



# Lincoln Corridor Plan

May 20, 2014





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# ACKNOWLEDGMENTS



Poudre River Trail near Lincoln Corridor

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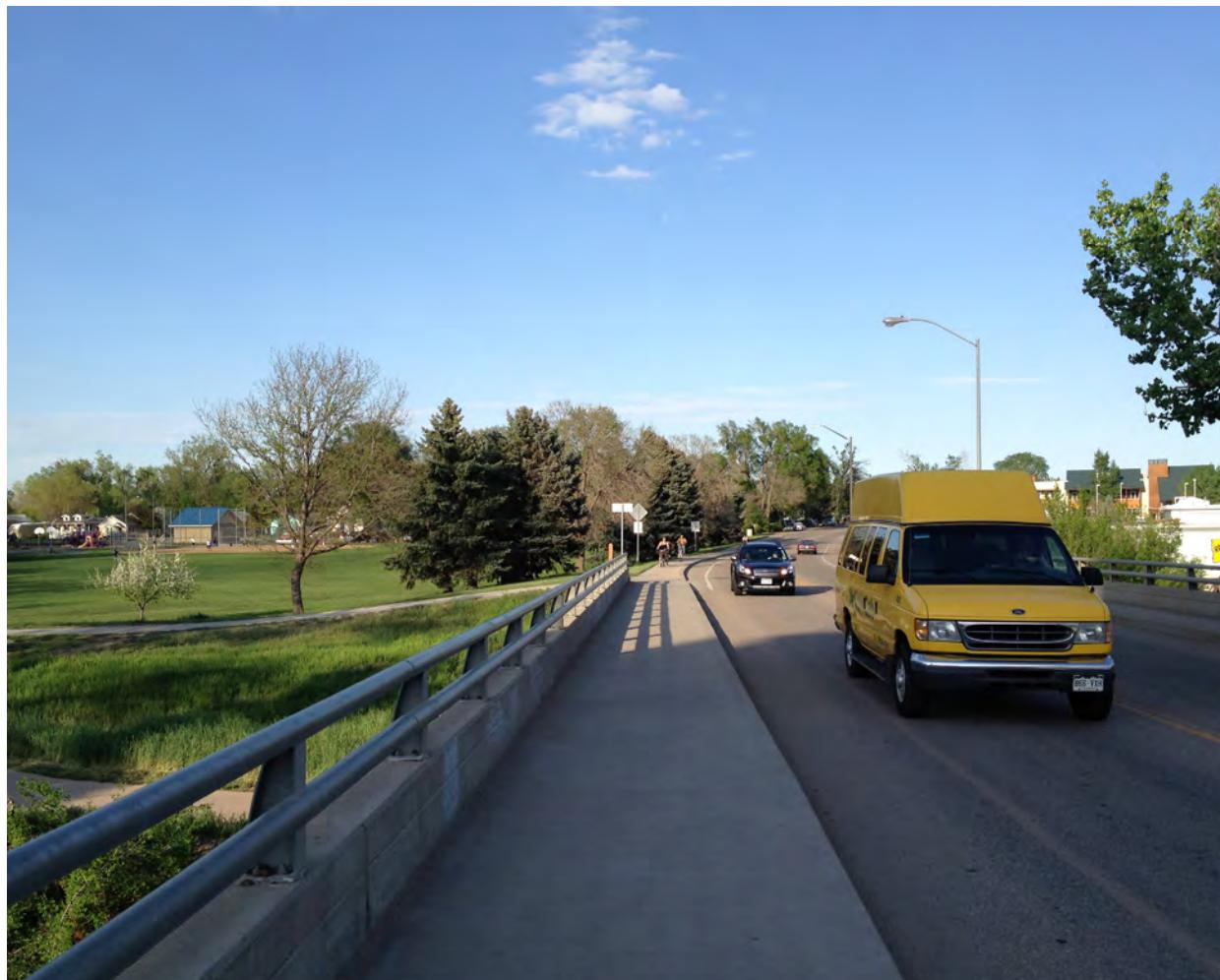
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# TABLE OF CONTENTS



Lincoln Corridor Bridge

<b>Executive Summary .....</b>	<b>i</b>
<b>PHASE I - VISION</b>	
<b>Section 1.0 Introduction.....</b>	<b>1</b>
Purpose .....	1
Need for Plan .....	2
Project Goals .....	4
Process .....	6
Planning at Three Scales.....	7
<b>Section 1.1 Existing and Future Conditions.....</b>	<b>8</b>
Existing Plans and Ongoing Projects .....	8
Existing and Future Land Use .....	14
Socio-Economic .....	16
Mobility and Safety .....	18
Natural Systems .....	24
<b>Section 1.2 Community Engagement.....</b>	<b>26</b>
Strategies for Community Engagement	26
Phase 1 Outreach Events.....	27
What We Heard .....	28
Case Studies .....	30
<b>Section 1.3 Corridor Vision .....</b>	<b>32</b>
Background .....	32
Great Streets Initiative Criteria .....	32
Key Values.....	34
Corridor Vision.....	35

**PHASE II - ALTERNATIVES DEVELOPMENT**

<b>Section 2.0 Introduction.....</b>	<b>43</b>
<b>Section 2.1 Alternatives .....</b>	<b>44</b>
Three Alternatives for Lincoln Corridor.	44
Bridge Alternatives .....	64
Bus/ Rail Transit Alternatives .....	66
Bike Alternatives .....	68
Roundabouts.....	76
Streetscape Amenities.....	78
<b>Section 2.2 Community Engagement .....</b>	<b>80</b>
Community Workshops.....	80
Stakeholder Workshop.....	81
Online Survey .....	81
<b>Section 2.3 Alternatives Evaluation .....</b>	<b>84</b>
Evaluation Methodology .....	84
Triple Bottom Line Analysis .....	88

**PHASE III - PREFERRED PLAN**

<b>Section 3.0 Introduction .....</b>	<b>90</b>
<b>Section 3.1 Community Engagement.....</b>	<b>90</b>
<b>Section 3.2 Preferred Alternative .....</b>	<b>93</b>
Lincoln Corridor West .....	93
Lincoln Corridor Central .....	95
Lincoln Corridor East A .....	97
Lincoln Corridor East B.....	99
Primary Intersections .....	100
Streetscape Amenities.....	102
Sugar Beet History .....	104
Pedestrian Gathering Areas.....	106
Special Pavements.....	108
Lincoln Bridge .....	109
Low Impact Development Techniques .....	110
Landscape Character .....	111
Transit.....	112
Neighborhood Improvement Projects .....	116
Triple Bottom Line Analysis .....	118
<b>Section 3.3 Implementation .....</b>	<b>120</b>
Introduction .....	120
Lincoln Corridor.....	120
Transit & Neighborhood Improvements .....	128
Performance Indicators .....	132
Next Steps.....	132

**APPENDICES****Appendix A Phase I Vision**

A-1	Transportation Analysis
A-2	Phase I Community Engagement Summary

**Appendix B Phase II Alternatives**

B-1	Alternative Budgetary Cost Estimates
B-2	Rail Trolley Analysis
B-3	Phase II Community Online Survey Summary
B-4	Alternatives Evaluation Summary

**Appendix C Phase III Preferred Plan**

C-1	Lincoln Corridor Phase III Online Survey and Open House Summary
C-2	Business and Resident Concerns & Responses
C-3	Transit Route Alignments Chart
C-4	Preferred Plan Budgetary Cost Estimate

**Appendix D Technical Drawings**

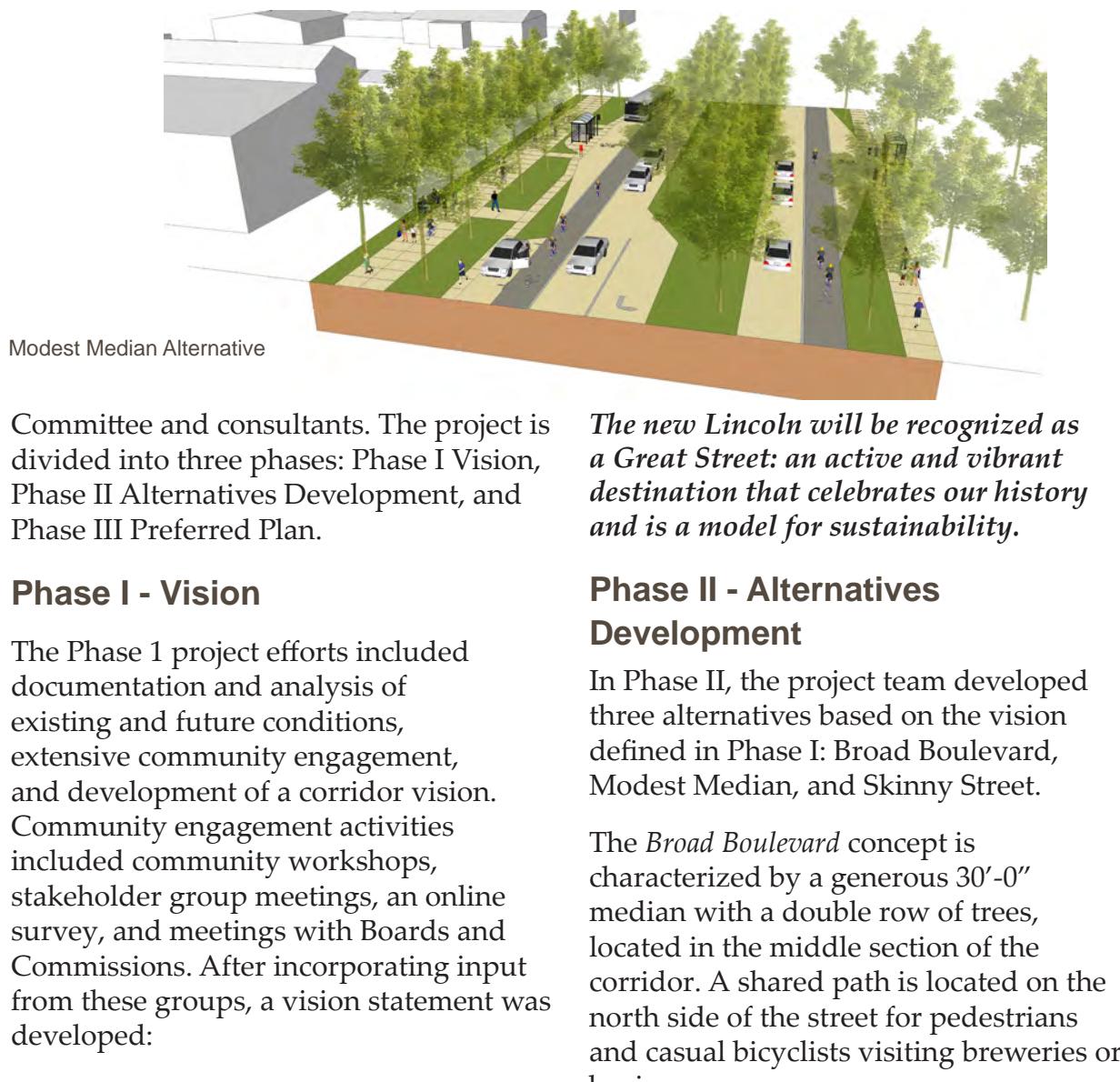
Note: The complete Appendix is available under separate cover.

# EXECUTIVE SUMMARY

The Lincoln Corridor Plan represents a 12-month planning project with two primary objectives. First, to develop the ultimate multi-modal roadway design for Lincoln Avenue from Jefferson Street to Lemay Avenue. Second, to identify and implement related neighborhood improvement projects in the planning area. The planning effort was focused on developing:

- A community-driven corridor vision for Lincoln Avenue
- A preferred multi-modal roadway design
- Recommendations for related corridor projects in the area
- Implementation strategies and actions
- Preliminary project costs
- Project funding options and phasing
- Implementation strategies and actions

The project was initiated in March 2013 and was led by a team of FC Moves and Planning staff with support from a multi-departmental Technical Advisory



The *Modest Median* concept is characterized by a median that extends most of the corridor. The median varies in width, with a maximum width of approximately 16'-0". A shared path is provided on the south side of the street, creating a convenient connection to the Woodward Technology Center for both pedestrians and bicyclists.

The *Skinny Street* concept is characterized by a center turn lane and limited median, providing flexibility in turning movements along the majority of the corridor. One-way off-street bike lanes with generous landscape areas are provided on both sides of the street.

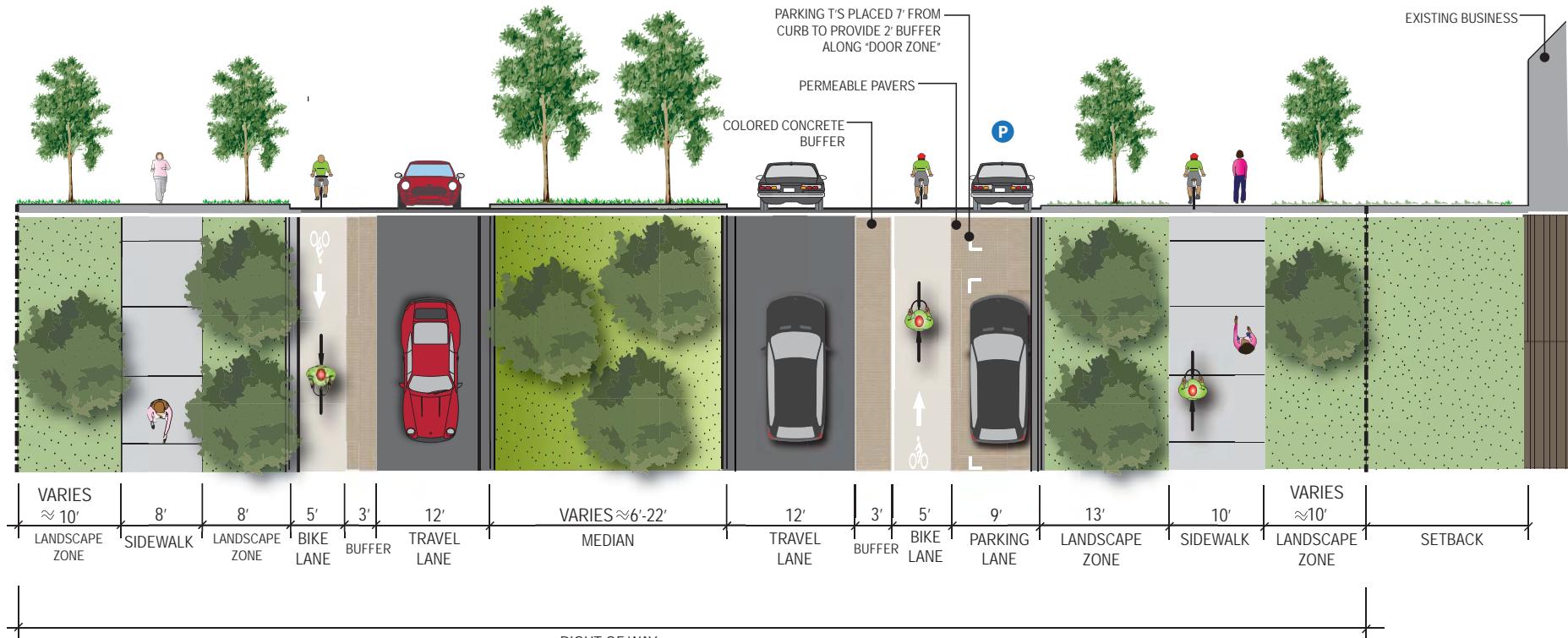
These three alternatives were evaluated by a variety of factors, including performance criteria, level of community support, cost,

and triple bottom line considerations. The performance criteria were based on a set of five objectives. These objectives emerged from the project goals and vision statement:

**Objective #1 - Improve Multi-Modal Mobility**

**Objective #2 - Improve Safety**

**Objective #3 - Create Active Street Environment**



Lincoln Corridor street section

## Objective #4 - Enhance Appearance

## Objective #5 - Incorporate Sustainable Street Design Practices

The evaluation resulted in the Broad Boulevard and Skinny Street alternatives with slightly more support than the Modest Median alternative.

## Phase III - Preferred Plan

The project team developed a Preferred Plan by combining and refining components of the alternatives for the West, Central, and East segments of the corridor that best supported the corridor vision and results of the alternatives evaluation.

Key elements of the Preferred Plan include:

- Two travel lanes
- Buffered bike lanes
- Wide sidewalks (generally 10' on north side, 8' on south side)
- Special pavement materials to enhance aesthetics and improve safety at driveways and intersections; delineate vehicular and bicyclist travel lanes from pedestrian crossings at driveways and intersections



Pedestrian gathering areas are key elements of the Preferred Plan

- Transit stops and shelters
- On-street parking in select locations
- Generous landscaped median
- Streetscape amenities such as gathering areas, street furnishings, lighting and art in public places
- New Lincoln bridge with an enhanced connection to the Poudre River
- Low Impact Development applications to improve stormwater drainage and water quality



Walking with business owners along the corridor

The project team met with property and business owners, and neighbors along the corridor to get feedback on the Preferred Plan as the project evolved. A key part of this review included coordination of existing and future driveway access and potential right-of-way adjustments along the corridor. The Preferred Plan describes a phased approach for access and right-of-

way changes to ensure access works with existing conditions while anticipating potential future redevelopment. Final design will be implemented in phases, starting with the functional roadway improvements and then later adding enhancements, such as enhanced landscaping and gateway amenities. The plan is intended to be action-oriented. Implementation strategies and an action plan were developed for two parts: Part I Lincoln Corridor, and Part II Transit,

## Lincoln Corridor Action Plan

Strategy	
<b>FINAL DESIGN</b>	
1	Secure funding for developing final design/construction plans
2	Prepare final design/construction plans and obtain approvals
3	Finalize potential phasing
4	Coordinate with Jefferson Street final design
<b>CONSTRUCTION</b>	
5	Secure funding for construction
6	Acquire right-of-way
7	Conduct construction operations to minimize impacts to businesses and residences
8	Lower speed limit
<b>OPERATIONS &amp; MAINTENANCE (O&amp;M)</b>	
9	Maintain roadway
10	Maintain landscaping

& Neighborhood Improvements. Transit & Neighborhood Improvements include smaller projects that address longstanding existing deficiencies and enhance neighborhood livability. Some of these projects were already identified in previous plans (e.g., Northside Neighborhoods Plan, Pedestrian Plan), and some projects are new ideas that have arisen during the public process for the Lincoln Corridor. The list of potential neighborhood projects was refined to best align with the corridor vision and objectives and meet realistic expectations for implementation.

## Transit & Neighborhood Improvements Action Plan

Strategy	
<b>TRANSIT</b>	
1	Implement Phase 1 transit improvements
2	Secure funding for additional transit phases
3	Implement future transit phases
<b>NEIGHBORHOOD PROJECTS</b>	
4	Secure funding for neighborhood improvement projects
5	Implement neighborhood improvement projects

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## PHASE I - VISION

## SECTION 1.0

# INTRODUCTION

The Lincoln Corridor is a critical connection to Downtown Fort Collins, the Poudre River Trail, and the eastern side of the community. *City Plan* (2011) identifies the Lincoln Triangle as a catalyst site, an area within the City well-positioned for creating and maintaining public and private initiatives for lasting, desirable change. The attributes that contributed to this nomination include:

- A strong and unusually diverse mix of retail, heavy and light industry, offices, recreation, and residential neighborhoods with a rich history and culture.
- Significant historic structures and areas.
- Large, currently vacant and underdeveloped infill properties that are owned by individuals and organizations with an interest in redevelopment.
- An existing historic neighborhood providing a diversity of households near Downtown.

- The Cache la Poudre River (Poudre River) corridor.
- Three thriving craft brewery businesses that attract regional and national visitors.
- Designation within the proposed FortZED service grid.
- Sites to cultivate incubator businesses including the CSU Engines and Energy Conversion Lab (EECL) and the Rocky Mountain Innosphere.
- Proximity to Downtown and related opportunities to enhance Downtown business activities, including breweries and brew pubs, in a way that is "Uniquely Fort Collins."

Because *City Plan* identifies the Lincoln Triangle, which corresponds to this plan's Influence Area, as a catalyst site, several city-supported initiatives have taken place to encourage and anticipate future growth in the area. In fact, one of the key messages found in current related planning documents is the desire to extend downtown east of the Poudre River. Today, industrial land uses and undeveloped parcels are being replaced by mixed-use and residential development, and the addition of the Woodward Technology Center at the

former Link-N-Greens site alone will introduce more than 1,500 employees to the area at full build-out. This growth will change the way in which Lincoln Avenue functions on a daily basis.

## Purpose

**The purpose of the Lincoln Corridor Plan (LCP) is to provide an overall community supported vision for the corridor and a clear roadmap for strategies to implement that vision. The plan provides detailed concepts for Lincoln Avenue, and also makes recommendations throughout the Project Influence Area to ensure that needs from all stakeholders have been addressed.**



Lincoln Avenue at Fort Collins Brewery

## Need for Plan

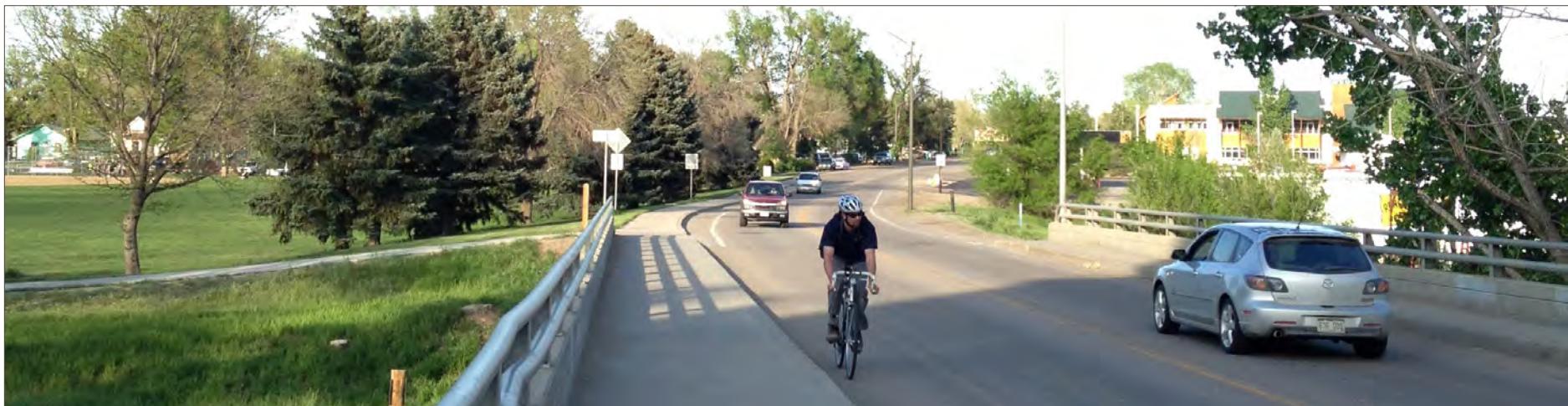
The City has taken several steps to identify transportation and utility improvement needs within the Influence Area through recent sub-area and citywide initiatives; however, a corridor-specific analysis had not yet been conducted. As directed by *City Plan* and other City initiatives, the need for the LCP centers on the current and anticipated growth in the area, concerns of local residents and businesses, and the increasing volume of bicyclists, pedestrians, and motorists that are expected to utilize the corridor. This plan provides a mechanism to identify and prioritize ways to improve the street and surrounding neighborhoods.

Although streetscape and infrastructure improvements to Lincoln Avenue will be a central focus, the LCP incorporates a larger Influence Area to understand factors that directly affect existing neighborhoods.

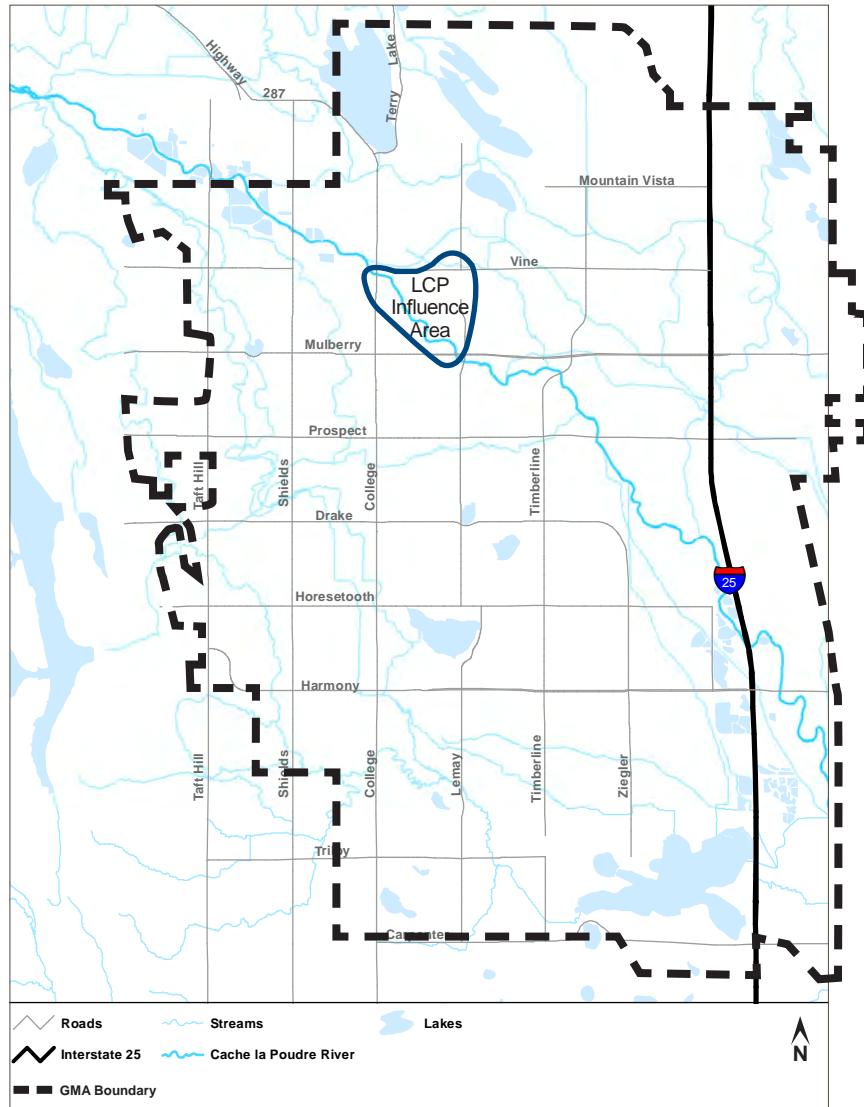
## Influence Area

The LCP Influence Area has been referred to as the Lincoln Triangle, the triangular area on the north side of Fort Collins generally bounded by Riverside Avenue/Jefferson Street on the west, Mulberry Street on the South, Lemay Avenue on the east, and East Vine Drive on the north. The Influence Area includes part of the Poudre River and is just north of downtown Fort Collins.

The Influence Area contains the historic Buckingham, Alta Vista, and Andersonville neighborhoods. Other key features include three local craft breweries (New Belgium Brewing, the Odell Brewing Co., and the Fort Collins Brewery); the CSU Engines and Energy Conservation Lab; Ranch-Way Feeds; established restaurants and historic structures rehabbed for office and professional services; and the Northside Aztlan Community Center. Woodward, Inc. is in the process of developing a world headquarters campus at the southwest corner of Lincoln and Lemay.



The existing Lincoln Poudre River Bridge is lacking sidewalk and trail access on the south side, and bicycle lanes on both sides.





Historic house in Buckingham neighborhood

## Project Goals

The outcome of the planning process is two fold. First, the design of a “great green street” that is specifically tailored to this area. Second, to develop recommendations to implement neighborhood improvements, through a transparent and inclusive public engagement process. The plan collectively involves the neighborhood residents, community residents, businesses and property owners.

### Goals for the project include:

- Creating a street with a unique identity.
- Reflecting the rich history and culture of the area.
- Enhancing existing neighborhoods.
- Improving the mobility, safety, and experience for bicyclists, pedestrians, transit users, and vehicles.
- Celebrating, protecting, and enhancing the Poudre River.
- Creating an environment where businesses can thrive.
- Becoming a center for innovation, sustainability, and creativity.



**Street and intersection improvements**



**Sidewalks and benches**



**Bicycle lanes and racks**



**Trees and other landscaping**



**Gateway features**



**Bus circulating around Downtown**



**Stormwater improvements**



**Directional signage**



**Art and other projects for a positive neighborhood image**



**Interpretive features of culture and history**

Potential Elements to Consider for the Lincoln Corridor

## Process

The LCP has been developed through three distinct phases: Phase I Vision; Phase II Alternatives Development; and Phase III Preferred Plan. In the first phase of the process, an assessment of the area's context was conducted, which includes a review of existing adopted plans and existing conditions. This information provides a basis for developing a corridor-wide vision. The second part of the process focused on developing and evaluating alternatives for Lincoln Corridor. The third phase includes developing a preferred plan, strategies, an action plan, phasing, and funding for implementation of the street design and other elements.



## Planning at Three Scales

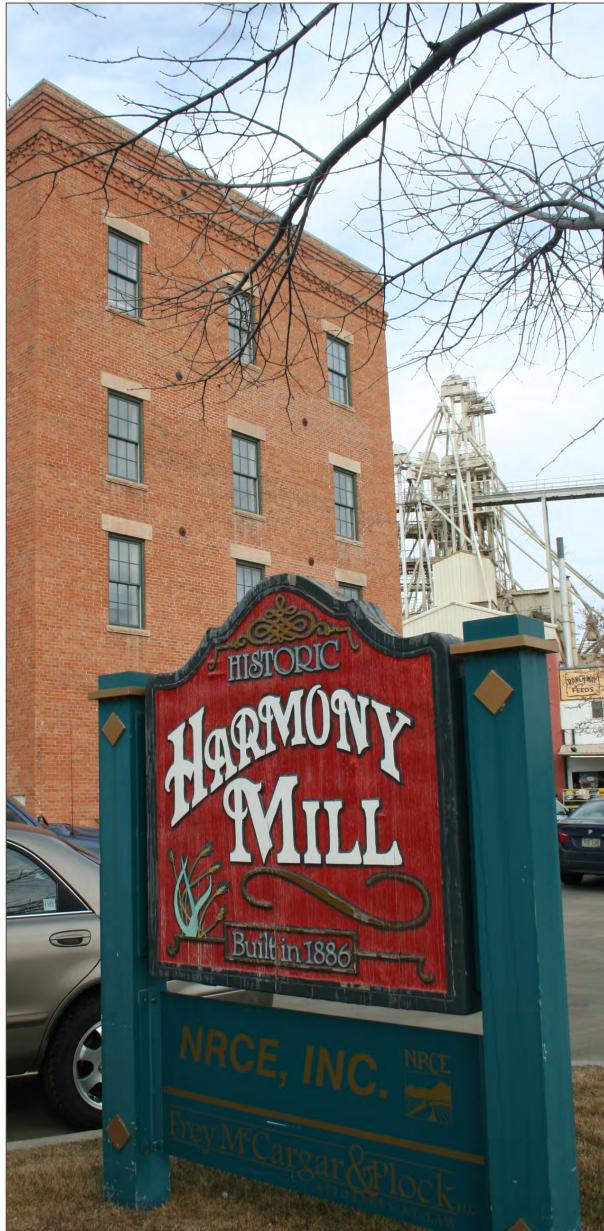
Because the LCP proposes streetscape enhancements to a corridor within a broader study area, analysis is provided at three different scales: (1) Street; (2) Neighborhood; and (3) Influence Area.

The Street scale focuses on constraints and opportunities related specifically to the street. For example, variations in right-of-way, sidewalk discontinuations, and accident data are all examined at this level.

The Neighborhood scale includes Lincoln Avenue, as well as a 1/4 mile north and south of the corridor to understand the local character and development patterns around the corridor. Example analyses conducted at this scale include development proposals currently under City review, utility information, and character-defining features such as historic structures.

The Influence Area scale studies the entire Influence Area to better understand context and circulation issues, including land use, transit and recreational trail connections.





## SECTION 1.1

# EXISTING AND FUTURE CONDITIONS

This section identifies citywide and sub-area plans that make planning, infrastructure and design improvement recommendations within the Lincoln Influence Area. To illustrate the City's concentrated effort within the area, a key map locates all of the proposed, in progress, and completed projects to date.

### Existing Plans and Ongoing Projects

The LCP Influence Area is almost completely surrounded by related City-designated planning and ongoing project areas. The Vision builds on these plans to identify transportation, urban design, land use, historic/cultural, neighborhood, infrastructure, and natural features improvement needs.

The following list highlights City plans that have identified improvements within the Lincoln Influence Area:

**City Plan (2011).** The City's comprehensive plan and defines the long-term goals and policies related to transportation, utilities, land use, recreation and housing. *City Plan* identifies the Lincoln Influence Area, FortZED, and Mason/Midtown area as catalyst sites. These are defined as places for ongoing, new public and private sector initiatives that use a multi-disciplinary and triple bottom line approach, addressing economic, environmental, and social factors in a balanced manner. *City Plan* also acknowledged the potential of creating a "Great Green Street" and gateway for Lincoln Avenue.

**Transportation Master Plan (TMP) (2011).** A citywide plan that provides policy direction for decisions regarding the implementation of the transportation system to achieve the City's vision, mission, and values. The *TMP* includes a reclassification of Lincoln Corridor from a four-lane arterial to a two-lane arterial.

**Master Street Plan (2011).** A component of the *TMP*, the Master Street Plan defines future roadway system classifications. The most recently adopted Master Street Plan includes two major changes in the arterial street system that exist within the LCP Influence Area. Specifically, it recommends realigning Lemay Avenue with a railroad grade separation, and realigning Vine Drive to the north of Alta Vista neighborhood.

**City Structure Plan (2011).** A component of *City Plan*, the City Structure Plan focuses primarily on the physical form and development pattern of the City. It sets forth a basic framework for growth and development over the next twenty years.

**Transfort Strategic Plan (2009).** A citywide plan that addresses the coordination of transit service with the planned Mason Corridor MAX project, identifies funding mechanisms and practical phasing options, and addresses financial solutions required to create and sustain a high-performing transit system. The 2009 Transfort Strategic Plan proposes a new Downtown circulator bus that runs along the Lincoln corridor.

**Northside Neighborhoods Plan (2005).** A sub-area plan that provides utility, stormwater, and transportation improvement recommendations as well as more specific policies and land use alternatives for this area. The Northside Neighborhood Influence Area overlaps the LCP Influence Area.

**Downtown River District Streetscape Improvement Project (2008).** A sub-area improvement plan adjacent to the west part of Lincoln Avenue. The overarching plan objective is to create a unique Downtown district through visually pleasing, welcoming streetscape improvements that is ready for infill development. This would be achieved through traffic calming, enhanced pedestrian and bicycle amenities, and robust public involvement.

**Jefferson Street Alternatives Analysis (2012).** A transportation plan focusing on improvements to Jefferson Street from College Avenue to Lincoln Avenue. The purpose was to find the most suitable alternative to improve air quality, livability, and the urban character of Jefferson Street while enhancing amenities for pedestrians and transit.

**East Mulberry Corridor Plan (2003).** Establishes neighborhood mixed-use commercial centers, employment centers, and a mix of other uses along East Mulberry. The study area extends 1/4 mile north of the corridor and provides land use recommendations to parcels immediately adjacent to the LCP Influence Area.

**Cache la Poudre Natural Areas Management Plan Update (2011).**

This plan identifies key conservation, recreation and cultural goals for City natural areas along the river. It includes management strategies and actions for two natural areas within the LCP Influence Area (Gustav Swanson and Udall). Three other natural areas are partially within the LCP Influence Area (River's Edge, Springer, and Williams).

**Downtown Strategic Plan (2004).**

A collaboration between the City, Downtown Business Association, and Downtown Development Authority. The plan area extends well into the LCP Influence Area and identifies the Oxbow site, among others as potential infill opportunities.

**Pedestrian Plan (2011).** This citywide plan assesses pedestrian needs and proposes solutions to existing problems. It updates and prioritizes the City's list of pedestrian improvement projects and explores potential funding options. The 2010-2011 Priority List for pedestrian improvements ranks Lincoln Avenue from Riverside to Lemay as #1, along with six other highly ranked projects within the LCP Influence Area.

**Bicycle Plan (2008).** A citywide plan that presents information on existing conditions as well as recommendations for improvements targeted for the next five years that will result in a more efficient and effective bicycle network. The hierarchy map identifies the realigned Vine Drive, Buckingham, and Lincoln streets as high volume feeder routes that would connect with the City's high volume bike corridors. The *Bicycle Plan* will be updated in 2014.

**Fort Collins Streetscape Standards (2013).** A component of the Larimer County Urban Area Street Standards, the Fort Collins Streetscape Standards identified Lincoln Avenue as a special corridor and gateway.

**Woodward Technology Center Development (ongoing).** Woodward, Inc. will expand its corporate headquarters at the former Link-N-Greens golf course. The project will be split into multiple phases, starting with a 215,000 square foot industrial building, followed by its Corporate Headquarters and Engines Technology Building. The complex will also include adjacent retail shops along Lemay Avenue.

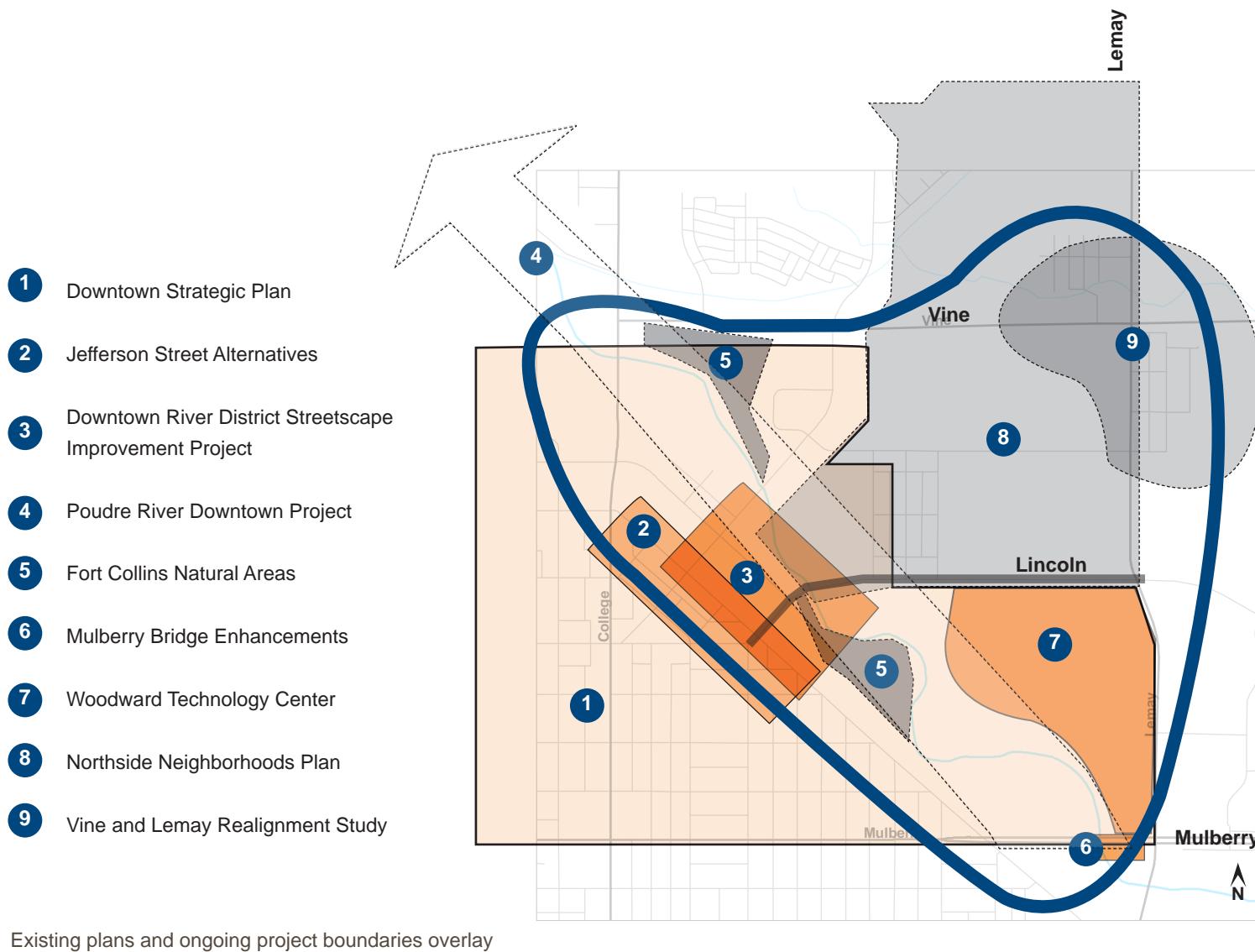
**Mulberry Bridge Replacement (ongoing).** A collaboration between Colorado Department of Transportation (CDOT) and the City to make the Mulberry Bridge structurally sound and function as a gateway into downtown. The project began in Fall 2013. The bridge is within the LCP Influence Area.

**Vine/ Lemay Realignment Study (ongoing).** The study examines ways to mitigate traffic at the intersection of Vine Drive & Lemay Avenue. Some alternatives developed include the relocation of the intersection, the realignment of Vine and Lemay, and building a grade separation between the railroad and roadways.

**Poudre River Downtown Project (ongoing).** City initiative to develop a master plan for the areas in and adjacent to the Poudre River from Shields Street to Mulberry Street. The master plan will address in-river and bankside recreation, habitat connectivity restoration and rehabilitation, bank protection, stormwater/floodplain management, water quality, public safety and access, and transportation

**River District Design Standards and Guidelines (ongoing).** Creates standards and guidelines to promote design that is consistent with the vision for the area and that supplements the existing standards in the River Downtown Redevelopment Zone.

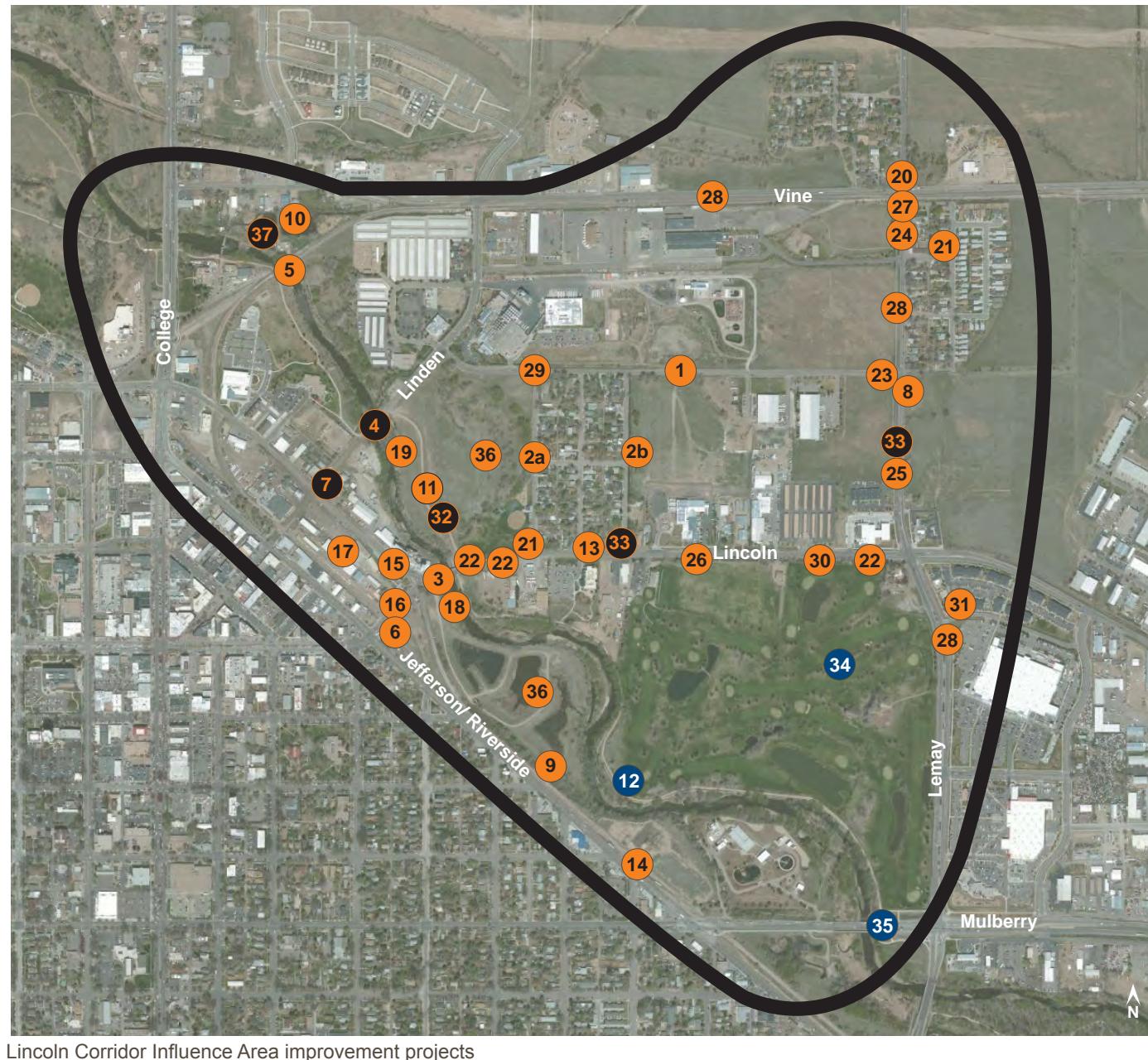
The following list and map on pages 12-13 illustrate all of the improvements proposed in existing City-supported plans within the Lincoln Corridor Influence Area, some of which have been proposed and some of which are already completed.



