support an efficient, reliable transportation system for all modes of travel, enhance high-priority intersection operations, and reduce Vehicle Miles Traveled (VMT).
- **6.3:** Invest in equitable access to, and expansion of, all sustainable modes of travel with emphasis on growing transit ridership.
- **6.4:** Support and invest in regional transportation connections.



High Performing Government

- **7.3:** Engage the community more effectively with enhanced inclusion of diverse identities, languages and needs.



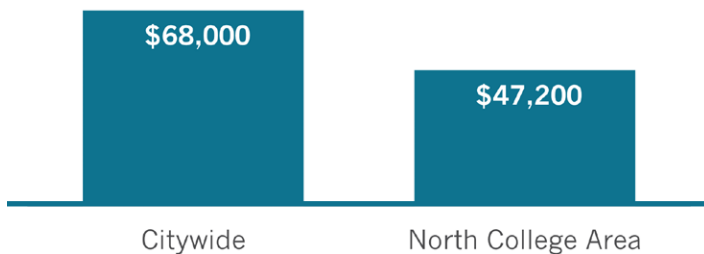
80%

The recommendations in the North College MAX BRT Plan are most relevant to the City's goal of reducing 2030 greenhouse gas emissions by 80% below 2005 baseline levels.

CLIMATE GOALS

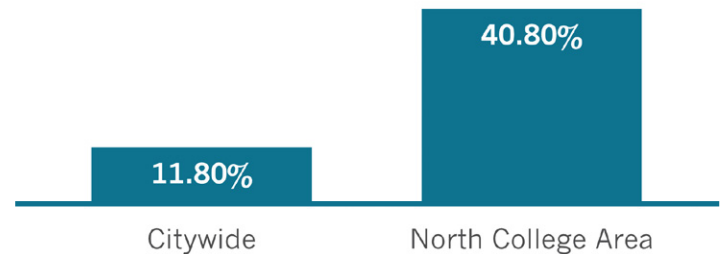
The recommendations in this plan were also developed in an effort to help contribute to the City's climate action goals as described in Fort Collins' Our Climate Future Plan. The recommendations in the North College MAX BRT Plan are most relevant to the City's goal of reducing 2030 greenhouse gas emissions by 80% below 2005 baseline levels. Our Climate Future includes a Big Move to provide convenient transportation choices, including expanding local and regional public transit, continuing to build bicycle facilities, and creating mobility hubs. Additionally, Our Climate Future also includes a Big Move with moves related to increasing the density and mix of land uses. The North College MAX BRT Plan's recommendations include transportation and land use improvements that aim to make it easier, more efficient, and more comfortable to use transit and active transportation modes. Shifting more trips to, from, and within the North College area to transit and active transportation modes will reduce the number of vehicle miles traveled and therefore the greenhouse gas emissions created by ground travel.

Median Household Income



Source: US Census Bureau

Hispanic Population



Source: US Census Bureau

EQUITY

Improving equity is a core priority for the City and was a guiding principal for the process and recommendations for this plan. The public engagement process of this plan integrated equity through outreach to historically underrepresented populations, like people who primarily speak Spanish, mobile home community residents, service industry workers, and patrons of the area's social service providers. Several social service providers are located in the North College area, including Salud Medical Clinic, Larimer County Department of Human Services, Food Bank For Larimer County, Murphy Center for Hope, Catholic Charities of Larimer

County, and The Family Center La Familia. In an effort to make the process more accessible to a wide range of people, a diversity of outreach opportunities were presented throughout the project including online engagement, in-person workshops, and virtual meetings. The Fort Collins Community Connectors handed out flyers to area businesses and went door-to-door to collect community member feedback in neighborhoods with high numbers of underrepresented groups. In addition to the outreach process, improving equitable outcomes was a key consideration throughout this project's recommendation development and technical analysis. The equity considerations that were considered for different recommendations are included in the more detailed discussions of study recommendations later in this report.



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Vision, Purpose, & Need

HAVE A
HEART.
DRIVE
SMART.
YIELD TO
THE BUS.
IT'S THE
LAW.

Vision, Purpose, & Need

The vision for North College Avenue is for a **safe, accessible, and affordable** corridor for people who live, work, and visit the North College area.

The vision, purpose, and need statements below were created using the public input collected and existing conditions analysis conducted in previous phases of this project. The **vision statement** describes the ideal of how the study area should look and function once all of the plan recommendations have been implemented. The **project purpose** outlines this specific plan's role in achieving the vision statements. The **statement of need** summarizes the common themes of existing challenges in the study area.

VISION STATEMENT

The vision for North College Avenue is for a safe, accessible, attractive, and affordable corridor for people who live, work, and visit the North College area. North College Avenue will be a gateway and hub for local and regional transit connections that link people to essential services, recreation, and entertainment.

The corridor will connect to a comfortable and convenient network for people using active modes made up of sidewalks, share-use paths, and bike lanes.

Transit stations will be focal points for new, multi-story development that de-emphasizes surface parking. Corridor development will bring upgrades to infrastructure, improve public space, and fill in existing vacant land and buildings. New development will occur in a way that protects the natural environment and preserves affordability and diversity of residents, local businesses, and service providers. North College Avenue will become a district and destination with its own distinct character that is driven by residents, workers, and local business owners. The corridor will be a safe and comfortable corridor to travel through and a destination for people of all socio-economic statuses, ages, and abilities.

The corridor will:



Be a **gateway** into the City of Fort Collins.



Include a **safe, comfortable, and convenient** transportation network for people taking transit, using active modes, and driving.



Stay **affordable** for residents and local businesses.



Grow in a way that **protects the natural environment and the local community.**



Provide ample **services, places to live, employment opportunities, and spaces for recreation.**



Display its own **unique** local character.

PROJECT PURPOSE

The purpose of the North College MAX Plan is to guide future transit investments and help align policies with those future transit investments.

This plan will provide a roadmap for the City of Fort Collins to make improvements to transportation infrastructure and transit service in the North College area. Additionally, this plan provides recommendations to guide new development in a direction that preserves affordability for residents and local businesses, is supportive of transit and other active modes of transportation and promotes needed services and open space to the surrounding community. In summary, this plan's purpose is to:

- **Guide transportation infrastructure improvements and new development** in a way that allows North College Avenue to continue its evolution as the northern entryway to the city with a positive community look and feel.
- **Plan and provide steps for implementation** for increased transit investment and a multi-modal transportation network in the North College area that is safe, comfortable and convenient for people of all ages and abilities.
- **Build upon citywide efforts to preserve affordability** for residents and local businesses and recommend appropriate strategies for the North College area in particular.
- **Guide new development to provide** affordable housing, essential services, and open space in the area.
- Contribute to numerous other efforts in the North College area to **strengthen its unique local character and sense of place**.

STATEMENT OF NEED

From analyses of community Input (**Appendix A**) and existing conditions (**Appendix B**) the following five statements of need for the North College area were developed:

- **Incomplete multi-modal transportation network** that makes it challenging to comfortably get to, from, and around the North College area by modes other than driving. Additionally, the current network creates many areas of conflict between people driving and people using active modes which impacts efficiency and feelings of safety, especially for vulnerable, active mode users. Additionally, community members expressed that the existing transportation network could be improved to better protect the natural environment.
- **Need for increased investment in transit service** in the North College area. Community members expressed a desire for more frequent and efficient transit service on North College Avenue and the surrounding area with more investments in bus stops, future MAX stations, and security to make them feel safer and more comfortable. Community members also expressed the importance of preserving the existing transit connections to the Poudre Valley Mobile Home Park and social services on Blue Spruce Drive.
- **Lack of comfortable places to walk and bike** in the North College area due to missing or uncomfortable infrastructure, infrequent controlled crossings of roadways (particularly across North College Avenue), and the frequency of driveways that intersect the bike lane and sidewalk on North College Avenue.
- **Desire for redevelopment of vacant properties** to provide new homes, services, and enough travel demand for high-frequency transit.
- **Increasing costs of buying or renting property** for both residents and local businesses, which is making it hard to stay in the North College area and Fort Collins at large, especially for underrepresented populations including people with lower incomes and Hispanic residents.



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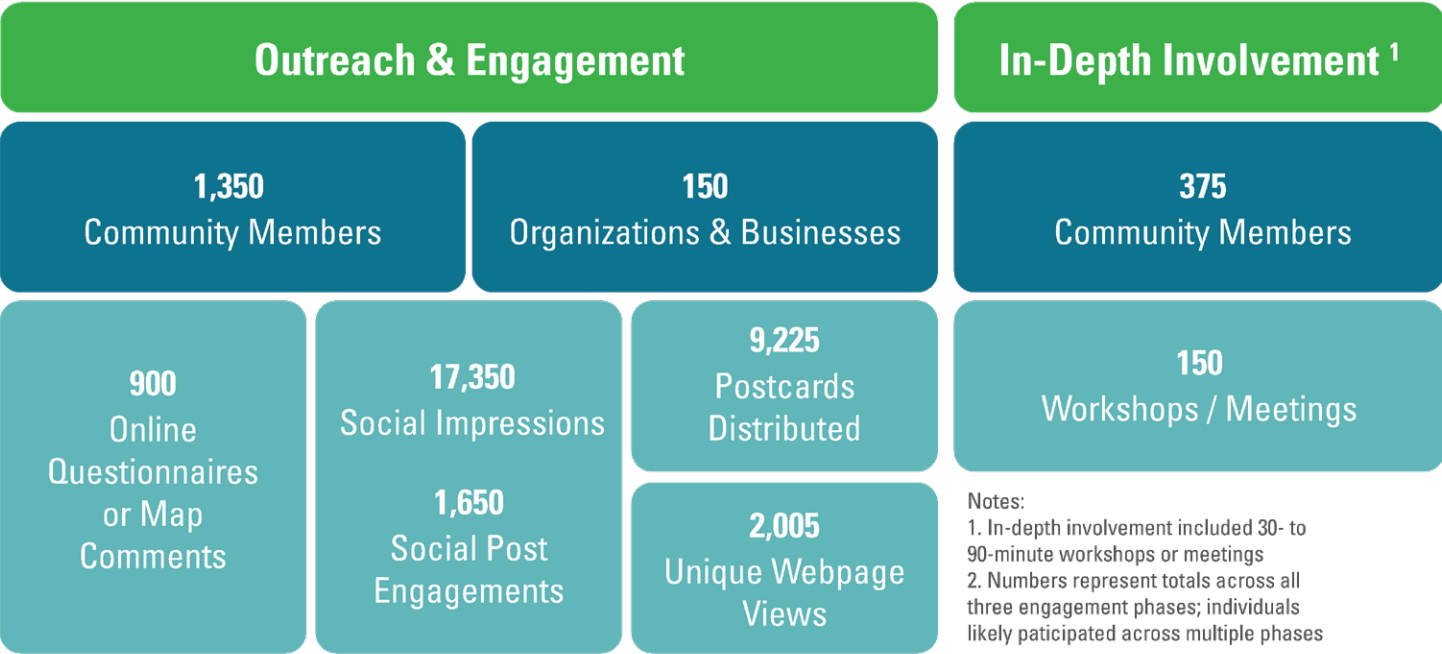
Plan Development

Plan Development

This plan details the final recommendations for the future of transportation and related land use improvements in the North College area. These recommendations were developed and refined through an extensive public outreach process and technical analysis. These processes are summarized in **Figure 3** and more details about each can be found in their respective appendices at the end of this report.



Figure 4: Outreach Summary



Phase 3:
Recommendations

Community members provided feedback to the project team that the proposed plan for the North College area aligns with their vision for the area and addresses their transportation needs. Community members were supportive of increasing density in the North College area provided that affordability goals are identified and met. Business owners, in particular, are concerned about the impacts of future construction.

The project team prepared conceptual designs for the preferred recommendations on North College Avenue, land use recommendations, cost estimates, and an implementation strategy. The implementation plan includes short-term, mid-term, and long-term recommendations that will achieve significant progress in the short-term while avoiding major construction until the mid-term.

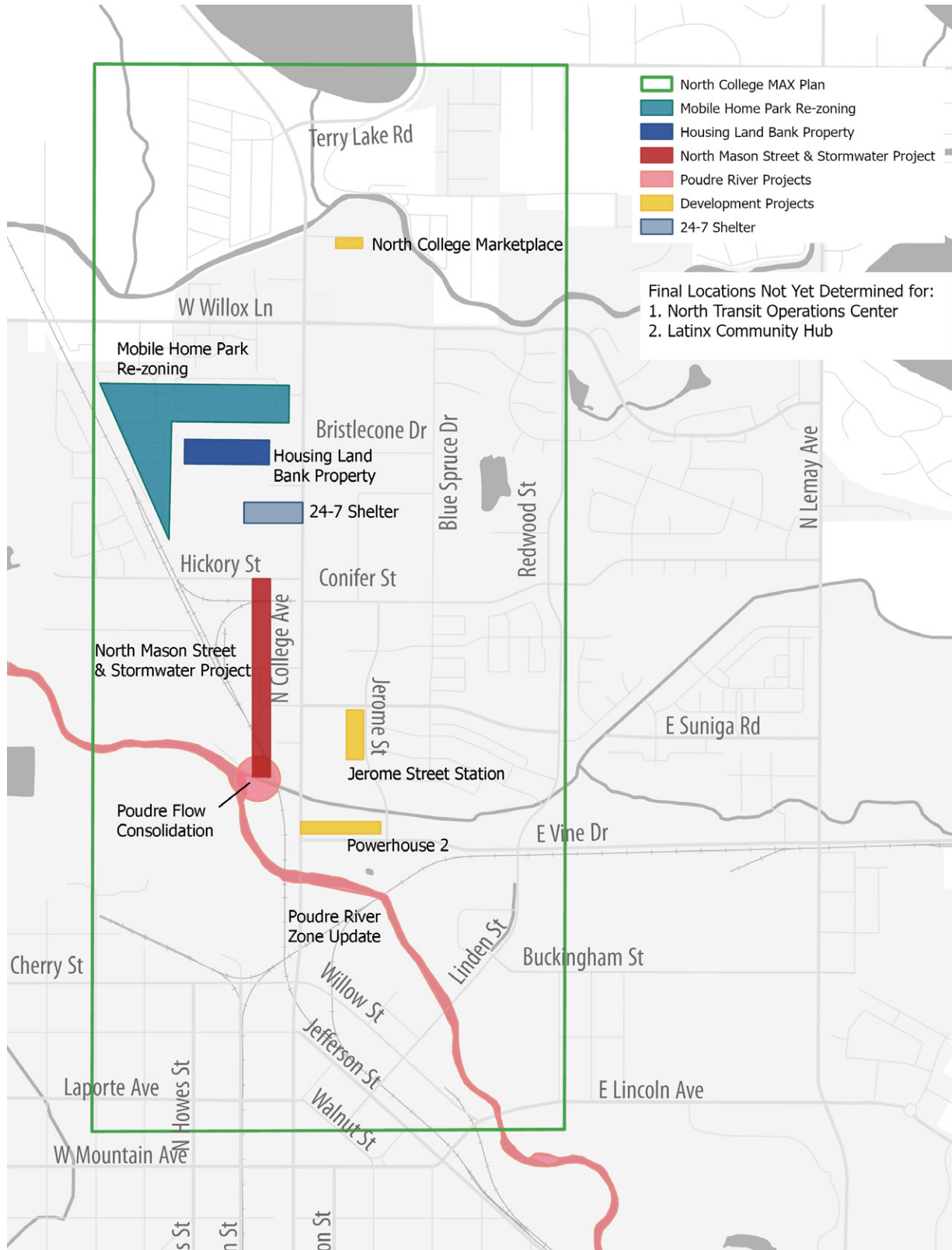
The plan was developed across three separate phases of community engagement and technical analyses. The team implemented an equity-forward community engagement process given the proportion of under-served populations in the North College area. Specifically, community members, community-based organizations, and representatives of the area’s social service providers all participated in the community engagement process. Given the high proportion of Hispanic residents, the team conducted outreach in all phases in both English and Spanish, including door-to-door outreach in the area’s mobile home parks. Lastly, recognizing the value of peoples’ time, compensation was provided to participants of workshops in the form of \$50 grocery gift cards. **Figure 4** summarizes the number of people engaged through different mediums through the community engagement process.



To see more details about each phase of outreach and the results of those efforts see **Appendix A** of this plan. To see more about the technical analysis, see **Appendix B** which includes the Existing Conditions Report and **Appendix C** which includes the Alternatives Analysis Report.

The North College MAX BRT Plan was developed to be consistent with other projects in the area, as shown in Figure 5.

Figure 5: Active Projects in the North College Area







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Transportation Plan Recommendations

Transportation Plan Recommendations

This design also aims to improve the comfort and safety of people using active modes and people taking transit on the corridor.

ROADWAY DESIGN OF NORTH COLLEGE

The long-term design for North College Avenue can be seen in **Figure 6** and **Figure 7**. Plan view cut sheets of the entire corridor can be seen in **Appendix D**. The roadway design includes Business Access Transit (BAT) lanes and sidewalks widened into shared-use paths for people walking and biking.

BUSINESS ACCESS TRANSIT LANES

Business Access Transit (BAT) lanes are a key element of the preferred cross-section. BAT lanes are lanes in which buses travel and vehicles can use only for making right turns at intersections or turning into existing driveways midblock. The recommended BAT lanes can be accommodated in the existing curb-to-curb width of the street if the existing median width is reduced, typically one to five feet of median narrowing is necessary.

