



**BRIGHTON
BOULEVARD**
REDEVELOPMENT PROJECT

North Denver Cornerstone Collaborative
An initiative of Mayor Michael B. Hancock

April 2014





MICHAEL B. HANCOCK
MAYOR

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Dear Brighton Boulevard Stakeholders:

Denver is an optimistic and progressive city that offers a high quality of life for all. To maintain our momentum, we must continue toward our goal to becoming a leading global city. Through a variety of significant projects along our Corridor of Opportunity – the nearly 23-mile stretch between Denver Union Station and Denver International Airport – we are well on our way to achieving that goal. In 2013, I formed the North Denver Cornerstone Collaborative (NDCC) to strategically align six key planning efforts in the Globeville, Elyria and Swansea neighborhoods. These catalytic projects will better connect these unique and historic neighborhoods to resources and opportunities.

As part of the NDCC, the Brighton Boulevard Corridor Redevelopment is a transformational project that provides an opportunity to create an inviting gateway to and from downtown Denver. It encourages innovative development that mixes the new with the old, and offers a genuinely unique experience for all. The following plan will help guide the redevelopment of this corridor moving forward.

Through a significant public outreach effort, we received valuable recommendations for four unique character zones that make up this gateway corridor. I am confident this plan supports a friendly multimodal approach where pedestrians, bicyclists, and small and large vehicles can safely co-exist. This plan also ensures that we will preserve the existing use of this corridor as a lifeline for many businesses as we prepare for future redevelopment and uses of this corridor.

I would like to thank Councilwoman Judy Montero for her tireless effort to encourage creative thinking and visioning for the future of North Denver. In addition, residents and land and business owners along this corridor have been instrumental in our planning process. Your involvement is appreciated.

This is a bold vision for Brighton Boulevard. As we continue to move forward, we are committed to leveraging all projects to create significant benefits for not only these neighborhoods, but for the entire Denver Metro region.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael B. Hancock", with a long horizontal flourish extending to the right.

Michael B. Hancock
Mayor





Acknowledgements

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<http://www.denvergov.org/infrastructure/PolicyandPlanning/CurrentProjects/BrightonBoulevardCorridor/tabid/443430/Default.aspx>



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INTRODUCTION

The vision for Brighton Boulevard is to create an engaging, connected, multimodal corridor. Brighton Boulevard serves as an entry to downtown from Denver International Airport (DIA) and I-70, provides access to the National Western Stock Show Complex and is the spine of the River North neighborhood. Implementing this vision will build upon this corridor's identity and further catalyze redevelopment and reinvestment in the area. The Brighton Boulevard Redevelopment Project is Phase 2 of a planning process being completed by the City of Denver to develop an ultimate vision for the corridor, in keeping with the City's desire to facilitate safe, multimodal connectivity in the area. The process engaged the community through both public and one-on-one meetings so that decisions could be made relative to the final cross sections for Brighton Boulevard from 29th St. to the Denver city limits at York St.

PROJECT PROCESS

Working with the City's project management team(PMT); consisting of representatives from Public

Works, Development Services, Community Planning and Development, Parks and Recreation, Economic Development and the Mayor's Office; the project team examined past studies, explored the corridor's opportunities and constraints and documented potential trade-offs that exist when implementing desired elements in a constricted environment. Throughout several months of one-on-one meetings with stakeholders and two interactive public meetings, several reoccurring themes were documented that help shape the plan's goals and informed the development of the recommended cross sections.

The themes that emerged in public meetings and one-on-one meetings with stakeholders were:

SAFETY

The public felt that safety and security, particularly in the case of how bikes and pedestrians interface with truck and vehicular traffic, was a critical element of the cross section design. The importance of buffer zones and need for sufficient separations between modes were cited by the public. Also noted was that the corridor will continue to serve a diverse group



Phase 1 multi-modal implementation includes dedicated space for bikes, pedestrians and vehicular traffic

of users with different mobility needs including increasing bike/pedestrian users, continued truck/delivery and bus traffic, mixed-use redevelopment and maintaining private-property access. It is vital that the designs ensure safety for all users both today and in the future. Proper lighting and effective signage were identified as measures to increase visibility and inform the public on proper use of the improvements.

DIFFERENTIATE BETWEEN BICYCLISTS AND PEDESTRIANS

The community identified a need to allow ample and clearly dedicated spaces for both bicyclists and pedestrians. Protected bike lanes with an emphasis on ensuring visibility and predictability of cyclists, specifically at intersections and driveways, were highlighted by the bike community. Shared facilities, such as a multiuse pathway, were not favored.

A SUSTAINABLE STREETScape

Stakeholders identified their support for the project's approach to include sustainable measures focused on incorporating water quality treatment in the design and reducing the heat impact of the urban environment through the installation of landscaped areas and street trees.

AN ARTS DISTRICT IDENTITY

Brighton Boulevard is a gateway to Downtown, a link to the National Western Center and part of the RiNo Arts District. As a key connection the importance of providing opportunities for art and creative elements along the corridor was noted. It was deemed essential to ensure that the design emphasizes Brighton Boulevard's sense of place and reflects the unique aspects of the River North neighborhood such as the industrial character of the existing commerce and the South Platte River to the West.

SUPPORT FOR PHASED IMPLEMENTATION

Improvements, even small ones, that could be implemented in the next few years were cited as having the potential to provide real value to the community and may create stimulus to accelerate additional improvements. Many stakeholders were highly supportive of a phased approach to the ultimate vision that allows block-by-block, property-by-property or character area-by-character area

improvements to be installed as opposed to an all or nothing implementation for the entire corridor.

PROJECT VISION

Building upon past studies, understanding the existing conditions and utilizing the input received from stakeholder interviews and feedback at public meetings, the project team concluded that ultimate vision cross section should:

- Include all modes of travel and allow for the implementation of a corridor defining amenity zone that includes landscape elements/tree lawn and opportunity for art.
- Include a phase 1 implementation strategy that fits within the existing right-of-way that would allow for near term improvements.
- Include an ultimate vision that allows for redevelopment to implement the final vision for the corridor.

RECOMMENDATIONS

The recommendations from this study will enable the City to clearly communicate to developers, partner

agencies, and the public about the required cross section elements for Brighton Boulevard. Key that will guide the City toward the ultimate vision:

The four Character Areas defined in this study (Main Street; Education, Industry and Development; National Western Center; and Northern Neighborhood) are based on current zoning and land use. The need and location of certain streetscape elements was based on the projected redevelopment and/or continued existence of adjacent uses. Should land uses or priorities change prior to the ultimate vision being implemented, the recommendations should be adapted to meet the new conditions.

Brighton Boulevard is one of several significant concurrent projects that will transform the area including I-70, the North Metro Rail Line, and the National Western Center. As these projects are realized, market conditions may accelerate additional redevelopment beyond what was documented or envisioned in this study.

The recommendations include both a near term (Phase 1) vision that occurs in the existing right-of-way and ultimate vision build-out that includes

This marks a tremendous step forward for this important part of Denver. Clarifying these key elements of the future Brighton Boulevard gives developers the detail they need to start immediately making changes while also positioning the City to maintain our momentum to advance the design and begin implementation."

— Kelly Leid, project manager for Mayor Hancock's North Denver Cornerstone Collaborative (NDCC)

improvements outside the existing right-of-way. Both include safe and sufficiently sized facilities for all modes of travel as well as an amenity zone to support the creation of Brighton Boulevard's gateway identity.

As redevelopment occurs along the corridor, implementation of the ultimate vision may be possible with improvements made by the parcel's developers coordinated with the City.

Along existing properties that intend to remain in place or are repurposed, the opportunity to implement the ultimate vision could be constrained depending on the lot configuration and building set back. However, with the phased project approach setting a consistent curb line and location for the amenity zone, these properties will still allow for multimodal connectivity.

IMPLEMENTATION

The recommendations in this plan call for Brighton Boulevard to be designed to suit four distinct Character Areas with both a near term solution and an ultimate vision. With vision in place the City along with stakeholders in the corridor can collaboratively move forward implementing block-by-block or property by- property improvements. City earmarked funds alone can incrementally progress the final design as redevelopment takes place while leveraging funds from concurrent projects that can accelerate shared improvements. The feedback received from the public preferred this approach versus waiting for a large scale, corridor-wide implementation.

Given the current development interest in the Brighton Boulevard corridor particularly between 29th-35th St. the opportunity exists to implement much of the ultimate vision on one or both sides of the street instead of a phased approach. As the design progresses consideration should be given to how to transition between the newly constructed improvements and the surrounding context.



Introduction

CONTEXT AND PROJECT HISTORY

For years, Brighton Boulevard has been a short cut or back door into downtown Denver. Historically home to many long standing industrial businesses, the boulevard is experiencing an exciting mix of new development and adaptive reuse to compliment the remaining businesses. Efforts to define a vision and footprint for right-of-way improvements have long been a challenging endeavor. Numerous studies over the past decade have resulted in recommended cross sections ranging from 80 to 120 feet.

CORRIDOR OF OPPORTUNITY/ NORTH DENVER CORNERSTONE COLLABORATIVE

The City of Denver has several major redevelopment and infrastructure projects taking place that provide a connection from Denver Union Station to Denver International Airport. Named the *Corridor of Opportunity* by Mayor Michael B. Hancock, the nearly 23-mile stretch is one of the most compelling commercial investment opportunities in the world, with thousands of developable acres.



Vicinity map

Reconciling Brighton Boulevard's role as a major arterial moving increasing traffic volumes with the growing demand for multimodal options as well as a recent surge in redevelopment efforts along the corridor has emphasized the need for clear direction. The ultimate vision establishes Brighton Boulevard as an engaging, connected, multimodal corridor meeting the needs of a wide variety of users. As an entry to downtown from DIA and I-70, access to the National Western Center and a centerpiece to the River North Neighborhood, Brighton Boulevard's location and current redevelopment will turn this corridor into an important gateway to downtown.

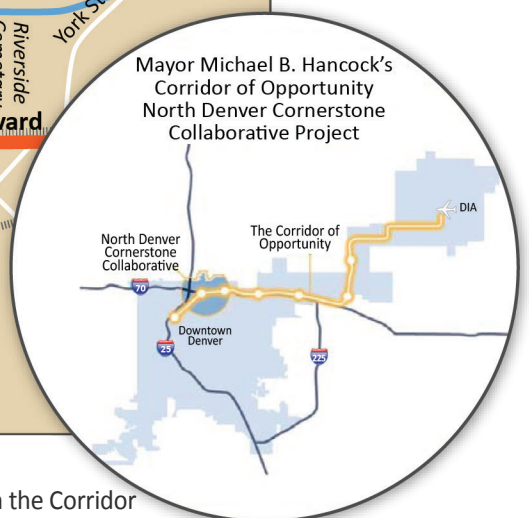
"What we build today will create Denver's tomorrow. Signature development projects will strengthen our economy, create jobs and improve neighborhoods."

— Mayor Michael B. Hancock

a connected community and energize a gateway to downtown Denver.

The Brighton Boulevard Redevelopment Project is one of six concurrent projects that make up the North Denver Cornerstone Collaborative – a coordinated effort by Mayor Michael B. Hancock and headed by Kelly Leid to ensure integrated planning and deliberate connections among the six major

Within the Corridor of Opportunity is a vibrant community consisting of Globeville, Elyria and Swansea neighborhoods that have a rich history of making fundamental contributions to the city. Currently, there are six different redevelopment projects in this cornerstone that provide a unique and historic opportunity to rebuild



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redevelopment and infrastructure projects. These projects provide a unique and historic opportunity to rebuild a connected community and energize a gateway to downtown Denver.

North Denver Cornerstone Collaborative (NDCC) are projects include:

BRIGHTON BOULEVARD REDEVELOPMENT PROJECT

Overseeing effective public infrastructure improvements to the boulevard — the gateway to downtown and the National Western Complex from I-70 — and continuing the momentum of reinvestment that is beginning to emerge along this important corridor.

NATIONAL WESTERN COMPLEX

Creating, in partnership with the National Western Stock Show (NWSS), Colorado State University, the City and County of Denver, the Denver Museum of Nature & Science and History Colorado a master plan that would turn the facility into an all-year round destination. NWSS reconfirmed their commitment to creating a new vision for the next 100 years and its mission to develop a strong sustainable program in the City of Denver. The new National Western Center (NWC) will focus on three key pillars;

- **Education** - With K-20 partnerships, this component will focus on the well beings of humans, animals and the environment. The NWC will be the hub for agricultural education in the region with a state of the art animal performance center, animal care and world-class research.
- **Economic Development** - The NWC will be a catalyst for sustainable economic development through job creation, trade shows, restaurants and hotels among other opportunities.
- **Tourism and Entertainment** - The NWC will host a variety of events that will showcase our urban western heritage. The tourism and entertainment component will include the annual stock show, rodeo, equestrian events, outdoor and recreational exhibitions, concerts and other types of events. A special Western Cultural Heritage Program will also provide families and individuals with a unique western heritage experience in an urban setting.

INTERSTATE 70 RECONSTRUCTION

The Interstate 70 corridor between I-25 and Tower Road is Colorado's only east-west Interstate connection serving as an essential backbone of state and regional commerce, moving residents and tourist between the airport, downtown Denver, and the communities and resorts to the west. The viaduct (the elevated portion of I-70 on a bridge) was constructed in the early 1960s, has reached the point where it must be reconstructed

to safely convey the traveling public and freight that keeps the Colorado economy moving.

For the first time in ten years of extensive study, which includes reviewing over 200 options, the Colorado Department of Transportation (CDOT) recently recommended a preliminary "preferred alternative" for the I-70 East Environmental Impact Statement (EIS). The Partial Cover Lowered (PCL) option on the Existing Alignment would remove the elevated section of I-70, lower the highway below grade, cover the highway by Swansea Elementary School and reconnect the Elyria and Swansea neighborhoods. This alternative was developed over many years of work with the community and has broad public support, including from elected officials. In April 2013, the project team held public meetings attended by more than 400 people, during which the community urged CDOT to move forward with this alternative.

The city is collaborating with the Colorado Department of Transportation and area stakeholders to ensure smart improvements to I-70 between I-25 and Tower Road that help reconnect Denver neighborhoods.

RIVER NORTH

A vibrant community with residential and mixed-use land makes up the River North project. The current planning team is looking for creative ways to reconnect this energetic community to the rest of the city. Enriching the use of the South Platte River is one component of the project that can increase the residential and mixed-use component of River North. Home to an evolving RiNo Arts District, newly constructed residential units, restaurants, bars, breweries and office spaces, River North's evolution is expected to continue over the next twenty years through transit oriented development near 38th St. and Blake St., as well as mixed-use development.

GLOBEVILLE, ELYRIA AND SWANSEA NEIGHBORHOOD PLANS

A new planning process for Globeville began in June 2012 and for Elyria and Swansea in January 2013. These planning processes involve looking comprehensively at a vision for the future of these neighborhoods. The neighborhood plans will ultimately be adopted by the Denver City Council and will serve as official policy for future decision making on both land use, urban design and infrastructure and will identify key partnerships that will aid in realizing the vision contained within the official plans. The NDCC's role is ensuring that the Elyria, Swansea and Globeville neighborhood plans are aligned with each other and with the myriad projects happening in and around these historic neighborhoods.

RTD STATION DEVELOPMENT

Elyria, Swansea, and Globeville are in a unique location that will be home to several rail stations via the East, North Metro and Gold Rail Lines. The rail lines will not only enhance the community's connection to other parts of the city but it will transport Denverites and tourists to and from Denver Union Station, Denver International Airport, National Western Center and Arvada with connecting transportation options at Denver Union Station. NDCC is working with the Regional Transportation District and city agencies to coordinate the planning and implementation of new stations that will serve the area and connect downtown to the airport, including:

- **EAST RAIL LINE 38TH ST/ BLAKE ST STATION**

The East Rail line is a 22.8-mile electric commuter rail transit line that runs between Denver Union Station and Denver International Airport. The rail line will connect these two very important areas while serving adjacent employment centers, neighborhoods and development areas.

- **GOLD RAIL LINE/41ST ST STATION**

The Gold Rail Line is an 11.2-mile electric commuter rail transit corridor that connects downtown Denver to Wheat Ridge, passing through northwest Denver, Adams County and Arvada. With seven stations, Globeville's station will be located at 41st Ave and Fox St. The Gold Rail Line is in full construction and is scheduled to open to the public in 2016.

- **NORTH METRO LINE/NATIONAL WESTERN COMPLEX STATION**

The North Metro Rail Line is an 18.5-mile long commuter rail line that will run from Denver Union Station through Commerce City, Thornton and Northglenn to Highway 7 in North Adams County. Its first stop will be located at the National Western Center then moving north.

EXISTING CONDITIONS

Today Brighton Boulevard finds itself at the center of the rapidly changing re-use, redevelopment and urban infill trend taking place north of downtown. It is envisioned that Brighton Boulevard remain



A popular route for taxis. Brighton Blvd is a gateway to downtown from the airport

an important arterial vehicular connector serving industrial users between downtown, I-70, and the National Western Center. However, there is very little infrastructure in place to provide a comfortable, safe and defined network for multimodal users to access the rapidly increasing number of destinations along the corridor.

RIGHT-OF-WAY

The existing right-of-way along the corridor is generally 80 feet with sections north of I-70 as narrow as 58 feet. Where no curb and gutter exist the shoulder often serves as parking for the adjacent properties and buildings. For several of the buildings, loading docks are located directly on the right-of-way line, and the shoulder within the right-of-way is used for loading/unloading zones.



Parked Vehicles encroach into the right-of-way

DRAINAGE

Curb and gutter exist sporadically at intersections or along newer developments. The topography along the corridor is very flat and standing water after even minor events is not uncommon. Without a curb and gutter, the drainage sheet-flows to area inlets placed along the corridor and outflows directly to the South Platte River to the north.

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Standing water is common after a storm event

ROADWAY SECTION

The current pavement section for Brighton Boulevard south of I-70 is approximately 48 feet, with four 12-foot lanes or larger. Sidewalk and curb and gutter are limited in the corridor. Scattered locations where it has been constructed are the north and south edges of the corridor (near 44th St. and 29th St.) and in front of newer developments such as the Block 32 at RiNo Apartments (3200 Brighton Blvd.). North of I-70 the road section varies between 2 and 4 lanes with and without curb, gutter, sidewalk and on-street parking. Width varies from 68 feet at 46th Ave. to the 36 feet shoulder to shoulder section from Race St. to York St.



Often no definition exists between travel lanes to building frontage

DRIVEWAYS

The majority of the existing driveway configurations along Brighton Boulevard do not delineate access but instead allow open access that covers the entire property width and multiple buildings. Many of the existing properties; due to building configuration, loading docks and parking, often encourage vehicles to encroach into the shoulder within the existing right-of-way.