1. On Buckingham Street, from Linden Street to Lemay Avenue, reshape the street, incorporating bikeways, sidewalks, landscaping and consistent storm water treatment.
2. On 1st and 3rd Streets, from Lincoln Avenue to Buckingham, reshape local streets.
3. Improve visuals for bicyclists and pedestrians at the Lincoln Avenue Poudre River Bridge.
4. Upgrade Poudre River Bridge on Linden Street to become a gateway feature.
5. Add new bike/pedestrian bridge on the Poudre River Trail at the railroad trestle between Linden and College.
6. Bike and pedestrian improvements on Riverside Avenue from Lincoln Avenue to East Mountain Avenue.
7. Linden Street: Two 12-foot travel lanes, 5-foot bicycle lanes, diagonal parking on both sides, 15-foot attached sidewalk, from Jefferson Street to the Poudre Bridge.
8. Pedestrian improvements on South Lemay Avenue from East Vine Drive to Lincoln Avenue.
9. Construct paved trail from Mulberry/Riverside Intersection across Pickle Plant Site and Udall Natural Area to Lincoln.
10. Restoration and construction of trail improvements on the Coy Ponds area of Gustav Swanson Natural Area.
11. River restoration from Linden to Lincoln.
12. Restore floodplain area from Lincoln Avenue to Mulberry Street on the northeast side of the river to enhance habitat and develop a natural area/river park.
13. Establish a circulator bus that provides service between downtown and the Lincoln Influence Area destinations.
14. Jefferson Street: Three 14-foot travel lanes, raised landscaped medians, 8-foot on-street parking on the southwest side of street, and streetscape improvements.
15. Willow Street: Two travel lanes separated by diagonal parking in the center, bicycle lanes, parallel parking on both sides, attached sidewalk on southwest side of street, and attached sidewalk on northeast side of street.
16. Lincoln Avenue: Two 12-foot travel lanes, raised median, 8-foot bicycle lanes, attached sidewalk on north side and detached sidewalk on south side from Jefferson Street to Lemay Avenue.
17. New storm sewers within the street right-of-way (ROW) and abandon existing sewers that cross mid-block between Jefferson Street and Willow Street.
18. Improve existing outfall at Lincoln Avenue Bridge.
19. Create new outfall at Linden Street Bridge.
20. Add a southbound left-turn lane on Vine Drive at Lemay Avenue.
21. Provide gateway features at entrances to neighborhoods.
22. Provide pads, benches, and shelters at all transit stop locations.
23. Add signal at Buckingham Street and Lemay Avenue.
24. Add northbound right turn lanes on Vine Drive and Lemay Avenue.
25. Improvements to Lemay Avenue ditch between Vine Drive and Lincoln Avenue.
26. Installation of curb and gutter and street outflows along Lincoln Avenue.
27. Realign the Vine Drive and Lemay Avenue intersection to include a grade-separated crossing.
28. Add bicycle lanes to Vine Drive and Lemay Avenue.
29. Widened, multi-use sidewalk along north side of Buckingham Street that connects to downtown.
30. Provide street lighting along Lincoln Avenue.

- 31. Expand the Museo de las Tres Colonias.
- 32. Install Poudre River floodplain mitigation diversion levee.
- 33. Install interim sidewalks along Lincoln Avenue and Lemay Avenue.
- 34. Woodward Technology Center campus
- 35. Mulberry Bridge improvements to serve as gateway into Fort Collins.
- 36. On Udall Natural Area, restore right riverbank, enhance in-channel wetlands, and construct river overlook structure.
- 37. Parking lot and paved trail improvements.

- Complete
- In Progress/ Funded
- Proposed



## Existing and Future Land Use

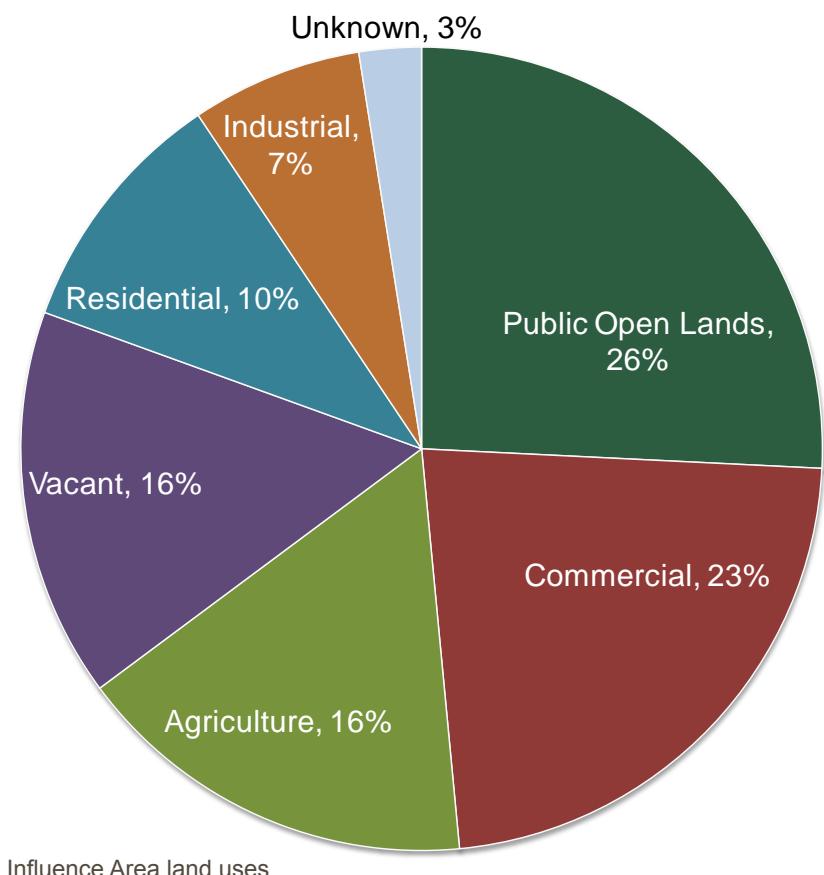
Historically, the Lincoln Influence Area has been physically isolated from Old Town. The railroad tracks and Jefferson Street act as physical barriers; discontinuous sidewalks provide pedestrians with little reprieve from vehicular traffic; and until recently, historic neighborhoods have lacked some basic urban amenities. In fact, the City did not complete a sewer line to Alta Vista until the early 1970s, or pave the roads until 1980.

Although only 10% of the LCP Influence Area is comprised of residential land use, the Buckingham, Alta Vista, and Anderson neighborhoods are significant. As seen through previous planning efforts, the City has taken several initiatives to preserve and connect these neighborhoods to the greater community while anticipating future growth in the LCP Influence Area.

Land uses in the *Structure Plan* have changed in certain areas from what is currently depicted in the zoning plan. As highlighted on the map on the adjacent page, these areas are primarily within the floodplain and have transitioned from light industrial uses to Open Space. Other changes include the Oxbow site (the parcel immediately west of the Buckingham Neighborhood), which has changed from Community Commercial District to Downtown District; this change emphasizes the desire to extend the downtown east of the Poudre River.

Non-residential existing & future land uses are flexible, and support redevelopment within the Lincoln Corridor. Residential uses are not flexible; these neighborhood classifications will remain, and do not support redevelopment within the LCP Influence Area.

The *Transportation Master Plan* and related *Master Street Plan* recently reclassified Lincoln Avenue from a 4-lane arterial to a 2-lane arterial, primarily because future traffic analysis indicates that the corridor could function as a 2-lane arterial even with the anticipated growth in the area. This will undoubtedly help preserve the residential and business character of the area while still providing the space necessary for pedestrian and bicycle improvements.

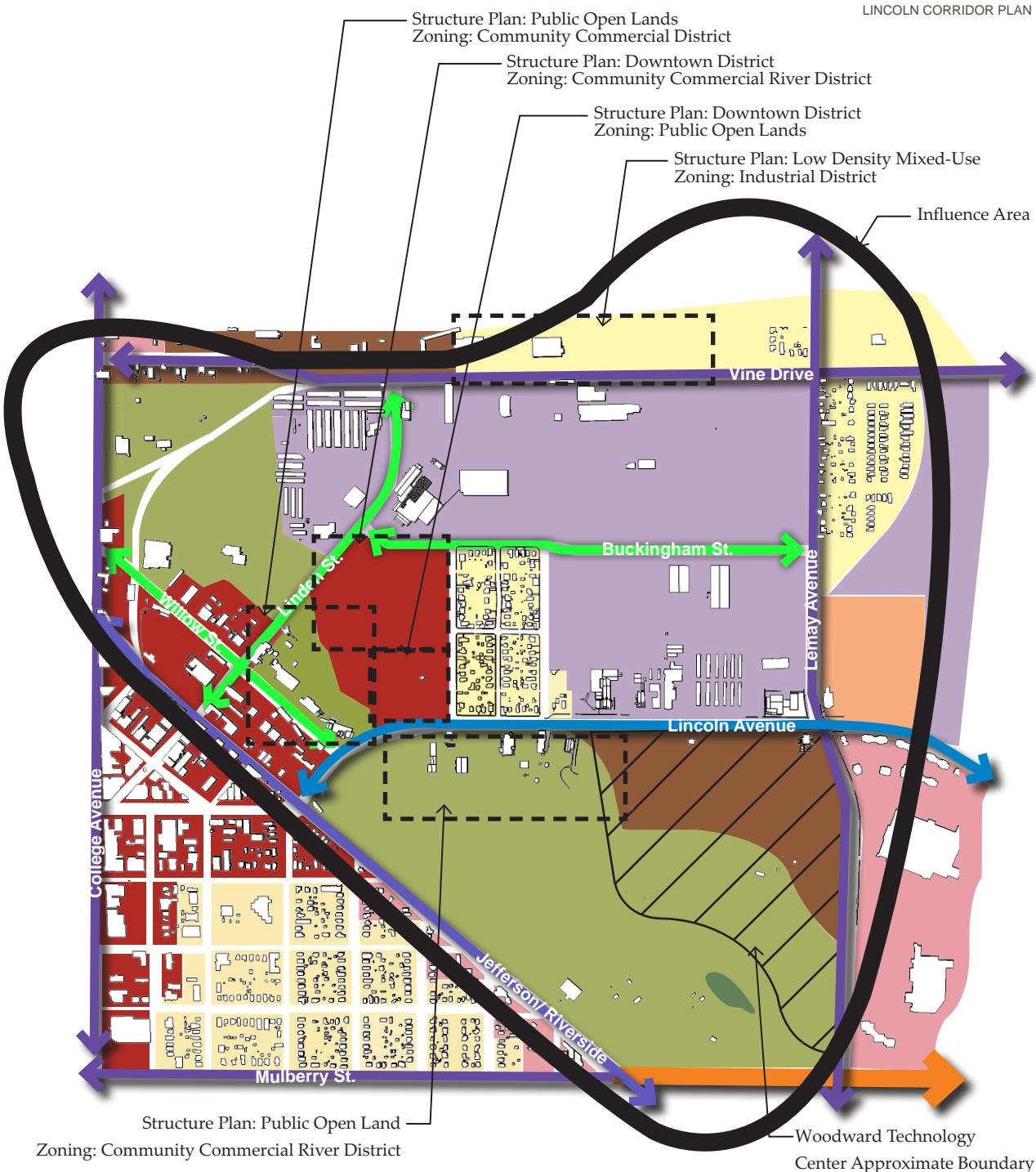


## Master Street Plan Classifications

-  2-Lane Collector
-  2-Lane Arterial
-  4-Lane Arterial
-  6-Lane Major Arterial
-  Areas with different structure plan land use than zoning

## Structure Plan Land Use Categories

-  **Public Open Lands/ Poudre River**
-  **Low Density Mixed Use:** Intended to be settings for a predominance of low density housing (average of four dwelling units per acre), providing a variety of housing choices, gathering places, services and conveniences, neighborhood parks, and other amenities in a compact setting.
-  **Medium Density Mixed Use:** Intended to be settings for a diverse mix of concentrated housing within easy walking or biking distance of transit, commercial services, employment, and parks or recreational amenities.
-  **General Commercial:** General Commercial Districts include a wide range of community and regional retail uses as well as offices, business and personal services, and, to a lesser extent, residential uses.
-  **Community Commercial District:** Combines a mix of retail, services, civic uses and housing, in uniquely distinct and identifiable "places." Principal uses include retail, restaurants, offices. Supporting uses include higher density housing, day care, civic and institutional uses, pocket parks and other outdoor gathering spaces.
-  **Industrial District:** Intended to provide a location for a variety of work processes such as manufacturing, machine shops, warehouses, outdoor storage yards, and other uses of similar character. Supporting uses include restaurants, day care, convenience retail, services and housing. Lower intensity land uses should be placed at the edges of the District to help provide transition between Industrial Districts and adjacent districts and neighborhoods.
-  **Downtown District:** Downtown District must include office, finance, civic, government, and entertainment functions in addition to retail shops, services, parks, restaurants, and housing, all served by a local and regional transportation system that incorporates multiple modes of travel.



Structure plan and master street plan overlay

## Socio-Economic

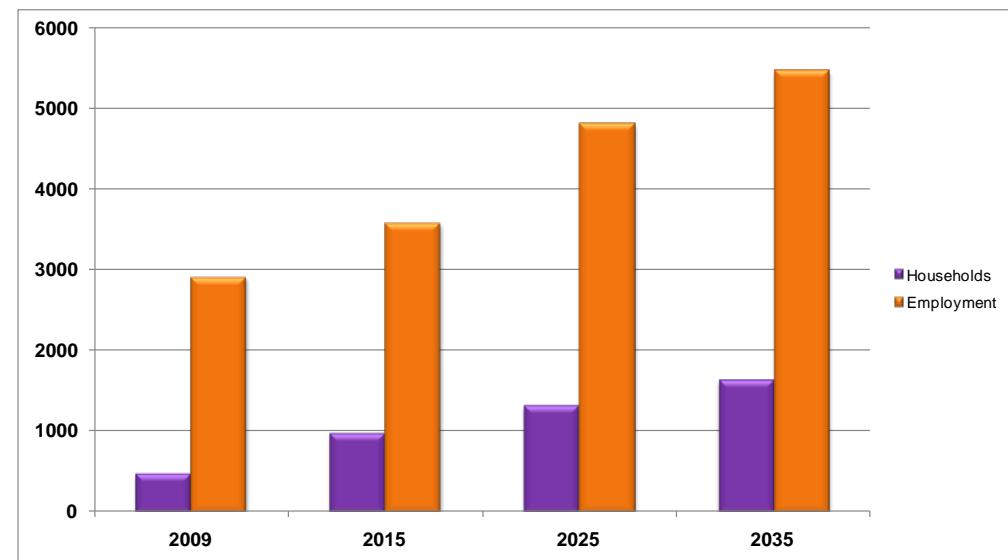
As the City takes action to connect and sustain the Lincoln Influence Area, it must simultaneously balance existing uses with inevitable change over time. The LCP Influence Area contains a number of parcels that are either vacant or currently under development review. This provides an exciting opportunity to introduce innovation to the sub-area, a tenet of the *City Plan* Vision. As the corridor continues to develop, areas of stability will need to be preserved while key businesses and properties evolve into redevelopment sites that complement the overall LCP vision.

The strong presence of vacant and underutilized land means this area is expected to grow in both employment and population figures. With the addition of the Woodward Technology Center, the area will double in employment at full build-out. The area will become a center for employment, with over three jobs for every household.

Although the Lincoln Influence Area is predicted to grow, it has a solid economic and residential foundation that helps maintain stability.

The Areas of Change include land that can be or is already planned to be developed, such as vacant parcels and developments under review. Areas of Stability include character-defining features, such as historic buildings and the Poudre River, parks and open space, and existing neighborhoods.

Based on the developments currently under review, as well as recent development within the last year, several parcels previously zoned for industrial use are transitioning into mixed-use residential development, particularly in the Downtown River District. These changes in land use will increase the uses of all modes of travel within the corridor, promote neighborhood-supported businesses, and create opportunities for enhanced interconnectivity throughout the region.



Influence Area: housing versus employment

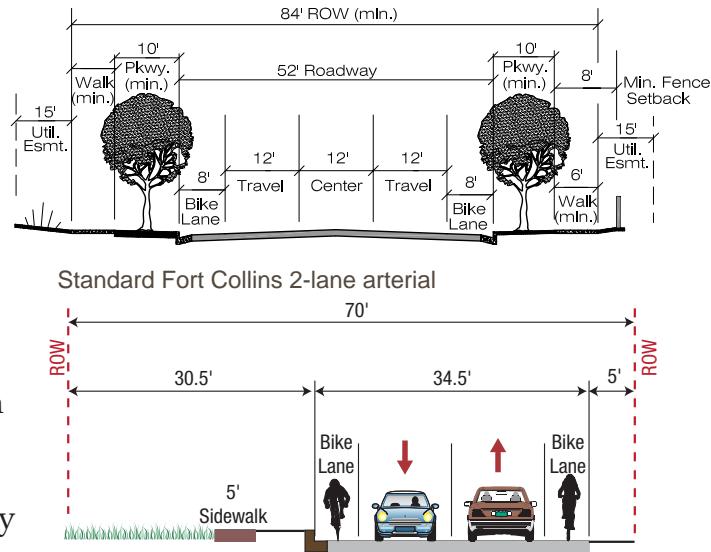


# Mobility and Safety

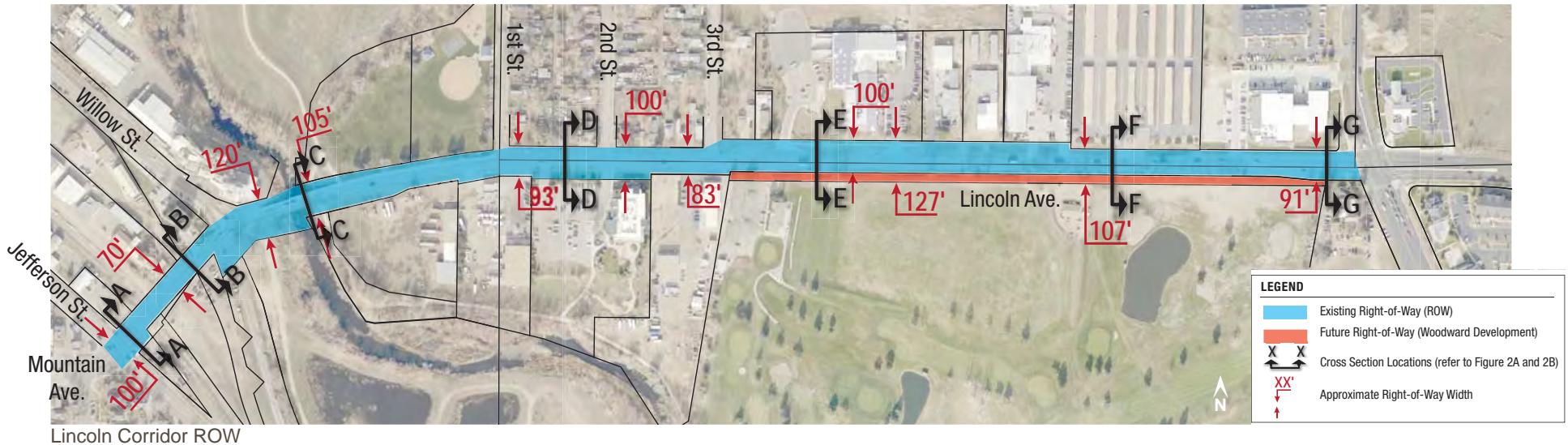
## Right-of-Way

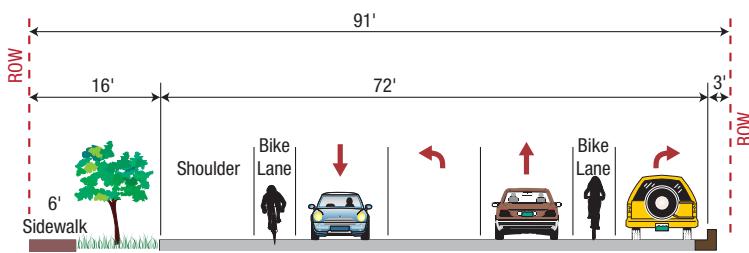
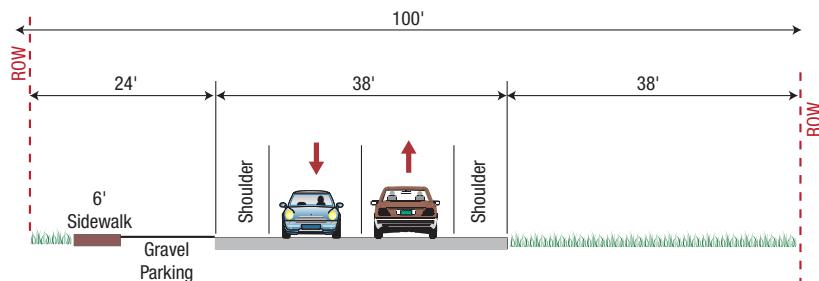
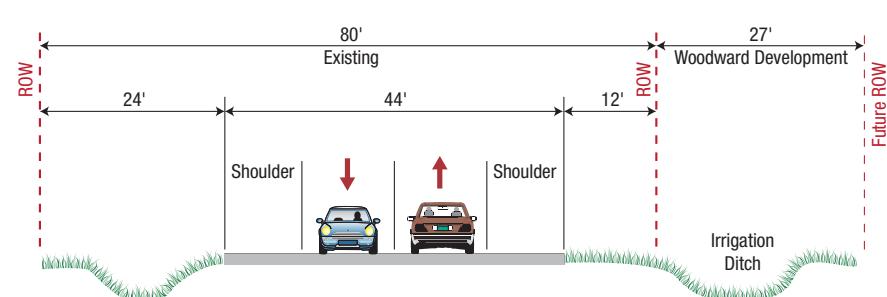
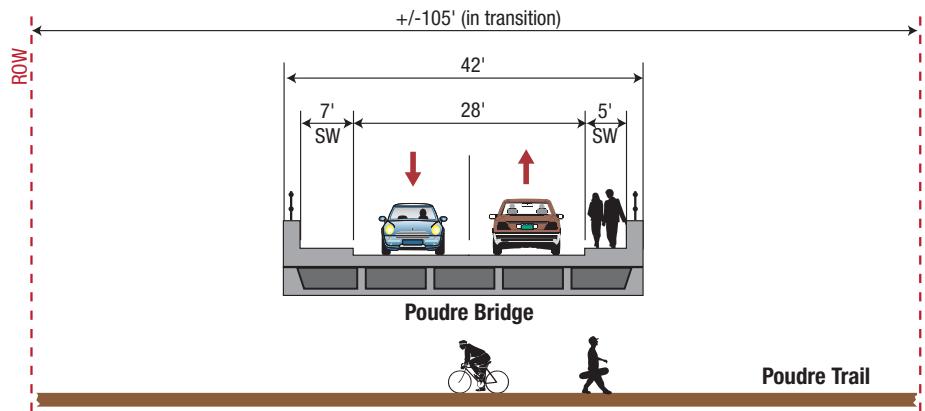
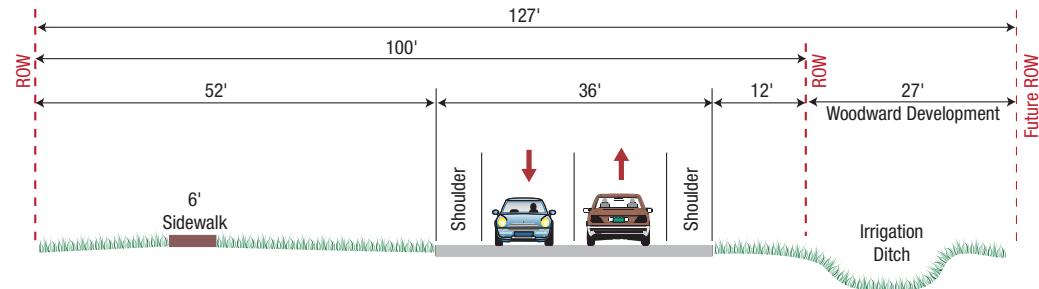
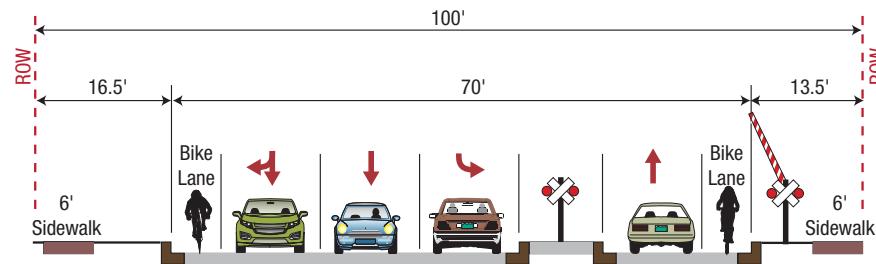
The Lincoln Avenue right-of-way (ROW) cross-sections vary along the  $\frac{3}{4}$  mile corridor. The street includes one vehicular travel lane in each direction, bike lanes along most of the corridor. Turn lanes are provided at the larger intersections including Jefferson Street/Riverside Avenue, at Fort Collins Brewery, and at Lemay Avenue. While curb and gutter are provided for short segments, most of the corridor has a more rural feel, including the Coy Ditch along the Woodward, Inc. property.

An exciting quality about this section of Lincoln Avenue is its generous ROW, particularly in the east part of the corridor. Although the existing right-of-way varies between 70 feet to over 100 feet, the vast majority of the corridor exceeds the standard 84-foot minimum ROW for a 2-lane arterial. As part of the Woodward Technology Center development, an additional 27 feet of ROW has been dedicated along the south edge of Lincoln Avenue between 3rd Street, just west of Lemay Avenue. The wide ROW presents a unique opportunity to introduce design solutions that can transform Lincoln Avenue into a thriving multi-modal environment.



The narrowest section (B-B) of the corridor exists at the UPRR crossing west of Willow Street. Transforming this pinch point into a pedestrian and bike-friendly gateway is an important objective of the LCP.





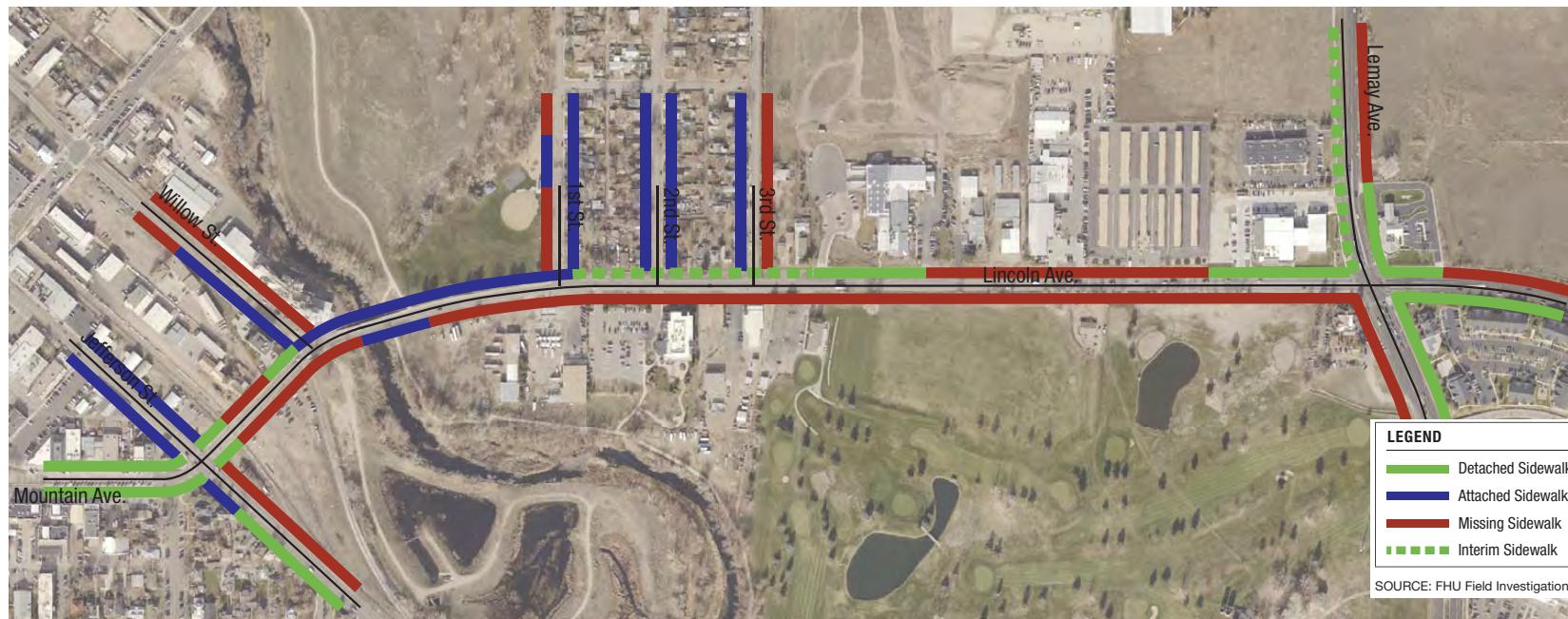
## Bicycle and Pedestrian

Bicycle volumes along Lincoln Avenue are moderate, with approximately 25 total bicyclists using the corridor during the morning and afternoon peak hours. The peak bicycling direction is eastbound in the morning and westbound in the afternoon. Pedestrian activity at both ends of the corridor (at Jefferson Street/ Riverside Avenue and at Lemay Avenue) is relatively low ( $\leq 6$  in any hour).

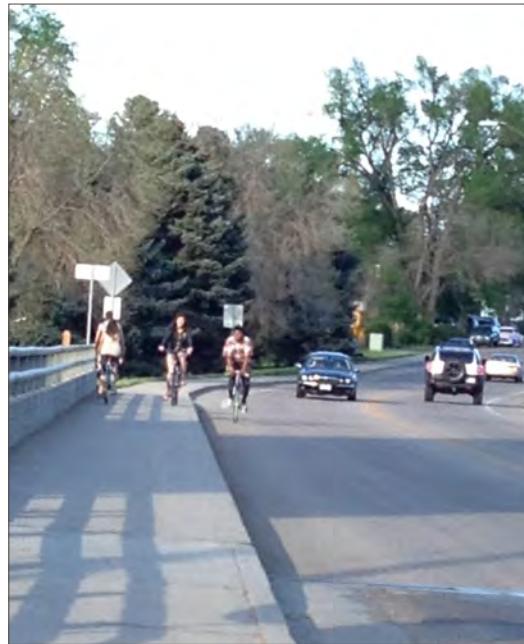
Sidewalks exist along only portions of Lincoln Avenue. Today, the lack of consistent sidewalks discourages pedestrians from using the corridor. A detached sidewalk is provided on the north side of the street adjacent to the residential neighborhood, Odell Brewing Company, and Fort Collins Brewery. An attached sidewalk is provided across both sides of the Poudre River bridge and on the north side of Lincoln Avenue adjacent to Buckingham Park.



Sidewalks are lacking along much of Lincoln Avenue.



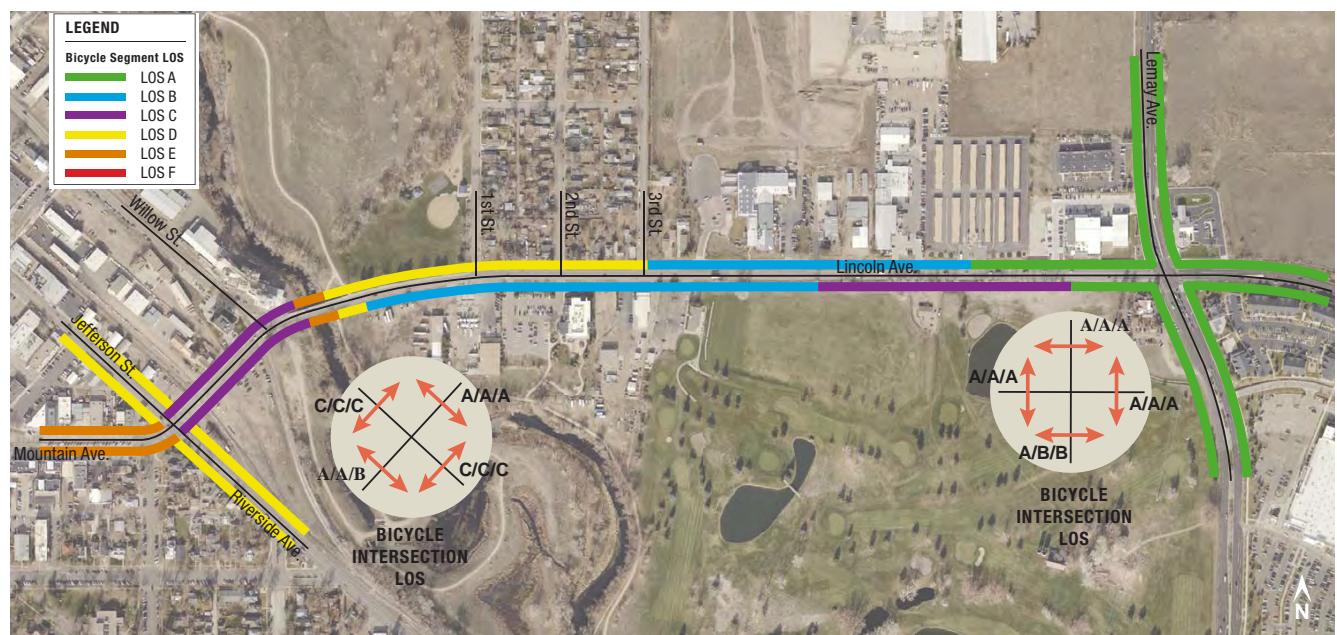
Pedestrian levels of service (LOS) reflect the comfort experienced by pedestrians as they walk along a street. Conditions that affect pedestrian segment LOS include the width of the sidewalk, buffer separation, amenities, and the speed and volume of adjacent traffic. Where sidewalks are provided, the pedestrian LOS is good (LOS C or better). The pedestrian intersection LOS is also based on the level of delay and interaction with turning vehicles. The pedestrian intersection LOS at the two signalized intersections is good (LOS C or better).



Existing conditions at Lincoln Bridge

Bicycle LOS is based on the comfort bicyclists experience when riding the corridor which can be affected by the presence and width of bike lanes, on-street parking encroachment, and the speed and volume of adjacent traffic.

The bicycle segment LOS on the Lincoln Avenue corridor is generally good (LOS C or better), but it is LOS E on the Poudre River bridge where the bike lanes end; LOS D adjacent to the residential neighborhood due to the influence of on-street parking; and LOS D to the west of 1st Street where the bike lane in the westbound direction is very narrow.



Existing bicycle levels of service. Source: HCM Bicycle Segment and Intersection LOS Methodology.

## Vehicles

Lincoln Avenue currently carries approximately 6,000 vehicles per day (vpd) on the west end of the corridor and approximately 8,800 vpd on the east end. Morning, noon, and afternoon peak hour turning movements are used to assess the existing traffic operations. Several of the existing land uses and planned redevelopment along the corridor rely on large trucks to import and export goods to their sites. The western portion of the corridor carries approximately 4.2 percent heavy vehicles (trucks and buses), while the eastern portion carries approximately 3.4 percent. These heavy vehicles will need to be safely accommodated in any improvements made to the Lincoln corridor.

The 2035 traffic volume projections are based on the North Front Range Metropolitan Planning Organization (NFRMPO) regional travel demand model as modified for the Fort Collins Transportation Master Plan. The forecasts, which account for local and regional residential and employment growth, show a 35-50 percent increase in daily traffic along Lincoln Avenue, compared to 2009 conditions. Using the forecasted traffic volumes for 2035, and assuming no

improvements to the corridor (the “No Action” alternative), the intersections of Lincoln Avenue with Jefferson Street/Riverside Avenue, Lemay Avenue, and 1st, 2nd, and 3rd Streets would continue to operate at acceptable levels of service.

Between 2010 and 2012 there were a total of 54 crashes along Lincoln Avenue. Approximately 70 percent of these crashes occurred at the two intersections on the ends of the corridor (Jefferson Street/Riverside Avenue and Lemay Avenue), as would be expected given the higher levels of intersecting traffic volumes. Six of the crashes in the corridor involved a bicyclist and one involved a pedestrian. There were a total of nine injury accidents, including three involving a pedestrian or bicyclist. Overall, the corridor has experienced a relatively low number of crashes compared with similar corridors.

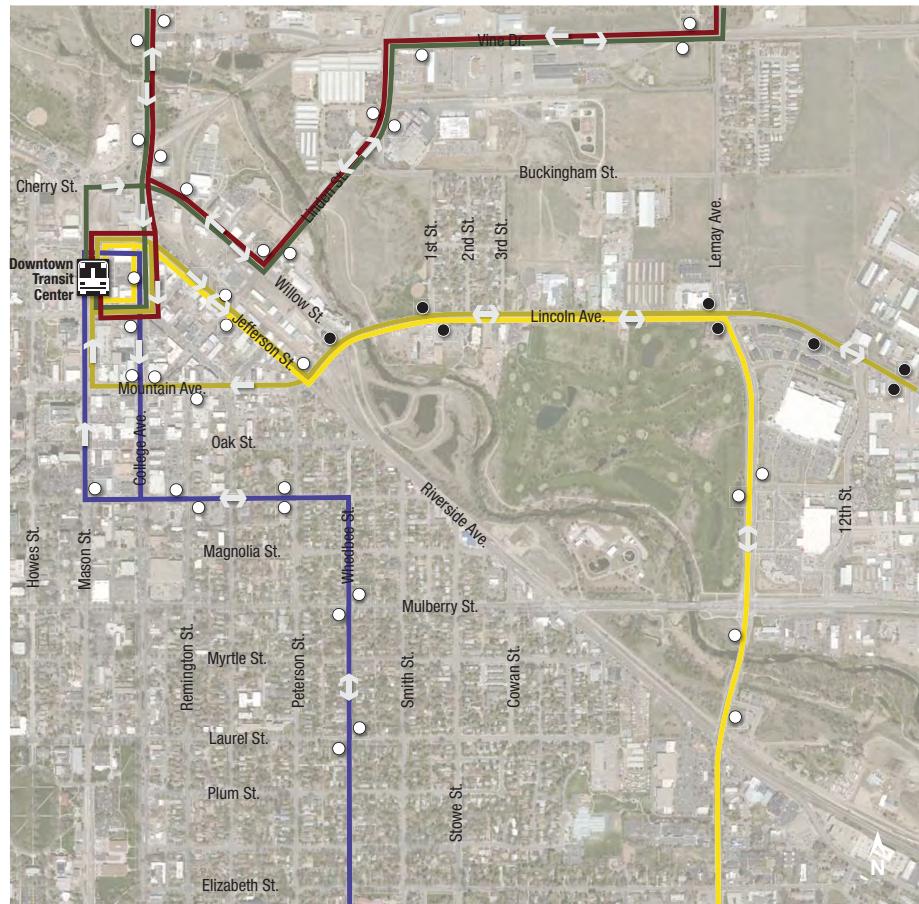
## Transit

Two Transfort bus routes currently serve Lincoln Avenue. Route 5 connects the Downtown Transit Center to the Mall Transfer Center via Lemay Avenue and Route 14 provides east-west bus service between the Downtown Transit Center and Centro via Lincoln Avenue and Mulberry Street. There are three bus

stops on the Lincoln Avenue corridor in the westbound direction and two in the eastbound direction.

The weekday and Saturday boardings and alightings for each of the stops along Lincoln Avenue (serving Routes 5 and 14) show the highest concentration of transit boardings/alightings at the intersection of Lincoln Avenue and Lemay Avenue. Boardings and alightings along Lincoln Avenue account for approximately five percent of the Route 5 total ridership and approximately ten percent of the Route 14 total ridership

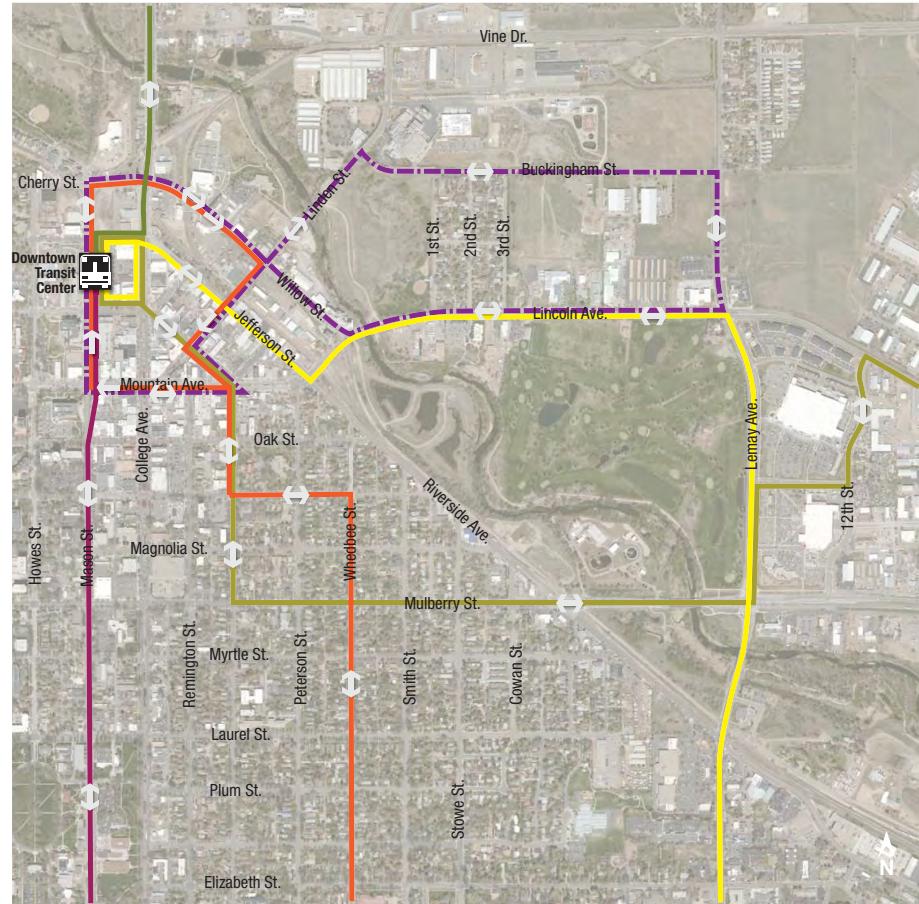
The Transfort Strategic Operating Plan outlines three phases of improvements/modifications to the transit routing and service in Fort Collins. In addition to renumbering the routes in the future, several modifications/re-routings of existing routes are planned. MAX bus rapid transit service is scheduled to begin May of 2014 and will connect the South Transit Center with the Downtown Transit Center. A new Downtown Circulator Route is identified in the Strategic Operating Plan, which would provide a circulating bus route between the Downtown Transit Center along Lincoln Avenue and Buckingham Street.



Existing transit routes and stops.

LEGEND	
	Route 5
	Route 8
	Route 14
	Route 18
	Route 81
	Lincoln Avenue Bus Stops
	Other Bus Stops

SOURCE: Transfort



Planned future transit routes.

LEGEND	
	Route 9 *
	Route 2 *
	Route 6 *
	Route 7 *
	New Downtown Circulator Route
	MAX

\* Renumbered Routes  
 Source: Transfort Strategic Operating Plan

## Natural Systems

### Poudre River

The Poudre River, the most iconic natural feature in Fort Collins, has evolved into a popular recreation and conservation corridor. Lincoln Avenue provides a critical connection to the Poudre River. Currently, the Poudre Trail adjacent to the river can only be accessed on the north side of the street, forcing bicyclists and pedestrians traveling on the south to cross the road to access the trail. The curvature of the road, moderate traffic volumes, and the narrow width of the bridge, makes this crossing unsafe, particularly for bicyclists, because there is little room on the shoulder to wait.

There are no readily discernible inadequacies in the current stormwater system. However, given the age of the existing storm sewer system, some upgrades may be necessary if the roadway drainage ultimately ties into it. There is no structural drainage system for the majority of the roadway. Drainage may eventually contribute to the surrounding systems, but the adequacy of the existing drainage systems to the east of the Poudre River bridge is not dependent on the existing roadway drainage.