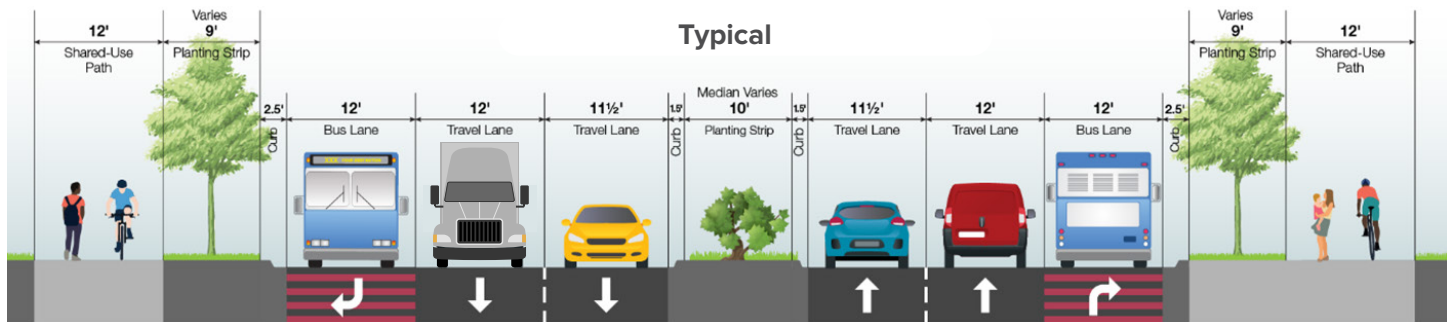
SHARED-USE PATHS

The construction of BAT lanes does not allow enough width for on-street bicycle lanes. However, community input indicated that higher comfort bicycle infrastructure (like an off-street path) is preferred on North College Avenue over on-street bike lanes due to the volume and speed of vehicles. Instead of bike lanes, a shared-use path (10- to 12-feet wide,

which requires acquiring up to two feet of right-of-way on each side) is recommended along the length of the corridor to provide a high-comfort facility for people using active modes. In many areas the shared-use path cannot be accommodated in existing right-of-way. Therefore it is recommended that in areas without sufficient right-of-way, the existing sidewalk be widened behind the back of walk to allow for both a shared-use path and the existing width of landscaped buffer. This also will minimize disturbance to established street trees that are already on the corridor. Implementation of this cross section will require acquisition or easement for additional right-of-way at certain locations on the corridor (see **Appendix D**).

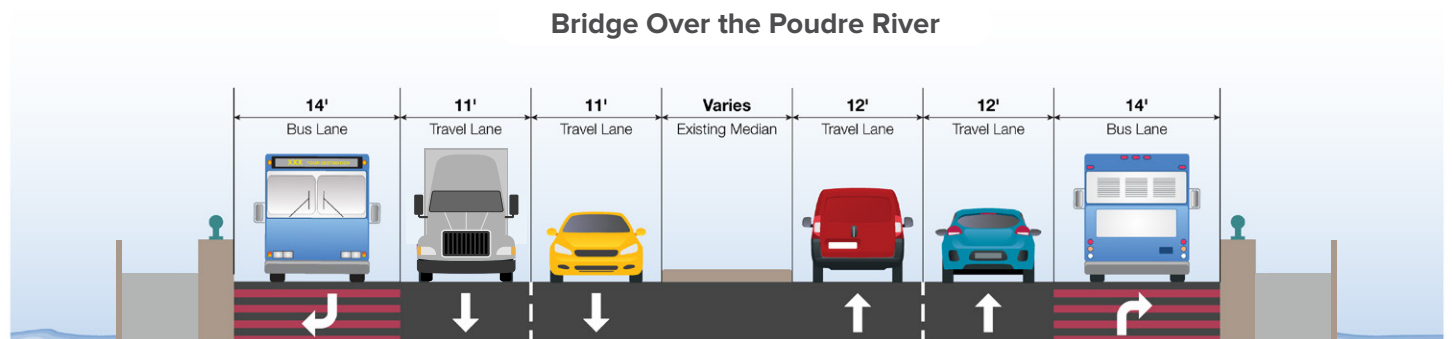
Due to the cost and disruption of construction required to build a shared use path along the length of the corridor, it is recommended only a priority section be constructed in the near-term where parallel bikeways are not feasible. Elsewhere, the remainder of the path will be implemented as parcels redevelop along North College Avenue. The priority area to be constructed in the near-term is on the west side of North College Avenue between Hibdon Court and the pedestrian and bicycle bridge over the canal to the north (**Figure 10**).

Figure 6: Typical North College Avenue BAT Lane Cross-section



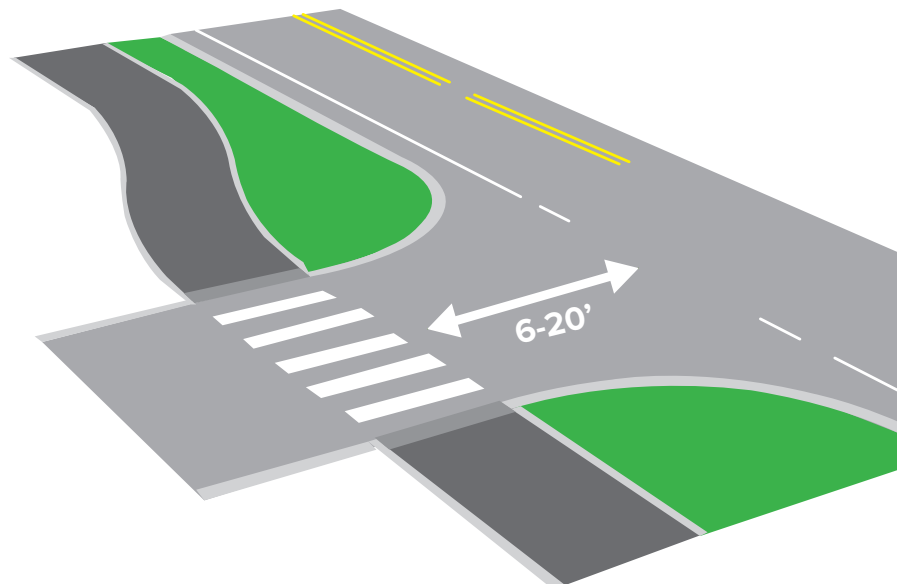
*At signalized intersections, turn lanes will replace the median.

Figure 7: North College Avenue Cross-section at Poudre River Bridge



Throughout the project, concerns were heard regarding the safety of people biking and walking on the shared use paths where they intersect minor streets and driveways. **Figure 8** shows treatments implemented in other cities to minimize crash risk at similar locations. These treatments include bending out the shared use path at intersections to create yielding space for drivers turning off of the major street and stacking space for drivers waiting to turn onto the major street. High-visibility markings emphasize the path crossing to people driving.

Figure 8: Typical Shared-use Path Crossing with Setback and High-visibility Markings



MEDIANS

Creating the BAT lanes will require narrowing the existing landscaped medians, typically by one to five feet. Additionally, the plan recommends adding medians on North College where they do not currently exist south of Conifer Street and as shown in **Figure 9**. The median narrowing and new median would have some construction impacts to the corridor.

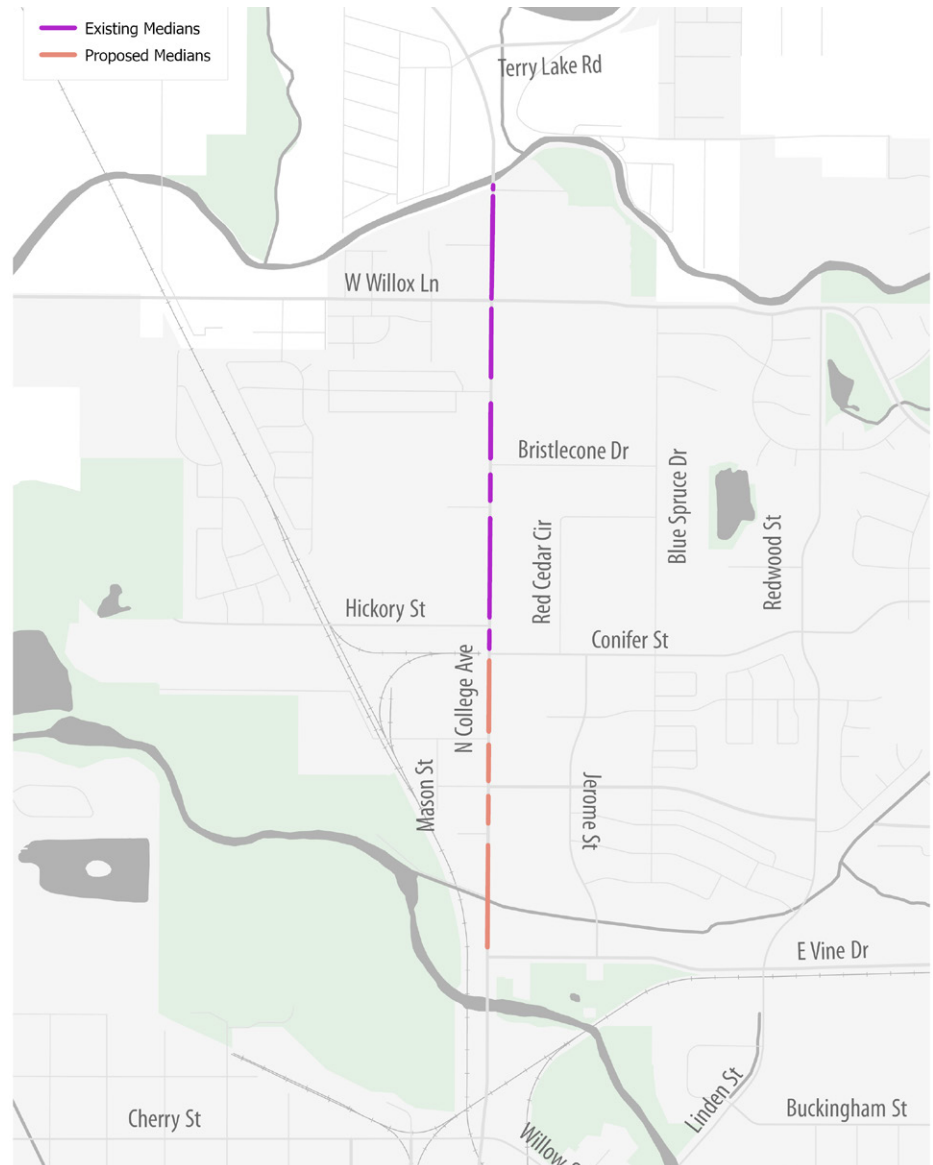
FUTURE BUS TURNAROUND

This plan also recommends constructing a new turnaround for buses outside of the Poudre Valley Mobile Home Park, somewhere north of Terry Lake Road along either North College Avenue or Terry Lake Road. Through this plan, the project team explored whether any publicly owned parcels were available for a turnaround and found none. Instead, the city will have to work with a property owner or property owners to acquire land for a turnaround. The project team explored different dimensions for this turnaround and found that approximately one acre of land is adequate, with a minimum depth of 150 feet and a minimum length of 250 feet.

COST ESTIMATES

Conceptual cost estimates were developed for the full implementation of the cross-sections shown in **Figure 6** and **Figure 7** along the length of North College Avenue. The total for all improvements is estimated to cost **\$21.8 million in 2022 dollars**, excluding right-of-way costs and the future bus turnaround. Rebuilding the entire corridor

Figure 9: Existing and Future Median Locations



at once would not only be a considerable financial investment but would also create additional construction impacts. For this reason, the phasing of elements is recommended and phasing options are described in more detail in Phasing & Funding Sources, later in this section.

Appendix E provides the more detailed breakdown of the cost estimate.

TRANSIT RECOMMENDATIONS

Below is a summary of recommendations for transit service changes across the North College area:

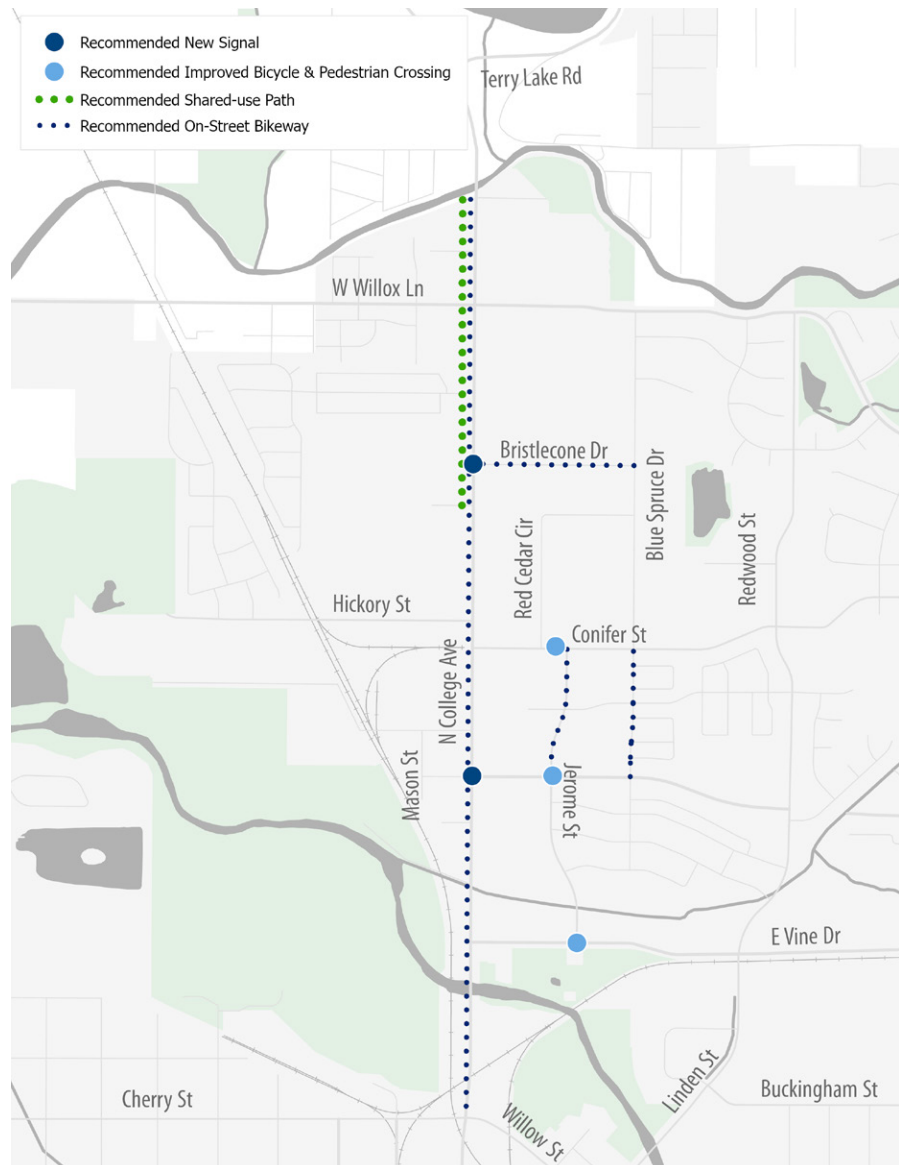
- New MAX BRT route on North College Avenue; long-term interlining of service with MAX on Mason Street
- Realign route 8 to run from the Downtown Transit Center to Poudre Valley Mobile Home Park, operating on Blue Spruce Drive, Redwood Street, and Linden Street
- Elimination of route 81 (the North College MAX will replace this service)
- New on-demand transit service like micro-transit service operating in the neighborhoods near North College Avenue, connecting to businesses on Lemay Avenue and bringing people into the high-frequency transit network

These recommendations are shown on a map in **Figure 11**. The following sections provide further detail about and the reasoning for each recommendation.

MAX ON NORTH COLLEGE AVENUE

The first phase MAX route alignment for North College Avenue is from the Downtown Transit Center to Willox Street on North College Avenue and back, with the Willox Street roundabout as the northern turnaround point (see **Figure 11**). This alternative was chosen because it could be implemented immediately without needing to build a new turnaround area. This alignment creates a straightforward and intuitive MAX route that goes both north and south on North College Avenue and does not make any additional loops, helping with route efficiency as well as being easier to understand for riders.

Figure 10: Near-term Pedestrian & Bicycle Recommendations, Including High-priority Shared-use Path Segment



The drawbacks of this alignment is that MAX level service is not provided directly to the Poudre Valley Mobile Home Park or the social services on Blue Spruce Drive and Redwood Street. However, Route 8 will still provide local service to these locations and the efficiency of a local route on Blue Spruce Drive and Redwood Street will be improved because it will not need to make a loop on North College Avenue. Additionally, MAX service will be provided within a half mile of the main entrance to the mobile home park at Terry Lake Road and within a quarter mile of the south end which has an unofficial pedestrian access point that residents use to enter and exit the neighborhood. Further discussion of the final route alignment for the local route 8 is covered in an upcoming section of this report.

Potential Future Phase of Route Alignment

It is recommended that the long-term vision for MAX on North College Avenue include creating a new turnaround point near the North College Avenue/Terry Lake Road (CO 1) intersection (see **Figure 11**). There will be a considerable cost to purchase the property for and construction of this turnaround, which makes it a less desirable alternative in the short-term. However as a long-term goal, this turnaround would be able to provide MAX service closer to the Poudre Valley Mobile Home Park and other residences in the area north of Willox Street. This turnaround would also be available for use by local buses to eliminate buses turning around inside of the mobile home park as they currently do today.