Vehicles park along building fronts within the right-of-way

BUS STOPS

There are sixteen bus stops along Brighton Boulevard serviced by Routes 47X and 48. Route 12 crosses Brighton Boulevard at 38th St. and has stops on both sides of the intersection. Most of the existing bus stops are below standard. Newer bus stops such as 31st St. include enhancements such as curb and gutter, separation from the road (wide sidewalk), updated streetscaping, a bench, and good visibility for other motorists to see a bus pulling over. Most bus stops are not ADA-accessible and safety and visibility are a concern. There are no curb ramps, benches, or shelters at most of the stops along Brighton.



No sidewalk or shelter exists at this heavily used bus stop at 38th St. across from the PepsiCo facility

SIDEWALKS

Pedestrian access is very limited along Brighton Boulevard. Sidewalks exist only in newer developed portions of the Brighton Corridor, specifically south of 31st St. and along the older section developed just north of I-70. A majority of the corridor has no sidewalk and pedestrians are forced to walk in the shoulder and in many cases around automobiles parked in front of businesses.



Sidewalks exists at new construction.



Bike and Pedestrian acces is poor along Brighton Boulevard

BICYCLE FACILITIES

There are no bicycle facilities within the right-of-way. Bicycle commuters face many of the same obstacles pedestrians encounter with parked or encroaching vehicles and poorly drained undefined street edges in addition to sharing the roadway with a significant amount of truck traffic.



No clear designated bike facilities exist along Brighton Boulevard

STREETSCAPE

Most of the Brighton Corridor has no streetscape. The edges of Brighton Boulevard act as parking for local businesses and pedestrian queuing areas for those waiting for the bus. The material along the sides of Brighton includes dirt, gravel, and asphalt.



Curb and gutter exists only at the corner at 31 St.

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FIGURE 1

Brighton Corridor Recommended Projects From Previous Planning Efforts

Land Use

- L1- Relocate Park-and-Ride to 36th St and Wazee St (5,6)
- L2- Orient opening day commuter rail platform to 36th St instead of 39th St (5, 6)
- L3- 38th St and Blake St station (Existing)
- L4- Evaluate a station along 36th St between Walnut St and Blake St (5, 6)

Bridges

- B1- Bike/ ped bridge over RR tracks (1, 3, 5, 6)
- B2- Ped bridge over RR, at 31st St or 33rd St (5, 6)
- B3- Ped plaza bridge at 36th St over S Platte; relocated from 38th St proposal (1, 3, 5, 6, 7)
- B4- Bike/ped bridge over RR (1, 3, 5, 6)
- B5- If Park-and-Ride does not get moved, build ped bridge over 38th St (5, 6)
- B6- Reconstruct the Blake St bridge (5, 6)

Intersections

- I1- Gateway treatment at 29th St and Brighton Blvd and new signal (3)
- I2- Gateway treatment at 31st St and Brighton Blvd (3)
- I3- Arkins Ct and 31st St signalization (7)
- I4- Brighton Blvd and 36th St additional signal for ped connectivity (5, 6)
- I5- 36th St and Blake St intersection improvements, ped focus (3, 5, 6)
- I6- Brighton Blvd and 38th St intersection improvements (3)
- I7- Reconfigure 38th St/Walnut St/Marion St intersection (5, 6, 7)
- I8- Cul-du-sac Marion St, making 38th St "T" onto Walnut St (5,6)
- I9- Pedestrian treatment for 40th St and Blake St (5, 6)
- I10- Pedestrian treatment for 40th St and Walnut St (5, 6)
- I11- Traffic signal at Walnut St, 40th Ave and Franklin St (5, 6)

Non-Motorized

- N1- Sidewalk on both sides of 31st St (5, 6)
- N2- Bike/ped connection on 31st St from S. Platte River to bridge (3)
- N3- Shared use sidewalk on 31st St between the RR and Larimer St (1)
- N4- Sidewalk on both sides of Delgany St (5, 6)

- N5- Bike/ped connection to greenway, bridge over S. Platte (B3) (3, 5, 6)
- N6- Further study on 36th St between Arkins Ct and Larimer St (1)
- N7- Sidewalk on both sides of Arkins Ct (5, 6)N8- Ped path on Wazee St between 36th and 38th St, if pnr does not move (5, 6)
- N9- Sidewalk on both sides of 38th St (5, 6)
- N10- Further study on 38th St between Arkins Ct and Walnut St (1)
- N11- Sidewalks on Blake St and Walnut St between 38th and 40th St (5, 6)
- N12- Further study on Blake St between 36th St and 40th St (1)
- N13- Sidewalk on both sides of 40th St (5, 6)
- N14- Bike lane on 40th St between Blake St and Williams St (1, 5, 6)
- N15- Sidewalk on both sides of 40th Ave (5, 6)
- N16- Bike lane on Blake St and sharrow on 40th Ave (1)
- N17- Transition on Marion St between Walnut St and Larimer St (1)
- N18- Bike lane on Arkins Ct from 38th St to 46th Ave (8)
- N19- Sidewalk, streetscape and ped crossing on Baldwin Ct, 46th to 48th Ave (8)
- N20- Bike lane on Brighton Blvd between 47th Ave and Race St (1)
- N21- Sidewalk, streetscape and ped crossing on Brighton, Race Ct to 46th Ave (8)
- N22- Sidewalk, streetscape, ped crossing and sharrow on 48th Ave (8)

Multi-Modal

- M1- Traffic calming on Blake St (5, 6)
- M2- Traffic calming on Larimer St (5, 6)
- M3- Convert Downing St to two-way (5, 6)
- M4- Reconstruct the 38th St Underpass (3, 5, 6, 7)
- M5- Brighton Boulevard improvements (3, 4, 5, 6, 7)**
- M6- Extend Baldwin Ct and 48th Ave to Brighton Blvd (8)

Vehicular

- V1- Convert Blake St to two-way (5, 6)
- V2- Convert Walnut St to two-way (5, 6)
- V3- Extend Wynkoop St; add new 33rd and 34th Streets (5, 6)
- V4- Realign Arkins Ct away from S Platte (2, 3)
- V5- New 37th St between Wazee St and the S Platte (5, 6)
- V6- Convert Marion St to two-way (5, 6)
- V7- New 39th St between Blake St and Larimer St (5, 6)
- V8- New Marion St between 39th St and 40th St (5, 6)
- V9- New streets at 41st St, 42nd St and 43rd St connecting Wynkoop St to Brighton Blvd (5, 6)

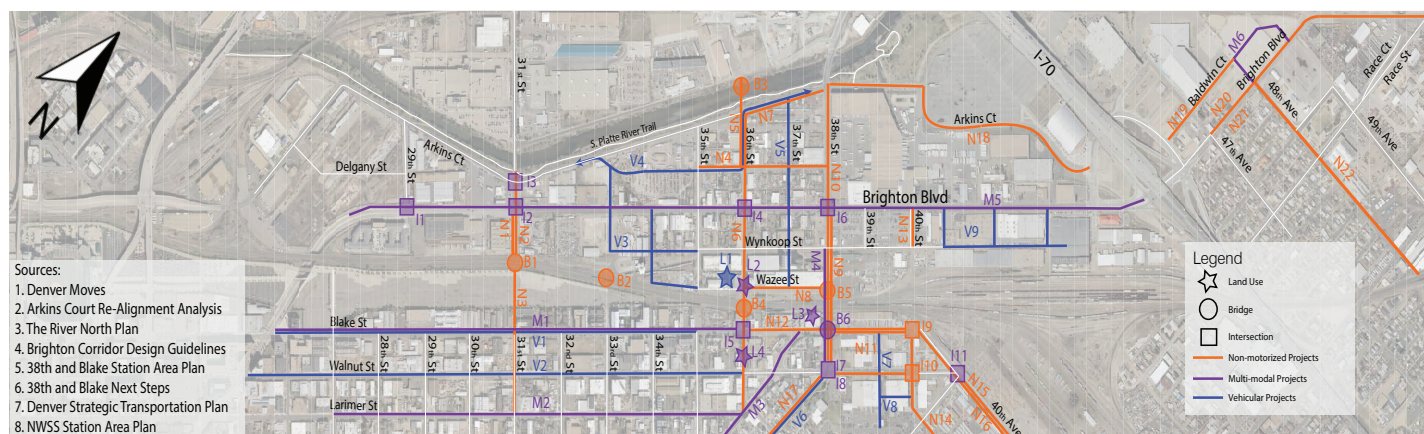


Figure 1 summarized recommended projects found in previous studies

PREVIOUS STUDIES

There are a number of planning documents published over the past decade that inform and affect the future planning of the Brighton corridor. These documents range from general plans for the city, such as Blueprint Denver, to area plans that more specifically address the corridor, such as the Brighton Corridor Design Guidelines. Together, these plans form a comprehensive discussion of the corridor and the greater role that it plays in the city to safely and efficiently move people. The project team reviewed these documents and presented a summary of past recommendations in Figure 1.

BRIGHTON BOULEVARD SURVEY AND TECHNICAL ENGINEERING (2013)

This study was the initial phase of technical design studies along the Brighton Boulevard corridor. It provides the City with information and tools necessary to advance a more detailed analysis including a parking and access study and cross section alternatives analysis, which will ultimately assist the City in developing a conceptual design that meets the vision and character desired for Brighton Boulevard between downtown and the National Western Center.

DENVER STRATEGIC TRANSPORTATION PLAN (2008)

The Strategic Transportation Plan is a multimodal transportation plan initiated by the Denver Department of Public Works, with support from other agencies and stakeholders, to understand and address the current and future transportation needs of the City and County of Denver. This document also served as a unique and innovative approach to identifying future system needs and community values, in order to provide a method to incorporate them into future transportation decisions and solutions.

The plan is geographically divided by travel sheds, which are study areas defined by boundaries that have characteristics and facilities serving similar travel patterns. The River North Travel includes the majority of the Brighton Corridor, from Broadway to I-70. Recent changes to development in this area have triggered an interest in multimodal transportation options; thus, improvement is needed to bicycle and pedestrian facilities and connections to the new commuter rail stations. The plan included the following specific recommendations:

- Cole/Clayton neighborhood connections across 40th Ave.
- 38th Ave. and Blake St. Station operational study

- Transit-oriented (high density and mixed use) development around the station
- Brighton Boulevard reconstruction from 31st to 44th St.
- Arkins St. and 31st St. signalization
- Downing St./ Marion St./38th St., geometric and signal improvement
- 38th St. roadway widening from Blake St. to Brighton Boulevard
- Additional river crossing at 35th or 36th St.
- Complete multimodal reconstruction of Brighton Boulevard

THE RIVER NORTH PLAN (2003)

Notably the first area for which a plan was adopted pursuant to the City's Blueprint Denver plan, the industrially-gritty River North neighborhood is supported by two defining physical attributes—the South Platte River greenway and the neighborhood's main transportation arterial, Brighton Boulevard. The plan framework consists of two north–south corridors and one east–west corridor connecting three districts, four neighborhoods and downtown Denver. The Plan calls for the creation of a dynamic and compatible mixture of uses that serves and takes advantage of proximity to downtown, access to I-70, and the proposed rapid transit station in the vicinity of 40th Avenue and 40th Street. The Plan calls for creating attractive vehicular and pedestrian friendly connections within River North and to the surrounding neighborhoods and downtown.

The focus of the River North Plan was to promote the area, and identify appropriate locations for growth, identify the issues and opportunities to establishing a multimodal transportation network, and provide direction for a regulatory environment that makes mixed use development possible. This plan was an effort to protect and sustain the South Platte River by analyzing and planning the eleven-mile corridor that goes through Denver from 20th Ave. to the northern border of the City.

DENVER MOVES (2011)

This plan expanded the vision for non-motorized transportation and recreation in Denver, by addressing the connectivity of on and off-street infrastructure to create safe and comfortable corridors that link various land uses and parts of the city. It is a dynamic, action-oriented plan that builds on existing plans, contains recommended improvements, as well as a phasing plan for implementation.

38TH AND BLAKE NEXT STEPS TRAFFIC OPERATIONAL STUDY (2011)

The purpose of this study is to review the recommendations carried forward in the 38th Ave. & Blake St. Station Area Plan for engineering and operational feasibility and, if necessary, to develop new or revised recommendations based on this review through previous studies, traffic modeling and public and stakeholder involvement.

38TH AND BLAKE STATION AREA PLAN (2009)

This plan, conducted by Denver Community Planning and Development, is intended to guide public and private development infrastructure investment decisions as well as public regulation of the built environment in the vicinity of the 38th Ave. and Blake St. Station. The plan articulates immediate and longer-term goals, issues, and recommendations for the future.

BRIGHTON BOULEVARD: MANAGING TRAFFIC WHILE CREATING PLACE (2011)

This study documented the complexities of Brighton Boulevard and explored the trade-offs associated with better utilizing the existing 80' right-of-way versus expanding the right-of-way to 100 or 110', the challenges those solution present for adjacent land and existing businesses and necessary steps to develop this important arterial.

ARKINS COURT RE-ALIGNMENT ENGINEERING ASSESSMENT (2011)

This plan is a follow-up on the River North Greenway Master Plan, which recommended that "Arkins Court be relocated or moved away from the South Platte River wherever feasible while maintaining parallel through streets and/or local access between 31st and 38th Aves. in order to provide a water quality area. This study looks at the feasibility of removing Arkins Court and developing a parallel connection further from the river.

INTRODUCTION



PUBLIC ENGAGEMENT

During the eight months of this project, public engagement played a vital role in shaping the outcome. There were two public meetings held to inform and solicit feedback regarding opportunities and constraints within the corridor. The first meeting, held in September 2013 and attended by over 100 people, presented the recommendations of previous studies, land use and zoning for the area and the existing and recommended bicycle network outlines

in Denver Moves. Network options exploring the roles adjacent streets play along the corridor were presented along with recommendations for further exploration based on right-of way limitations, traffic demand, and concurrent project conflicts. Feedback was requested and collected regarding the creation of four Character Areas including area extents and the prioritization of streetscape elements.

FIGURE 2

BRIGHTON BOULEVARD REDEVELOPMENT PROJECT

A North Denver Cornerstone Collaborative Project

This information below provides a high-level look at the comments submitted at September 19 public meeting. 104 people signed-in upon arriving at the meeting. A 'small handful of individuals didn't sign in. And some people that signed in, did so on behalf of an individual attending with them.

For each character area, the optional streetscape elements have been assigned an average rating based on the rankings of those that completed comment forms with one being most important, 2 being next-most important, etc. While the "Other" category ranked high in many character areas, the majority of comments fell

into one of three or four categories: Stormwater, parks, arts integration and detailed bike elements

Main Street Zone (29th St. to 38th St.)

Base streetscape elements in this zone include:

- Center Turn Lane/Striped Median
- Sidewalk amenity zone
- Two traffic lanes each direction
- Sidewalk

Streetscape Element	Average Rating	Number of Respondents
Bike Facility	1.9	113
Sidewalk Café/Building Frontage Zone	2.1	112
Other	2.3	62
On-Street Parking	3.3	104
Raised/Planted Median	3.6	103

Education, Industry & Development Zone (38th St. to I-70)

Base streetscape elements in this zone include:

- Two traffic lanes each direction
- Sidewalk
- Sidewalk amenity zone

Streetscape Element	Average Rating	Number of Respondents
Bike Facility	1.9	107
Sidewalk Café/Building Frontage Zone	2.7	101
Other	2.9	33
Center Turn Lane/Striped Median	3.3	97
On-Street Parking	3.6	97
Raised/Planted Median	3.8	96

National Western Center Zone (I-70 to Race St.)

Base streetscape elements in this zone include:

- Two traffic lanes each direction
- Sidewalk
- Sidewalk amenity zone

Streetscape Element	Average Rating	Number of Respondents
Bike Facility	1.9	102
Sidewalk Café/Building Frontage Zone	2.8	98
Other	3.0	30
Center Turn Lane/Striped Median	3.2	92
On-Street Parking	3.5	91
Raised/Planted Median	3.7	90

Northern Neighborhood Zone (Race St. to York St.)

Base streetscape elements in this zone include:

- Two traffic lanes each direction
- Sidewalk
- Sidewalk amenity zone

Streetscape Element	Average Rating	Number of Respondents
Bike Facility	1.9	101
Sidewalk Café/Building Frontage Zone	2.6	93
Other	3.2	26
On-Street Parking	3.4	88
Center Turn Lane/Striped Median	3.6	88
Raised/Planted Median	3.6	88

Figure 2 shows public meeting 1 feedback from the public survey was tabulated and used to move forward design concepts

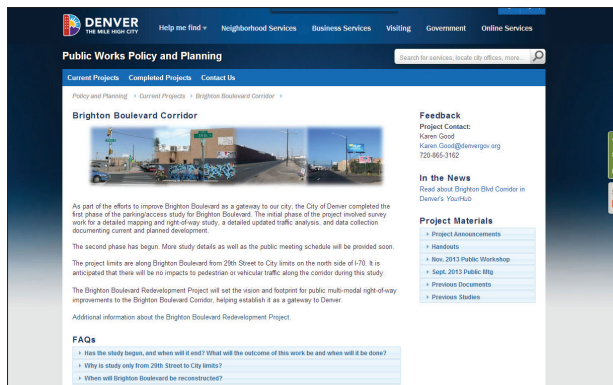
The second public meeting, held in November 2013, presented sustainability strategies to be explored as the project progresses, a path forward and funding strategies being considered by Denver and two section options for each Character Area. Both options included a near term and long term implementation scenarios. Eighty five people participated in the open house/ meeting format offering input on the pro, cons, and trade-offs associated with the options presented.



Public meeting 2 was held at the Exdo Event Center

Denver's website served as an important source of information for stakeholders. A project overview and opportunities for public involvement were made available on a project web page within the City's website. Project maps, public meeting boards, and comment review forms were available for each of the two public meetings. Email updates were distributed at key project milestones to a stakeholder database.

Concurrent with the public meetings and throughout the project timeline the project team engaged with key stakeholders in the area including, National Western Stock Show, PepsiCo., CDOT and identified business owners to provide education on the project and its goals as well as solicit specific feedback including current and future operational need that would assist in developing the alternative the community would support.



*All figures can also be found at:
[http://www.denvergov.org/infrastructure/
 PolicyandPlanning/CurrentProjects/
 BrightonBoulevardCorridor/tabid/443430/Default.aspx](http://www.denvergov.org/infrastructure/PolicyandPlanning/CurrentProjects/BrightonBoulevardCorridor/tabid/443430/Default.aspx)*



PROJECT
PROCESS/
DESIGN
DEVELOPMENT

Project Process/Design Development

The first step in creating a vision for Brighton Boulevard was to define the role it plays through the corridor. The project team met weekly in technical meetings to address the feedback received from the City's project management team (PMT) and one-on-one interviews with stakeholders and develop concepts that would address key issues and shape the designs presented in the public meetings. It was important to understand that the Brighton Boulevard is part of a larger network that can work together to serve all modes of travel, and all current and future development scenarios. By studying the adjacent land uses and current zoning, it became clear that a single solution would not serve the interests of users along the corridor. Network options for vehicular and bicycle traffic were developed to help understand what long term role adjacent streets may play in relieving the pressure that increased traffic on Brighton creates.