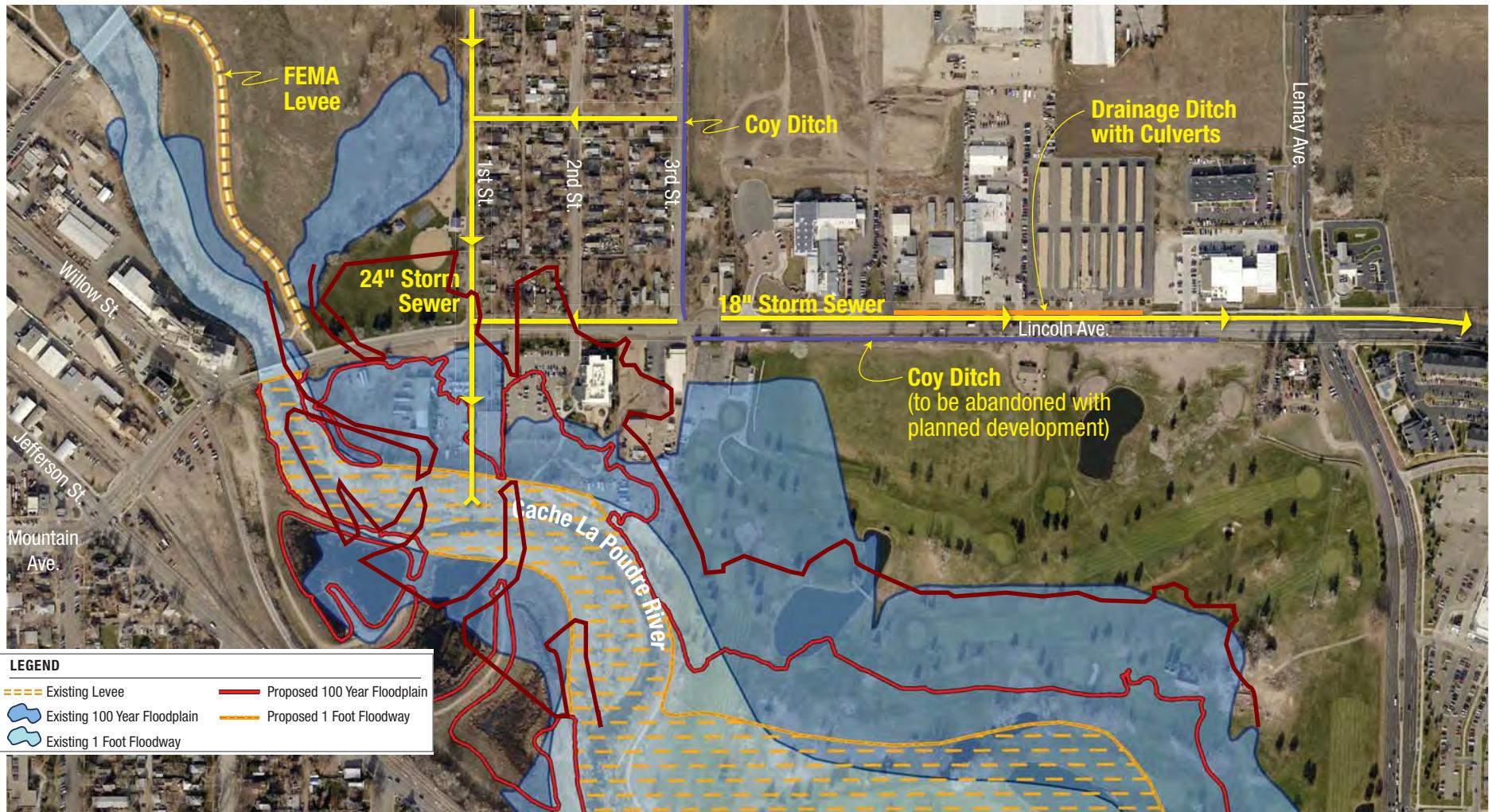
The City of Fort Collins recently acquired the water rights in the Coy Ditch, which previously provided irrigation water to the Link-n-Greens golf course. This purchase allows more in stream flows to remain in the Poudre River, meeting the City's goal to improve the ecological characteristics of the river. The ditch is no longer needed and will be abandoned.

The City is also currently pursuing several planning studies and restoration efforts to protect the river while facilitating safe visitor use. One of the most recent plans is the Link-n-Greens River Restoration Project. Part of the future Woodward Technology Center, this project proposes the restoration of over four acres of wetland and emergent wetland, three acres of willow shrubland, fourteen acres of cottonwood/ shrub woodland, and seven acres of upland shrubland. Additionally, it proposes the realignment of the Poudre Trail and a new loop trail near the Coy-Hoffman barn. This project will ultimately affect the floodplain and floodway limits south of Lincoln Avenue as shown on the map on the facing page.



Link-n-Greens River Restoration Project Plan

Another recent project that has affected the floodplain limits is the Poudre River floodplain mitigation levee, located just north of Lincoln Avenue Bridge. This levee pushed the floodplain limits closer to the river, which allows more flexibility for development in adjacent vacant parcels, and helps mitigate stormwater issues in already developed sites. The Poudre River floodplain limits affect several parcels that abut Lincoln Avenue. Some parcels are quite affected, while others more minimally. Some underground storm sewer systems exist along the corridor, primarily serving the Buckingham neighborhood and the businesses along the north side of Lincoln Avenue between 3rd Street and Lemay Avenue.



Floodplain map. Sources: City of Fort Collins Engineering 2013 survey; FEMA Flood Insurance Rate Map (FIRM) Panel Number 08069C0979H, Effective date May 2, 2012; FEMA Flood Insurance Study (FIS) for Larimer County, Colorado and Incorporated Areas, Effective Date February 6, 2013.

# SECTION 1.2

## COMMUNITY ENGAGEMENT

### Strategies for Community Engagement



#### High-Tech Tools & Broadcast Media:

- Online Questionnaires
- Project Website
- Social Media Notification
- Electronic Polling
- Public Participation Tracking Database
- QR Codes to Scan Smart Phones
- Videos
- Press Releases
- News Articles
- Postcard Mailings
- Email Notification
- Flyers
- Posters



#### Public Activities & Events:

- Neighborhood Social
- Neighborhood Conversations
- Corridor Walks
- Business Owner Meetings
- Visioning Workshops
- Bike to Work Day
- Attendance at Other City and Neighborhood Events



#### Boards, Commissions & Other Committees:

- Project Management Team (PMT)
- Technical Advisory Committee (TAC)
- Stakeholder Group (SG)
- Planning and Zoning Board
- Transportation Board
- Bicycle Advisory Committee
- Chamber Local Legislative Affairs Committee
- Downtown Development Authority
- Public Transit Advisory Group
- Air Quality Advisory Board
- Natural Resources Advisory Board
- Parks and Recreation Board
- University Connections
- City Council

The Lincoln Corridor Plan process began in Spring 2013. From the beginning, the highest priority was to directly engage residents, businesses, and stakeholders to ensure that their needs were being met, their issues addressed, and their ideas reflected in the vision for the corridor. Three strategies for public engagement were used throughout the planning process: high-tech tools and broadcast media; public activities and events; and outreach to boards and committees. The events that occurred during the three phases of the project are summarized in each section of this report.

## Phase 1 Outreach Events

Transportation Projects Open House:  
May 1

Neighborhood Social: May 13

Business Outreach: May 14

Neighborhood Conversations &  
Corridor Walks: May 22

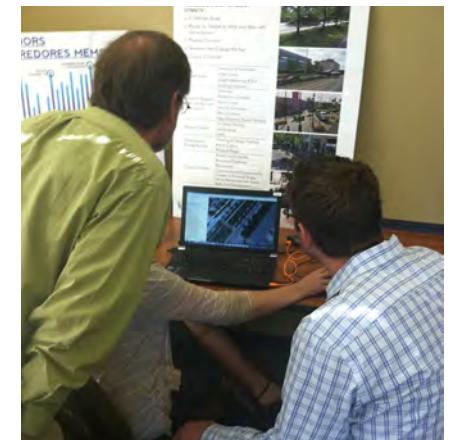
“Envisioning a Future” Workshops: June  
18 & July 9

Bike to Work Day: June 26

Poudre River Projects Open House:  
June 26

Woodward Open House: July 31

Buckingham Neighborhood Night Out:  
August 6



## What We Heard

The project team heard a number of issues, opportunities, and comments during the Neighborhood Social, Neighborhood Conversations, Corridor Walks, and Business Outreach events. The following list of key themes summarizes the comments that were expressed most frequently.

### Connectivity of Travel Modes

Ensure the corridor meets the needs of all modes, and a range of comfort zones for bicyclists and pedestrians. There is a need for better bike and pedestrian connectivity between the breweries, in a way that reduces impacts to Buckingham Neighborhood.

### Neighborhood Character

Maintain Buckingham Neighborhood as a unique neighborhood that recognizes its history and keeps its charm without gentrifying or significantly driving up property values.

### Neighborhood Protection

Spillover effects from brewery traffic and events negatively impact the residents of Buckingham Neighborhood. Residents

feel that their concerns have not been fully acknowledged or addressed by the City in the past.

### Corridor Character/Identity

Lincoln Corridor should be a distinct district with its own identity that complements and transitions from Old Town to the River District. The district should celebrate the eclectic mix of historic properties and heritage, parks and natural areas, residential uses, state-of-the-art industrial businesses, breweries, and restaurants. The connection to the river should be promoted, and the area should have a "softer" more landscape-based feel than Old Town.

### Bike Safety

Current bike lanes and connections to the Poudre Trail are inadequate and unsafe for the type/amount of bike traffic in the area, particularly on and around the bridge.

### Pedestrian Safety

There is a major need for safe, designated pedestrian crossings on Lincoln and its cross-streets.

### Traffic Concerns

The amount of traffic generated by commuters, businesses, brewery visitors, and trucks passing along Lincoln and through the neighborhoods adversely impacts the neighborhood, makes turning movements difficult, and creates unsafe conditions for bicyclists and pedestrians. Speeds should be slowed on Lincoln from Buckingham Neighborhood to Old Town.

### Aesthetics

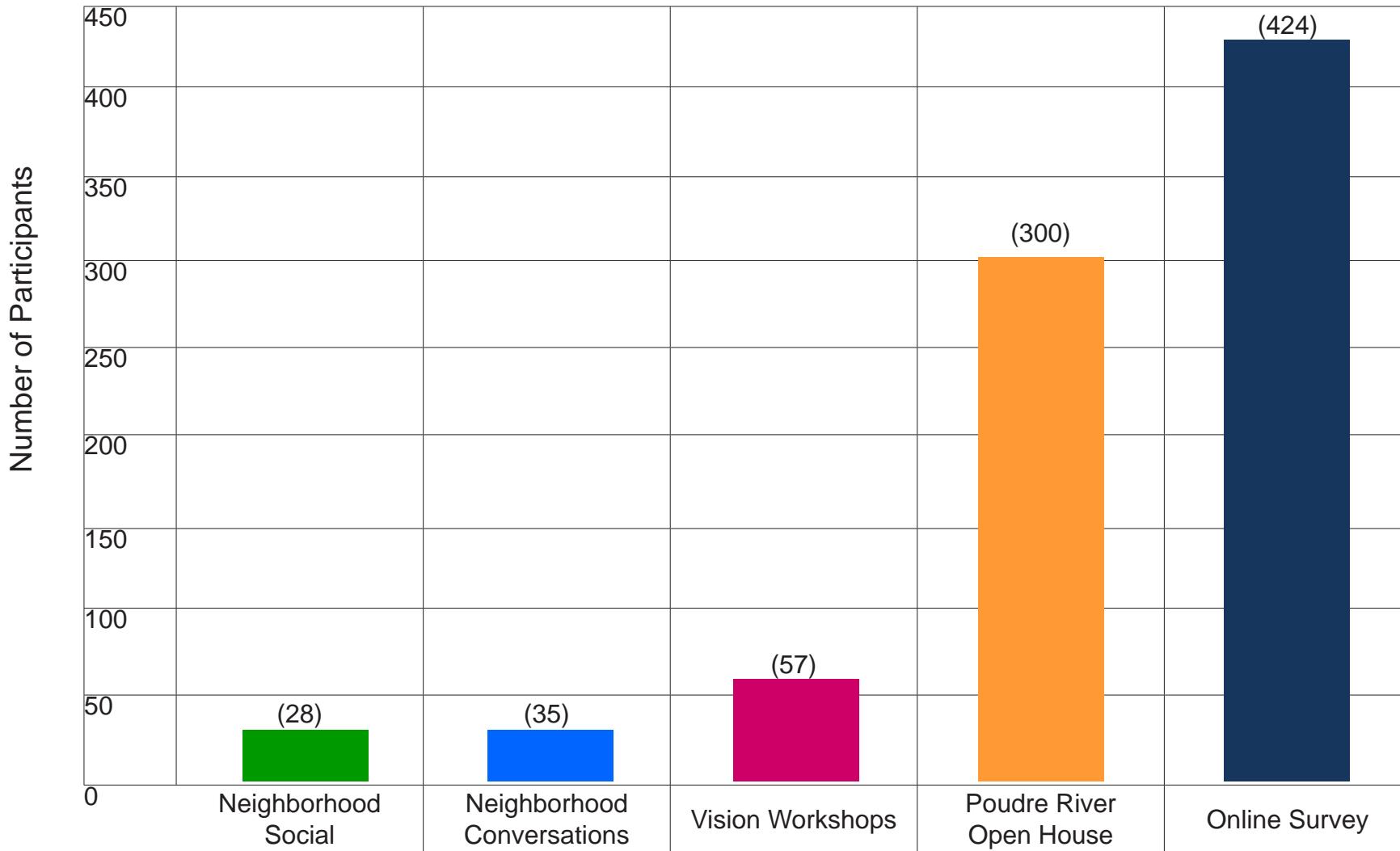
Use screening, landscaping, public art, and clean-up efforts to improve the aesthetics of the corridor.

### Branding and Wayfinding

Clear wayfinding signage and design elements should be used to provide visitors with information and give the district a distinct identity.

### Community Engagement

Project team should attend key events in the Northside Neighborhoods.



More than 840 participants have been involved in community engagement activities to date, either online or through attendance at events.

## Case Studies

### Community Event

Creating a forward-looking vision for the Lincoln Corridor requires input from neighborhood residents, business owners, elected officials, and the broader Fort Collins community. A total of five workshop sessions were held June 18 and July 9 to stimulate discussion, gather ideas, and explore new possibilities for the Lincoln Corridor Plan.

In preparation for these workshops, over 40 memorable streets and corridors from around the world were reviewed for qualities that might be relevant to the Lincoln Corridor. Five of the highest-ranked corridors were selected containing elements that could be considered for the Lincoln Corridor. The complete list of corridors reviewed is contained in Appendix A-1.

At the June 18 and July 9 events, participants examined and discussed the following five corridors in greater detail:

1. Mountain Avenue, Fort Collins, CO
2. Euclid Avenue, Cleveland, OH
3. Lancaster Boulevard, Lancaster, CA
4. Nørrebrogade, Copenhagen, Denmark
5. Rothschild Boulevard, Tel Aviv, Israel



1



2



3



4

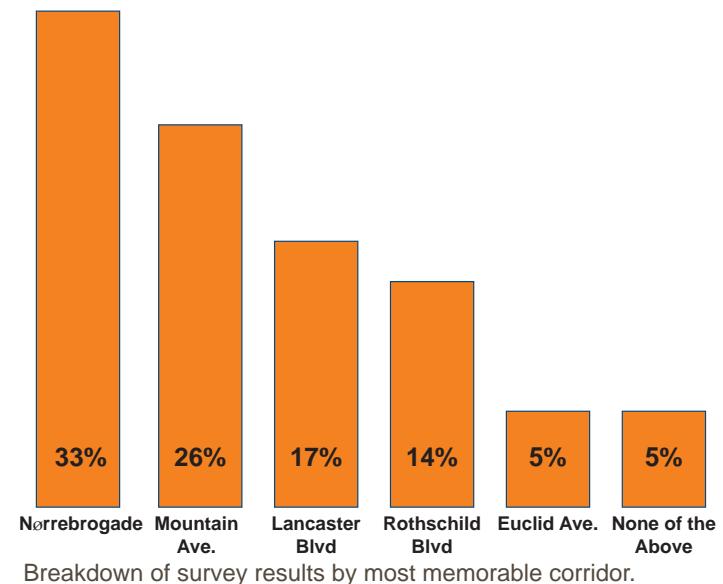
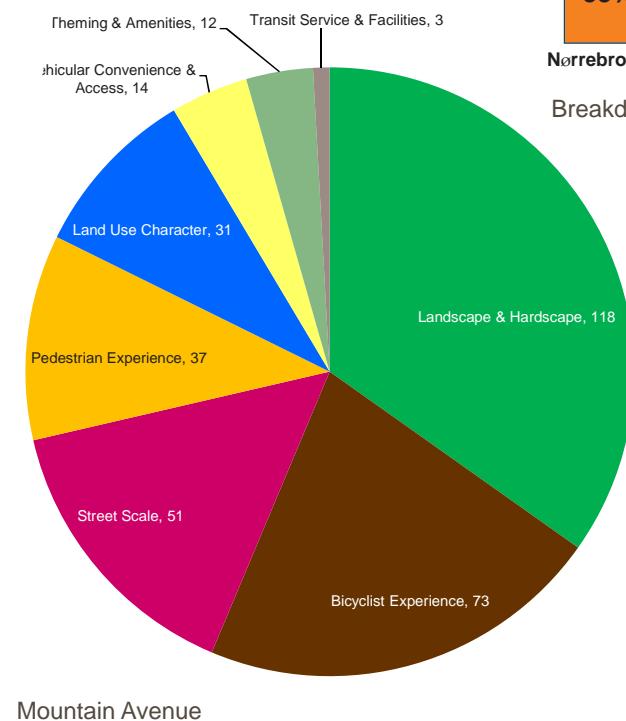
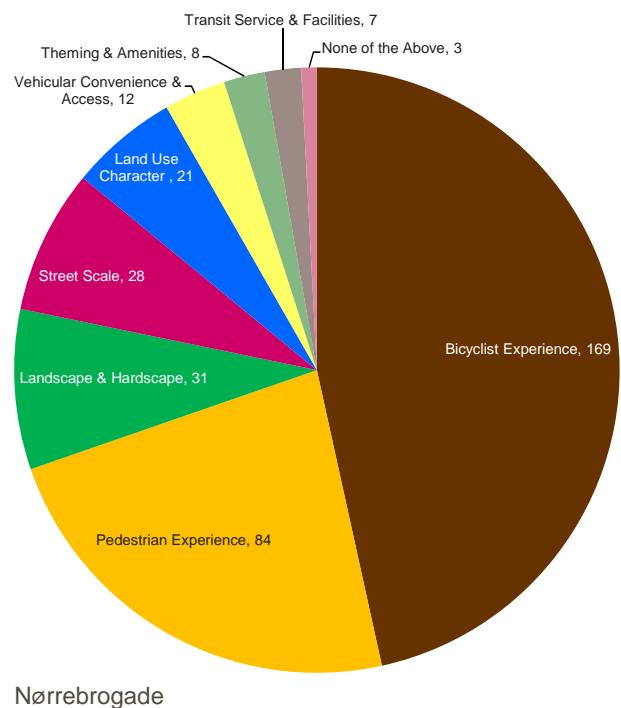


5

After learning about each corridor, meeting attendees participated in an electronic polling activity. Participants were asked to select which corridor they found the most memorable. The results varied from one session to another, but overall Mountain Avenue (Fort Collins, CO), Nørrebrogade (Copenhagen, Denmark), and Rothschild Boulevard (Tel Aviv, Israel) were ranked the highest.

## Online Survey

In addition to the workshops, the case studies were also evaluated by members of the community in an online survey. Nørrebrogade and Mountain Avenue were selected as the two most memorable corridors. These charts show the



reasons survey participants made their selected choices.

The online survey asked participants which elements stand out and could be considered for Lincoln Avenue. As illustrated in the charts, the top choices indicated pedestrian and bicycle experience, landscape and hardscape, and street scale.

The complete results of the Phase II community engagement activities can be found in Appendix A-2.

# SECTION 1.3

## CORRIDOR VISION

### Background

Lincoln Avenue, between Jefferson Street and Lemay Avenue, is an important connection between Downtown Fort Collins and the eastern part of the community. It contains a rich and eclectic mix of historic neighborhoods, old and new businesses, and public/private open space. Changes are occurring rapidly along the corridor, and development of the Link-N-Greens site into a major employment center for Woodward, Inc. will transform how the street functions. Expectations for the corridor are high. Stakeholders have already begun branding the corridor, with monikers such as "our next great street," "the nation's first bike-first street," "our most sustainable street," and "a street centered on sustainability, creativity, and culture." It is with these ideals in mind that the vision originates.

The vision was derived from recent neighborhood conversations, corridor walks, public meetings, comments from the Technical Advisory Committee (TAC), *City Plan* and community surveys.

**It is important to note the vision is not a design solution but rather illustrates possible solutions based on input and ideas gathered to date through the community engagement process.**

### Great Streets Initiative Criteria

Allan Jacobs, the author of *Great Streets*, has observed and measured scores of famous urban streets and boulevards, in order to explore what makes great public streets. His book provides a tool to analyze and quantify the initial visceral tourist reaction of wonder and pleasure when confronted with places like the Champs-Élysées or the Passeig de Gracia in Barcelona. The *Great Streets* criteria include:

#### A Defined Street

- Is the street an extension of a downtown?
- What is the overall width and number of travel lanes?

- Does it have a beginning and/or end?
- Is it contained with building enclosure?

#### Places for People to Walk and Bike with Some Leisure

- Does the right-of-way include sidewalks?
- Is the area pedestrian-oriented?
- Does the right-of-way include bicycle lanes?
- Does the area contain connections to off-street trails and greenways?
- Could the street be considered bike-dominant?
- Does the street include high-efficiency transit facilities?

#### Physical Comfort

- Does the right-of-way include on-street parking?
- Does the right-of-way include pleasant, interesting, and well-maintained landscaping?
- Is it safe?

## Qualities that Engage the Eye

- Does the area include unique theming and/or design features?
- Does the right-of-way highlight the area's arts and culture?
- Are there pedestrian plazas and places adjacent to the corridor?

## Unique Character

- Does the corridor boast an eclectic mix of land uses?
- Do the style of the street features and elements reflect the local values and culture?



Existing conditions



Potential concept: one of the goals of the LCP is to improve the safety and mobility for bicyclists and pedestrians.

## Key Values

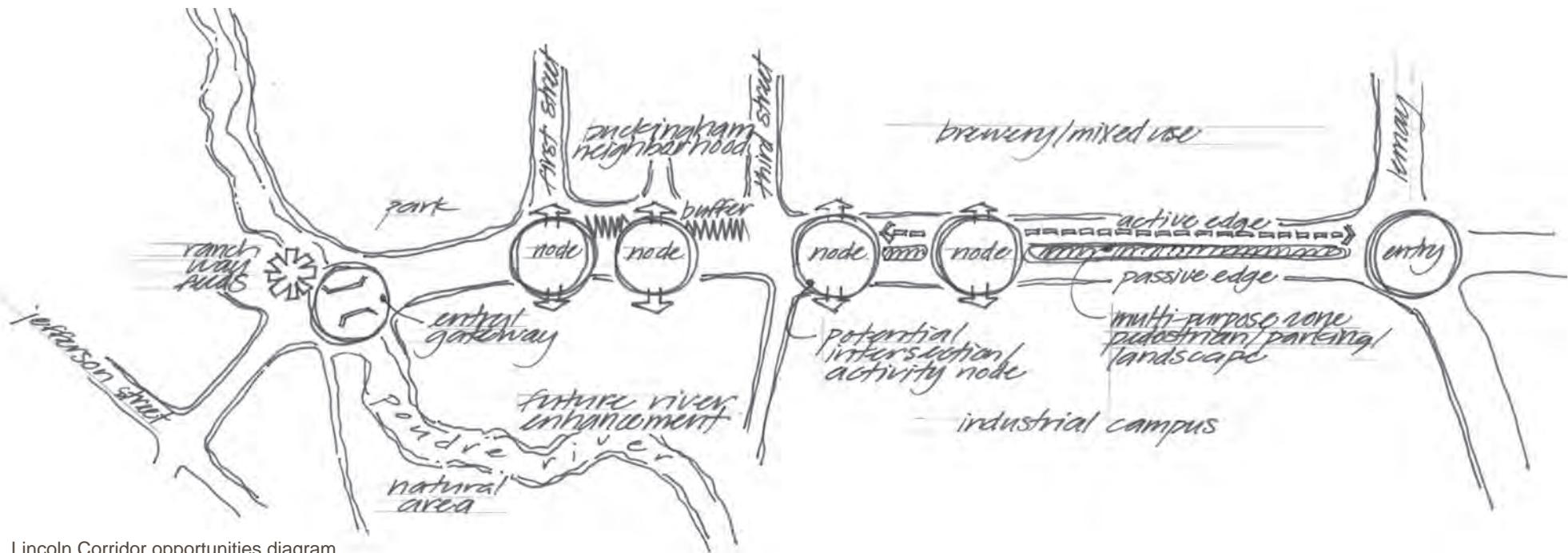
The illustration below represents a summary of key values derived from stakeholder interviews, workshop summaries, community surveys and existing plans. Word sizes are based on the number of times each word was expressed throughout the Community Engagement process. Key values expressed include:

- Neighborhood
- Business
- Access
- Pedestrian
- River



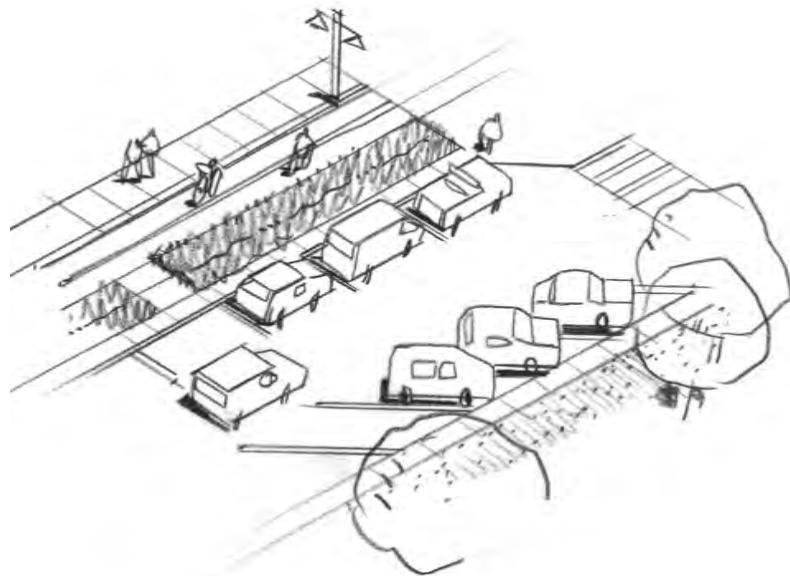
## Corridor Vision

The new Lincoln will be recognized as a great street: an active and vibrant destination and connection that celebrates our history and is a model for sustainability....



## Lincoln will be a place focused on mobility, safety, and experience of bicyclists, pedestrians, transit users, and motorists;

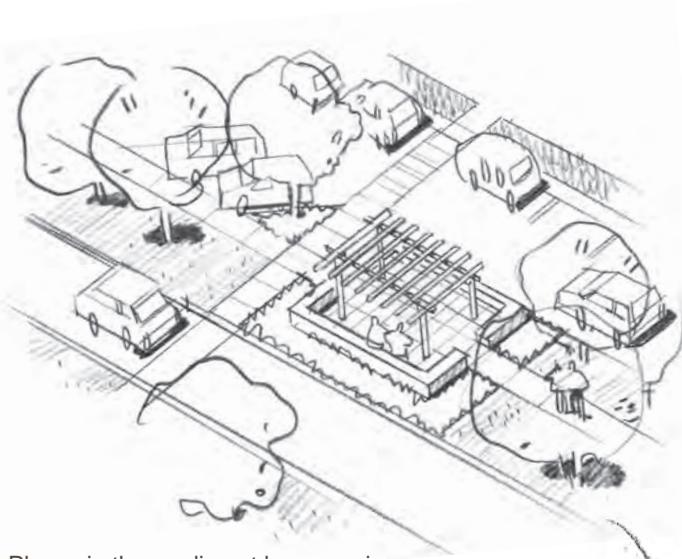
The street will embrace bold safety features for bicyclists and pedestrians at intersections crossings, transit stops, and along sidewalks. Generous sidewalks, the physical separation of bicyclists, on-street parking, and thoughtful streetscape design will create a comfortable edge. Porosity between sidewalks, bike lanes, the street and land uses will allow the interaction of various modes at planned points. The focus will be on creating a continuous pathway and the efficient movement of transit and the motor vehicle. The street will continue to serve its function as a major connection to downtown and the eastern community.



Distributed parking along the street edge and in the median could provide convenience for users and activate the street



The street will provide comfort and access for pedestrians, bicyclists and motorists, enhancing safety for all users



Plazas in the median at key crossings could provide a refuge and gathering space for pedestrians

## with an active street environment;

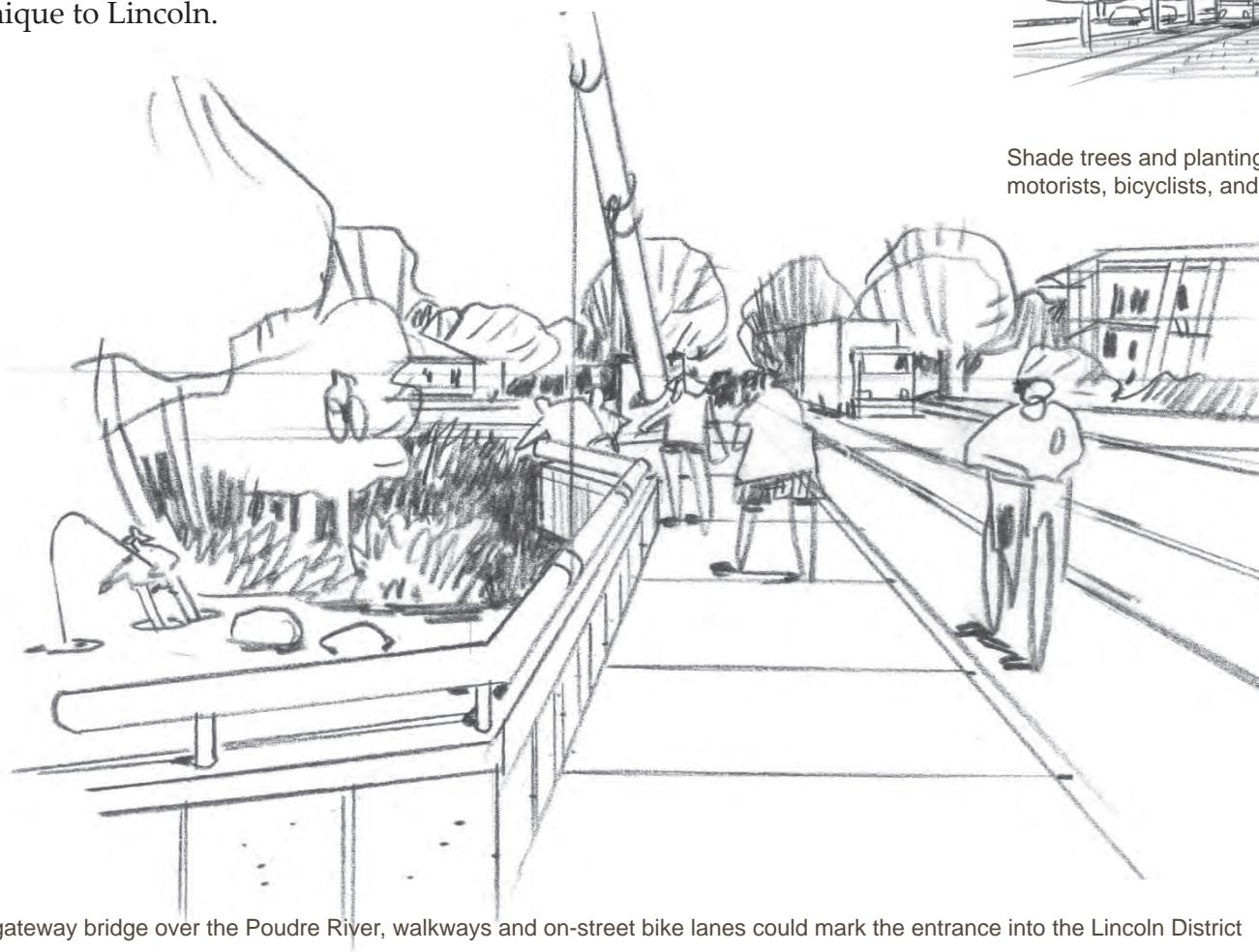
A pleasant outdoor experience will be created by providing tree canopies or structural elements at key nodes along the corridor. Generous sidewalks, plazas and amenities for people at key crossing points will create areas for spontaneous gatherings. Sidewalks and bike lanes will seamlessly merge with these spaces, creating active connection points to businesses.



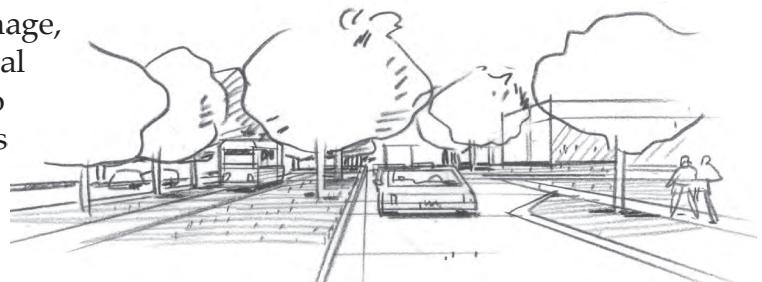
Shade shelters at nodes along the corridor could create active gathering spaces for people, and provide opportunity for artful expression

## that is visually appealing:

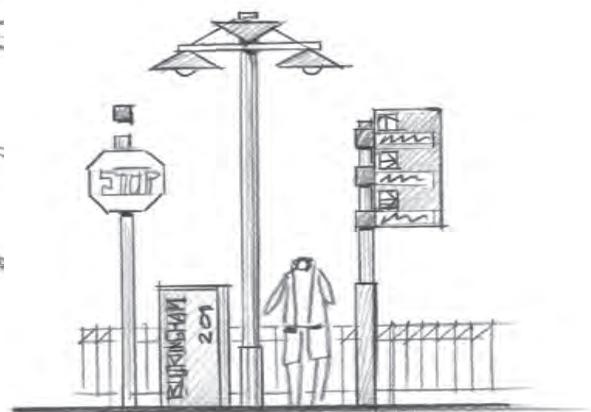
Enhanced Poudre River access areas, improvements at Buckingham Park, the Woodward Technology Center, a new bridge, and new features such as signage, lighting, walls and fencing will define the historic neighborhoods and natural character while reinforcing Lincoln's sense of place. The area will connect to Downtown via a new gateway that includes art, signage and bridge features unique to Lincoln.



A gateway bridge over the Poudre River, walkways and on-street bike lanes could mark the entrance into the Lincoln District



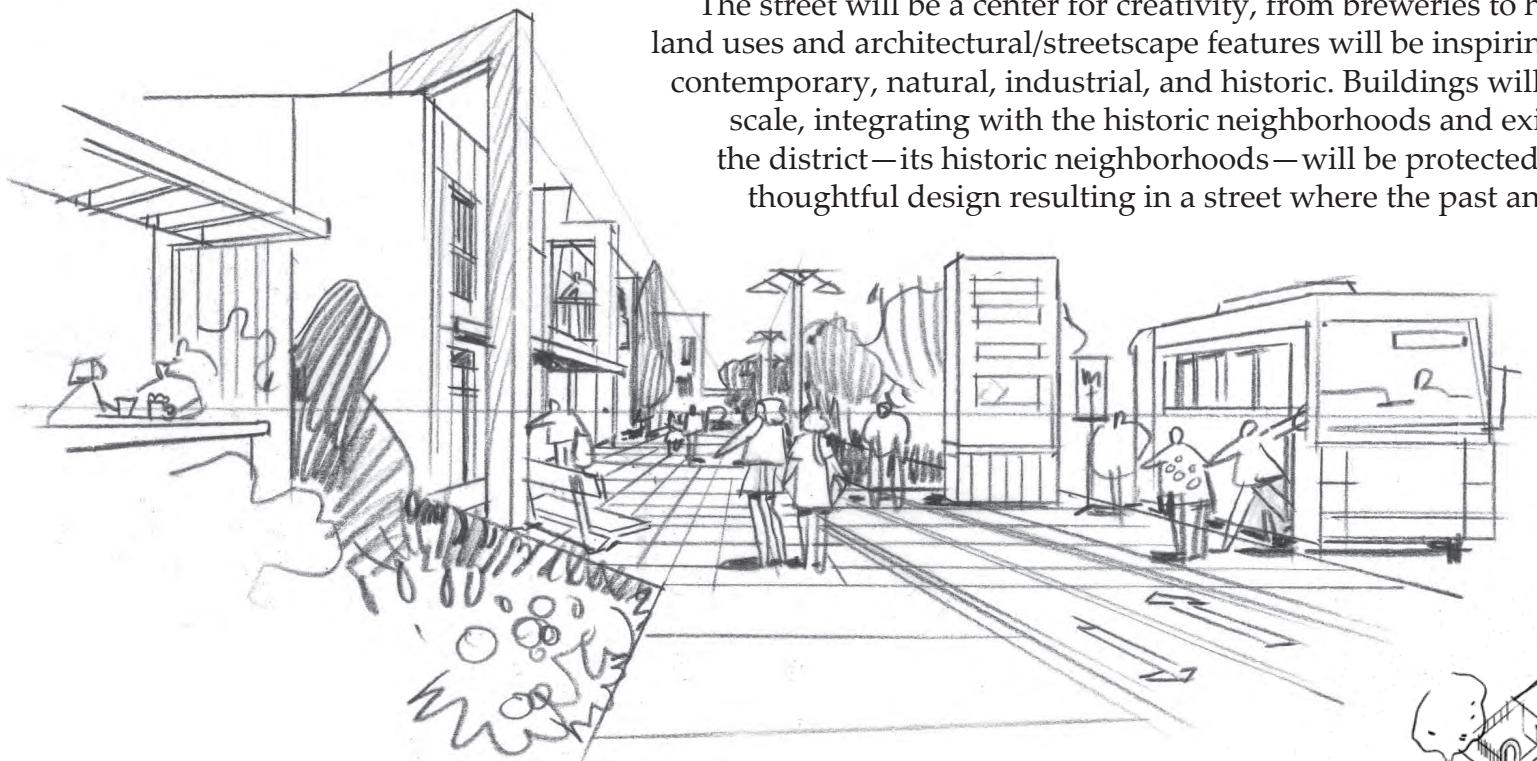
Shade trees and plantings could create a memorable experience for motorists, bicyclists, and pedestrians



Site furnishings, light posts and signage could be designed with an industrial, contemporary edge

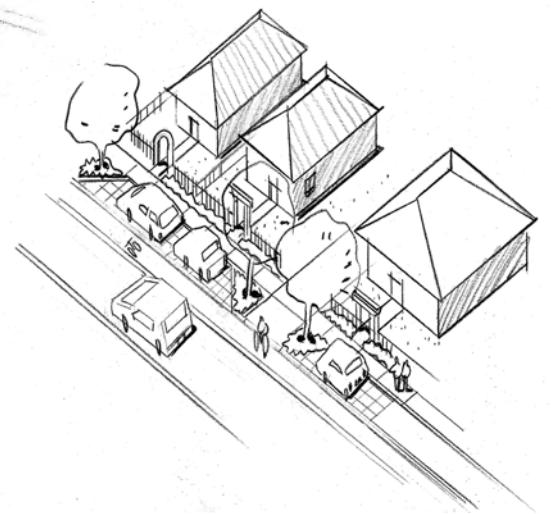
## and fosters a variety of unique, eclectic and creative land uses

The street will be a center for creativity, from breweries to high-tech companies. Its land uses and architectural/streetscape features will be inspiring and eclectic—artistic, contemporary, natural, industrial, and historic. Buildings will be at a suitable human scale, integrating with the historic neighborhoods and existing uses. The heart of the district—its historic neighborhoods—will be protected and enhanced through thoughtful design resulting in a street where the past and future are integrated.



A blend of new residential, retail or commercial uses could enhance the eclectic character of the corridor

Well designed buffers between residences and the street could balance the needs of bicyclists and pedestrians, and privacy of local residents



## in a sustainable manner.

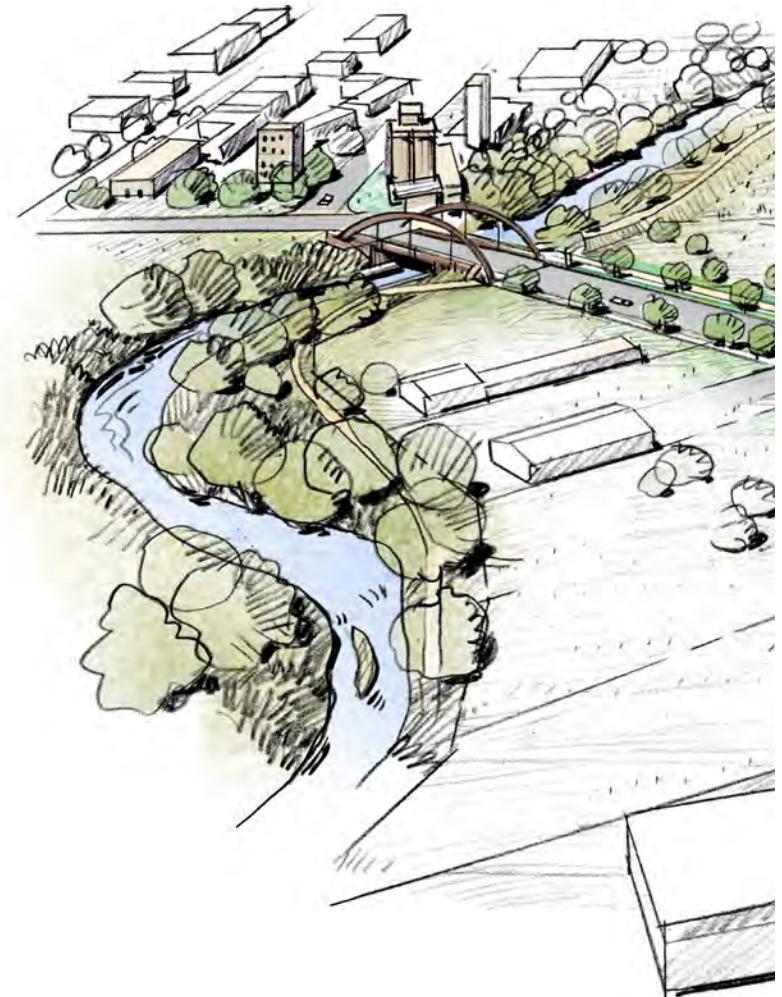
Social, environmental and economic sustainability strategies will be employed through the entire corridor. The vision is designed to achieve the City's sustainability Triple Bottom Line sustainability goals.

**Social** elements include transport options beyond the car, including increased bike, pedestrian and transit mobility. Social interactions are enhanced through the creation of new gathering places, while existing historic features and neighborhoods are preserved and protected.

**Environmental** elements include green infrastructure, such as permeable pavements, restoration of natural ditches, solar lighting technologies, green building techniques and the use of local and sustainable building materials. The Poudre River will continue to be protected and restored, remaining as one of the key defining elements of the corridor.

**Economic** elements focus on the creation of a new distinct district and an extension of downtown. The vision fosters a creative business environment, and tourist destination with new redevelopment opportunities anchored by the Woodward Technology Center.

The Lincoln Corridor will be a model for sustainable street design and the integration of economic, social and environmental factors to create a lasting legacy for businesses, visitors, and residents of the community and region.





Lincoln's social, environmental and economic characteristics will help contribute to the City's short- and long-term sustainability goals.

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## PHASE II ALTERNATIVES DEVELOPMENT

# SECTION 2.0

# INTRODUCTION

Three corridor design alternatives were developed and reviewed extensively with the public based on the vision defined in Phase I. The vision statement is as follows:

**The new Lincoln will be recognized as a Great Street: an active and vibrant destination that celebrates our history and is a model for sustainability.**

The design elements that were considered to achieve the vision include:

- Consistent sidewalks, with landscaped parkways
- Either protected or standard bicycle lanes (or a combination)
- Off-street multi-use paths (either on the north side or south side of Lincoln)
- Landscaped medians
- Access control with potential consolidation of driveways
- Streetscape amenities
- New Poudre River bridge, with bicycle and pedestrian facilities
- Improved transit service to the corridor

The alternatives illustrate different approaches to the operational organization of the street, including pedestrian & bike facilities, transit stops, access to businesses and residences, size and extent of medians, bridge design, and different approaches to landscape enhancements. Because each of the alternatives has the potential to fully realize the vision as stated in Section 1, any are suitable for development as a Preferred Plan.

One of the biggest influences in the design of the corridor is vehicular and truck access to private properties. Lincoln Avenue has many individual driveway access points along the corridor for homeowners and businesses. Some parcels even include multiple access points. While driveways provide important access to land uses, they also can be potential conflict points that impact mobility and capacity. Given that Lincoln Avenue is not a state highway, a separate Access Control Plan has not been developed for Lincoln; however, the alternatives explore different levels of access control, with primary goals to create a safer traveling environment for bicyclists, pedestrians, and motorists, to further maintain and improve the functional integrity (safety, capacity and speed) of transportation service along the corridor, and improve the aesthetics of the corridor by offering additional landscaping opportunities.

Evaluation criteria were defined based on the Vision goal statements. The alternatives were compared based on their relative performance against each other, as well as against the city's standard two-lane arterial street section in achieving those goals. Budgetary estimates of probable construction and maintenance costs were prepared for the alternatives; detailed cost estimates are provided in Appendix B-1. Cost did not vary greatly among the alternatives, but were generally 30% higher than a two lane arterial standard. This cost difference is due to many factors, including more robust landscape enhancements, streetscape amenities, the cost of bridge replacement, and costs for ROW acquisition.

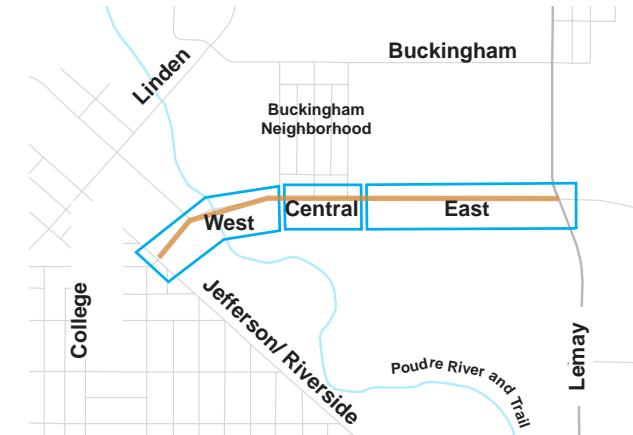
In addition to alternatives for the layout of the street, alternatives were developed for the character of streetscape elements, and various types of transit that could serve the area. The potential for a roundabout at the Lemay Avenue intersection was also studied.

