City of Washington
15th Street Complete Streets Project

Date: June, 2021

15th Street/Brown Street intersection looking west

Stantec

Acknowledgment

This project would not be possible without the help from the following people:

- Donald Sadler, Mayor
- Betsy Kane, Councilmember
- Jonathan Russell, City Manager
- Erin Ruyle, Director of Tourism & Economic Development
- Berekia Divanga, Fellow
- Andy Olson, title
- Mary Day Mordecai, Resident

Thank you.

"Thank you to the staff & team for their hard work."

- Attendee

"Very encouraging work product Stantec, City facilitators Erin & Jonathan, and council members - thanks!"

- Attendee

"This is a great plan. Thanks to the team for all the hard work!!"

- Attendee

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FIRST BANK


CHAPTER 01
Introduction
TSC
Fitness
UNLIMITED
DOLLAR
HERE!

Introduction.

Downtown Washington along Pamlico River. Source: BusinessNC

Washington, NC – "Little Washington", as residents like to call it, in contrast to our Nation's capital – is a city born, raised, and made by the water. Sitting at the confluence of the Tar and Pamlico Rivers, its location has made it a key point for travel and trade in Eastern North Carolina for over three centuries, connecting communities east to Greenville, Raleigh, and beyond.

Today, 15th Street plays a crucial role in carrying Washington's legacy forward, providing linkages to residents and travelers to key destinations, as well as major thoroughfares, connecting Washington to nearby communities and our state and national transportation network. Yet as Washington has grown, and its needs changed, 15th Street has failed to keep pace. The result is a street that is ill-suited to its many surrounding land uses, and unsafe for residents and multimodal users alike.

In preparing this Plan, the City of Washington directly confronts these issues, seeking to cast a vision for 15th Street that addresses its challenges, creates a Complete Street that prioritizes all users of the corridor, and makes 15th Street a safe road and valued connection in Washington's transportation network.

Background & Context.

Washington, Main Street. Source: NC Roots

This is a project with a history.

To create a new plan that can meet the needs and interests of the many stakeholders, including local residents, business owners, bicyclists, pedestrians, and the North Carolina Department of Transportation, it's important to understand how the project arrived at this point. The 2000 City of Washington Thoroughfare Plan identified growing congestion and safety issues along 15th Street as a current and future problem to be addressed through roadway improvements. Evolving from a proposed new two-lane connector to Avon Avenue, widening of 15th Street became the preferred improvement, and the 2013 Beaufort County Comprehensive Transportation Plan called for a four-lane divided roadway with sidewalks on both sides.

Previous plans focused on safety, but lacked public input.

Washington has two bicycle and pedestrian plans relevant to this discussion. The 2014 Comprehensive Bicycle Plan, which identifies a network of proposed bicycle facilities, did not propose any bike facilities along the corridor, but did recommend improvements at the Market Street Intersection. The complementary Comprehensive Pedestrian Plan proposed sidewalk facilities along the south side of 15th Street for the length of the corridor.

15th Street improvements became part of the NCDOT's State Transportation Improvement Program: first for a shorter section between US 17 Business and Bridge Street (TIP ID W-5008), then expanded to the current project limits at Brown Street/12th Street (TIP ID U-5860). The plan proposed a "synchronized street" design. Preliminary design converted 15th Street to a four-lane roadway, divided by a raised 17.5-foot median, with left turns allowed at median breaks at five locations along the corridor. The traffic signal at Washington Street would be relocated. The plan did not call for sidewalks, but would include them if a cost-sharing agreement was reached with the City, nor did it include bicycle facilities. Importantly, the conversion to a four-lane divided thoroughfare would involve significant impacts to adjacent property owners.

Little Washington wanted something different.