Character Areas emerged as a way to subdivide the area as the context and land use changes along the corridor and best provide a solution that responds to the unique needs of that area. Building upon this knowledge of the network, the framework of the neighborhoods, and these defined Character Areas, the team developed a list of issues and objectives for intersections, barriers, bottlenecks, and other streetscape elements in disrepair or non-existent in the corridor. While different solutions may emerge as the character of the area changes that many areas shared similar infrastructure deficiencies.

ISSUES

- Most of Brighton Boulevard corridor has no streetscape. Dirt, gravel and asphalt define the edge for most of its length.
- The ability of bicyclists and pedestrians to travel safely along the corridor is severely hampered by inadequate or non-existent facilities.
- Limited curb and gutter along the corridor with scattered locations on the north and south ends allow access to loading docks and building entrances but also allows parking configurations that can encroach into the shoulder of the roadway.

- Many existing driveways do not delineate access but instead allow for the free flow of vehicular traffic in and out a property's entire width.
- The existing topography is very flat. Very little roadway is defined by curb and gutter, sidewalk and typical driveway access. Stormwater sheet flows across much of the area, including businesses, to inlets placed along the corridor.

PLAN GOALS

To define a vision for the corridor through a roadway section or multiple sections, the design team developed the following plan goals:

- Each section must include all modes of travel and allow for the implementation of some corridor defining tree lawn or amenity zone.
- Each section should include a Phase 1 implementation strategy that fits within the existing 80' right-of-way.

LAND USE SUMMARY

The Land Use Summary maps show the adopted land use visions that affect the project area, including River North, and the Globeville, Elyria, Swansea and Curtis Park neighborhoods. The plans included the River North Area Plan, the 38th St. & Blake St. Station Area Plan and the Globeville and Elyria, Swansea neighborhood plans. As the Globeville and Elyria and Swansea neighborhood planning process is currently ongoing, a current land use vision is unavailable, and was not included on the maps. Detailed planning and design for the Brighton Boulevard corridor will need to support the neighborhood vision as it is developed.

The adopted land use plans contain similar goals. The highest development density, and focus on mixed-use occurs in the transit-oriented development areas around future rail stations. The remaining area are envisioned as a mixed-use, with a focus on residential closer to downtown, and more of an emphasis on industrial closer to I-70 and the Pepsi Bottling Plant. However, in all cases, the overall vision is for a mixed-use district that welcomes new residential and commercial development, but also retains its industrial users and character.



PROJECT
PROCESS/
DESIGN
DEVELOPMENT

The land use visions mapped represent consistent goals, but an evolving vision for the River North area. The River North Plan proposed mixed-use, transit oriented development surrounding the proposed rail station at 40th Ave. However as RTD plans evolved, the station moved to 38th St. & Blake St. Consequently the 38th St. Station area plan concentrates on transit-oriented development around that station, and existing parcels at 38th St. and Brighton Boulevard.

FIGURE 3

Composite Land Use Vision

RIVER NORTH PLAN (2003)

River North projects an image of a place with its own unique identity. It has the excitement of LoDo but has a more eclectic mixture of residents and businesses due to its much more affordable prices. It is a thriving area that has successfully merged mixed uses with multiple modes of transportation. Brighton Boulevard is the gateway into downtown for residents living along the east corridor and for visitors arriving at DIA.

- **TOD:** Consider transit mixed-use or other mixed-use zone districts for other land up to half mile from the station.
- **Residential Mixed Use:** Rezone the residential mixed-use area to Residential Mixed-Use zoning, Commercial Mixed-Use zoning or a combination of both of them. New heavy industrial uses are discouraged in this area. Mechanisms for retaining art related uses should be pursued.
- **River Corridor Mixed Use:** When an existing industrial use ceases operations, it should not be replaced with another industrial use. Zoning should be put in place that assures uses that take advantage of the proximity to the South Platte River. Both residential and commercial mixed-use zone districts should be considered.

38TH & BLAKE. STATION AREA PLAN (2009)

The 38th & Blake station area will become a unique destination district that provides safe and comfortable multi-modal access from the surrounding communities to the rail station, the South Platte River, and between adjacent neighborhoods. Future development of the area will emphasize its industrial heritage, historic neighborhoods, and emerging new residential and arts and entertainment districts; provide a mix of uses where feasible and especially near the station; ensure access and provide enhancements to the South Platte River greenway; provide enough housing and jobs to make non-auto travel modes those of choice; and provide living opportunities for people of all incomes, ages and backgrounds.

LEGEND

- TOD Mixed Use

Commercial Mixed-Use

Residential Mixed-Use

Urban Residential

Single Family Residential

Entertainment, Cultural, Exhibition

Industrial Mixed-Use

Industrial

Open Space
- Road Improvements (per Recommended Projects-July 2013)

Existing Bike Facility (includes bike lanes, shared sidewalks, and signed routes)

Key neighborhood bike and pedestrian connections.

Proposed pedestrian bridge

Neighborhood Boundary

Existing Traffic Signal

Potential Traffic Signal

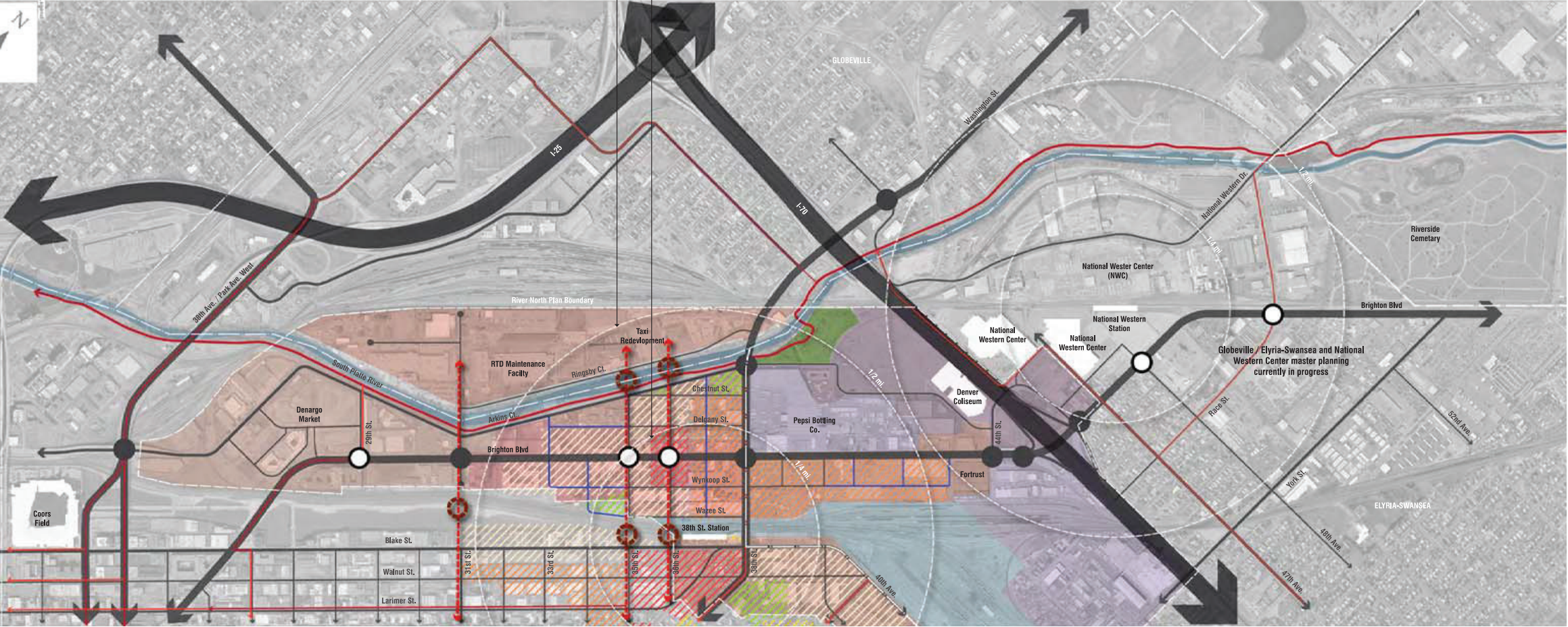


Figure 3 compiles the Land Use Vision as of July 2013



ZONING SUMMARY

The Zoning Summary maps the existing zoning, created in 2010. The zoning generally follows the visions described in the lands use plans, and includes a combination of mixed-use (C-MX) and industrial mixed-use (I-MX) zones. The C-MX

zones are generally concentrated in the southern areas of the Brighton Boulevard corridor, with I-MX on the northern ends, creating a transition to heavy industrial areas.

FIGURE 4

Current Zoning

MIXED USE DISTRICTS (C-MX)

- Promote safe, active, and pedestrian-scaled, diverse areas through the use of town house, row house, courtyard apartment, apartment, and shopfront building forms that clearly define and activate the public street edge.
- Intended to enhance the convenience, ease and enjoyment of transit, walking, shopping and public gathering within and around the city's neighborhoods

INDUSTRIAL-MIXED USE ZONES (I-MX)

- Intended to develop in a pedestrian-oriented pattern, with buildings built up to the street and an active ground story.
- Provide a transition between mixed use areas and Industrial Districts.
- The Industrial Mixed Use districts accommodate a variety of industrial, commercial, civic and residential uses.

LIGHT INDUSTRIAL DISTRICT (I-A)

- Intended to be an employment area containing offices, business and light industrial uses that are generally compatible with adjacent Residential or Mixed Use Commercial Zone Districts.
- No new residential uses may be established in the I-A Zone District in order to promote a stable employment base for the city.
- Serve as a land use buffer between residential areas and more intensive industrial areas, which may be zoned I-B General Industrial.

LEGEND

- Main Street/ Mixed Use (MS)
- Mixed-Use Employment (MX, M-GMX)
- Residential Mixed-Use (RX)
- Multi-Unit Residential (MU,RH,RO,TH)
- Two-Unit Residential (TU)
- Single-Unit Residential (SU)
- Entertainment (CMP-ENT)
- Industrial Mixed-Use (I-MX, M-IMX)
- Heavy Industrial (I-B)
- General Industrial (I-A)
- Former Chapter 59 Zone (R-MU,C-MU)
- Downtown (AS,C,GT,LD,TD)

- Open Space-Conservation (OS-C)
- Open Space-Public Parks (OS-A)
- Open Space-Recreation (OS-B)
- Road Improvements (per Recommended Projects-July 2013)
- Existing Bike Facility (includes bike lanes, shared sidewalks, and signed routes)
- Key neighborhood bike and pedestrian connections.
- Proposed pedestrian bridge
- Neighborhood Boundary
- Existing Traffic Signal
- Potential Traffic Signal

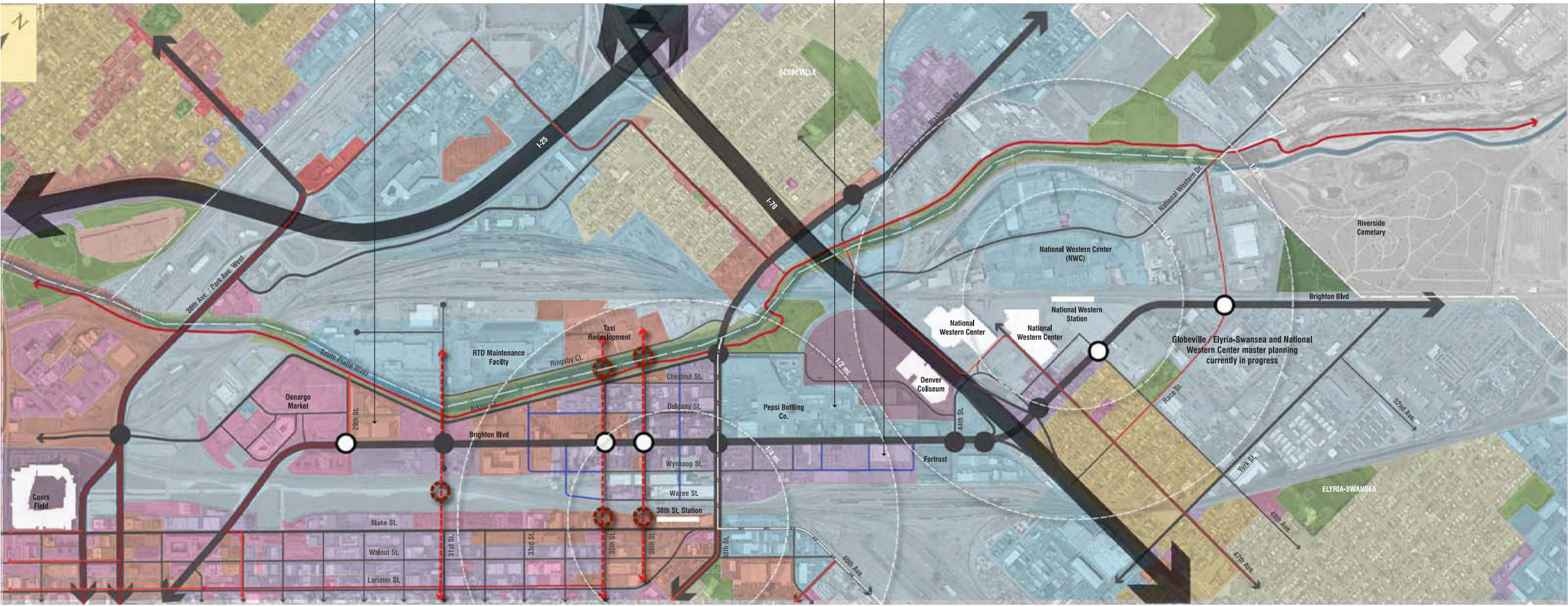


Figure 4 compiles the current zoning as of July 2013

NETWORK VISION OPTIONS

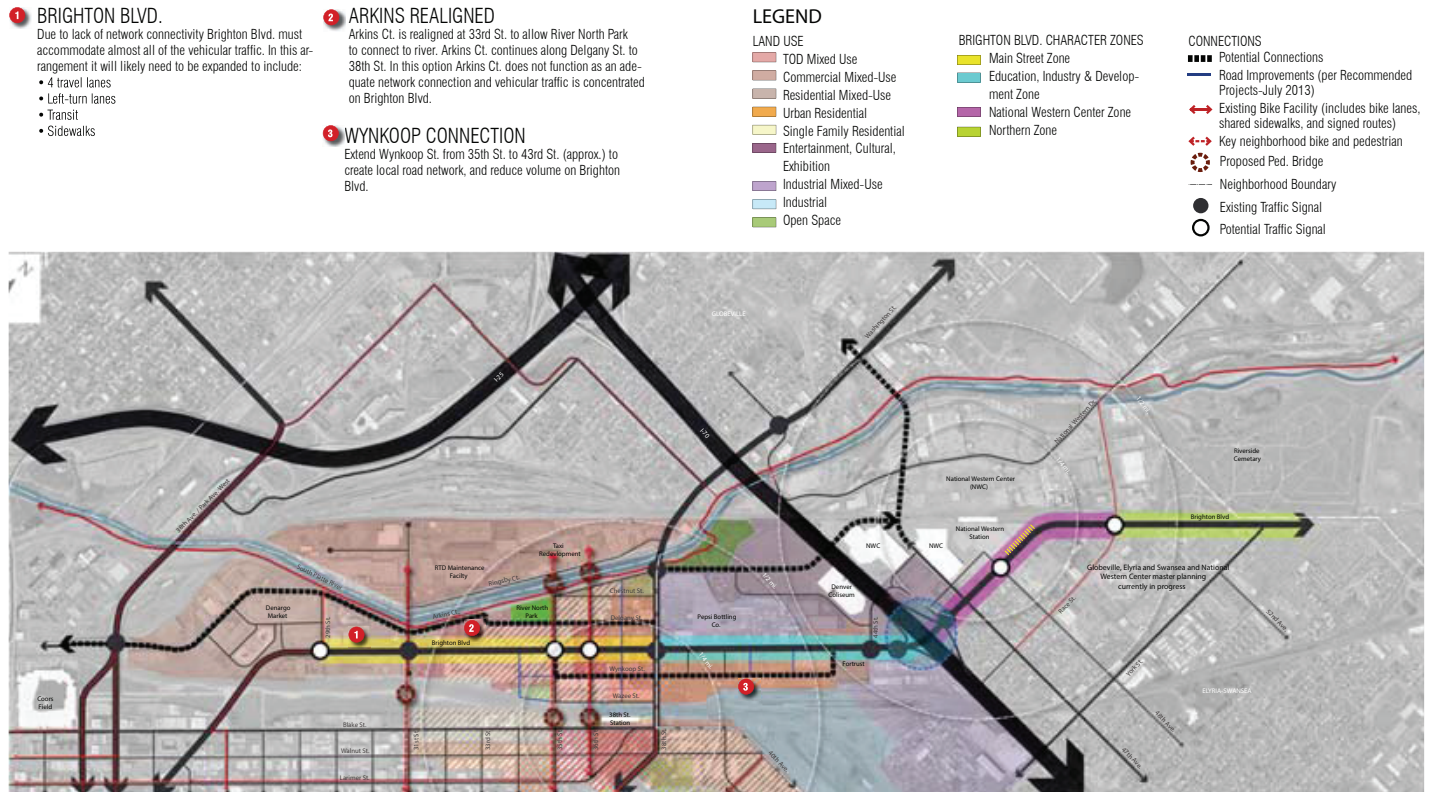
Redevelopment of the River North area, and the National Western Center will create new transportation pressures throughout the Brighton Boulevard corridor. The Long-Term Network Vision Options analyze options for creating a network of streets and transportation alternatives to distribute these pressures throughout the area, rather than focusing them all on Brighton Boulevard.

OPTION 1: BRIGHTON FOCUS

This option concentrates improvements on Brighton Boulevard, with limited network connections. This will minimize impacts to surrounding blocks, but results in limited connectivity. This option also will concentrate all traffic onto Brighton, which could increase congestion and challenge the opportunity to create a vibrant, pedestrian oriented street in the Main Street Area.

FIGURE 5

Long-Term Network Vision Options - Option 1



Option 1: Brighton Focus

Opportunities

- Minimizes local impacts
- Focuses re-investment on Brighton Boulevard

Challenges

- Arkings Ct. realignment eliminates important alternative vehicular route between National Western Center, I-70 and downtown
- Limited connectivity concentrates all vehicular traffic on Brighton Boulevard
- May need to obtain portions of right-of-way for Brighton Boulevard and Wynkoop Street extension

This Option is recommended for further study

Figure 5 depicts Network Vision Option 1 presented at public meeting 1

OPTION 2: BRIGHTON/WYNKOOP COUPLET

This option proposed a one-way couplet through the core of the Main Street Area, along Brighton Boulevard and Wynkoop St. It was not recommended for further study because of the difficulty in obtaining right-of-way for Wynkoop St.