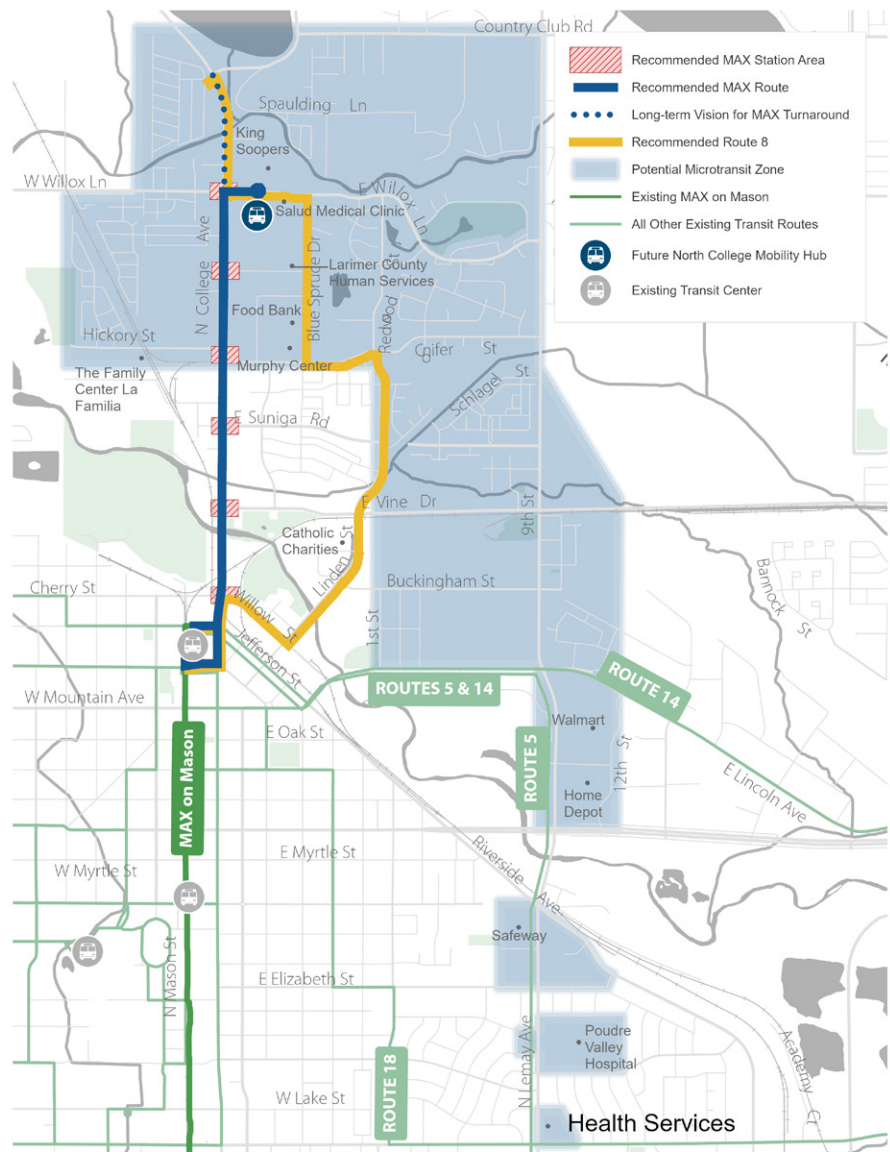
Service Characteristics

It is recommended that the MAX route on North College Avenue operate at a 15-minute frequency. A round trip of the route is estimated to take about 12-minutes. Therefore, this service could be operated with one bus every 15 minutes with roughly three minutes of recovery time between trips. The following sections provide additional information on how the possibility of interlining MAX on North College Avenue with MAX on Mason Street and could affect frequencies.

Future Interlining with MAX on Mason Street

Based on extensive community desire for a one-seat ride from North College Avenue to the South Transit Center, technical analysis of this plan considered the feasibility, benefits, and drawbacks of interlining the MAX on North College Avenue with the existing MAX on Mason Street route. Interlining the two routes would result in operating the service as one continuous route where the Downtown Transit Center would serve as a stop rather than a transfer. In the near- and mid-term it is recommended that these two MAX routes operate separately (possibly with different service names) because of a mismatch of the planned frequencies of each route and reliability challenges created by railroad crossings.

Figure 11: Map of Final Transit Recommendations



Mismatch of Frequencies

Before the COVID-19 pandemic, MAX on Mason Street ran at 10-minute frequencies with six buses required to operate that service. It is expected that MAX on Mason Street will return to this frequency once resources are available. The MAX route on North College Avenue is proposed to have 15-minute frequencies which allows the route to be operated using only one bus. Existing demand is not yet at a level where 10-minute frequency is necessary. The two MAX routes operating separately would require a total of seven buses. Riders would transfer from the North College Avenue route to the Mason Street route at the Downtown Transit Center. Given the planned frequencies of 15- and 10-minutes, riders would not experience much waiting to transfer.

If interlining is desirable in the future, the challenge of misaligned frequencies (10-minutes vs. 15-minutes) can be addressed two different ways:

1. Run a bus at 10-minute frequencies the length of the two routes, from the turnaround on Willox Lane to the South Transit Center. This requires eight buses to operate (one more than if the routes operate separately). MAX on Mason Street currently has a simple 60-minute run time with built in recovery time. Extending up to North College Avenue would create a 75-minute cycle time for the route that would require two additional buses than MAX on Mason Street did before the pandemic.

The benefits of interlining are that it is a simple and intuitive schedule for riders and provides a single seat ride from the North College area all the way to the South Transit Center. This strategy also provides more frequent service to North College Avenue than if the routes operated separately. The drawbacks of this option are that it requires an additional bus to operate compared to the non-interlined option, which would be an extra cost for the bus, operator hours, and other operating costs. It is possible the additional resource investments to interline the two routes may not result in proportional increases in ridership based on expected demand in the North College area.

2. Run only every other MAX on Mason Street bus up North College Avenue so that MAX on Mason Street has 10-minute frequency but MAX on North College Avenue would have 20-minute frequency. This option also requires 8 buses, because of the needed cycle time to combine both routes into one. The only benefit this option achieves is creating the single seat ride from Willox Lane to the South Transit Center. The drawbacks include the alternating run schedule (which is often confusing and frustrating for riders), additional resources needed for the eighth bus, and lower frequency service for the North College area. This strategy would require similar resources as the first without the added benefit of high-frequency service on North College Avenue.

Based on 2019 ridership data, MAX on Mason Street averages 285 boardings per station per day or 800 passengers per mile. Interlining would be most appropriate when transit ridership on North College Avenue comes within a margin of these levels of productivity (approximately 1,500 boardings per day).

Conflicts from Additional Rail Crossings

The North College Avenue MAX route will need to cross two freight rail lines in order to connect the Downtown Transit Center with the north end of North College Avenue. MAX on Mason Street already crosses the rail twice: once when turning around north of the Downtown Transit Center and a second time in the southbound direction at Laurel Street. The rail crossings will impact the route's reliability at certain times as

the bus must wait for the trains to pass through. This is likely to cause the bus to run behind schedule. Rail crossings will be a challenge for the North College MAX route regardless but interlining with MAX on Mason Street will bring this challenge to the Mason Street service where it is not currently an issue. Rather than just the North College area occasionally experiencing these delays, the railroad crossings have the potential to impact the reliability of the entire interlined route.

For these two reasons it is recommended that the two services begin operating as separate routes. The feasibility and benefits of interlining the two routes may be more appropriate to consider when ridership of a North College MAX route is better understood after the service has been operating for a couple of years.

CO2 EMISSION REDUCTION BENEFITS

MAX on North College Avenue is envisioned to eventually deliver daily ridership over 1,000 boardings per day. Assuming typical point-to-point travel distances of three to five miles, and if all of these trips were to be made by car, this level of ridership represents 3,000 to 5,000 vehicle miles traveled (VMT) per day, or 2,400 to 4,000 pounds of reduced CO2 emissions per day. While this likely over-estimates the CO2 emissions reduction potential of MAX on North College Avenue as not all ridership would be converted from driving trips, it does illustrate the CO2 emissions-reducing potential of the service.

STOPS & STATIONS

Locations

The final plan for MAX on North College Avenue includes consolidating and aligning the existing bus stops to create the MAX stations (see **Figure 11**). New station locations were chosen for their proximity to key destinations as well as their alignment with existing or proposed traffic signals. All stations were aligned into matching pairs, one northbound station and one southbound station on the other side of the road. These station pairs make the service easier to use for riders, allowing someone to pick-up the bus for their return trip in the same location they were dropped off. This mitigates confusion about where to go to take the bus back, especially for newer riders.

Station pairs were located around traffic signals to provide safe, controlled pedestrian crossings linking the northbound and southbound stations together. Crossing at signals to access bus stops and destinations on the other side of the road improves pedestrian comfort as well as minimizing out of direction travel for people accessing the bus stops.

Figure 12: Shared Mobility Hub



1 Bus shelter

2 Information and fare payment

3 Scooter share & bike share (Zagster)

4 Car share

5 TNC/microtransit drop-off/pick-up

6 Intersecting bike lane or bike paths

7 Bike parking

8 Car charging station

Amenities at MAX Stations

It is recommended that each MAX BRT station feature multimodal options, with the most northern station near King Soopers being the a mobility hub with the most amenities.

All MAX BRT stations should have the following amenities, where space allows:

- Intuitive information on transportation options:
 - » Live informational signage on transit arrival times
 - » Maps of key destinations, transit routes, and bicycle facilities
- High comfort station amenities including:
 - » Shelters
 - » Benches
 - » Trash cans
 - » Pedestrian scale lighting
 - » Kiosks for ticket purchases (if applicable)
- Features of universal design for accessibility by all users
- Public art
- Security features such as emergency telephones
- Bicycle parking (covered where possible)
- Micro-mobility parking areas

The northern most station near the King Soopers will serve as a mobility hub. The Transit Master Plan envisioned a mobility hub at this location, which can be incorporated into redevelopment of the former Albertsons site. As a mobility hub, it can include the following additional amenities illustrated in **Figure 12**:

- Secure bicycle parking
- Park-n-ride
- Restrooms
- Electric vehicle (EV) charging
- Car share
- Taxi/ride hailing loading zones
- Micro-mobility charging hubs

These additional amenities would require more space than a typical MAX station. Partnerships can be pursued with nearby landowners and businesses to create shared parking agreements or other agreements allowing station amenities to be located on parcels near the station. The vacant Albertsons lot could provide a great opportunity to accommodate these mobility hub elements on part of that property.

NEW ROUTE 8

The recommended alignment for local bus service is to eliminate the current route 81 and realign route 8 to create greater efficiency and eliminate redundancy with MAX on North College Avenue. The new route 8 will run from the Downtown Transit Center to Willow Street, then head north on Linden Street to Redwood Street to Blue Spruce Drive. The route will then turn west on Willox Lane and turnaround in the Poudre

Valley Mobile Home Park as it does today and then reverse the directions above back to downtown (see **Figure 11**). When the future turnaround south of Terry Lake is constructed, route 8 will also use this turnaround in order to remove turning buses from the Poudre Valley Mobile Home Park.

The new alignment of route 8 will make it more intuitive and efficient for riders, particularly those using the service to get to and from the services on Blue Spruce drive, since the route would run the same path northbound and southbound. The alignment also retains the connection between the service providers east of North College Avenue with the Downtown Transit Center.

Alignments that brought route 8 to destinations on Lemay Avenue were considered, however after analysis those options were not recommended because of route inefficiency, loss of the connection from services on Blue Spruce Drive to Downtown, and redundancy with route 5. Instead, this need for connections to destinations on Lemay Avenue, like shopping and medical services, was addressed with a recommendation for new on-demand micro-transit service that is detailed in the following section.

Service Characteristics

The new alignment of route 8 is recommended to run at 20-minute frequencies. It is estimated that a round trip of this route would take about 35-minutes. This means it would require two buses to operate route 8 at 20-minute frequency with a 5-minute recovery period between trips. Route 8 could also operate at 30-minute frequencies but this would still require two buses. For this reason it is more beneficial and efficient to operate the route at 20-minute frequencies.

Amenities at Local Bus Stops

It is recommended that all local bus stops on the realigned route 8 be upgraded to include the following amenities where space is available:

- Shelters
- Maps of the transit system
- Benches
- Trash cans
- Pedestrian scale lighting
- Bicycle/micro-mobility parking

Providing these amenities at stops can make riding the bus feel safer and more comfortable for a wider demographic of riders. Bus shelters make it more feasible and comfortable for people to ride transit in inclement weather. Benches provide a chance to rest while waiting for the bus which can be particularly critical for older adults and people with mobility issues. Trash cans and pedestrian scale lighting provide a more comfortable station environment, particularly at night. Bicycle and micro-

Figure 13 Image of Microtransit Service in Denver called the “Montbello Connector”



mobility parking provide an option for people to easily access the stop by bicycle or scooter to make their trip more efficient or access a bus stop that is too far to comfortably walk to.

INNOVATION ZONE: NEW MICRO-TRANSIT SERVICE

This plan recommends exploring a microtransit service from the North College area to destinations on Lemay Avenue. See **Figure 11** for the approximate boundaries of the recommended zones within the study area. Travelers could request trips that started and ended at any two points within the three zones on the map. The three zones encompass the mobile home communities near North College Avenue, the Tres Colonias neighborhoods, Walmart, Home Depot, Safeway, Poudre Valley Hospital, and other medical services on Lemay Avenue. These microtransit zones were drawn based on where community members reported they wanted new transit connections to the North College area.

The microtransit service will help fill the gap in transit service to the Tres Colonias neighborhoods and provide a direct link from the North College area to Home Depot, Walmart, Safeway, and medical services on Lemay Avenue. These new connections were identified as high priority by community members. Additionally, the service would provide a first/last-mile connection between MAX service on North College Avenue and the surrounding neighborhoods. The data collected about trips in the microtransit system can inform the creation of a fixed route service in the future.

What is Microtransit?

Microtransit is a form of demand response transit that uses a smartphone app (with a call-in option) to match trip requests in real time. Microtransit typically uses small vans or shuttle buses and can be operated by a contracted provider or by an agency, like Transfort, with purchase of a ride-matching app and associated technology.

Microtransit allows for transit service connecting low to medium density areas with popular destinations where a fixed-route bus route may not be appropriate due to low demand for fixed-route transit. Microtransit technology has the ability to group trips to and from popular destinations at similar times. This service can charge a fare or be operated fare-free.

Equity Considerations for Microtransit

A new microtransit service should still be accessible to people who do not have reliable access to cellphone data, are not proficient in using a smartphone, or are uncomfortable creating a profile on an app. To address this concern, the new service should include a call-in option as an alternative to using the app. Providing a call-in option for riders is an essential component to making this tech-enabled service more accessible to everyone.

Additionally, any materials developed for this service should be in both English and Spanish, at a minimum, in order to make the service easy and accessible for riders who primarily speak Spanish. Finally, it should be noted that at least one vehicle in the microtransit fleet must be ADA accessible.

Service Characteristics

Within the study area, the proposed microtransit zones cover a total of 2.4 square miles. Operating this microtransit system would require one to two vehicles (one of which must be ADA accessible) in order to provide service within 10-minutes of a request. The exact number of vehicles needed will depend on days and hours of service, projected demand, and the final service area as it may be desirable to serve other nearby areas not served by fixed-route transit.

ACTIVE MODE RECOMMENDATIONS

In addition to the new shared use path along North College Avenue, several other recommendations were developed for improving active mode use in the North College area, building upon the recommendations in the 2022 update to the Active Modes Plan (see **Figure 14**):

- Construction of two new traffic signals on North College Avenue

- Improvement of five key roadway crossings east of North College Avenue
- Creation of comfortable pedestrian and bicycle networks to the east and west of North College Avenue
- Interim protected bike lanes on North College Avenue

The following sections provide locations and more detail for these pedestrian and bicycle recommendations.

Roadway Crossings

Additional signals with crosswalks at Bristlecone Street and Suniga Road are recommended. Signalizing these intersections would provide additional controlled crossings for people using active modes and make it more convenient for transit riders to get between the northbound and southbound stations at these locations (see **Figure 14**). The signal at North College Avenue/Suniga Road is already planned for construction and both the signals are planned for in CDOT's *US-287 (North College Avenue) Access Control Plan*. The signal at Bristlecone Drive would also serve people accessing the future 24/7 shelter at Hibdon Court.

Figure 14: Pedestrian & Bicycle Infrastructure Improvements





In addition to the signals on North College Avenue, it is recommended that the following intersections be evaluated for improved bicycle and pedestrian crossings (see **Figure 14**):

- Conifer Street / Red Cedar Court / Jerome Street
- Suniga Road / Jerome Street
- Vine Drive / Jerome Street (in design as of fall 2022)
- Hickory Street / Mason Street
(when Mason Street extension is constructed)
- Bristlecone Street / Red Cedar Court
(when Red Cedar Court extension is constructed)

These locations are all on the recommended parallel networks for improved bicycle and pedestrian infrastructure (see **Figure 14**) and several were identified by community members as difficult areas to cross the street.

Active Mode Networks Adjacent to North College Avenue

It is recommended that investments be made on streets adjacent to North College Avenue to create comfortable infrastructure for people using active modes (see **Figure 14**). Investments in the streets around North College Avenue will give people the option to walk and bike on lower speed streets with fewer cars, providing an alternative to walking or biking on North College Avenue.

