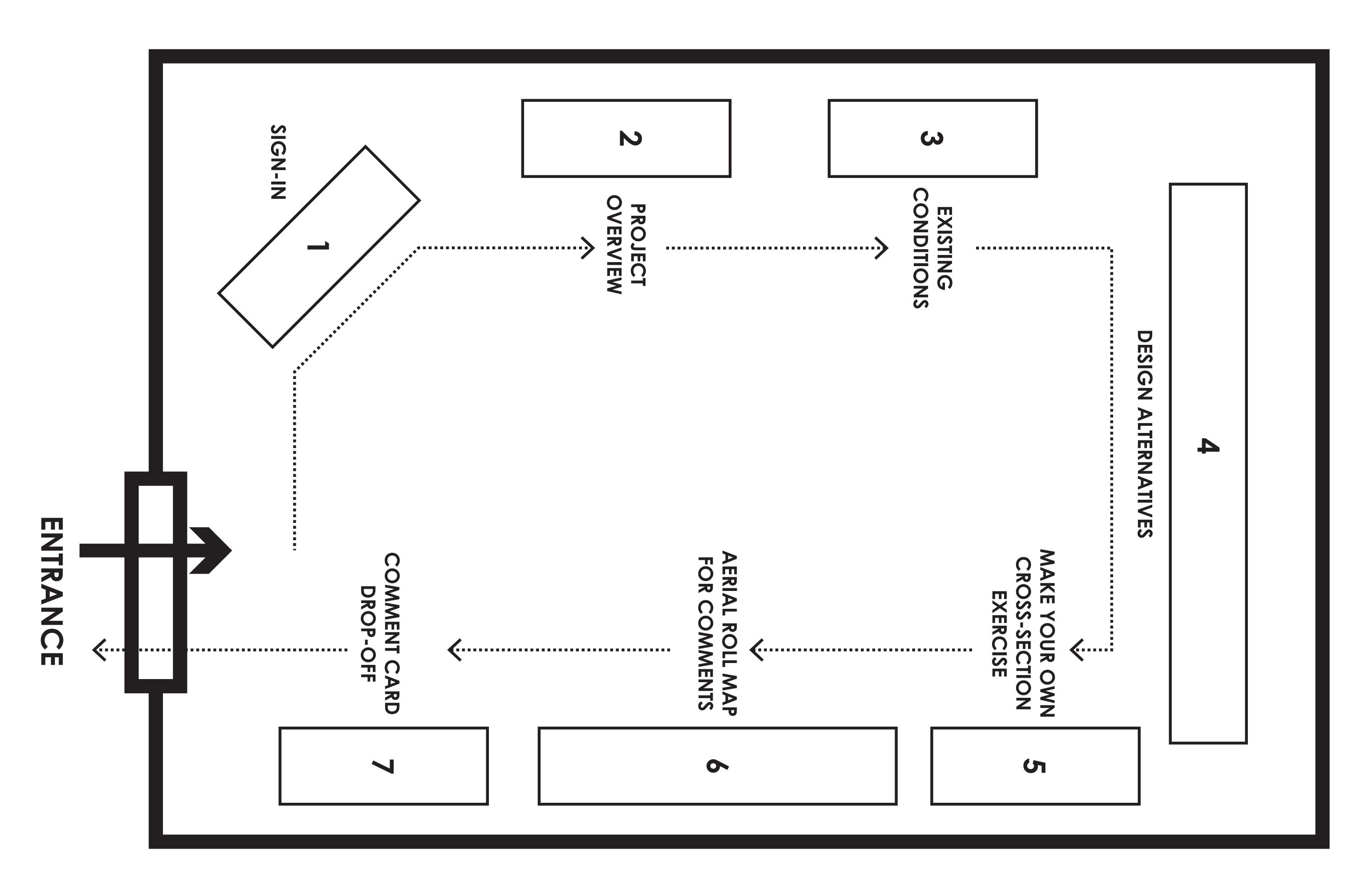
CITY OF PITTSFIELD

NORTH STREET CORRIDOR STUDY PUBLIC OPEN HOUSE

WEDNESDAY, APRIL 9, 2025 4:00 PM - 7:00 PM







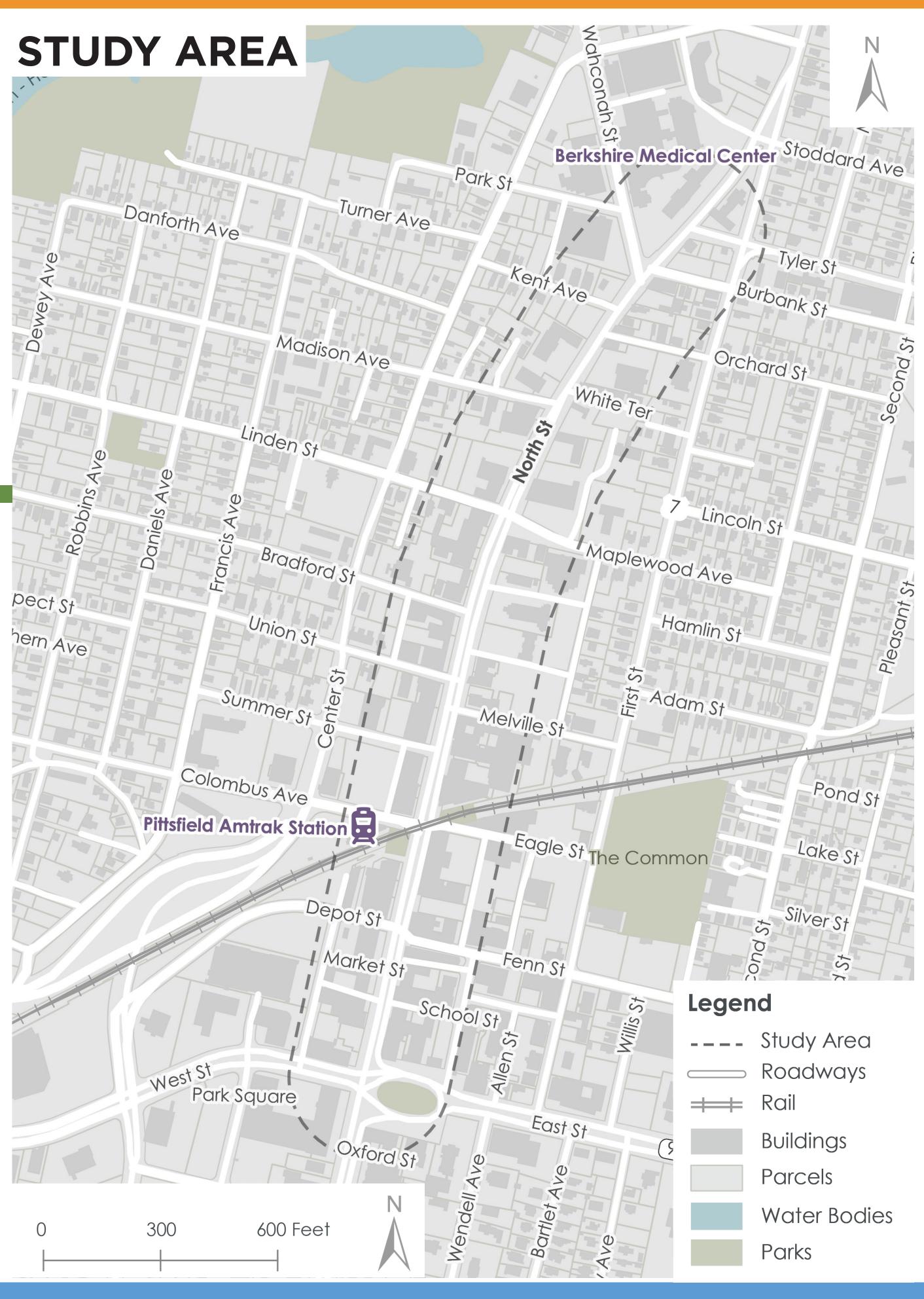
PROJECT BACKGROUND

This project aims to conduct a holistic corridor-wide visioning study looking at land use, demographic, transportation, and urban design characteristics along North Street in downtown Pittsfield.

This study will develop and analyze comprehensive street design alternatives that envision North Street as a great small town main street that functions as a complete street with multimodal transportation facilities and a special gathering place for the community.







DRAFT PROJECT VISION

Transform North Street into a great street that attracts people, businesses, and activity by providing safe and comfortable transportation facilities for all, enhancing environmental resiliency, and celebrates the City's history.



Bicycle Conflict Area Striping on North Street
Source: Kittelson & Associates



Bike Lane Intersection Markings
Source: Kittelson & Associates



DRAFT GOALS

COMMUNITY COLLABORATION

Collaborate with stakeholders and community members to develop a comprehensive transportation, land use, and urban design vision.

SAFETY, COMFORT, & ACCESS FOR ALL

Apply complete street strategies to improve multimodal safety, comfort, and access for users of all ages and abilities.

ENHANCE THE PUBLIC REALM

Develop and evaluate street design alternatives that enhance the public realm, create place-making opportunities, and integrate environmentally resilient streetscapes.

GUIDE POTENTIAL FUTURE DEVELOPMENT

Create a land use framework to guide potential future redevelopment along the corridor that is context-sensitive and creates an urban, mixed-use, walkable corridor.

PLANNING PROCESS

PHASE 1: PLANNING STUDY (JAN - JUNE 2025)

- Comprehensive corridor-wide analysis of existing conditions
- Development and assessment of design alternatives
- Stakeholder and community engagement

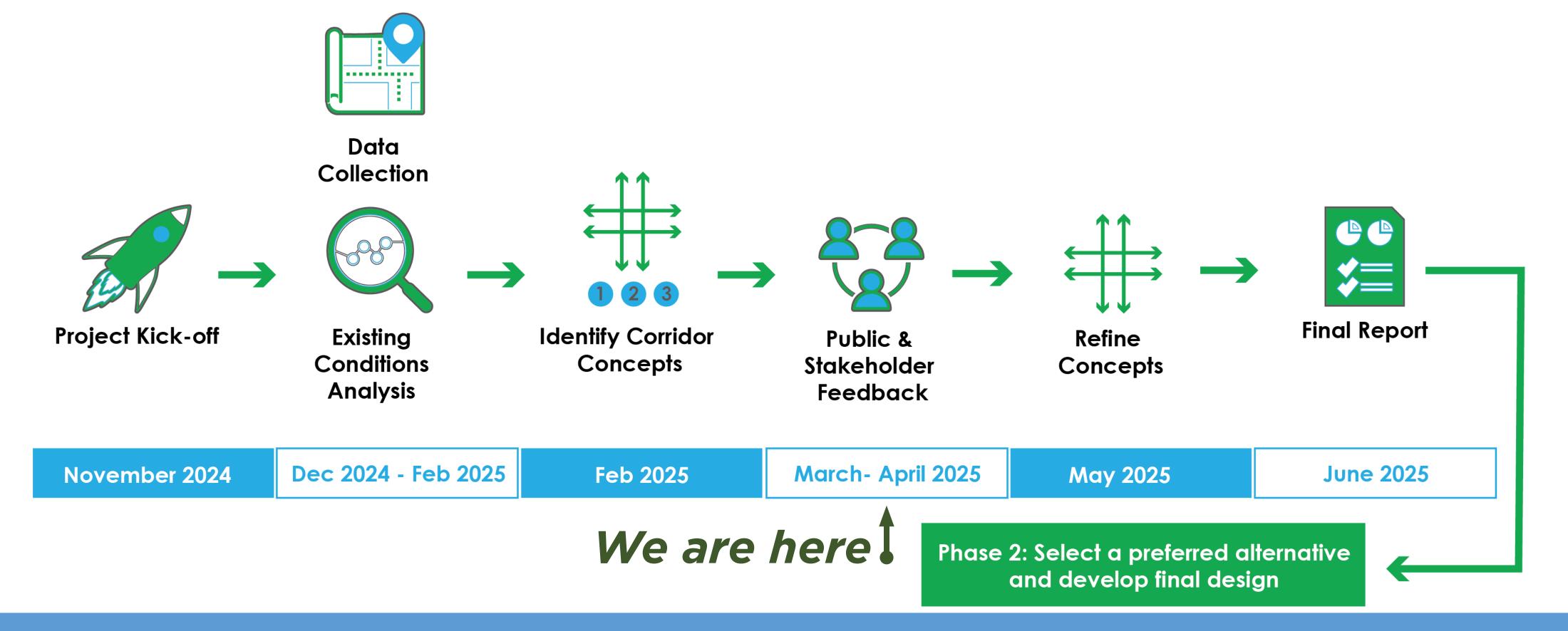
PHASE 2: DESIGN (JULY 2025 - APRIL 2026)

- Select a preferred alternative
- Stakeholder and community engagement
- Develop engineering design and environmental evaluation

PHASE 3: CONSTRUCTION (SUMMER 2026 ONWARDS)

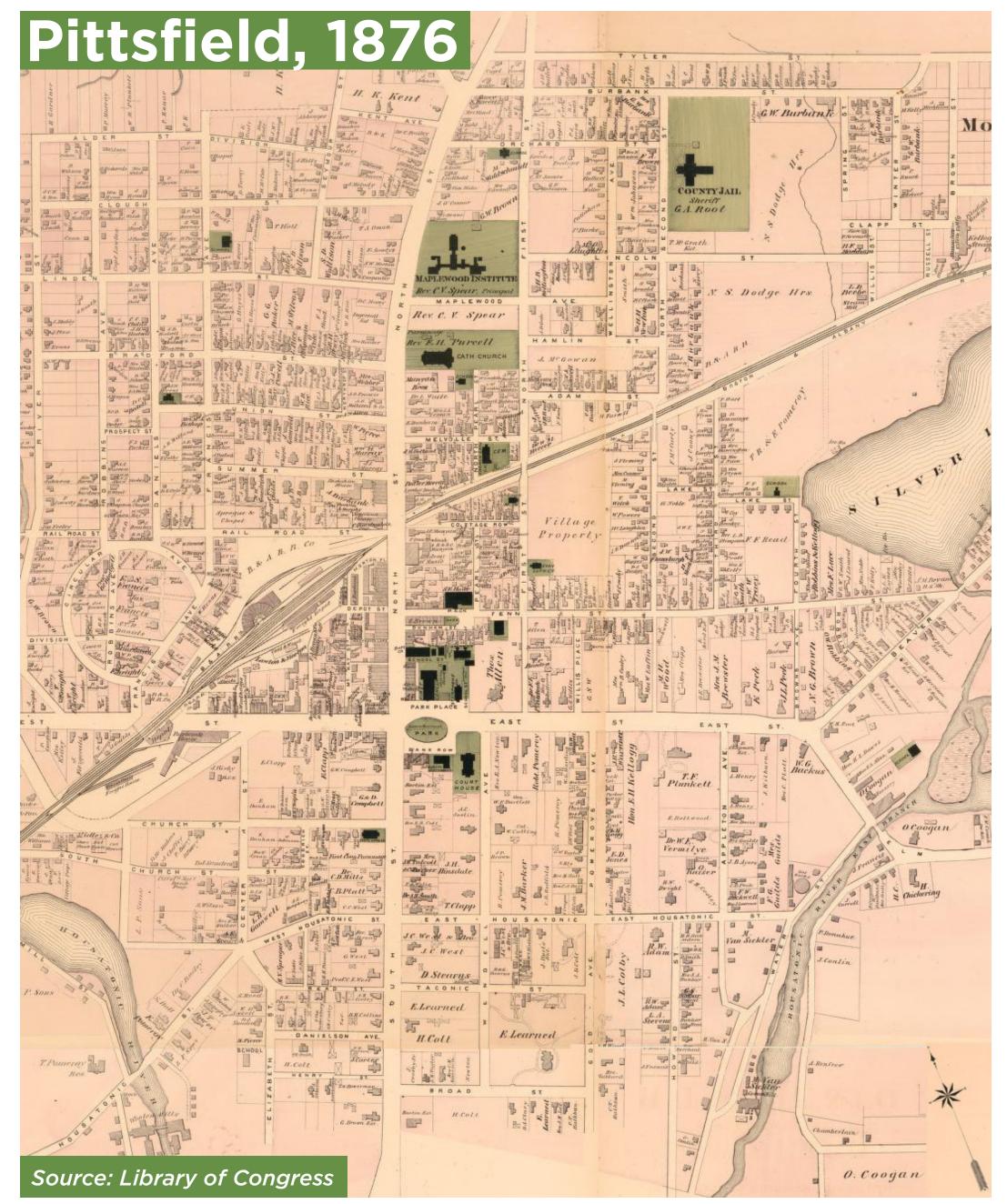
Contingent on funding

NORTH STREET CORRIDOR STUDY (PHASE 1) TIMELINE





HISTORICAL CONTEXT



North Street is a historic corridor which has been Pittsfield's main street since its original street grid was laid out in the late 18th century.

Laid out in 1790, Park Square is the heart of Pittsfield and was the site of the first agricultural fair in the United States in 1810.

Today, North Street remains a vibrant hub in Pittsfield, blending its rich historical heritage with modern cultural and commercial activities.

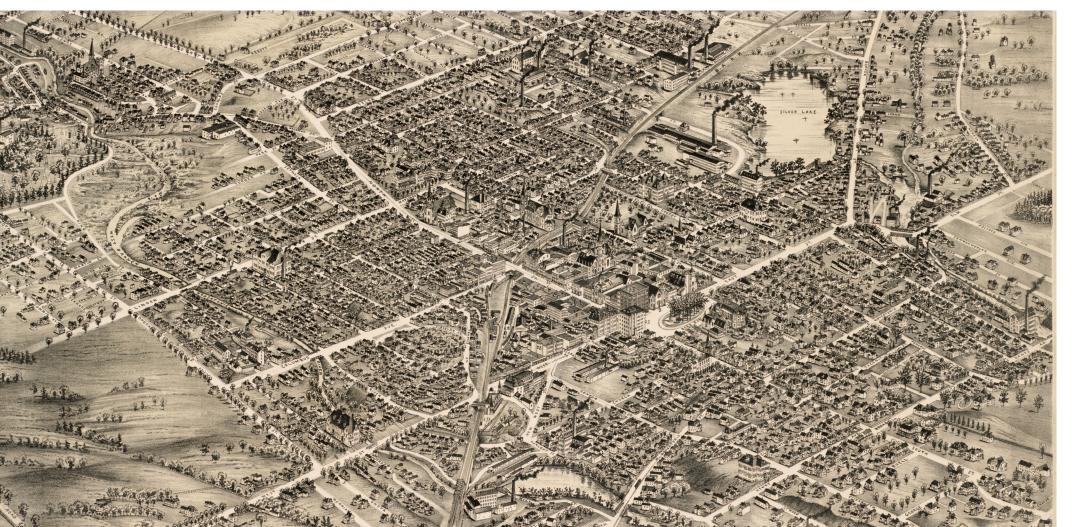


Image: Pittsfield Aerial View Drawing, 1899
Source: Boston Public Library - Norman B. Leventhal Center

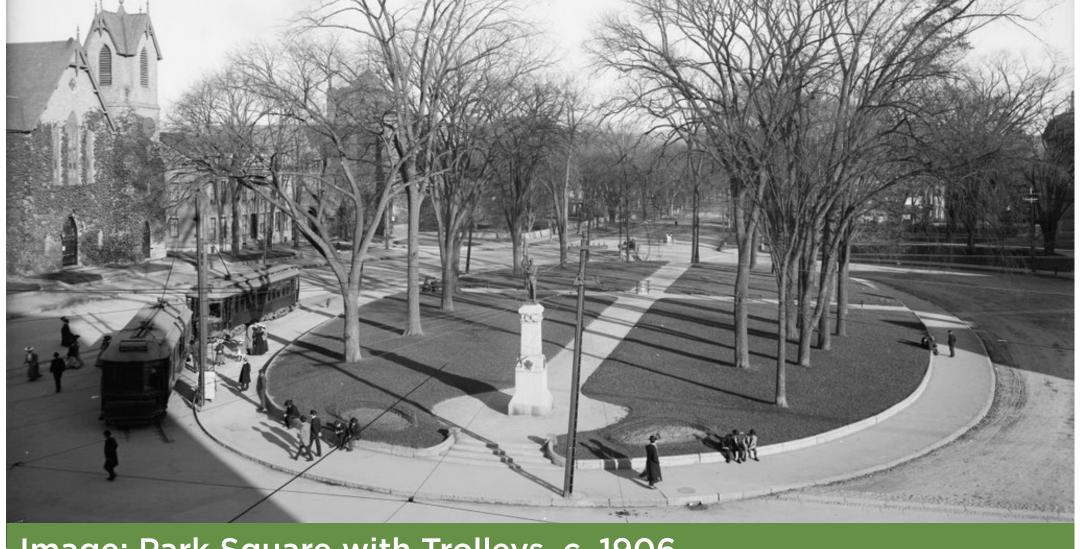


Image: Park Square with Trolleys, c. 1906
Source: Library of Congress, Detroit Publishing Company

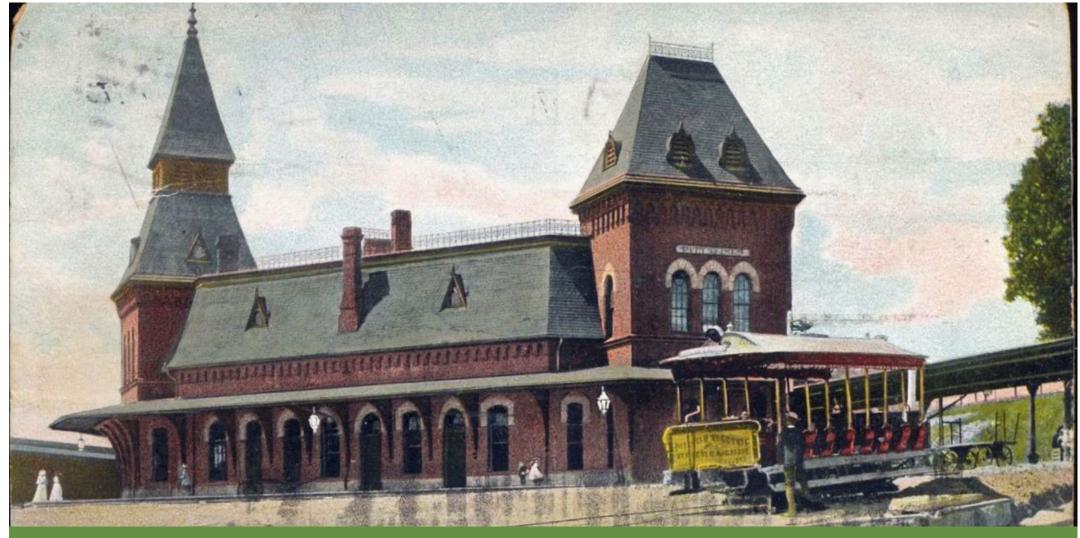


Image: Pittsfield's First Union Station from 1866 to 1914 Source: Wikipedia; A.C. Basselman & Co.