FIGURE 6

Long-Term Network Vision Options - Option 2

1 BRIGHTON/WYNKOOP COUPLET

A paired one-way couplet through the River North TOD core would accommodate the traffic requirements within two 80' right-of-ways

2 ARKINS REALIGNED

Arkins Ct. is realigned at 33rd St. to allow River North Park to connect to river. Arkins Ct. continues along Delgany Street to 38th St. In this option Arkins Ct. does not function as an adequate network connection and vehicular traffic is concentrated on Brighton Blvd.

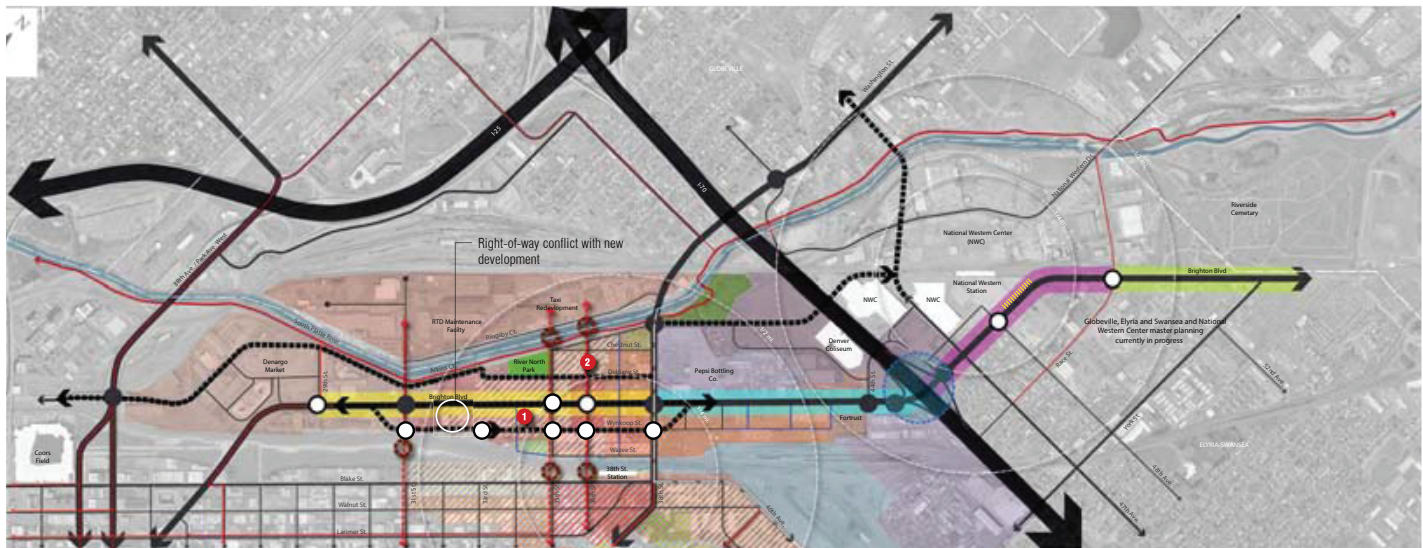
LEGEND

LAND USE
TOD Mixed Use
Commercial Mixed-Use
Residential Mixed-Use
Urban Residential
Single Family Residential
Entertainment, Cultural, Exhibition
Industrial Mixed-Use
Industrial
Open Space

BRIGHTON BLVD. CHARACTER ZONES
Main Street Zone
Education, Industry & Development Zone
National Western Center Zone
Northern Zone

CONNECTIONS

Potential Connections
Road Improvements (per Recommended Projects-July 2013)
Existing Bike Facility (includes bike lanes, shared sidewalks, and signed routes)
Key neighborhood bike and pedestrian
Proposed Ped. Bridge
Neighborhood Boundary
Existing Traffic Signal
Potential Traffic Signal



Option 2: Brighton/Wynkoop Couplet

Opportunities

- Couplet provides flexibility to accommodate all modes and amenities within 80' right-of-way

Challenges

- Difficulty obtaining portions of right-of-way for extension of Wynkoop St. portion of couplet
- Without additional Wynkoop St. right-of-way couplet is too short to be effective

This Option is not recommended for further study

Figure 6 depicts Network Vision Option 2 presented at public meeting 1

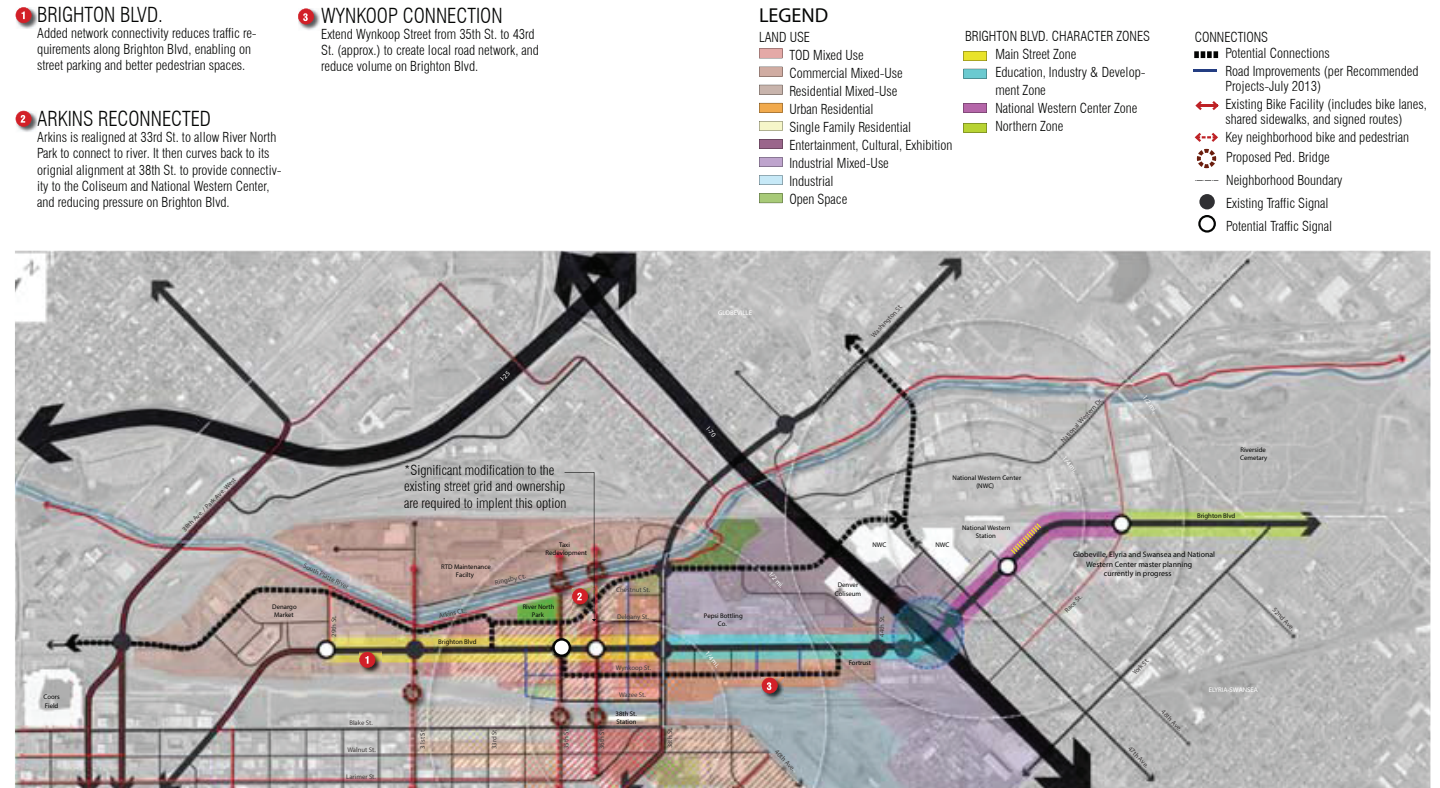
OPTION 3: ARKINS CONNECTION

Currently Arkins St. parallels the South Platte River, and creates a secondary route for the area. Proposals for the River North Park eliminate a portion of Arkins, breaking that connection. This option studies the opportunity to reconnect Arkins to its existing intersection at 38th St. This option was not recommended for further study because the required

Arkins alignment affects a significant number of properties in the area.

FIGURE 7

Long-Term Network Vision Options - Option 3



Option 2: Brighton/Wynkoop Couplet

Opportunities

- Couplet provides flexibility to accommodate all modes and amenities within 80' right-of-way

Challenges

- Difficulty obtaining portions of right-of-way for extension of Wynkoop St. portion of couplet
- Without additional Wynkoop St. right-of-way couplet is too short to be effective

This Option is not recommended for further study

Figure 7 depicts Network Vision Option 3 presented at public meeting 1

OPTION 4: RINGSBY CONNECTION

This option creates a secondary road network by redirecting Arkins across the river to Ringsby Court. A new bridge is proposed at approximately 35th St., and traffic is reconnected to the existing Arkins St. south of 31st St., by utilizing the existing bridge.

This option was not recommended for further study because it is too circuitous to become an effective alternative route, reduced access for the existing Taxi development and conflicts with a proposed pedestrian bridge at River North Park.

FIGURE 8

Long-Term Network Vision Options - Option 4

- 1 BRIGHTON BLVD.
Added network connectivity reduces traffic requirements along Brighton Blvd, enabling on-street parking and better pedestrian spaces.
- 2 RINGSBY CONNECTION
Network connectivity is created by connecting Ringsby Ct. at 31st Ave., and the end of the corridor. This will require one new bridge
- 3 WYNKOOP CONNECTION
Extend Wynkoop from 35th St. to 43rd St. (approx.) to create local road network, and reduce volume on Brighton Blvd.

LEGEND

LAND USE

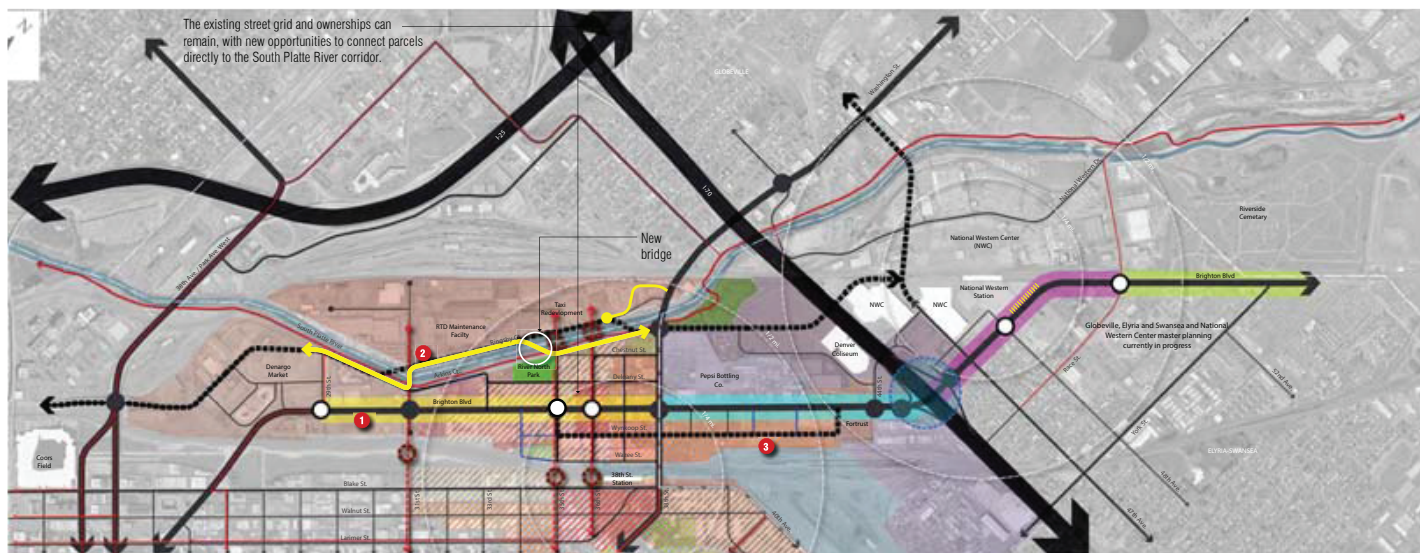
- TOD Mixed Use
- Commercial Mixed-Use
- Residential Mixed-Use
- Urban Residential
- Single Family Residential
- Entertainment, Cultural, Exhibition
- Industrial Mixed-Use
- Industrial
- Open Space

BRIGHTON BLVD. CHARACTER ZONES

- Main Street Zone
- Education, Industry & Development Zone
- National Western Center Zone
- Northern Zone

CONNECTIONS

- Potential Connections
- Road Improvements (per Recommended Projects-July 2013)
- Existing Bike Facility (includes bike lanes, shared sidewalks, and signed routes)
- Key neighborhood bike and pedestrian
- Proposed Ped. Bridge
- Neighborhood Boundary
- Existing Traffic Signal
- Potential Traffic Signal



Option 4: Ringsby Connection

Opportunities

- Improves connectivity to National Western Center & I-70

Challenges

- Is too circuitous to achieve parallel connection goal
- Cost for 1 vehicular bridge over S. Platte River
- Reduces access for Taxi development
- Conflicts with planned pedestrian bridge at River North Park

This Option is not recommended for further study

Figure 8 represents Network Vision Option 4 presented in public meeting 1

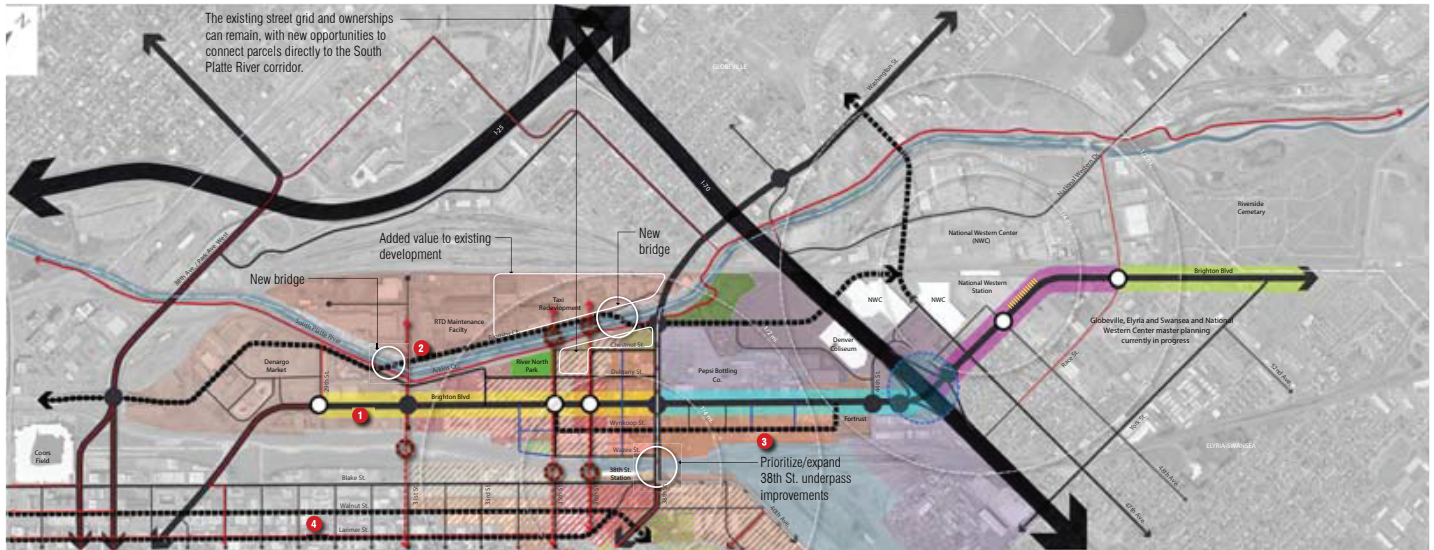
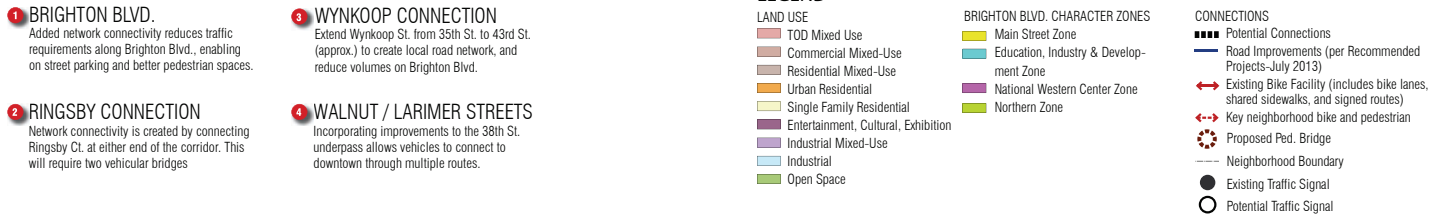
OPTION 5: NETWORK FOCUS

In addition to Brighton Boulevard, this option proposes investments to create two additional network options. First, a secondary connection between 38th St. and Park Ave. West is created by shifting the existing Arkins connection to Ringsby Court. This is achieved by adding two bridges, one directly south of 38th St. and a second south of 31st St., creating a direct alternative

connection that improves access to Taxi and the RTD Maintenance Facility, and does not conflict with the proposed pedestrian bridge at River North Park. The second proposal is to prioritize the expansion of the 38th St. underpass improvements to accommodate four lanes. This would create a viable alternate route into downtown via Downing, Larimer and Walnut Streets. This alternative is recommended for future long term study.

FIGURE 9

Long-Term Network Vision Options - Option 5



Option 5: Network Focus

Opportunities

- Good connectivity to National Western Center & I-70
- Creates multiple parallel connections, reducing traffic on Brighton Boulevard
- Improved access and connectivity for properties west of S. Platte River.
- Can eliminate Arkins Ct. north of 35th St. and improve riverfront

Challenges

- May need to acquire right-of-way
- Cost for 2 vehicular bridges over S. Platte River
- Cost for 38th St. underpass improvements

This Option is recommended for further study

Figure 9 represents Network Vision Option 4 presented in public meeting 1+

BIKE CONNECTIONS

Bike connectivity is a key issue for the future redevelopment of River North and Brighton Boulevard. The area is currently not served by any bike routes or bike lanes, except the South Platte River Trail. However, connections across the railroad tracks, to Five Points and Curtis Park neighborhoods are underway for 35th/36th St. and envisioned in the future in the vicinity of 31st St. (depending on final configuration of the rail station). Two options were studied for bike connectivity through the Brighton Corridor:

OPTION A: ALL ON BRIGHTON BOULEVARD

- This option concentrates bike lanes on Brighton Boulevard, creating a clear and direct bike route through the corridor, and further activating the street through the Main Street Area.