The recommended infrastructure upgrades to these streets include:

- New bikeways on:
 - » Bristlecone Street between North College Avenue and Blue Spruce Drive – this segment has a curb-to-curb width of approximately 40 feet, which is adequate for buffered or protected bike lanes if on-street parking is prohibited. If parking cannot be removed, a Neighborhood Bikeway may be feasible provided that traffic calming can achieve the desired vehicular volume and speed levels of a Neighborhood Bikeway.
 - » Blue Spruce Drive from Conifer Street to Suniga Road – this segment has a curb-to-curb width of approximately 30 feet. Given the residential nature of this segment, a Neighborhood Bikeway is recommended. Additional traffic calming treatments may be necessary to achieve the desired vehicular volume and speed levels of a Neighborhood Bikeway.
 - » The proposed Mason Street extension – the Mason Street extension is proposed as a 2-lane collector. The Larimer County Urban Area Street Standards for a 2-lane collector feature two travel lanes and buffered bike lanes with 5-foot bike lanes and 3-foot buffers.
 - » The proposed Red Cedar Circle extension – the Red Cedar Circle extension is proposed as a 2-lane collector.

The Larimer County Urban Area Street Standards for a 2-lane collector feature two travel lanes and buffered bike lanes with 5-foot bike lanes and 3-foot buffers.

- Wide detached sidewalks with limited or no curb cuts across the sidewalk on the proposed Mason Street extension.
- Wayfinding on North College Avenue and the parallel pedestrian and bicycle corridors directing people how best to walk and bike between key destinations and use the parallel streets to bike the length of North College Avenue comfortably.

Investing in these parallel streets for people using active modes will make it more convenient and comfortable to move through the North College area, as well as improve the first and last mile connections to MAX stations and route 8 stops.

INTERIM PROTECTED BIKE LANES ON NORTH COLLEGE AVENUE

As an interim solution to address user comfort for people biking on North College Avenue, this plan recommends that the wide shoulder on North College Avenue be converted into one-way protected bike lanes. The shoulders are typically 8 feet wide from curb to edge line which is adequate space for a 5- to 6-foot bike lane and a 2- to 3-foot buffer with vertical delineators. **Figure 15** shows a cross-section of the interim protected bike lanes. Eventually, once BAT lanes are added by narrowing the median, the continuous shared-use path on North College Avenue will replace the protected bike lanes.

Changes to the Master Street Plan

The map of adjacent pedestrian and bicycle networks (**Figure 14**) assumes the future construction of two roadway extensions: Mason Street and Red Cedar Court. The alignment shown in **Figure 16** differs from that currently shown in the Master Streets Plan. These alignments are recommended for a variety of reasons including equity, feasibility, and circulation.

Mason Street Extension

The Master Street Plan indicates a future extension of Mason Street from Suniga Road, to the north through the North College Mobile Home Park, across Willox Lane, across the Larimer & Weld Canal, and connecting back to North College Avenue through the Poudre Valley Mobile Home Park in Larimer County. The intention of the original Mason Street alignment was to provide a parallel street on the west side of North College Avenue for local access and circulation as an alternative to the highway. The original Mason Street alignment provided access to North College Avenue at signalized intersections as medians were implemented on North College Avenue to manage access to individual properties.

This plan recommends amending the Master Street Plan to show Mason Street's north terminus at a future intersection with Bristlecone Drive which will have a traffic signal on North College Avenue. The remaining portion of a future parallel Mason Street can still provide access and utilities to land parcels that currently lack that infrastructure. It also would provide bicycle and pedestrian paths for local circulation without requiring the use of the highway. Because Mason Street will still provide access to North College Avenue at the same signalized intersections as previously proposed, the traffic impacts of this change will be minimal.

In the area of the North College Mobile Home Park, this original alignment is based on ideas for potential redevelopment of the east portion of the park with related drainage and utility improvements. Additionally, new access to a traffic signal on North College Avenue would provide improved access to shopping and other destinations to the east and north. Recently, park ownership and management have changed their approach to reinvest in the east portion of the park, at the same time that affordable housing has become an increasingly critical issue which is evident by the current effort to rezone the park to Manufactured Housing (M-H), intended to preserve affordability. For these reasons, along with the community discussions for this plan, this plan recommends amending the Master Street Plan to show Mason Street's north terminus at

Figure 15: I Interim Protected Bike Lane Cross-section

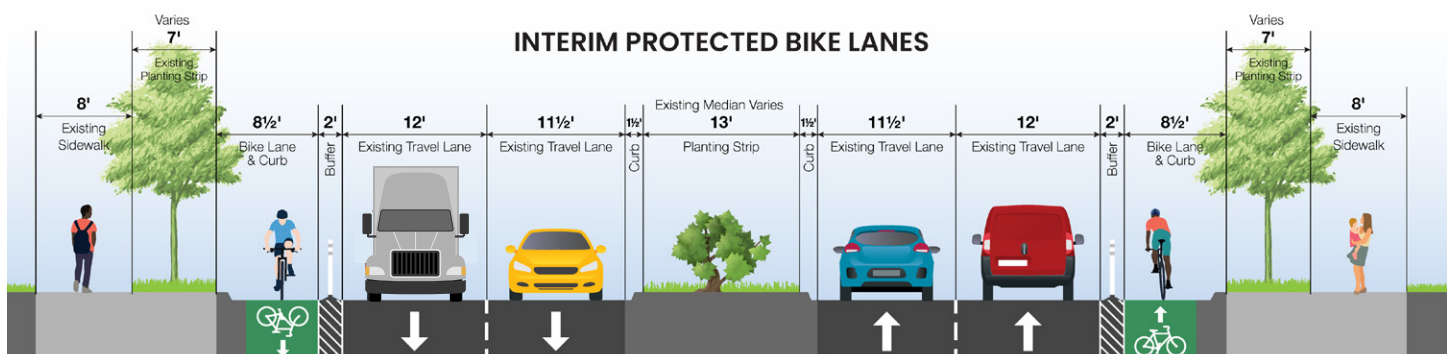
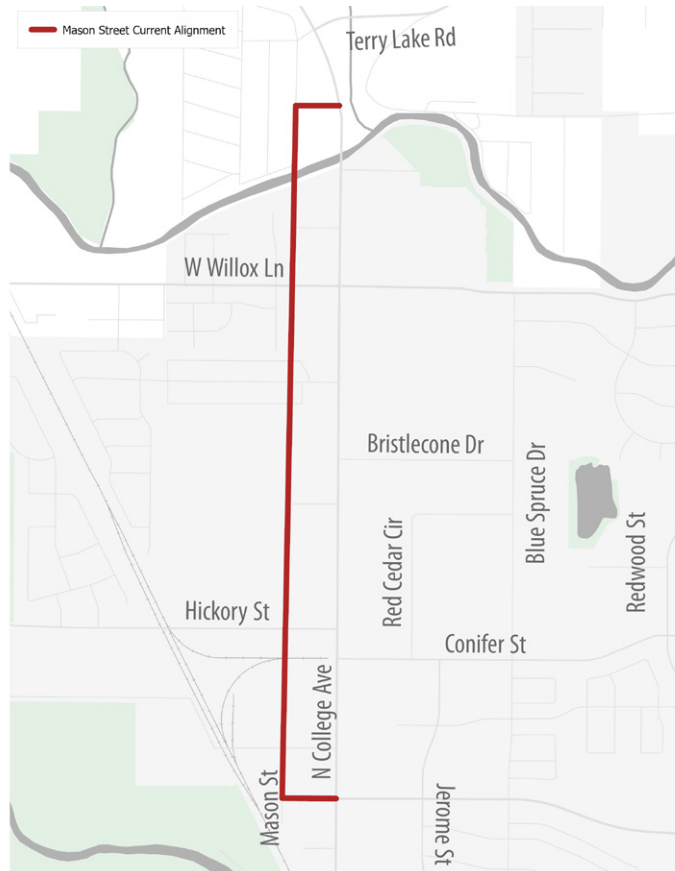


Figure 16: Original and Recommended Mason Street Alignment

a future intersection with Bristlecone Drive. This will remove the future Mason Street connection through the park.

The Master Street Plan also indicates future extension of the Mason Street alignment northward from Wilcox Lane along what is currently Wilcox Court, across the Larimer & Weld Canal with a new bridge, and then along a street through the Poudre Valley Mobile Home Park in Larimer County connecting to North College Avenue. This study recommends removing that proposed street segment because of the major difficulties and costs and minor benefits. A short segment of Mason Street was already built south of Wilcox Lane. This segment provides access to two parcels owned by the City of Fort Collins. In the future, this segment can be reconfigured as a cul-de-sac to enable turning around as well as parcel access.

While a parallel street that extends the full length of the corridor is lost with this realignment, the intent of the original alignment is still achieved. The parcels to the south of the North College Mobile Home Park are the parcels without

existing access to North College Avenue. The proposed alignment would still provide access to those parcels. High-comfort bicycle and pedestrian infrastructure can be accommodated in the form of a shared-use path on North College Avenue north of Bristlecone Drive, rather than on a parallel street. For this reason this section of the recommended shared-use path is a near-term priority project in this plan.

Lastly, south of Conifer Street, the Mason Street extension will complement proposed medians south of Conifer Street by provided alternative access to properties currently accessed by North College Avenue.

The development of North Mason Street will likely have an alternative cross-section to the Collector identified in the Larimer County Urban Area Street Standards (LCUASS), but will still accommodate a buffered bike facility for the parallel bike network. This is to accommodate the existing businesses and property alignments, and likely low volumes of traffic.

Red Cedar Court Extension

The current alignment in the Master Street Plan for Red Cedar Court crosses Bristlecone Street to connect to Willox Lane. The new alignment, shown in **Figure 17**, would terminate Red Cedar Court as a collector street at Bristlecone Street, using Blue Spruce Drive as a continuous north-south collector street parallel to North College Avenue. Development and redevelopment north of Bristlecone Street, including redevelopment of the former Albertson's, would allow for other north-south streets connecting to Red Cedar Court.

PHASING & FUNDING SOURCES

The plan recommends a **phased approach** to implementation for the following reasons:

A major capital project was constructed on North College less than a decade ago. The construction of sidewalks, streetscape amenities, and medians was challenging for residents and businesses in the North College corridor. More major construction in the near term is not welcome.

The mid- and long-term recommendations are not yet needed in the corridor but associated conditions will be monitored to determine when they are needed.

The mid- and long-term recommendations are expensive and without meeting certain population and ridership requirements this project is not eligible for the FTA grants that typically pay for such improvements like the Small Starts grant used for the MAX BRT.

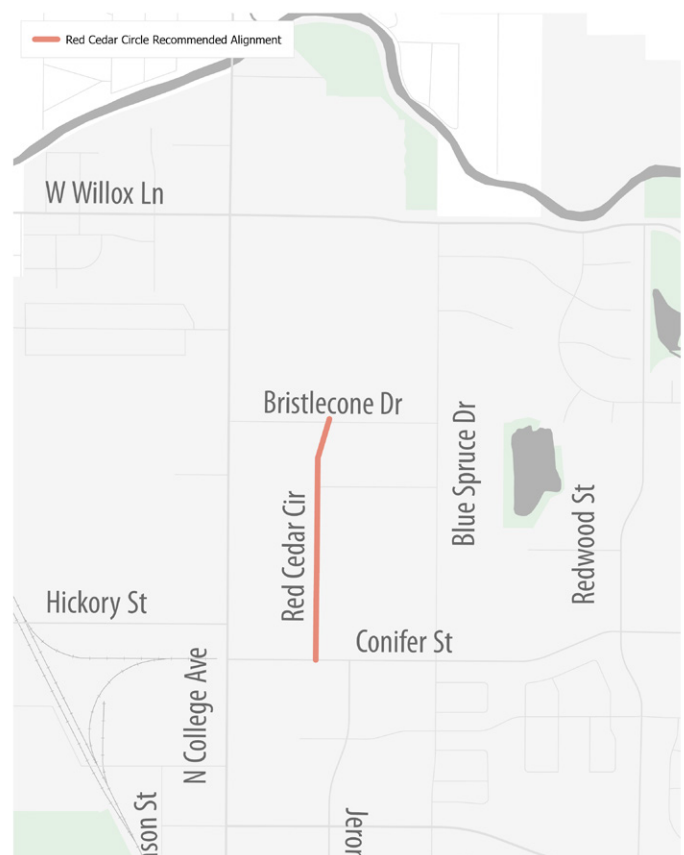
All of the transportation recommendations detailed previously are summarized and organized as near-, mid-, and long-term transportation recommendations and displayed in **Table 1**, **Table 2**, and **Table 3**, respectively. Potential funding sources and relevant partners were identified for each recommendation.

Funding Opportunity Acronyms

Below is a list of acronyms used in the recommendations tables that correspond to federal grants or other federal funding programs:

- **FTA** - Federal Transit Administration

Figure 17: Recommended Red Cedar Court Alignment



- **MMOF** - Multimodal Transportation and Mitigation Options Fund (distributed through North Front Range Metropolitan Planning Organization)
- **CMAQ** - Congestion Mitigation and Air Quality Improvement Program (distributed through North Front Range Metropolitan Planning Organization)
- **STBG** – Surface Transportation Block Grant (distributed through North Front Range Metropolitan Planning Organization)
 - » (TA) - Transportation Alternatives (a subset of the Surface Transportation Block Grant)
- **RAISE** - Rebuilding American Infrastructure with Sustainability and Equity Discretionary Grant Program (distributed by the United States Department of Transportation)

NEAR-TERM RECOMMENDATIONS

Table 1: Near-term Transportation Recommendations

Recommendation		Planning Level Cost Estimates	Relevant Partners	Potential Funding Sources
Fixed-route Transit Realignments:				
<ul style="list-style-type: none"> Create new high-frequency bus route on North College Avenue within existing general-purpose lanes at 15-minute frequency (with turnaround at Willox Lane roundabout) Realign route 8 on Blue Spruce Drive, Redwood Street, and Linden Street at 30-minute frequency Eliminate route 81 		Fleet needs: \$2.3m for battery electric buses Operating costs: neutral	Transfort	FTA 5307 Funding, MMOF, CMAQ
Micro-transit Zone		Fleet needs: \$120k Operating costs: +\$500k per year	Transfort, Ride-matching technology provider	FTA 5307 Funding, MMOF, CMAQ
Consolidate existing local bus stops into new MAX Stations at signalized intersections (with basic amenities such as shelters, benches, trash cans, and pedestrian scale lighting)		\$450k	FC Moves, Engineering, CDOT, Property owners	FTA 5339 Funding, CMAQ, STBG, RAISE
New shared use path on the west side of North College Avenue (between the canal and Hibdon Court)		\$770k	FC Moves, Engineering, CDOT, Property owners	STBG, MMOF, CMAQ, RAISE
Adopt amendments to the Mason Street realignment identified in the Master Streets Plan		No cost. Staff time only.	City Council, FC Moves, Engineering, Traffic Operations	N/A
New Signals	Suniga Road/North College Avenue	\$500k	FC Moves, Engineering, Traffic Operations	MMOF, STBG
	Bristlecone Street/North College Avenue	\$500k	FC Moves, Engineering, Traffic Operations	MMOF, STBG
Improved bicycle and pedestrian crossings	Bristlecone Drive/Red Cedar Circle	\$80k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Conifer Street/Red Cedar Circle/Jerome Street	\$80k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Hickory Street/Mason Street	\$80k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Suniga Road/Jerome Street	\$80k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Vine Drive/Jerome Street	\$80k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
New buffered or protected bike lanes	Interim one-way protected bike lanes on North College Avenue north of the railroad crossing	\$340k	FC Moves, Engineering, Traffic Operations	Local
	Jerome Street (between Conifer Street and Suniga Road)	\$25k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Blue Spruce Drive (between Conifer Street and Suniga Road)	\$25k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Bristlecone Street (between North College Avenue and Blue Spruce Drive)	\$50k	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ

MID-TERM RECOMMENDATIONS

The mid-term recommendations include large capital investments that will not be implemented until the following conditions are met:

- Ridership on North College BRT is at 1,000 boardings per day, or
- Traffic becomes congested to the point that intersections on North College Avenue are experiencing a level of service F, or

- The population (currently approximately 7,000) and employment (currently approximately 16,125) of the area doubles from current levels, or
- CDOT plans a major rehabilitation project for North College Avenue and this plan's recommended improvements could occur at the same time.

Additionally, prior to any major capital project related to this plan, an Equity Analysis is recommended to identify and mitigate possible negative outcomes.