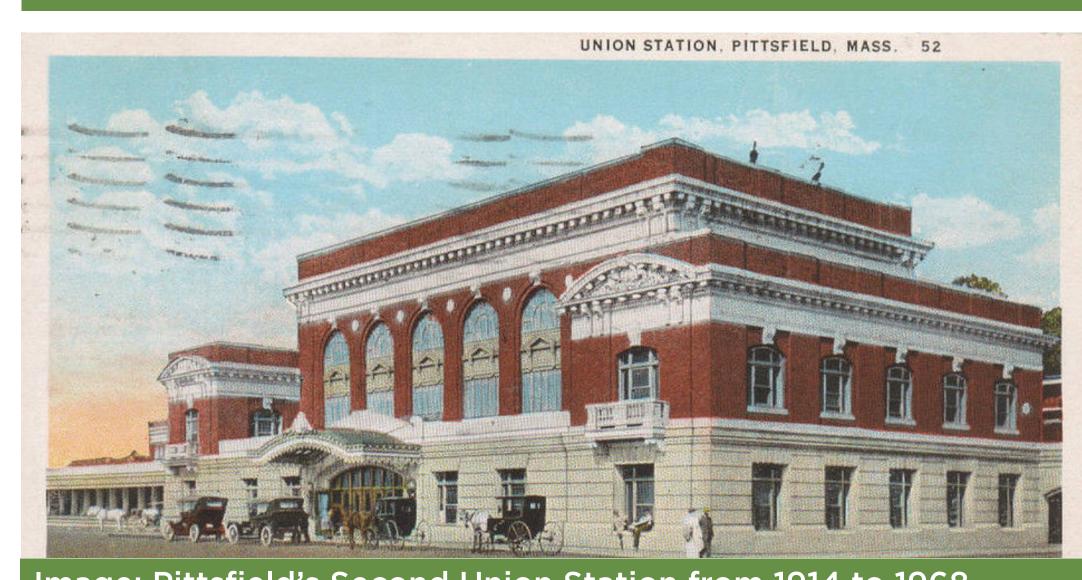


Image: Pittsfield's Second Union Station from 1914 to 1968 *Source: Wikipedia*



Image: North Street and Depot Street around 1908-1915
Source: Lost New England Blog



Image: North Street and Depot Street, 2024

Source: Lost New England

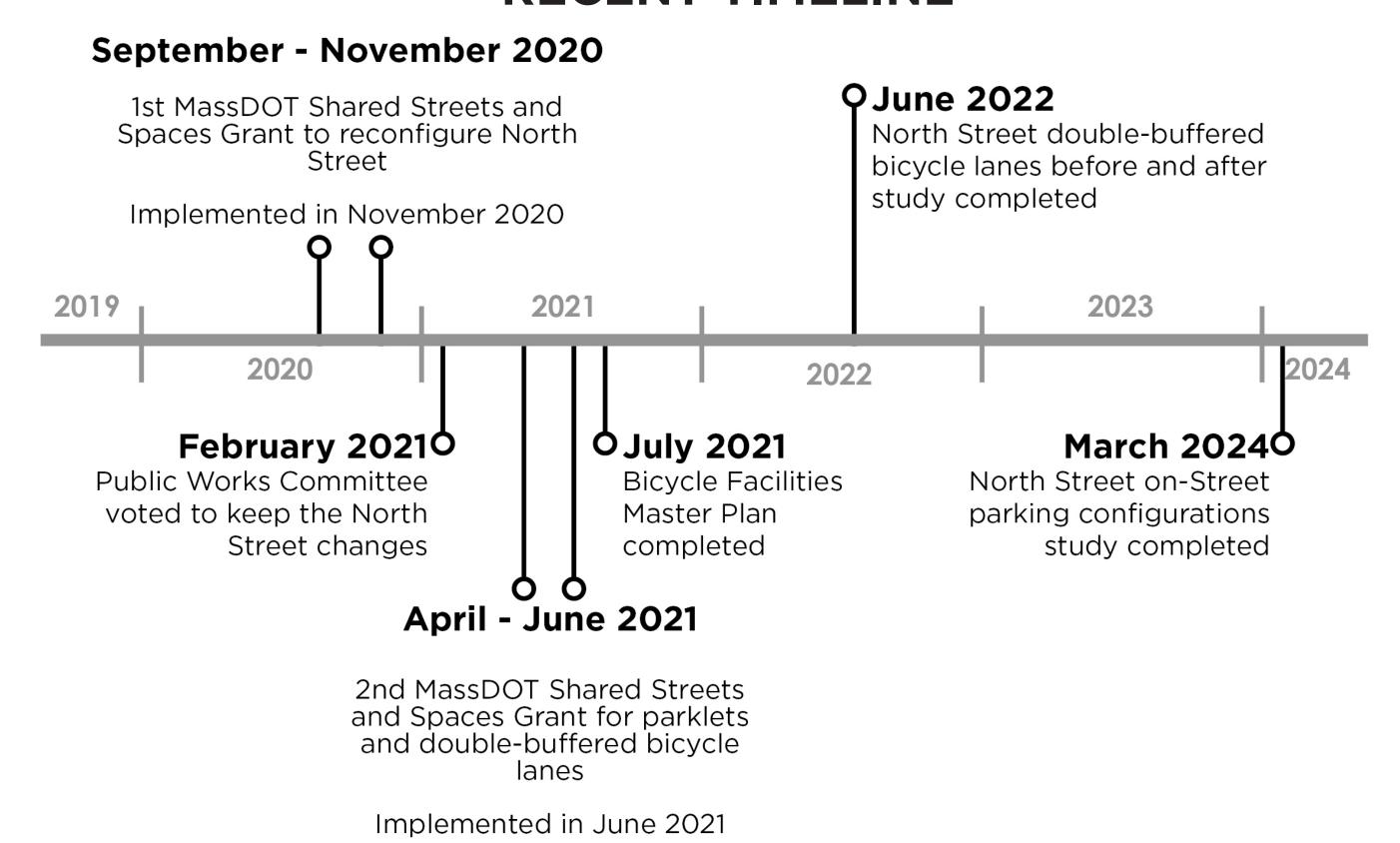


REVIEW OF PREVIOUS STUDIES AND DESIGNS

RECENT NORTH STREET STUDIES

North Street has been the focus of several evaluation studies and design projects in recent years. Although effective for improving safety and comfort for multimodal users, the retrofits in the last few years have been quick-build pilot projects, limited in their ability to truly transform North Street.

RECENT TIMELINE



- Bicycle Facilities Master Plan (2021): The Plan proposes buffered bicycle lanes on North Street as a near-term, quick-build option that can transition to separated bicycle lanes in the future.
- North Street Pilot Project Evaluation Report (2022): Study conducted a survey and data analysis that found higher bicycle ridership, lower overall crashes, and people feeling safer and more comfortable along North Street
- North Street On-Street Parking Configurations Study (2024): The study determined that angle parking will have negative impacts on bicycle facility or may require reducing sidewalk widths. The City determined that the additional spaces gained by any of the angle parking configurations did not justify the reduction in potential safety and comfort of pedestrians and bicyclists.
- STEPS Initiative: the Safe Travel and Equity Plan for our Streets (2024): County-wide safety action plan identified North Street from Burbank Street to West Street as a High Injury Corridor. The plan also identified Columbus Avenue & North Street Intersection as a High-Injury Intersection.

NORTH STREET CONFIGURATION PRIOR TO 2020



NORTH STREET CONFIGURATION BETWEEN 2020 - 2021

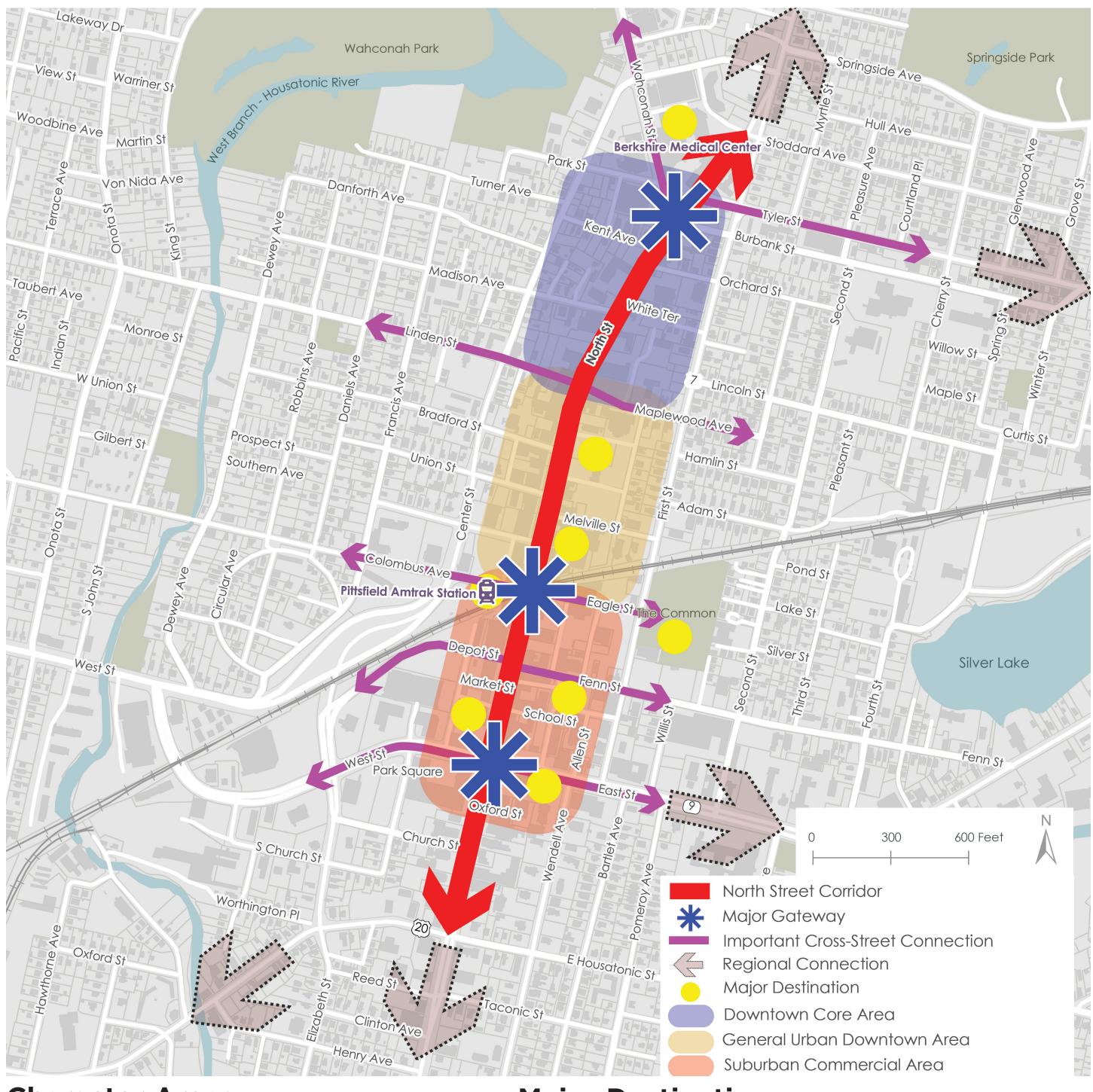


CURRENT NORTH STREET CONFIGURATION



LAND USE, DESTINATIONS, AND CHARACTER AREAS

ISSUES AND OPPORTUNITIES DIAGRAM



Character Areas

- Downtown Core
- General Urban Downtown
- Suburban Commercial

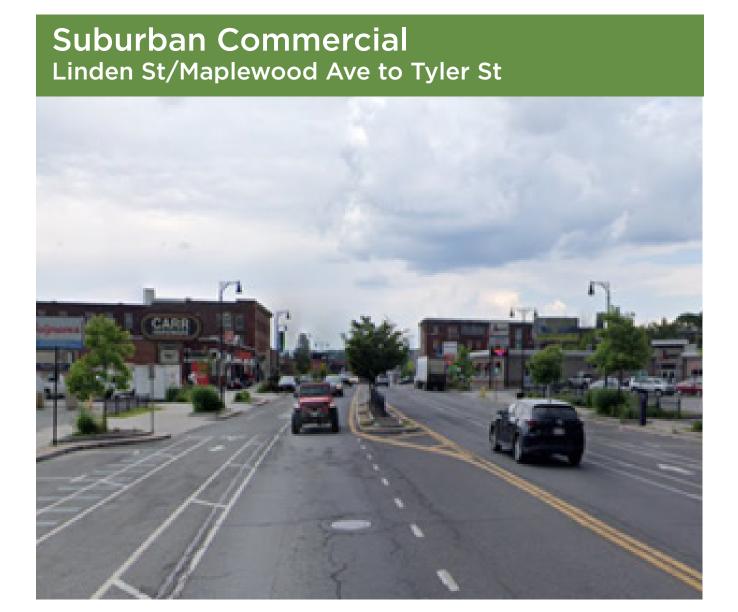
Major Gateways

- Park Square
- Joseph Scelsi Intermodal Transportation Center
- Berkshire Medical Center

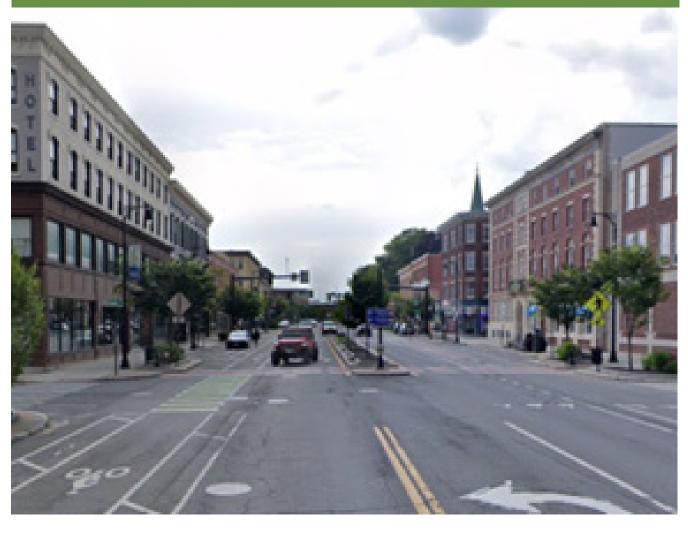
Major Destinations

- City Hall
- The Common
- Berkshire Common Shopping Center
- Park Square
- Church of St. Joseph
- Berkshire Medical Center
- Joseph Scelsi Intermodal Transportation Center

CHARACTER AREAS

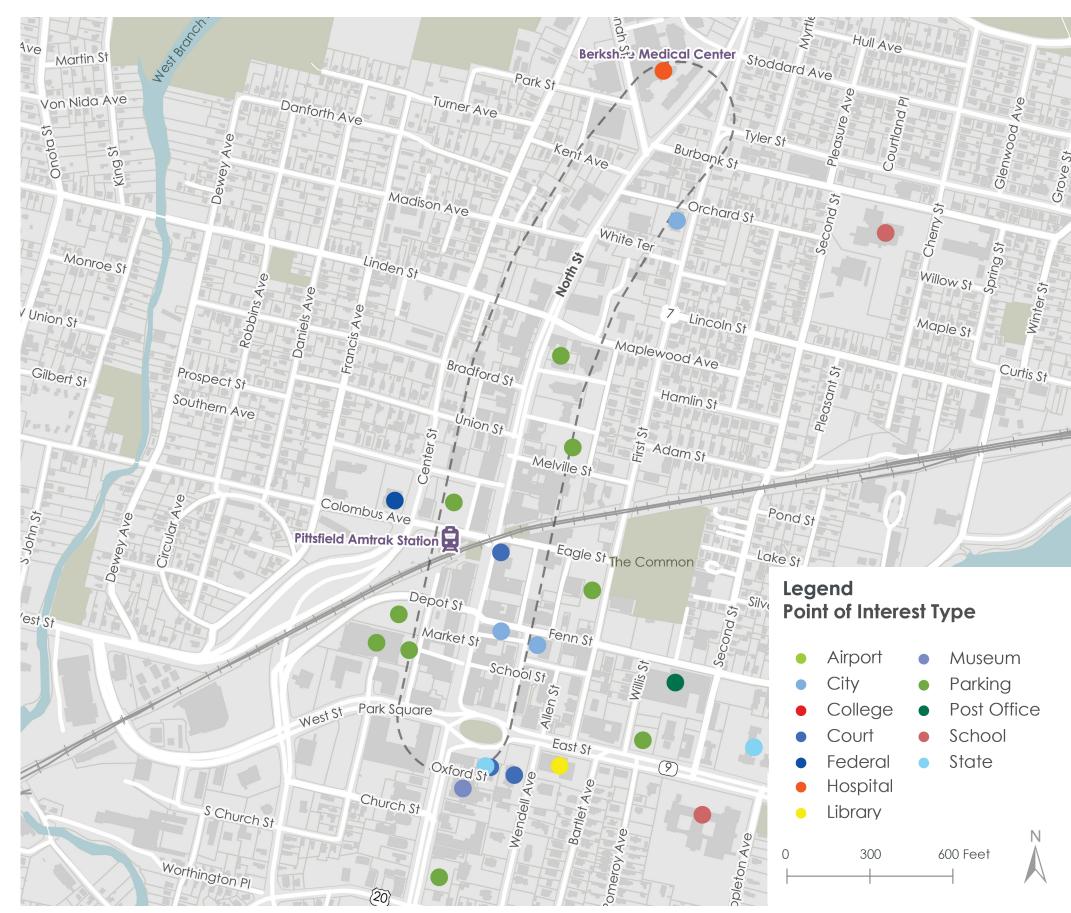








POINTS OF INTEREST



LAND USE



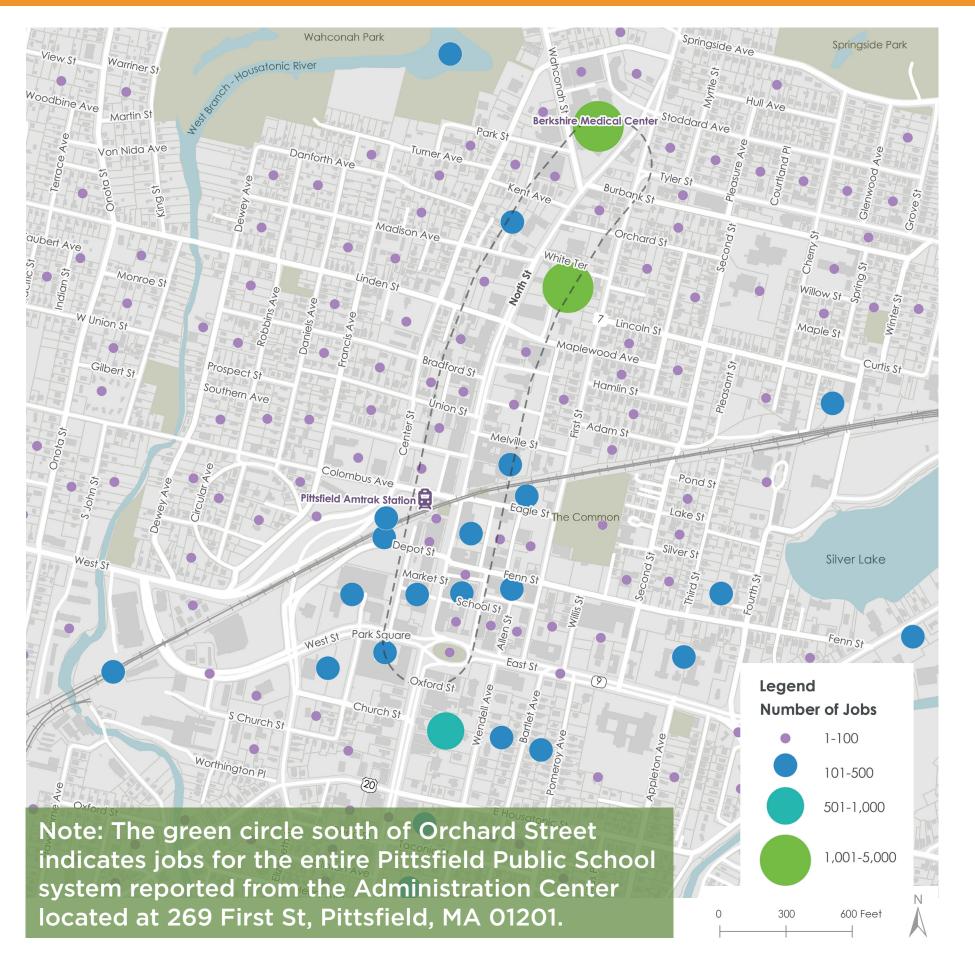


DEMOGRAPHICS

DEMOGRAPHIC CHARACTERISTICS

The demographic analysis of downtown shows that a higher concentration of seniors and commuters who walk, bicycle, and take transit are located along the study corridor.