# SECTION 2.1

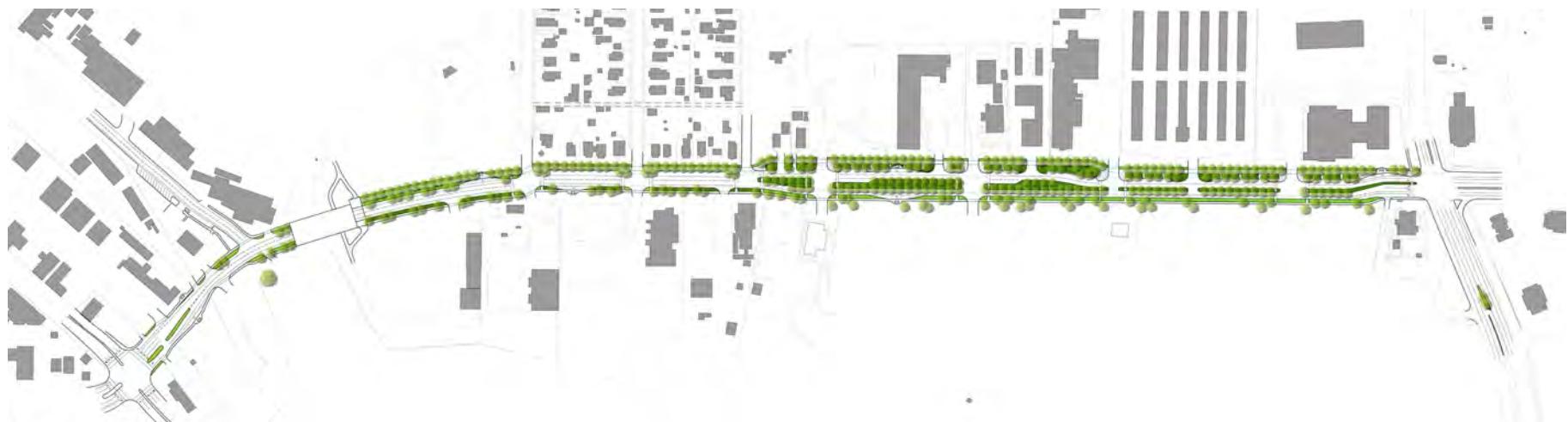
## ALTERNATIVES

### Three Alternatives for Lincoln Corridor

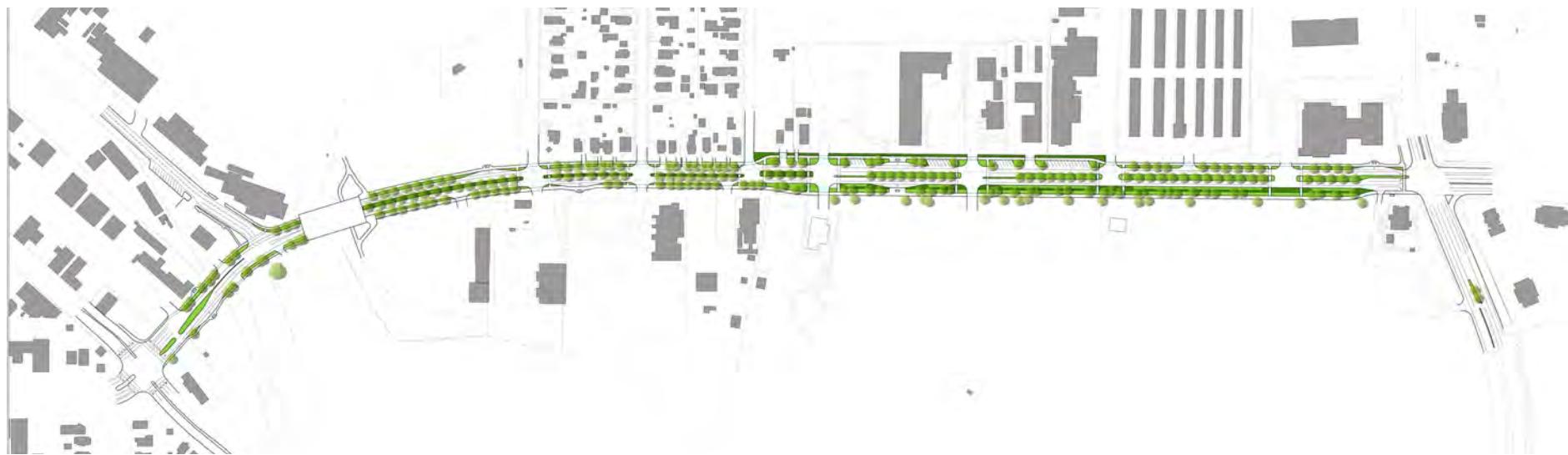
The three alternatives are titled “Broad Boulevard”, “Modest Median”, and “Skinny Street”. The alternatives are divided into three segments: West, Central and East. This allows for magnified views of the layouts and more detailed evaluation of how each alternative functions in the context of the existing development that occurs along the length of the corridor. Right-of-way widths along the corridor vary greatly. The overall concept, and differences between key characteristics for the alternatives and the two-lane arterial street standard are provided. A bird’s eye view of a portion of each segment shows the concepts in more detail.



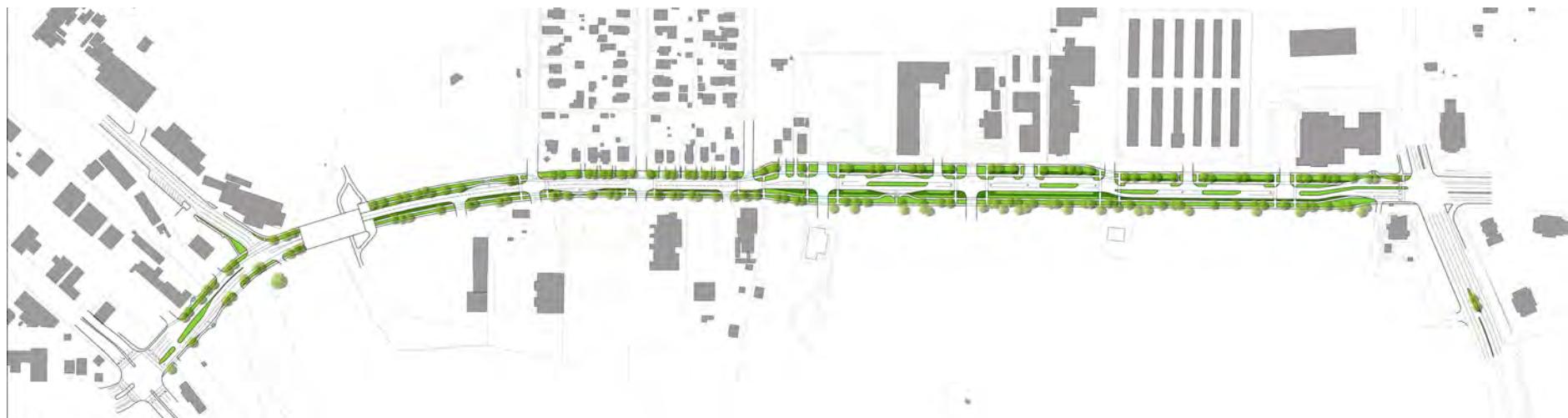
Alternatives for Lincoln Corridor are divided into three segments. The West segment extends from Jefferson to 1st Street. The Central segment extends from 1st Street to 3rd Street. The East segment extends from 3rd street to Lemay



Alternative 1 - Broad Boulevard. Characterized by a generous 30' wide median, on street bike lanes, and a shared path on the north side of the street.



Alternative 2 - Modest Median. Characterized by a 16' wide median, on street bike lanes, and a shared path on the south side of the street



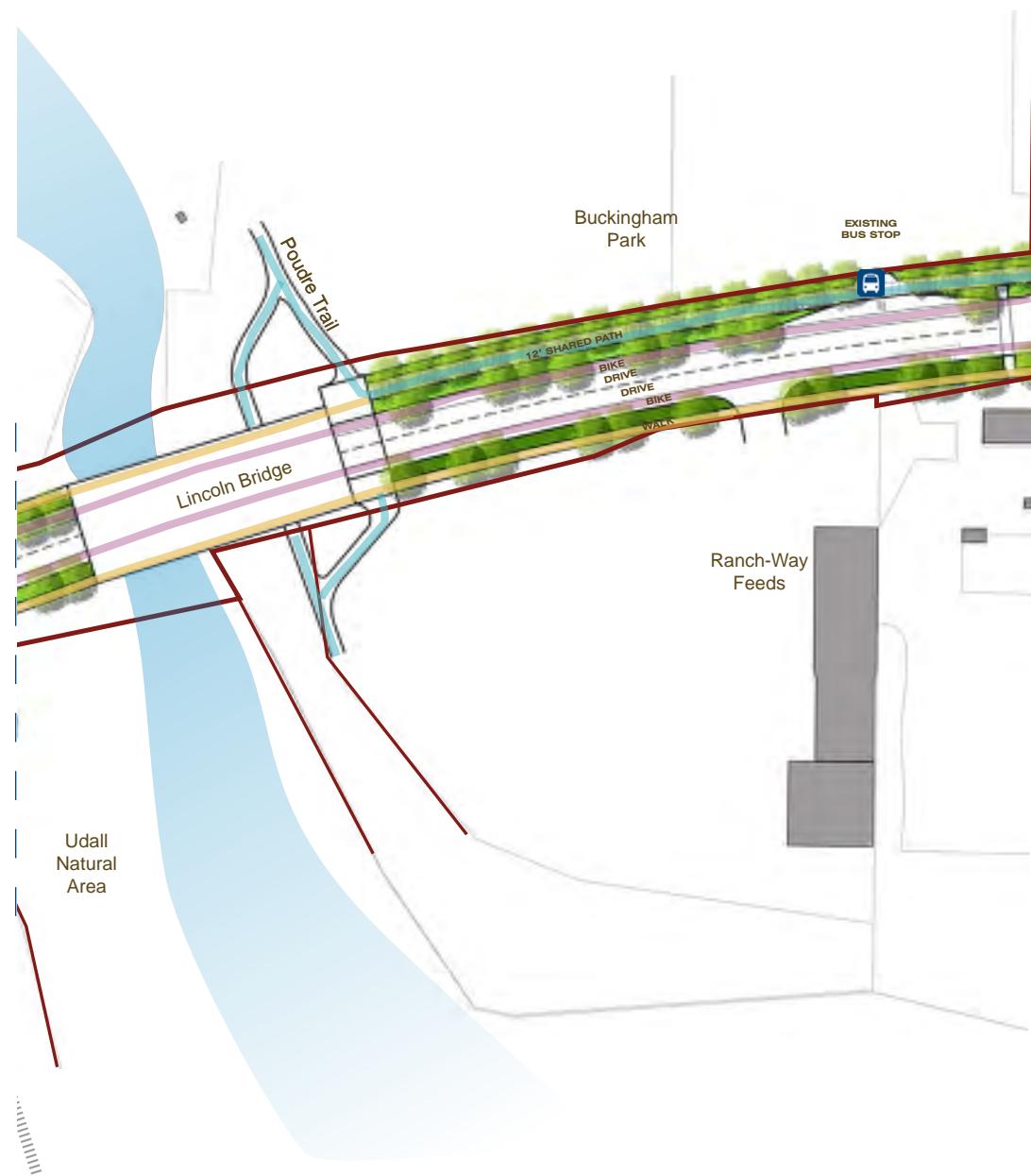
Alternative 3 - Skinny Street. Characterized by a center turn lane and limited median, one way off street bike lanes, and detached walks on both sides of the street.

## Alternative 1 - Broad Boulevard West

The Broad Boulevard concept is characterized by a generous 30' median with a double row of trees, located in the middle section of the corridor. A shared path is located on the north side of the street for pedestrians and casual bicyclists visiting breweries or businesses. Key characteristics of this alternative include:

- Pedestrian - Shared path on north side of Lincoln; detached walk on south side of Lincoln
- Bicycle - One-way on street bike lanes (both sides); shared path for casual bicyclist on north side
- On-Street Parking - None this segment
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings in large central median and at street edges
- Access - Full access this segment



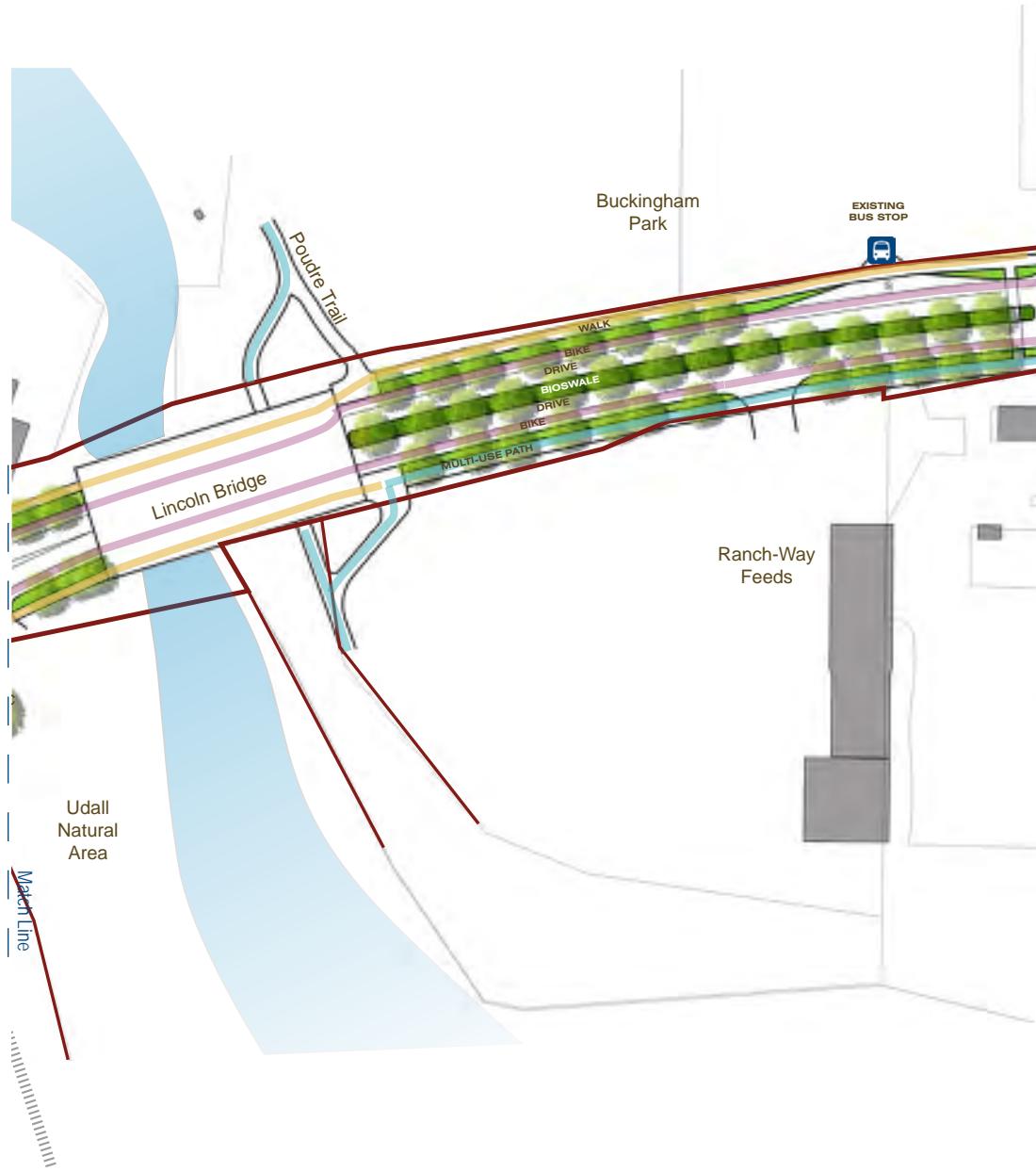


## Alternative 2 - Modest Median West

The Modest Median concept is characterized by a median that extends most of the corridor. The median varies in width, with a maximum width of approximately 16'. A shared path is provided on the south side of the street, creating a convenient connection to the east for both pedestrians and bicyclists. Key characteristics of this alternative include:

- Pedestrian - Shared path on the south side of Lincoln; detached walk on north side of Lincoln
- Bicycle - One-way on-street bike lanes both sides; shared path on south side
- On Street Parking - None this segment
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings at street edges and in medians
- Access - Potential limited access to some businesses, as shown

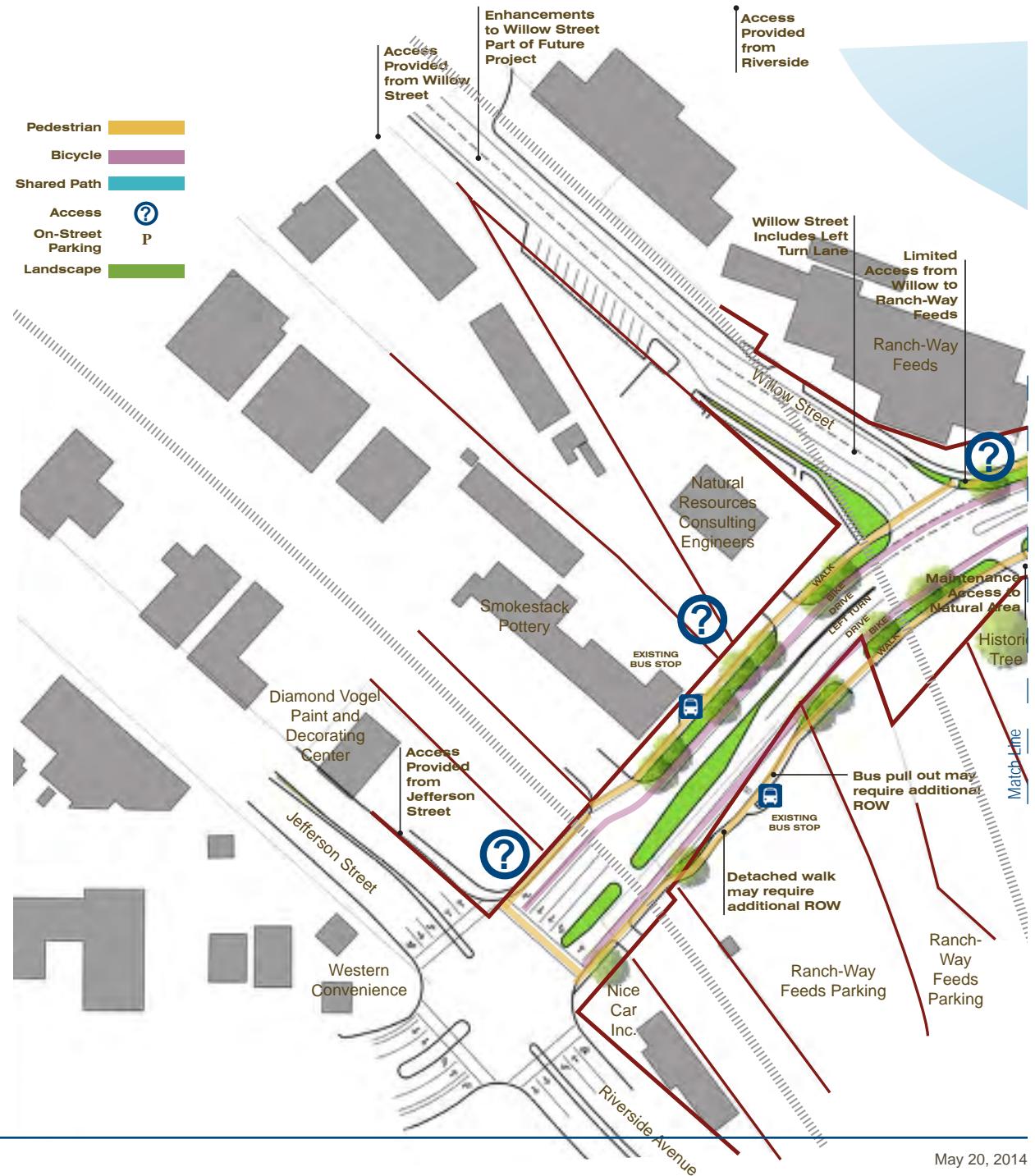




### Alternative 3 - Skinny Street West

The Skinny Street concept is characterized by a center turn lane and limited median, providing flexibility in turning movements along the majority of the corridor. One-way off-street bike lanes with generous landscape areas are provided on both sides of the street. Key characteristics of this alternative include:

- Pedestrian - Detached walks both sides
- Bicycle - One-way off-street bike lanes both sides
- On-Street Parking - None this segment
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings at street edge and in median where possible
- Access - Potential limited access to some businesses, as shown

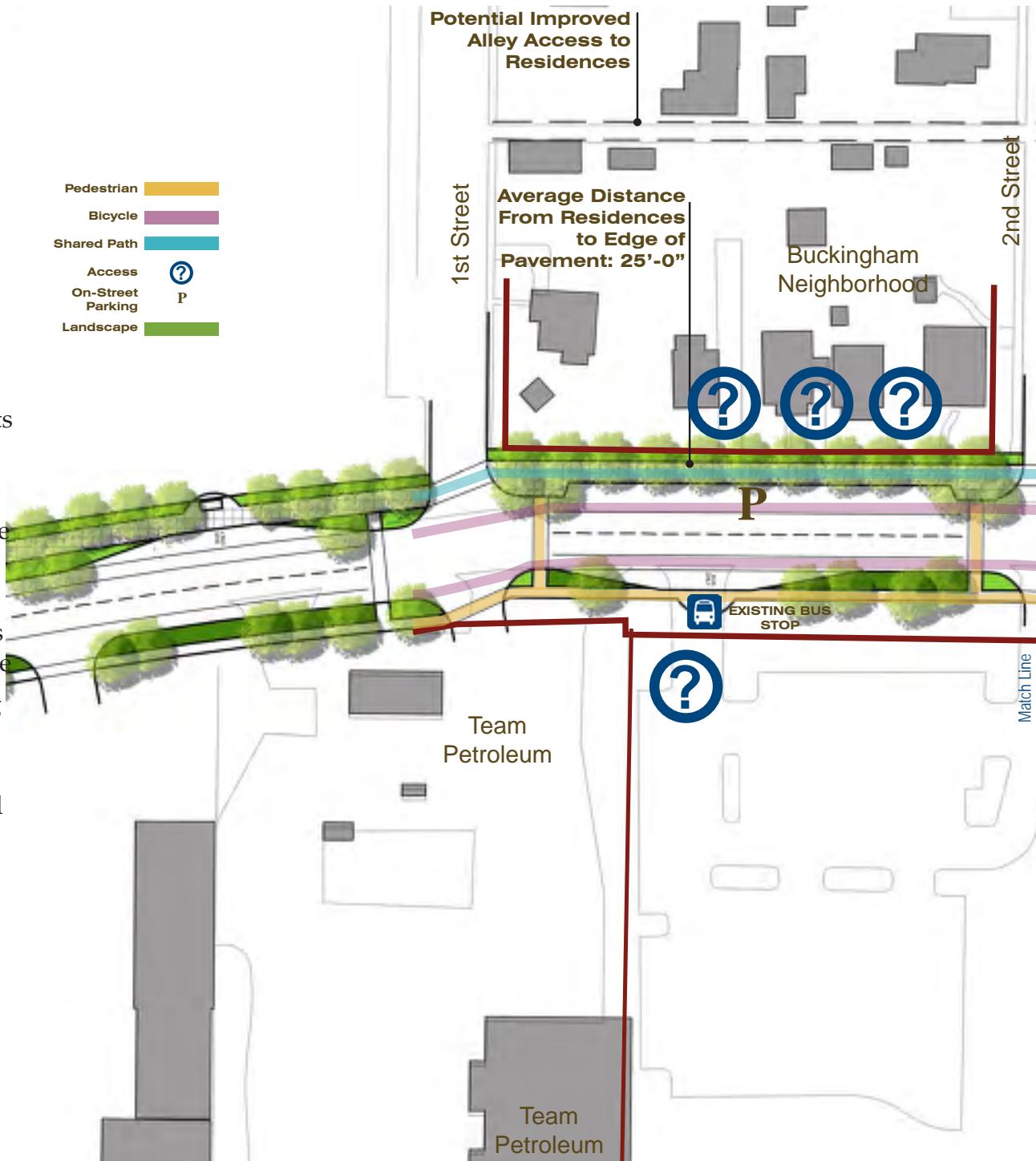


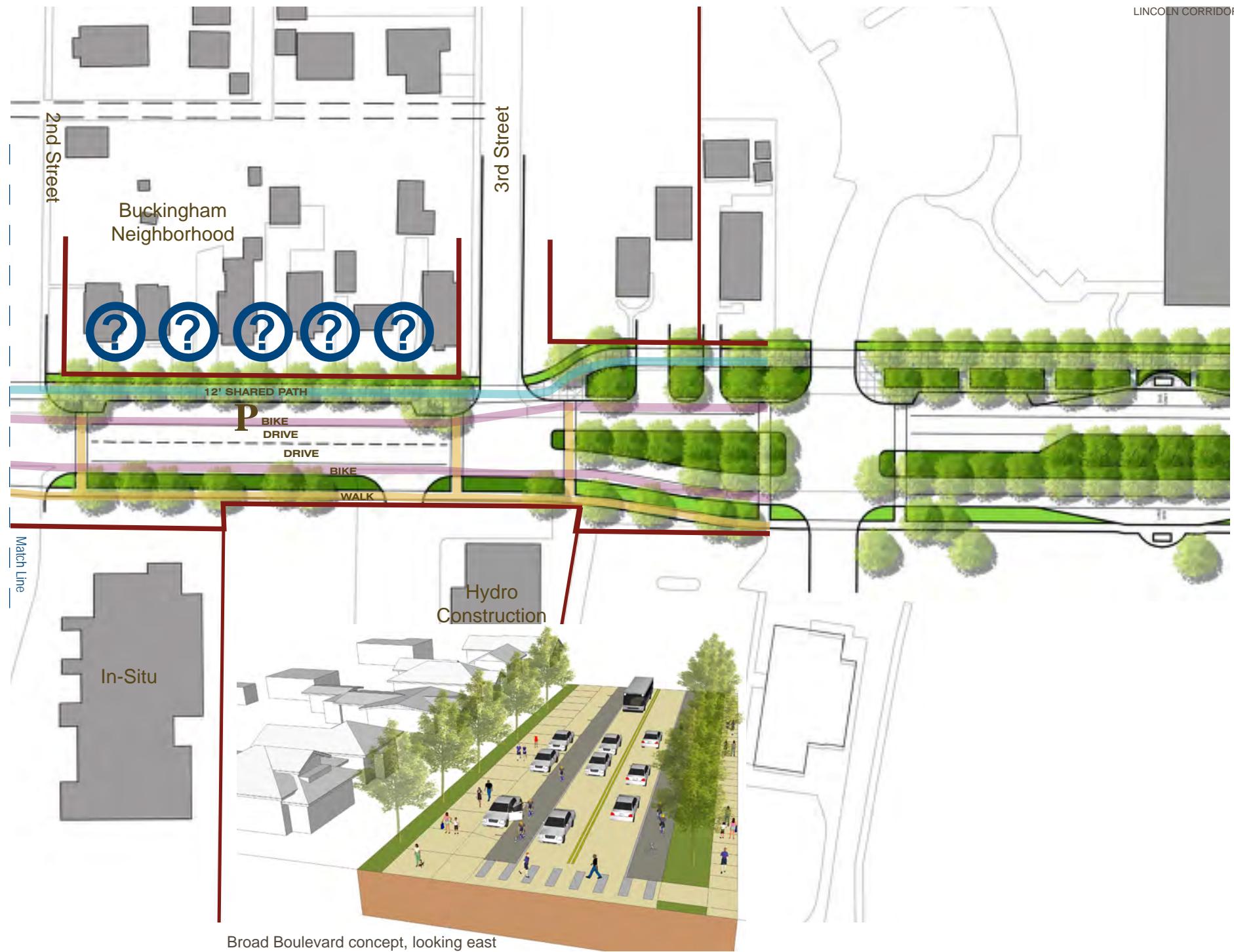


## Alternative 1 - Broad Boulevard Central

The Broad Boulevard concept is characterized by a generous 30' median with a double row of trees, located in the middle section of the corridor. A shared path is located on the north side of the street for pedestrians and casual bicyclists visiting breweries or businesses. Key characteristics of this alternative include:

- Pedestrian - Shared path on north side of Lincoln; detached walk on south side of Lincoln
- Bicycle - One-way on street bike lanes (both sides); shared path on north side
- On-Street Parking - On-street parking north side of street
- Neighborhood Buffer - Shared path with landscape area, potential limited access at residential driveways; on-street parking
- Landscape - Trees and plantings in large central median and at street edges
- Access - Potential limited access to some businesses, as shown

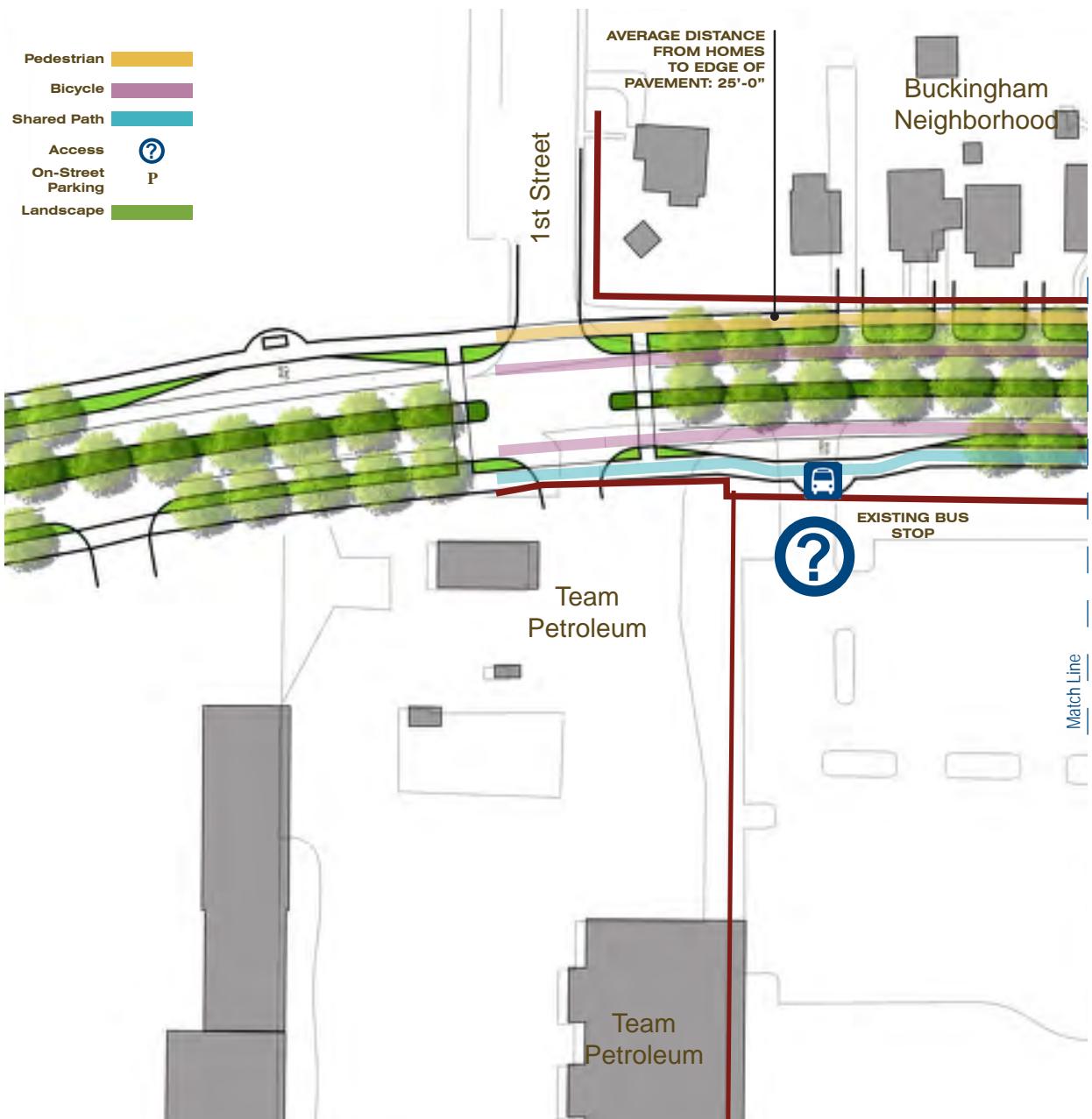


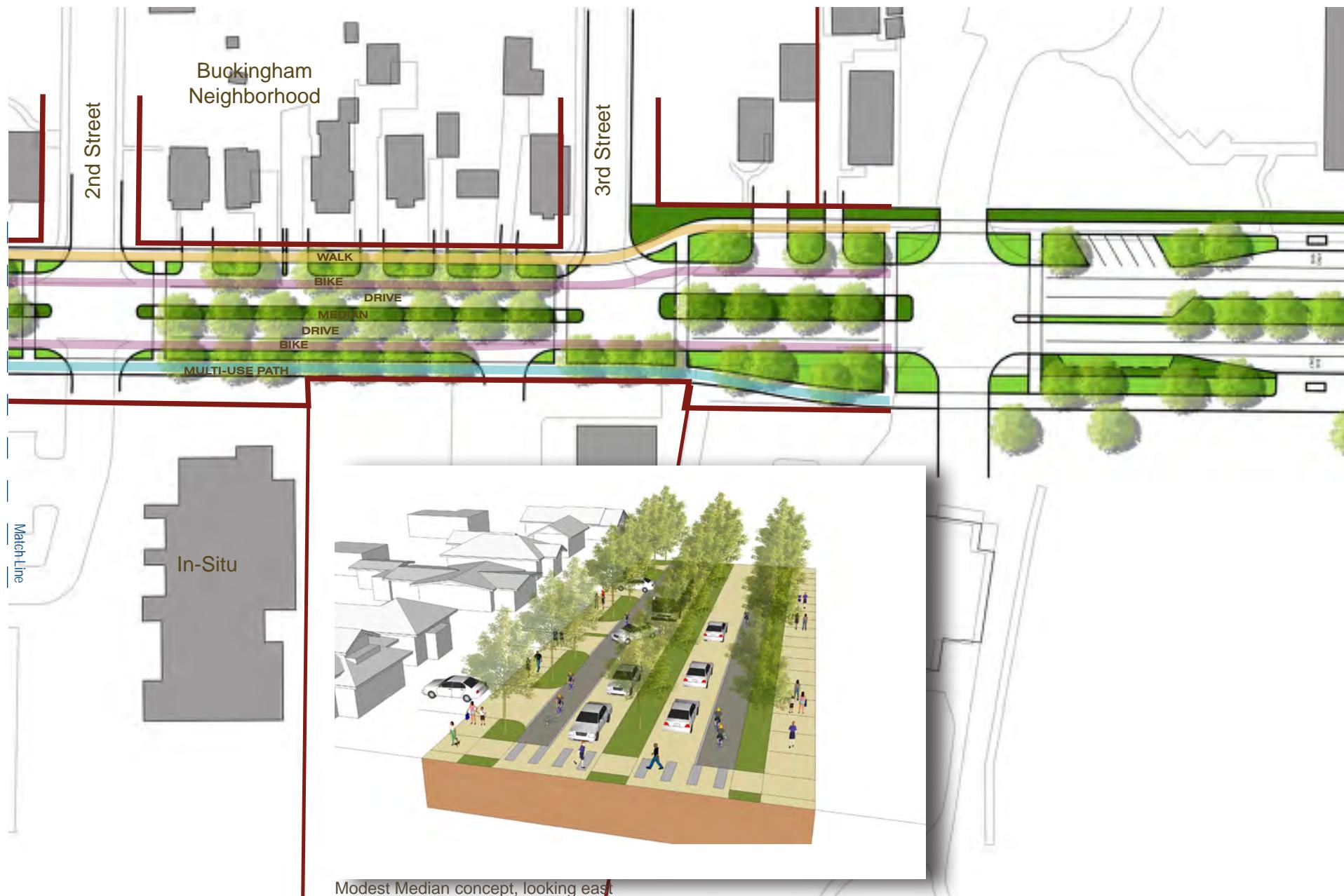


## Alternative 2 - Modest Median Central

The Modest Median concept is characterized by a median that extends most of the corridor. The median varies in width, with a maximum width of approximately 16'. A shared path is provided on the south side of the street, creating a convenient connection to the east for both pedestrians and bicyclists. Key characteristics of this alternative include:

- Pedestrian - Shared path on the south side of Lincoln; detached walk on north side of Lincoln
- Bicycle - One-way on-street bike lanes both sides; shared path on south side
- On-Street Parking - Angled parking on north side
- Neighborhood Buffer - Detached walk with landscape area; no on-street parking
- Landscape - Trees and plantings at street edges and in medians
- Access - Potential limited access to some businesses, as shown



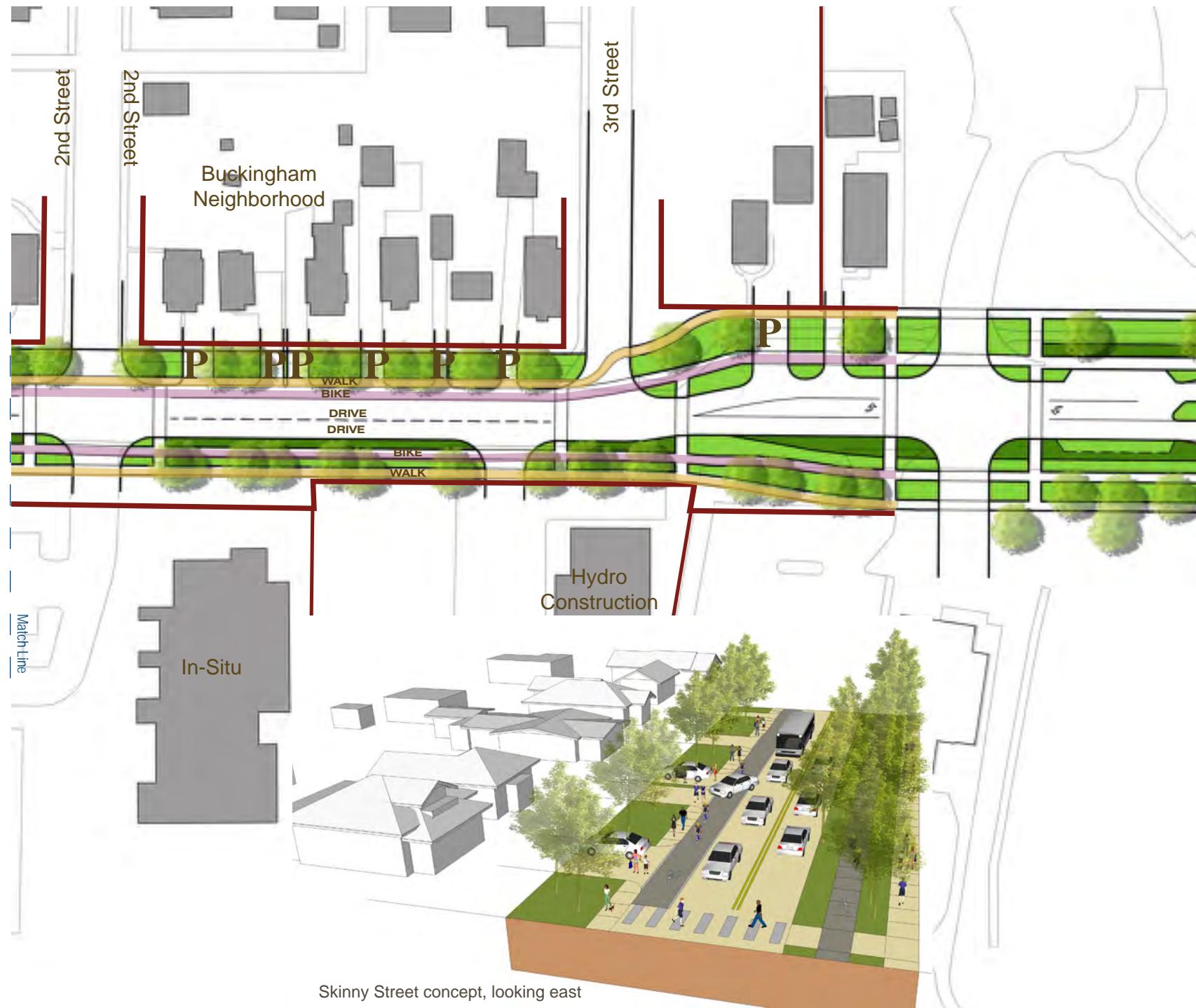


## Alternative 3 - Skinny Street Central

The Skinny Street concept is characterized by a center turn lane and limited median, providing flexibility in turning movements along the majority of the corridor. One-way off-street bike lanes with generous landscape areas are provided on both sides of the street. Key characteristics of this alternative include:

- Pedestrian - Detached walks both sides
- Bicycle - One-way off-street bike lanes both sides
- On-Street Parking - On-street parallel parking north side; potential future parallel parking on south side
- Neighborhood Buffer - Attached walk with generous landscape area; residential parking in driveways within ROW
- Landscape - Trees and plantings at street edge and in median where possible
- Access - Potential limited access to some businesses, as shown

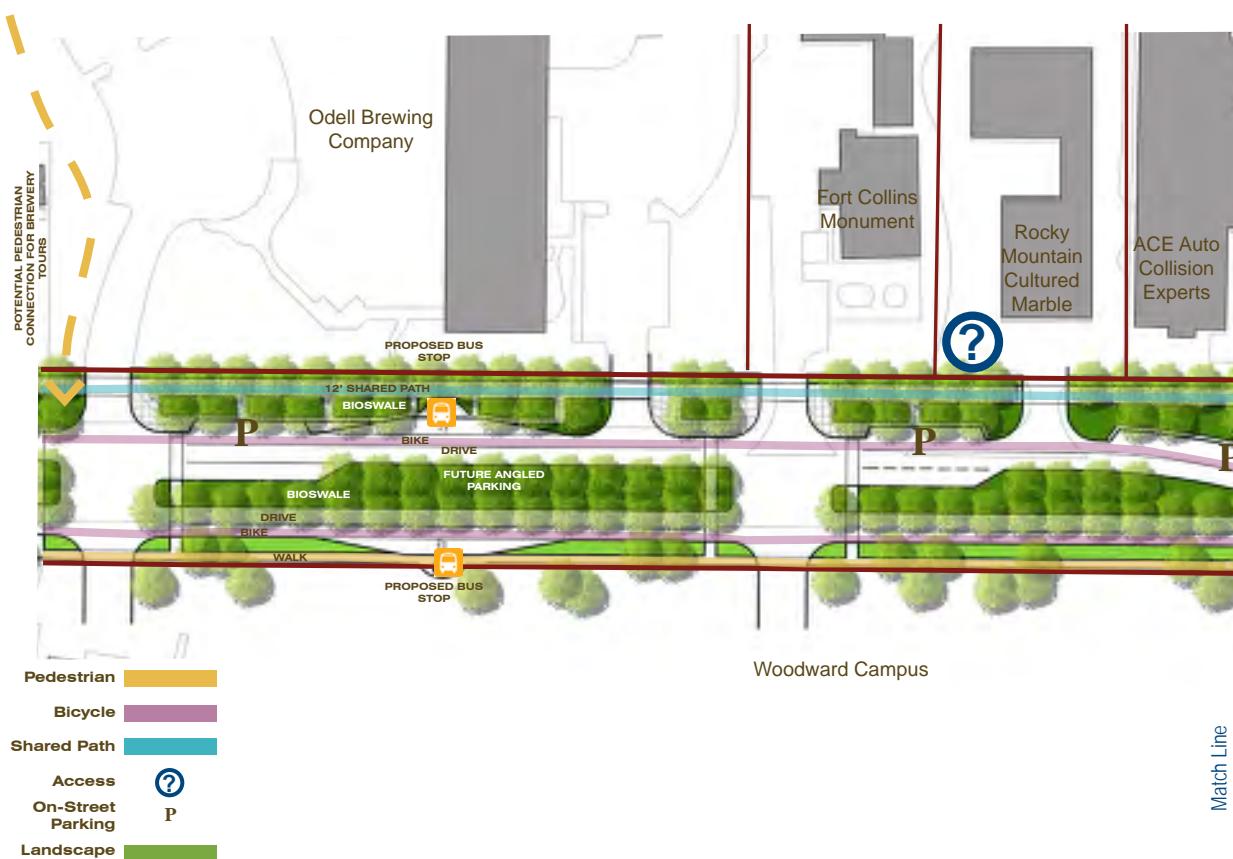


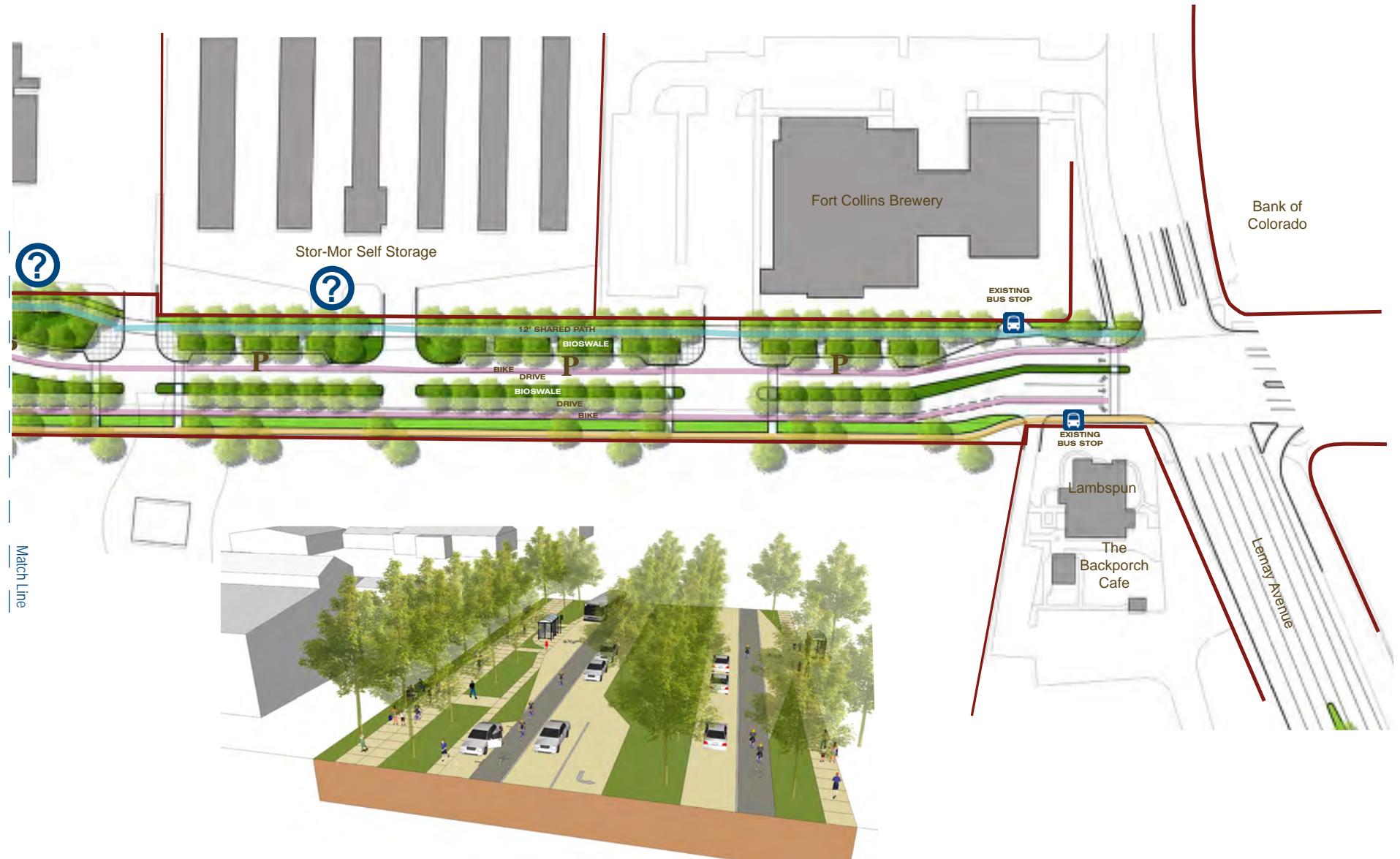


## Alternative 1 - Broad Boulevard East

The Broad Boulevard concept is characterized by a generous 30' median with a double row of trees, located in the middle section of the corridor. A shared path is located on the north side of the street for pedestrians and casual bicyclists visiting breweries or businesses. Key characteristics of this alternative include:

- Pedestrian - Shared path on north side of Lincoln; detached walk on south side of Lincoln
- Bicycle - One-way on street bike lanes (both sides); shared path on north side
- On-Street Parking - On-street parking north side of street
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings in large central median and at street edges
- Access - Potential limited access to some businesses



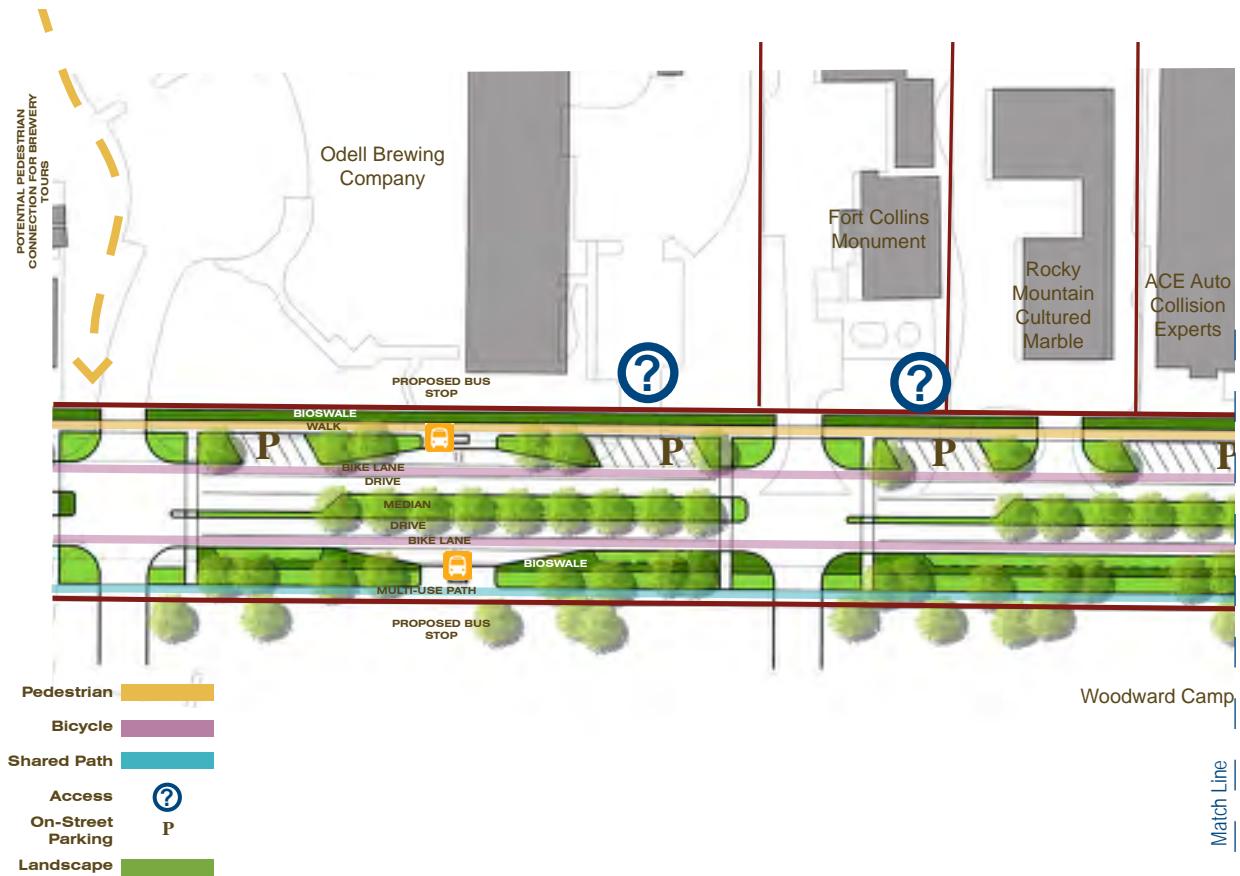


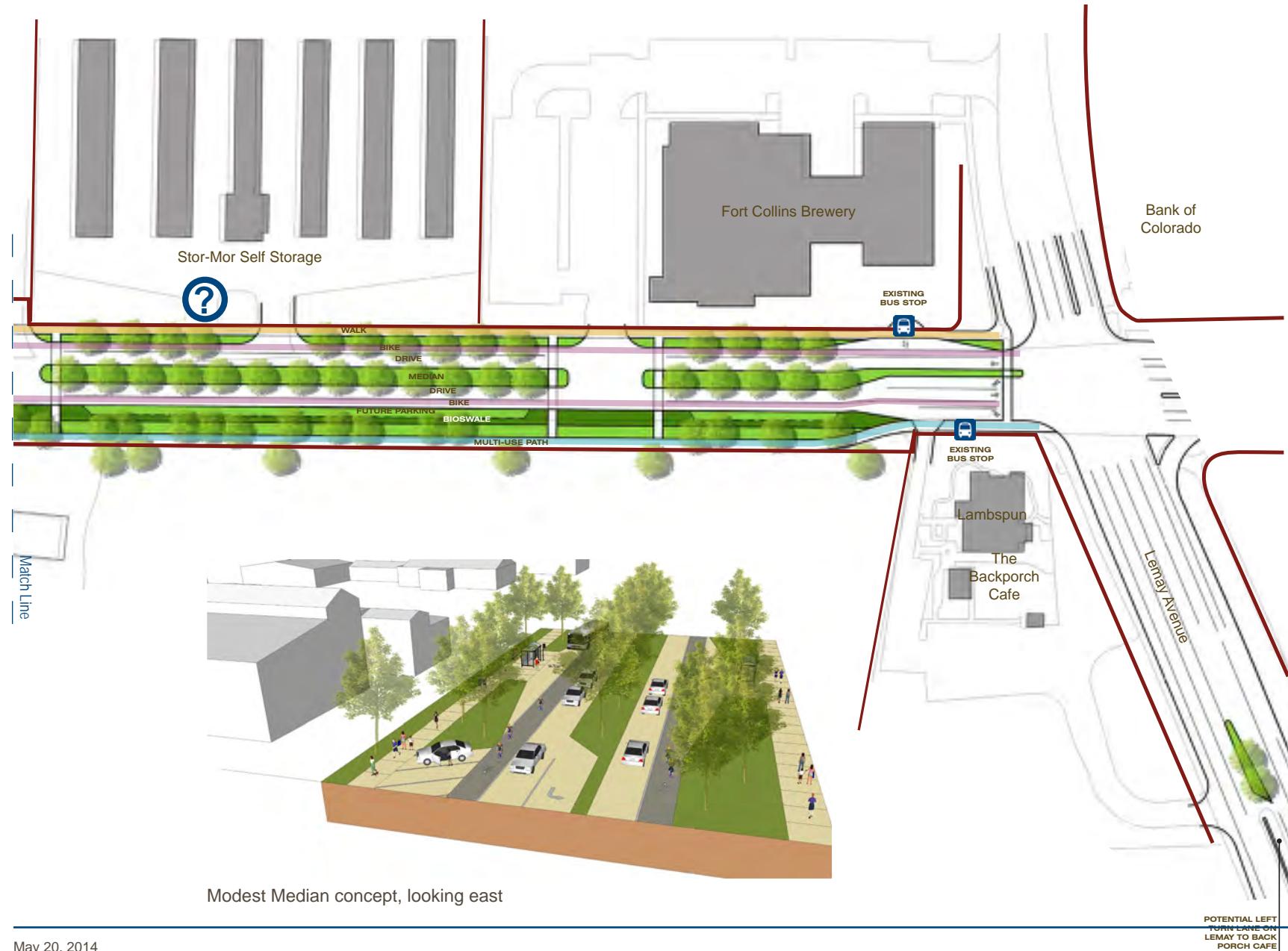
Broad Boulevard concept, looking east

## Alternative 2 - Modest Median East

The Modest Median concept is characterized by a median that extends most of the corridor. The median varies in width, with a maximum width of approximately 16'. A shared path is provided on the south side of the street, creating a convenient connection to the Woodward campus for both pedestrians and bicyclists. Key characteristics of this alternative include:

- Pedestrian - Shared path on the south side of Lincoln; detached walk on north side of Lincoln
- Bicycle - One way on street bike lanes both sides; shared path on south side
- On-Street Parking - Angled parking on north side; potential future parallel parking on south side
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings at street edges and in medians
- Access - Potential limited access to some businesses, as shown



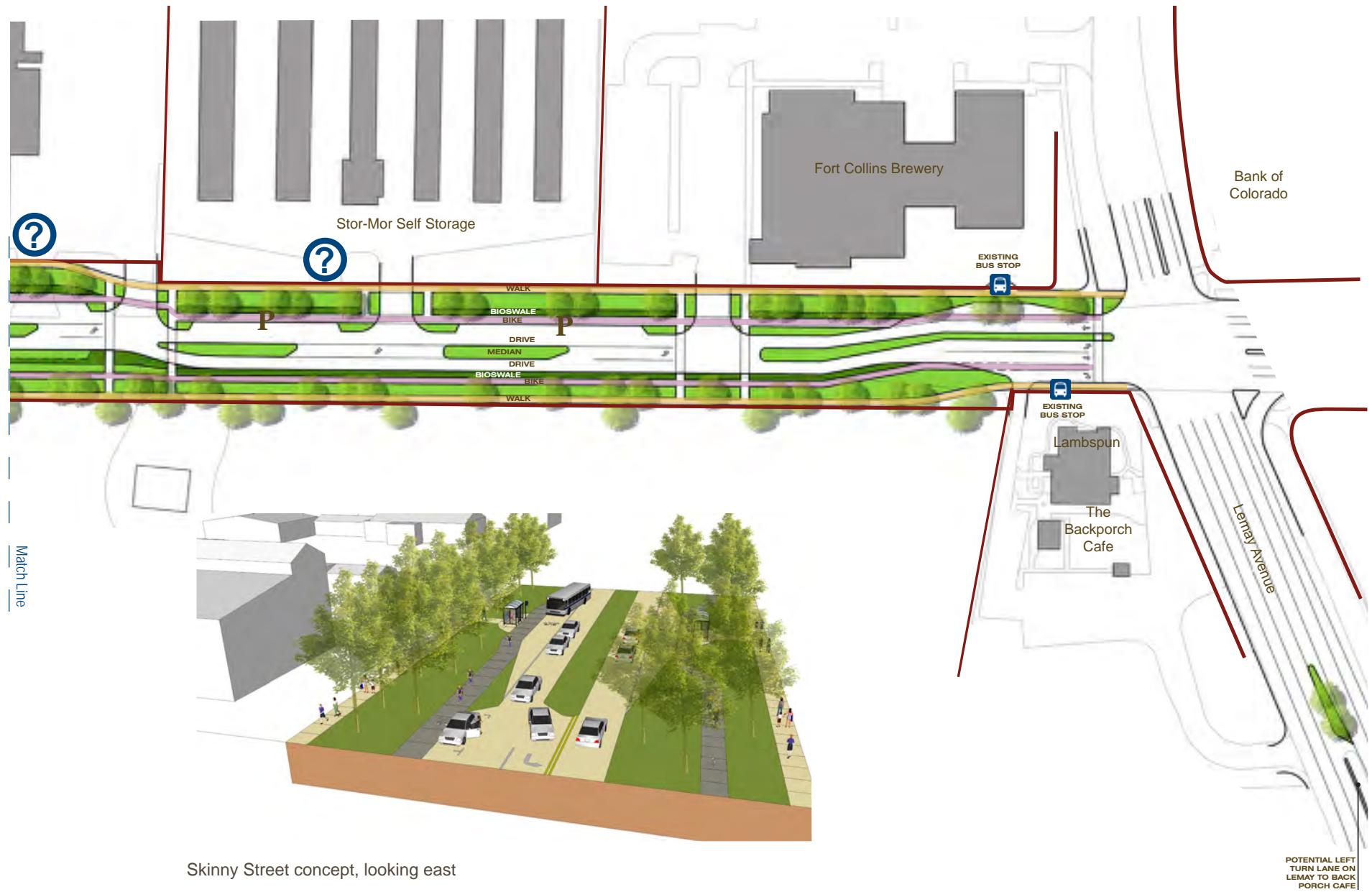


### Alternative 3 - Skinny Street East

The Skinny Street concept is characterized by a center turn lane and limited median, providing flexibility in turning movements along the majority of the corridor. One-way off-street bike lanes with generous landscape areas are provided on both sides of the street. Key characteristics of this alternative include:

- Pedestrian - Detached walks both sides
- Bicycle - One-way off-street bike lanes both sides
- On-Street Parking - On-street parallel parking north side; potential future parallel parking on south side
- Neighborhood Buffer - Not applicable this segment
- Landscape - Trees and plantings at street edge and in median where possible
- Access - Potential limited access to some businesses, as shown

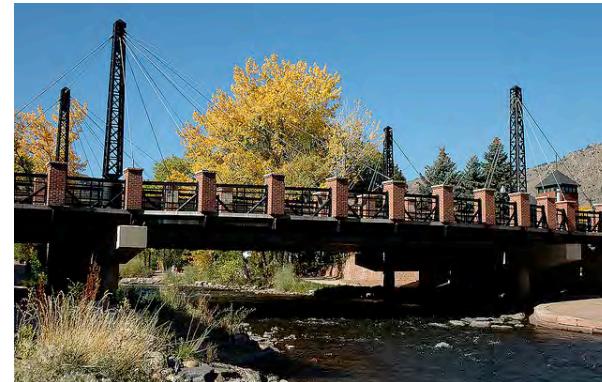




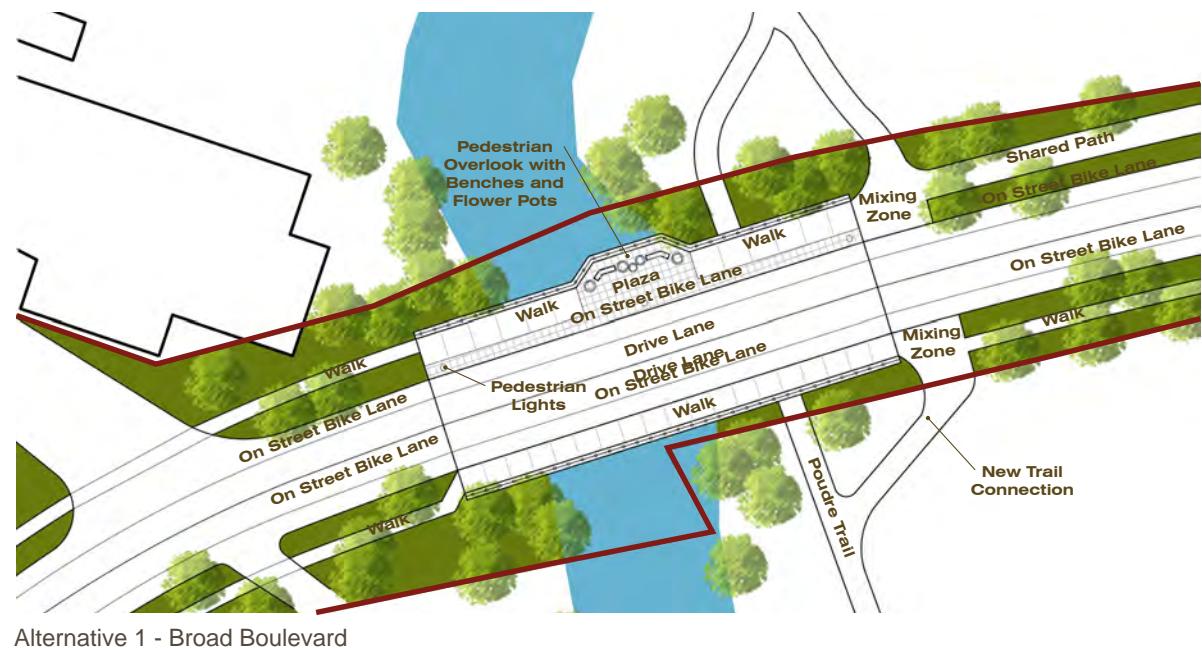
## Bridge Alternatives

Plan view enlargements of the Poudre River bridge show the bridge concepts associated with each alternative. All three alternatives include improved connections to the Poudre River Trail, and a zone where pedestrians and bicyclists must mix together at the right end of the bridge where the trail meets the street. The designs consider the differences in locations for leisure bicyclists accommodated on shared use paths shown on Alternatives 1 and 2, and the absence of a shared use path on Alternative 3.

The Broad Boulevard bridge includes bike lanes, a wide walk on the downstream side, and a wider walk with a buffer next to the bike lane and an overlook on the north side. Bicyclists coming from the east on the shared use path on the north side of the street would mix with pedestrians on the wider walk, or move to the bike lane to cross the bridge.

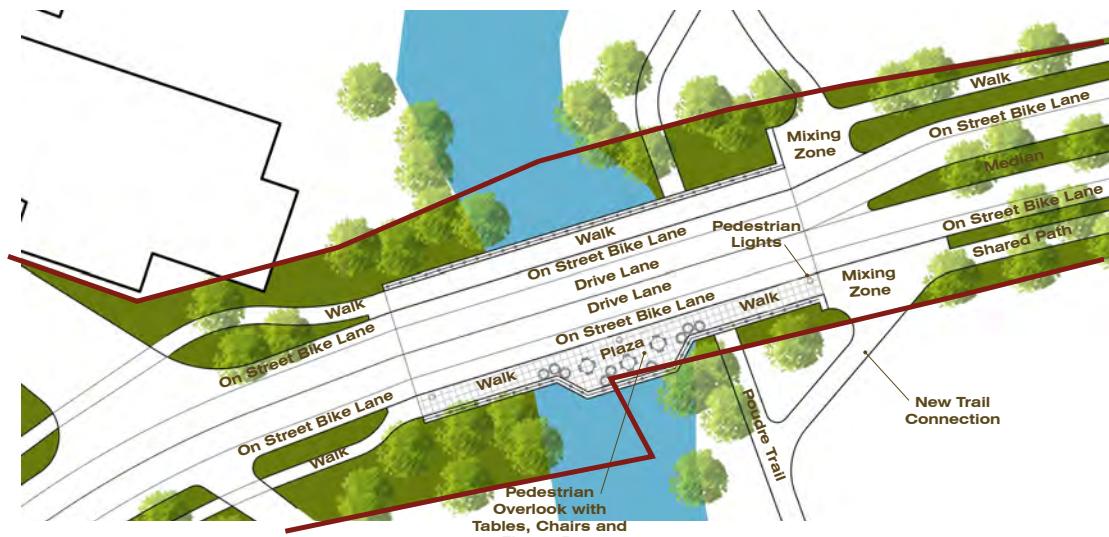


Washington Avenue Bridge, Golden Colorado was a precedent studied for the Lincoln Bridge because it has broad walks for pedestrians and overlooks.

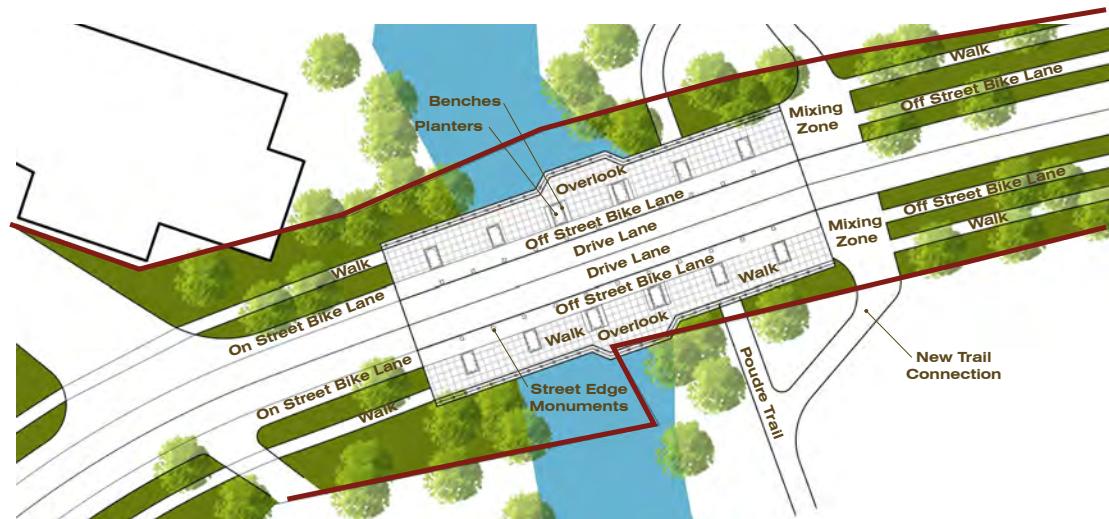


The Modest Median bridge includes bike lanes and walks on both sides, with an overlook on the south side. Bicyclists coming from the east on the shared-use path on the south side of the street would move to the bike lane to cross the bridge because the walk is not wide enough to safely accommodate them with the planters and other amenities that are associated with the overlook.

The Skinny Street bridge includes bike lanes that are buffered by protective barriers (street edge monuments) from the vehicle travel lanes, planters that provide visual interest and separate pedestrians from the bicyclists, and overlooks on both sides of the bridge.



Alternative 2 - Modest Median

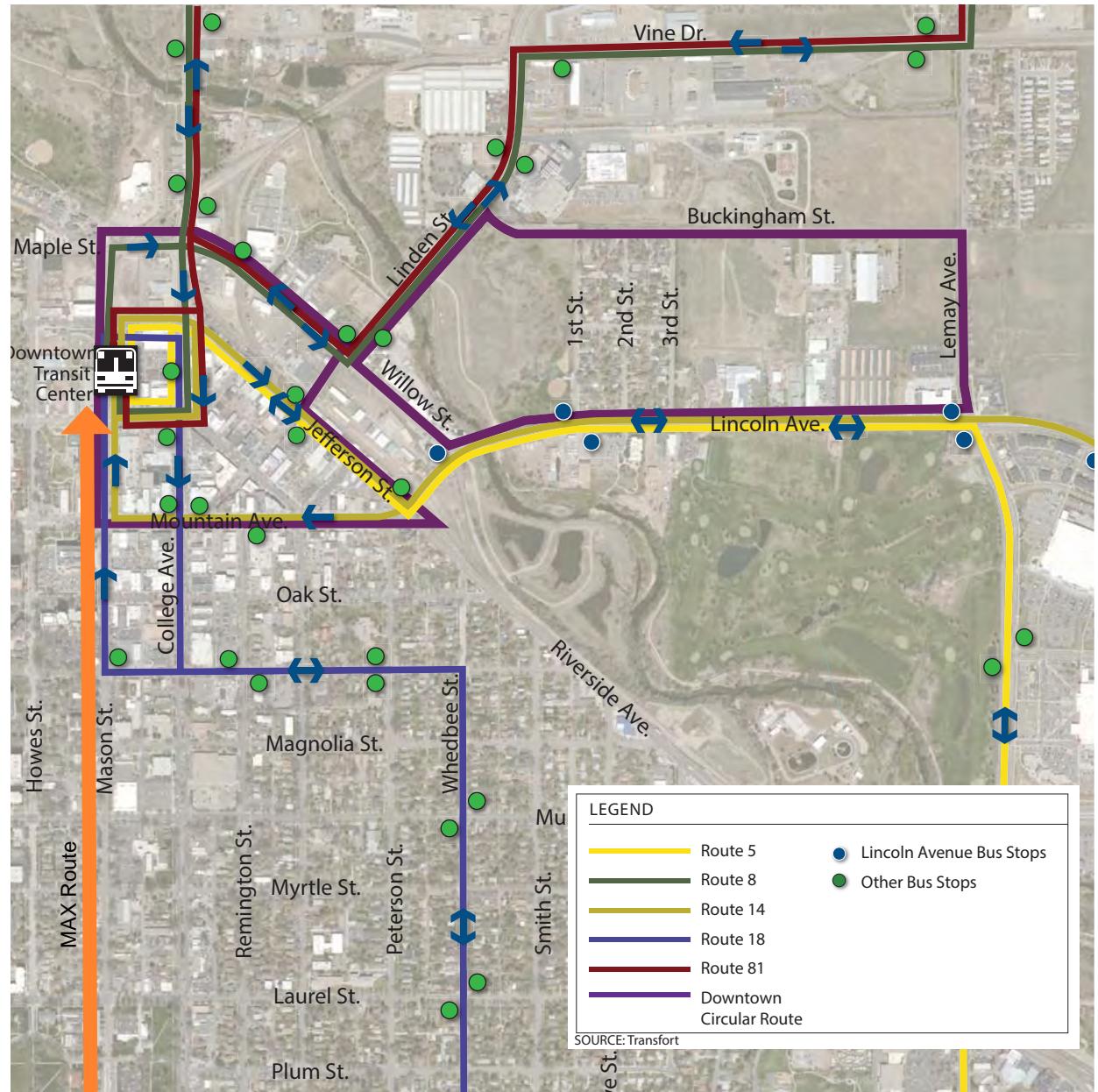


Alternative 3 - Skinny Street

## Bus/ Rail Transit Alternatives

The study team assessed various transit options, including continuing the existing service, enhancing existing service, adding a Downtown Circulator (consistent with the Transfort Strategic Operating Plan), adding a Downtown Circulator with a custom vehicle (e.g., rubber-tired trolley or innovative bus vehicle), and rail trolley. The three roadway design alternatives described previously were developed to support each transit option except rail trolley, include transit stops that can accommodate the existing buses, as well as alternative types of downtown circulator vehicles.

The rail trolley was determined to have substantial costs and challenges associated with operations, railroad and bridge crossings, and potential connectivity through downtown to the existing trolley system. See Appendix B-2 for additional analysis of the rail trolley.



## Transit Alternatives Summary

	Description	Likely User Groups	Capital/ Ongoing Cost	Vehicle Type
1	<b>Maintain Existing Service</b> <ul style="list-style-type: none"> <li>• Route 5 - 60 minute frequency</li> <li>• Route 14 - 60 minute frequency</li> <li>• 30 Minute (combined) service connecting to MAX</li> </ul>	<ul style="list-style-type: none"> <li>• Transit Dependent Populations</li> <li>• Green Riders</li> </ul>	\$ / Neutral	
2	<b>Enhance Existing Service</b> <ul style="list-style-type: none"> <li>• Increase frequencies on existing routes that are currently serving Lincoln</li> <li>• 15 Minute (combined) service connecting to MAX</li> </ul>	<ul style="list-style-type: none"> <li>• Transit Dependent Populations</li> <li>• Green Riders</li> <li>• Area Residents</li> <li>• Area Employees</li> </ul>	\$ / \$	
3	<b>Downtown Circulator Service Using Standard Bus</b> <ul style="list-style-type: none"> <li>• Shuttle - 10 minute frequency connecting to MAX</li> </ul>	<ul style="list-style-type: none"> <li>• Transit Dependent Populations</li> <li>• Green Riders</li> <li>• Area Residents</li> <li>• Area Employees</li> <li>• Area Visitors</li> </ul>	\$\$ / \$\$	
4	<b>Downtown Circulator Service Using Custom Vehicle</b> <ul style="list-style-type: none"> <li>• Shuttle - 10 minute frequency connecting to MAX</li> </ul>	<ul style="list-style-type: none"> <li>• Transit Dependent Populations</li> <li>• Green Riders</li> <li>• Area Residents</li> <li>• Area Employees</li> <li>• Area Visitors</li> <li>• Tourists</li> </ul>	\$\$\$ / \$\$	
5	<b>Rail Trolley</b> <b>Downtown Circulator Service Using Custom Vehicle</b> <ul style="list-style-type: none"> <li>• Connection between Downtown and Lincoln Avenue</li> </ul>	<ul style="list-style-type: none"> <li>• Transit Dependent Populations</li> <li>• Green Riders</li> <li>• Area Residents</li> <li>• Area Employees</li> <li>• Area Visitors</li> <li>• Tourists</li> </ul>	\$\$\$\$ / \$\$	

## Bike Alternatives

The Lincoln Avenue Corridor Plan considered a variety of on-street bicycle and shared use pathway facility types in the Corridor Design Alternatives phase of the project. A number of factors are considered to determine the most appropriate type of facility for a particular location—roadway speeds, volumes, right-of-way width, presence of parking, adjacent land uses, number of intersections and potential conflicts with turning vehicles, and expected user types—are all critical elements.

Studies find that some of the most significant factors influencing bicycle use are motor vehicle traffic volumes and speeds. Most bicyclists prefer facilities that are separated from higher volume and higher speed motor vehicle traffic, perceiving these facilities as efficient and safe. If a rider perceives that the route is efficient and safe, she will be more likely to choose bicycling over driving.

Many types of bike facilities were considered, including buffered bike lanes; separate bike-only paths; shared-use paths; and protected bike lanes, which are

lanes on the roadway that are solely for bike use but separated from traffic with physical barriers.

The three alternatives described in the following section show variations in how to accommodate leisure bicyclists on shared paths or walks. All alternatives also include on-street bike lanes for more intrepid bicyclists. Options for lane markings, off-street to on-street transitions at intersections, road crossings, and signage for each alternative are shown in more detail in this section.





Diagrammatic illustration of an on-street bike lane with parallel parking



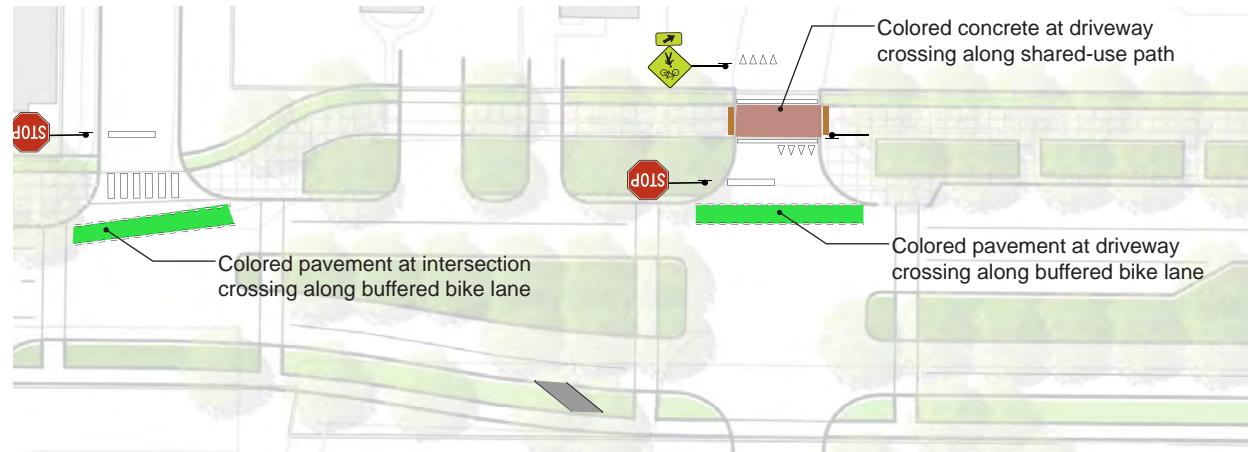
Diagrammatic illustration of a raised cycle track adjacent to parallel parking

## Broad Boulevard

The bicycle facilities in the Broad Boulevard concept are buffered bike lanes that follow the direction of vehicular traffic and a separate two-way shared-use path along the north side of Lincoln Avenue. The shared-use path provides an off-street option for less confident or leisure cyclists, while the buffered bike lanes can be used by more experienced riders. A buffer is shown on both the parking side and the travel lane side of the bike lane (see image below). The buffer on the parking side will reduce the likelihood of bicyclists being hit by the driver-side vehicle door, and encourages better parking compliance within the parking stall.

In order to increase the safety and visibility of pedestrians and bicyclists and driver awareness, a number of elements such as pavement color, signage, pavement markings, and crossing treatments are suggested for the bicycle facilities in the Broad Boulevard alternative.

Where the Shared-Use Path intersects a driveway, roadway, or intersection, the following treatments are recommended:



Typical driveway and intersection treatments for the shared-use path and buffered bike lane

### Driveway and Roadway Crossing Treatments

- Incorporate colored concrete at driveway crossings to increase visibility (Note: Shared-Use Path shall remain at the same elevation as the adjacent sidewalk)
- Install bicycle and pedestrian trail crossing sign with yield lines on roadway
- Install stop sign and stop line a minimum of 15' clear of shared-use path crossing for queuing vehicles
- Optional Improvement: Add white “elephants feet” and bike symbols to increase visibility of the driveway crossing



Colored concrete pavers increase the visibility of a shared-use path crossing a roadway in Tucson, Arizona.



A “dual” buffered bike lane in Davis, California provides cyclists separation from both parked and moving cars.

## Intersection Crossing Treatments

- Install stop sign, stop bar and 'high visibility' crosswalks on roadway for increased awareness of bicyclists and pedestrians

## Buffered Bike Lanes

Where the Buffered Bike Lanes intersect a driveway, roadway, or intersection, the following treatments are recommended:

## Driveway & Roadway Crossing Treatments

- Install white dotted lines and shared lane markings on street to increased visibility of bicyclists at driveways and roadways
- Optional Improvements: Add green paint in bike lanes when crossing roadways or driveways

## Intersection Crossing Treatments

- Install white dotted lines and shared lane markings for increased visibility of bicyclists

## Optional Improvements:

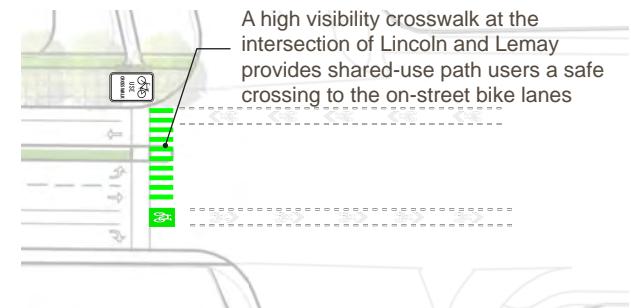
- Colored pavement may be used for increased visibility within conflict areas or across entire intersection



A crosswalk in Indianapolis, Indiana provides dedicated space for users of a Share-Use Path at a roadway crossing.



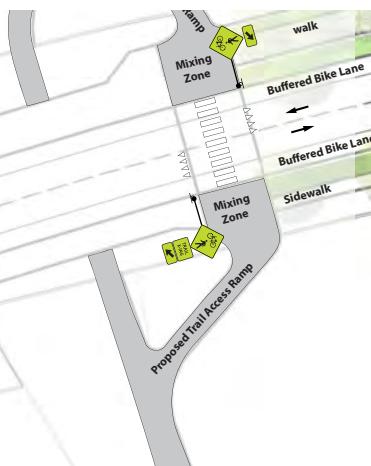
Colored pavement at intersections & driveways increase the visibility of the facility and identifies areas of conflict.



Intersection crossing markings guide bicyclists in a clear and direct path through the intersection.



Colored pavement at roadway crossing along buffered bike lane



A safe connection at the Poudre River Trail provides users the option to travel both east and west along Lincoln Avenue.

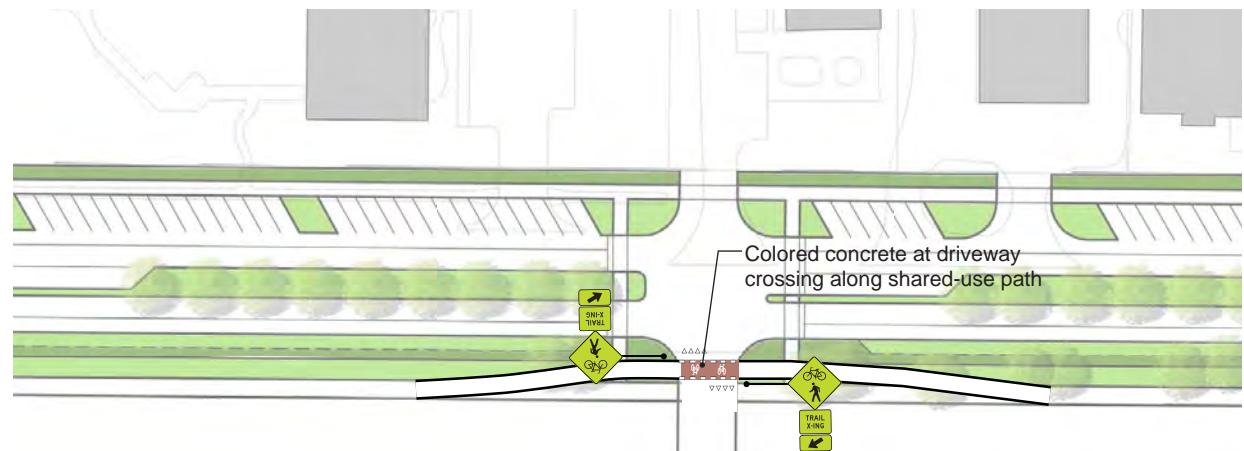
## Modest Median

The bicycle facilities considered in the Modest Median concept are buffered bike lanes that follow the direction of vehicular traffic and an off-street two-way shared-use path on the south side of Lincoln Avenue. As described previously, a buffer should be placed on both the parking side and the travel lane side of the bike lane when parking is present.

Where the Shared-Use Path intersects a driveway, roadway, or intersection, the following treatments are recommended:

### Driveway and Roadway Crossing Treatments

- Incorporate colored concrete at driveway crossings to increase visibility (Note: Shared-Use Path shall remain at the same elevation as the adjacent sidewalk)
- Install bicycle and pedestrian trail crossing sign with yield lines
- Install stop sign and stop line a minimum of 15' clear of shared-use path crossing for queuing vehicles
- Optional Improvement: Add white “elephants feet” and bike symbols to the increase visibility of driveway crossings



Typical driveway crossing treatments for the shared-use path on Lincoln Avenue.

### Intersection Crossing Treatments

- Install stop sign, stop bar and ‘high-visibility’ crosswalks for increased visibility of bicyclists and pedestrians

Where the Buffered Bike Lanes intersect a driveway, roadway, or intersection, the following treatments are recommended:

### Driveway and Roadway Crossing Treatments

- Install white dotted lines and shared lane markings on street to increased visibility of bicyclists at driveway
- Optional Improvements: Add green paint in bike lanes when crossing roadways or driveways.

### Intersection Crossing Treatments

- Install white dotted lines and shared lane markings for increased visibility of bicyclists
- Colored pavement may be used for increased visibility within conflict areas or across entire intersections



"Elephants feet" treatment increases the visibility of a shared-use path as it crosses a roadway in Billings, Montana.



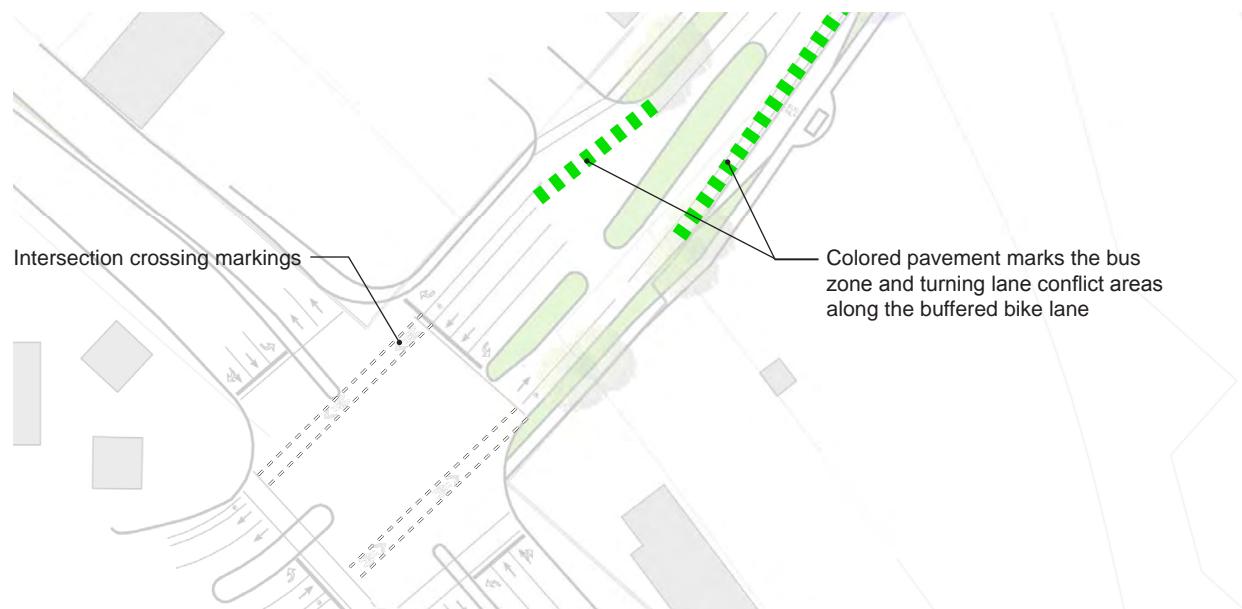
Intersection crossing markings in Denver, Colorado raise awareness for both bicyclists and motorists to potential conflict areas.



Dotted lines and shared lane markings guides bicyclists through the intersection in a straight and direct path.



The use of colored pavement mark the potential conflict area for buses and bicyclists along Lincoln Avenue.



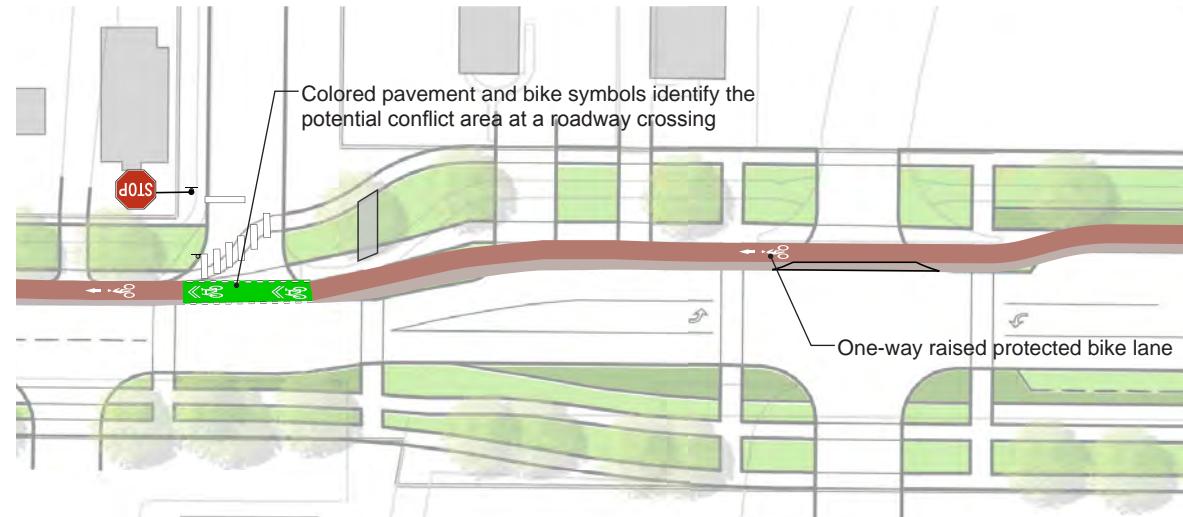
Intersection crossing markings indicate the intended path of bicyclists.

## Skinny Street

The bicycle facilities considered for the Skinny Street alternative include one-way raised protected bike lanes on both sides of the street that follow the direction of vehicular traffic. The raised protected bike lane provides a separated facility for cyclists while the detached sidewalk, buffered from the road by a strip of landscaping, provides a comfortable walking experience.

Protected bike lanes provide a high level of comfort for many users, however innovative treatments still need to be considered for driveway and roadway crossings and intersections and intersection approaches. In order to increase the visibility of bicyclists and awareness by drivers, a number of elements such as pavement color, signage, pavement markings, and crossing treatments are suggested for the bicycle facilities in the Skinny Street alternative.