FIGURE 10

BIKE NETWORK A - BIKES ON BRIGHTON

PROS

- Clarity & Continuity for users
- Enhanced level of activity along Brighton Blvd.
- Traffic calming

CONS

- Reduced area for other amenities such as sidewalk and streetscape
- Bikes located on busy street with high volume of truck traffic and bus stops

LEGEND

	Main Street Zone		Existing Bike Route
	Education, Industry & Development Zone		Proposed Bike Route
	National Western Center Zone		Existing Traffic Signal
	Northern Zone		Proposed Traffic Signal
			Proposed Pedestrian Bridge

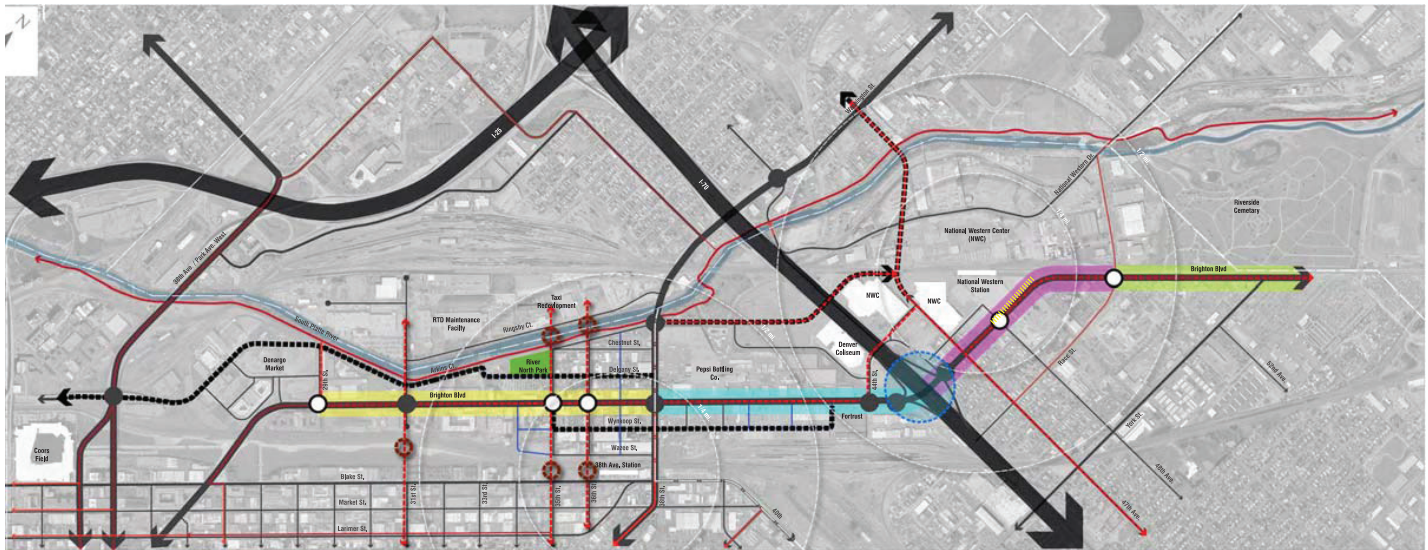


Figure 10 shows the pros and cons of bike facilities on Brighton Boulevard vs adjacent streets were weighed

- This option proposes distributing bike lanes onto parallel streets on either side of Brighton Boulevard, thereby removing some of the demands of Brighton.

FIGURE 11
BIKE NETWORK **B** - BIKES ON PARALLEL STREETS

- Potential for larger sidewalk and streetscape in Brighton Blvd.
- Bike traffic is directed to slower, less busy streets
- Less conflict with Bus stops and truck traffic

- Indirect access to Brighton Blvd.
- Potentially unclear route through Main Street Zone and Education, Industry & Development Zone

Main Street Zone
 Education, Industry & Development Zone
 National Western Center Zone
 Northern Zone

Existing Bike Route
 Proposed Bike Route
 Existing Traffic Signal
 Proposed Traffic Signal
 Proposed Pedestrian Bridge

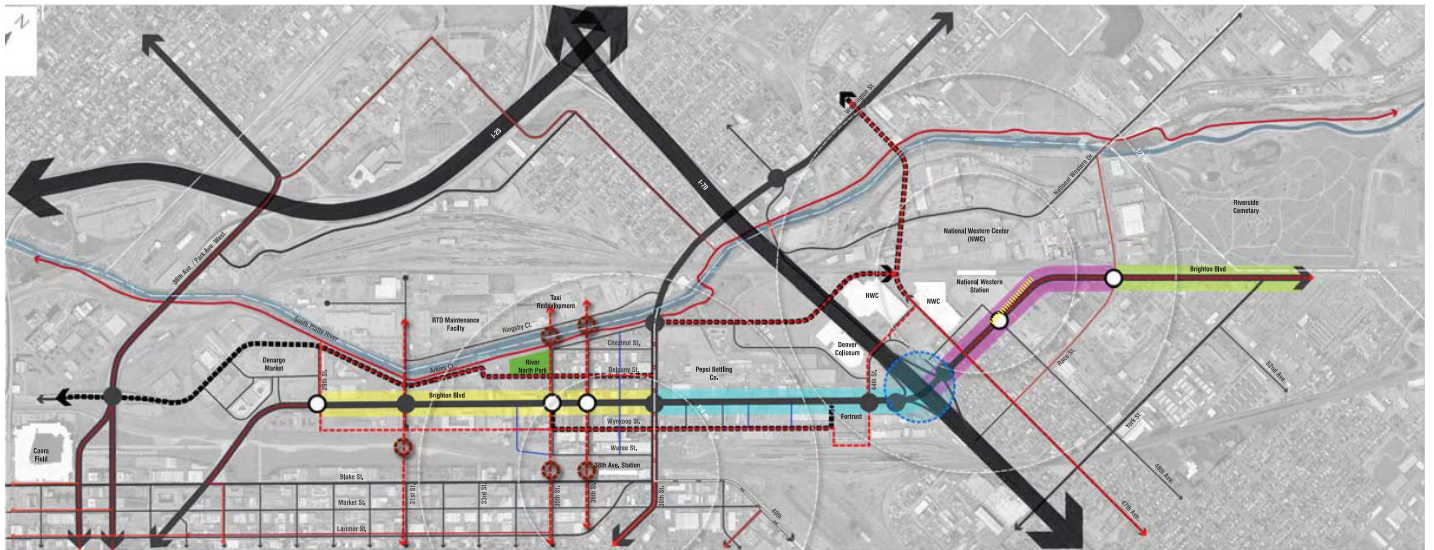


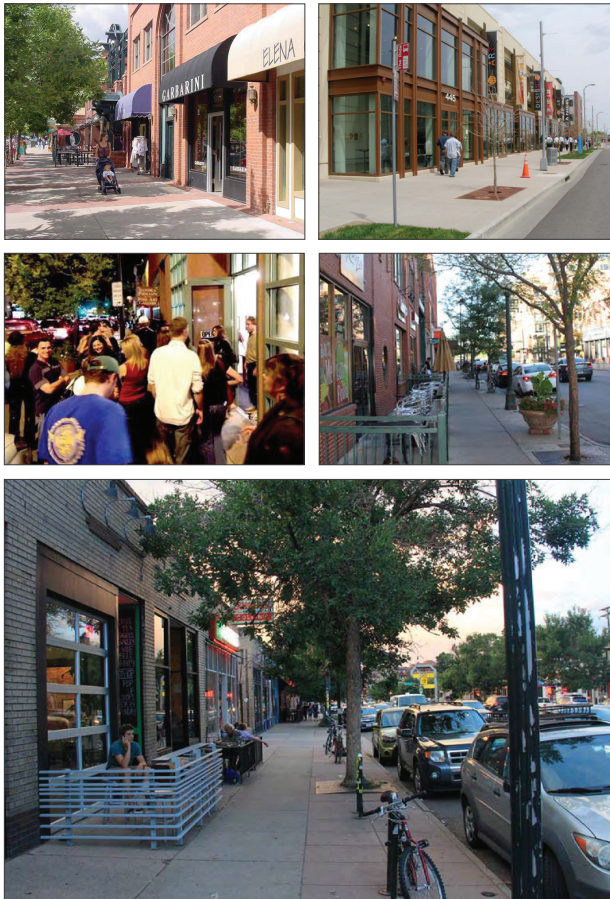
Figure 11 shows the pros and cons of bike facilities on Brighton Boulevard vs adjacent streets were weighed

CHARACTER AREAS

The Brighton Boulevard corridor passes through several different contexts between 29th St. and the City limit. Based on the mapping and analysis of the existing and proposed land uses, as described in the neighborhood plans and zoning, as well as Denver Moves and the River North Plan, four distinct Character Areas were created:

MAIN STREET AREA (29TH ST - 38TH ST)

This is the most active redevelopment area, and the core of the River North district. Significant redevelopment has already occurred, or is proposed, with a focus on mixed-use residential and commercial, as well as industrial uses. The focus on this area is creating a vibrant mixed-use neighborhood. Thus, the streetscape priority is on placemaking, multimodal transportation, sidewalk activity and pedestrian connectivity.



Main St. character includes mixed use often with street fronting retail

EDUCATION, INDUSTRY & DEVELOPMENT AREA (38TH ST — 44TH ST)

This area also focuses on placemaking and multimodal transportation. However, it includes major employers and facilities that limit future corridor expansion, and will create different opportunities and character for the area.



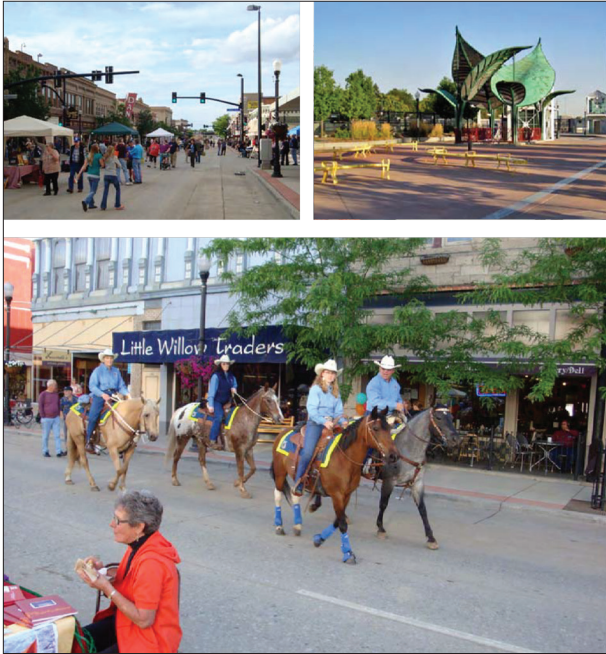
Tree-lined streetscape provides character to employment centers



Street character compatible with large employment center while providing placemaking opportunities

NATIONAL WESTERN CENTER AREA (I-70 – RACE ST)

This area places a priority on multimodal transportation and placemaking, as Brighton Boulevard will become the 'front door' to the National Western Center, a major, year round entertainment destination.



NWC Master Plan should influence the vision for this character area

NORTHERN AREA (RACE ST – CITY LIMIT)

This area is characterized by larger industrial and/or distribution uses, and the historic Riverfront Cemetery on the west. The priorities for this area are to create a consistent, welcoming frontage into the City and for the cemetery, and a multimodal corridor.



A welcoming tree-lined character is appropriate for the adjacent uses

PROJECT
PROCESS/
DESIGN
DEVELOPMENT





PROJECT
PROCESS/
DESIGN
DEVELOPMENT

The goal of public meeting #1 was to get feedback on the community priorities for Brighton Boulevard in each of the proposed Character Areas. To accomplish this, character images and a section diagram for each Character Area were presented to the community. The images showed the expected character of the streetscape. The diagrams illustrated the required elements (traffic lanes, tree lawn, and pedestrian sidewalk), and

then a series of additional streetscape elements that could be included in the streetscape. These included landscape medians, on-street parking, bike facilities, and wider sidewalks to accommodate outdoor café seating and/or displays. The public was asked to rank the additional streetscape elements in order of their importance; feedback that was integral to creating the subsequent streetscape alternatives.

Based on the community feedback from public meeting #1, alternative streetscape concepts were prepared for review with the community in public meeting #2. The streetscape concepts were based on the following principles:

- They will respond to and respect the community preferences documented in meeting #1.
- The Phase 1 streetscape will fit within the current right-of-way, and will not encroach on existing properties.

- The Vision will be constructed incrementally, as parcels redevelop.
- The proposed concepts will accommodate all modes of transportation in all phases of streetscape development.
- The proposed concepts will create a continuous, consistent level of quality, and a gateway into downtown.

FIGURE 12

Character Zones

MAIN STREET ZONE

Streetscape design priority on placemaking, side-walk activity, and pedestrian connectivity. Design priorities include:

- Enable a diversity of mixed-use and industrial users throughout the corridor
- Celebrate the character of River North
- Stimulate activity along the street
- Ensure pedestrian safety and comfort
- Encourage multi-modal transportation
- Provide on-street parking
- Promote slower speeds and an increased number of traffic signals
- Implement safe pedestrian and bike connections across Brighton Blvd. on 35th St. and/or 36th St. to transit station.



EDUCATION, INDUSTRY & DEVELOPMENT ZONE

The streetscape design balances placemaking and multi-modal transportation needs. The character of the streetscape will create a "front door" for future industrial and educational development. Design priorities include:

- Encourage multi-modal transportation
- Enable a diversity of mixed-use, educational and industrial users
- Celebrate the character of River North
- Ensure pedestrian safety and comfort
- Limit number of traffic signals



NATIONAL WESTERN CENTER ZONE

The streetscape design places a priority on placemaking, as Brighton Boulevard will become the "front door" to National Western Center and an entertainment destination. Design priorities include:

- Stimulate activity along the street
- Accommodate large events
- Ensure pedestrian safety and comfort
- Encourage multi-modal transportation
- Implement safe connections to National Western light rail station
- Provide on-street parking and/or drop off zones
- Enable wider sidewalks for increased pedestrian activity
- Promote slower speeds and an increased number of traffic signals



NORTHERN ZONE

The streetscape design creates a consistent, welcoming frontage for existing industrial uses and Riverside Cemetery. Design priorities include:

- Encourage multi-modal transportation
- Ensure pedestrian safety and comfort
- Provide on-street parking
- Limit number of traffic signals
- Respect relationship with Riverside Cemetery

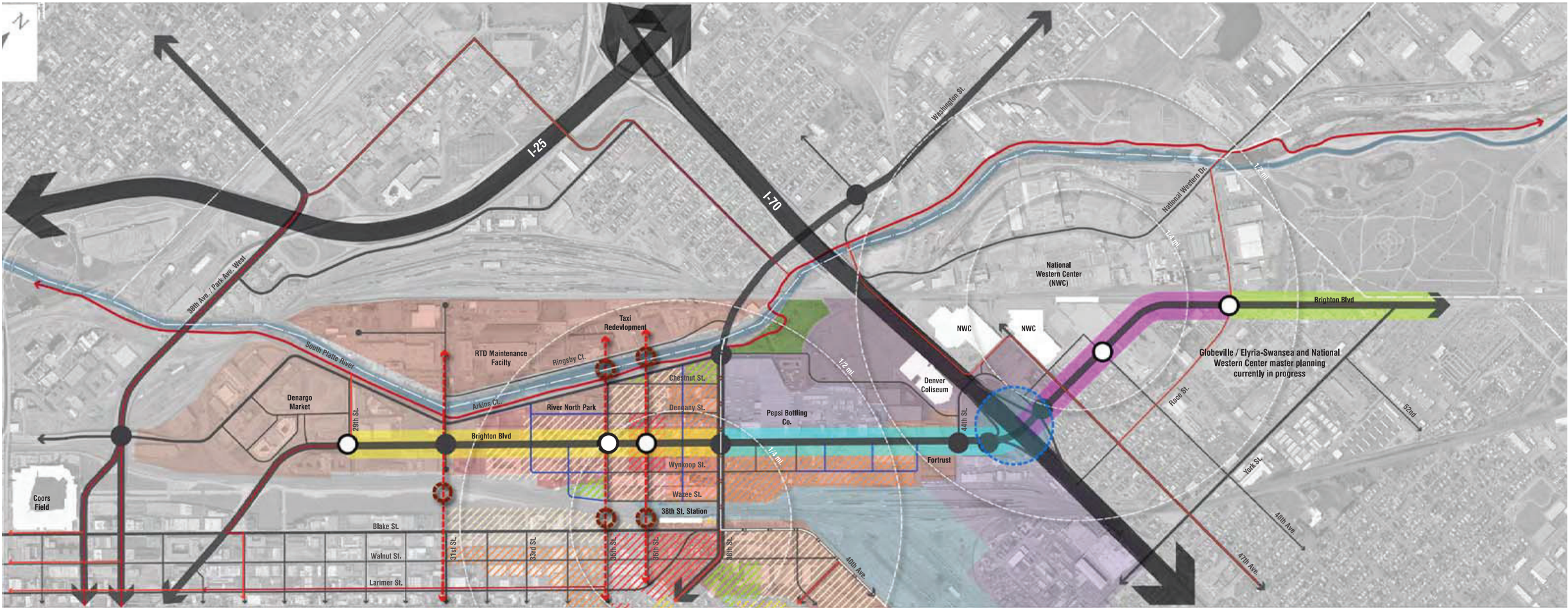


Figure 12 depicts the limits of the four proposed character areas.