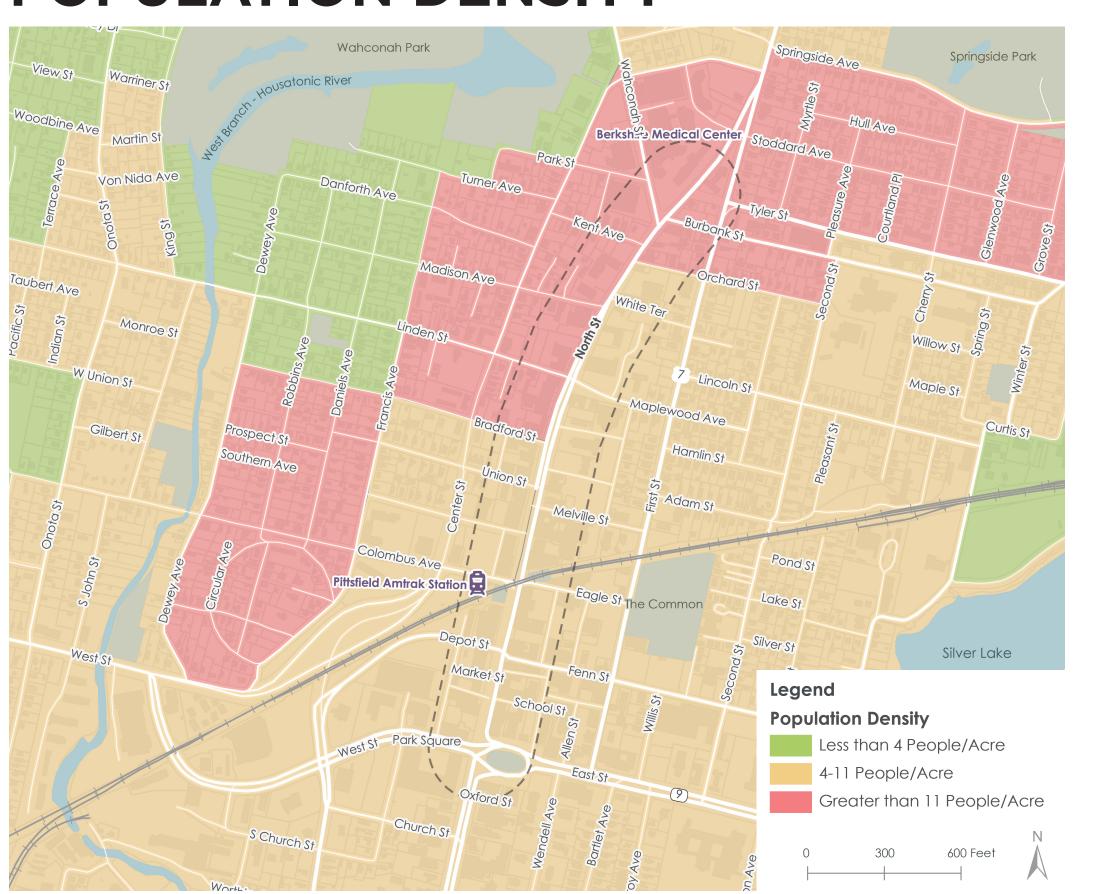
- Population density along North Street is higher than the city-wide population density. The study area accounts for approximately 7,740 residents or 18% of the total population in the City of Pittsfield.
- Seniors aged sixty-five and over and children aged eighteen and under are two age groups with a high propensity to walk, bicycle, or take transit and are comparatively less likely to drive automobiles.
- The concentration of the youth population is higher in the residential neighborhoods on the east and the west sides of North Street, while the senior population is highly concentrated along the entire North Street study corridor as compared to surrounding residential neighborhoods.



EMPLOYMENT LOCATIONS

- Employment locations are one of the most common origins or destinations of everyday trips.
- Connecting major employment centers to surrounding areas by comfortable pedestrian and bicycle facilities will provide a healthier commute mode option for people employed in the study corridor.
- Some of the important employers in and near downtown Pittsfield include General Dynamics Mission Systems, Berkshire Health Systems, SABIC Innovative Plastics, Berkshire Bank, and VidMob.

POPULATION DENSITY



POPULATION OVER 65 YEARS



POPULATION UNDER 18 YEARS





COMMUTING PATTERNS

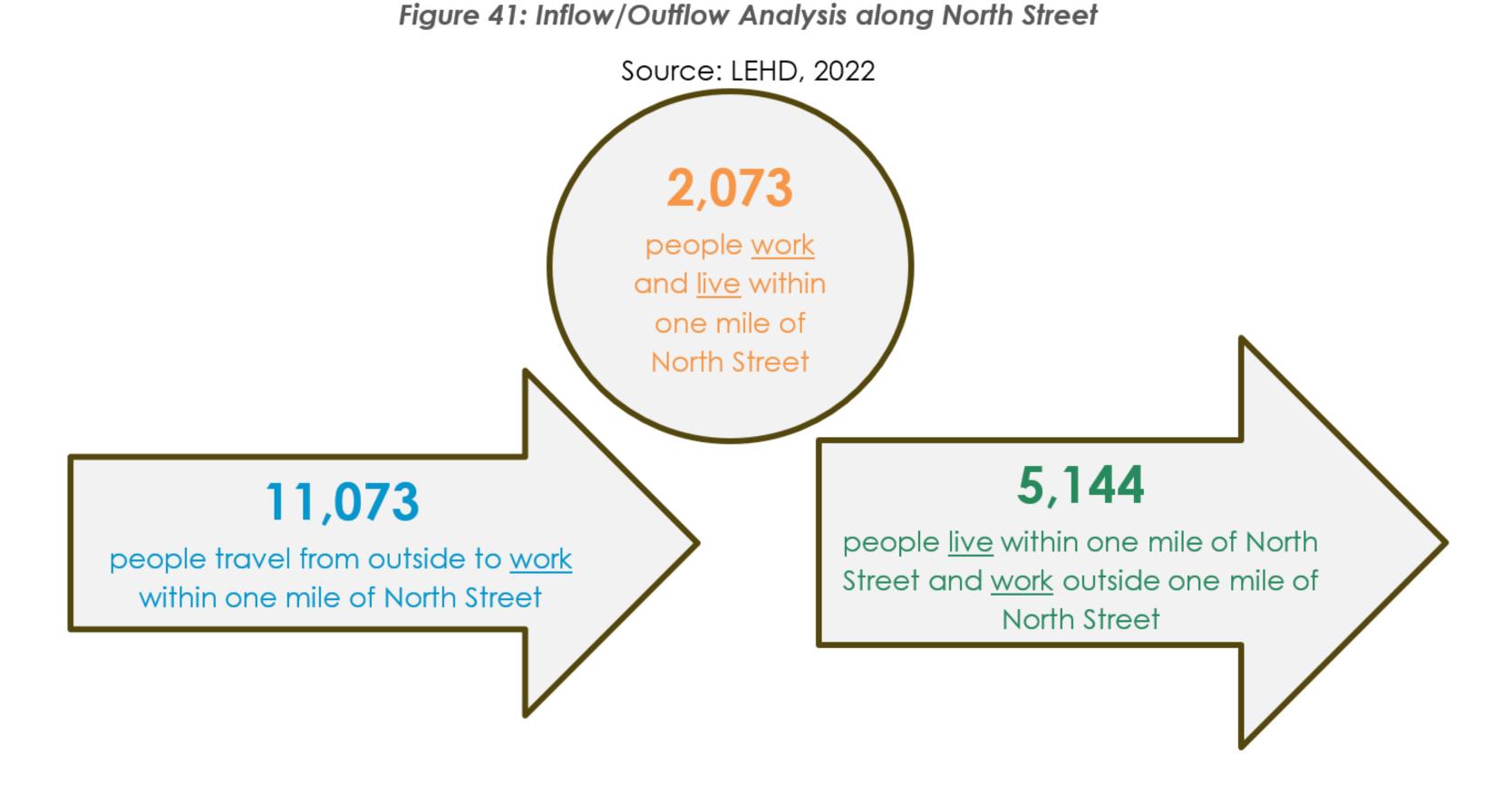
HOW DO YOU COMMUTE?

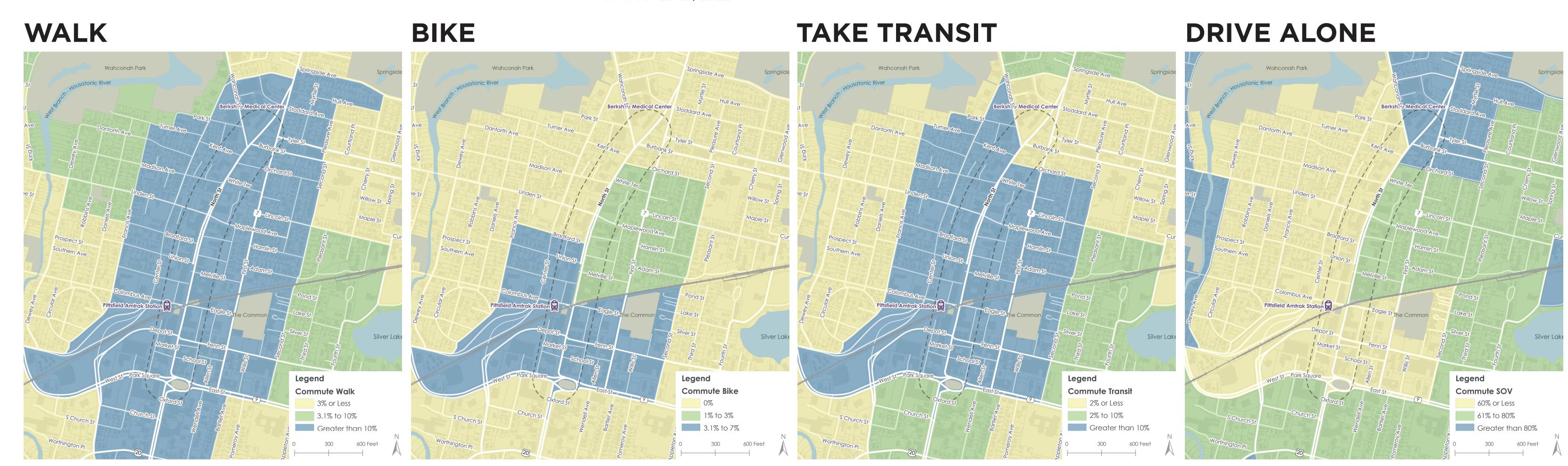
- Around 2,073 people work and live within one mile of North Street.
- These patterns suggest that while most workers commute from more than one mile away, a significant portion resides within a 10-mile distance to benefit from enhanced transit, bicycle, and pedestrian connections.
- These improvements could help facilitate more sustainable and convenient travel options for workers both within and just outside the study corridor.

Table 1: Distance Traveled to Work by Workers Living within One Mile of North Street

	Count	Share
Total All Jobs	7,217	100.0%
<u>Less than 10 miles</u>	4,455	61.7%
<u>10 to 24 miles</u>	719	10.0%
<u>25 to 50 miles</u>	653	9.0%
<u>Greater than 50 miles</u>	1,390	19.3%

Source: LEHD, 2022





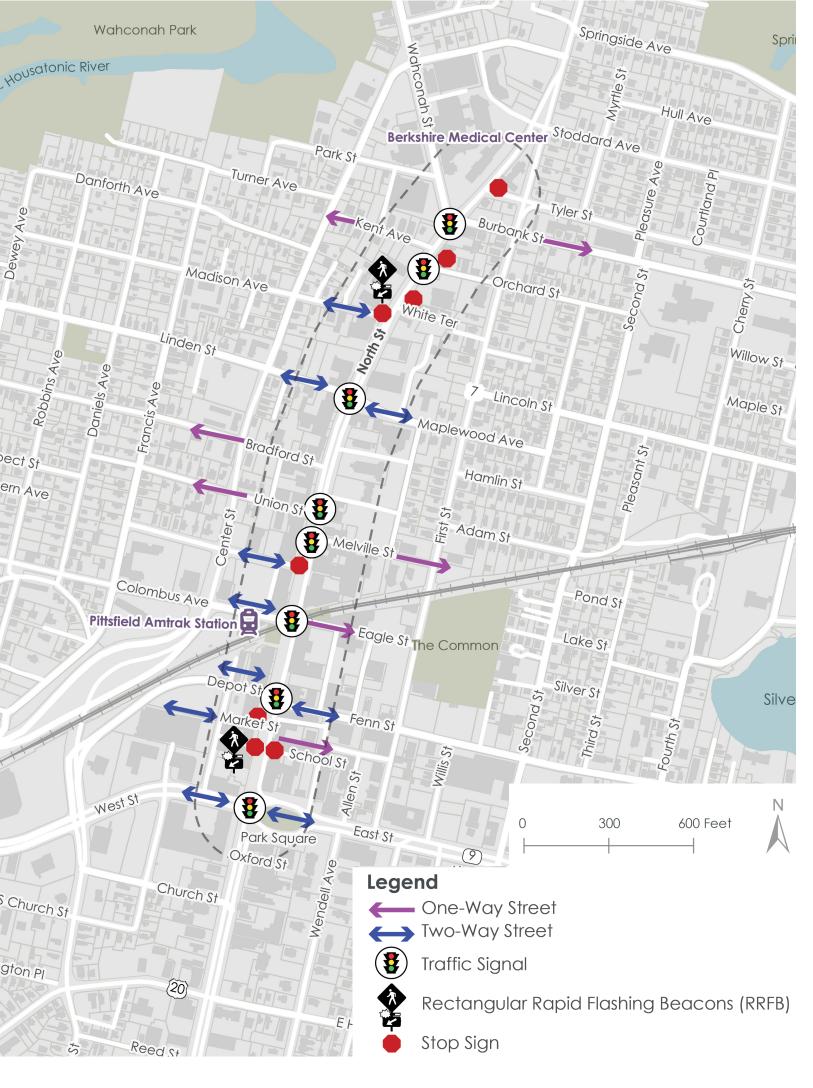


TRANSPORTATION SYSTEMS

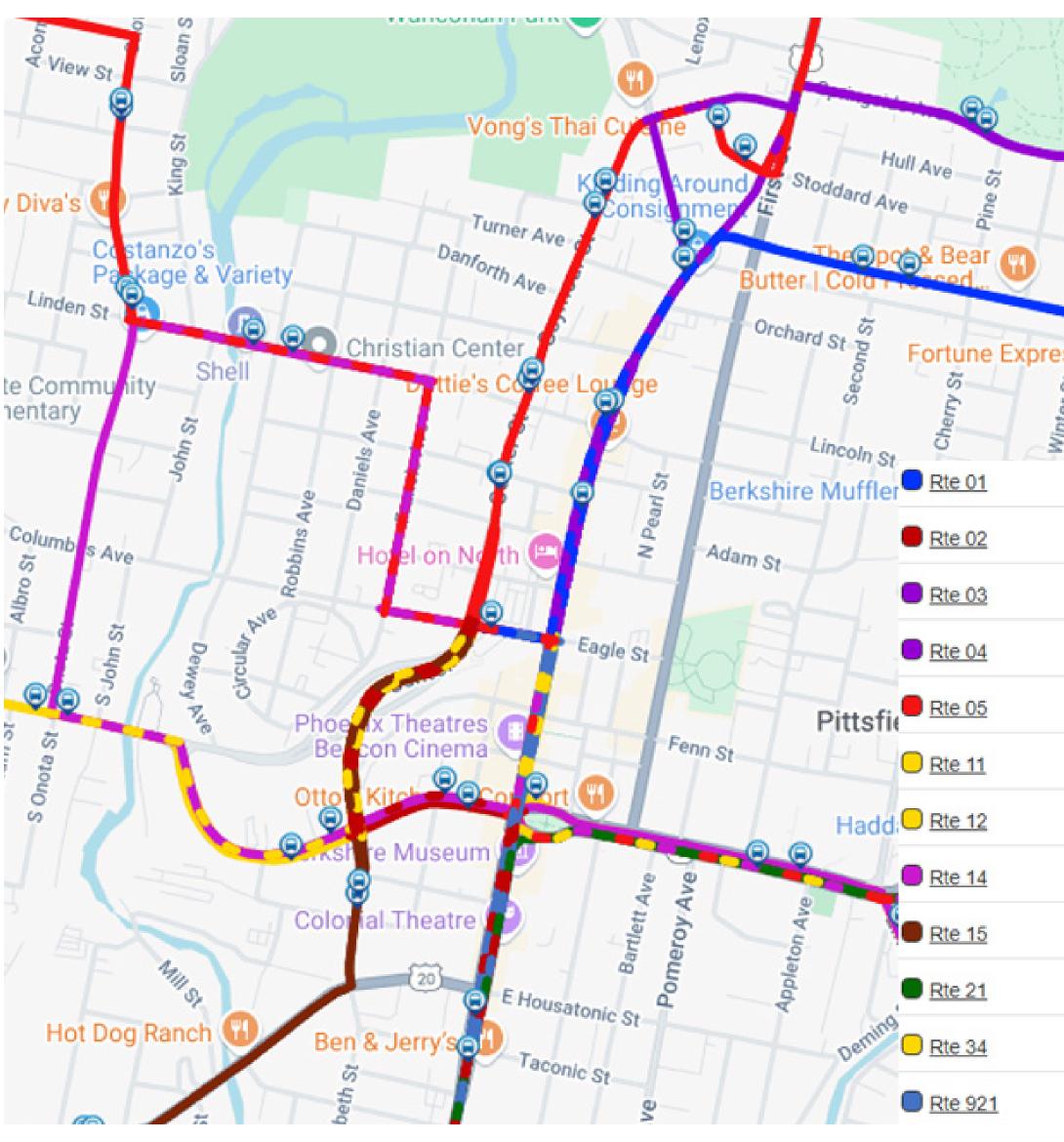
ROADWAY CHARACTERISTICS

- As part of this study, new traffic counts were taken in December 2024 and January 2025. Traffic operations analysis based on this new data confirms that the current configuration, with one-lane in each direction and left turn lanes at intersections, is adequate to manage vehicular traffic in peak hours.
- The posted speed along the study corridor is 25 MPH. 85th percentile speeds ranged from 23 MPH to 31 MPH, while average speed ranged from 19 MPH to 26 MPH.
- The observed speeds indicate that the new roadway configuration has slowed vehicular travel speeds and are more aligned with posted speeds.
- North Street is classified as an Urban Principal Arterial.
- The 2024 AADT volume is 9,762 vehicles per day.
- Out of the total 9,762, on average, 4,060 vehicles travel in the northbound direction, and 5,703 vehicles travel in the southbound direction.
- North Street serves bi-directional vehicular and bicycle traffic, intersected by many one-way east-west streets that often do not continue across the study corridor.



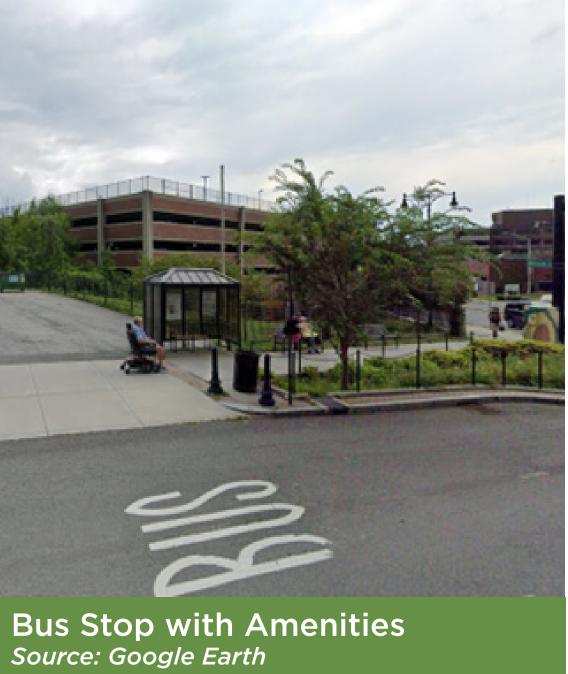


EXISTING TRANSIT NETWORK



- The Joseph Scelsi
 Intermodal Transportation
 Center is located at the
 intersection of North
 Street and Columbus
 Avenue and includes
 the Amtrak train station,
 intercity bus service, and
 BRTA's bus transit center.
- Local BRTA bus routes serve the North Street study corridor, Peter Pan intercity bus service connects Pittsfield to Albany and Springfield, and Amtrak Lake Shore Limited train route connects the city to Boston, Chicago, and New York City.
- A few bus stops along the North Street corridor have amenities such as shelters, benches, signs, and landscape buffers.