Where the protected bike lane intersects a driveway, roadway, or intersection, the following treatments are recommended:



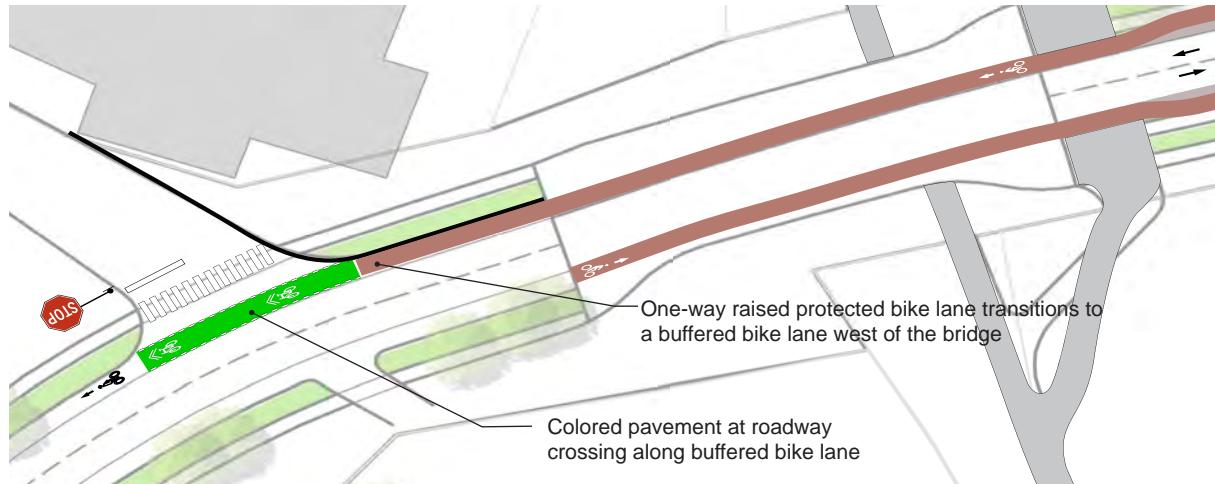
Graphic shows ways to improve safety at driveways and minor roadway intersections



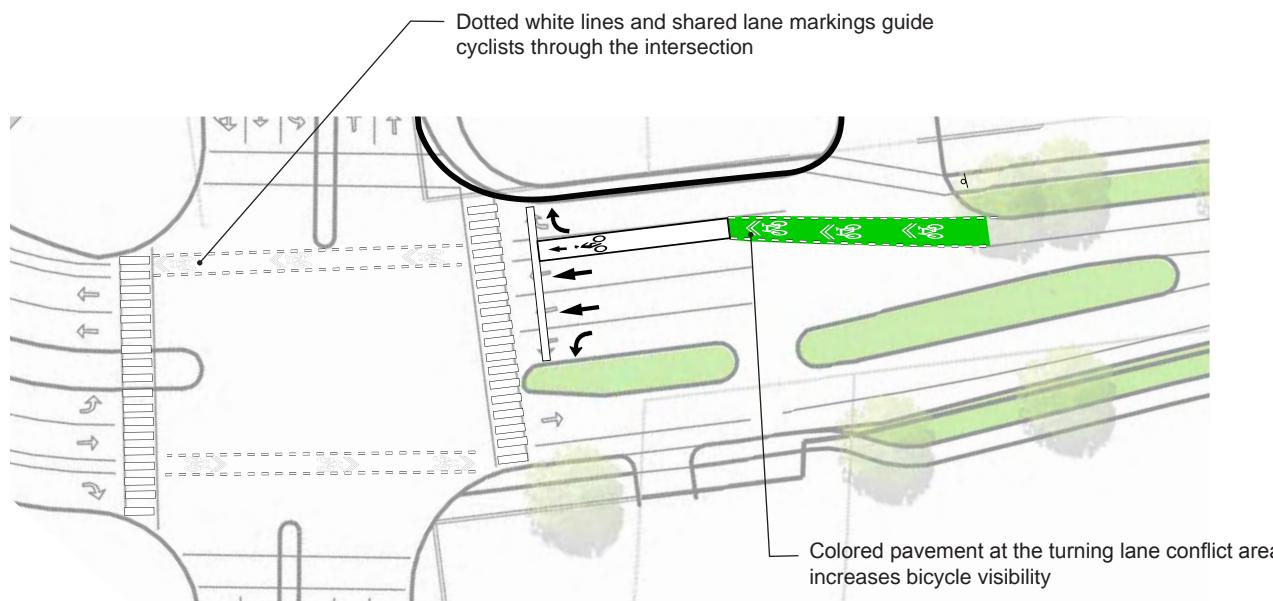
Driveways crossings are a unique challenge of protected bike lane design. Color is used to identify the conflict area along this Cambridge, Massachusetts bike lane.



Pavement markings at this driveway crossing on the Cully Street Cycle Track in Portland, Oregon notify cyclists and drivers of a potential conflict area.



Driveway and intersection treatments



Intersection crossing treatments at Lincoln and Jefferson

## Driveway and Roadway Crossing Treatments

- Incorporate colored concrete at driveway crossings to increase visibility (Note: Shared-Use Path shall remain at the same elevation as the adjacent sidewalk)
- Install white dotted lines, shared lane markings and 'turning vehicle yield to bikes' sign for increased visibility of cyclists
- Optional Improvements: Add green paint in bike lanes when crossing roadways or driveways.

## Intersection Crossing Treatments

- At the intersections and roadway crossings, a raised protected bike lane can be dropped and merged onto the street, or it can be maintained at sidewalk level, where cyclists can cross with pedestrians and other users. In addition, moving the protected bike lane to the curb edge allows for increased visibility of cyclists.
- Install white dotted lines and shared lane markings for increased visibility of bicyclists
- Thin conflict areas or across entire intersections

## Roundabouts

The City of Fort Collins evaluates roundabouts as a traffic control alternative to reduce vehicle idling time. In the Lincoln Corridor, roundabouts were suggested to assist with vehicle access when direct access to adjacent properties is affected by the installation of raised medians. Essentially, a roundabout could be used to allow motorists, and specifically larger trucks, a convenient and controlled method of conducting u-turns. In the right circumstances, a roundabout can be an efficient traffic control device while also being a pleasing aesthetic feature.

This approach would be most effective with Alternatives 1 and 2, the Broad Boulevard and Modest Median alternatives, where landscaped medians are proposed. Two roundabouts were considered to be the maximum number needed and their optimal locations for installation were considered to be at the Odell Brewery/Woodward West Access and at the Fort Collins Brewery. These locations are at the approximate west and east ends of the Lincoln Corridor Plan segment that needs a u-turn opportunity (the East segment).



Conceptual rendering of a roundabout

### Advantages

- Provides the u-turn opportunity discussed above for those alternatives with raised medians that restrict some property access
- Provides an opportunity for creating aesthetic gateway features

### Disadvantages

- Not necessarily required to provide good access for property owners along the corridor. While some access would be restricted, access alternatives

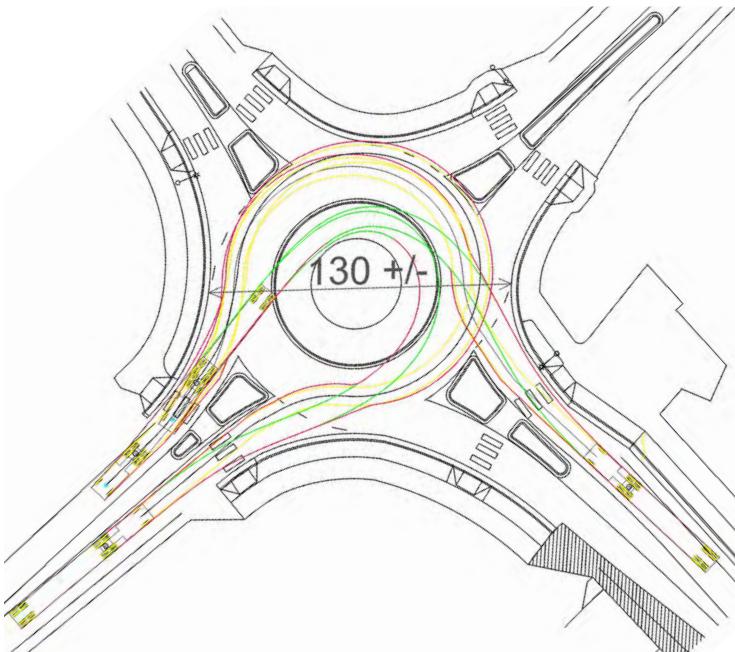
to the City's arterial street network is available

- If installed, the footprint required for a roundabout that can accommodate even a modest truck size would impact right-of-way on both sides of Lincoln Avenue. The following graphics show approximate dimensions for the inscribed circle of single-lane roundabouts for a WB-40 vehicle (example: beer delivery truck) and a WB -67 (a typical semi-truck that delivers goods to businesses along the Lincoln Corridor)

## Conclusion

Given the right-of-way dimensions along the East segment (approximately 107' to 124'), and considering the additional space needed to accommodate pedestrian and cyclists, it is clear that the installation of roundabouts would significantly impact adjacent properties, and require significant right-of-way acquisition.

Based on this analysis, it was determined that roundabouts are not a desired or needed traffic control element for the Lincoln Corridor.



A 130' diameter roundabout is needed to accommodate a WB-67, a typical semi truck



A 105' diameter roundabout is needed to accommodate a WB-40, a small delivery truck

## Streetscape Amenities

The analysis of alternatives included an initial assessment of potential streetscape amenities. Streetscape amenities provide comfortable and engaging gathering areas, and also reinforce the unique brand and identity of the district. Components associated with three different styles have been assembled to demonstrate choices regarding the character of the streetscape amenities. The styles are very conceptual in nature, and meant to suggest an overall approach to the design of the streetscape amenities, rather than illustrate the specific furnishings that will be selected for the street. Regardless of which style is preferred, the streetscape amenities will:

- **Connect with Downtown.** Although the Lincoln Corridor is not part of the historic downtown, it is a primary connector to it. The design of the street will be complementary to the character of downtown.
- **Enhance the Eclectic Character of the Corridor.** The Lincoln Corridor includes a diversity of land uses, including natural areas, industrial, commercial and residential. This blend of uses is what makes Lincoln special and unique in Fort Collins. The design of the street will support and enhance this eclectic character.
- **Create a Fresh Identity.** Streetscape amenities will help create a fresh look for the district, while respecting and celebrating the rich history of the area.

### modern

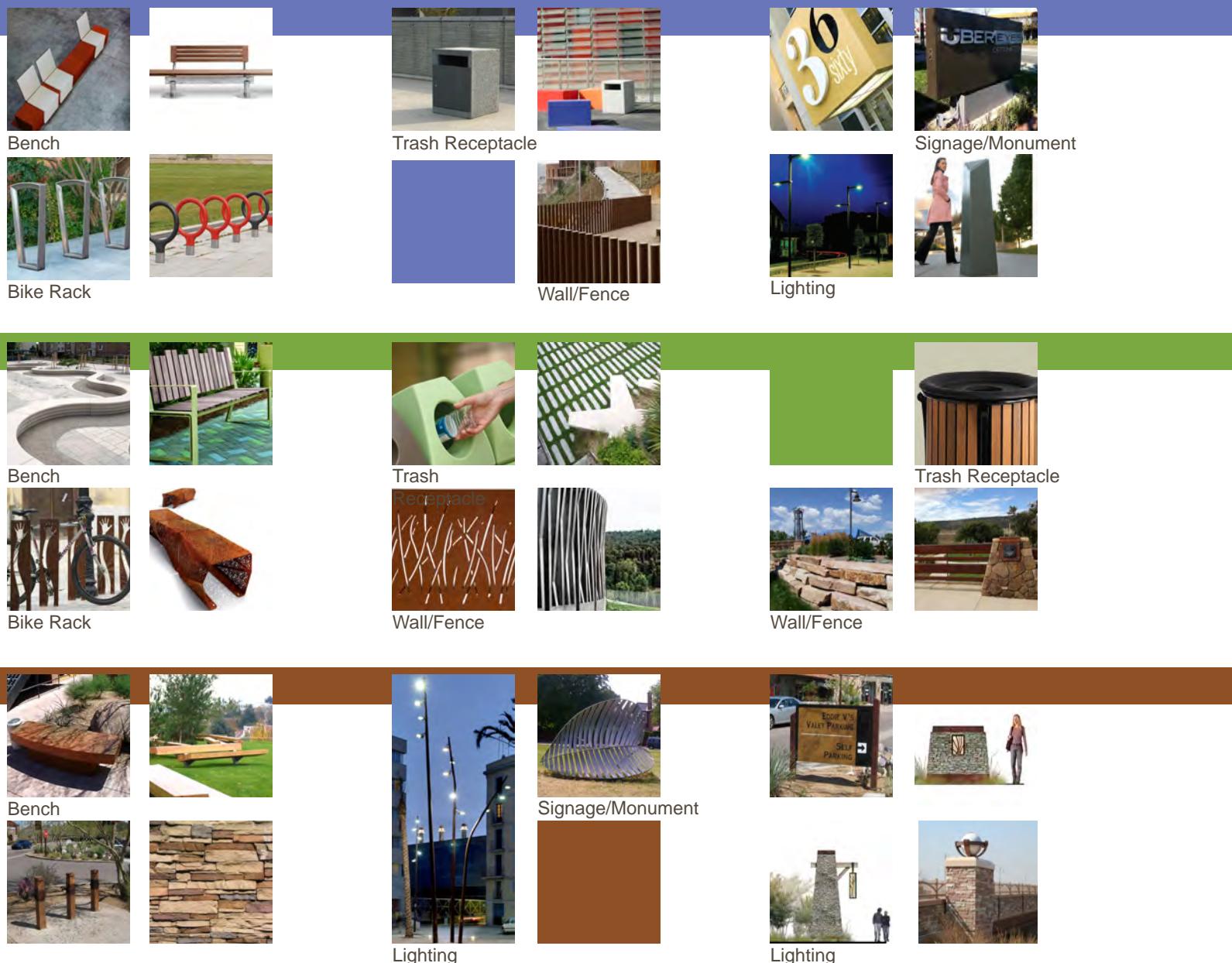
The modern style is characterized by bold forms and contemporary finishes

### organic

The organic style is characterized by sinuous or irregular forms and natural finishes

### rugged

The rugged style is characterized by simple, basic forms and coarser, earthen finishes



## SECTION 2.2

# COMMUNITY ENGAGEMENT

Community engagement during Phase 2 included community workshops, a Stakeholder Group meeting, an online survey, and visits with Boards and Commissions. In general, the Broad Boulevard alternative and Skinny Street alternative were slightly more supported than the Modest Median. Other key themes included:

- Concern over changing access to the Buckingham Neighborhood and businesses
- Protecting the privacy of Buckingham Neighborhood residents and buffer from adjacent industrial uses
- Providing sufficient access to businesses for employees, delivery trucks and patrons
- Providing an attractive streetscape that incorporates eclectic street character that matches the unique surroundings
- Concern over safety for pedestrian and bicyclists

- Overwhelming support for a path that can accommodate leisure bicyclists on the north side of the street
- Appreciation for improvements being made to the Lincoln Bridge
- Support for a Downtown Circulator with a custom vehicle

A summary of each of the community outreach events follows.

### Community Workshops

September 19, 2013

The Community Workshops provided the community an opportunity to review and evaluate three alternatives for the Lincoln Corridor. Two workshop sessions were held on September 19 to review and discuss the alternatives.

Each meeting began with an introduction to the project, an overview of community outreach activities and results to-date, existing conditions, and an overview of the alternatives and key components. Participants were asked to break into two groups to discuss and evaluate the pros and cons of each alternative. Following this discussion, each group reported key discussion points and findings to the larger group. At the conclusion of the workshop, participants were asked to



Date	Session	Participants
September 19	4:00-5:30 p.m.	24
	6:00-7:30 p.m.	15

complete an evaluation form and rate the alternatives. Evaluation criteria included multi-modal mobility, safety, access to businesses and residences, and landscape enhancements. Overarching themes of the workshop included: concern over access to the Buckingham Neighborhood, maintaining a sense of privacy for

neighborhood residents, safety for all modes of travel, providing separate bike lanes in all alternatives, and incorporating a multi-use path on the north side of the street in the Skinny Street Alternative.

Participants rated the Skinny Street alternative the highest in the performance evaluation, but indicated an overall preference for the Broad Boulevard Alternative for all three segments of the corridor. The Rugged style of streetscape amenities was heavily favored over Organic and Modern. Participants voiced appreciation for bridge design alternatives that incorporated overlooks and seating areas where pedestrians could enjoy the view of the Poudre River.

## Stakeholder Workshop

September 25, 2013

The purpose of the Stakeholder Workshop was to provide stakeholders an opportunity to review and evaluate three alternatives for the Lincoln Corridor. The stakeholder group is comprised of residents from Alta Vista, Andersonville, and Buckingham neighborhoods, Lincoln Corridor business owners or representatives, and other community leaders.

The workshop began with an introduction to the project, an overview of community outreach activities and results to-date, existing conditions, and an overview of the alternatives and key components.

Participants were asked to break into two groups to discuss and evaluate the pros and cons of each alternative. Following this discussion, each group reported key discussion points and findings to the larger group. At the conclusion of the workshop, participants were asked to complete an evaluation form and rate the alternatives. Evaluation criteria included multi-modal mobility, safety, access to businesses and residences, and landscape enhancements.

Key themes resulting from this workshop include: protecting the privacy of Buckingham Neighborhood residents; providing sufficient access to businesses for employees, delivery trucks and patrons; providing sufficient room for on-street truck turning radii movements; and providing an eclectic street character that matches the unique surroundings. Shared or closed accesses to businesses were not recommended.



Participants rated the Skinny Street alternative the highest in the performance evaluation, primarily because the alternative provides the best access for vehicles. In terms of preference, participants chose the Broad Boulevard concept for the West segment, and the Skinny Street alternative for the Central and East segments.

## Online Survey

September 20 through October 4, 2013

An online survey was prepared to gather feedback from the larger community on the alternatives. The survey was similar in format to the evaluation forms provided at the Community and Stakeholder workshops. The survey was available from September 20 through October 4, 2013. Over 200 people responded to the online survey.

Key themes that emerged included: concern over safety for pedestrian and bicyclists; an overwhelming preference for a shared path on the north side of the street; and an appreciation for improvements being made to the Lincoln Bridge.

Survey results indicated an overall preference for the Broad Boulevard alternative; nearly 50% of respondents selected this alternative for all three segments. Skinny Street came in second with 30%, followed by Modest Median with 20%. Respondents favored a downtown circulator route as a transit option. Nearly 50% of respondents preferred a custom bus, with 20% selecting a standard bus. The Rugged streetscape amenities style was favored by over 50% of respondents, with the Organic style favored by 40% of respondents.

## Combined Results

The combined preferences for the alternatives, transit options, and streetscape amenities that were received during the community workshop, stakeholder workshop and online survey are summarized as follows:

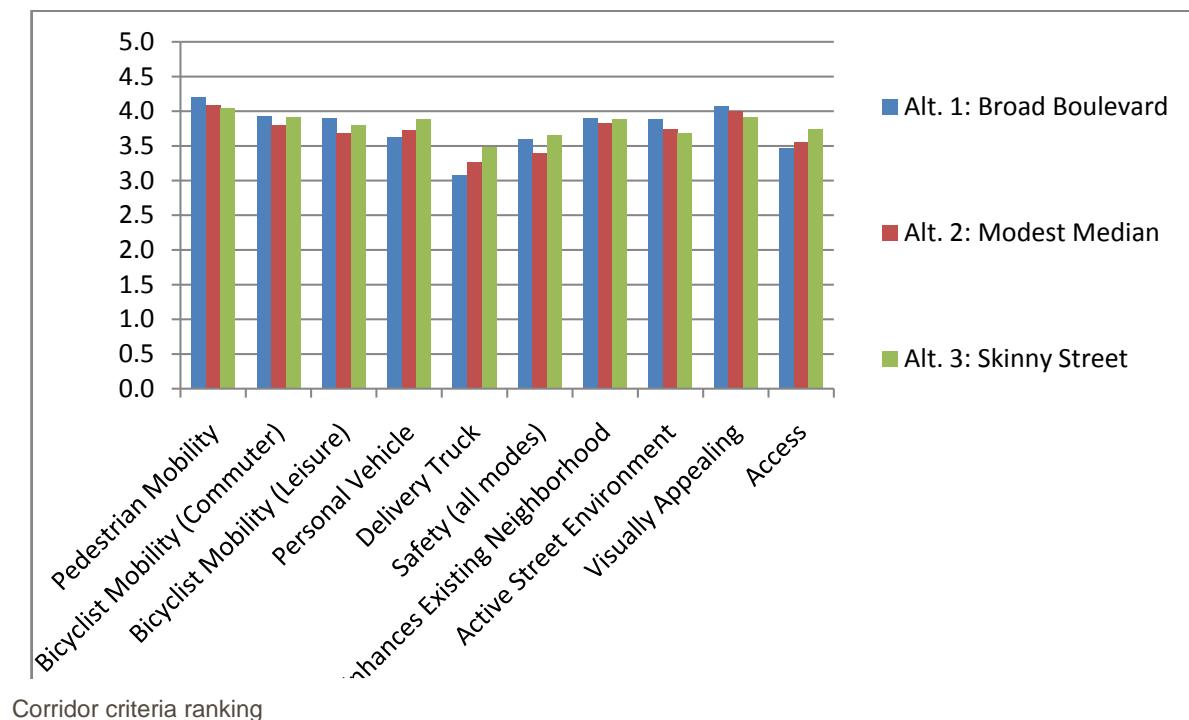
### 1. Rate the strength of each alternative:

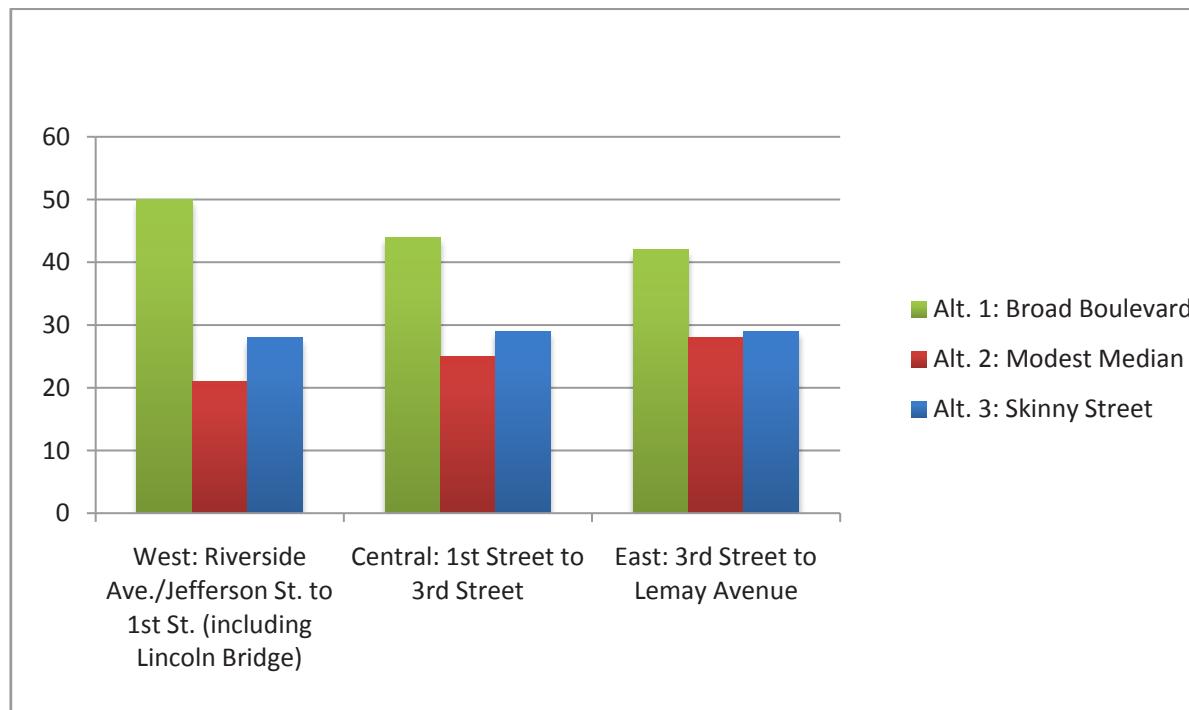
Attendees were asked to rate each alternative from 5 to 1 (5 representing the strongest; 1 the weakest) using the following criteria:

- Pedestrian Mobility
- Cyclist Mobility - Commuter
- Cyclist Mobility - Leisure
- Personal Vehicle

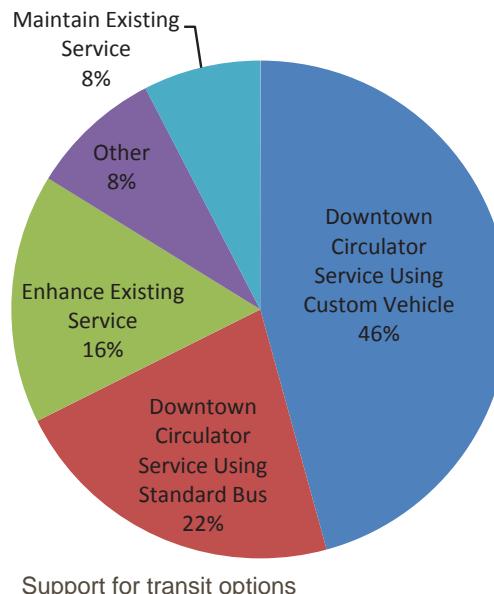
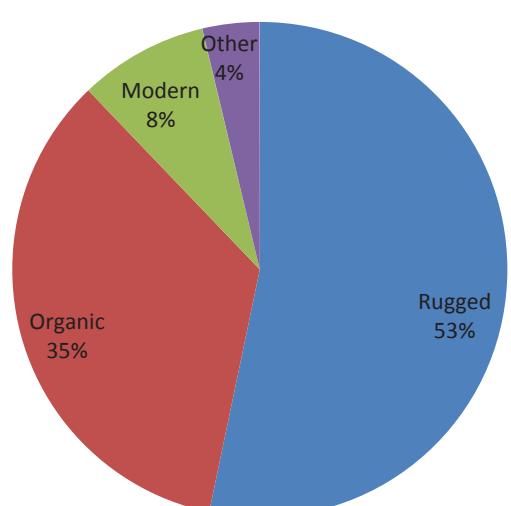
- Delivery Truck
- Safety (all modes)
- Enhances Existing Neighborhoods
- Visual Appeal
- Access (for neighborhood and businesses)

The results varied, but overall the Broad Boulevard alternative ranked highest, followed by the Skinny Street alternative.





Support for alternatives



Preference for streetscape amenities

## 2. What is your Preferred Plan for each segment (measured by percent of respondents)?

The corridor is divided into three distinct segments: West, Central and East. Respondents were asked to indicate their Preferred Plan for each segment. Broad Boulevard ranked highest for all three segments, followed by Skinny Street.

## 3. Which public transit option do you prefer?

Participants were asked to select their preference for transit options. A downtown circulator service using a custom vehicle was preferred.

## 4. Which streetscape amenities concept do you prefer?

Participants were asked to select a preferred style for streetscape amenities along Lincoln. The Rugged style was preferred.

Complete survey results and comments are found in Appendix B-3.

## SECTION 2.3

# ALTERNATIVES EVALUATION

### Evaluation Methodology

The alternatives were evaluated by a variety of factors, including performance criteria, level of community support, cost, and triple bottom line considerations. The performance criteria are based on a set of five objectives. These objectives emerged directly from the project vision and support the goal statements developed in Phase I of the project.

**Objective #1 - Improve Multi-Modal Mobility**

**Objective #2 - Improve Safety**

**Objective #3 - Create Active Street Environment**

**Objective #4 - Enhance Appearance**

**Objective #5 - Incorporate Sustainable Street Design Practices**

For each of the objectives, key criteria have been defined that are related to achievement of that objective, as shown across the top of the alternatives evaluation table on the following page. The evaluation table includes a "Base Alternative", by which the alternatives can be compared. This Base Alternative incorporates both the minor arterial street standard and the existing condition of the street as standards for comparison and evaluation purposes.

The chart on the following page provides a rating of poor, fair or good for each corridor segment (West, Central, East) as well as the specific bridge designs associated with the alternatives. A "poor" rating indicates that the alternative performs below average, with a minor issue or condition. A "fair" rating indicates that the alternative performs average, and in most cases meets the

minor arterial standard, at minimum. A "good" rating indicates that the alternative performs well, and in most cases exceeds the performance of the minor arterial street standard. Detailed descriptions of the basis for ratings associated with each criterion, and their relationship to triple bottom line sustainability categories (environmental, social, and economic) are provided in Appendix B-4.

The table shows that the existing condition and minor arterial standard favor mobility for motorists and trucks, and are generally less favorable for bicyclists and pedestrians, as well as safe intersections and entry drives. The existing condition and minor arterial standard also perform worse in creating an active street environment, appearance and sustainability.

The performance of the alternatives across the segments varied. Generally, the Broad Boulevard alternative and Skinny Street alternatives performed better than the Modest Median. However, the evaluations associated with each criterion for each segment are important because there are design elements from each alternative that can be considered in the development of a Preferred Plan. The Preferred Plan does not have to be defined by one alternative as presented, but rather can incorporate the most desired and effective elements from the various alternatives.

For example, the concept for the bridge design for the Skinny Street with overlooks on both sides can be applied to a Preferred Plan, and the medians and drive accesses on the Broad Boulevard alternative could be modified to increase access for vehicles and trucks.

		Objective #1 Improve Multi-Modal Mobility								Objective #2 Improve Safety		
Base Alternative	Alternative	Accommodates Traffic Flow	Pedestrian Comfort and Convenience	Commuter Bicyclist Comfort and Convenience	Leisure Bicyclist Comfort and Convenience	Motorist Access and Convenience	Commercial Truck Access and Convenience	Transit Access and Convenience	Provides Safe Crossings at Intersections and Entrance Drives	Provides a Buffer Between Vehicular Traffic and Bicyclists	Reduces Driveway Access Conflict Points	
	Existing Condition (Includes Woodward Interim Improvements)	Fair	Poor	Fair	Poor	Good	Good	Fair	Poor	Poor	Poor	
	Minor Arterial Standard	Good	Fair	Fair	Poor	Good	Good	Good	Fair	Fair	NA	
	Broad Boulevard West	Fair	Fair	Good	Good	Good	Fair	Good	Good	Good	Poor	
	Modest Median West	Good	Good	Good	Good	Fair	Fair	Good	Good	Good	Fair	
	Skinny Street West	Good	Good	Good	Good	Fair	Good	Good	Good	Good	Fair	
	Broad Boulevard Central	Fair	Good	Good	Good	Poor	Fair	Good	Good	Good	Good	
	Modest Median Central	Good	Fair	Good	Good	Fair	Poor	Good	Fair	Good	Fair	
	Skinny Street Central	Fair	Poor	Good	Good	Good	Fair	Good	Good	Good	Poor	
	Broad Boulevard East	Fair	Good	Good	Good	Fair	Fair	Good	Good	Good	Fair	
	Modest Median East	Fair	Good	Poor	Good	Fair	Poor	Good	Good	Fair	Fair	
	Skinny Street East	Good	Fair	Good	Good	Good	Good	Good	Good	Good	Poor	
	Bridge Option 1 - Broad Boulevard	Good	Fair	Good	Good	Good	Fair	NA	Good	Good	NA	
	Bridge Option 2 - Modest Median	Good	Fair	Good	Good	Good	Fair	NA	Good	Good	NA	
	Bridge Option 3 - Skinny Street	Good	Good	Good	Good	Good	Fair	NA	Good	Good	NA	

Lincoln Corridor alternatives evaluation table

Objective #3 Create Active Street Environment				Objective #4 Enhance Appearance		Objective #5: Incorporate Sustainable Street Design Practices			Community	Cost	
Promotes Traffic Calming	Provides Convenient On Street Parking	Anticipates Future Redevelopment	Potential for Pedestrian Gathering Areas	Provides Adequate Landscape Enhancements	Potential for Streetscape Amenity Enhancements	Transit Oriented	Potential for Bioswales & Stormwater Infiltration	Potential for Pervious Pavement	Community Support	Capital Cost	Lifecycle Costs
Poor	Poor	Poor	Poor	Poor	Poor	Fair	Poor	Poor	NA	NA	NA
Poor	Poor	Poor	Poor	Fair	Fair	Good	Fair	Poor	NA	NA	NA
Fair	Poor	Fair	Fair	Good	Good	Good	Good	Fair	Good	Fair	Good
Fair	Poor	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good
Fair	Poor	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good
Fair	Good	Fair	Fair	Good	Good	Good	Good	Good	Good	Fair	Good
Good	Poor	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good
Fair	Fair	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good
Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Fair	Poor
Good	Good	Good	Good	Good	Good	Good	Good	Good	Fair	Fair	Poor
Good	Good	Good	Good	Good	Good	Good	Good	Good	Fair	Fair	Poor
Fair	NA	NA	Good	Good	Good	NA	NA	NA	Good	Fair	Fair
Fair	NA	NA	Good	Good	Good	NA	NA	NA	Good	Fair	Fair
Good	NA	NA	Good	Good	Good	NA	NA	NA	Good	Fair	Fair

# Triple Bottom Line Analysis

## Lincoln Corridor and Sustainability

Sustainability is a core philosophy of the City of Fort Collins, one that underpins every City effort, from the smallest of daily tasks to the largest multi-year initiatives. The central premise of any sustainable operation is that it considers human (social), economic, and environmental factors in decision-making and management. This approach is nothing new to Fort Collins; it has been a part of the City's culture for years.

Social, economic, and environmental sustainability are vital to our community's success, and our residents expect that we will be responsible stewards of our financial, natural, and human resources. These three types of sustainability are commonly used and referred to as "Triple Bottom Line". Knowing this, the City has steadily worked to advance its capacity in "Triple Bottom Line" (TBL) decision-making over the years.

As part of the alternative development process for the Lincoln, the project team conducted a TBL analysis to incorporate social, economic, and environmental considerations into the alternatives.

General observations from the TBL analysis are highlighted below. The project team later conducted a TBL analysis for the Preferred Alternative, as described in Section 3.

## Social Considerations

- The social aspects of a street/corridor cannot be understated in this process, including the opportunity to celebrate the neighborhoods, provide additional connectivity, and address concerns related to property values
- Limitations highlight the short-term (during construction) impacts to neighbors and residents and a need to better understand the long-term consequences of this effort, e.g., how will traffic flow through this area and what will the impacts be on surrounding neighbors and businesses
- Neighborhood cohesiveness – opportunity to celebrate historic qualities of existing neighborhoods
- Increased street activity and connectivity – active streetscape
- New design could reduce speed limits and improve overall safety
- Plan may provide transit loop that will also discourage cut-through traffic in Buckingham Neighborhood street network
- Art in Public Places will enhance cultural & aesthetic value of adjacent neighborhoods and businesses

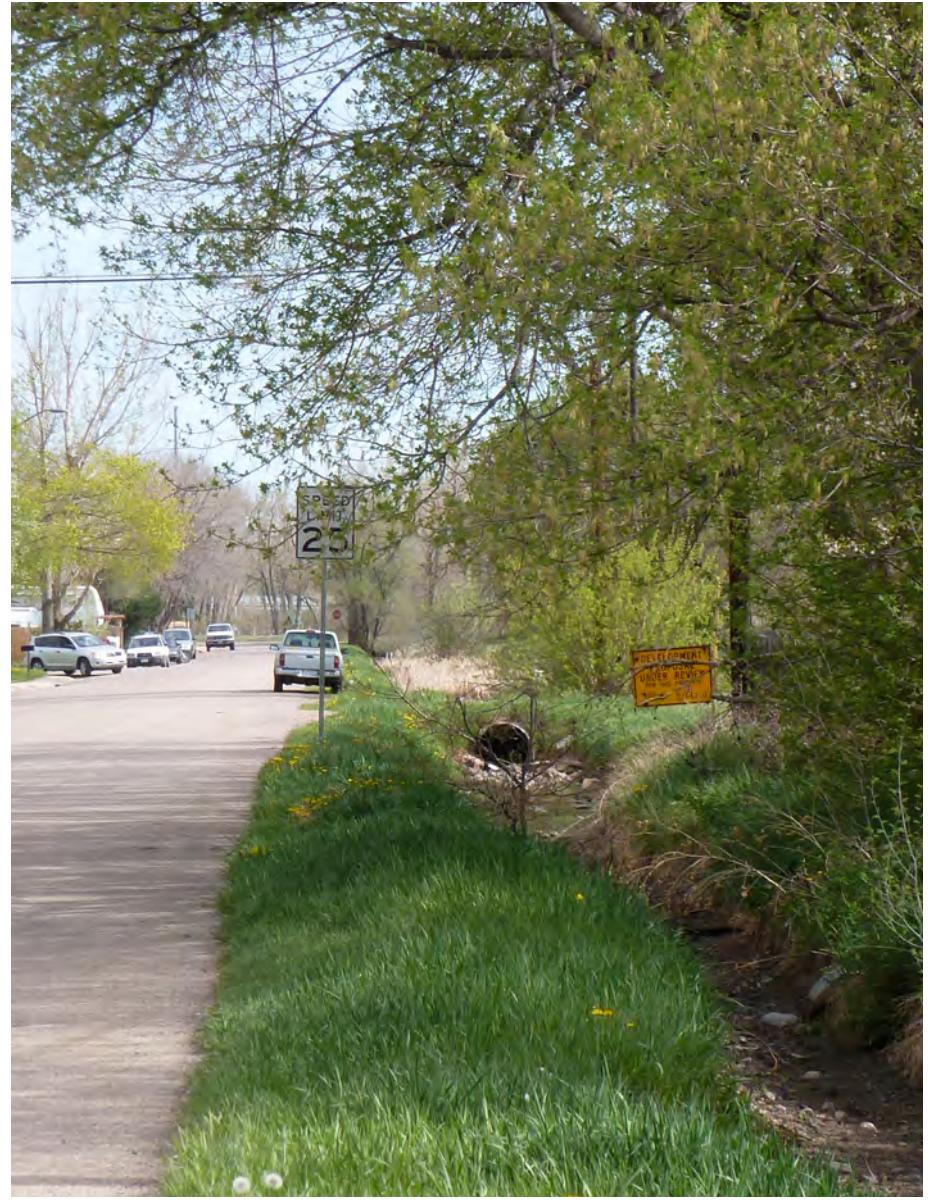
## Economic Considerations

- Alternatives test various design options that may support economic development in area
- Need for reconstructing Lincoln and upgrades to other infrastructure to meet urban standards will improve economic health of area
- Could help develop new funding collaborations – sales tax, DDA expansion, new business attraction

- Attractive streets tend to attract high quality developments and higher paying employment
- The proposed options for transforming Lincoln into a new gateway may enhance economic potential for downtown and East Mulberry areas
- Potential for enhanced/expanded transit service in area

## Environmental Considerations

- Is consistent with recent Master Street Plan downsizing of Lincoln from 4-lane to 2-lane arterial – potential air quality benefits
- Street design will incorporate sustainability practices such as “Green Street” and Low Impact Development improvements
- Appropriate landscaping can mitigate heat island effect
- Will preserve historic features in corridor (trees, etc.)
- Utilizing local and sustainable materials reduces embedded energy and lifecycle costs
- Improved health and air quality created by encouraging more cycling, walking, and transit use
- New transit vehicles may be prototyped and used in area



Buckingham Neighborhood

## PHASE III PREFERRED PLAN

# SECTION 3.0 INTRODUCTION

The Preferred Plan illustrates a vision and framework for Lincoln Avenue. This framework is flexible in accommodating current uses while allowing for adjustments based on future change or redevelopment along the corridor. Based on the Preferred Plan, preliminary engineering drawings for Lincoln Corridor have also been developed. These technical drawings are included in Appendix D. The Preferred Plan was developed based on the results of the alternatives evaluation described in Section 2.3. It contains preferred components from all three alternatives and was refined based on specific corridor conditions and additional stakeholder input.

Key elements of the Preferred Plan include:

- Two travel lanes
- Buffered bike lanes
- Wide sidewalks (generally 10' on north side, 8' on south side)
- Special pavement materials to enhance aesthetics and improve safety at driveways and intersections; delineate vehicular and bicyclist travel lanes from pedestrian crossings at driveways and intersections
- Transit stops and shelters
- On-street parking in select locations
- Generous landscaped median
- Streetscape amenities such as gathering areas, furniture, lighting and art in public places

- New Lincoln bridge design with an enhanced connection to the Poudre River
- Low Impact Development (LID) applications to improve stormwater drainage and water quality

# SECTION 3.1 COMMUNITY ENGAGEMENT

The project team continued to meet one-on-one with business owners and residents to get feedback on the plan as the project evolved. A key part of this review included coordination of existing and future driveway access and potential right-of-way adjustments along the corridor. The Preferred Plan describes a phased approach for access and right-of-way changes to ensure existing access is maintained while future redevelopment is anticipated. An online survey on the preferred plan was conducted from January 17th through 31st, and received approximately 170 responses. The project team also hosted a public open house on January 23, with about 70 attendees. Key themes that emerged from these events include:

- Encourage safe and accessible routes for bicycles and pedestrians
- Improvements to the Lincoln Bridge are needed
- Maintain clear and direct access to businesses

Over 75% of survey respondents indicated they were either somewhat satisfied or very satisfied with the Preferred Plan. When asked which elements of the Preferred Plan were most

important, over 25% of respondents indicated buffered bike lanes, and 16% a new Lincoln Bridge. A complete summary of the open house and survey results are found in Appendix C-1.

While the initial Preferred Plan generally received support from the public, key stakeholders identified a few remaining concerns, including:

- Need for existing driveway access.
- Need to accommodate truck movements
- Concern about potential congestion

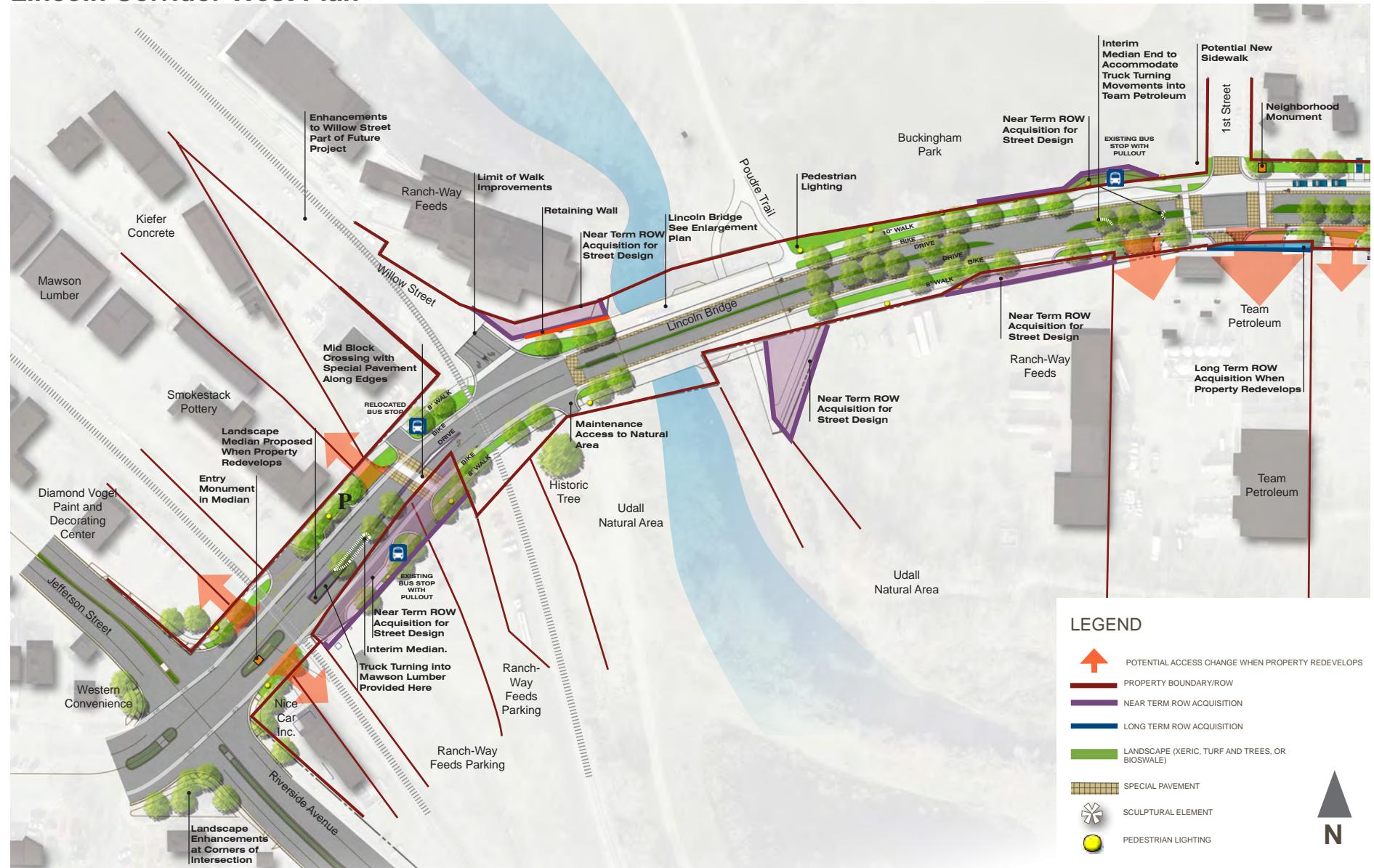
- Celebrate history of the area
- Sensitivity to potential right-of-way (ROW) acquisition

Adjustments to the Preferred Plan were made based on these concerns. A detailed summary of these issues and how they were addressed are found in Appendix C-2. Once the corridor is built, conditions will continue to be monitored, and it is possible that additional changes will be made to the corridor, as conditions warrant it. Typical solutions include median redesign, addition of turn lanes, and/or installation of signals, if warranted.



A conceptual rendering of the Preferred Plan for Lincoln Corridor. Enhancements will include low water use plantings and water quality treatments.