Table 2: Mid-term Transportation Recommendations

Recommendation		Planning Level Cost Estimates	Necessary Partners	Potential Funding Sources
Business Access Transit (BAT) lanes on North College Avenue (between Willox Lane and Willow Street)		\$22m	FC Moves, Engineering, Traffic Operations CDOT	FTA 5339 Funding, MMOF, STBG (TA), CMAQ, RAISE
*Increase bus frequency and service hours: <ul style="list-style-type: none"> • MAX on North College Avenue with 15-minute peak frequency • Route 8 with 15-minute peak frequency 		Fleet needs: +\$1m Operating costs: +\$1m per year	Transfort, Ride-matching technology provider	FTA 5307 Funding, MMOF, CMAQ
Creation of mobility hub near Willox Lane turnaround		No capital cost. Incorporate into redevelopment plans.	Transfort, FC Moves, Engineering, Property owners	FTA 5339 Funding, MMOF, STBG (TA), CMAQ
*Shared-use paths for the length of North College Avenue on both sides of the roadway		Included in cost of BAT lanes.	Public Works, CDOT, Property owners	MMOF, STBG, CMAQ
Fully built MAX stations with multimodal options		Included in cost of BAT lanes.	Transfort, FC Moves, Engineering, Traffic Operations, CDOT, Property owners	FTA 5339 Funding, MMOF, STBG, CMAQ
Bus turnaround north of Terry Lake Road		\$5m; does not include property.	Transfort, FC Moves, Engineering, Traffic Operations, CDOT, Adjacent property owners	FTA 5339 Funding, MMOF, STBG, CMAQ
*Construct medians south of Conifer Street		Included in cost of BAT lanes.	FC Moves, Engineering, Traffic Operations, CDOT, Property owners	MMOF, STBG (TA), CMAQ
*New buffered or protected bike lanes or shared use paths with planned roadway connections	Mason Street (between Bristlecone Street and Alpine Street)	No capital cost. Incorporate into new street construction.	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ
	Red Cedar Circle (between Willox Lane and Conifer Street)	No capital cost. Incorporate into new street construction.	FC Moves, Engineering, Traffic Operations	MMOF, STBG (TA), CMAQ

**Recommendations with an asterisk could be implemented before the previously listed conditions are met.*

LONG-TERM RECOMMENDATIONS

Table 3: Long-term Transportation Recommendations

Recommendation	Planning Level Cost Estimates	Relevant Partners	Potential Funding Sources
Increase bus frequency to 10-minutes; re-evaluate feasibility and benefits of interlining MAX on North College Avenue with MAX on Mason Street	Fleet needs: +\$1.3m Operating costs: +\$500k per year	Transfort, FC Moves, Planning Development & Transportation	FTA 5307 Funding, MMOF, STBG, CMAQ

MAINTENANCE CONSIDERATIONS

Some of the recommendations in this plan, such as shared-use paths, landscaped medians, transit station amenities, and protected bike lanes will require more time to maintain and may require the purchase of specialized equipment, incurring higher maintenance costs. For example, based on analysis completed for the Bicycle Master Plan, the Fort Collins Streets Department estimated that it costs \$17,900 per year to sweep and plow one mile of protected bike lane compared to \$3,970 per year to sweep and plow one mile of standard bike lane.

As projects from this plan go through final design, the project management team shall work closely with the Transfort, Streets Department, Forestry, and the Parks Department to identify maintenance requirements, context appropriate materials, and maintenance responsibilities. Future budget requests should be made at the time the recommended facilities are built.

102

MAX

THIS VEHICLE MAKES
FREQUENT AND SUDDEN STOPS

City of
Fort Collins

YIELD
TO
BUS
WHEN
LIGHT IS
FLASHING
IT'S THE
LAW

QTL-429
COLORADO

CNG



05

Urban Design & Land Use Requirements

Urban Design & Land Use Requirements


























Community members expressed that their priorities included **preserving and expanding affordability for residents and local businesses, increasing density to support high-frequency transit, and redevelopment of currently vacant properties to provide new housing, services, and infrastructure improvements in the area.**

Based on community input and travel demand projections, it was determined that this plan needed to create recommendations around land use, future development, and affordability. Community members expressed that their priorities for future development in the North College Avenue area included preserving and expanding affordability for residents and local businesses, increasing density to support high-frequency transit, and redevelopment of currently vacant properties to provide new housing, services, and infrastructure improvements in the area. The existing zoning in the area does not support these ideas as effectively as it could.

CORRIDOR DENSITY AND BRT CORRELATION

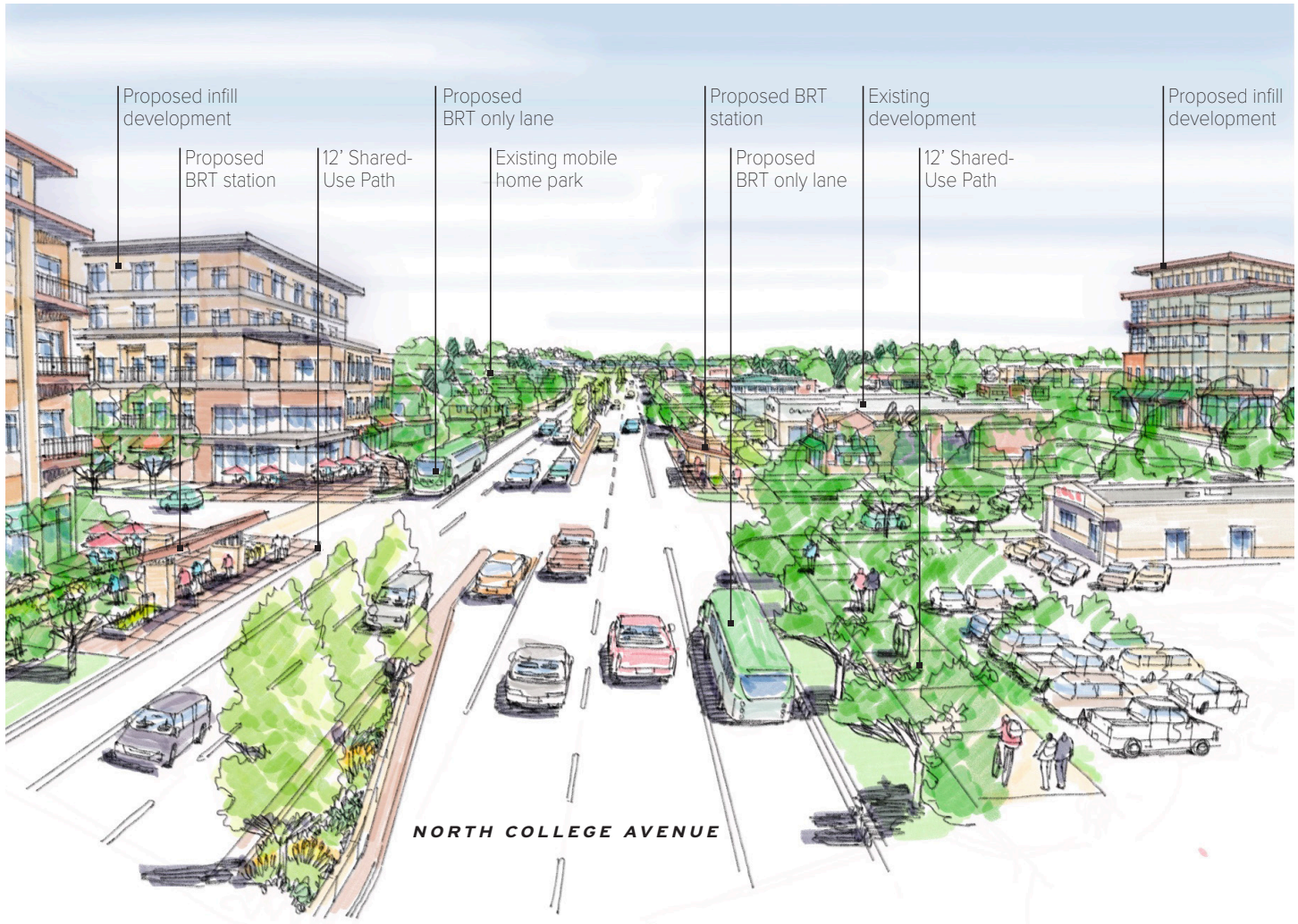
BRT corridors are typically found in more dense urban settings due to higher population and ridership demand in these areas. Low density areas lack the population for frequent ridership demand and have larger dispersal areas making accessing stations difficult. Federal grants for infrastructure improvements are awarded when there is increased ridership demand and the zoning conditions that support higher population densities. As shown in **Figure 18**, the area is currently transitioning

Figure 18: Depicts the Correlation Between Densities and Building Height Increases With the Type of Public Transit That Can Be Supported

Land Use				Transit	
Land Use Type	Example	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
 Downtowns & High Density Corridors		>45	or >25	  	 10 minutes or better
 Urban Mixed-Use		30-45	or 15-25	  	 10-15 minutes
 Neighborhood & Suburban Mixed-Use		15-30	or 10-15		 15-30 minutes
 Mixed Neighborhoods		10-15	or 5-10	 	 30 minutes On demand
 Single Family Neighborhoods		<10	or <5	 	On demand

The North College area's current land uses and density reflect Mixed Neighborhoods. With the recommendations of this plan, the area will transition to an Urban Mixed-Use area, compatible with BRT.

Figure 19: An artist's rendering of possible character of North College Avenue with Redeveloped and New Developed Properties That Adhere To Recommendations



from low density to medium and higher density.

The following recommendations have been developed to bring additional residential units and new businesses required along North College Avenue to support BRT operations and infrastructure.

To help address these community priorities the following policies are recommended for the North College Avenue area:

- Establish a North College Avenue specific Transit-Oriented Development (TOD) Overlay Zone
- Modify the existing 200-foot residential setback from North College Avenue
- Increase building height allowance
- Provide regional detention and reduce Low Impact Development (LID) requirements for projects that include affordable housing to provide more on-site buildable area

while also reducing development costs

- Establish connectivity requirements
- Establish outdoor space requirements for large urban buildings
- Reference River Downtown Redevelopment (RDR) architectural standards
- Create incentives to preserve existing commercial buildings and current rental rates where possible

The following sections provide more detail about each of the policies listed previously. The current Mason MAX BRT utilizes many of the same recommendations particularly in the area near Colorado State University and Downtown Fort Collins.

Figure 19 shows an artist's rendering of possible character of North College Avenue with redevelopment and new development that utilizes the recommended policies while also integrating with the existing commercial and residential of the area.

NORTH COLLEGE AVENUE SPECIFIC TOD OVERLAY ZONE

Currently the City of Fort Collins has an existing Transit-Oriented Development (TOD) Overlay Zone that runs along the Mason Street Corridor from Vine Drive to the South Transit Center. This TOD Overlay Zone includes reduced parking requirements and increased building heights that allow for additional housing units when affordable units are included. This TOD Overlay Zone is meant to encourage more dense residential developments and affordable housing that support ridership for the MAX BRT route on Mason Street.

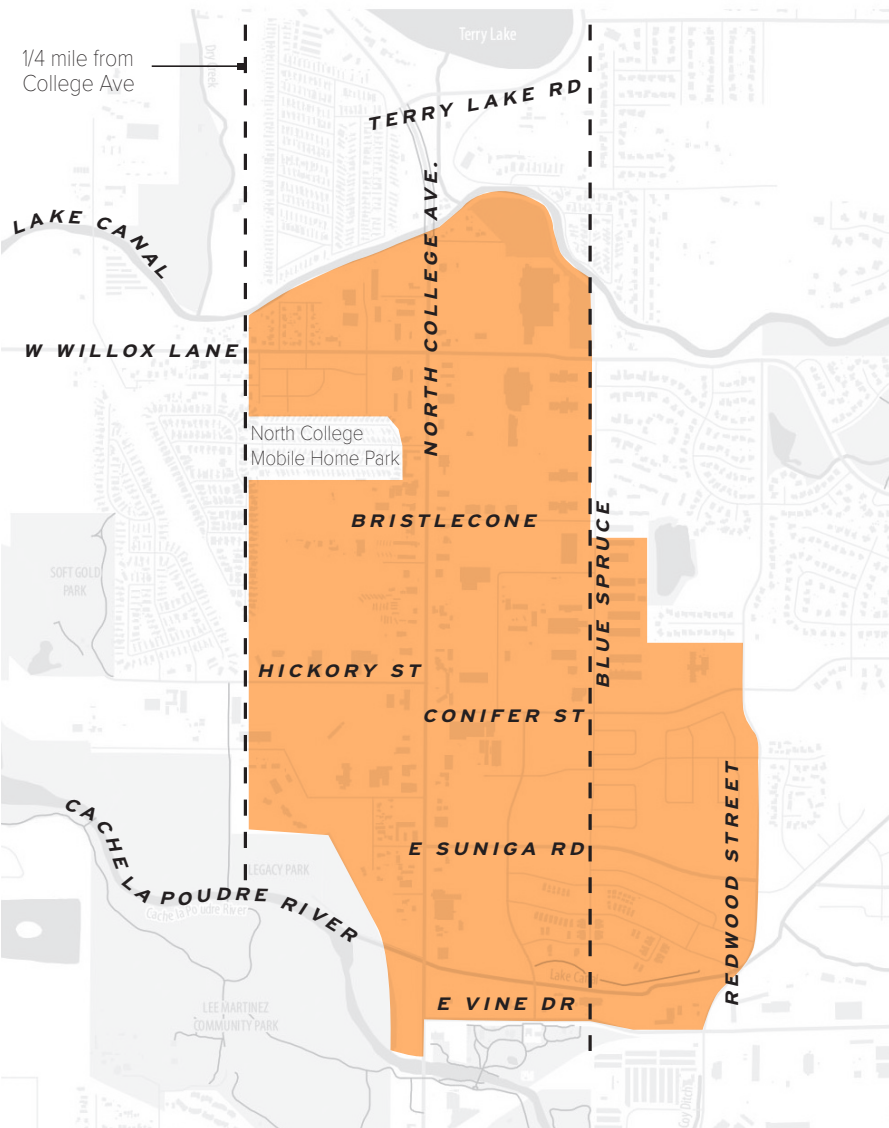
In order to facilitate denser transit-oriented development that supports public transit and provides pedestrian and bike connectivity, more open space options, and regional detention, a new TOD Overlay Zone should be established north of Vine Street to Terry Lake Road along North College Avenue. Parking reductions should be created for standard developments and decreased further when affordable housing units are included.

Figure 20 outlines the proposed area of the North College Avenue TOD Overlay Zone.

RECOMMENDATIONS:

- Limit new auto-oriented developments such as auto dealerships, car washes, etc like the current 10% limitation on auto dealerships within the zone district on North College and discourage traditional auto-oriented design like drive-thru restaurants in order to prioritize development that supports the ridership of the BRT and is more compatible with a multi-modal user group.
- Explore feasibility and costs/benefits of URA funded parking structure that could be utilized for public/affordable housing parking.
- Establish a transit-oriented development (TOD) Overlay zone or create a new zone district if deemed appropriate upon further evaluation.

Figure 20: North College Avenue TOD Overlay Zone Extents



	Current City of Fort Collins Land Use Code Parking Requirement		Proposed City of Fort Collins Land Development Code Parking Requirement*	Proposed North College Ave TOD Overlay Parking Requirement	
	Non-TOD	Existing Mason TOD Overlay	Non-TOD	TOD Overlay	Any Project with Affordable Housing (applies to all units)
1-Bedroom	1.5	0.75	1	0.75	0.5
2-Bedroom	1.75	1	1.5	1	.75
3-Bedroom	2.0	1.25	2.0	1.25	1
4+-Bedroom	3.0	1.5	3.0	1.5	1.25
All Bedrooms	-	0.75	-	0.75	0.75

* The City of Fort Collins Planning Department is currently working on Land Use Code changes to encourage housing capacity and afford ability

MODIFY RESIDENTIAL SETBACK REQUIREMENT

In the 1994 zoning updates a 200-foot setback was established along North College Avenue that restricted any residential development within it. The intent of this setback was to preserve commercial uses along the corridor and recognize the impacts of the highway on livability.

In order to support the new MAX BRT route, improve streetscapes, and allow for more housing in the corridor, this setback should be modified to allow residential uses on North College Avenue when part of mixed-use developments where a portion of the ground floor is commercial. Stand-alone commercial uses should continue to be permitted.

Figure 21 and **Figure 22** outline the different modifications to the setback approaches that can be used to encourage both mixed-use and commercial only developments along North College Avenue while allowing for the development of new residential units as well.