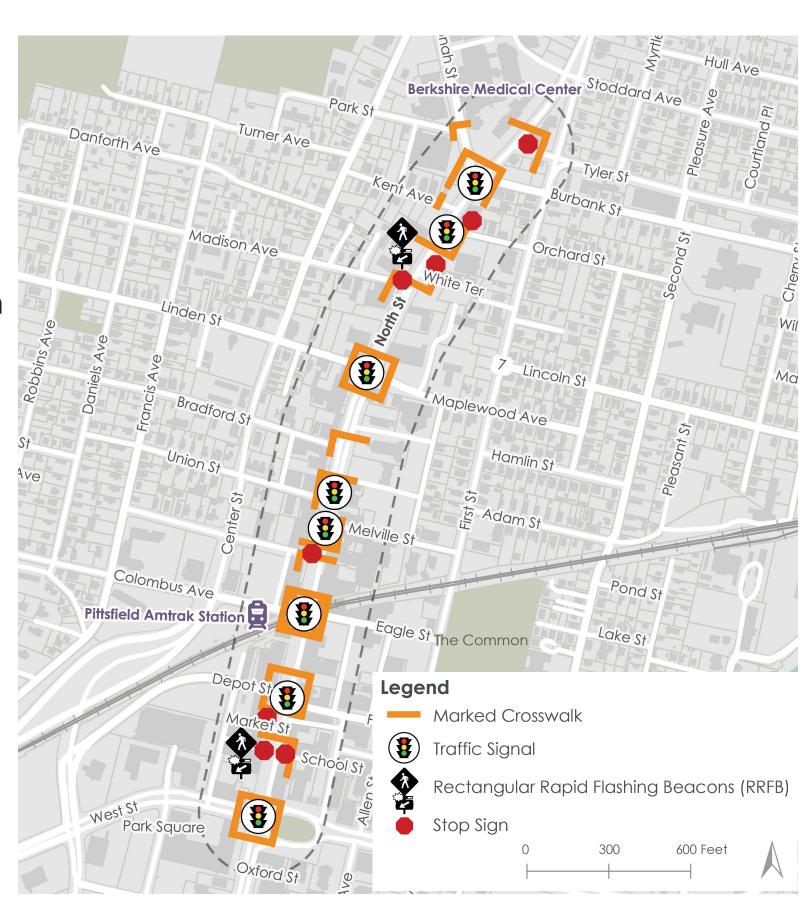


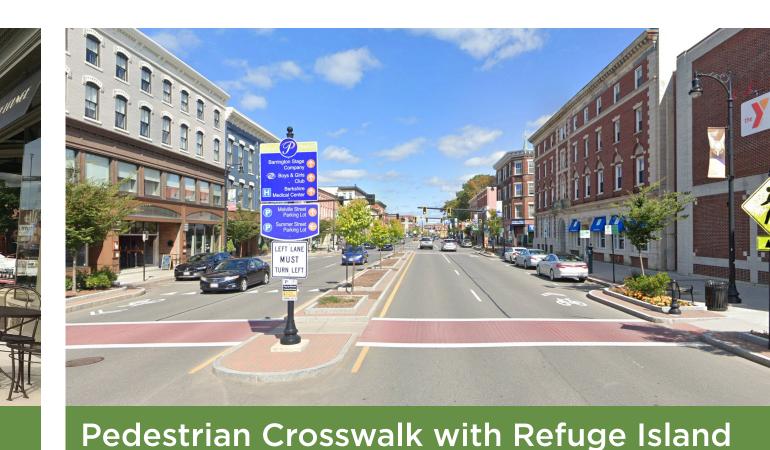


PEDESTRIAN AND BICYCLE CONDITIONS

PEDESTRIAN FACILITIES

- North Street study corridor has continuous sidewalks on both sides of the street.
- Most of the corridor has 15-foot-wide sidewalks on both sides, including a 10-foot clear walkway and a 5-foot amenity zone with streetscape amenities such as benches, street trees, landscape areas with shrubs, lighting, bicycle parking, and trash cans.
- Most intersections include 12-foot-wide crosswalks and are decorative, red-colored stamped asphalt with brick patterns.
- All the signalized intersections have pedestrian push buttons and pedestrian signal heads.
- During the COVID-19 pandemic, the City installed additional outdoor dining areas by repurposing parking spaces in front of certain restaurants. The outdoor dining parklets further enhanced the pedestrian experience and widened the public realm.

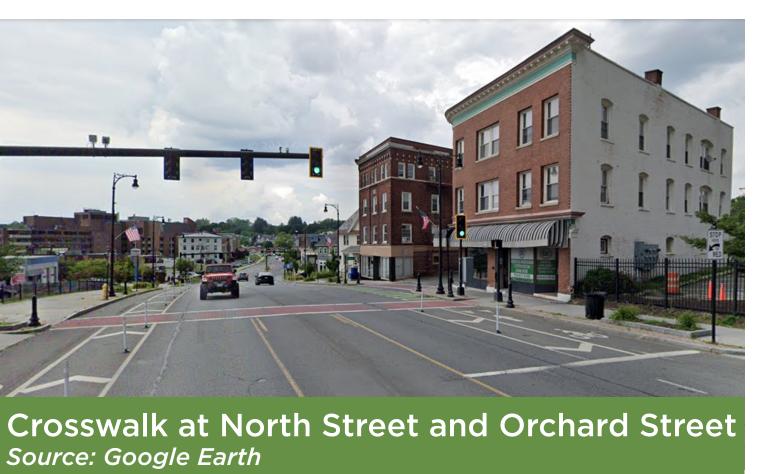




Source: Google Earth



Sidewalks with Pedestrian Amenities



EXISTING & PLANNED BICYCLE NETWORK

North Street currently has double-buffered bicycle lanes from Park Square to Madison Avenue, where curbside onstreet parking is present, and separated bicycle lanes from Madison Avenue to Wahconah Street, where this is no on-street parking. These bicycle facilities were implemented as a quickbuild project in 2021.

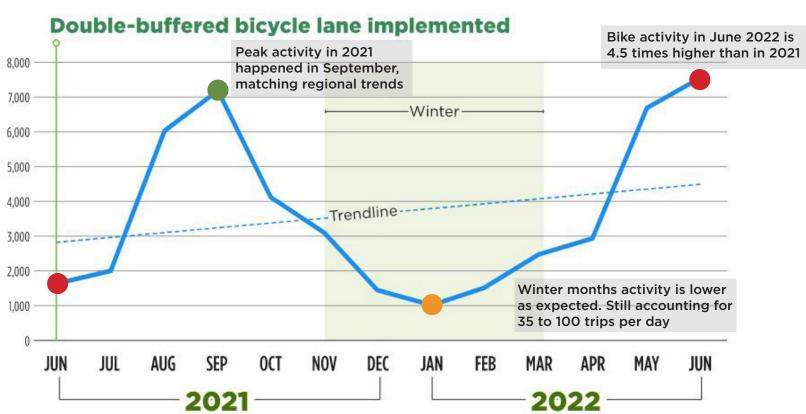
- North Street is designated as a high-priority segment, with recommendations for separated or buffered bicycle lanes in the City's Bicycle Facilities Master Plan.
- Several cross streets to the North Street study corridor also have existing and planned bicycle facilities.





Source: halftravel.com









Existing Double-Buffered Bicycle Facilities Source: Kittelson & Associates



Source: iBerkshires

CRASH SEVERITY

- A total of 233 crashes were reported from 2018 to 2022 along North Street in the study area. 49 were injury crashes and 1 was fatal.
- Crashes are concentrated at intersections with East/West Street, Maplewood Avenue, and Depot/Fenn Street.
- The fatal crash occurred at the North Street intersection with Columbus Avenue and Eagle Street.

PEDESTRIAN & BIKE CRASHES

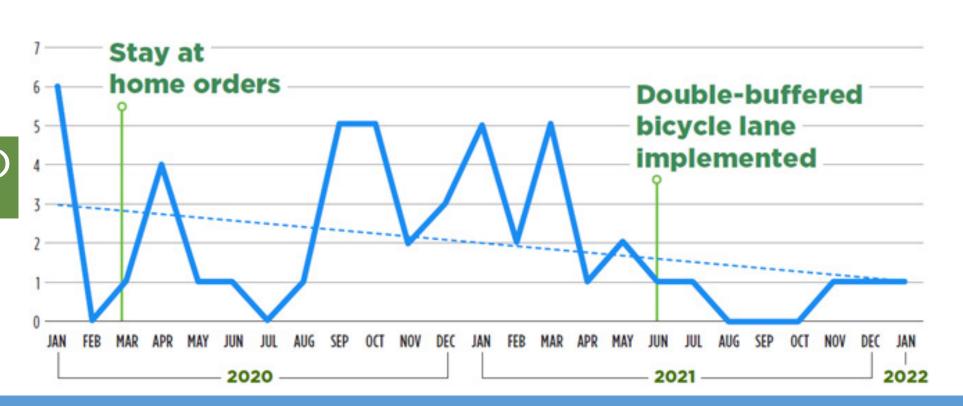
- 26 vulnerable user crashes were reported along North Street from 2018 to 2022.
- Vulnerable user crashes are most concentrated at the intersection with Linden Street and Maplewood Avenue.
- The current configuration of North Street with doublebuffered bicycle lanes has improved safety and comfort for all users, especially vulnerable road users like pedestrians and bicyclists.

Crashes by Month (January 2020-2022)

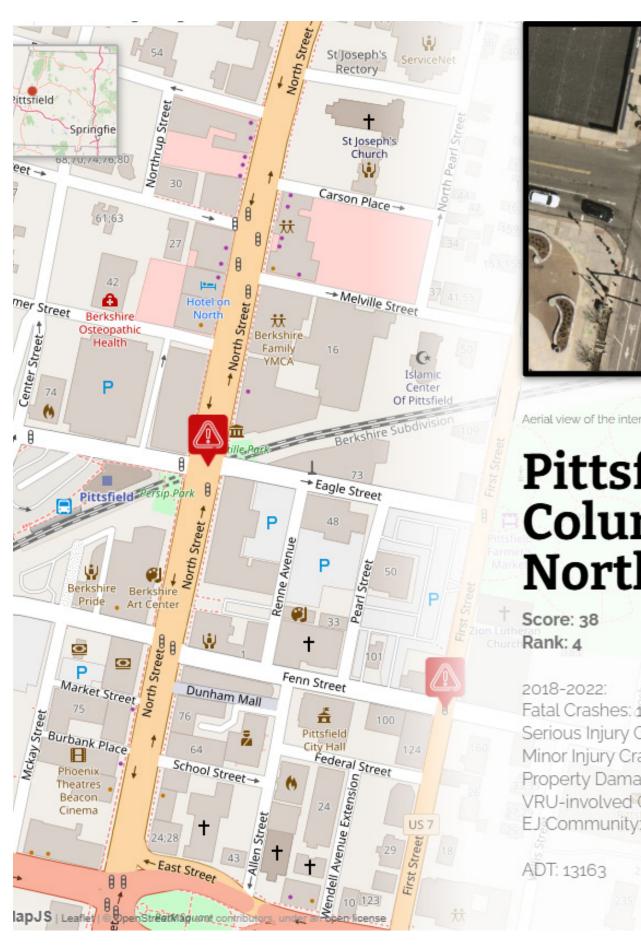
Source: North Street Pilot Project Evaluation Report



Intersection along North Street (South to North)	Vulnerable User Crash	Fatal Crashes	Serious Injury Crashes	Non-Serious Injury Crash	Property Damage Only Crashes
East/West Street	1	0	1	3	23
Depot/Fenn Street	2	0	1	7	18
Columbus Avenue and Eagle Street	1	1	1	4	11
Summer Street	2	0	0	2	8
Melville Street	2	0	0	2	9
Carson Place	1	0	0	2	5
Bradford Street	2	0	0	4	8
Alley between Bradford Street and Maplewood Avenue	1	0	0	2	13
Maplewood Avenue	7	0	0	8	19
Madison Avenue	3	0	1	1	10
Orchard Street	2	0	0	3	6
Kent Avenue	1	0	0	1	4
Burbank Street	1	0	0	4	10
Tyler Street	0	0	0	2	13
Total	26	1	4	45	157



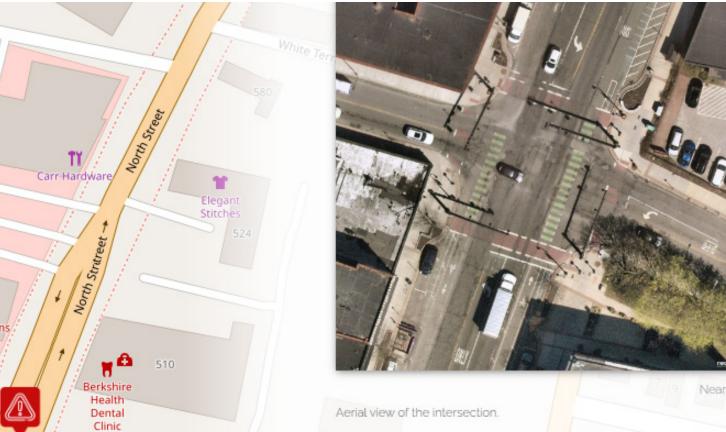
TOP INJURY LOCATIONS IN BERKSHIRE COUNTY





Pittsfield: Columbus Ave & North Street

2018-2022:
Fatal Crashes: 1
Serious Injury Crashes: 1
Minor Injury Crashes: 4
Property Damage Only Crashes: 11
VRU-involved Crashes: 1





Score: 28 Rank: 9

2018-2022:
Fatal Crashes: o
Serious Injury Crashes: o
Minor Injury Crashes: 8
Property Damage Only Crashes: 19
VRU-involved Crashes: 7
EJ Community: Yes

ADT: 13887

- Two of the BRPC's top 13 injury locations are located on North Street in the study area. The intersection with Columbus Avenue/Eagle Street is ranked 4th and the intersection with Linden Street/Maplewood Avenue is ranked 9th.
- In addition to intersection crashes, several segment crashes have occurred on North Street. Many roadway segments along North Street rank in BRPC's crash database of top crash segments within Pittsfield.
- The northbound segment of North Street between Maplewood Avenue and Madison Avenue ranks tenth. This segment alone has had crashes involving eight vulnerable users such as pedestrians and bicyclists.
- The southbound segment on North Street north of Linden Street/Maplewood Avenue ranks eleventh in the top crash segments and has experienced crashes with eight vulnerable users and over twenty property damage crashes.

Top Intersections in Berkshire County for Injuries and Fatalities

Source: BRPC



CHARACTERISTICS OF GREAT SMALL-TOWN MAIN STREETS

Historic Character & Architectural Cohesion

- Preservation of historic facades and adaptive reuse of buildings maintain authenticity.
- Brick or stone-paved streets complement historic settings.
- Signage and lighting respect the town's historic aesthetic.

Engaging Public Spaces

- Plazas, pocket parks, and seating areas invite people to linger.
- Water features, public art, and historic markers add character.
- Markets, festivals, and street performances foster community life.



Market Street, Portsmouth, NH Source: American Planning Association

Local & Artisanal Focus

- Locally owned shops, farmers' markets, and informal retail kiosks with local artisans add uniqueness.
- Local restaurants and cafés reinforcing a sense of place.
- Murals, sculptures, historic interpretive signs, and heritage plaques celebrate local history and culture.

Green Infrastructure & Sustainability

- Mature tree canopy helps provide shade and lower temperatures in summer months
- Landscaping, planters, bioswales and rain gardens improve aesthetics and climate resilience.
- Pedestrian-friendly lighting balances safety and ambiance.

Mixed-Us Street Fr. Historic bu retail, cafe vibrancy. Upper floo

Walkability & Human-Scale Design

- Narrow streets with wide sidewalks encourage walking and strolling.
- Street trees, amenities such as benches, awnings, and shade structures make walking pleasant.
- Traffic-calming measures to slow vehicular traffic and foster pedestrian safety.

Bicycle Friendliness

- Dedicated bike lanes on wider streets or shared very narrow slow-speed streets accommodate bicyclists.
- Ample bike parking racks and repair stations encourage bicycling.
- Connection to regional bike trails enhances accessibility.



Biltstraat, Utrecht, Netherlands
Source: Google Earth

Mixed-Use & Active Street Fronts

- Historic buildings with ground-floor retail, cafes, and small businesses create vibrancy.
- Upper floors house offices or residences, ensuring continuous activity.
- Transparent storefronts and outdoor seating make streets feel lively and inviting.

Low-Speed, Multi-Modal Streets

- Streets designed for low vehicle speeds (20 25 mph) allow safe pedestrian and bike movement, including frequent safe crossings.
- Frequent intersection controls such as stop signs or signals provide safe pedestrian and bicycle crossings along well-marked crosswalks.
- Transit facilities are integrated within street design and transit amenities such as bus stops with shelters are seamlessly incorporated in streetscape design.
- Without losing overall pedestrian-friendly nature of the street, the design accommodates adequate vehicular facilities including emergency vehicle access, vehicular travel lanes, on-street parking, delivery zones, and pick-up/drop-off zones.

Broadway, Saratoga Springs, NY Source: American Planning Association

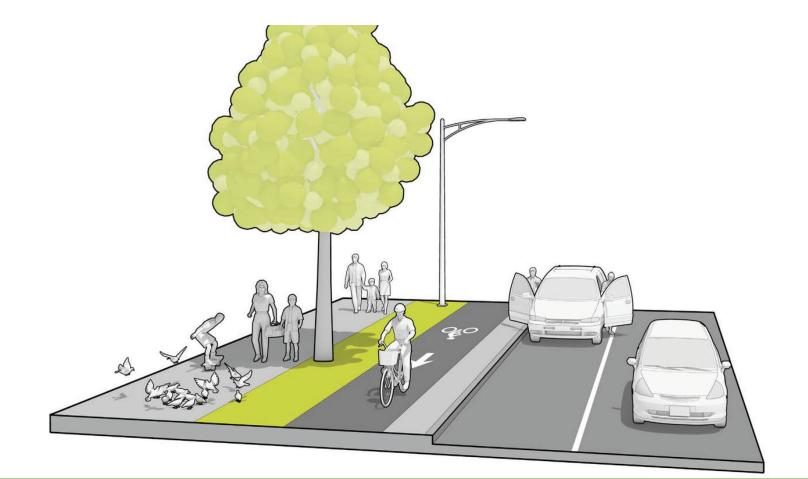


DESIGN CONSIDERATIONS

PUBLIC REALM ZONES



SEPARATED BIKE LANES

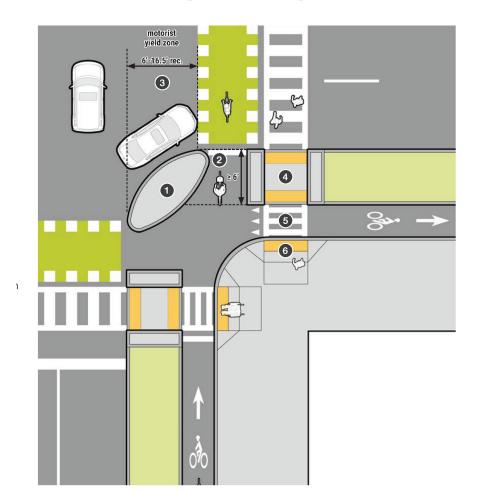


Raised Sidewalk-Level Bicycle Lane
Source: MassDOT Separated Bike Lane Planning & Design Guide

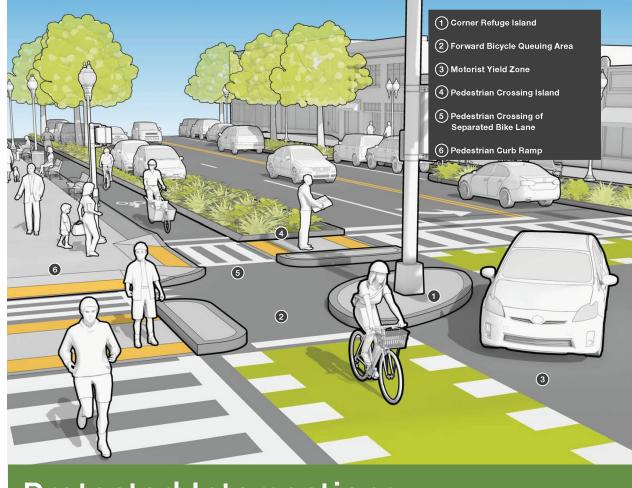


Street-Level Bicycle Lane
Source: MassDOT Separated Bike Lane Planning & Design Guide