## Lincoln Corridor West Plan



## SECTION 3.2

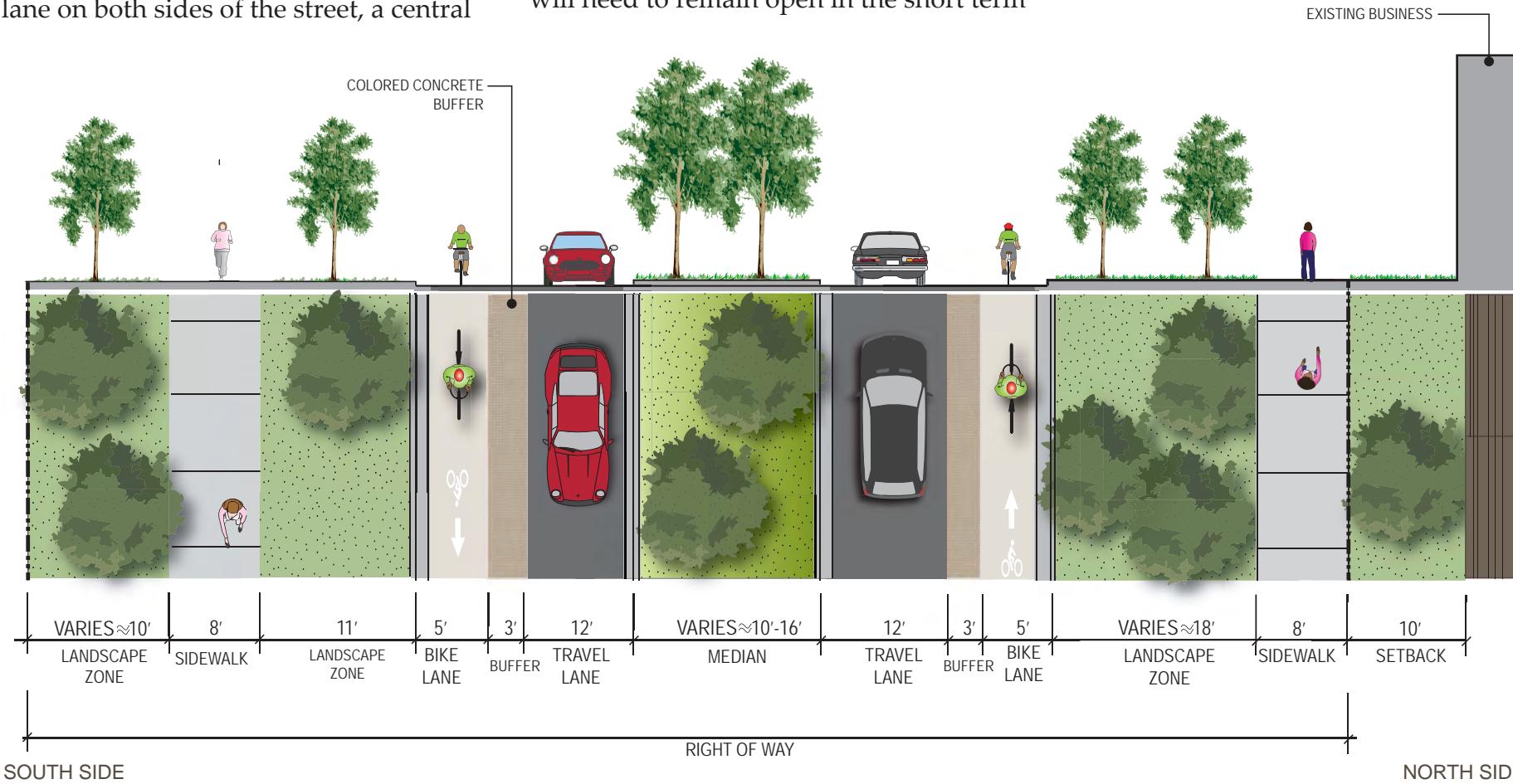
# PREFERRED ALTERNATIVE

### Lincoln Corridor West

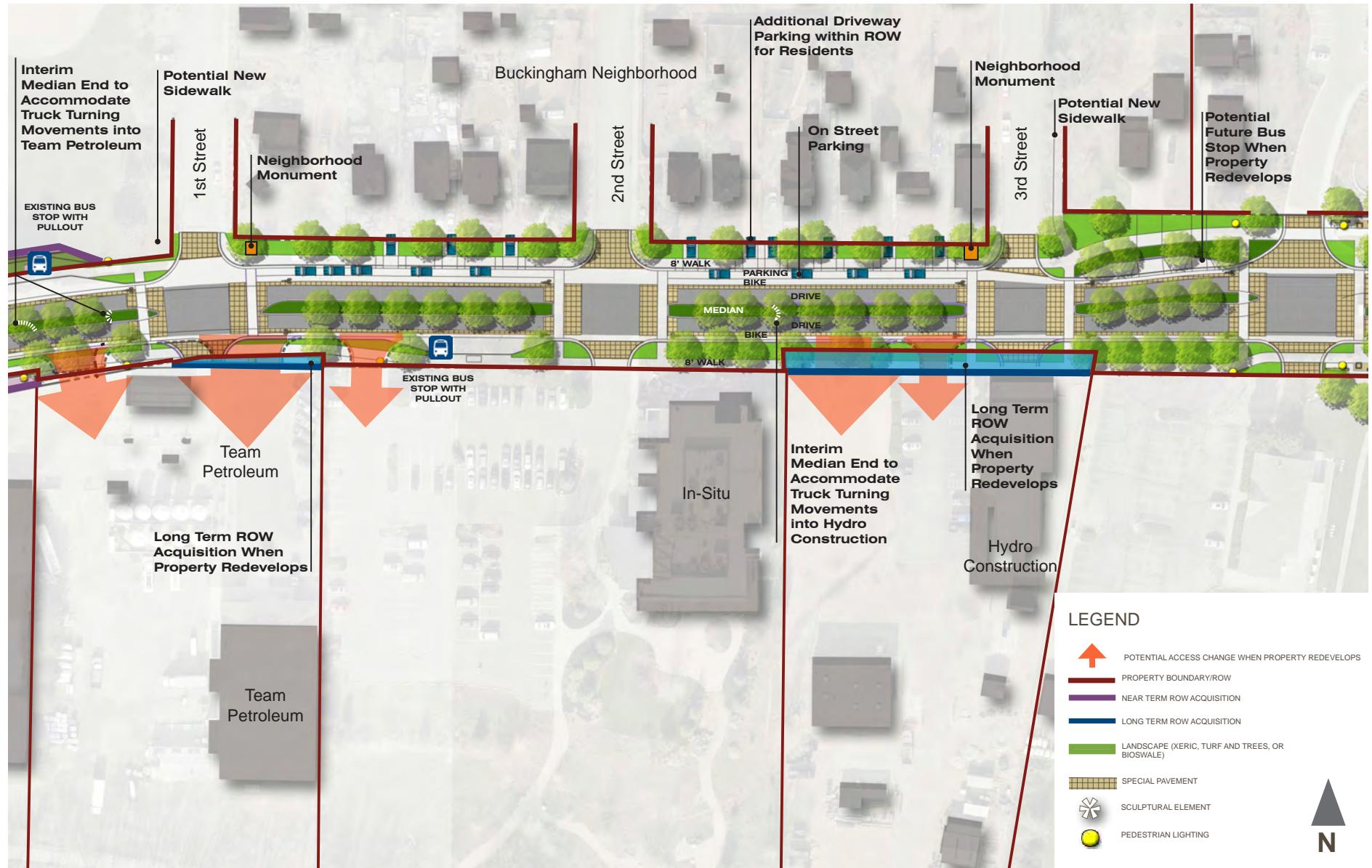
The west segment of the corridor extends from Jefferson/Riverside west to 1st Street. Although there is some variation in the street section throughout this segment, the street typically includes a single travel lane in each direction, a buffered bike lane on both sides of the street, a central

median, an 8' walk on the south side of the street, and an 8' walk on the north side. As there is great variation in the street ROW width along this segment, some ROW acquisition is necessary in order to create a unified street condition. There are also several access drives that will need to remain open in the short term

but that are envisioned to close if/when the property redevelops. The Lincoln Bridge will be enlarged and improved and is described in greater detail later in this section. The landscape treatment of medians and landscape zones is discussed later in this section as well.

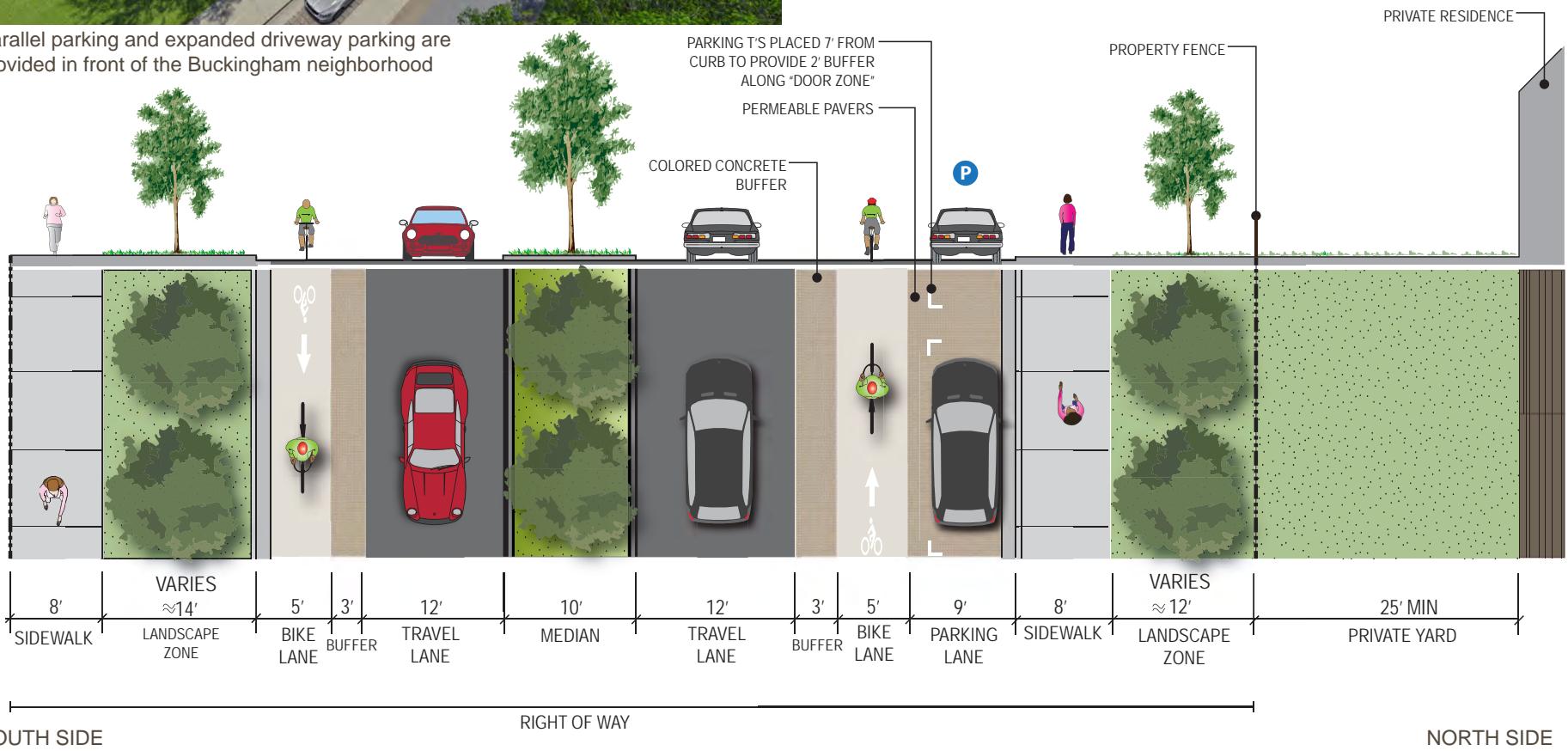


## Lincoln Corridor Central Plan





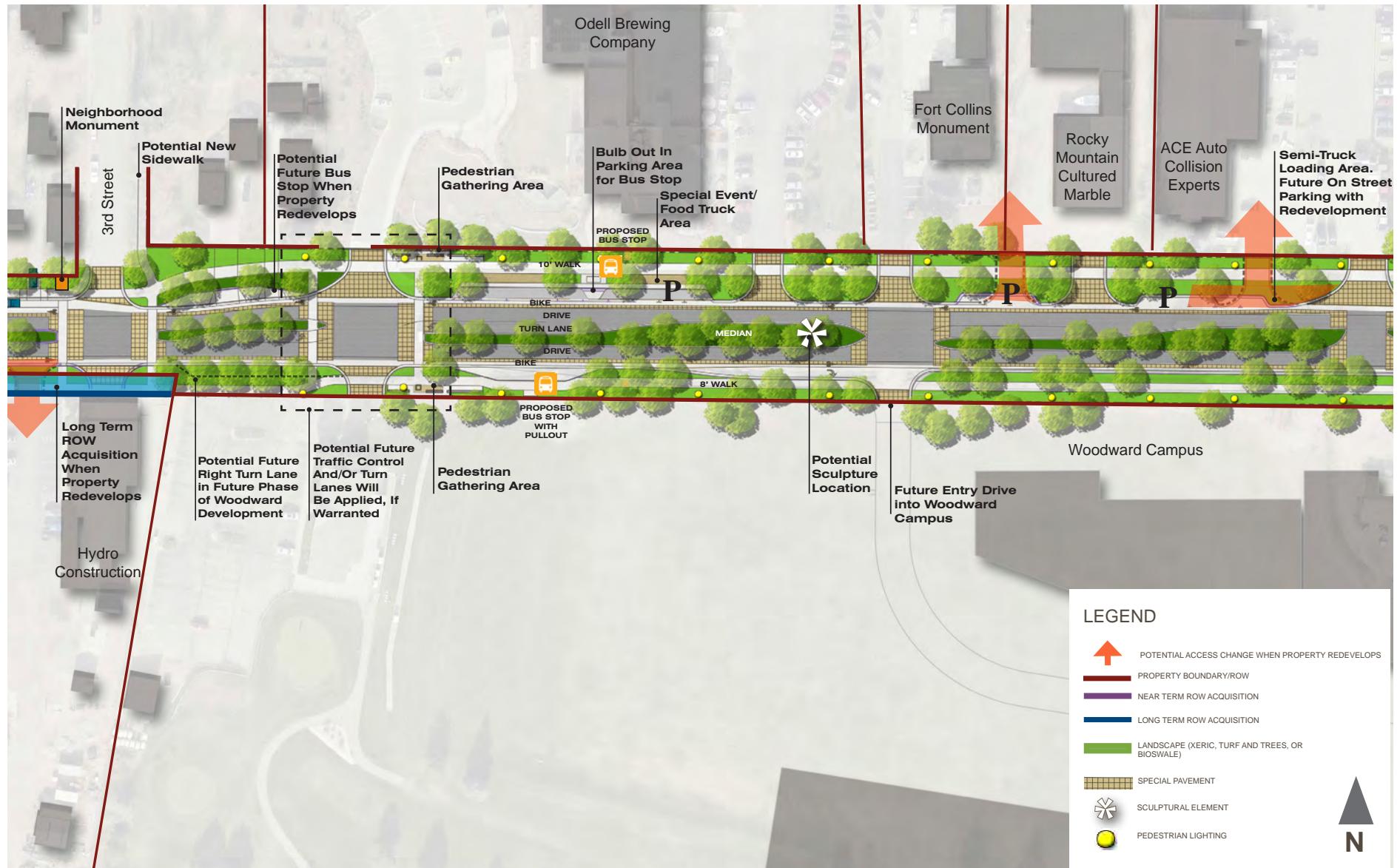
Parallel parking and expanded driveway parking are provided in front of the Buckingham neighborhood



## Lincoln Corridor Central

The central segment of the corridor extends from 1st Street to 3rd Street and includes the Buckingham neighborhood frontage. The street includes a single travel lane in each direction, a buffered bike lane on both sides of the street, a central median, an 8' walk on the south side of the street, an 8' walk on the north side, and a landscape buffer between the street and residences. Parallel parking is provided on the north side of the street to accommodate both residents and visitors.

## Lincoln Corridor East Plan - Part A

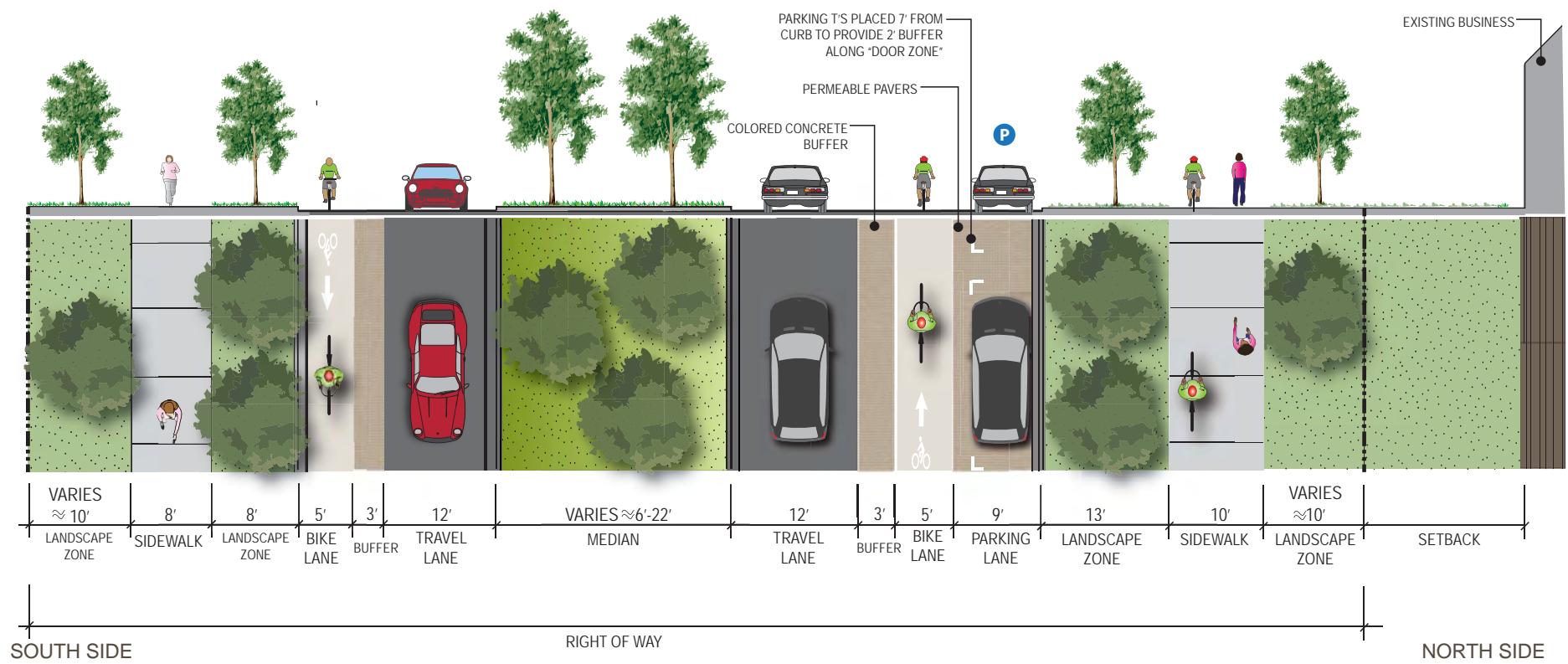




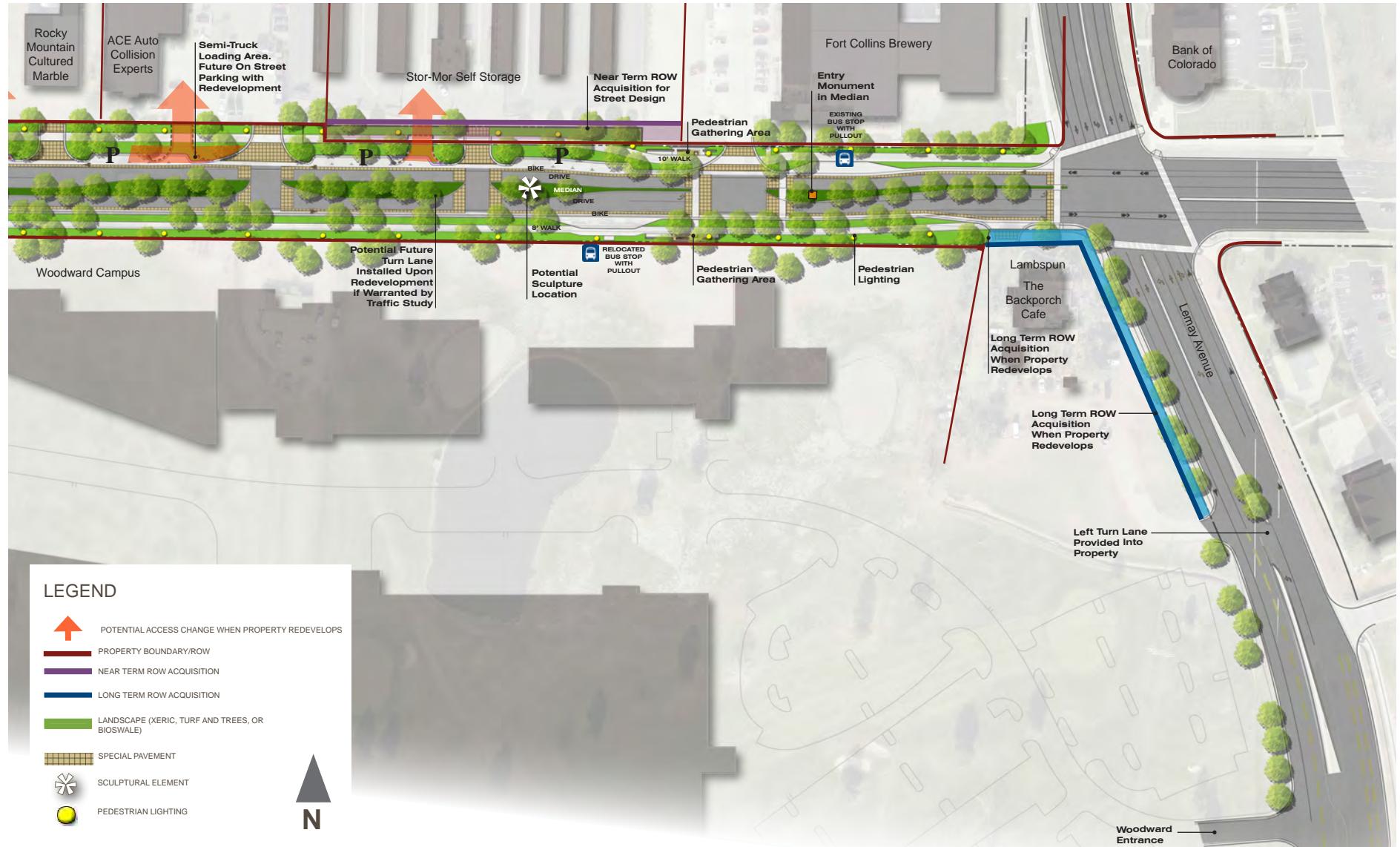
Special event staging areas provides a gathering space in front of the breweries along the north side of Lincoln

## Lincoln Corridor East A

The east segment of the corridor extends from 3rd Street to Lemay. Due to its length, this segment is divided into two parts, A & B. The street includes a single travel lane in each direction, a buffered bike lane on both sides of the street, a central median, an 8' walk on the south side of the street, and a 10' walk on the north side. A special event staging area is provided in front of Odell Brewery, including on-street parking for food trucks and a shaded seating area.



## Lincoln Corridor East Plan - Part B



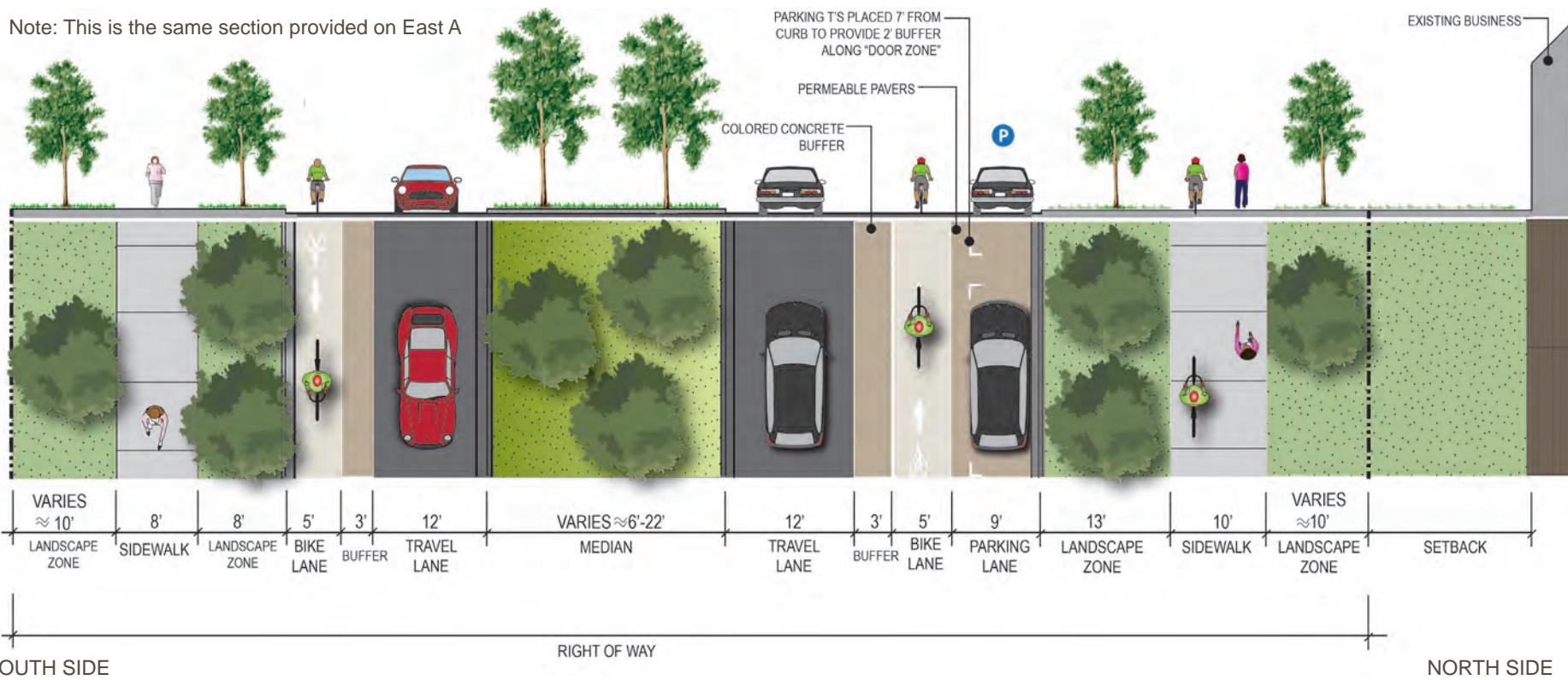
## Lincoln Corridor East B

Like Part A, Part B includes a single travel lane in each direction, a buffered bike lane on both sides of the street, a central median, an 8' walk on the south side of the street, and a 10' walk on the north side. Some parallel parking is provided on the north side of the street, which will

help calm traffic, create an active edge to the street, and provide convenient parking for brewery and business guests. The wide ROW in this area allows for a generous landscaped median, a feature that received strong support during the community input process. In addition to landscape enhancements, this broad median provides an excellent location

for sculpture. Concepts for sculpture are described in more detail later in this section. The northern edge of the Woodward campus is proposed to include heavy plantings of trees to create a park-like edge, as well as to create a screen and buffer on the edge of the property.

Note: This is the same section provided on East A



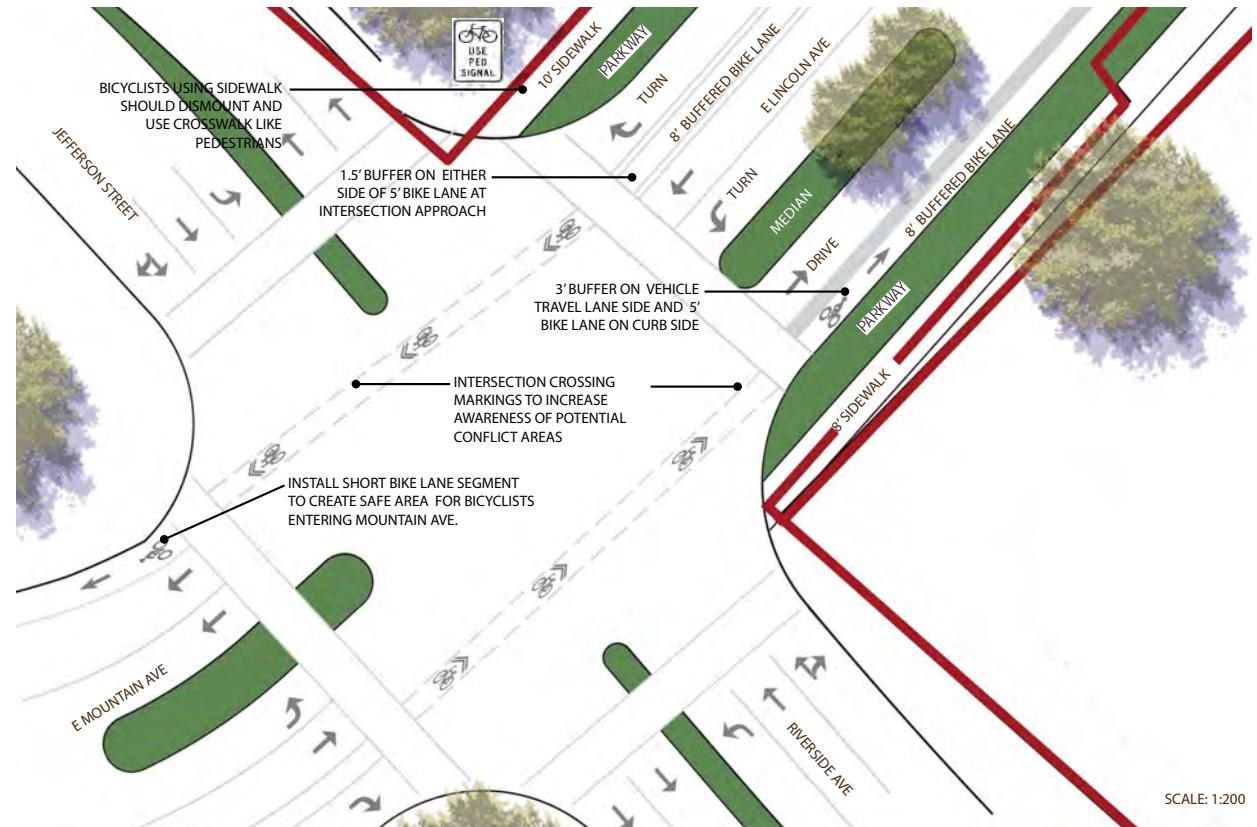
## Primary Intersections

Because the primary intersections of Lemay Avenue and Jefferson Street provide important bicycle and pedestrian crossings from the Lincoln Corridor, enlargement plans of these intersections are provided to illustrate how these crossings could be enhanced. Intersections are critical components of an enhanced bikeway and can act as barriers to less experienced bicyclists if bicycle accommodation is not maintained through them. The design intent for the Lemay Avenue and Jefferson Street intersections is to increase awareness and safety for bicyclists as they approach and travel through these two intersections. Providing intersection crossing markings and a continuous bicycle facility through the intersection's helps accomplish the goal of providing an enhanced bikeway for a Great Street. Intersection crossing markings aim to accomplish the following:

- Provide safe & direct path
- Make path easy to see
- Increase visibility of cyclists

### Jefferson Street Intersection

Built upon the recent Jefferson Street



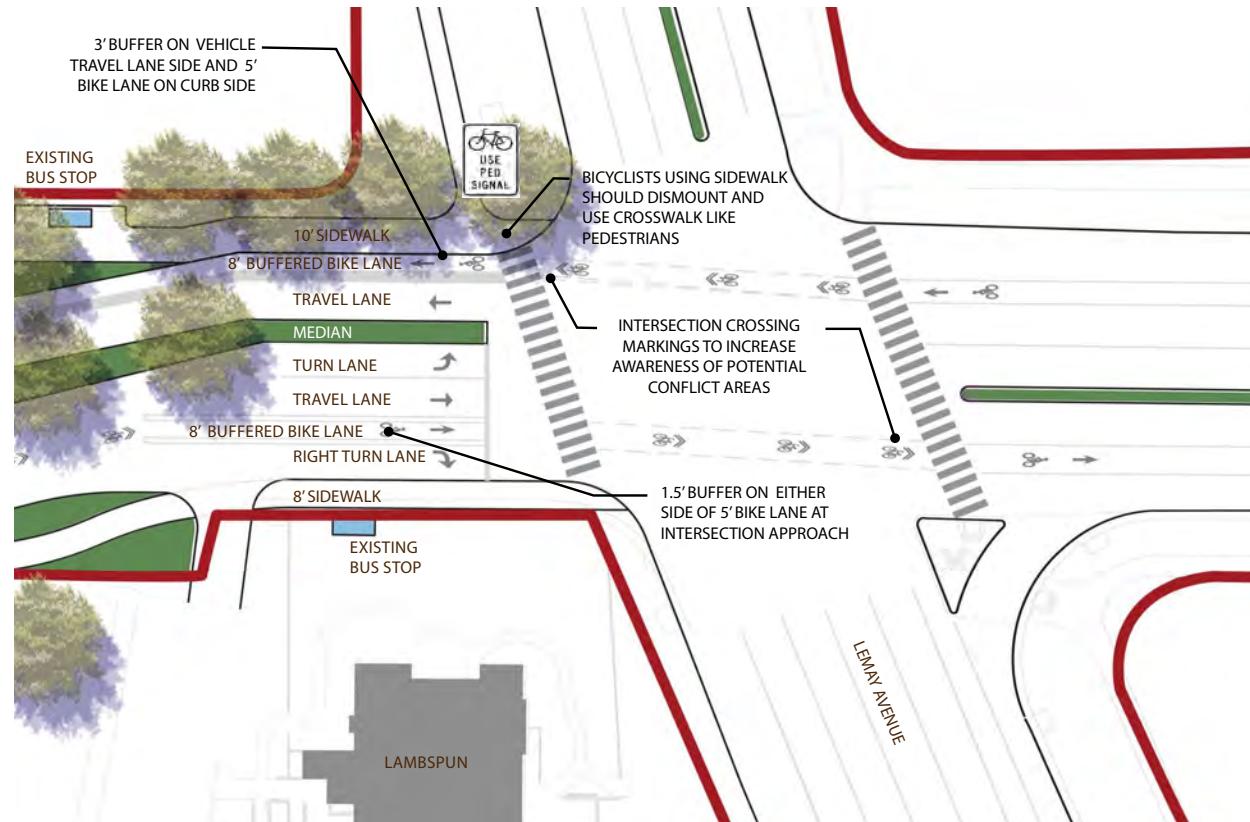
Jefferson Street and Lincoln Avenue intersection alternatives analysis, we propose one minor change to increase safety for cyclists. The preferred westbound lane configuration at the intersection of Jefferson Street and Lincoln Avenue is a dedicated right turn lane, a buffered bicycle lane, a through travel lane, and a dedicated left turn lane. The preferred eastbound lane configuration at the

intersection shall remain in its current configuration. In addition, intersection crossing markings are proposed in both the westbound and eastbound travel directions from the leading bicycle facilities. A short bicycle lane segment on the west side of the intersection is also proposed to create a safe area for bicyclists entering Mountain Avenue.

However, based on current travel patterns and the nearby railroad crossing, there are challenges to the lane configuration proposed for the east side of the intersection that need to be considered during the final design of this corridor and intersection. On the approach to the intersection, colored pavement or additional signing and markings should be provided at the conflict area where vehicles cross the bicycle lane to enter the dedicated right turn lane. The ROW is not currently wide enough to accommodate the improvements, and if gateway landscape features are desired, even more ROW will be required at three of the four corners.

## Lemay Avenue Intersection

It is proposed that the westbound lane configuration at the intersection of Lemay Avenue and Lincoln Avenue remain in its current configuration. However, the preferred eastbound lane configuration at this intersection is a dedicated right turn lane, a buffered bicycle lane, a through travel lane, and a dedicated left turn lane. In addition, intersection crossing markings are proposed in both the westbound and eastbound travel directions from the leading bicycle facilities. On the approach



Lemay Avenue and Lincoln Avenue intersection

to the intersection, colored pavement or additional signing and markings should be provided at the conflict area where vehicles cross the bicycle lane to enter the dedicated right turn lane.

## Other Intersections

While the major intersections are critical to the overall success of the enhanced

bikeway, the treatments at the minor intersections and driveway crossings will also contribute to the safety of the bicycle facility in the Lincoln Corridor. Colored pavement or additional signing and markings can be used at these potential areas of conflict within the bicycle lane to increase the visibility of the facility and reinforce priority to bicyclists in the conflict areas.

## Streetscape Amenities

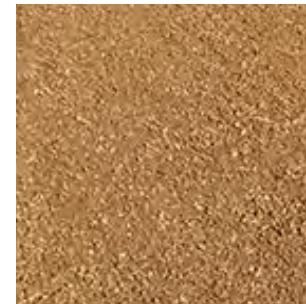
Streetscape amenities support the desired vision of an active and attractive street environment. Streetscape amenities proposed in the Preferred Plan include the Lincoln Bridge enhancements, sculpture, monuments, special pavements, and lighting as well as site furnishings, such as benches, trash receptacles, and bike racks.

### Materials Palette

The materials proposed along Lincoln are inspired by the warm tones and finishes of many of the businesses and breweries along the corridor today. The intent is for the Lincoln streetscape amenities to complement the architecture that currently exists along the corridor and to build a cohesive character and feel to the district that is unique to Lincoln but that also connects to and is complementary to the style of downtown. The materials proposed include sandstone veneer, crushed stone, concrete pavers, wood, weathered metal, and textured plantings. This combination will create a welcome, casual environment for visitors.



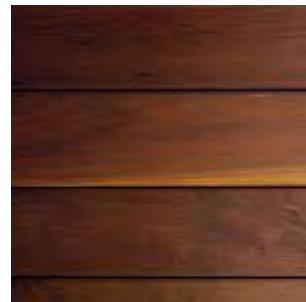
Sandstone Veneer



Crushed Stone



Special Pavement



Wood



Weathered Steel



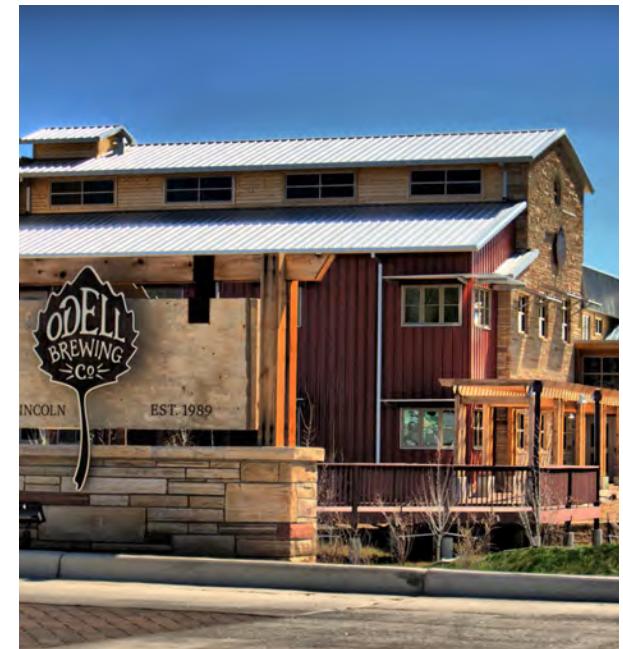
Textured Plantings



In-Situ



Fort Collins Brewery



Odell Brewing Company

## Sugar Beet History

The Lincoln Corridor is a natural place for celebrating Fort Collins' rich sugar beet history. The site of the historic sugar beet factory is nearby, and many of the sugar beet workers lived in the Alta Vista, Andersonville, and Buckingham neighborhoods. The Lincoln Corridor thus provides an excellent opportunity to tell Fort Collins sugar beet story through art and sculpture. There are numerous locations identified in the Preferred Plan for this story to be expressed, including monuments, sculpture, and art mosaics. Interpretive signage, like that used in Old Town, could be provided at select locations if desired.

## Monuments

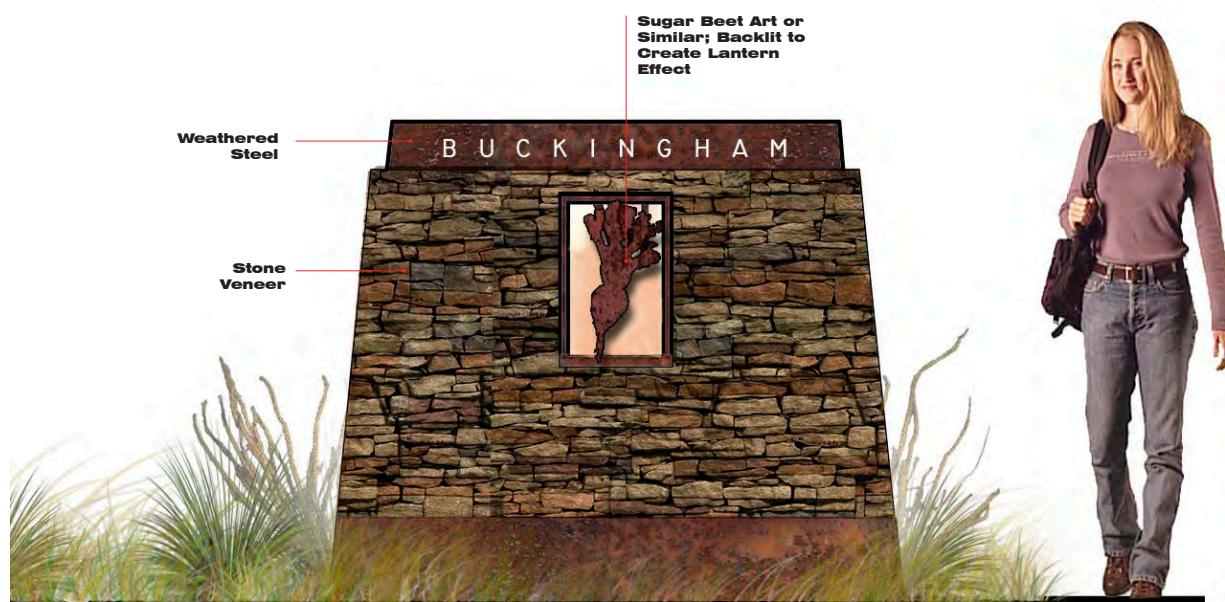
The Preferred Plan includes monuments to mark the entry into the Lincoln Corridor from Jefferson and Lemay, as well as at the east and west ends of the Buckingham neighborhood, near 1st and 3rd Street. The name of the neighborhood is provided on the face of the monument, along with an image of a beet. If desired, backlighting can be provided behind the beet image, creating a soft, lantern-like glow.



Sugar beets from 1906



Unloading beets at the factory





Steel art sphere sculpture in Twisp, Washington



Pine cone sculpture by Dave Claussen

## Sculpture

The Preferred Plan identifies several locations for sculpture along the corridor, including the center medians in the street. Large, life size, abstract beet sculptures may be provided in these medians, similar to the steel sculptures shown here.

## Mosaics

The Preferred Plan includes ground-mounted mosaics in the pedestrian gathering areas. Similar to the historic plaques provided on Linden Street, these mosaics can create an illustrative narrative of Fort Collins beet history, with multiple mosaics expressing a different aspect of Fort Collins' sugar beet history



Lincoln Corridor pedestrian gathering area beet mosaic

## Pedestrian Gathering Areas

Pedestrian gathering areas are provided at key intersections, in concert with pedestrian crossings along the corridor. These pedestrian gathering areas provide refuge and amenities for pedestrians and bicyclists, enhance gateways into the district, create a sense of place and destination, and reinforce the Lincoln brand. Each pedestrian gathering area includes trash receptacles, bike racks, benches, seat walls, special pavements, pedestrian lights, and a commemorative mosaic that expresses a particular aspect of Fort Collins sugar beet history. Materials are rugged, warm and durable, and create a welcome, casual character for the street. Pedestrian lighting extends along the entire corridor on both the north and south sides of the street, creating a safe environment for pedestrians.