Figure 21: Plan View Options for Configuring Residential and Commercial within Mixed Use Developments within 200 Feet of North College Avenue

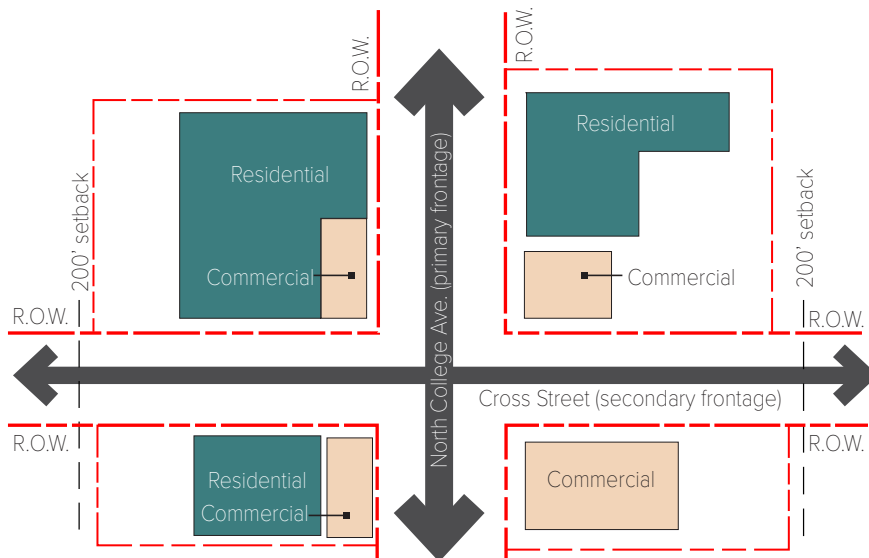
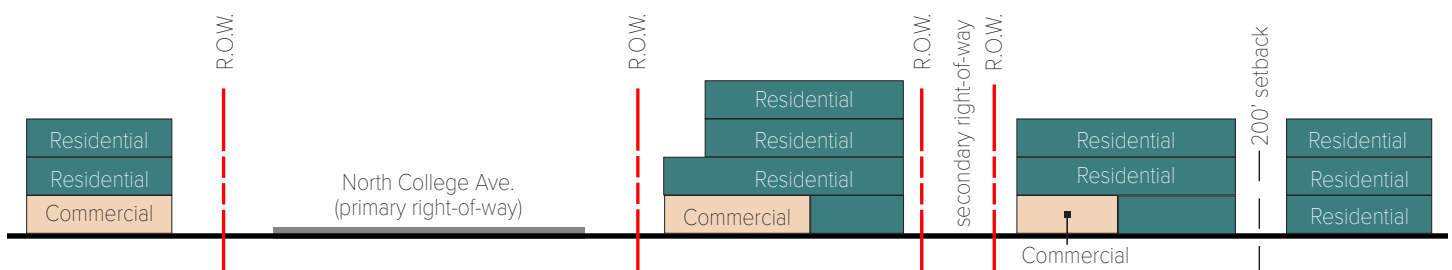


Figure 22: Section View Options for Mixed Use Development within 200 Feet of North College Avenue Showing Orientation of Commercial Uses



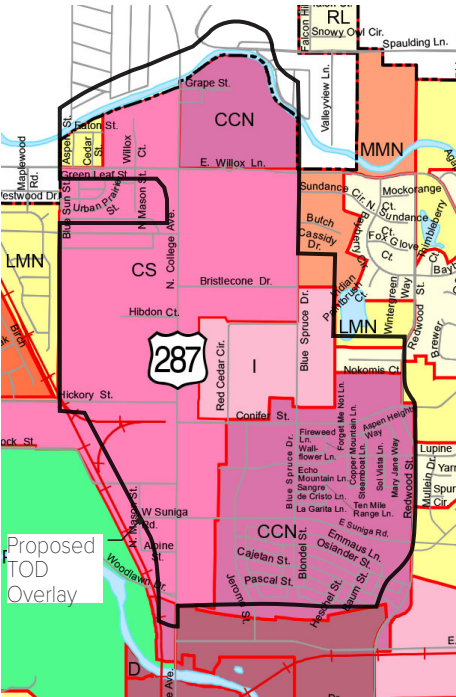
RECOMMENDATIONS:

- Allow residential development with ground floor commercial (mixed-use) within 200-feet of North College Avenue
- Commercial area should be minimum 20% of ground floor area or 20% of primary right-of-way frontage, whichever is greater
- Uses associated with residential component may not be considered as a portion of the commercial area (i.e. leasing offices, recreation facilities for residential, etc.)

INCREASE BUILDING HEIGHT ALLOWANCE

Within the study area there are currently five (5) different zone districts with varying building height allowances described below and shown in **Figure 23**:

Figure 23: Zoning Map

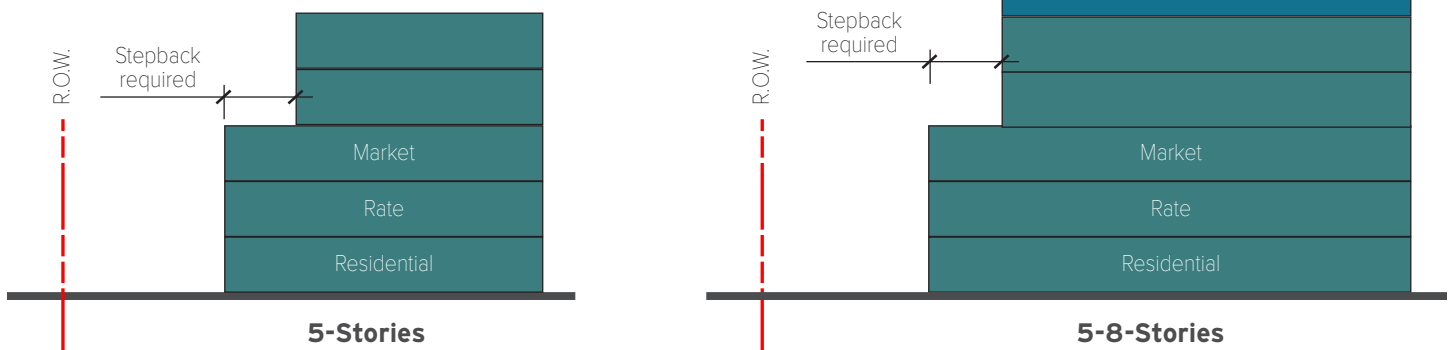


- The Service Commercial District (C-S) district comprises much of the area and allows for a maximum building height of 3-stories
- A small portion of the north-west corner of the study area is Low Density Mixed-Use Neighborhood District (L-M-N) and has a 3-story maximum
- The Industrial District (I), also on the east side of North College Avenue allows for a maximum of 4-stories for mixed use buildings
- Two areas east of North College Avenue are zoned Community Commercial North College (C-C-N) and Downtown District (D-innovation subdistrict) and have a maximum building height of 5-stories

To promote denser development for the BRT line as well as to increase the likelihood of more affordable/attainable housing units it is recommended that within the North College Avenue TOD Overlay Zone building height allowance be increased if the share of affordable units in a development exceeds 30% (see **Figure 24**).

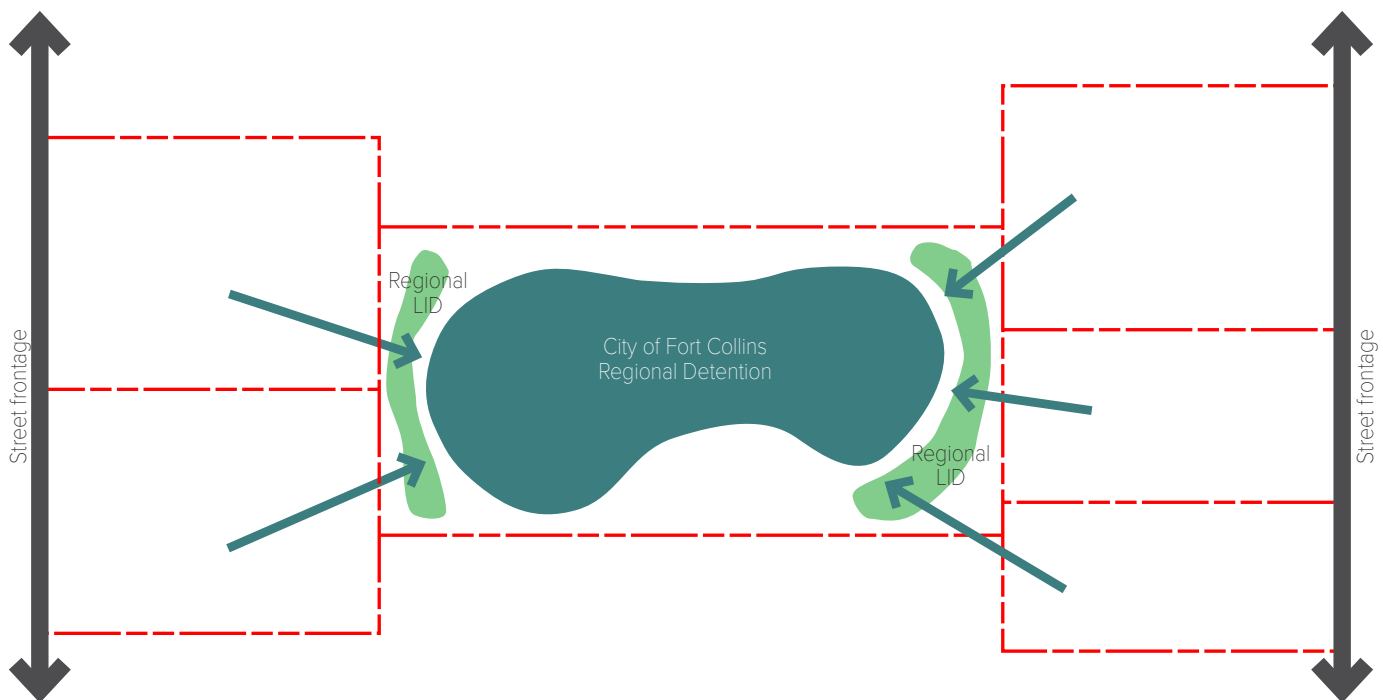
Building step-backs, which help reduce the perception of overall height along street frontages should be required along primary public right-of-way for buildings over 3-stories. Mixed use developments will typically require 4-5 stories in order to be financially feasible, public feedback has indicated that this is supported.

Figure 24: Building Height Sections



RECOMMENDATIONS:

- Increase building height allowance to 5-stories within the 200-foot setback of North College Avenue
- 8-stories should be permitted in all other areas of the North College Avenue TOD Overlay Zone

Figure 25: Regional Detention for All Development and LID for Developments with Affordable/Attainable Housing Diagram

PROVIDE REGIONAL DETENTION AND REDUCE LID REQUIREMENTS

By providing a regional detention system for all developments along North College Avenue more area could be developed on each site, reducing the overall development cost. Offsite detention reduces design fees, lowers construction and maintenance costs, allows for more densities on project sites and creates more park-like natural areas for all residents of the community

Low Impact Development (LID) stormwater treatment facilities comprise a large portion of not only a site's area but also of the development costs. Currently each site must provide LID treatment. Allowing for LID treatment to occur in off-site detention facilities or reducing the area that needs to be treated for sites that include affordable housing will allow for less infrastructure needing to be designed, accommodated, maintained, and paid for. These saved costs promote the inclusion of affordable/attainable housing in a project.

Currently the city has secured a parcel on the west side of North College Avenue that will serve as regional detention for all the development from Bristlecone to the Poudre River. Additional efforts should continue to analyze and secure regional detention on the east side of North College Avenue.

RECOMMENDATIONS:

- Invest in additional regional detention on the west side of North College Avenue, if current Hickory Pond is not sufficient for future development (see **Figure 25**)
- Explore reduction of LID requirements for developments with more than 30% of the development's units being affordable/attainable housing (for example, only treat vehicular areas, etc.)
- Explore centralized LID treatment within regional detention areas in lieu of "treatment train" approach of having small, isolated LID treatments for developments with affordable/attainable housing

ESTABLISH PEDESTRIAN & BICYCLE CONNECTIVITY REQUIREMENTS

North College Avenue has several locations with block lengths that are over 1,000-feet, making it difficult for bikes and pedestrians to easily move east and west from North College Avenue.

The addition of city or privately owned and maintained trail connections would ease circulation for these travel modes from the North College MAX BRT to residential units on parallel streets.

Figure 26 identifies where these connections should be made. These locations are based on current block lengths, existing building locations, existing city owned land, as well as existing and proposed streets that are east and west of North College Avenue. Easements and/or property dedication to the city should both be considered. Right-of-way dedications would ensure long term maintenance and snow removal. **Figure 27** displays diagrams of what these connections may look like. Within the west area the mobile home neighborhoods would not be included in the TOD Overlay Zone. General TOD Overlay Zone recommendations are outlined here.

RECOMMENDATIONS:

- Developments within designated areas on map (**Figure 26**) shall be required to provide multi-modal connections from North College Avenue to parallel streets
- Dedication of 15-foot access easement or parcel to City of Fort Collins should be required to accommodate a 10-12-foot trail connection (**Figure 27**)

Figure 26: Multi-modal Connections and Block Lengths

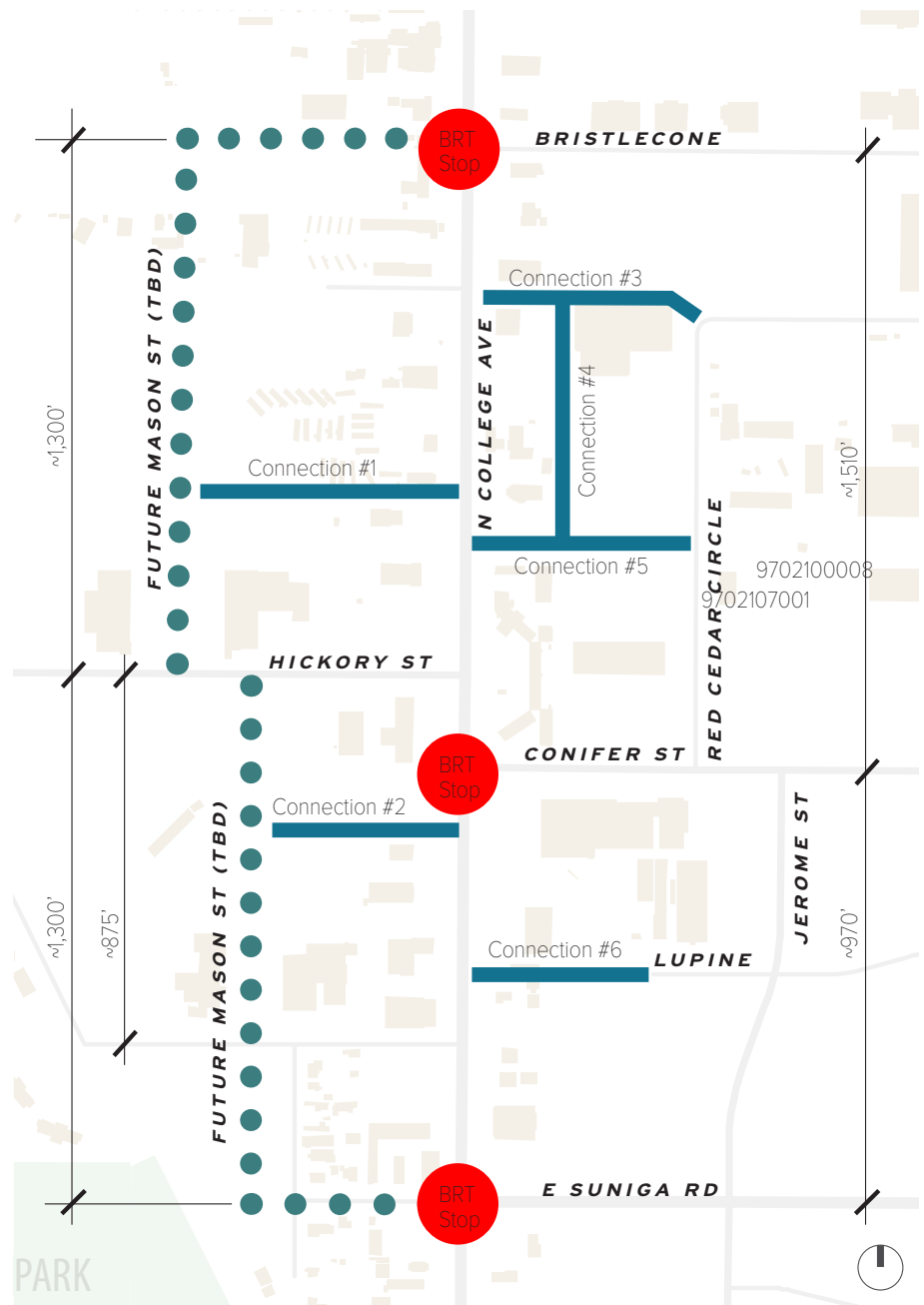
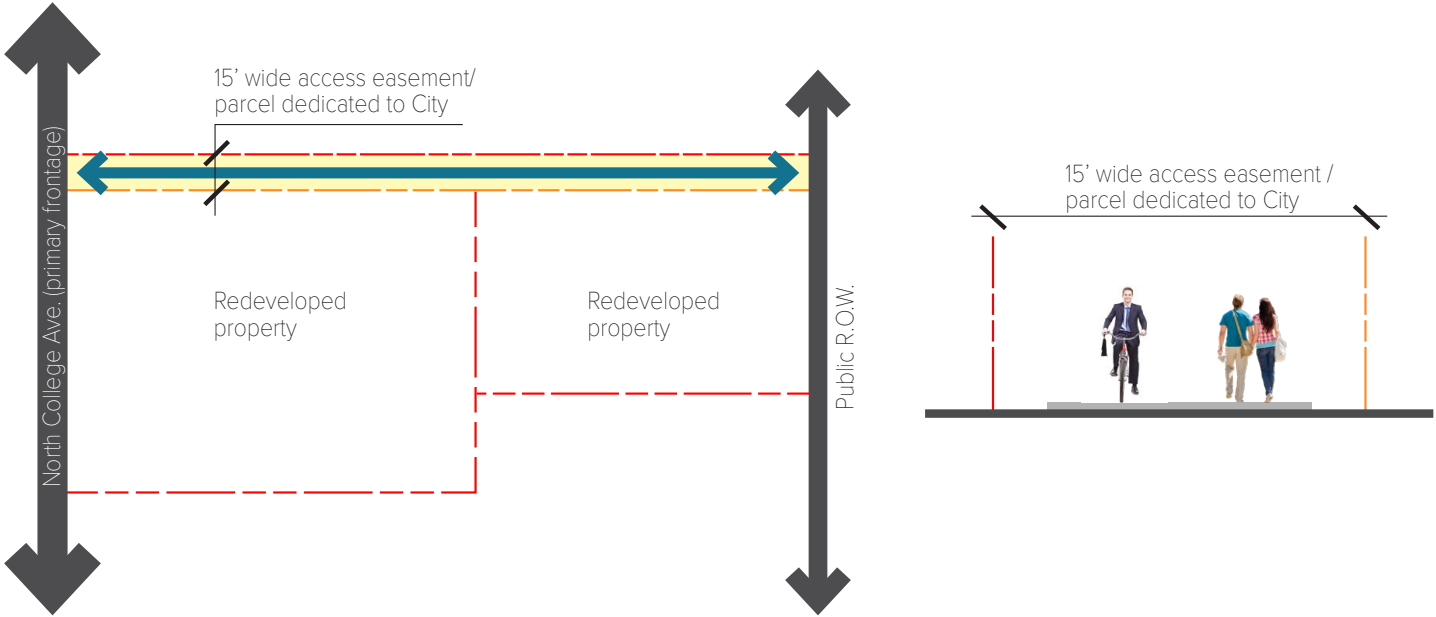


Figure 27: Example Multi-Modal Connection Plan and Section



ESTABLISH OUTDOOR SPACE REQUIREMENTS

Within the North College Avenue TOD Overlay Zone, outdoor spaces should be more urban in form with plazas, courtyards, and rooftop spaces. These types of outdoor spaces allow for gathering and refuge to activate the streetscapes and create visually appealing areas within developments. Naturalized/vegetated open spaces within the North College Avenue TOD Overlay Zone will be accomplished with the regional detention areas. **Figure 28** and **Figure 29** provide examples of how these requirements could look.