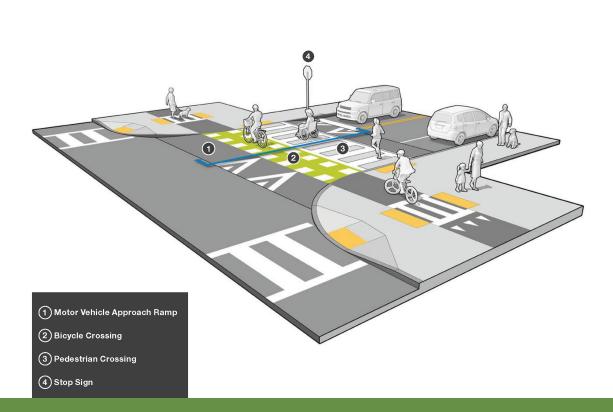
INTERSECTION TREATMENTS



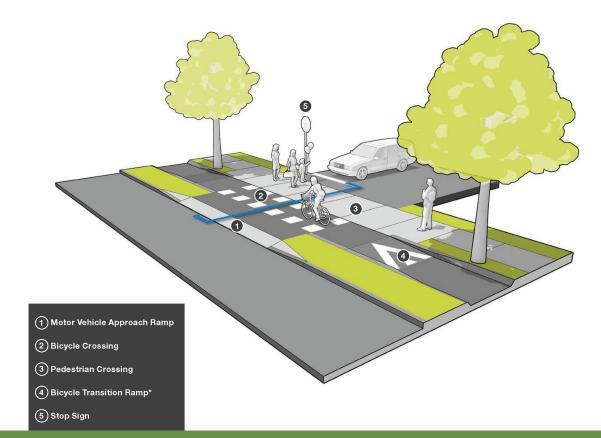
Protected Intersections
Source: MassDOT Separated Bike Lane Guide



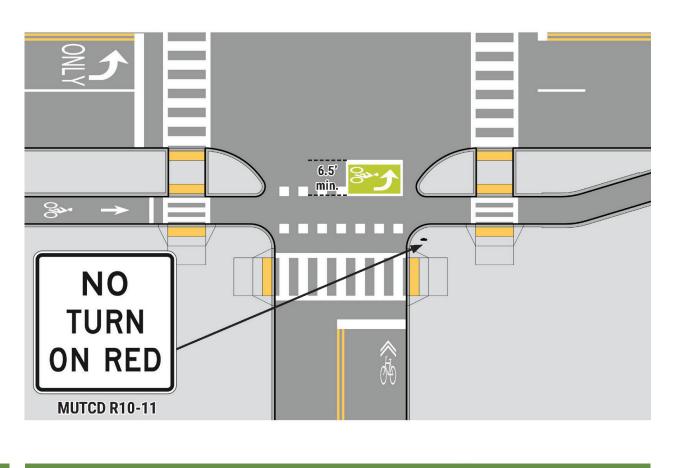
Protected Intersections
Source: MassDOT Separated Bike Lane Guide



Raised Side Street Crossing
Source: MassDOT Separated Bike Lane Guide

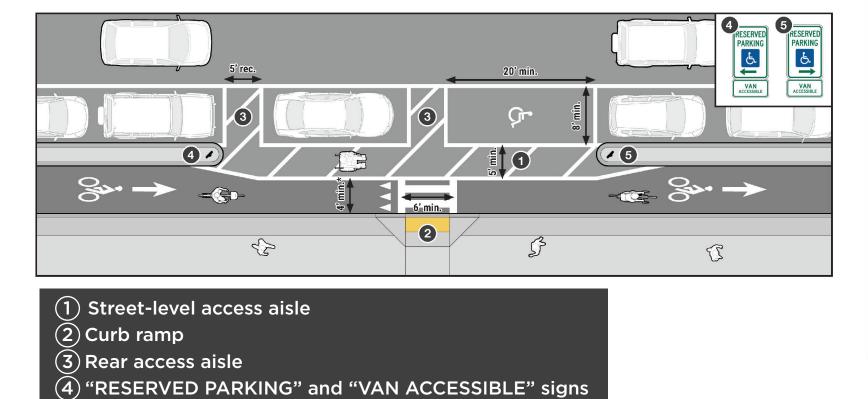


Raised Driveway Crossing
Source: MassDOT Separated Bike Lane Guide

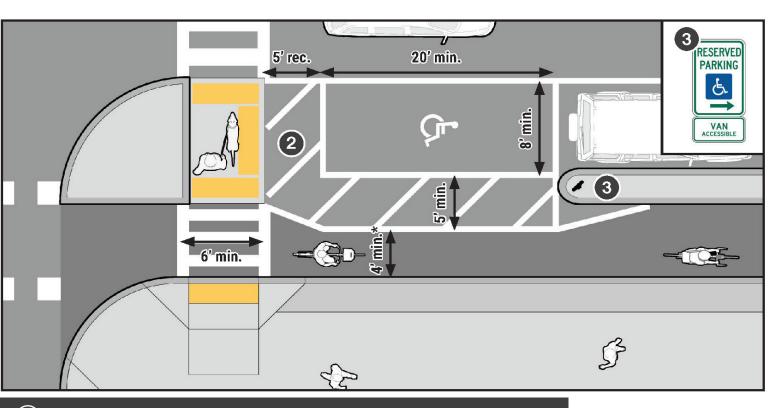


Transition to Cross Street Bike Route Source: MassDOT Separated Bike Lane Guide

ACCESSIBLE PARKING



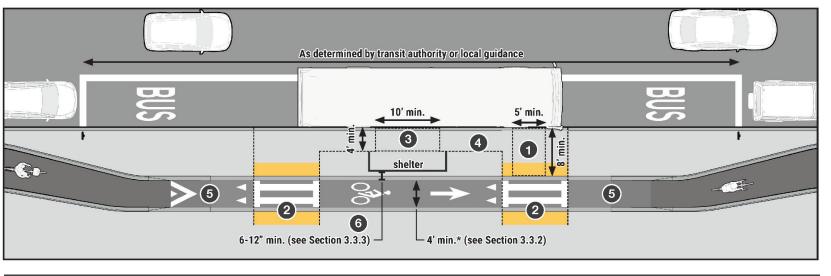
Accessible Mid-Block Parking
Source: MassDOT Separated Bike Lane Planning & Design Guide



1 Street-level access aisle
2 Rear access aisle
3 "RESERVED PARKING" and "VAN ACCESSIBLE" signs

Accessible Parking at Intersections
Source: MassDOT Separated Bike Lane Planning & Design Guide

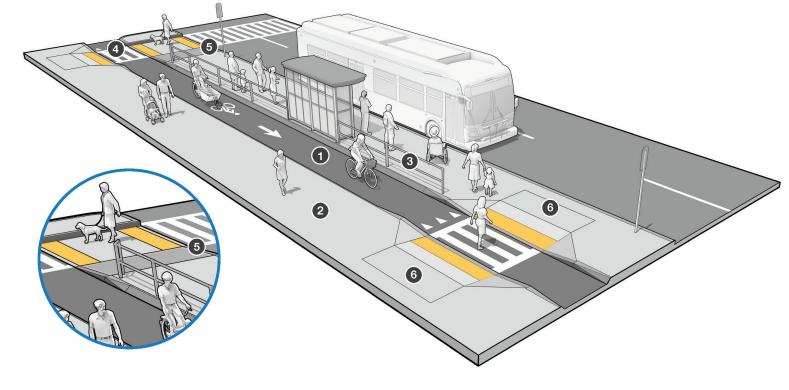
BUS STOPS



- (1) Clear boarding and alighting area
- (2) Pedestrian access routes
- $\overline{(3)}$ Rear door clear zone
- (4) Continuous clear zone connecting rear door and boarding and alighting areas
- (5) Bicycle transition ramps
- 6 Minimum distance from bike lane edge to shelters or other vertical elements

Bus Stop Design Elements

Source: MassDOT Separated Bike Lane Planning & Design Guide



Floating Bus Stop Design

Source: MassDOT Separated Bike Lane Planning & Design Guide

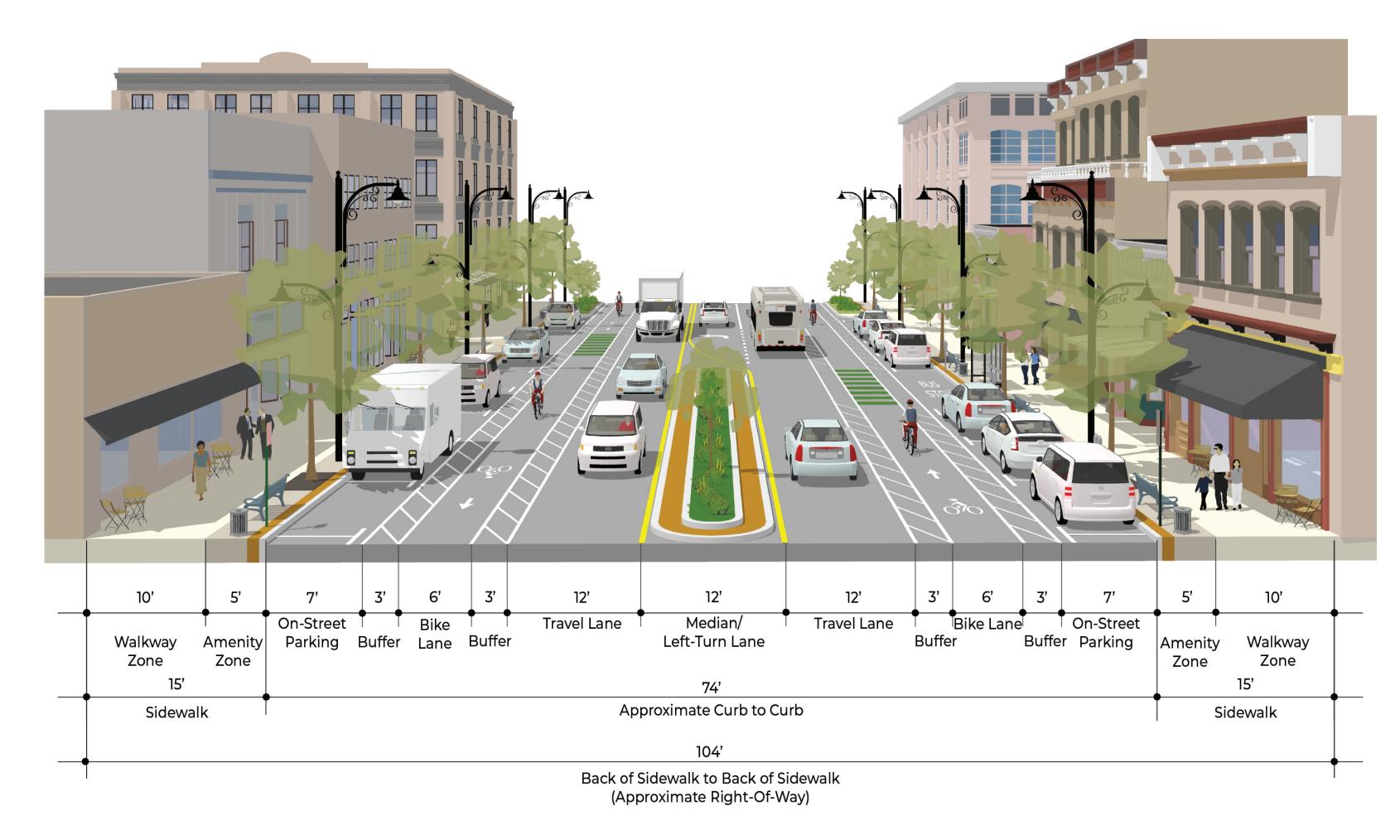


(5) "RESERVED PARKING" and "VAN ACCESSIBLE" signs

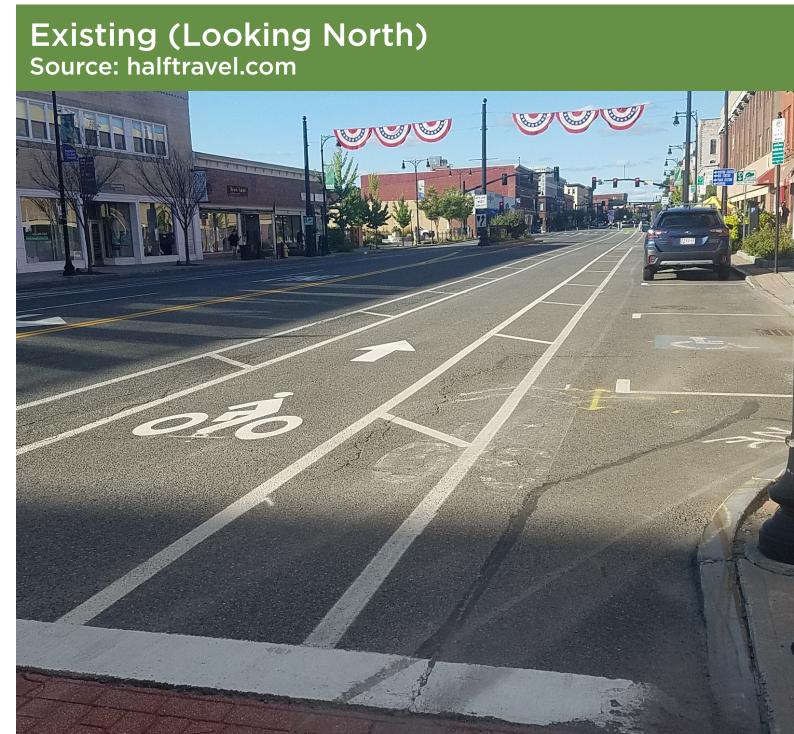
EXISTING CROSS SECTION: DOUBLE-BUFFERED BIKE LANES

Existing Cross Section

(Looking North)



Add any comments on sticky notes here



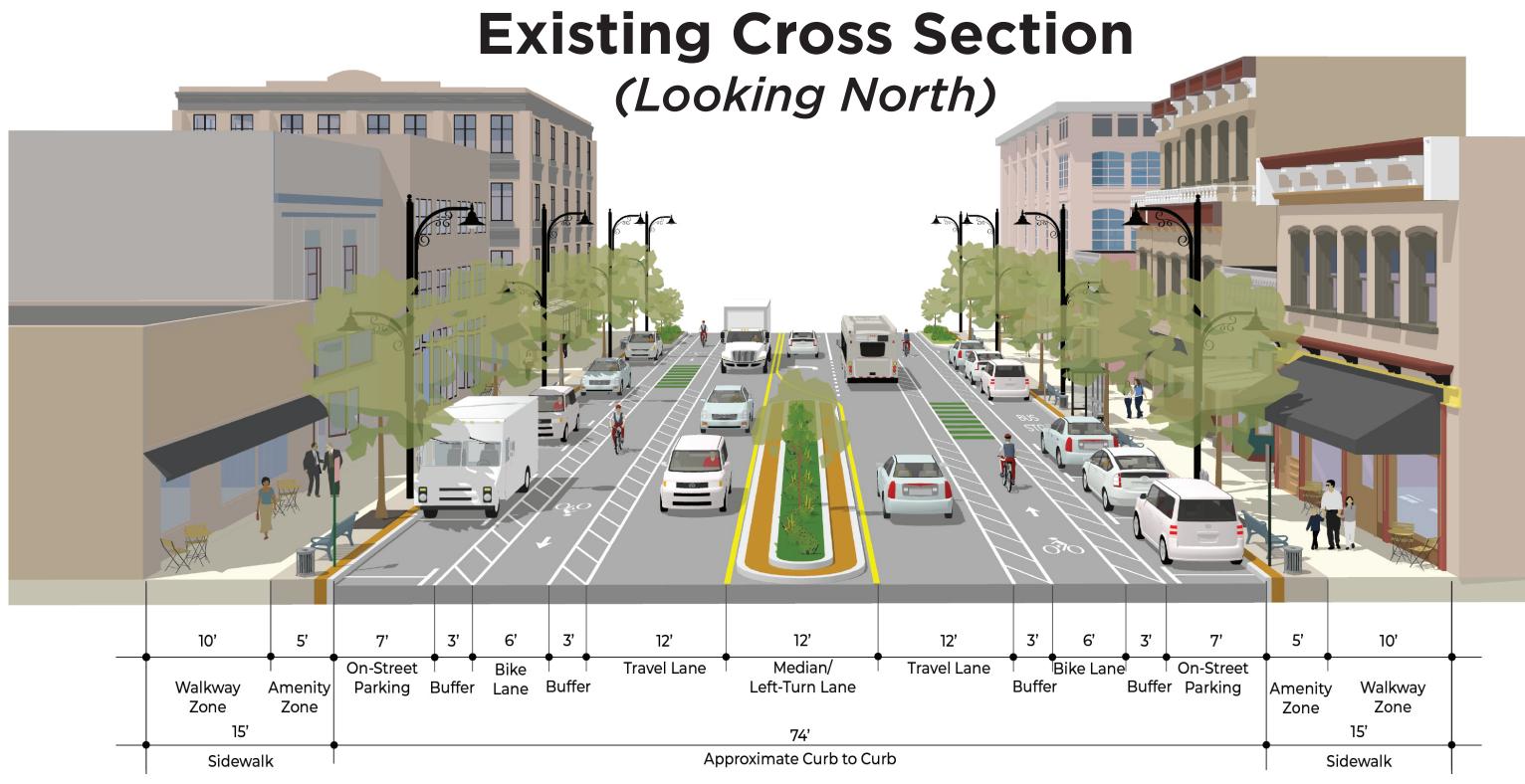
	Alternative No.	Existing
	Evaluation Measures	Double-Buffered Bike Lanes
广	Pedestrian Comfort	Low
50	Bicycle Comfort	Low
*	Ease of Emergency Vehicle Staging	High
	Ease of Curbside Parking/ Deliveries to Building Access	Medium
Medialogy	Green Infrastructure & Landscaping Opportunities	Low
	Drainage & Utility	Low
\$	Cost	Low
	Intersection Treatment	Low
	Pedestrian Space	Low

Additional information on Board 18.

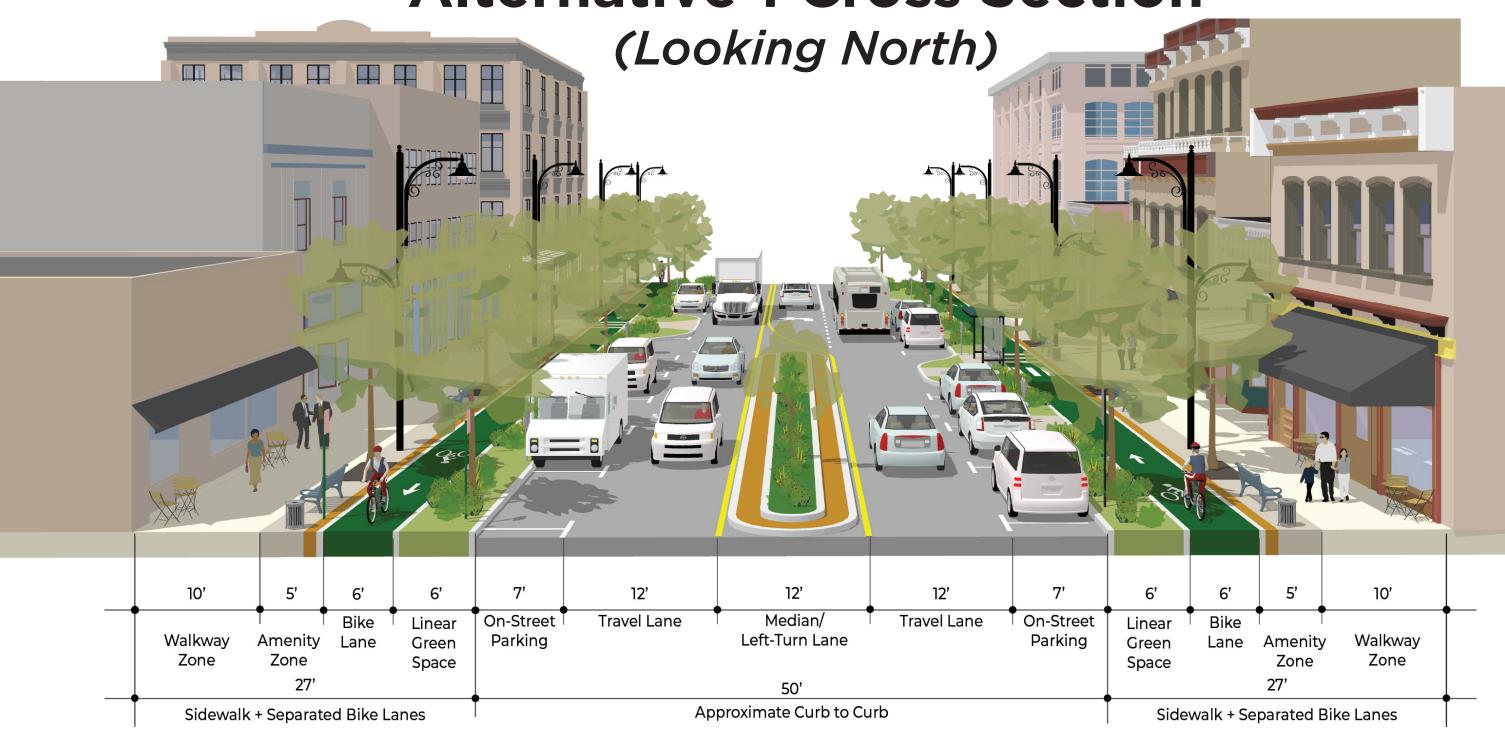
Existing Cross Section Rendering (Looking North)