Pedestrian gathering areas create a sense of place and destination along the Lincoln Corridor

## Typical Pedestrian Gathering Area Amenities



## Stone Seat Wall



## Trash Receptacle



Bench



## Special Pavement



## Pedestrian Light



## Bike Rack



## Mosaic



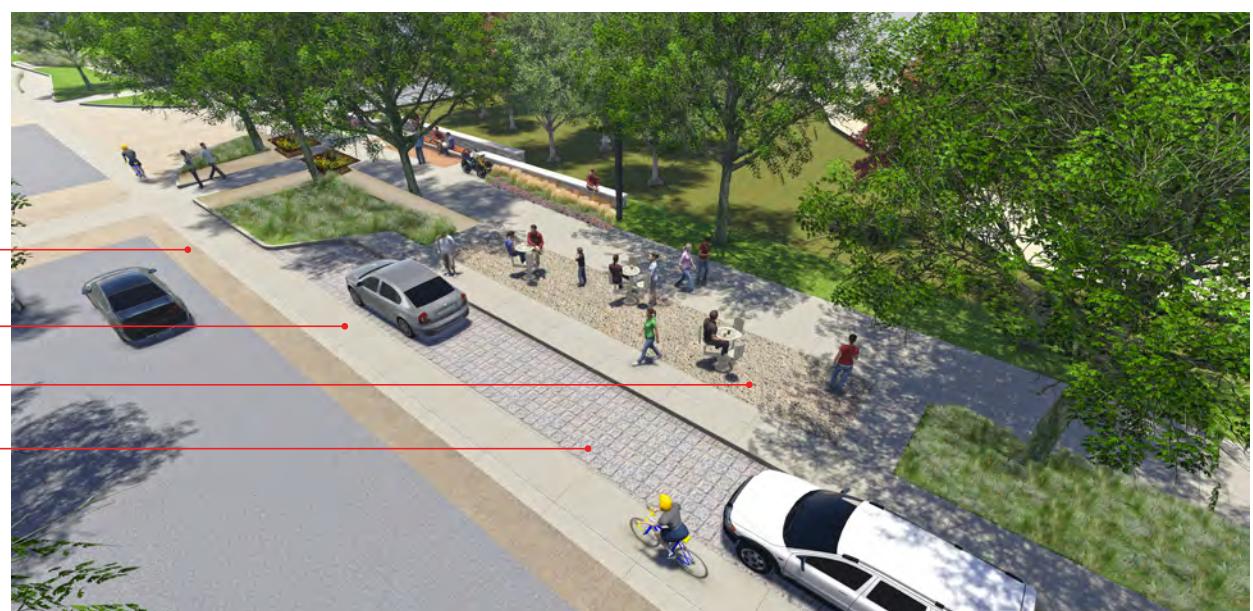
## Flower Pots

## Special Pavements

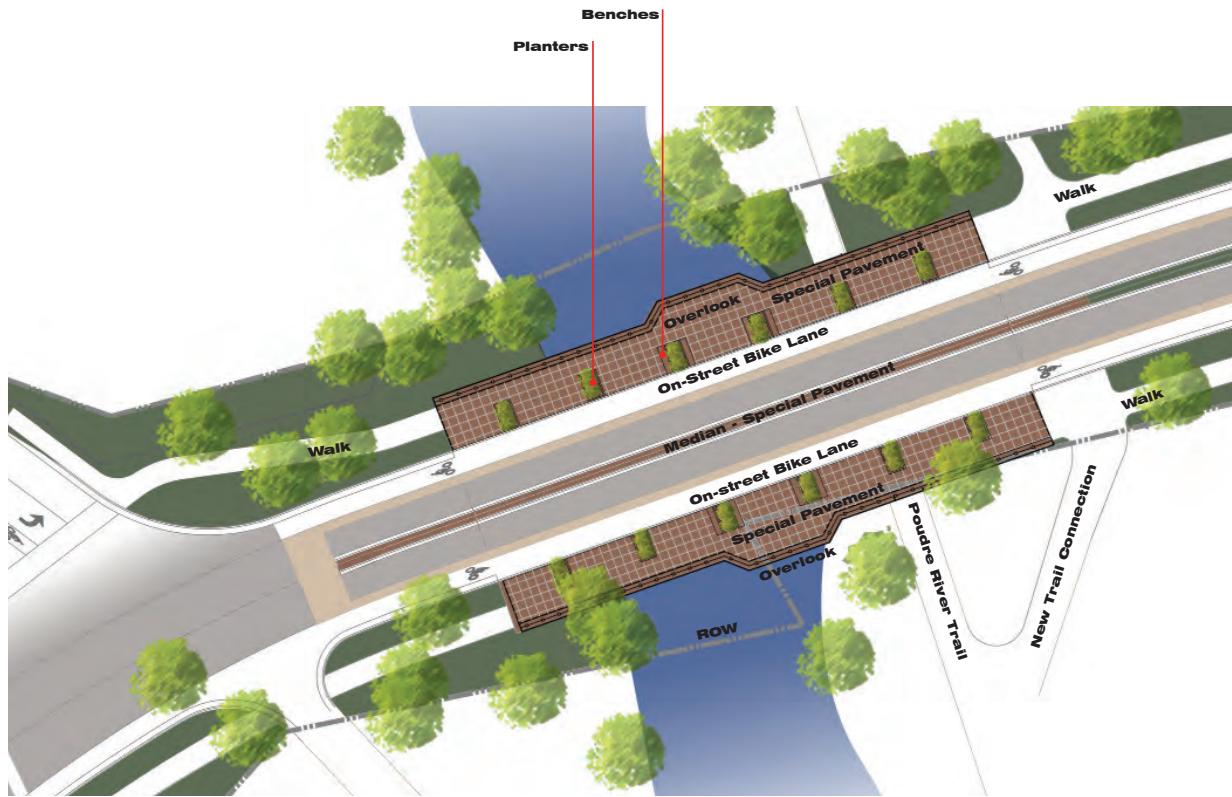
A key component of the Preferred Plan is the use of a variety of special pavements that differentiate uses along the corridor. This approach creates a safer corridor for all users, as the special pavements cue motorists, bicyclists and pedestrians at intersections, driveways, and crosswalks. These pavement types also change the character of the street, creating a more crafted look and feel, and reinforcing a sense of place and destination. Special pavements are used to mark crosswalks and bike lane edges, parking areas, and pedestrian zones. Special pavement types may include colored concrete, permeable pavers, concrete pavers, and crushed stone.



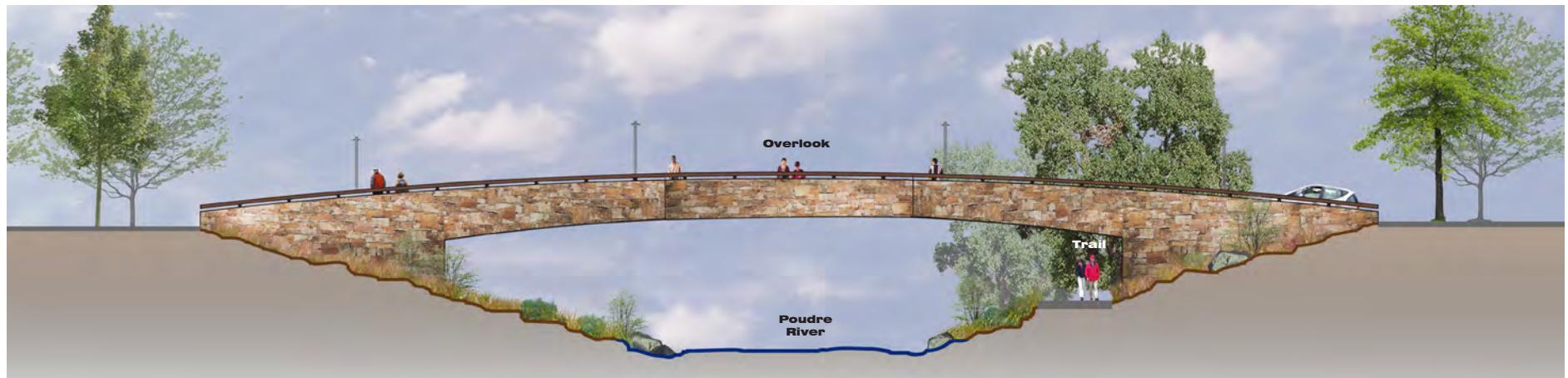
Special pavements frame pedestrian crossings, creating a safer street environment for all users.



Special pavements are provided for the buffered bike lane, parallel parking and special event seating area.



Plan



Conceptual elevation

## Lincoln Bridge

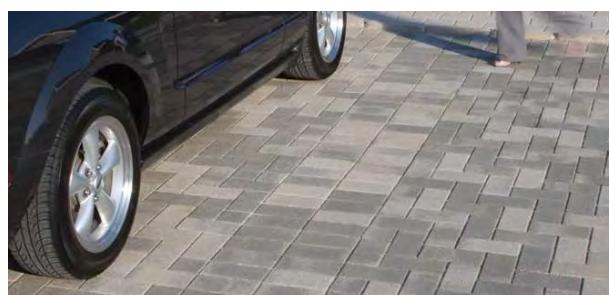
The Preferred Plan includes an enlarged and improved Lincoln Bridge. The bridge is widened to provide space for buffered bike lanes, walks, overlooks, seating areas, pedestrian lighting, special pavements, and planters. A new Poudre River trail connection is provided on the south side of the bridge, eliminating the dangerous on-street crossing that currently exists. The arch design reinforces the sense of gateway and entry into the Lincoln Corridor. Locally quarried sandstone veneer and a weathered steel railing complement the brewery architecture, evoke a sense of quality and permanence, and create a memorable gateway into the district.



Rain gardens collect and filter stormwater



A bioswale at a pedestrian crossing



Permeable pavers

## Low Impact Development Techniques

Low Impact Development (LID) includes a variety of practices that mimic or preserve natural drainage processes to manage stormwater. LID practices typically retain rain water and encourage it to soak into the ground rather than allowing it to run off into ditches and storm drains where it would otherwise contribute to flooding and pollution problems. These approaches manage rainfall as close to the source as possible, slow stormwater and promote infiltration, and reduce the need and associated cost of stormwater infrastructure.

There are three primary LID approaches best suited for the Lincoln Corridor. These include bioswales, rain gardens, and permeable pavements. Plan drawings of the LID approach for the Lincoln Corridor are included with the technical drawings in Appendix D. A basic description of each approach follows:

### Bioswales

Bioswales can be used to slow the rate of stormwater runoff and to encourage infiltration and treatment. Bioswales can be attractive features designed with

a variety of plants to provide texture, color, and interest. As shown on the LID plans, bioswales are proposed in several sections along the corridor, particularly the south edge of the street in front of the Woodward campus.

### Rain Gardens

Rain gardens will be installed throughout the corridor to treat collected stormwater runoff. Rain gardens will fit into narrower sections easier than an extended detention basin and can be designed to fit into the surrounding landscape better than a sand filter basin. Rain gardens are provided at transit stops and at other key locations along the corridor.

### Permeable Pavements

Permeable pavements reduce the impervious surface area of a street, reduce the need for stormwater infrastructure, and contribute to the replenishment of local aquifers. In the Preferred Plan, permeable pavements are provided in all of the on-street parking areas located on the north side of the street. This approach differentiates the parking paving type from the street paving, and helps to further articulate and define the different uses on the street.



Type I - Turf and Trees



Type II - Xeric Garden



Type III - Bioswale/Rain Garden

## Landscape Character

The Preferred Plan provides a variety of landscape types along the corridor, creating a rich, diverse, and water-conserving landscape throughout the corridor. These landscape types are designed to work in concert with the LID approach. The overall streetscape approach will incorporate the city streetscape standards which promote low water use techniques. Three primary landscape types have been identified for the corridor: Turf and Trees, Xeric Garden, and Bioswale/Rain Gardens.

### Type I - Turf and Trees

The Turf and Trees landscape type is characterized by turf with large shade trees. This landscape type is proposed primarily along parkway edges.

### Type II - Xeric Garden

The Xeric Garden landscape type includes shrubs, perennials, ornamental grasses, decorative mulches, and boulders. This landscape type is proposed primarily in medians, at pedestrian gathering areas, and near pedestrian crossings.

### Type III - Bioswale/Rain Gardens

The Bioswale/Rain Gardens landscape type includes a blend of ornamental grasses, native grasses, groundcovers and perennials suited for periodic wet conditions and for filtering and treating sediments and pollutants. Bioswales are provided in key locations throughout the corridor to slow stormwater. Rain gardens are provided near transit stops and other locations throughout the corridor.

# Transit

## Proposed Transit Phasing

The Transfort Strategic Operating Plan (TSOP) (2009) proposes a bi-directional circulator route at 10 minute frequencies, connecting the Lincoln Corridor to Downtown Fort Collins and MAX via Lemay Avenue and Buckingham Street.

Implementation of this long-term vision is recommended to be phased in concert with the corridor building out and creating demand for the high frequency circulator service proposed

in the TSOP. The three proposed phases for near-/mid-term implementation include the following:

- Phase 1 – Maintain the existing Routes 5 and 14 at 60 minute frequencies, but coordinate the operating schedule to create a 30 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX.
- Phase 2 – Enhance the frequencies of Route 5 and 14 to 30 minutes each, creating a combined 15 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX.



**Phase 1** – Maintain the existing Routes 5 and 14 at 60 minute frequencies, but coordinate the operating schedule to create a 30 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX.

- Phase 3 – Option A – Expand upon Phase 2, adding a modified Circulator Route (“Lincoln Shuttle”) that provides a 15 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX. This option would realign Route 14 onto Jefferson/Riverside Avenue and keep 30 minute bi-directional service by Route 5 on Lincoln Avenue. The combination of the Lincoln Shuttle and Route 5 service on Lincoln Avenue yields a combined frequency of less than 15 minutes. This option uses standard Transfort vehicles to operate the proposed Lincoln Shuttle.
- Phase 3 – Option B – This option is the same as Phase 3 Option A, except a customized vehicle would be used on the Lincoln Shuttle service.



**Phase 2 –** Enhance the frequencies of Route 5 and 14 to 30 minutes each, creating a combined 15 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX.

This phased implementation is supported by recommendations of the Transit Capacity and Quality of Service Manual, Third Edition (2013), which states that corridor densities of 15 dwelling units (du)/acre are needed to support transit service at or below 15 minute frequencies. As this area does not currently, nor is planned to have such densities with dwelling units alone,

staff recommends also considering employment densities and phasing service improvements in concert with increased development and demand expected in the corridor.

A summary chart for the route alignments for near-/mid- and long-term phases are provided in Appendix C-3.



**Phase 3 – Option A** – Expand upon Phase 2, adding a modified Circulator Route (“Lincoln Shuttle”) that provides a 15 minute bi-directional connection between the Lincoln Corridor and Downtown/MAX. This option would realign Route 14 onto Jefferson/Riverside Avenue and keep 30 minute bi-directional service by Route 5 on Lincoln Avenue. The combination of the Lincoln Shuttle and Route 5 service on Lincoln Avenue yields a combined frequency of less than 15 minutes. This option uses standard Transfort vehicles to operate the proposed Lincoln Shuttle.



**Phase 3 – Option B** – This option is the same as Phase 3 Option A, except a customized vehicle would be used on the Lincoln Shuttle service.

## Neighborhood Improvement Projects

As part of the Preferred Plan, various neighborhood improvement projects have been identified. More detailed descriptions, including a map and chart of these projects, is provided in the next section of this document. Many of the projects have been identified as priorities in multiple city plans, such as the *Northside Neighborhoods Plan* and the *Pedestrian Plan*. Primarily, the neighborhood improvement projects focus on improving pedestrian mobility and safety. The improvements include providing new sidewalks and amenities, alley improvements, and a push button pedestrian signal crossing. There are also plans to make improvements to a nearby transit stop. Three neighborhoods adjacent to Lincoln Corridor have been identified as priority areas. Improvements for these neighborhoods include installing new gateway signage and providing new signage designed to reduce traffic through the residential areas. Alley and park projects are also planned to improve the neighborhoods.

Neighborhood projects include:

- Wayfinding to provide routes between breweries that do not cut through Buckingham Neighborhood
- Transit stop improvements, including upgrades to existing bus stops
- Adding push-button pedestrian signals at crosswalks
- Improvements to existing sidewalks and adding new sidewalks
- New gateway/interpretive signage or entrance monument for neighborhoods
- New neighborhood park elements to existing park area at Streets Facility
- Signage to reduce impacts from cut-through traffic in Buckingham Neighborhood
- Alley improvements including ROW acquisition and paving of alley to provide better access for residents in Buckingham Neighborhood



(Clockwise from left) Potential improvements include upgrading the existing East Vine Drive transit stop; developing new gateway/interpretive signage at the Alta Vista, Andersonville, and Buckingham neighborhoods; installing permanent sidewalks, curbs, and gutters; and adding new neighborhood park elements to the existing park area at the Streets Department facility.

## Triple Bottom Line Analysis

This summary represents a follow-up of the Triple Bottom Line (TBL) analysis of the corridor design alternatives described in Section 2. The project team reviewed the information in the initial TBL analysis and refined responses related to the Preferred Plan for social, economic, and environmental considerations.

### Economic Considerations

- Preferred Plan implements *City Plan* policies and priority catalyst project
- Flexibility incorporated into design that not only supports existing businesses, but also new development and redevelopment opportunities
- New opportunity for universal design and infrastructure improvements
- Potential for enhanced/expanded transit service in area
- Will be the first “New Great Street” project – if successful, may create similar street opportunities across the city
- Could develop new partnerships and collaborations with existing and future breweries
- The “Great Street” design approach is more expensive than a traditional approach
- Necessary ROW acquisitions may be expensive
- Access consolidation may impact businesses
- Could help develop new funding collaborations – sales tax, DDA expansion, new business attraction

- The strategic nature of this planning document will allow for quick implementation of some elements, which could allow benefits to be realized more quickly

### Social Considerations

- Preferred Plan maintains driveway access and on-street parking for Buckingham neighbors that front Lincoln; supports established functionality of existing neighborhood
- Keeping existing residential zoning will preserve important historical and cultural qualities of neighborhood
- Improved health benefits created by encouraging more cycling and walking
- Could develop new partnerships and collaborations with existing/future breweries
- New education and awareness programs and signage could minimize impacts of cut-through traffic in neighborhood
- Increased activity within the neighborhood may lead to perceived lack of safety
- Money spent on street project should not preclude funding for neighborhoods related projects

## Environmental Considerations

- The Preferred Plan incorporates the “Broad Boulevard” concept of enhanced median and parkway landscaping, canopy of shade trees and water-wise planting techniques into the overall street cross-section
- The Lincoln project has the opportunity to collaborate with other, significant efforts for improving the Poudre River – synergies with this project and the other, environmentally-

focused efforts will contribute to the City’s overall Triple Bottom Line goals

- As corridor plan is implemented, increased opportunities to improve flood protection and overall community resilience
- Incorporation of new Low Impact Development (LID) facilities within corridor will enhance both surface drainage, water quality, and connections to the Poudre River



Lincoln Avenue at Buckingham Neighborhood

## SECTION 3.3

# IMPLEMENTATION

### Introduction

Implementation of the Lincoln Corridor Plan will likely occur over a period of time, require a phased approach, and involve multiple funding sources. Implementation of the project will occur in two parts: Part I is the Lincoln Corridor street reconstruction, and Part II includes transit & neighborhood improvements. Funding and implementation strategies are provided for each part.

The Lincoln Corridor Plan represents a framework master plan for Lincoln Corridor and is subject to change, based on the new development and redevelopment of the area.

### Lincoln Corridor Funding Options

There is likely no single funding source able to provide the approximately \$19 million or more needed for this corridor improvement. The project would likely be funded by a combination of city resources. The following section presents a variety of funding options available for corridor funding.

### Voter Approved Sales Tax Initiative

The most recent voter-approved sales tax initiative for capital projects is Building on Basics (BOB), a quarter-cent sales tax that has provided \$57.6 million for various city projects since 2006. While this tax sunsets in 2015, the City intends to ask voters to approve a continuation of the sales tax in the April 2015 election.

There is some uncertainty whether the next round of the voter-approved Sales Tax Initiative for capital projects in 2015 will be an available funding source for this project. Fort Collins voters have a long history of approving dedicated sales tax initiatives; however there is no guarantee that this initiative will be approved in April. Even if it does pass, there is also no assurance that the Lincoln Corridor project will be included in the initiative. The City Council retains discretion over what projects will be eligible for funding.

Although it is not certain, the Lincoln Corridor project remains a strong candidate for funding, and it is a prioritized action item on the Fort Collins Capital Improvement Plan.

BOB provided \$3 million and \$4.8 million for infrastructure improvement projects along Harmony Road and North College Avenue, respectively. Based on these historical projects, the potential 2015 Sales Tax Initiative could fund approximately \$3 to \$5.5 million of the Lincoln Corridor Plan.

### Downtown Development Authority

The DDA has identified the potential for \$2.85 million in TIF revenues to support a portion of the Lincoln Corridor improvements. These revenues are dependent upon the completion of the phased development of the Woodward Technology Center project and generation of the associated tax increment revenues. Tax increment revenue would begin accruing in 2018 with full revenue collection completed in 2031.

In partnership with the City, the DDA is currently funding natural area restoration and enhancements, and public improvements to mitigate traffic congestion in the Lincoln Corridor area. As infill redevelopment projects emerge over time, the DDA will entertain petitions from adjacent Lincoln Corridor property owners to include their property in the DDA boundary and consider public private partnerships that advance the goals for improvement of the Lincoln Corridor.

### Street Oversizing Fund

Fort Collins collects transportation impact fees through developer contributions in order to finance the Street Oversizing program. Based on interviews with City staff, the Street Oversizing Fund contribution for Lincoln Avenue could be approximately \$690,000. This amount is significantly less than what we would typically expect from a corridor of this size that has vacant lands that are developable; a majority of the Lincoln corridor is older existing development

with limited opportunity for additional contributions from redevelopment.

### Keep Fort Collins Great

In addition to Building on Basics, Fort Collins voters approved a 0.85 percent sales tax initiative, Keep Fort Collins Great (KFCG), to provide funding for city projects. KFCG funds projects in many different categories, including fire, police, transportation and streets, and parks. In 2013 there was approximately \$3.8 million available for "other transportation needs." This could be a potential funding source for the Lincoln project.

The magnitude of potential assistance from KFCG will likely be relatively small. Last year the \$3.8 million for "other transportation needs" contributed funds to approximately 15 different projects. Though the funding amounts varied, on average KFCG provides about \$250,000 per project.

### Bridge Program

The City's Bridge Program is a potential funding option for the replacement of the

Lincoln Bridge over the Poudre River, although the program does not have a dedicated funding source (it is funded through the City's competitive biennial budget process). At some point, the Lincoln Bridge will need to be replaced for structural reasons; the exact timing is hard to predict, but 6-10 years is the current estimate. Ideally the bridge replacement would occur at the same time as the street reconstruction to more efficiently use funds.

### Miscellaneous General Funds

The City's General Fund could also be a potential funding source for the Lincoln Corridor project. The recent North College Avenue project was largely funded out of City general funds, showing that the City may be willing to use discretionary funds if the Lincoln project is deemed to be a priority. There are a few potential sources of General Fund revenues that could be appropriated for the Lincoln Avenue project.

The City has already allocated funds for the North College improvement project,

but the project has since received a RAMP grant from CDOT in order to improve mobility. This RAMP grant may provide a new opportunity to use approximately \$2 million that can now be allocated to other projects. It is possible that City Council could reallocate these funds to the Lincoln Corridor.

### State and Federal Grants

Several recent large-scale transportation projects in Fort Collins have received state and federal funds, including the MAX Bus Rapid Transit and North College Avenue Improvement projects. These projects received grants because they will increase mobility and enhance alternative transportation methods.

While state and federal grant money may become a possibility in the future, it is impractical to depend on any of these sources when funding large capital projects. The total project funding should first be allocated from more certain funds. If grant money is later awarded for the Lincoln Avenue project, any previously appropriated funds can then be reallocated elsewhere.

One major source of federal funds is the Transportation Alternative Program

section of the Moving Ahead for Progress in the 21st Century Act (MAP-21). This funding source consolidated the many programs from SAFETEA-LU including, Recreation trails, Safe Routes to Schools and Transportation Enhancement Programs. Funds are provided for “construction, planning and design of... non-motorized forms of transportation.” However this act only provides funding for projects through September 2014. Congress will have to extend this funding for this to be a viable option.

The City could also potentially apply for statewide Funding Advancement for Surface Transportation & Economic Recovery (FASTER) grant money. The FASTER program provides funding for large capital purchases that have significant regional impacts. Funds are awarded on a two year cycle.

### Improvement Districts

Municipalities have the option of raising funds for special projects by implementing improvement districts. Improvement districts overlay specific parts of the city that stand to benefit from the new project. Land owners within the district often pay either additional property taxes or special assessments. While cities can propose

improvement districts, they must then be approved by landowners within the district boundaries.

The specific conditions of the Lincoln Corridor project make special taxing districts particularly unappealing as an option for this project. Asking local stakeholders to approve districts in order to pay for the improvements is likely to be unpopular. Successful districts have strong support from key stakeholders, who are often the largest land and business owners within the area.

In order to raise sufficient funds, the district would have to cover a larger area. However, this project has limited direct benefit to many of the smaller stakeholders outside of the immediate area. They are not likely to approve an improvement district if other landowners are exempt.

### Project Costs

The preliminary cost estimate for the Lincoln Preferred Alternative is a planning-level cost estimate that will be further refined when the project advances to Final Design. The current project cost estimate is broken into two parts: \$14.8 million for the complete roadway and

## Lincoln Corridor Cost by Segment

Segment	Location	Cost
West*	Union Pacific Railroad (UPRR) Tracks to 1st Street (includes bridge replacement)	\$11.4M
Central	1st Street to 3rd Street	\$2.0M
East	3rd Street to Lemay	\$5.9M
<b>TOTAL</b>		<b>\$19.3M</b>

\* The Jefferson/Riverside & Lincoln Street intersection will be further developed in the Jefferson Intersection Plan.

\$4.5 million for a new bridge. The total preliminary estimated cost of the Lincoln Avenue improvements is \$19.3 million, including Final Design, construction, and a planning-level contingency of 30%. Estimated operation and maintenance costs for landscape maintenance in the medians and parkways would be approximately \$108,000 per year. A Cost Summary table and Cost by Segment table provide additional detail regarding cost. A complete cost estimate for the Preferred Plan is provided in Appendix C-4.

## Funding Timing

The list of funding sources is an example of a way to partially seek funding for this project. Various approval processes (e.g., City Council, voters, DDA Board) would be required to obtain funding through these options and there is uncertainty

in the amount available for each source. The funding chart provided presents a potential timetable for the availability of identified funds. The timing of fund availability is approximate and based on best available data. There could be

sufficient funds for the West segment by 2018, contingent upon the timing of future Sales Tax Initiative funds and completion of the Woodward project. This represents a best-case scenario. Even with the above funding sources, the Lincoln Corridor

## Lincoln Corridor Cost Summary

Category	TOTAL (Millions)	Notes
Roadway	\$9.2M	Roadway, buffered bike lanes, wider sidewalks, raised wider medians, new connection to Poudre Trail, transit stops/pull-outs, railroad crossing improvements, existing driveways/curb-cuts
Landscaping	\$2.1M	Median and parkway plantings, including LID planting treatments
ROW	\$0.9M	
<b>SUBTOTAL</b>	<b>\$12.2M</b>	
Gateway Amenities	\$2.6M	Site furnishings (e.g., benches, art), pedestrian lighting, special crosswalks, permeable pavers
Bridge	\$4.5M	Enhanced bridge with seating areas, planters
<b>TOTAL</b>	<b>\$19.3M</b>	
Note: Totals include design and construction costs		

## Lincoln Corridor Potential Funding Scenario

(Pending City Council, voter, and DDA Board of Directors approval)

Funding Source	2015	2016	2017	2018	2019	2020	Total
Voter-approved Sales Tax Initiative		\$1.5M <sup>1</sup>	\$4.0M <sup>1</sup>				\$5.5M <sup>1</sup>
DDA				\$2.85M <sup>2</sup>			\$2.85M <sup>2</sup>
Street Oversizing			\$0.7M				\$0.7M
Keep Fort Collins Great	\$0.25M						\$0.25M
North College Funds	\$2.0M						\$2.0M
Annual Total	\$2.25M	\$1.5M	\$4.7M	\$2.85M	\$0M	\$0M	
Cumulative Total	\$2.25M	\$3.75M	\$8.45M	\$11.3M	\$11.3M	\$11.3M	\$11.3M

<sup>1</sup>Voter-approved Sales Tax Initiative timing based on observed BOB fund accrual and disbursement from 2011-2012

<sup>2</sup>The City would need to issue a revenue bond for the \$2.85 million + interest with the DDA TIF pledged as a source to repay the bond principal if a lump sum amount is expected by the City in 2018.

project still faces an approximate \$8 million funding gap. The estimated \$11.3 million in available funding represents the maximum amount based on realistic and reasonable assumptions and there is no evidence that any of these sources will be able to cover the funding gap given historic funding practices.

The City will need to explore other options to fund the project, or choose to scale some elements of the project back (e.g., pavement and landscaping enhancements, gateway amenities, bridge amenities, median treatments). Options for funding this gap include using general funds to fully finance the project, or reserving a larger portion of the potential is a priority, then available reserve funds could be appropriated to the project over time in order to cover the funding gap. Though it is an uncertain funding opportunity at the moment, the City could also decide to make this project, or portions of the project, contingent upon obtaining grant funding from the North Front Range Metropolitan Planning Organization, Colorado Department of Transportation, Colorado Department of Local Affairs or other agencies.

## Strategies & Actions

Ten implementation strategies with associated actions have been identified for the Lincoln Corridor project. A chart with associated actions for each strategy is provided on the following page.

### **1. Secure funding for developing final design/construction plans**

The next step for the project is to complete the design and construction plans for the corridor. Acquire funding to pay a consultant team to complete these design efforts is the first step.

### **2. Prepare final design/construction plans and obtain approvals**

Construction drawings will define the extent of impacts to and mitigation plan for the Poudre River corridor, and include details on railroad crossings and the Jefferson Street intersection, which are necessary to obtain approvals from agencies such as the Public Utilities Commission (PUC), Union Pacific Railroad (UPRR), US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), and Colorado Department of Transportation (CDOT). Detailed construction plans are also

needed for obtaining approvals from the various departments within the City of Fort Collins and for discussions with neighbors regarding the specific improvements in front of their properties and at road intersections.

### **3. Finalize potential phasing**

The final design of the Plan will be implemented in phases, starting with functional improvements and then later adding enhancements, such as enhanced landscaping and gateway amenities. As with all other plans of the City, each phase will be implemented at such time as the City Council identifies appropriate funding sources, taking into consideration the other capital improvement needs of the City. As outlined in a previous section of the document, it is recommended that the corridor be constructed in segments to minimize impacts to businesses and residents, and to construct street improvements in the most efficient means possible.

## Lincoln Corridor Action Plan

Strategy		Actions (Primary Department(s) Responsible)	Timing
<b>FINAL DESIGN</b>			
1	Secure funding for developing final design/construction plans	1. Submit Budgeting for Outcomes (BFO) offer for funding (2015/2016) ( <i>Engineering, FC Moves, Planning</i> )	Short-term
2	Prepare final design/construction plans and obtain approvals	1. Identify and select a consultant team to prepare construction drawings ( <i>Engineering</i> ) 2. Identify neighborhood representatives to review design of areas in front of Buckingham Neighborhood ( <i>FC Moves, Planning</i> ) 3. Prepare preliminary construction plans and refine anticipated construction costs ( <i>Consultant</i> ) 4. Submit drawings to agencies to acquire approvals as required ( <i>Engineering</i> )	Short-term
3	Finalize potential phasing	1. Identify a phased approach to construction of corridor improvements; constructing the corridor in segments is recommended. ( <i>Engineering</i> )	Short-term
4	Coordinate with Jefferson Street final design	1. Incorporate the recommended Jefferson/Lincoln intersection design from the LCP into ongoing Jefferson Street final design ( <i>Engineering, FC Moves</i> )	Short-term
<b>CONSTRUCTION</b>			
5	Secure funding for construction	1. Secure funding for construction of Phase 1 of the project ( <i>Engineering</i> ) a. Pursue voter-approved Sales Tax Initiative b. Look for grant opportunities (e.g., MAP-21, FASTER) 2. Identify and secure funding for future phases of the corridor ( <i>Engineering</i> )	Short/Mid-term
6	Acquire right-of-way	1. Determine right-of-way acquisition necessary for Phase 1 construction. Negotiate with landowners to purchase and acquire right-of-way ( <i>Real Estate Services, Engineering</i> ) 2. As properties redevelop, acquire right-of-way for future phases ( <i>Real Estate Services, Engineering</i> )	Short/Mid-term
7	Conduct construction operations to minimize impacts to businesses and residences	1. Prepare and submit a plan that reduces construction impacts to residents and businesses ( <i>Contractor</i> )	Short/Mid-term
8	Lower speed limit	1. Secure approvals necessary to lower speed limit from 35 to 30 mph ( <i>Traffic Operations</i> ) 2. Replace speed limit signs ( <i>Traffic Operations</i> )	After construction
<b>OPERATIONS &amp; MAINTENANCE (O&amp;M)</b>			
9	Maintain roadway	1. Incorporate into Street Maintenance Program ( <i>Streets</i> )	After construction
10	Maintain landscaping	1. Maintain landscaping in parkways, medians ( <i>Parks</i> )	After construction

Timing: Short-Term (1-2 years); Mid-Term (3-5 years); Long-Term (5+ years)

#### **4. Coordinate with Jefferson Street final design**

The Jefferson Street reconstruction will likely precede any improvements made to the Lincoln Corridor. Coordination between these two projects will ensure a seamless connection and maintain the design intent proposed for Lincoln Corridor.

#### **5. Secure funding for construction**

The project must be supported by the community and its elected and appointed leaders in order to receive adequate funding through allocations of sales taxes, or other city funds. A commitment by the community to fund the project will allow the city to apply for matching grants from State and Federal agencies, and will give property owners and the development community confidence to invest in improvements and redevelopment projects. The benefits of the project need to be clearly communicated to the citizens of Fort Collins.

#### **6. Acquire right-of-way**

The Preferred Plan identifies various locations throughout the corridor that require acquisition of additional right-of-way either in the near-term or as the property redevelops (shaded as either blue or purple in the plan). Negotiating with landowners and purchasing the property must be completed before construction can begin.

#### **7. Conduct construction operations to minimize impacts to businesses and residences**

Construction is disruptive because it creates noise, is not attractive, and sometimes causes people to be inconvenienced. These impacts must be minimized as much as is feasible in order for customers and employees to have safe and reasonably convenient access to businesses and places of employment. Access to residences along the corridor must be maintained, and acceptable noise levels not exceeded. People, who walk, ride bicycles, drive or use transit through the corridor must be accommodated as well.

#### **8. Lower speed limit**

Lowering the speed limit from 35 mph to 30 mph will slow traffic, and create a safer and more pedestrian friendly street environment for all users. The City Traffic Operations department can lead this effort.

#### **9. Maintain roadway**

Additional operations and maintenance resources may be required to maintain the Lincoln Corridor. The project will need to be incorporated into the City Streets Maintenance program.

#### **10. Maintain landscaping**

The Parks Department will maintain the medians and other landscape enhancements proposed along the corridor.



Lincoln Avenue at In Situ

## Transit & Neighborhood Improvements

### Funding Options

#### Transit

The transit phasing improvements proposed in this Plan will be considered in Transfort's overall system planning process; service changes will be implemented as warranted by demand and funding availability.

#### Neighborhood Projects

The potential funding sources for neighborhood improvements will look similar to those identified for the *Pedestrian Plan*, *Transportation Master Plan*, and Lincoln Corridor. The two identified funding sources are Keeping Fort Collins Great (KFCG) and the potential next round of Sales Tax Initiative in 2015. Approximately 17 percent of KFCG revenues can be used for Other Transportation Needs, which includes approved uses such as road shoulder, mowing, median and alley maintenance; safe routes to school; and traffic operations replacement. Funds were allocated from BOB for both the *Pedestrian Plan* and intersection improvements. If

the next round of Sales Tax Initiative is approved by voters in April, it could potentially continue to provide funds for these types of projects. As discussed elsewhere, districts are not a feasible option; therefore the financial support will have to come from existing city funding sources. Should the city choose to prioritize these projects, the necessary funding could be allocated from the general fund.

Fort Collins' Budgeting for Outcomes (BFO) funding approach helps the city achieve its priorities by focusing on desired outcomes rather than limiting costs. Potential projects are ranked according to priorities and then funds are allocated to projects in descending order until available funds are depleted. Depending on where these neighborhood projects rank as city-wide priorities, there may be sufficient funds for some or all of the identified improvements in the near or medium term.

Another potential funding source is the Community Development Block Grant program (CDBG). CDBG is the primary program providing federal dollars to Fort Collins. Its purpose is to develop neighborhood approaches to improving the physical, economic

and social conditions for lower income people in Fort Collins. The City allocates funding through a competitive process with two funding cycles each year, one in the Spring and the other in the Fall. The Spring cycle has funding available for public services, community development activities and affordable housing projects. The Fall cycle has funding targeted specifically for affordable housing projects.

### Project Costs

#### Transit

Transit costs for each phase are shown below:

Transit Phase	Cost (1) Capital (2) O&M
<b>Phase 1</b> Maintain Existing Route Frequencies	1) \$0 2) \$450,000
<b>Phase 2</b> Increase Existing Route Frequencies	1) \$800,000 2) \$900,000
<b>Phase 3 - Option A</b> Phase 2 and Lincoln Shuttle using a <i>Standard</i> Vehicle	1) \$1.6M 2) \$2.1M
<b>Phase 3 - Option B</b> Phase 2 and Lincoln Shuttle using a <i>Custom</i> Vehicle	1) \$2.3M 2) \$2.1M

#### Neighborhood Projects

The neighborhood projects range in cost from \$1,000 to \$400,000, with the total for

all projects at approximately \$1 million. The individual project costs are listed in the table on p. 131.

## Strategies & Actions

Five implementation strategies have been identified for transit and neighborhood improvements.

### 1. Implement phase I transit improvements

As described in a previous section of this document, transit enhancements and

improvements will be phased over time, providing improved transit service to the neighborhoods as transit demands increase. The first phase improvement includes adjusting routes 5 and 14 schedules for 30-minute combined bi-directional headway.

### 2. Secure funding for additional transit phases

Transfort will need to secure funding for future transit phases. Funding and phasing can be incorporated into the

overall system planning and future budget requests.

### 3. Implement future transit phases

Future transit phases can be implemented as transit demand requires. Whether the Lincoln Shuttle is a standard bus or custom vehicle will also need to be determined.

### 4. Secure funding for neighborhood improvement projects

Funding for the neighborhood projects

## Transit & Neighborhood Improvements Action Plan

Strategy		Actions (Primary Department(s) Responsible)	Timing
<b>TRANSIT</b>			
1	Implement phase 1 transit improvements	1. Adjust Route 5 and 14 schedules for 30-minute combined bi-directional headway ( <i>Transfort</i> )	Short-term
2	Secure funding for additional transit phases	1. Incorporate proposed changes into overall system planning and future budget requests ( <i>Transfort</i> ) <ul style="list-style-type: none"> <li>a. Phase 2: Enhance Route 5 and 14 frequencies to 30 minutes each for 15-minute combined bi-directional headway</li> <li>b. Phase 3: Add Lincoln Shuttle route</li> </ul>	Short/Mid-term
3	Implement future transit phases	1. Monitor demand and development; implement changes when warranted ( <i>Transfort</i> ) <ul style="list-style-type: none"> <li>2. Determine if Lincoln Shuttle will be standard bus or custom vehicle (<i>Transfort</i>)</li> </ul>	Long-term
<b>NEIGHBORHOOD PROJECTS</b>			
4	Secure funding for neighborhood improvement projects	1. Prioritize projects ( <i>FC Moves, Planning</i> ) <ul style="list-style-type: none"> <li>2. Submit Budgeting for Outcomes (BFO) offer for funding (2015/2016)</li> <li>3. Look for grant opportunities (e.g., MAP-21, FASTER), if needed</li> </ul>	Short/Mid-term
5	Implement neighborhood improvement projects*	1. Finalize design ( <i>various departments</i> ) <ul style="list-style-type: none"> <li>2. Coordinate with ongoing maintenance programs for potential implementation opportunities (<i>various departments</i>)</li> </ul>	Short/Mid-term

\* See project list and map on next page

Timing: Short-Term (1-2 years); Mid-Term (3-5 years); Long-Term (5+ years)

will need to be secured. As described previously, in some cases the funding sources can dovetail with the Lincoln Corridor project, and in some instances the funding sources may be different.

## 5. Implement neighborhood improvement projects

Neighborhood improvement projects include smaller projects that address longstanding existing deficiencies and enhance neighborhood livability. Some of these projects were already identified in previous plans (e.g., Northside Neighborhoods Plan, Pedestrian Plan), and some projects are new ideas that have arisen during the public process for the Lincoln Corridor. The list of potential neighborhood projects was refined to best align with the corridor vision and objectives and meet realistic expectations for implementation.

This map and chart identifies projects and locations for proposed neighborhood improvement projects surrounding the Lincoln Corridor. The projects are not arranged by priority.



## Neighborhood Improvement Projects

#	Location/Neighborhood	Project Description	Source	Project Phasing	Cost Estimate
<b>A</b>	Brewery Destinations	Wayfinding to provide routes between breweries that do not cut through Buckingham Neighborhood	LCP	Short-term	\$1,000
<b>B</b>	East Vine Drive – near Lemay Avenue (north side, Alta Vista area)	Transit stop improvement: upgrade existing bus stop to add new shelter and pad	PP	Short-term	\$10,000
<b>C</b>	Lemay Avenue – between Andersonville Neighborhood and Streets Facility	Push-button pedestrian signal, crosswalk	LCP	Short-term	\$80,000
<b>D</b>	Lemay Avenue – between Buffalo Run Apartments and Wal-Mart (east side)	New sidewalk	PP	Short-term	\$10,000-15,000
<b>E</b>	Lemay Avenue – Buckingham Street and Lincoln Avenue (east side)	Interim asphalt sidewalk; two options: A) along east side of existing Lemay Avenue B) along dedicated ROW of realigned Lemay Avenue (10th Street to future residential project)	PP LCP	Short-term	A) \$60,000 B) \$40,000
<b>F</b>	Alta Vista, Andersonville, and Buckingham Neighborhoods	New gateway/interpretive signage, or entrance Monument for neighborhoods	NNP LCP	Short/Mid-term	\$90,000
<b>G</b>	Andersonville Neighborhood	Relocation/replacement of existing Romero Park to Streets Facility	NNP LCP	Short/Mid-term	\$150,000
<b>H</b>	Buckingham Neighborhood	Signage to reduce impacts from cut-through traffic	LCP	Short/Mid-term	\$1,000
<b>I</b>	Buckingham Neighborhood – 1st Street (west side); 3rd Street (east side)	New sidewalks	PP LCP	Short/Mid-term	\$150,000-300,000
<b>J</b>	Buckingham Neighborhood – between 1st Street and 3rd Street near Lincoln	Alley improvements including ROW acquisition and paving of alley to provide better access for neighbors	NNP PP	Short/Mid-term	\$140,000
<b>K</b>	Lemay Avenue – Vine Drive to Lincoln Avenue (both sides)	Permanent sidewalks, curb and gutter; concurrent with realigned Lemay Avenue; estimate includes ROW	PP LCP	Long-term	\$200,000-400,000

### Source of Project:

NNP - Northside Neighborhoods Plan (2005)

PP - Pedestrian Plan (2011)

LCP - Lincoln Corridor Plan (2014)

### Timing of Projects:

Short-Term (1-2 years)

Mid-Term (3-5 years)

Long-Term (5+ years)

## Performance Indicators

Performance indicators are provided as measures by which the project can be tracked and evaluated over time as the Preferred Plan is implemented. Performance indicators are most effective if the city monitors pre-construction conditions and compares this with conditions over time as the project evolves to get a sense of the project's impact and longer term effects. The performance indicators are focused on three primary areas: increased safety for all user groups, increased multi-modal usage, and redevelopment activity:

- **Multi-modal level of service.** This is a common method of measuring automobile traffic flow along street corridors and at intersections. The street corridor or intersection is given a grade (A through F) based on congestion and the amount of time it takes to travel the corridor or get through identified intersections at peak periods. Roads that are not large enough to handle traffic capacity have level of service F. The level of service along the Lincoln Corridor can be monitored to see if it improves, worsens, or stays the same following improvements to the corridor.

- **Transit ridership.** Increased multi-modal transportation usage is a citywide goal. Tracking transit ridership along the corridor is a key indicator of whether transit usage has increased along the corridor.
- **Bicycle usage.** This is another measure of multi-modal transportation usage. Measuring bicycle lane usage, perhaps by periodic hand counts during peak period commuting times and during off-peak hours, would allow the city to assess corridor usage by different types of cyclists. The city could compare a pre-construction bicycle count to post-construction conditions to assess the effectiveness of the corridor project in promoting bicycle use.
- **Accidents.** Safety is a key objective of the project. Comparing auto and bicycle accident prevalence before and after corridor construction, as well as over time, would allow the city to demonstrate the effectiveness of the corridor improvements in increasing safety along the corridor.
- **Stormwater infrastructure.** A key objective of the plan is to reduce the requirement for stormwater infrastructure by incorporating Low Impact Development (LID) techniques such as rain gardens and permeable pavements along the corridor. The performance of these techniques, as well as the long term capital and maintenance costs associated with these improvements, can be monitored over time to determine their effectiveness and cost savings.

## Next Steps

The immediate, short term next steps for the project in 2014 are provided for both the Lincoln Corridor and Neighborhood Improvements:

### Lincoln Corridor

1. Construct interim sidewalk improvements in front of Woodward Technology Center on the south side of Lincoln.
2. Secure funding for developing final design/construction plans.
3. Prepare final design/construction plans and obtain approvals.

4. Finalize phased construction of Lincoln Corridor. A phased approach will be explored that constructs the roadway framework first with enhancements added later, such as enhanced landscaping and amenities.

## Neighborhood Improvements

1. Implement Phase I transit enhancement improvements.
2. Secure funding for neighborhood improvement projects.
3. Implement neighborhood improvement projects, as funding sources allow.



The Lincoln Bridge



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# APPENDICES

The appendices listed below are provided under separate cover and are available online at [fcgov.com/lincoln](http://fcgov.com/lincoln).

## Appendix A Phase I Vision

- A-1 Transportation Analysis
- A-2 Phase I Community Engagement Summary

## Appendix B Phase II Alternatives

- B-1 Alternative Budgetary Cost Estimates
- B-2 Rail Trolley Analysis
- B-3 Phase II Community Online Survey Summary
- B-4 Alternatives Evaluation Summary

## Appendix C Phase III Preferred Plan

- C-1 Lincoln Corridor Phase III Online Survey and Open House Summary
- C-2 Business and Resident Concerns & Responses
- C-3 Transit Route Alignments Chart
- C-4 Preferred Plan Budgetary Cost Estimate

## Appendix D Lincoln Corridor Technical Drawings

Under separate cover - not included with this document.