Figure 28: Example Open Space Configurations

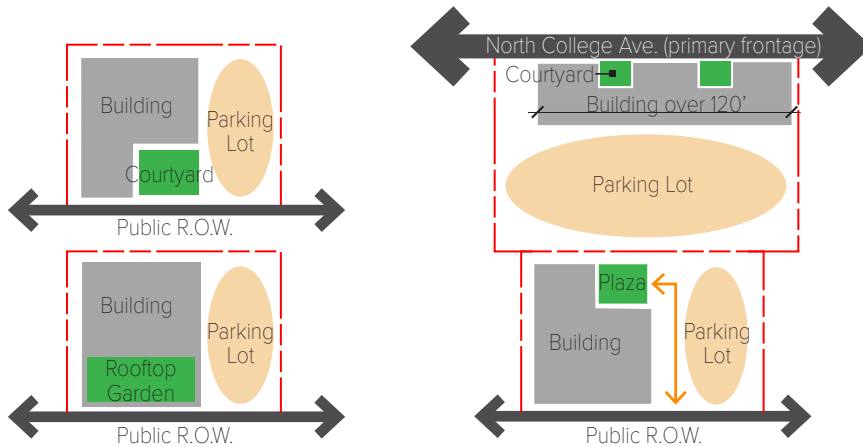


Figure 29: Example of Courtyard



RECOMMENDATIONS:

- Courtyards oriented to the primary public right-of-way on all multi-family buildings over 120-feet in length along right-of-way
- Open space credit for roof top amenities with permanent vegetation that is oriented towards the right-of-way
- Connecting walkways that have enhancements such as plazas and courtyards interior to the site
- Consider reducing the amount of open space requirements in the event that regional detention areas are created

Figure 30: Comparison of Architectural Character Images (“More of This” vs. “Less of This”)

More of This



Less of This



REFERENCE RIVER DOWNTOWN REDEVELOPMENT (RDR) ARCHITECTURAL STANDARDS

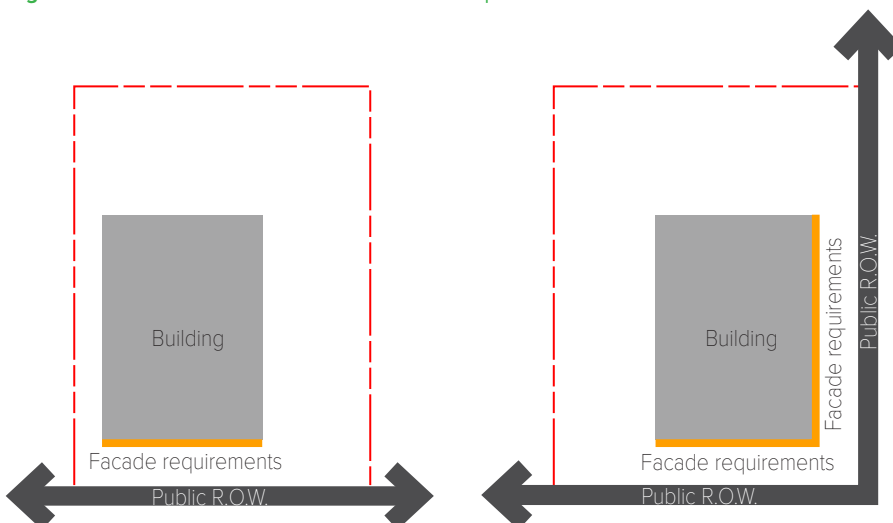
Currently architectural standards emphasize material changes and vertical articulation that generally create a complex aesthetic/appearance while increasing construction costs. In addition, all four sides of a building need to meet the materiality and articulation requirements which increase costs.

In order to encourage affordable/attainable housing and create a more simplified building aesthetic the architectural recommendations from the Fort Collins R-D-R, River Downtown Redevelopment Zone District should be referenced for the North College Avenue TOD Overlay Zone.

RECOMMENDATIONS:

- Reference Fort Collins R-D-R, River Downtown Redevelopment Zone District Architectural Design Guidelines
- Focus on street facing elevations for facade requirements (**Figure 31**).
- Reduce requirements for building articulation along horizontal planes.

Figure 31: Location of Architectural Facade Requirements



CREATE INCENTIVES TO PRESERVE EXISTING COMMERCIAL BUILDINGS AND RENTAL RATES

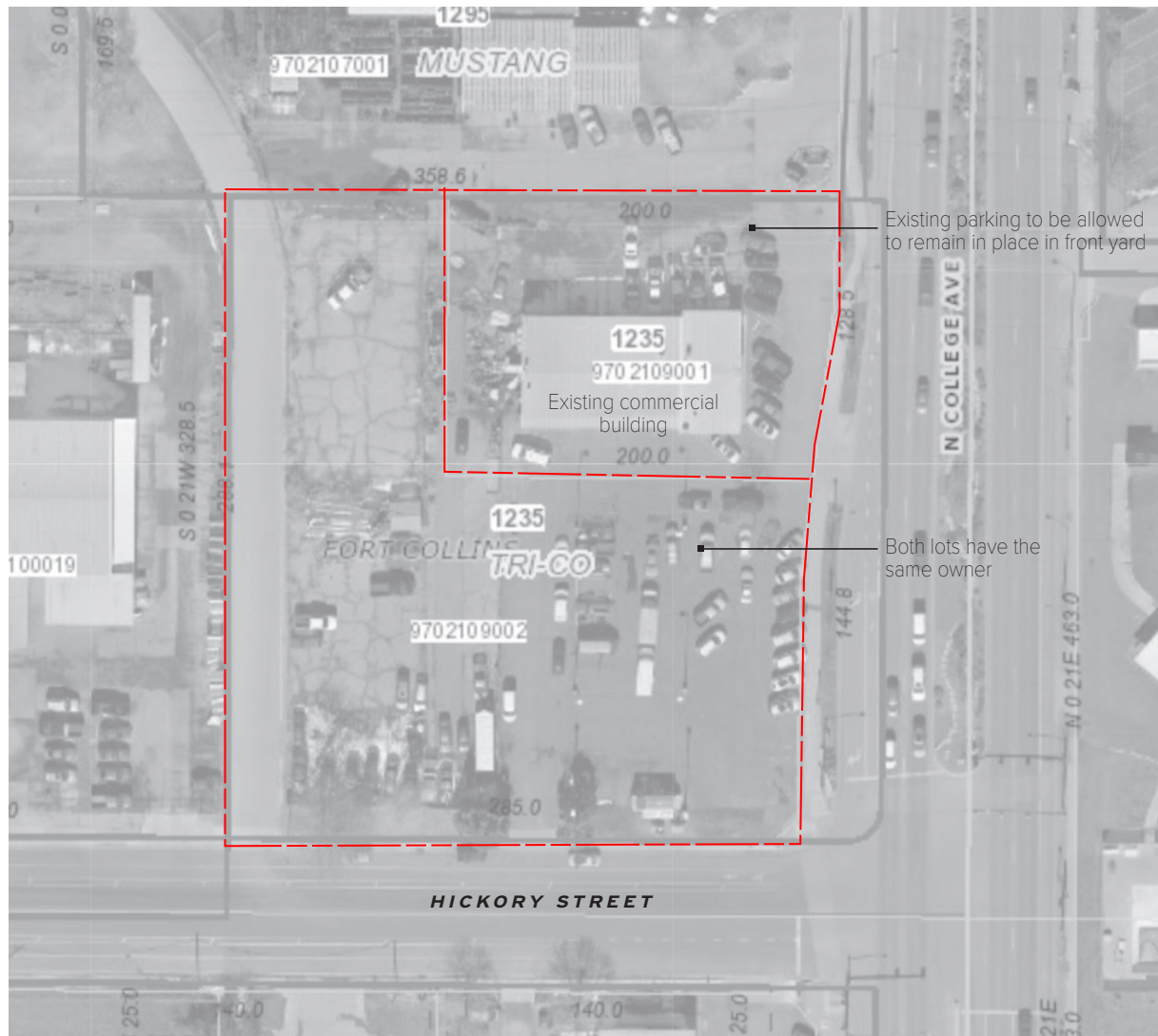
Community outreach has indicated a preference to preserve the existing businesses and commercial diversity that is due to the lower rents that are more common in this area. There is concern that redevelopment will increase rent costs and increase the likelihood that existing businesses could be displaced.

On properties where it is desired to preserve existing commercial buildings for the types of existing uses in the area, flexibility should be provided in order to maintain the existing building and allow for new development to occur.

RECOMMENDATIONS:

- Continue to allow case-by-case consideration of requirements for property upgrades “to the extent reasonably feasible”. Example of such would be adaptive re-use of an existing hotel/motel becoming multi-family
- Capture lower commercial rental rate in development agreement, similar to affordable housing deed restrictions

Figure 32: Possible Redevelopment while Retaining Existing Businesses







01 02 03 04 05 06 07

Strategies for Preserving & Increasing Affordability

Strategies for Preserving & Increasing Affordability

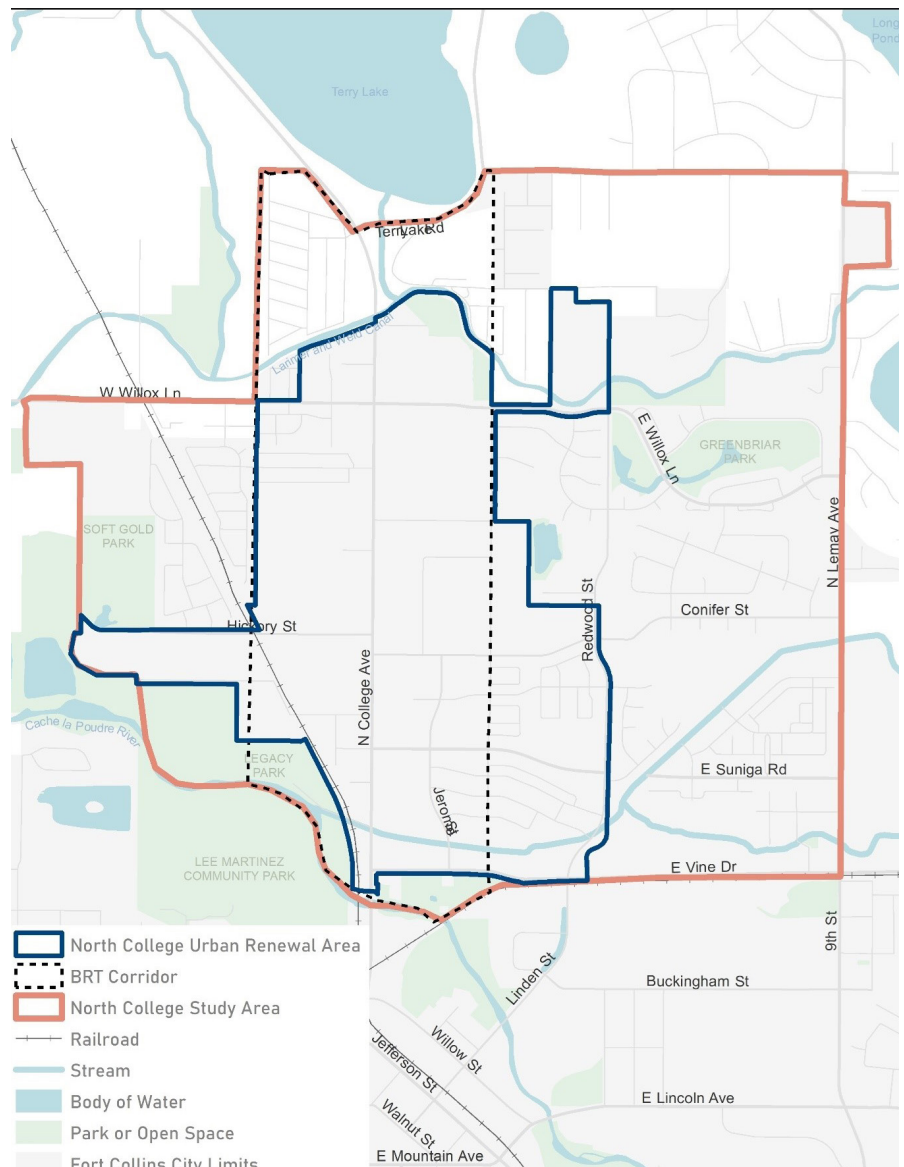
Currently the North College area is one of the most affordable neighborhoods in the city with a diverse population, including a higher percentage of Hispanic residents (44 percent) in comparison to the rest of Fort Collins' as a whole (12 percent).

• The new growth occurring on the corridor has raised concerns among existing residents and businesses about the impacts of gentrification and displacement. **These issues were identified through the public input gathered by this project.**

This section addresses land use and development implementation strategies to improve opportunities for TOD in the North College corridor. The study area is largely contained in the North College Urban Renewal Plan Area (URA) (**Figure 33**) which has a focus on addressing infrastructure deficiencies and promoting redevelopment of underutilized land. Over the last 15 years, there has been a significant amount of private infrastructure investment and related private development.

Previous studies conducted by the URA as well as this TOD land use analysis have identified additional redevelopment sites with the potential for TOD-supportive medium to high density housing. The development of these properties is currently inhibited by infrastructure deficiencies, particularly the

Figure 33: North College Urban Renewal Area



lack of regional stormwater detention and the lack of local street access on the west side of North College Avenue. Addressing these infrastructure deficiencies should therefore be a priority to continuing redevelopment and growth in the corridor.

The implementation recommendations therefore seek to balance the objectives of supporting additional development and density with protecting existing affordable housing, supporting locally owned businesses, and providing future opportunities for low- and middle-income residents and employers.

AFFORDABLE HOUSING STRATEGIES AND INCENTIVES

The additional strategies for encouraging new development while maintaining and increasing affordable housing in the corridor are outlined below. As an overarching goal, it is recommended that the City establish an affordable housing goal for the study area that can be applied to future development proposals and requests for financial assistance. **An overall goal of 30 percent affordable at 80 percent AMI or below for for-sale housing and 60 percent AMI or below for rental housing is recommended,** which would be support strategies outlined in the Housing Strategic Plan. The 30 percent goal is based on the on the existing housing stock in the area which is 32 percent affordable which includes the mobile home parks and the Village on Redwood. This 30 percent affordable goal aims to maintain the current levels of affordability in the area into the future.

RECOMMENDATIONS:

Preservation of Mobile Home Parks

The City has already taken an important step in maintaining the affordable housing inventory in the corridor by rezoning the existing Hickory Village mobile home park to Manufactured

Housing District (MH). The other mobile home park in the North College area, North College Mobile Home Park, is currently zoned as Low Density Mixed-Use. To help maintain the existing affordable housing inventory in the corridor, the North College Mobile Home Park is also recommended to be rezoned to MH. This zoning action would give greater protection to this inventory of affordable housing and would require a landowner or developer to rezone the property if it were to propose redevelopment.

Land Bank

Another important step towards affordable housing was the acquisition of a 5-acre parcel at 1475 North College Avenue by the Fort Collins Land Bank to be held for a future affordable housing development. The Land Bank Program was established in 2001 to purchase properties in the path of development that, due to a lack of infrastructure or other constraints, could be acquired at a discount; and when the properties appreciate in value five or more years later, sell them below market value to allow for the development of affordable housing. The program can sell properties at a maximum of 90 percent of market value, although many land bank properties have sold at a much higher discount. The North College Avenue site in the BRT Corridor is expected to redevelop into 75 affordable housing units in the future. This property lacks access to North College Avenue and will need to be aggregated with other properties or gain easement access, or access to the recommended realignment of Mason Street, before development can occur.

The existing City Land Bank Program can be used to acquire additional properties for affordable development. As noted, the corridor is one of the more affordable areas of the city and some properties may not be currently feasible for development given existing infrastructure constraints. There may therefore be opportunities to acquire additional properties at a discounted price for future development.

CASE STUDY WHEAT RIDGE URA AFFORDABLE HOUSING

In recent years, URAs throughout the state have been using URA funds to support the development of affordable housing. URAs have started to make it a priority to provide gap financing for projects within their boundaries that include affordable housing. A recent example took place in Wheat Ridge, CO where Renew Wheat Ridge, the City's URA program, provided TIF funds to support the conversion of an older 108-room hotel into 97 multifamily units for workforce housing. The new residential development, Prospect Park Apartments, includes studio, 1-, and 2-bedroom units at rental rates below market rate for the local workforce. It also has residential amenities with a fitness room, co-working space, storage units, and dog park. The developer received financial gap assistance from the URA to provide the additional improvements and amenities. The City and the developer worked together to create an affordable housing development that met the standards of the City with below market rents, exterior improvements, and residential amenities. The hotel conversion cost approximately \$10.7 million to develop and received \$400,000 in public subsidy as a TIF reimbursement.