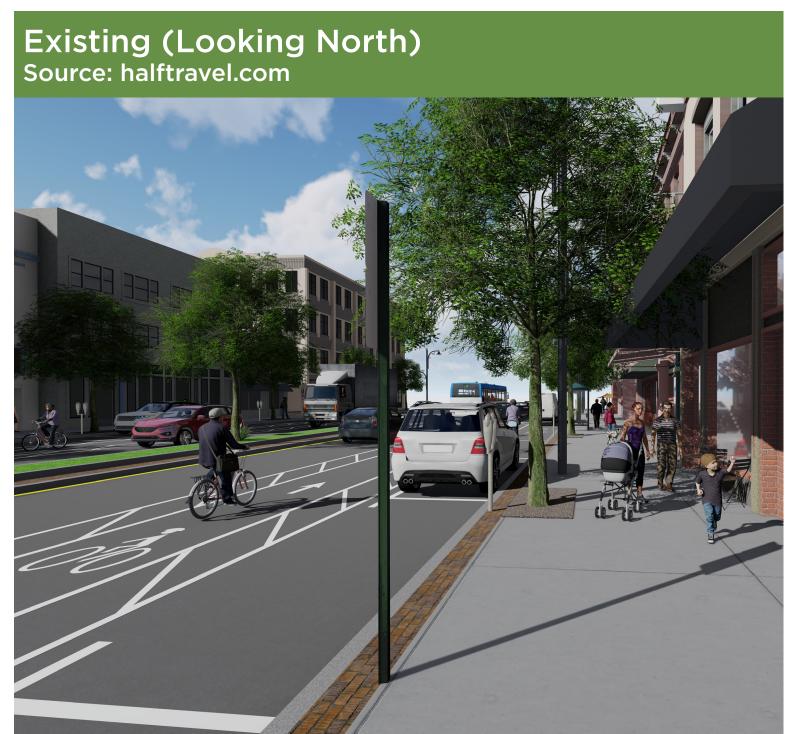
ALTERNATIVE 1: SIDEWALK-LEVEL SEPARATED BIKE LANES



Alternative 1 Cross Section

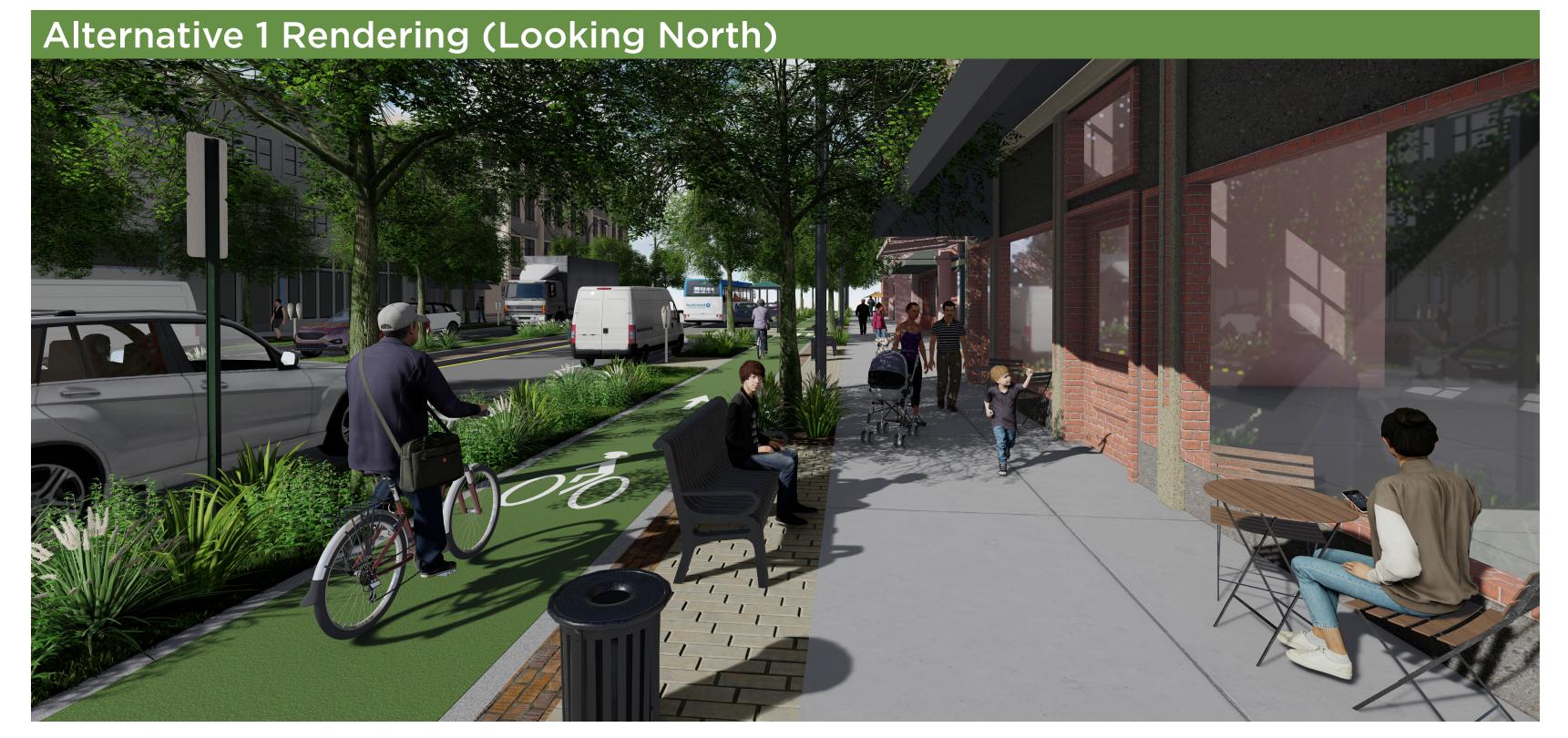


Add any comments on sticky notes here



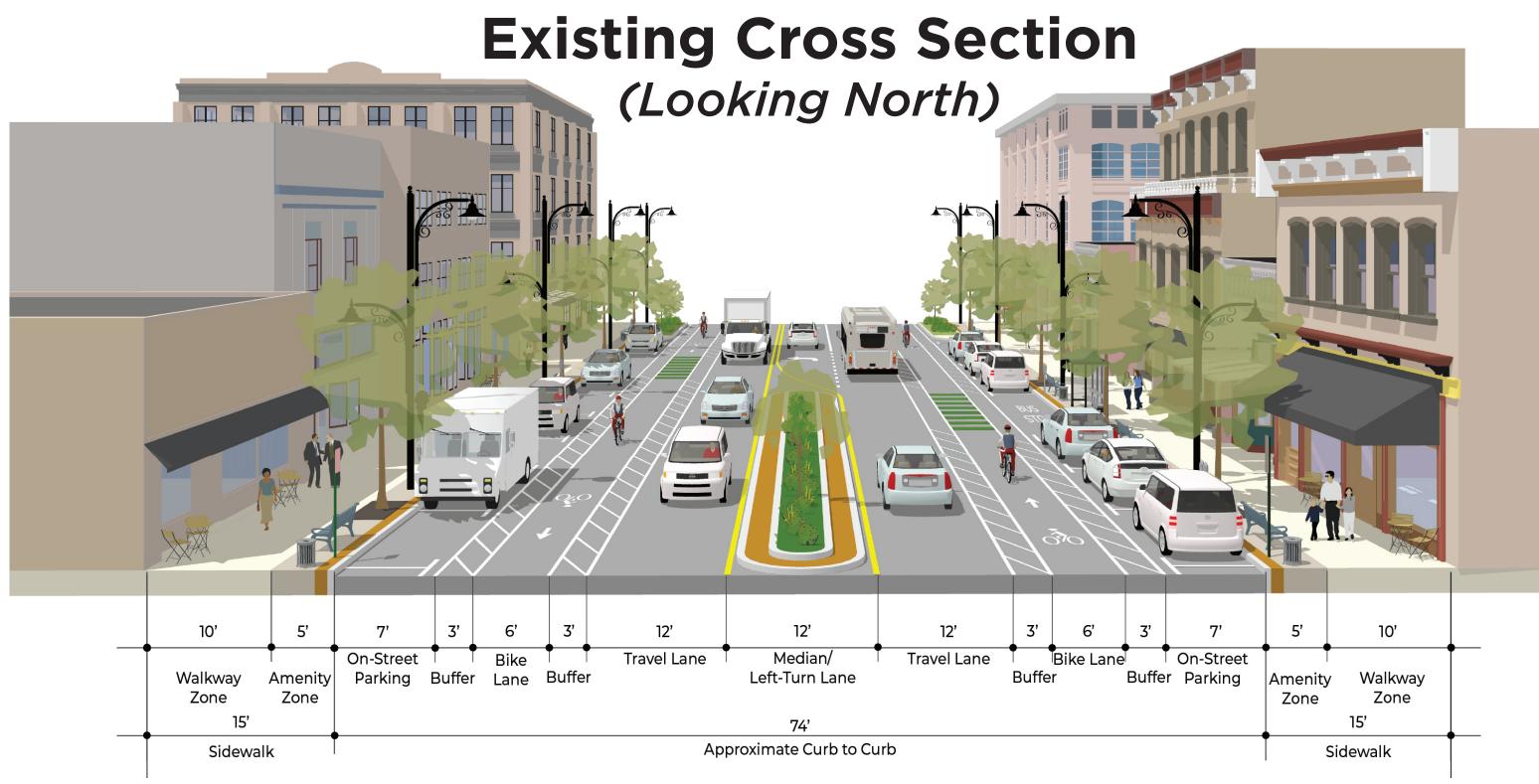
	Alternative No.	1
	Evaluation Measures	Sidewalk-Level Separated Bike Lanes
广	Pedestrian Comfort	High
0	Bicycle Comfort	High
*	Ease of Emergency Vehicle Staging	Low
	Ease of Curbside Parking/ Deliveries to Building Access	High
E CONTRACTOR OF THE PARTY OF TH	Green Infrastructure & Landscaping Opportunities	High
	Drainage & Utility	High
\$	Cost	Medium
	Intersection Treatment	High
	Pedestrian Space	High

Additional information on Board 18.

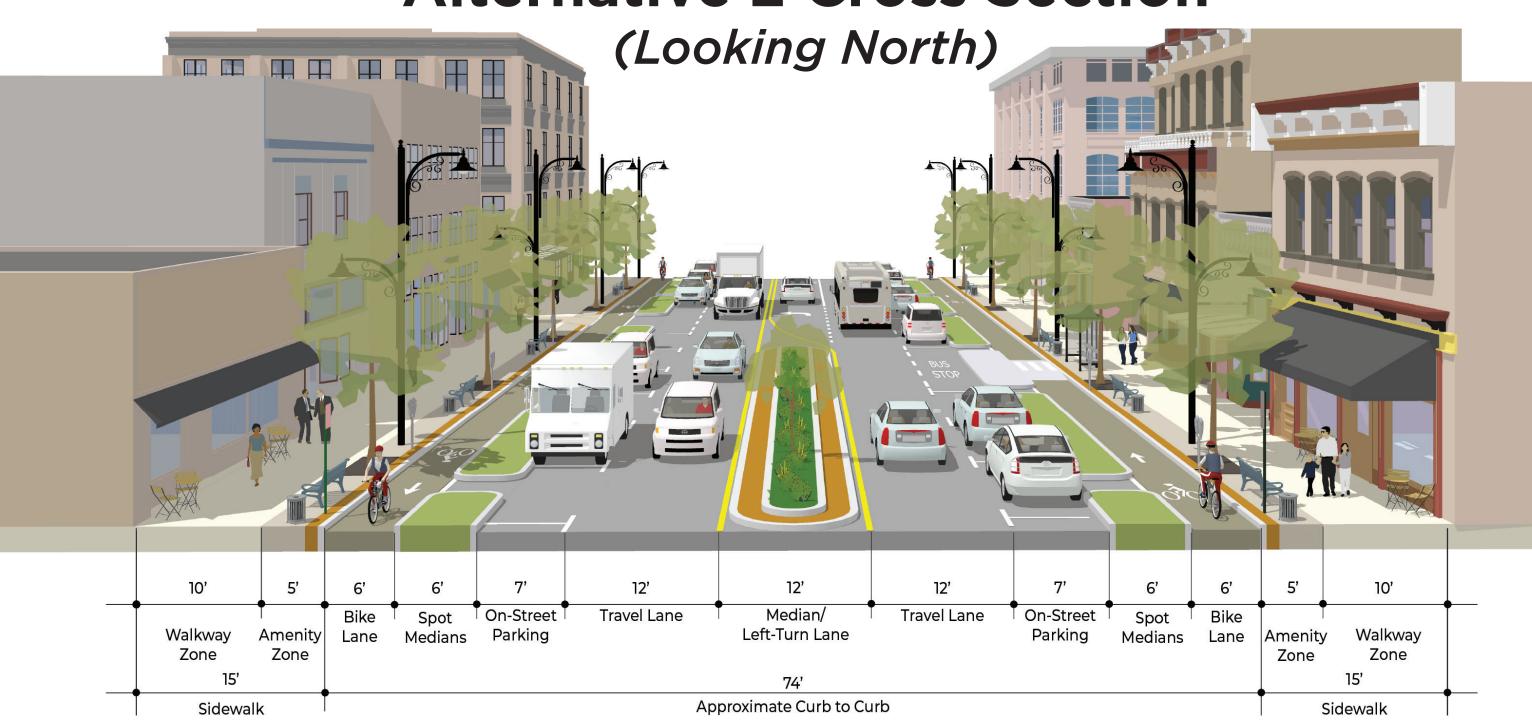




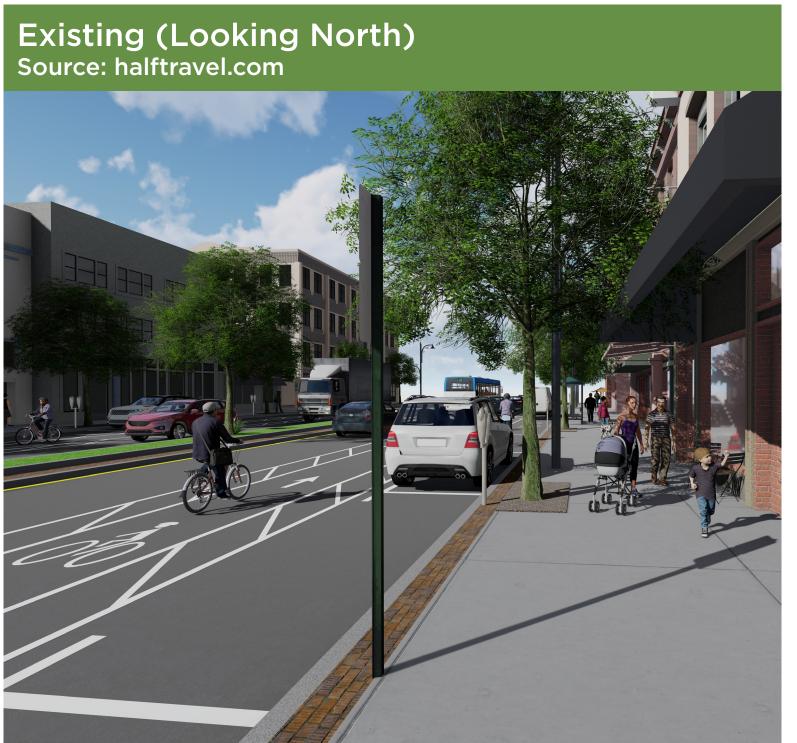
ALTERNATIVE 2: STREET-LEVEL SEPARATED BIKE LANES



Alternative 2 Cross Section



Add any comments on sticky notes here



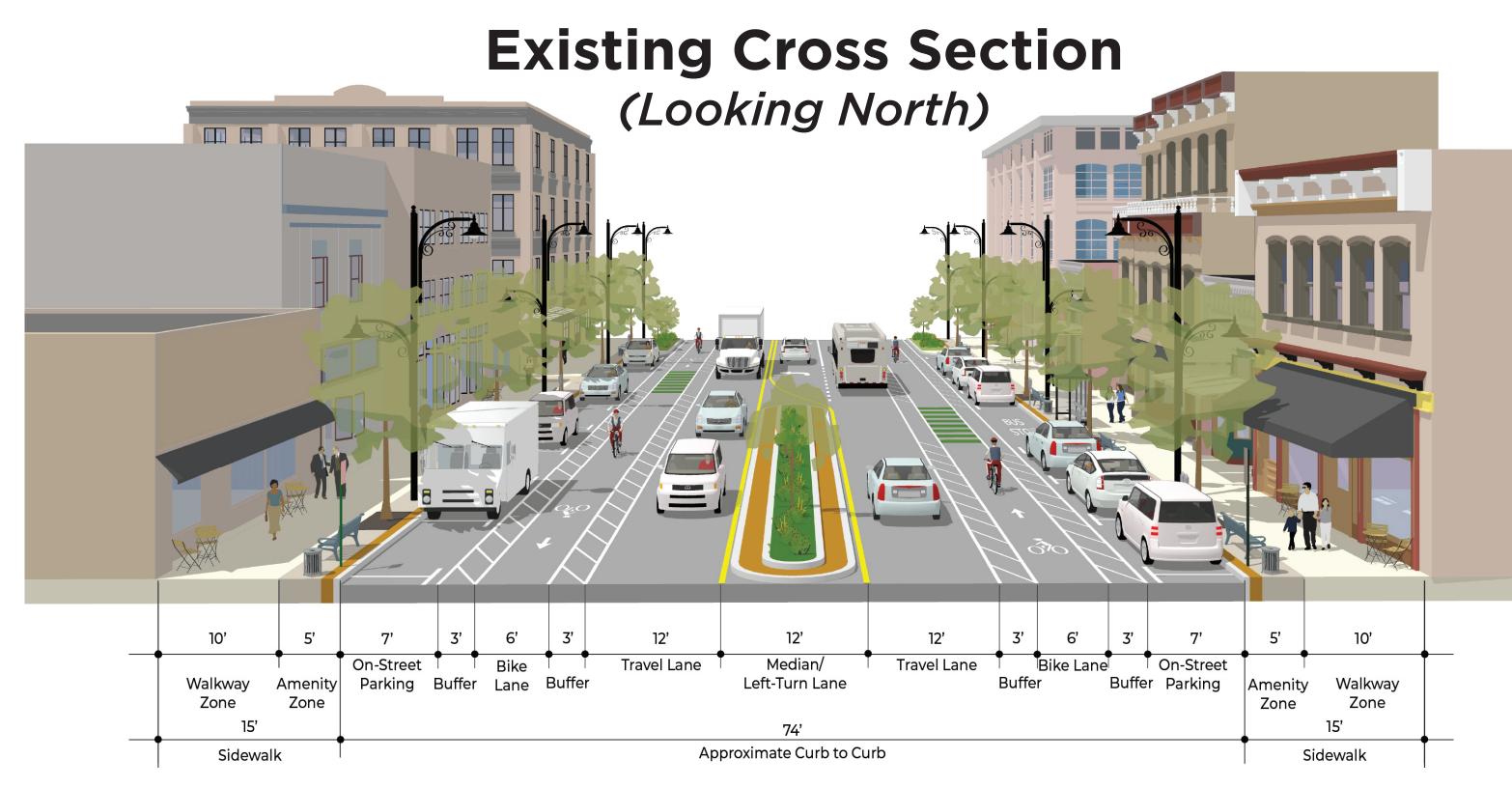
	Alternative No.	2
	Evaluation Measures	Street-Level Separated Bike Lanes
广	Pedestrian Comfort	Medium
50	Bicycle Comfort	Medium
**	Ease of Emergency Vehicle Staging	Low
—	Ease of Curbside Parking/ Deliveries to Building Access	Low
Thomas	Green Infrastructure & Landscaping Opportunities	Medium
	Drainage & Utility	Medium
\$	Cost	Medium
	Intersection Treatment	High
	Pedestrian Space	High

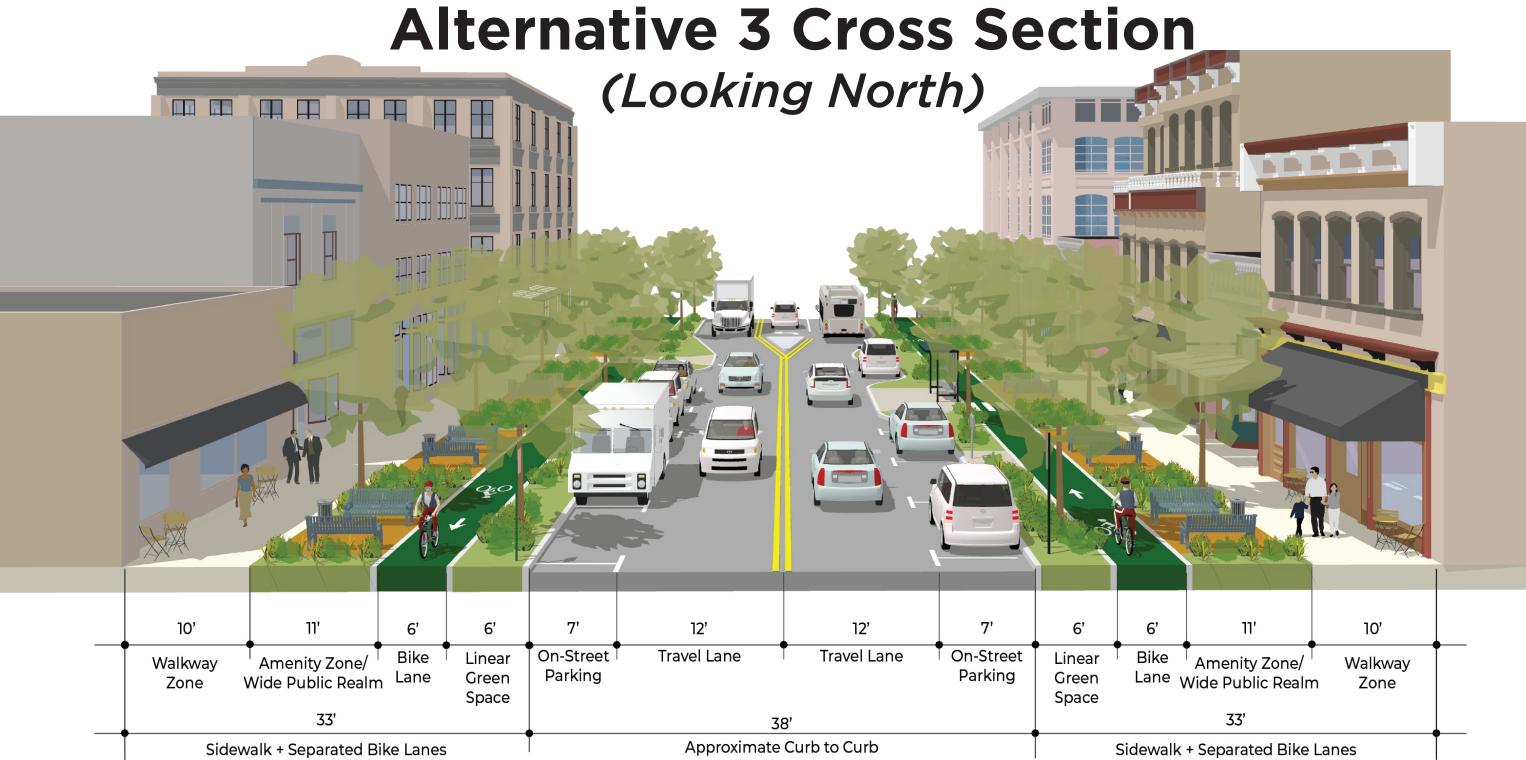
Additional information on Board 18.