MAIN STREET AREA

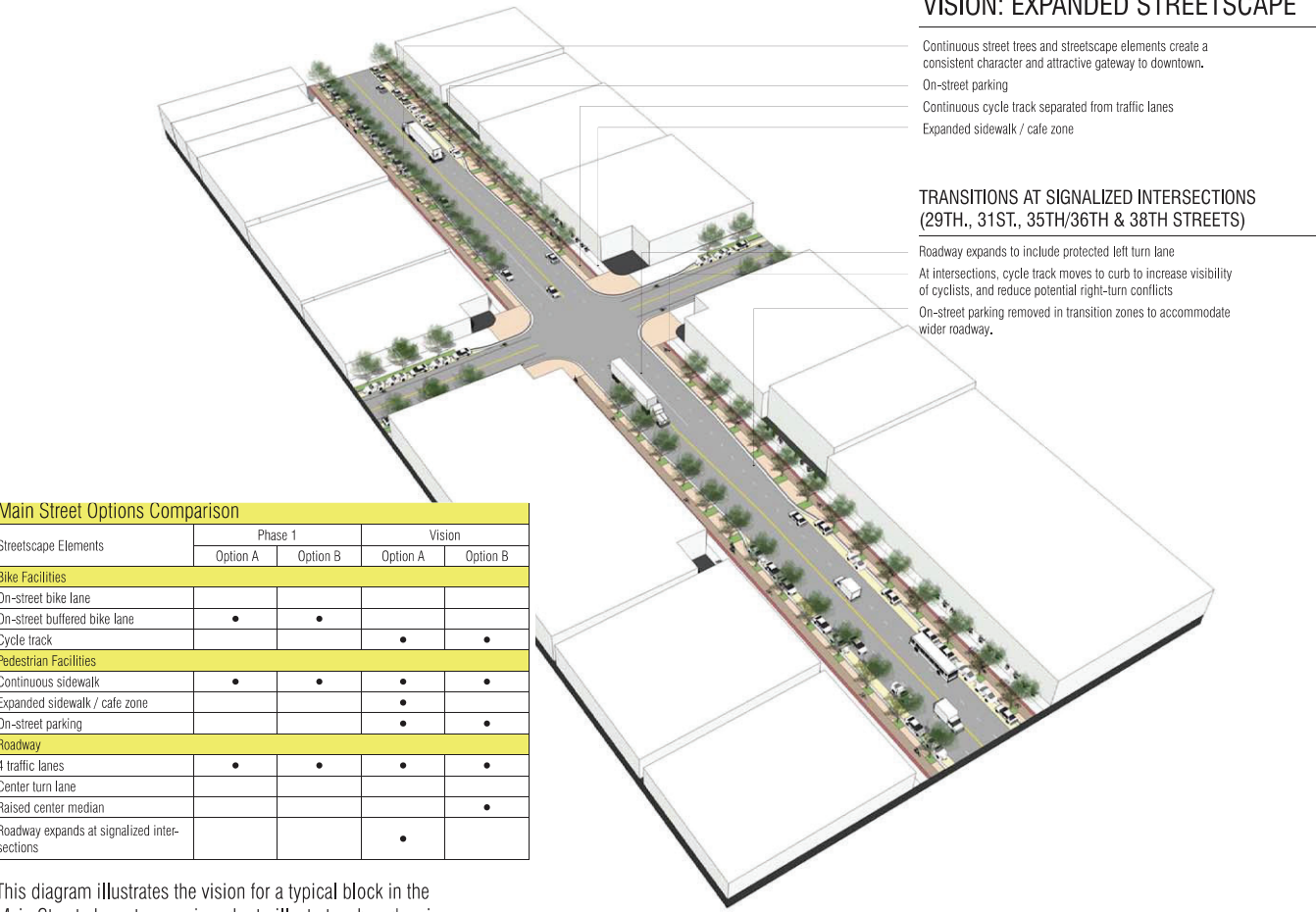
Two options for the Main Street area include all modes of transportation in Phase 1, within the existing 80’ right-of-way, and long term visions that expand the streetscape to 110’. In both options the vision can be implemented incrementally as parcels redevelop.

The Vision maintains the curb and amenity/street tree zone in the same location, allowing incremental development. The streetscape area behind the curb is expanded, and the bike facility is shifted onto the sidewalk as a cycle track. The Phase 1 bike lane is then re-stripped and converted to on-street parking.

OPTION A: NO MEDIAN

Option 1 includes the required 4 traffic lanes, but does not include a center median. Left turns lanes are only included at key signalized intersections (29th St., 31st St., 35th St. and 38th St.). Phase 1 includes buffered bike lanes along the street, with an amenity/street tree zone and pedestrian sidewalk behind the curb. Parallel parking is not included in Phase 1.

FIGURE 13
Main Street Zone: Option A
(29th Street to 38th Street)



Main Street Options Comparison				
Streetscape Elements	Phase 1		Vision	
	Option A	Option B	Option A	Option B
Bike Facilities				
On-street bike lane				
On-street buffered bike lane	•	•		
Cycle track			•	•
Pedestrian Facilities				
Continuous sidewalk	•	•	•	•
Expanded sidewalk / cafe zone			•	
On-street parking				•
Roadway				
4 traffic lanes	•	•	•	•
Center turn lane				
Raised center median				•
Roadway expands at signalized intersections			•	

This diagram illustrates the vision for a typical block in the Main Street character area in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

One of two options presented for this Character Area at public meeting 2

OPTION B: MEDIAN

The Core Streetscape also includes all modes of transportation within the current 80 foot right-of-way, in a manner consistent with community feedback. The key components include:

- 4 traffic lanes
- Buffered bike lanes
- A continuous streetscape amenity zone, with street trees
- A continuous 5'-6" sidewalk

The Vision expands the total streetscape width to 110 feet, and can be constructed incrementally as adjacent parcels develop. The key components and changes include:

- Phase 1 trees and curb remain in place, creating continuity and allowing for phased implementation.
- The roadway is re-striped and a center median with turn lanes is added. The Phase 1 bike lane converts to a traffic lane.
- The bike facility becomes a cycle track, relocated to the sidewalk area behind the street trees and amenity zones.
- The on-street parking is added by creating pockets within the existing amenity zone
- The continuous sidewalk remains. Additional space for café seating or wider sidewalks is not included

FIGURE 14
Main Street Zone: Option B
(29th Street to 38th Street)



This diagram illustrates the vision for a typical block in the Main Street Zone in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

Figure 14 shows one of two options presented for this Character Area at public meeting 2

EDUCATION, INDUSTRY AND DEVELOPMENT AREA

Both options for the Education, Industry and Development (EID) Area include all modes of transportation within the existing 80 foot right-of-way. Due to the presence and location of significant property owners, such as the PepsiCo, the opportunities for long-term expansion of the streetscape are limited, in particular on the west side of the street. For this reason, modest expansion is shown for the Vision. However, should the opportunities change, in particular on the east side of Brighton Boulevard, the Vision for Main Street, Option A may be applicable.

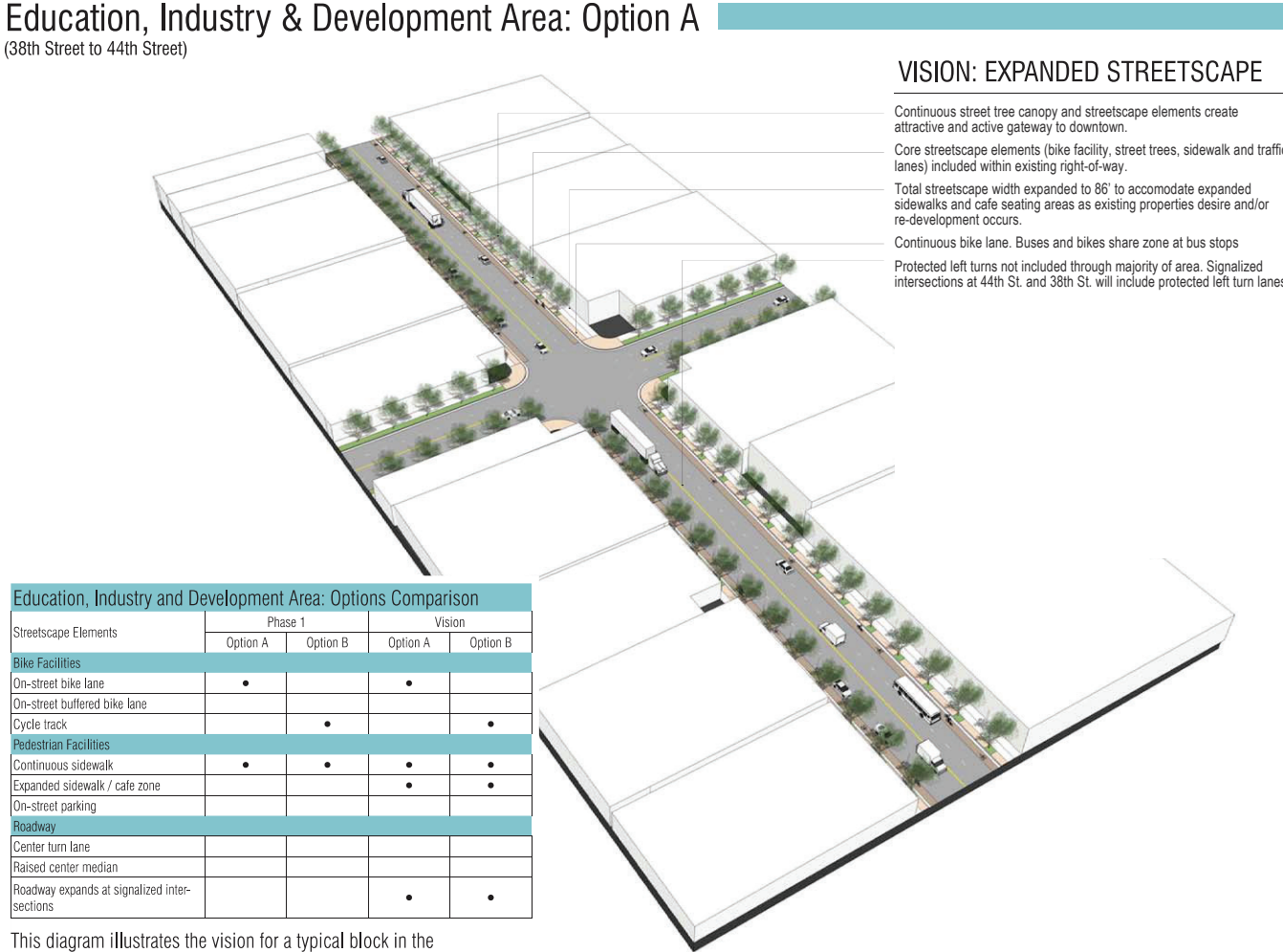
OPTION A:

Option A accommodates all modes of transportation in the existing 80 foot right-of way, including:

- 4-lanes of vehicular traffic
- On-street buffered bike lanes
- Continuous streetscape amenity zone and street trees
- A continuous 5'-6" wide sidewalk.

The Vision section is expanded on the east side of the street only, due to the constraints on the west. All of the Phase 1 elements remain unchanged, and an additional 6' wide expanded sidewalk area is added on the east streetscape, where redevelopment is more likely.

FIGURE 15
Education, Industry & Development Area: Option A
 (38th Street to 44th Street)



This diagram illustrates the vision for a typical block in the Education, Industry and Development character area in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

Figure 15 shows one of two options presented for this Character Area at public meeting 2

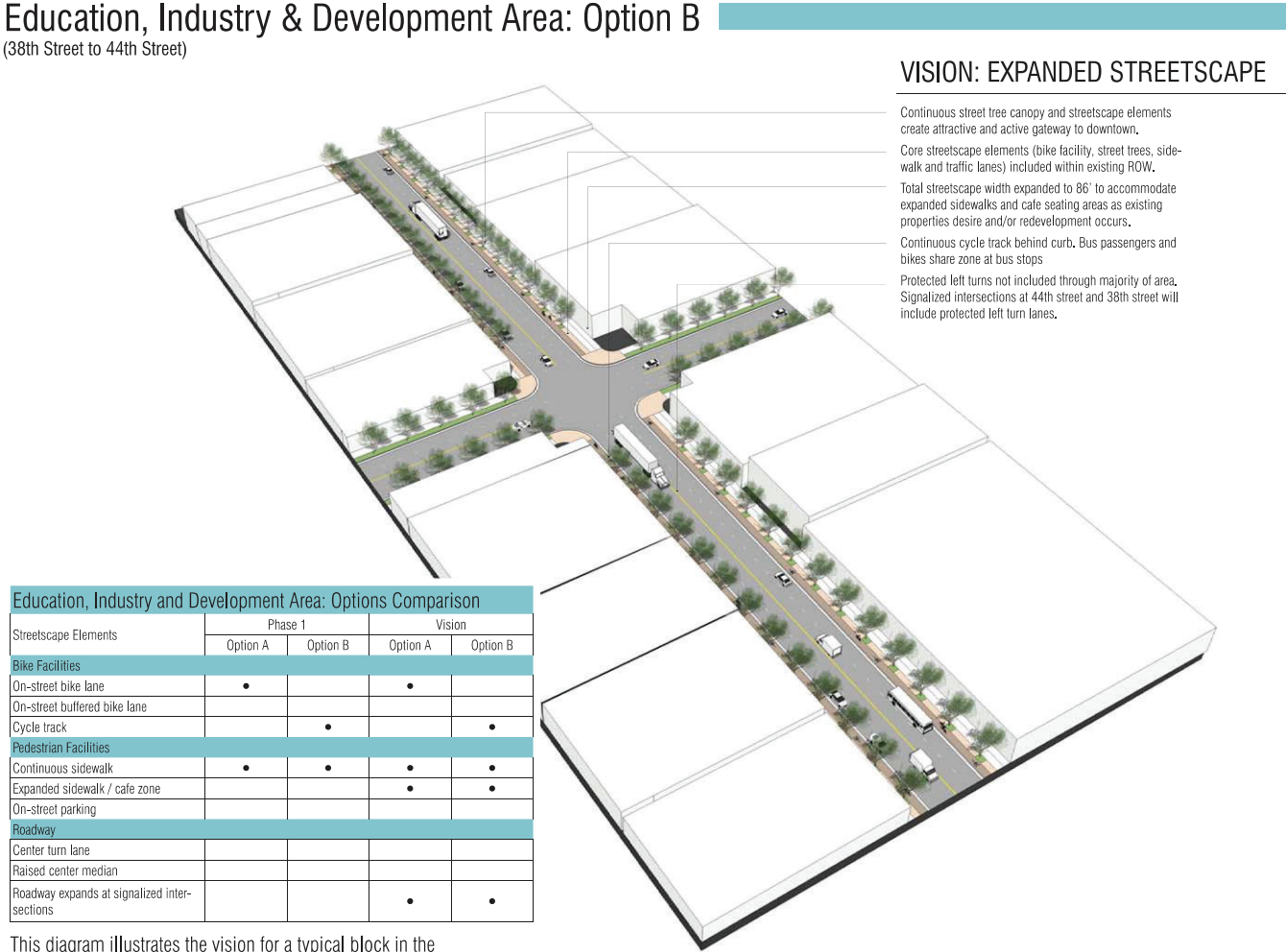
OPTION B:

The basic elements of Option B are the same as Option A, with one key difference: the bike facility is a raised cycle track. Like Option A, all modes of transportation in the existing 80 foot right-of way, including:

- 4-lanes of vehicular traffic
- Raised cycle track
- Continuous streetscape amenity zone and street trees
- A continuous 5'-6" wide sidewalk.

Again, the Vision section expands by 6' on the eastern side of Brighton Boulevard, to accommodate expanded sidewalk areas along the street. All other elements remain unchanged.

FIGURE 16
Education, Industry & Development Area: Option B
(38th Street to 44th Street)



This diagram illustrates the vision for a typical block in the Education, Industry and Development character area in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

Figure 16 shows one of two options presented for this Character Area at public meeting 2

NATIONAL WESTERN CENTER AREA

The National Western Center (NWC) area is a unique section of Brighton Boulevard for a number of reasons. First, the existing streets narrows to two lanes north of 47th Ave. Second, the proposed redevelopment of the National Western Center will create a major entertainment, research and educational destination. Also, detailed master planning of the NWC is just starting, so detailed traffic impacts and network connections are not known. However, based on the stated vision for the NWC, the planning team assumed that 4 traffic lanes will be required in the future. The options proposed depict how the Phase 1 street and future expansion protect adjacent properties. Given that the NWC Master Plan, Globeville, Elyria and Swansea Neighborhood Plans are still in development, the options for this area are considered more conceptual, and may require updating as those plans are finalized.

OPTION A:

Option A maintains the existing 60 foot right-of-way along Brighton Boulevard, allowing existing properties to remain. In order to accommodate community priorities and provide for all modes of transportation in all phases, bike lanes are added to the streetscape, and on-street parking is removed. The key elements include:

- 2 traffic lanes, with turn lanes only at traffic signals
- Continuous tree lawn with street trees (unchanged from existing condition)
- Continuous sidewalk (unchanged from existing condition)
- Bike circulation is recommended to be routed around the I-70 interchange at 44th St. and 47th Ave. As all bike traffic is on the west side of the street at 47th Ave., Option A proposes a two-way buffered bike lane on the west side of Brighton Boulevard.

The Vision proposes expanding the streetscape to accommodate 4 lanes of vehicular traffic, on street

FIGURE 17

National Western Center Area: Option A
(46th Ave. to Race Street)

VISION: EXPANDED STREETScape

Continuous street trees and streetscape elements create a consistent character and welcome to National Western Center and neighborhood.
Streetscape expands to west. East side of street and ROW line unchanged.
2-way cycle track on west side of street.
Expanded sidewalk and cafe zones create flexibility for future enhancement on west side of street

TRANSITIONS AT SIGNALIZED INTERSECTIONS

Roadway expands to include protected left turn lane
On-street parking removed in transition areas to accommodate left turn lane.

National Western Center Area: Options Comparison

Streetscape Elements	Phase 1		Vision	
	Option A	Option B	Option A	Option B
Bike Facilities				
On-street bike lane		•		
On-street buffered bike lane	•			
Cycle track			•	•
Pedestrian Facilities				
Continuous sidewalk	•	•	•	•
Expanded sidewalk / cafe zone			•	•
On-street parking			•	•
Roadway				
Center turn lane				
Raised center median				
Roadway expands at signalized intersections			•	•

This diagram illustrates the vision for a typical block in the National Western Center character area in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

Figure 17 shows one of two options presented for this Character Area at public meeting 2

parking and expanded streetscapes. The existing curb and right of way on the east side of Brighton Boulevard will remain unchanged; all expansion will occur to the west and existing property owners on the east side of the street will be unaffected. The Vision components include:

- Roadway expanded to 4 lanes, with turn lanes only at key signalized intersections.
- On-street parking added to both sides of the street.
- The 2-way bike lane is relocated to the sidewalk, and becomes a 2-way cycle track. During large events, such as the National Western Stock Show, the cycle track can be temporarily closed to create additional streetscape area.
- Expanded sidewalk zones are provided on the west side of the street only, to accommodate cafe seating, display areas, and redevelopment of the NWC.