NORTH COLLEGE URBAN RENEWAL AUTHORITY

The North College Urban Renewal Authority (URA) was established in 2004 and encompasses most of the North College MAX BRT Corridor. The URA has 7 years left to generate and collect tax increment financing (TIF) dollars from new development and redevelopment within the URA boundaries. The URA has approximately \$20 million of TIF funds that must be used before the URA expires in 2029 to support specific priorities within the plan area. Any remaining funds at expiration will be remitted back to each taxing entity. The URA is not a durable long-term source of funding, but it can support specific projects and goals before its expiration.

The North College URA adopted a Community Investment Plan in 2020 that provides guidance on how to invest unpledged TIF dollars through the duration of the URA. The Plan identifies three main priority areas:

- Complete, Vibrant Neighborhood
- Community Hub
- Infrastructure Improvements

Each priority area includes an investment plan with short-, medium-, and long-term strategies and a recommended revenue allocation. Specific recommendations from the Community Investment Plan also support affordable housing strategies and incentives included in this section such as, small business support, acquire property for redevelopment, repayments fund community objectives, forge development partnerships, continue and complete infrastructure projects, and fund legacy projects.

The following sections provide specific actions recommended for the URA in support of the Community Investment Plan and redevelopment that includes affordable housing.

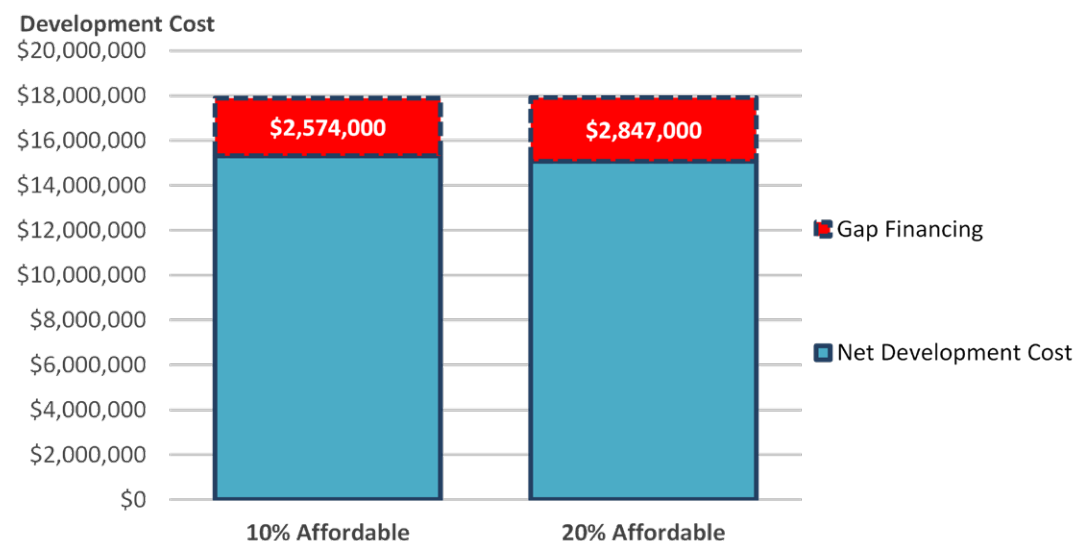
RECOMMENDATIONS:

Gap Financing for Affordable Housing

The City of Fort Collins URA has prioritized commercial and mixed-use developments. It is recommended that the North College URA provide gap financing for more residential developments that meet the affordable housing goals for the corridor.

The amount of gap financing required for residential projects with a percentage of affordable units is estimated below in **Figure**

Figure 34: Estimated Gap Financing Required for Affordability



34. The estimates are based on a 5-story multifamily project with 65 rental units. Two scenarios were tested with 10% affordable units (7 units) and 20 percent affordable units (13 units). Both scenarios apply the TOD Overlay recommendations of increased density to 5-stories and parking reductions for affordable housing developments. Each scenario requires a subsidy to reach a developer return within industry standards. The 10 percent affordable scenario requires approximately \$2.6 million in subsidy or \$40,000 per unit, which is about 13 percent of the total development costs. The 20 percent affordable scenario requires approximately \$2.9 million in subsidy or \$44,000 per unit, which is about 16 percent of the total development costs.

Key Infrastructure Projects

The west side of North College Avenue has various detriments for development due to the lack of key infrastructure. Regional stormwater improvements are needed to allow for new development of significant density and scale. Additionally, there are multiple sites that lack street frontage or connection to North College Avenue and require street connections or easements. The URA could provide funding to support stormwater, and street connections to help catalyze development on the west side of North College Avenue. The proposed Mason Street Extension is a key infrastructure project that would improve access for parcels west of North College with a future intersection at Bristlecone Drive with a traffic signal on North College Avenue. Additionally, the City owns a parcel west of North College Avenue that has plans for stormwater improvements that would benefit surrounding properties in the area. It is recommended to continue to invest in regional stormwater solutions and street accessibility improvements for the west side of North College Avenue.

New URA Plan

The City should consider creating a new urban renewal plan in the North College corridor to implement the recommendations of the existing URA plan and this study beyond its 2029 expiration. The expected growth over

the 2020-2045 time period will not support BRT investment unless development forecasts and area densities are increased. The feasibility of a new urban renewal area and plan should be explored through discussions with each taxing entity. With the revised state statute, C.R.S. 31-25-107 (3.5), each taxing entity must agree to inclusion in the tax increment financing (TIF) and a county impact report is required. Additionally, a new blight study and plan is required to establish a new URA. It is recommended to focus on areas of the corridor where redevelopment is desired, require significant infrastructure investment, and have plans for development.

Metro Districts

Larger development projects may seek to use a metro district to pay for project infrastructure costs. Fort Collins has modified its metro district service plan policies to require districts to provide “extraordinary public benefits” to be approved. These benefits can fall into the categories of Environmental Sustainability, Critical Public Infrastructure, Smart Growth Management, and Strategic Priorities, and for which there is an overall scoring system. This last category includes items such as Affordable Housing, Infill Redevelopment and Economic Health Outcomes that are applicable to the goals of this plan. A number of recently approved metro districts successfully gained affordable housing at 80 percent AMI or below (listed below). All of these developments were approved by a different iteration of the City’s metro district service plan policies, but illustrate how affordable housing goals can be met.

- Montava - 4,400 units with 10 percent being affordable (440 units)
- Waterfield - 498 units with 10 percent being affordable (50 units)
- Northfield - 442 units with 15 percent being affordable (63 units)

Additional projects in the corridor seeking metro district approvals should be required to provide affordable housing consistent with the recommended area goals.

CASE STUDY - OLDE TOWN ARVADA URA

The Arvada Urban Renewal Authority was created in 1981 and the City Center Plan Area was designated at that time. The Plan addressed building, façade, and streetscape improvements in the historic Olde Town commercial district. The Plan also assembled 26 acres of blighted land next to Olde Town that was redeveloped with infill housing. The City Center URA Plan Area expired in 2006. The City formed the Olde Town Station URA Plan Area in 2009 to address development and infrastructure needs in anticipation of the opening of the RTD Commuter Rail line and Olde Town station. The focus of the new URA was station improvements including a P3 with City, URA, and RTD to build a parking structure at the station and to support the transit-oriented development on the former RTD surface parking lot as well as adjacent private properties. Establishing the new URA required a blight study to define a boundary of eligible properties. It is a much smaller plan area but does overlap with a portion of the previous plan area.

CASE STUDY - ENGLEWOOD SMALL BUSINESS GRANTS

The City of Englewood has a Business Initiation grant program that provides grants of up to \$5,000 for a storefront business in a commercial district. The City also provides a Business Acceleration Grant of up to \$10,000 for permanent improvements to existing businesses in operation for 2+ years. In both cases, applicants must complete a business training program with SBDC and develop a business plan.

LOCAL COMMERCIAL STRATEGIES AND INCENTIVES

This section addresses strategies and incentives for commercial development, specifically balancing redevelopment and revitalization of commercial properties with the preservation of locally owned and operated retail and service businesses. A particular challenge is the preservation of local small businesses along North College Avenue, which has been magnified and compounded by the pandemic. Locally owned and locally serving retail, restaurants, and service businesses support local households and the quality of life in the community. The following strategies and incentives are recommended to help support local businesses in the area.

RECOMMENDATIONS:

New and Emerging Business Grants

Most of the available grants and loans are focused on improvements to commercial properties. It is more challenging to provide incentives to individual businesses. The primary sources of small business assistance are Small Business Development Centers (SBDC). SBDCs are a partnership of state (Colorado Office of Economic Development and International Trade), federal (Small Business Administration), and local (chambers and economic development corporations) organizations. Larimer SBDC is in Fort Collins and serves Larimer County. Some cities also provide small startup grants while others establish a revolving loan program (RLP). Fort Collins had a RLF that was established a few months prior to the pandemic, however it was suspended at that time. It is recommended the City consider bringing this program back or refocus it as grants instead of loans similar to the City of Englewood program described in the case study on this page.

Building Improvement and Redevelopment Incentives

The City and/or URA can provide grants and loans to local property owners and businesses for site and building improvements. This funding could be used for property improvements such as streetscapes, walkways, landscaping, façade repairs and enhancements, new signage, and other building upgrades to enhance the state of repair and aesthetics of businesses in the area. In 2017 and 2018, the URA offered a façade improvement program that no one took advantage of. If this or a similar program is brought back, additional promotion and education would be needed to encourage its use and effectiveness. Additionally, public assistance can be provided to support redevelopment projects including property acquisitions and gap financing using tax increment financing (TIF) to make a desirable project feasible.

Multicultural Business & Entrepreneur Center

The Multicultural Business & Entrepreneur Center (MBEC) is a free bilingual (English & Spanish) center that provides business owners and entrepreneurs easy access to business service providers, resources, mentorship and specialty training. It also connects them with critical resources to create, launch and grow a business in Fort Collins.

Capital Projects Business Liaison

This is a new position at the city who will work on the construction toolkit and help provide coordination and consistency across the city when it comes to projects that impacts businesses.

Commercial Lease Strategies

Commercial lease strategies can be used by property owners to support local businesses and mitigate the impact of high lease rates on tenants. These strategies would need to

be encouraged and potentially subsidized by the City to support and preserve economic development. Commercial lease strategies include percentage rent leases, graduated lease rates, and short-term leases.

Percentage Rent Leases

The rent paid by the tenant is based on a percentage of the sales made by the business. This often includes a base rental rate that is a reduced triple net (NNN) lease rate and can cover taxes, insurance, and maintenance. In addition to the base rate, a percentage of the revenue from sales above a set base level is paid as rent. This lease strategy works best for businesses with revenue tied directly to sales such as restaurants and clothing stores.

Graduated Lease Rates

A graduated lease can attract and support new businesses. The graduate lease structure increases rental rates as the business grows and becomes more viable. For example, a base rate in year 1 covers the costs of space (utilities, taxes, insurance, and maintenance) and then the rental rate increases annually as the business grows.


Short Term Leases

A short-term lease is typically for six months to a year and is great for pop-up businesses or incubator/start-up businesses. The rental rate is much lower than the market rate and is usually provided while recruiting a longer-term tenant.

Flexible Incubator Space

A business incubator space for local businesses was an idea that came from previous outreach done by the city to inform future Urban Renewal Authority investments. A flexible business incubator could provide space for new local businesses to get started or could be a temporary space for businesses that are displaced by redevelopment in the North College area. For displaced businesses the space could serve as a temporary location until they are able to move back to their original location once redevelopment is finished. A business incubator could be a space owned and managed by the city or an existing non-profit or could be a program of rent subsidies for local businesses displaced by redevelopment until they can return to a permanent space.





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Summary of Recommendations & Tracking Performance

Summary of Recommendations & Tracking Performance



Table 4 displays a summarized list of all the recommendations included in this plan organized by the subject of recommendation and whether the recommendation is near-, mid-, or long-term.

Table 4: Summary of All Recommendations

Recommendation Type	Phase	Recommendation
Transportation	Near-Term	 Fixed-route Transit Realignments: <ul style="list-style-type: none"> Create new high-frequency bus route on North College Avenue within existing general-purpose lanes at 15-minute frequency Realign route 8 on Blue Spruce Drive, Redwood Street, and Linden Street at 30-minute frequency Eliminate route 81
		 Micro-transit Zone
		 Consolidate existing local bus stops into new MAX stations at signalized intersections (with basic amenities such as shelters, benches, trash cans, and pedestrian scale lighting)
		 New shared use path on the west side of North College Avenue (between the canal and Hibdon Court)
		 Adopt amendments to the Mason Street realignment identified in the Master Streets Plan
		 New signals: Suniga Road, Bristlecone Drive
		 Improved bicycle and pedestrian crossings: Conifer Street/Red Cedar Circle/Jerome Street, Suniga Road/Jerome Street, Vine Drive/Jerome Street, Bristlecone Drive/Red Cedar Circle, Hickory Street/Mason Street
		 New buffered or protected bike lanes: interim protected bike lanes on North College Avenue; Jerome Street, Blue Spruce Drive, and Bristlecone Drive
	Mid-Term	 Business Access Transit (BAT) lanes on North College Avenue
		 Increase bus frequency and service hours: MAX on North College Avenue with 15-minute frequency and route 8 with 15-minute frequency
		 Creation of mobility hub near Willox Lane turnaround
		 Shared-use paths for the length of North College Avenue on both sides of the roadway
		 Fully built MAX stations with multimodal options
		 Bus turnaround north of Terry Lake Road
		 Construct medians south of Conifer Street
	Long-Term	 New buffered or protected bike lanes or shared use paths with planned roadway connections: Mason Street, Red Cedar Circle
		 Increase bus frequency to 10-minutes; re-evaluate feasibility and benefits of interlining MAX on North College Avenue with MAX on Mason Street

Recommendation Type	Phase	Recommendation
Development Requirements	Near-Term	Establish North College area specific TOD Overlay
		Modify residential setback from College Ave
		Increase building height allowance
		Establish connectivity requirements
		Establish outdoor space requirements
		Establish requirements for building dominant block faces
		Adjust Architectural Standards
	Mid-Term	Provide regional detention and reduce LID requirements
Strategies for Preserving & Increasing Affordability	Near-Term	Identify opportunities to use the Urban Renewal Authority's financing tools to encourage affordable development in the area
		Require metro districts created for large developments to provide specific and considerable public benefits
		Rezone the North College Mobile Home Park to the Manufactured Housing District
		Continue to leverage the city's existing land bank
		Establish an affordable housing goal for the study area
		Encourage and subsidize commercial lease strategies where appropriate
		Develop new and emerging business grants for local businesses
		Provide incentives for building improvements and redevelopments for local businesses



TRACKING PERFORMANCE

As the recommendations in the North College MAX BRT Plan are implemented, tracking the performance of improvements will be important. Tracking different performance measures will help ensure the project is addressing community concerns and serving community needs. Performance measures should measure the effectiveness of improvements achieving the corridor vision and addressing the identified need, both of which are included in the beginning of this document. The following is a list of potential performance measures the City of Fort Collins can track over time to ensure improvements are addressing the needs they were intending to and providing a direction for adjustments if they are not performing up to expectations.

- **Mode-share**

Tracking the percentage of trips by mode made to, from, and within the North College area can be an effective way to measure how convenient and comfortable the multi-modal transportation network is and how well development is serving active modes of transportation. The city can create a target for each mode to see how well improvements to transportation and land use are helping reduce the proportion of people driving alone and increasing the proportion of people using active modes and people taking transit. Changes in mode-share not only reflect the effectiveness of transportation infrastructure but also how the density, urban design, and land use mix of nearby development support transit ridership and active mode use.

- **Crash History**

Improvements to safety in the area can be monitored by tracking the number of crashes in the study area and identifying if they go down significantly after improvements are implemented. This performance measure should also look at the number of crashes involving people using active modes and the number of crashes that resulted in serious injury or death. Tracking crashes by these additional attributes will provide more information

about the safety challenges occurring at each location and how well improvements address the different safety concerns.

- **Speed and Reliability of Transit**

Monitoring changes to speed and reliability of bus routes can provide important information about when additional transit improvements are needed (like BAT lanes) and whether implemented projects are successful in improving transit performance. Tracking speed and reliability is very important for people choosing to use transit so monitoring this metric is tied closely to understanding changes in ridership numbers.

- **Surveys**

Regularly surveying transit riders, residents, and employees through on-board surveys or travel surveys can provide valuable information on how well the existing transit system is serving transportation needs, as well as how comfortable and convenient it is to ride. Items to ask transit riders could include:

- » Things that are working well about current transit services
- » Improvements they would like to see to the transit system
- » Challenges they experience accessing transit
- » Needed service changes or new connections they would like to see

- **Affordability**

The city could track the efficacy of different affordability policies by tracking prices of for sale and for rent homes and retail space in the North College area and creating targets for the proportions of property that fall into different affordability ranges. This would allow the city to understand if adopted policies and new developments are helping create a healthy mix of options for people of different income levels wanting to live or operate a business in the area. An overall goal of 20 percent affordable at 80 percent AMI or below for-sale housing and 60 percent AMI or below for rental housing is recommended.

Appendix A

Public Engagement Summaries

Appendix B

Existing Conditions Report

Appendix C

Alternatives Analysis Report

Appendix D

**North College
Roadway Design
Cutsheets**

Appendix E

Conceptual Estimate of Project Cost for North College Reconstruction