ALTERNATIVE 3: WIDE PEDESTRIAN REALM





Add any comments on sticky notes here



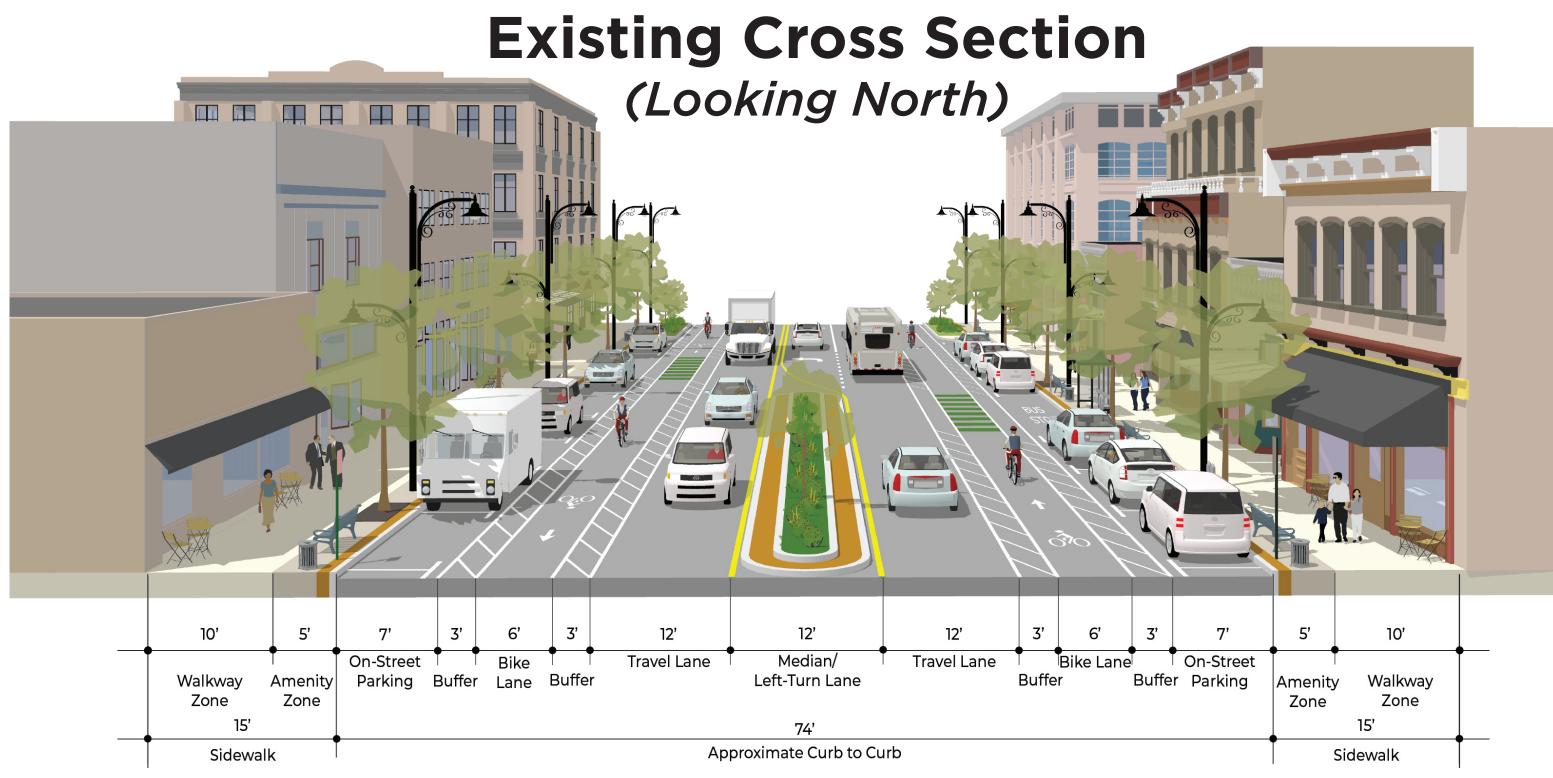
	Alternative No.	3
	Evaluation Measures	Wide Pedestrian Realm & Sidewalk-Level Bike Lanes
广	Pedestrian Comfort	High
50	Bicycle Comfort	High
**	Ease of Emergency Vehicle Staging	Low
	Ease of Curbside Parking/ Deliveries to Building Access	Medium
A CONTRACTOR OF THE PARTY OF TH	Green Infrastructure & Landscaping Opportunities	High
	Drainage & Utility	High
\$	Cost	High
	Intersection Treatment	High
	Pedestrian Space	High

Additional information on Board 18.

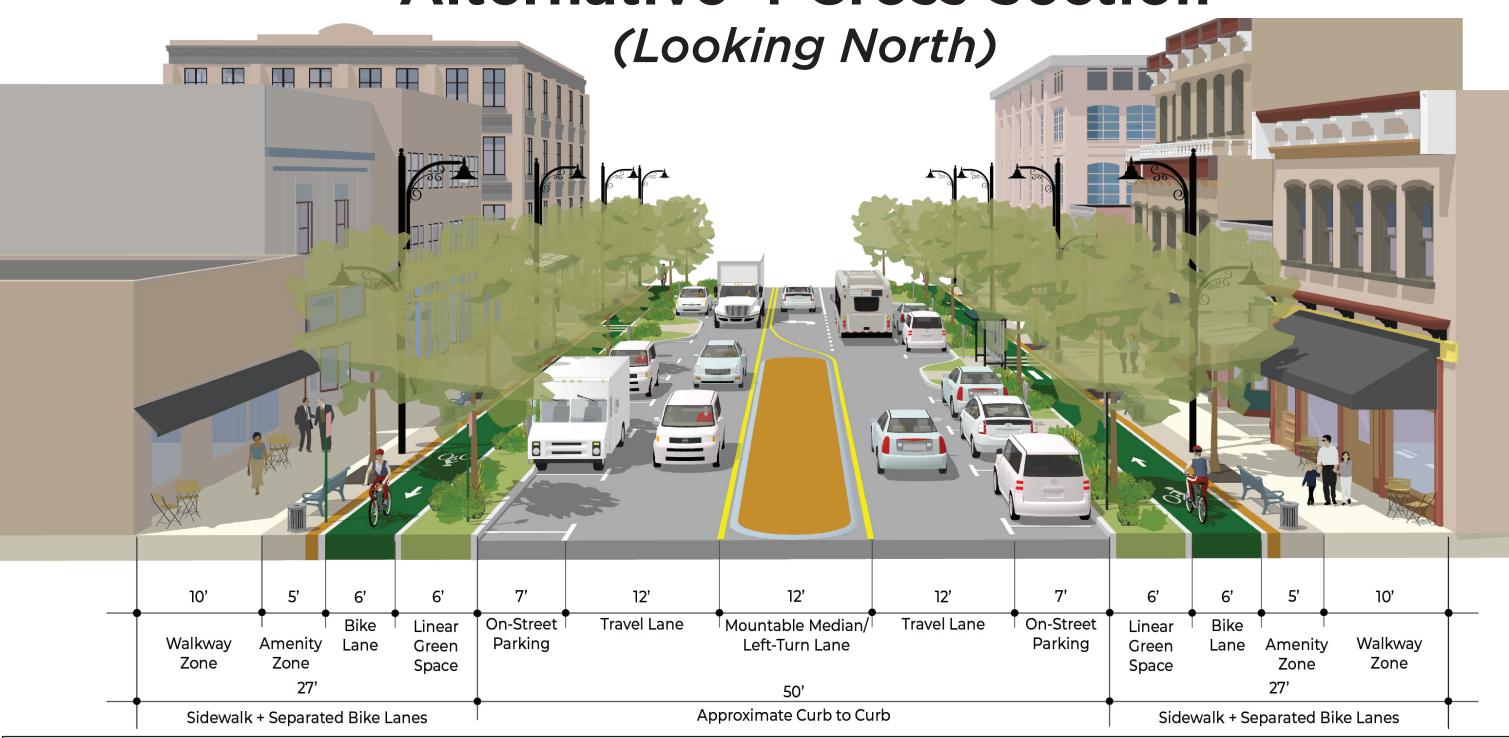




ALTERNATIVE 4: MOUNTABLE MEDIANS



Alternative 4 Cross Section



Add any comments on sticky notes here



	Alternative No.	4
	Evaluation Measures	Sidewalk Level Bike Lanes & Mountable Median
广	Pedestrian Comfort	High
50	Bicycle Comfort	High
**	Ease of Emergency Vehicle Staging	High
	Ease of Curbside Parking/ Deliveries to Building Access	High
Madaloh	Green Infrastructure & Landscaping Opportunities	High
	Drainage & Utility	High
\$	Cost	High
	Intersection Treatment	High
	Pedestrian Space	High

Additional information on Board 18.





COMPARISON OF CONCEPTUAL ALTERNATIVES

	Alternative No.	Existing		1		2		3		4		
	Description	Doubl	e-Buffered Bicycle Lanes		ar Green Space with lk-Level Separated Bike Lanes	Stree	et-Level Separated Bike Lanes		Wide Pedestrian Realm with Sidewalk-level Separated Bike Lanes & No Median		Linear Green Space with Sidewalk- Level Separated Bike Lanes & Mountable Median	
					1. Dedicated sidewalk-level bike lanes can eliminate bicyclists using sidewalks		1. Dedicated street-level bike lanes can eliminate bicyclists using sidewalks		1. Dedicated sidewalk-level bike lanes can eliminate bicyclists using sidewalks		1. Dedicated sidewalk-level bike lanes can eliminate bicyclists using sidewalks	
**			 Bicyclists often use sidewalks to bike No continuous landscape buffer 	High	2. Raised bike lanes provide additional separation between cars and pedestrians	Medium	2. Separated bike lanes provide additional separation between cars and pedestrians	High	2. Raised bike lanes provide additional separation between cars and pedestrians		2. Raised bike lanes provide additional separation between cars and pedestrians	
	Pedestrian Comfort	Low	between cars and pedestrians3. Lack of clear sidewalk zones for walkway, amenity zone, and building		3. Continuous landscape buffers between sidewalks, bike lanes, and curbside parking/delivery lanes		3. Continuous landscape buffers between sidewalks, bike lanes, and curbside parking/delivery lanes		3. Continuous landscape buffers between sidewalks, bike lanes, and curbside parking/delivery lanes	High	3. Continuous landscape buffers between sidewalks, bike lanes, and curbside parking/delivery lanes	
			frontage, with outdoor dining		4. Sidewalks redesigned to include clear walkway, amenity zone, and building fronting zone with outdoor dining		4. Sidewalks redesigned to include clear walkway, amenity zone, and building fronting zone with outdoor dining		4. Sidewalks redesigned to include clear walkway, wide public realm amenity zone, and building fronting zone with outdoor dining		4. Sidewalks redesigned to include clear walkway, amenity zone, and building fronting zones with outdoor dining	
			1. Only painted buffers exist today		Raised landscaped medians provides separation from cars		Raised landscape spot medians provides separation from cars		Raised landscaped medians provides separation from cars		Raised landscaped medians provides separation from cars	
00			2. No physical separation from cars		2. Raised sidewalk-level bike lanes provides better visibility		2. Bike lanes placed between sidewalks and curbside parking/delivery lanes		2. Raised sidewalk-level bike lanes provides better visibility		2. Raised sidewalk-level bike lanes provides better visibility	
	Bicycle Comfort	Low	3. Frequent conflict points between cars crossing bike lanes to park4. Frequent use of double-buffered	High	3. Bike lanes placed between sidewalks and curbside parking/delivery lanes	Medium	3. Cars will not be able to use bike lanes as pass-through lane or for double-parking	High	3. Bike lanes placed between sidewalks and curbside parking/delivery lanes	High	3. Bike lanes placed between sidewalks and curbside parking/delivery lanes	
			bike lanes by cars as a pass-through lane or used for double parking		4. Cars will not be able to use bike lanes as pass-through lane or for double-parking		4. Stormwater may cause inconvenience due to gaps in medians directing stormwater as specific locations5. Snow removal may be challenging		4. Cars will not be able to use bike lanes as pass-through lane or for double-parking		4. Cars will not be able to use bike lanes as pass- through lane or for double-parking"	
\ <u>\</u>			Double-buffered bicycle lanes used for emergency vehicle staging		 Curbside parking/delivery lane or one travel lane can be used for emergency vehicle staging 		Curbside parking/delivery lane or one travel lane can be used for emergency vehicle staging		 Curbside parking/delivery lane or one travel lane can be used for emergency vehicle staging 		Mountable medians can provide additional space for maintaining two-way traffic along North Street while	
*	Ease of Emergency Vehicle Staging	HIGH	2. Two-way traffic flow continues along North Street since emergency vehicle staging does not block travel lanes	Low	2. May require Maintenance of Traffic (MOT) procedures to allow metered two-way traffic to continue along North Street through one travel lane or provide detours along parallel roads	Low	2. May require Maintenance of Traffic (MOT) procedures to allow metered two-way traffic to continue along North Street through one travel lane or provide detours along parallel roads	Low	2. May require Maintenance of Traffic (MOT) procedures to allow metered two-way traffic to continue along North Street through one travel lane or provide detours along parallel roads3. No median limits space for emergency vehicle staging	High	travel lane or curbside parking/delivery lane is used for emergency vehicle staging 2. Mountable medians also allow for faster emergency vehicle access to use North Street	
	Ease of Curbside Parking/Deliveries to Building Access	Deliveries to ling Access	Curbside parking/delivery lanes provide direct access to buildings across sidewalks at the same level	Curbside parking/delivery lanes provide		Curbside parking/delivery lanes provide direct		Curbside parking/delivery lanes provide direct access to buildings across raised sidewalk-level bike lanes and	ess	_		
			2. Bike lanes are not between curbside parking/delivery lanes and sidewalks3. Lack of vertical separation allows vehicles to use wide double-buffered bike lanes to double park	High	divert accepte buildings accepted	Low	access to buildings but have to navigate raised spot landscape medians, street-level bike lanes, and sidewalk at different levels	Medium	2. Sidewalks with wide public realm and amenity zones containing street furniture, landscaping, and streetscape elements can impact deliveries		1. Curbside parking/delivery lanes provide direct access to buildings across raised sidewalk-level bike lanes and sidewalks at the same level	
Was all and a second se	Green Infrastructure & Landscaping Opportunities	Low	1. Very few opportunities to add additional trees and green infrastructure elements to reduce impervious surfaces	High	1. Additional street trees and green infrastructure elements can be added as part of landscape buffers between sidewalks and bike lanes to reduce impervious surfaces	Medium	Additional green infrastructure elements can be added as part of certain spot landscape medians depending on existing drainage patterns between sidewalks and bike lanes to reduce impervious surfaces	High	1. Additional trees and green infrastructure elements can be added as part of landscape buffers between sidewalks and bike lanes to reduce impervious surfaces	High	1. Additional trees and green infrastructure elements can be added as part of landscape buffers between sidewalks and bike lanes to reduce impervious surfaces	
	Drainage & Utility Relocaton Impacts	Low	1. No need to move existing drainage and utilities	High	1. May need to relocate drainage inlets and underground utilities since curbs will be relocated	Medium	 May need minor adjustments to existing drainage and utilities Gaps in spot medians separating curbside parking/delivery lanes and bike lanes help maintain existing drainage patterns 	High	1. May need to relocate drainage inlets and underground utilities since curbs will be relocated	High	1. May need to relocate drainage inlets and underground utilities since curbs will be relocated	
\$	Cost	Low	1. Low cost since maintaining existing configuration	Medium	1. Medium cost since curbs will have to be relocated along with potential drainage and utility impacts 2. Central medians can remain as existing	Medium	 Medium cost since curbs will not be relocated but spot medians will be added between bike lanes and curbside parking/delivery lanes Minor adjustments maybe needed to drainage inlets and utilities 	High	 High cost since curbs will have to be relocated along with potential drainage and utility impacts Medians will need to be removed to create wider public realm along sidewalks 	High	 High cost since curbs will have to be relocated along with potential drainage and utility impacts Medians will need to be removed to create mountable medians for emergency vehicle access and staging 	
	Intersection Treatment	Low	 No opportunities to improve intersection treatments for bike facilities No opportunities to shorten crosswalk lengths 	High	1. Opportunities to implement protected intersections or bike boxes at intersections for bike facilities 2. Crosswalk lengths shorter than existing conditions due to separated bike lanes and curb extensions	High	 Central medians can remain as existing Opportunities to implement protected intersections or bike boxes at intersections for bike facilities Crosswalk lengths shorter than existing conditions due to separated bike lanes and curb extensions 	High	1. Opportunities to implement protected intersections or bike boxes at intersections for bike facilities 2. Crosswalk lengths shorter than existing conditions due to separated bike lanes and curb extensions	High	1. Opportunities to implement protected intersections or bike boxes at intersections for bike facilities 2. Crosswalk lengths shorter than existing conditions due to separated bike lanes and curb extensions	
	Pedestrian Space	Low	No opportunities to increase pedestrian space for placemaking or seating areas	High	Opportunities to extend pedestrian space in linear green space and curb extensions at intersections	High	Opportunities to extend pedestrian space in linear green space and curb extensions at intersections	High	1. Pedestrian space is expanded in the wide public realm and curb extensions at intersections	High	Opportunities to extend pedestrian space in linear green space and curb extensions at intersections	



CORRIDOR TREATMENT TOOLBOX

TOOLBOX OF TREATMENTS



Add a dot sticker here to indicate your preference



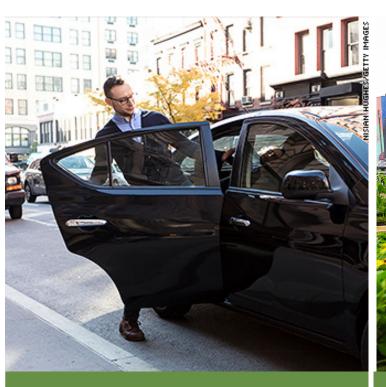
Curbside uses - Parking Source: Google Earth

Add a dot sticker here to indicate your preference



Curbside uses - Deliveries Source: Urbanism Next

Add a dot sticker here to indicate your preference



Curbside uses - Pick-up/Drop-off Source: CNN

Add a dot sticker here to indicate your preference



Curbside uses - Parklets Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Curbside uses - Bike Parking Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Landscape Buffers - Bike Lanes Source: Rural Design Guide