OPTION B:

Option B is generally identical to Option A, with one key difference. In this option, the bike lanes are located on either side of the street, in their

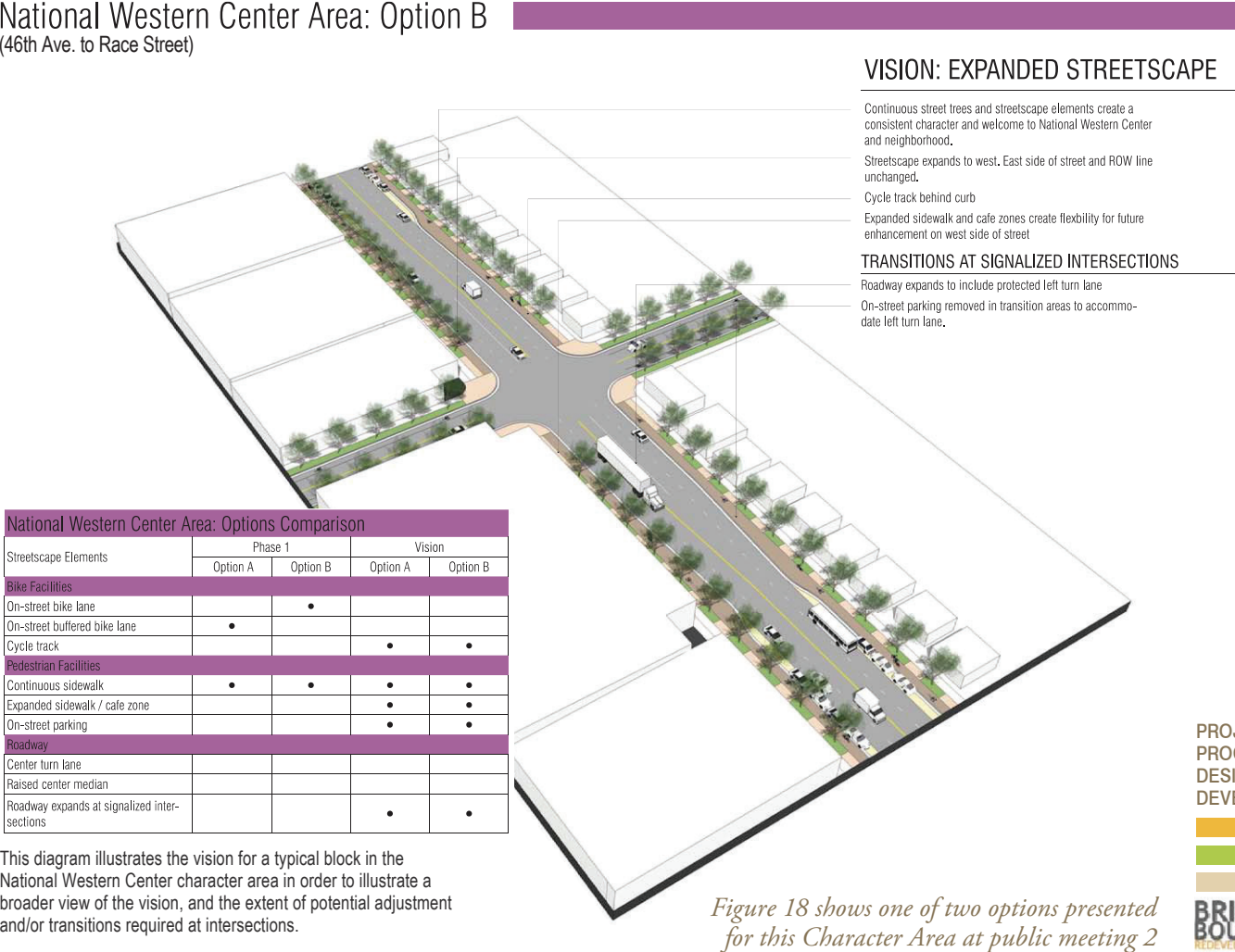
typical location. Phase 1 accommodates all modes of transpiration within the existing right-of-way. The key elements include:

- 2 traffic lanes, with turn lanes only at traffic signals.
- Continuous tree lawn with street trees (unchanged from existing condition)
- Continuous sidewalk (unchanged from existing condition)
- Bike lanes on either side of the street.

Like in Option A, the Vision expands to 4 lanes, and all expansion occurs to the west. The eastern right of way line remains unchanged. The Vision components include:

- Roadway expanded to 4 lanes, with turn lanes only at key signalized intersections.
- On-street parking added to both sides of the street.
- The bike lanes are reconstructed as raised cycle tracks on either side of the street.
- Expanded sidewalk zones are provided on the west side of the street only, to accommodate cafe seating, display areas, and redevelopment of the NWC.

FIGURE 18
National Western Center Area: Option B
(46th Ave. to Race Street)



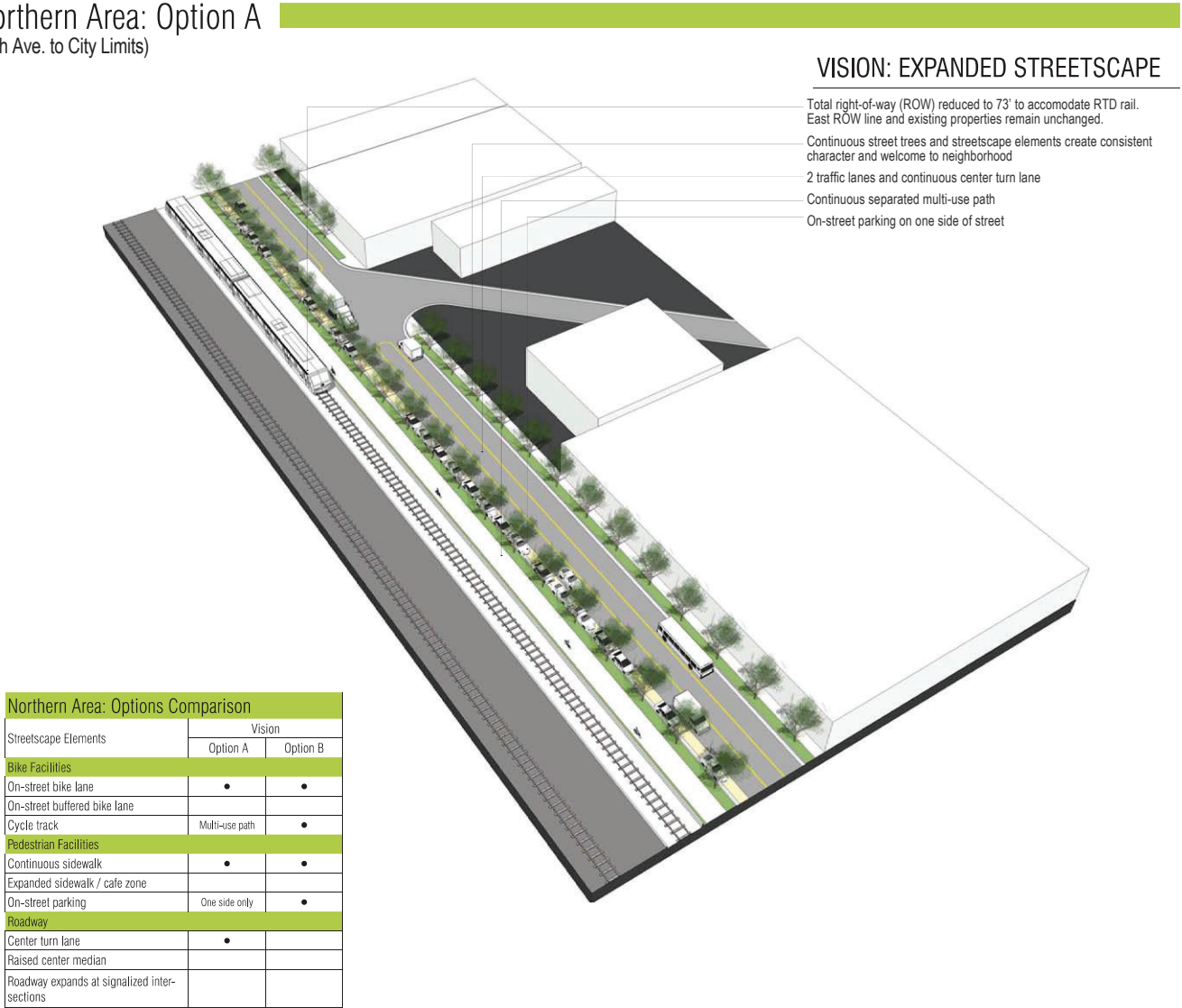
NORTHERN AREA

The Northern Area extends from Race St., to the City limit, through an area that is primarily industrial warehousing and distribution uses. The role of Brighton Boulevard through this area is still being determined, as part of the Globeville, Elyria and Swansea neighborhood planning process. For this reason, only a vision option is proposed, and it is conceptual and may need adjustment as the neighborhood plan is finalized.

OPTION A:

In Option A, the existing two lane road is expanded to three lanes, to included a painted, continuous center turn lane. Tree lawns and street trees are added on both sides of the street, with on-street parking on the west side only. Bike facilities are concentrated on the west side of the street, to be consistent with Option A of the National Western Center Area. A multi-use path is provided in this area, to accommodate two-way bike circulation.

FIGURE 19
Northern Area: Option A
(49th Ave. to City Limits)



This diagram illustrates the vision for a typical block in the Northern Area in order to illustrate a broader view of the vi-sion, and the extent of potential adjustment and/or transitions required at intersections.

Figure 19 shows one of two options presented for this Character Area at public meeting 2

OPTION B:

This option includes bike lanes on both sides of the street, consistent with National Western Center, Option B. In this option, two traffic lanes are included. Rather than adding a painted center turn lane, on-street parking is provided on both sides of the street. Bike lanes are included on either side of the street as well, as raised cycle tracks between the curb and tree lawn. Continuous 6' wide sidewalk are also included on both sides of the street.

FIGURE 20
Northern Area: Option B
 (49th Ave. to City Limits)



This diagram illustrates the vision for a typical block in the Northern Area in order to illustrate a broader view of the vision, and the extent of potential adjustment and/or transitions required at intersections.

Figure 20 shows one of two options presented for this Character Area at public meeting 2

SUSTAINABILITY

Brighton Boulevard will be a signature street for the City of Denver, and gateway into downtown. It will embody and represent Denver's commitment to sustainable green development. The design of the streetscape will feature several elements, including:

MULTIMODAL TRANSPORTATION

Brighton Boulevard will become a major multimodal transportation corridor, supporting transit, bikes, pedestrian, and cars.

STORM WATER MANAGEMENT

Paved streets increase storm water runoff, and the amount of pollutants in our waterways. Brighton Boulevard will look for opportunities to treat storm water runoff from the roadway and sidewalks, with the following elements:

- Porous pavements on bike lanes and sidewalks allow runoff to infiltrate through the pavement into the soil below, decreasing the amount of runoff
- Storm water is cleaned as it infiltrates through specially designed soils that capture pollutants.
- Landscape areas within potential median provide storm water detention (reducing runoff rates) and additional water treatment capacity.

RESOURCE AND ENERGY EFFICIENCY

Brighton Boulevard will include recycled materials and energy efficient lighting to reduce energy use and its carbon footprint. The design will investigate:

- LED streetlights
- Recycle roadbase
- Street furnishing with recycled materials

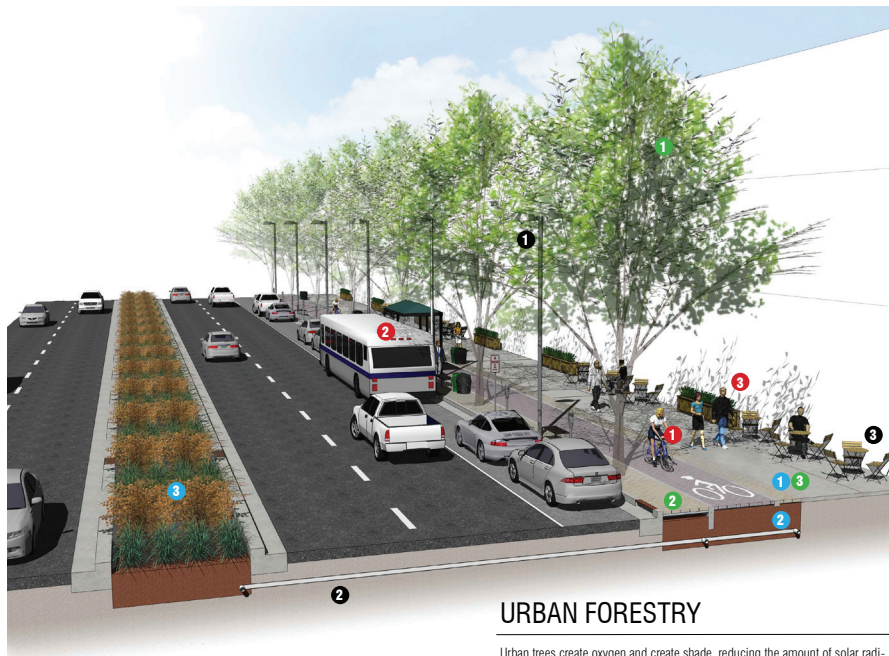
URBAN FORESTRY

Urban trees create oxygen and create shade, reducing the "urban heat island" effect, a phenomenon where hard impervious surfaces absorb and store solar radiation increasing the local air temperature. The Brighton Boulevard corridor and River North area has little or no tree canopy, and creates one of the highest heat island effects in Denver. The streetscape design will mitigate this with:

- A continuous street tree canopy that shades the streetscape.
- Tree root area is increased by suspending paving on grates around trees to allow pedestrian circulation, while preventing soil compaction
- Light colored paving reflects sunlight and decreases amount of sunlight absorbed during the day.

FIGURE 21

Sustainability Strategies



This diagram does not illustrate any specific streetscape area or option. It depicts potential streetscape elements and sustainable design solutions that could be implemented throughout the Brighton Boulevard corridor.

URBAN FORESTRY

Urban trees create oxygen and create shade, reducing the amount of solar radiation absorbed by the street, which contributes to the "urban heat island" effect (increased temperatures).

- 1 A continuous street tree canopy shades the streetscape.
- 2 Tree root area is increased by suspending paving on grates around trees to allow pedestrian circulation, while preventing soil compaction
- 3 Light colored paving reflects sunlight and decreases amount of sunlight absorbed during the day.

MULTI-MODAL TRANSPORTATION

Brighton Boulevard will become a multi-modal transportation corridor, supporting transit, bikes, pedestrians and cars.

- 1 Continuous bike facilities throughout length of the street
- 2 Bus stops with seating, lighting and shelters
- 3 Continuous detached pedestrian sidewalks

STORM WATER TREATMENT

Paved streets increase storm water runoff, and the amount of pollutants in our waterways. Brighton Boulevard will treat all storm water runoff from the roadway and sidewalks.

- 1 Porous pavements on bike lanes and sidewalks allow runoff to infiltrate through the pavement into the soil below, decreasing the amount of runoff
- 2 Storm water is cleaned as it infiltrates through specially designed soils that capture pollutants.
- 3 Landscape areas within potential median provide storm water detention (reducing runoff rates) and additional water treatment capacity

RESOURCE & ENERGY EFFICIENCY

Brighton Boulevard will include recycled materials and energy efficient lighting to reduce energy use and its carbon footprint

- 1 LED streetlights
- 2 Recycle roadbase
- 3 Street furnishing with recycled materials

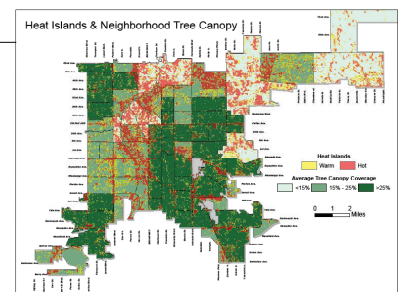


Figure 21 shows sustainable elements to be considered in the final design of Brighton Boulevard

Recommendation/Implementation

RECOMMENDATIONS

After considering a wealth of public input and months of technical analysis the following recommendations are made for the 2.5 mile stretch of Brighton Boulevard between 29th St. and the City limits north of I-70.

- The design of the corridor be split into four unique Character Areas: Main Street Area (29th St. to 38th St.), Education, Industry and Development Area (38th St. to I-70), National Western Center Area (I-70 to Race St.) and Northern Neighborhood Area (Race St. to City Limit).
- Since announcing these recommendations the City has continued to work with property owners who are in the midst of design and redevelopment along the corridor, mainly between 31st St. and 35th St. Through this process a hybrid concept which incorporates current development plans into the conceptual design and provides an interim solution that safely transitions between properties that are redeveloping and those that are remaining. In addition this hybrid design concept identifies opportunities to provide on street parking in the short term. This hybrid concept will continue to be refined and evolve through conversations with adjacent property owners and as the design progresses.



Main Street Area Phase 1 artist rendition of multimodal Brighton Boulevard

RECOMMENDATION/
IMPLEMENTATION

BRIGHTON
BOULEVARD
REDEVELOPMENT PROJECT

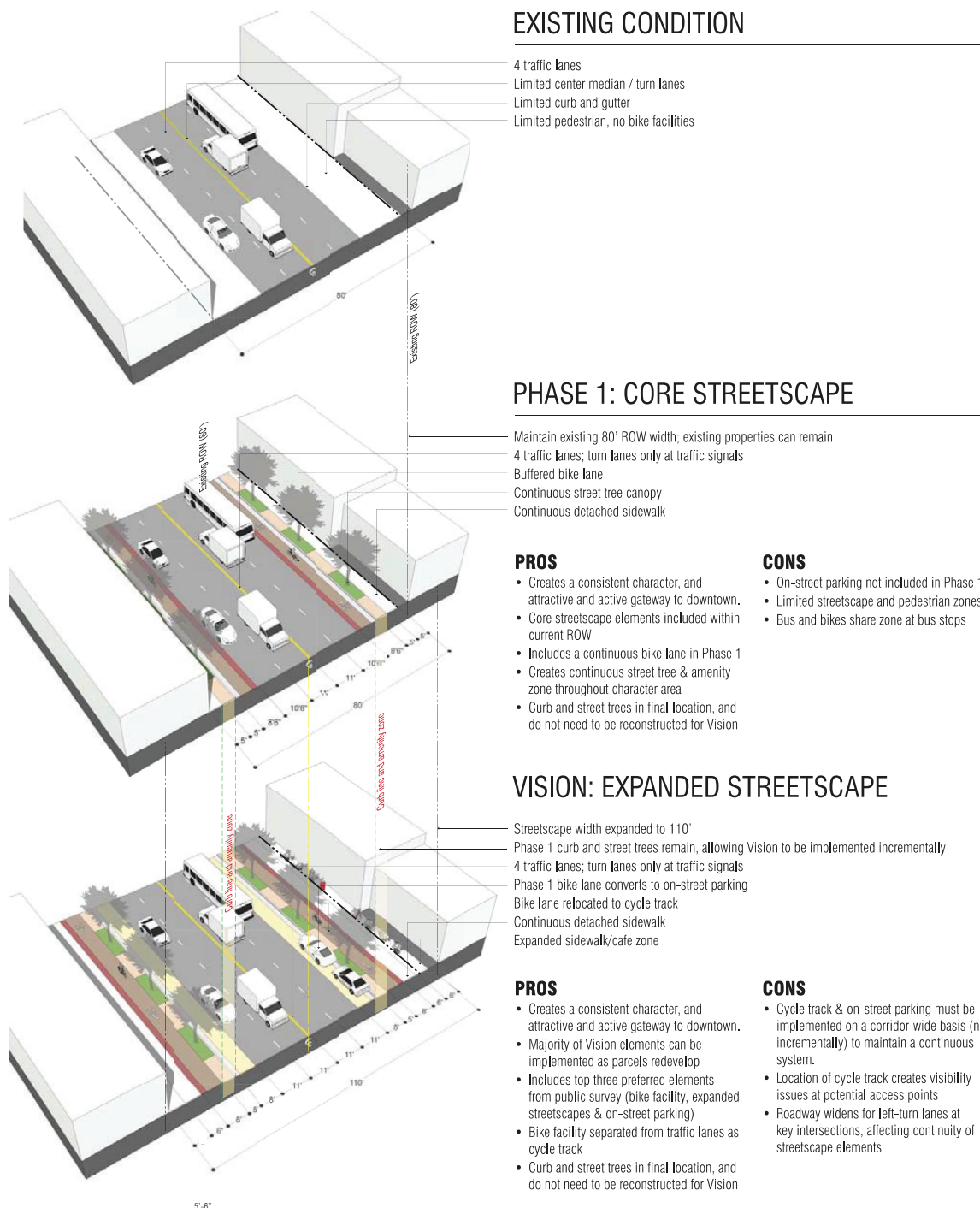
- The Main Street Character Area recommended final cross-section (Option A from public meeting 2) shall include a near term 80' implementation and an ultimate vision 110' cross section, where possible. Elements include four travel lanes with turn lanes at signalized intersections, a near term on-street buffered bike lane that converts to a vertically

separated cycle track at ultimate build-out, a continuous tree lawn/public-art/amenity area and detached sidewalk. As part of the ultimate vision the former buffered bike lane will accommodate on-street parking while the sidewalk is expanded to include a possible café zone.

FIGURE 22

Main Street Area: Option A

(29th Street to 38th Street)



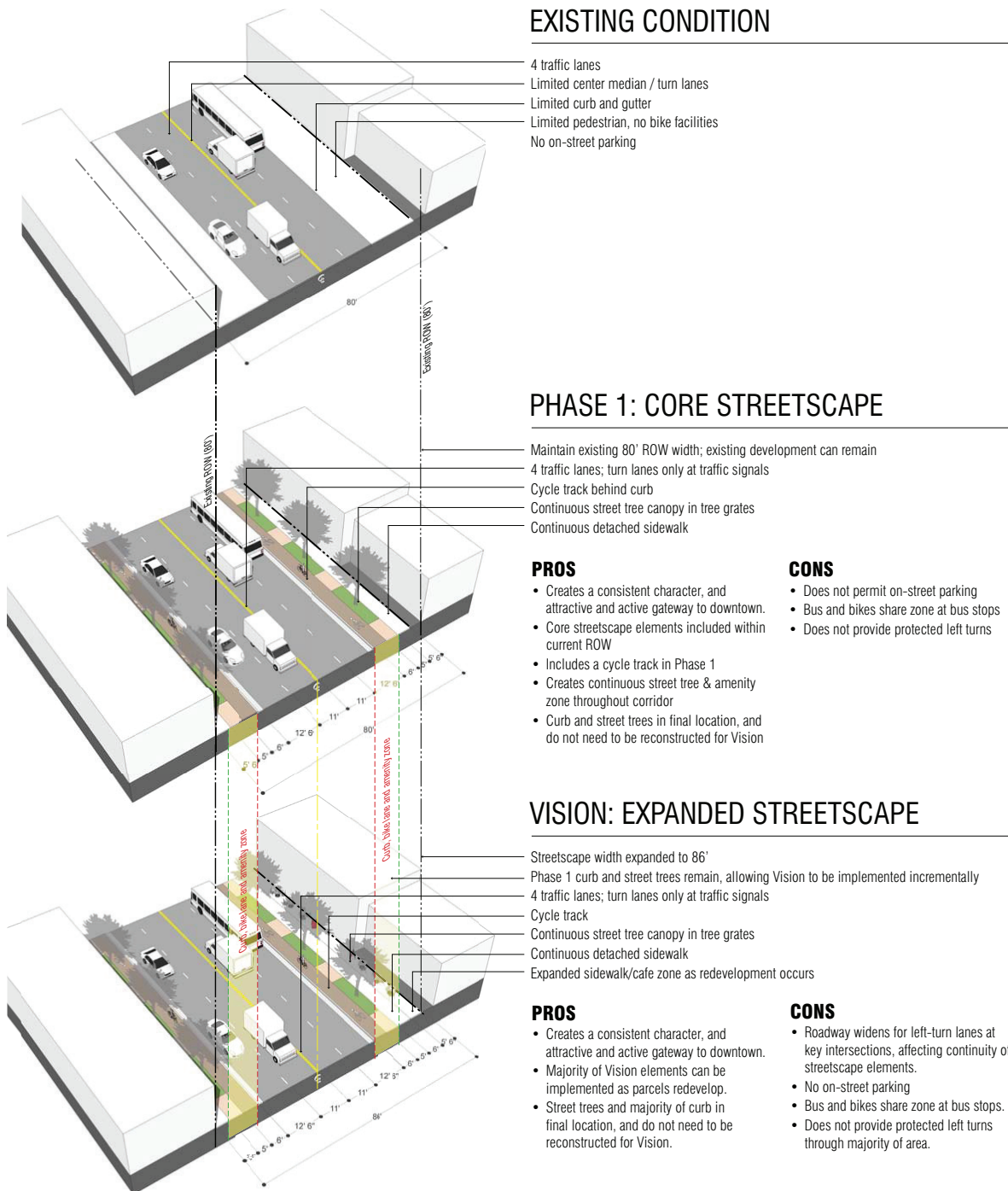
- The Education, Industry and Development Character Area recommended final cross-section (Option B from public meeting 2) shall include a near term 80' implementation and an ultimate vision 110' cross section, where possible. Elements include four travel lanes, a vertically separated cycle track, a continuous tree lawn/public-art/amenity area

and detached sidewalk. Where applicable, sidewalk café/building frontage zone shall be expanded as part of ultimate build-out.

FIGURE 23

Education, Industry & Development Area: Option B

(38th Street to 44th Street)



RECOMMENDATION/
IMPLEMENTATION

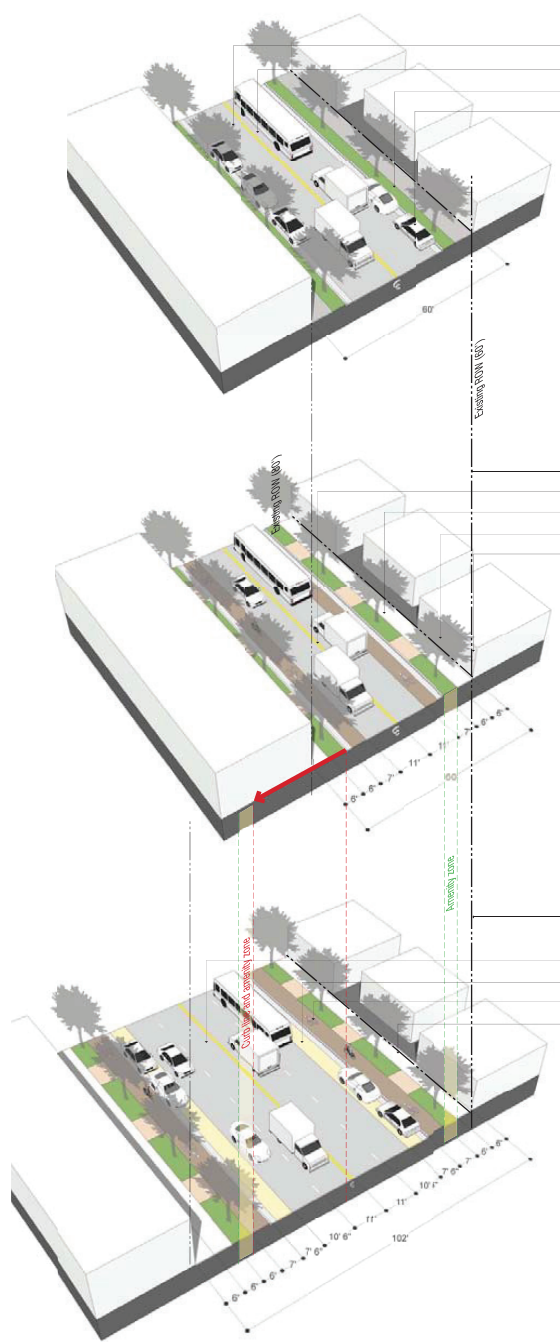


- The recommendations for the National Western Center and Northern Neighborhood Character Area cross-section presented in this report are initial recommendations based the input received during this reports study period. These cross-sections should be used to aid in the development of Neighborhood Plans, National Western Center Master Plan and the North Metro Rail Line as those concurrent projects proceed.

- With that in mind, recommended National Western Center Character Area cross-section (Option B from public meeting 2) shall include two travel lanes, on-street bike lanes with a continuous tree lawn and detached sidewalk that exists in the existing 60' right-of-way. While holding the eastern edge of the right-of-way, the Ultimate Vision expands the right-of-way to 102', adding 2 additional travel lanes, vertically separated cycle-tracks, and on street parking.

FIGURE 24

National Western Center Area: Option B (46th Ave. to Race Street)



EXISTING CONDITION

- 2 traffic lanes
- No center median / turn lanes
- Tree lawn and detached sidewalk
- On-street parking
- No bike facilities

PHASE 1: CORE STREETSCAPE

- Maintain existing 60' ROW width; existing properties can remain
- 4 traffic lanes; turn lanes only at traffic signals
- Bike lane
- Continuous street tree canopy
- Continuous detached sidewalk

PROS

- Core streetscape elements included within current ROW
- Includes bike lanes in Phase 1
- Creates continuous street tree & amenity zone throughout corridor
- Curb and street trees on east side of street in final location. All expansion to occur on west side of street.
- Bike lane connects to NWC redevelopment area
- Detached, buffered sidewalks

CONS

- No on-street parking in Phase 1
- West side of street and east curb line would need to be rebuilt in Vision phase.
- Bus and bikes share zone at bus stops.

VISION: EXPANDED STREETSCAPE

- Streetscape width expanded to west. East side of street and ROW line unchanged.
- Phase 1 curb and street trees remain, allowing Vision to be implemented incrementally
- 4 traffic lanes; turn lanes only at traffic signals
- Phase 1 bike lane converts to on-street parking
- Bike lane relocated to cycle track
- Continuous detached sidewalk

PROS

- Creates consistent character and welcome to National Western Center and neighborhood.
- Street trees and majority of curb on east side in final location, and do not need to be reconstructed for Vision
- Cycle track connects to NWC redevelopment area
- Detached buffered sidewalks
- Generous pedestrian zone allows flexibility for future enhancements

CONS

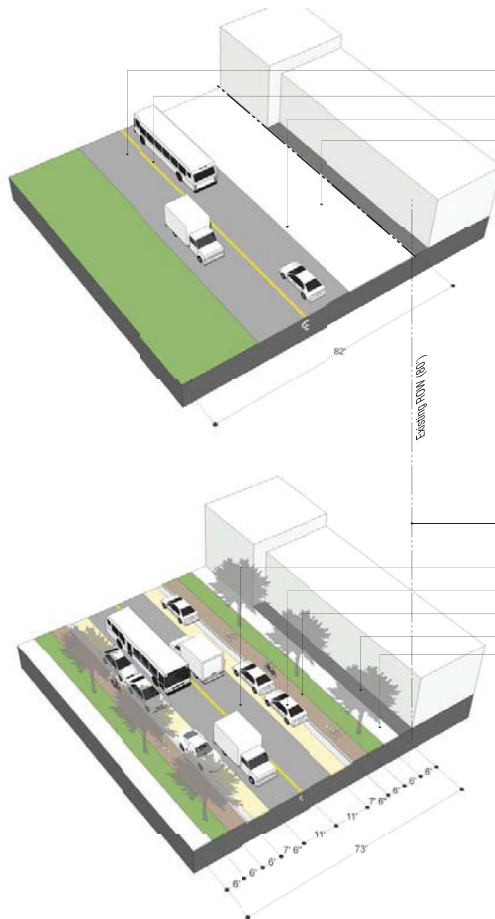
- Roadway widens for left-turn lanes at key intersections, affecting continuity of streetscape elements
- Bikes and bus riders share zone at bus stops
- Special treatment for cycle track at intersections

- The Northern Neighborhood Character Area cross-section (Option B from public meeting 2) includes a single phase implementation given the limited constraints in the existing condition. Two travel lanes with on-street parking are recommended. A detached sidewalk, continuous tree lawn and vertically separated cycle-track are proposed for each side of the corridor.

The recommended cross-sections accommodate all modes of travel, minimum vehicular travel lane widths, dedicates space for tree lawns, public art and other community amenities and allow for a phased approach to implementation that minimizes cost and, maximizes opportunities for cohesive implementation to occur on a property by property or block-by-block-basis.

FIGURE 25

Northern Area: Option B (49th Ave. to City Limits)



EXISTING CONDITION

- 2 traffic lanes
- No center median / turn lanes
- No curb and gutter
- No pedestrian, bike facilities

VISION

- Total right-of-way (ROW) reduced to 73' to accommodate commuter rail; east ROW line and existing development can remain
- 2 traffic lanes; turn lanes only at traffic signals
- On-street parking
- Cycle track behind curb
- Continuous street tree canopy in tree lawn
- Continuous detached sidewalk

PROS

- Vision can be constructed without phasing
- Core streetscape elements included within reduced ROW
- Creates continuous street tree & amenity zone throughout corridor
- Cycle track connects to NWC redevelopment area
- Detached, buffered sidewalks
- On street parking on both sides of street

CONS

- Roadway widens for left-turn lanes at key intersections, affecting continuity of streetscape elements
- Bikes and bus riders share zone at bus stops
- Special treatment for cycle track at intersections

RECOMMENDATION/
IMPLEMENTATION



IMPLEMENTATION

The purpose of this study was to define a vision for Brighton Boulevard. For 2014, the NDCC secured \$1.2 million from the City's annual CIP fund to advance the design of Brighton Boulevard from 29th St. to 44th St. This will advance the design development level detail and get the project shovel-ready. That effort will include, but is not limited to:

- Detailed design of an integrated multimodal solution
- More detailed design of the Brighton Boulevard Enhanced Bike Facility to improve visibility and safety
- Assessing and accommodating drainage and utilities using sustainable and low impact development practices.
- In-depth evaluation and design of intersections, turn lanes and transitions between character areas
- Operational options to improve safety and livability of the near-term implementation phase
- Identifying opportunities for public art and other options for establishing an identity for the corridor
- Paying particular attention to how the cross sections fit with properties that have already redeveloped and made infrastructure improvements, or are actively redeveloping

The City is moving to secure a design partner to advance the project, expecting that the contract will be issued and more formal design will commence in the summer of 2014. The project team will include experienced professionals with expertise in design of roadways and bicycle facilities, as well as the ability to incorporate innovative urban design, storm water and environmental sustainability elements. The NDCC will continue to seek additional funds from a variety of sources to construct and/or enable additional shovel-ready projects in the region.

The Mayor will be kicking off the NDCC Finance Work Group in May 2014. The committee will assist the Administration in exploring, and ultimately recommending, a set of funding solutions for the Brighton Boulevard project and the five other NDCC projects. Strategically combined, these projects will advance the transformation and reconnection of this region of the City. One of the key considerations will be the exploration of possible public/private partnerships, which will be essential to successfully complete the significant infrastructure investments required to reconnect this region to the rest of the City.

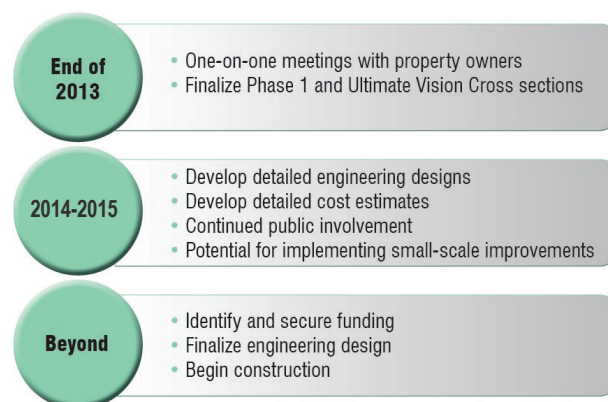
Details determined at this point including minimum widths and number of travel lanes, near-term and ultimate location of bicycle and pedestrian facilities, location of amenity zones, parking and minimum

dimensions required for each element this vision. This information provides property owners and developers who are redeveloping their site the detail they need to begin making changes to their properties that comply with the vision.

The western side of Brighton in the Main Street Character Area, for example, is currently home to several recently announced projects. Where these large parcel or entire block developments are taking place, the opportunity exists for the implementation of the ultimate vision instead of a phased approach.

That effort will include, but is not limited to:

- Detailed design of an integrated multimodal solution
- More detailed design of the Brighton Boulevard Enhanced Bike Facility to improve visibility and safety
- Assessing and accommodating drainage and utilities using sustainable and low impact development practices
- In-depth evaluation and design of intersections, turn lanes and transitions between character areas
- Operational options to improve safety and livability of the near-term implementation phase
- Identifying opportunities for public art and other options for establishing an identity for the corridor
- Paying particular attention to how the cross sections fit with properties that have already redeveloped and made infrastructure improvements, or are actively redeveloping



Project schedule and next steps

FUNDING SOURCES

As with most urban projects of this magnitude implementation will span several years and will likely tap a variety of funding sources. The City is working to identify funding sources and prioritize improvements

through the work of NDCC Finance Committee. Below are several possible funding sources:

CAPITAL IMPROVEMENTS PROGRAM (CIP)

Each year the City identifies a set of capital improvements to be made in the next six years and sets aside funds to implement those improvements annually. The City should identify the Brighton Boulevard corridor and work with the community to implement best value improvements as development changes the corridor.

TAX INCREMENT FINANCING (TIF) AND BUSINESS IMPROVEMENT DISTRICTS (BID)

The NDCC, in early 2014, will launch a finance committee to explore funding strategies for issues including implementations and long term maintenance that include Tax Increment Financing (TIF), Business Improvement District (BID). These funding strategies will require close coordination between the city and the surrounding community.

PUBLIC-PRIVATE PARTNERSHIP

A Public Private Partnership (P3) is an agreement where a single private entity, typically a consortium of private companies, is responsible for performing all or a significant number of functions in connection with a project. As a mechanism for funding future improvements along Brighton Boulevard this is one of many tools the City may explore that allows for greater private sector participation in the delivery and financing of transportation improvements.

GENERAL OBLIGATION BONDS (GO BONDS)

General Obligation Bonds (GO Bonds), allow the City to borrow money in order to finance long term investments in City assets such as the many improvement projects of the 2007 Better Denver Program. GO Bonds are approved by voters and are backed by the full faith and credit of the City. They are payable from ad valorem (property) taxes. Bonds are generally issued in various amounts and over several years to accommodate financing needs. The City, as the authorized issuer of the GO Bonds, pays interest and principal at fixed intervals, and the Bonds have a specified maturity date whereby all the principal and interest is repaid.

PROJECT
PROCESS/
DESIGN
DEVELOPMENT





PROJECT
PROCESS/
DESIGN
DEVELOPMENT