Add a dot sticker here to indicate your preference



Landscape Buffers - Sidewalks Source: SF Better Streets

Add a dot sticker here to indicate your preference



Landscape Medians Source: NYC Street Design Guide

Add a dot sticker here to indicate your preference



Stamped Brick Mountable Median Source: Word on the Street Blog

Add a dot sticker here to indicate your preference



Source: Ryan Packer via the Urbanist

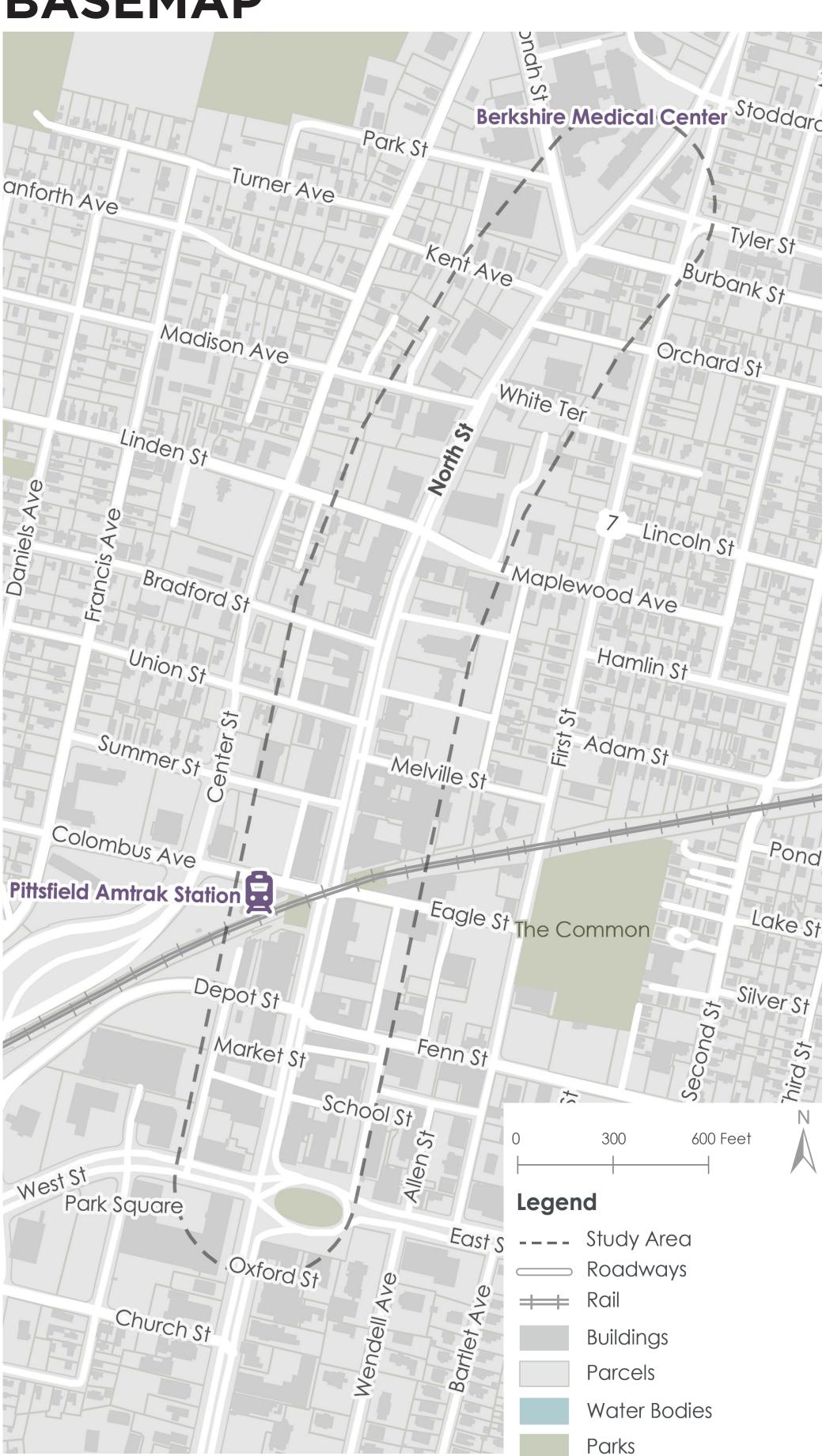
Add a dot sticker here to indicate your preference



Source: MWCOG

Add a dot sticker here to indicate your preference

BASEMAP



Use a sticky note to provide your comments here



INTERSECTION TREATMENT TOOLBOX

TOOLBOX OF TREATMENTS



High Visibility Crosswalks Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Mid-Block Crosswalk Source: Kittelson & Associates

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Pedestrian Refuge Islands Source: Kittelson & Associates

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Curb Extensions Source: Urban Milwaukee

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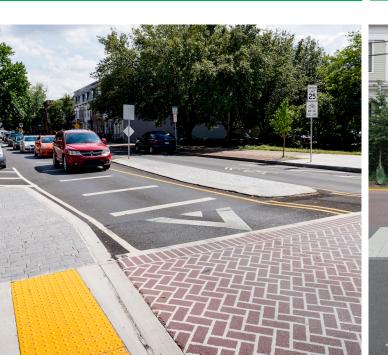
Rectangular Rapid Flashing Beacon (RRFB) Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Roundabout Source: Kittelson & Associates

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Raised crosswalk Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



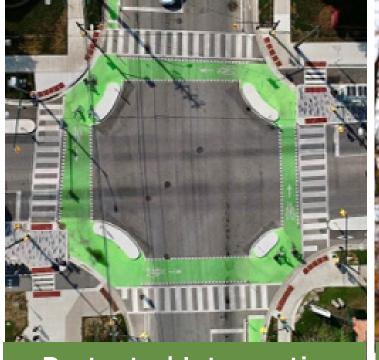
Raised Intersection Source: City of Cambridge

Add a dot sticker here to indicate your preference



Bike Boxes Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Protected Intersection Source: Kittelson & Associates

Add a dot sticker here to indicate your preference



Bike Signal Source: Mead & Hunt

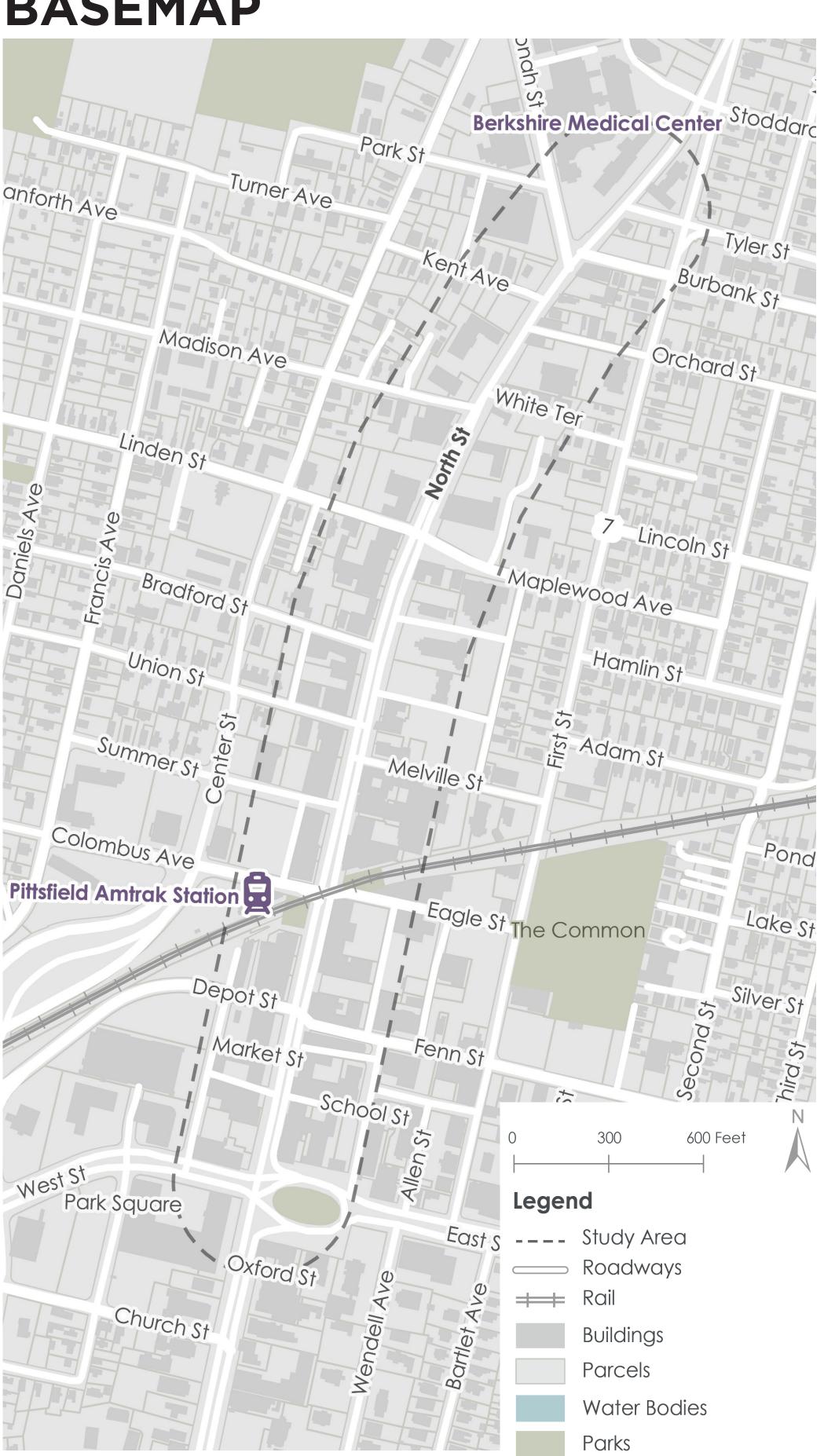
Add a dot sticker here to indicate your preference



Green Infrastructure Source: DDOT

Add a dot sticker here to indicate your preference





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URBAN DESIGN TREATMENT TOOLBOX

TOOLBOX OF TREATMENTS

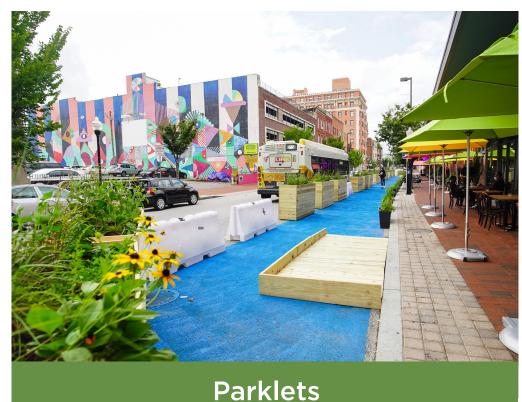


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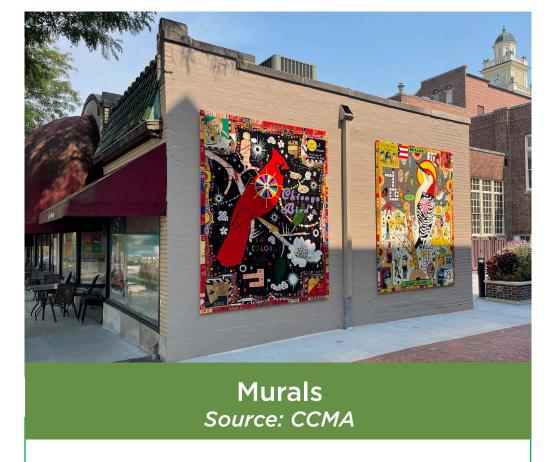
Plazas Source: American Planning Association

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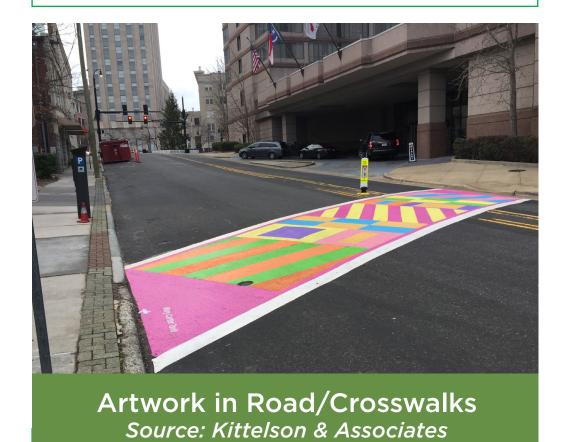


Source: Kittelson & Associates

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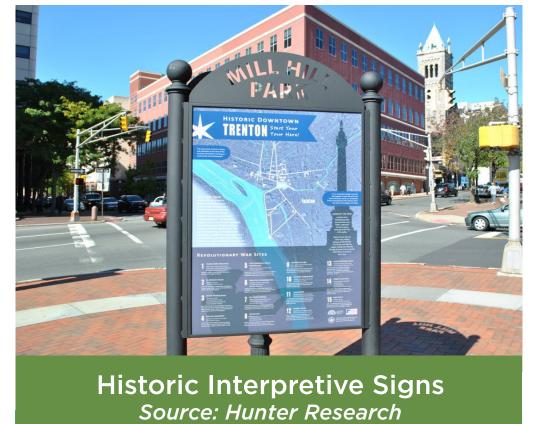
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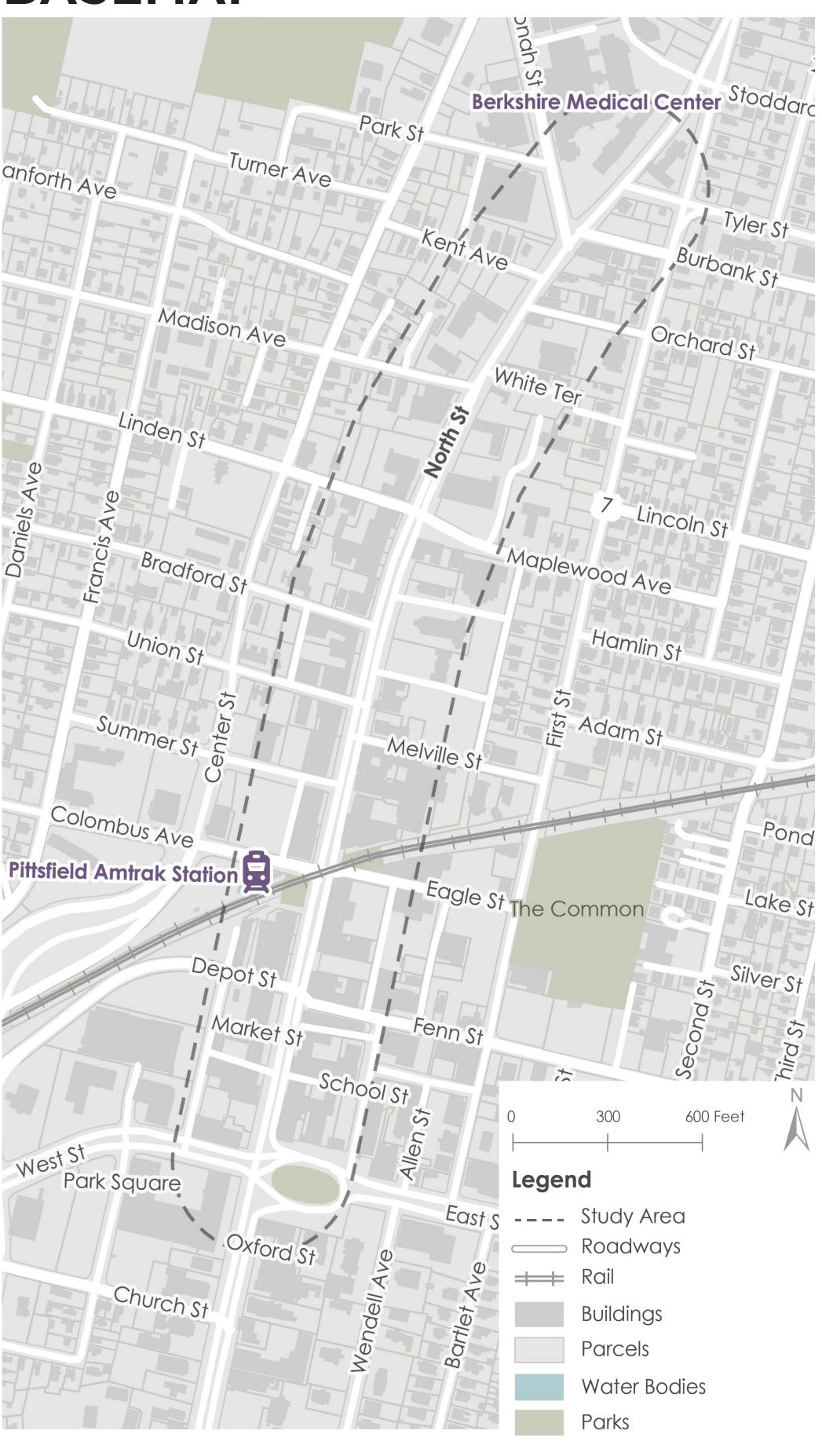
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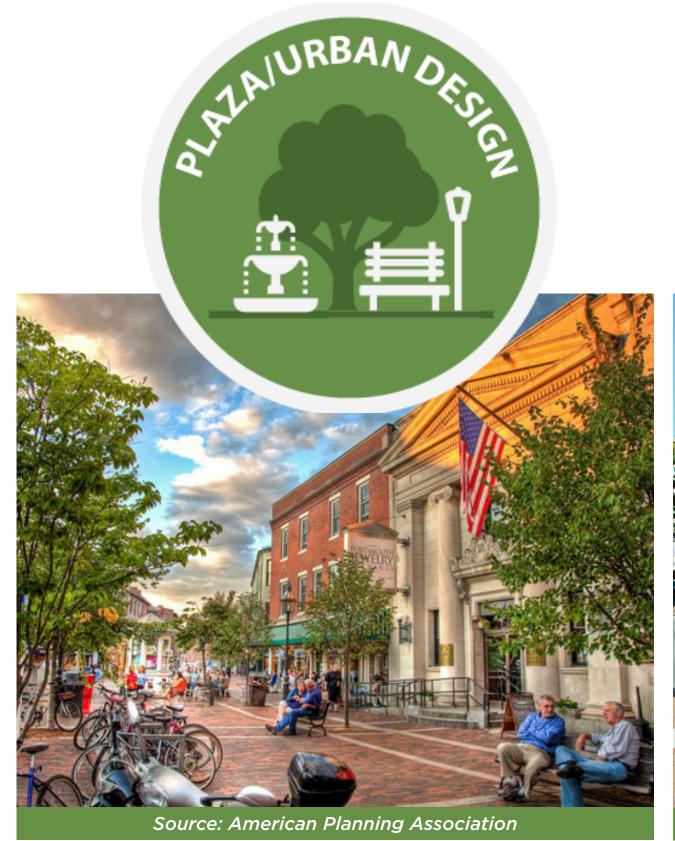
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BASEMAP





Put stickers on the Study Corridor Aerial Map that match the following icons for different treatments. Put relevant icon stickers at locations where you would like to see respective treatments.

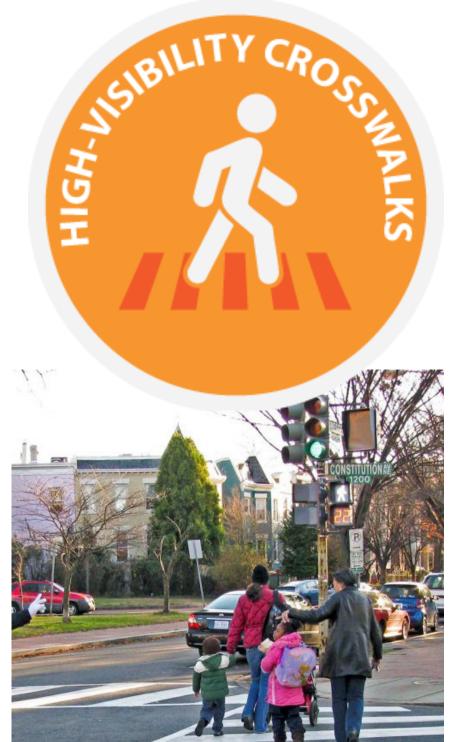




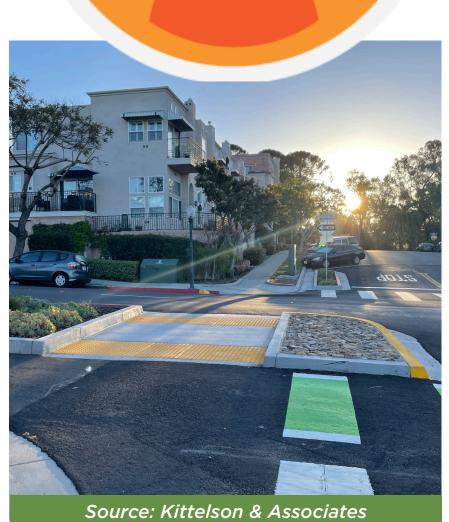




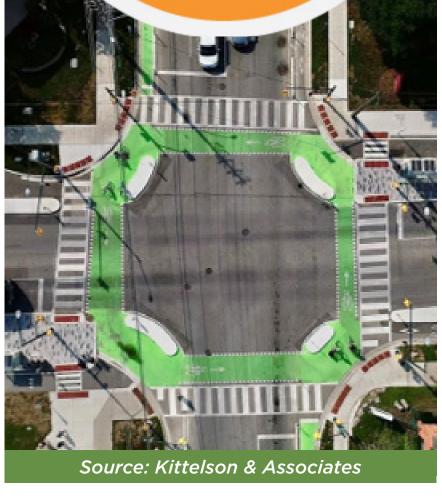








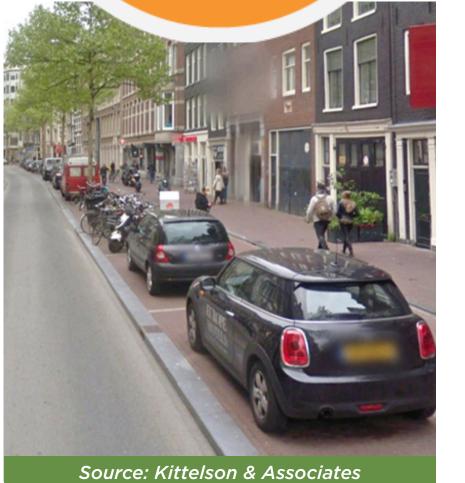




















Source: Kittelson & Associates