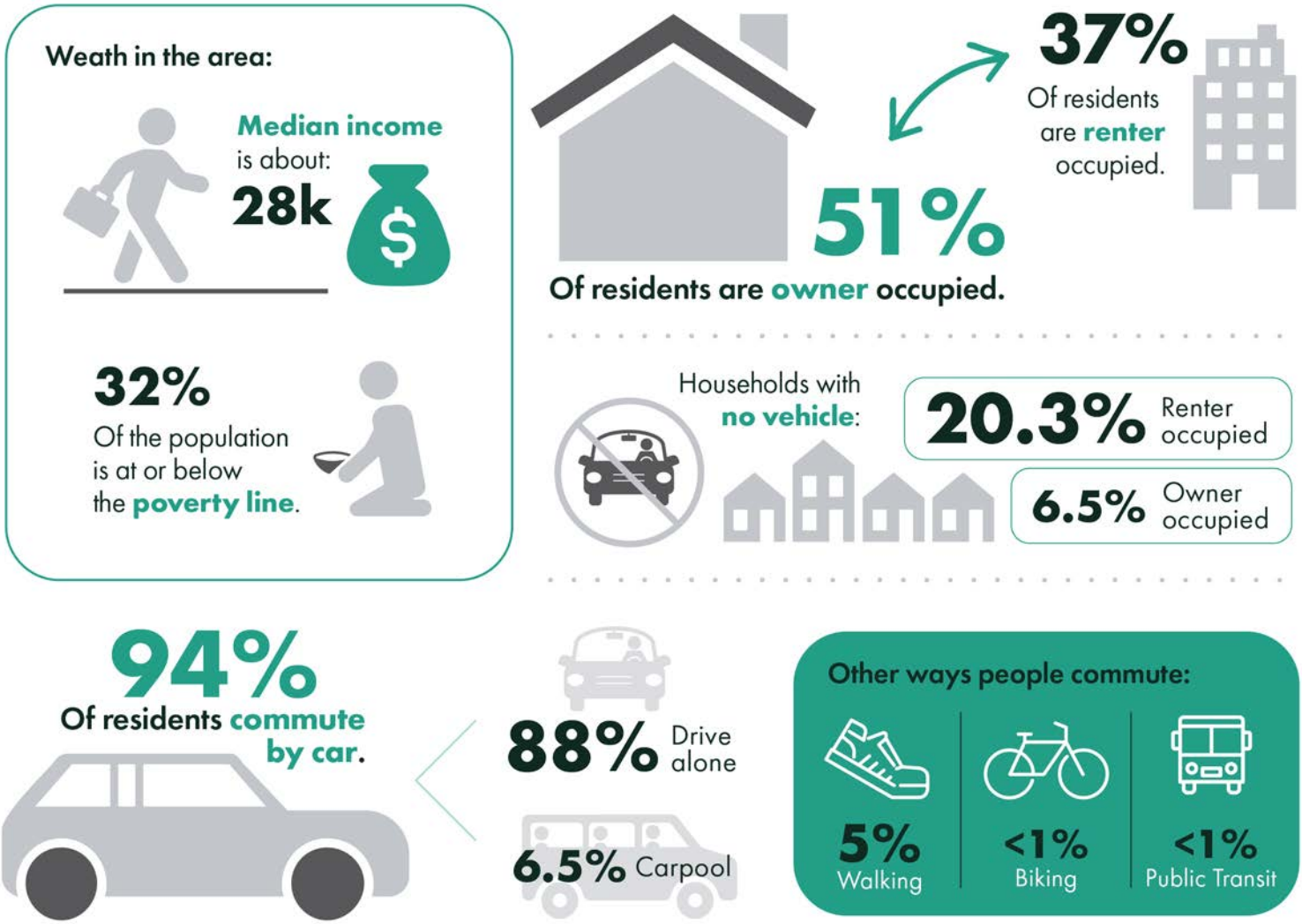
After significant public demonstration, the Washington City Council rejected the proposed design from NCDOT in 2016. Since that time, the project's status has been suspended; however, the project remains a part of the State Transportation Improvement Program (STIP) per the NCDOT website.

Downtown Washington. Source: Pamlico.com

Demographics.

As a cross-town connector that traverses much of Washington, 15th Street's demographic profile is a microcosm of the town. Its population relatively stable, the corridor is characterized both by its potential to serve as a multimodal, Complete Street for a transportation disadvantaged population as well as its currently unmet need.

Residents of the 15th Street corridor are generally less affluent than the remainder of the City. Median Household Income for those living within ¼ mile of the corridor in 2019 was $28,000, compared with $32,600 for residents of the town. Over 30% of the corridor's population falls at or below the federal poverty level, indicating that many residents are in need of affordable transportation alternatives. This point is underscored by the fact that **over 20% of households who rent, and over 6% of households who own their homes, are *without access to a vehicle***. Despite this, 15th Street's residents are restricted to commuting by car, most likely due to the limited and unsafe facilities for non-motorized uses. **94% commute by car** to and from work each day, whether alone or as part of a carpool. Only 5% of the population reports walking as their primary mode of transportation, reflecting the incomplete nature of the existing transportation facilities for residents and commuters in this corridor.



Planning Process & Timeline.

The planning process was divided into four distinct phases:

Phase 1 - **Visioning**

The first phase centered on data collection, preliminary study of the corridor, and developing the public engagement process. The team worked with community representatives, local, regional, and state planning agencies to define the Project's purpose, goals, and establish the framework for the Plan's development. The project website, survey, and online maps are launched to begin collecting public sentiment.

Phase 2 - **Investigation**

The second phase focused on analysis. The project team analyzed plans, policies, data and qualitative feedback from online engagement to conceptualize the Corridors strengths, problems, opportunities and constraints. The first major public event, the Project Symposium, was held in January 2021, and stakeholder interviews conducted both to present the results of initial analyses and obtain further feedback. Key takeaways derived from this phase culminated in the development of the Preferred Access Plan, the foundation for future design work.

Phase 3 - **Concept Design**

The third phase began immediately following Investigation. The team condensed data, public input, and background information to inform preliminary planning, engineering, and design recommendations. Many of these recommendations were developed during the multi-day Design Workshop (charrette), a large, interactive planning event that provided stakeholders and the general public opportunities to review and influence concept designs in real-time. During this phase, the concept design for the corridor was first developed and refined.

Phase 4 - **Reporting & Adoption**

The final phase documented the whole of the planning process. Using plans, materials and designs produced throughout the Study, this final planning document was prepared to reflect both the design recommendations, the data and analysis informing the recommendations, and the planning process itself. This document would guide the City of Washington and the NCDOT in subsequent design and engineering phases on the path to a constructed, Complete Street. The Open House, presenting the final recommendations to the public, was held during this period to close the project and celebrate the productive collaboration between the community and local planning agencies.

Guiding Principles.

As the function of 15th Street has changed, so too should its design. Leading the project team in the planning and design process are Guiding Principles, derived from the continuous input, perspectives, and directions provided by the Washington community through the immense public participation from surveys, interactive mapping, symposiums, and stakeholder outreach. The recommendations of this plan, developed through the Design Charrette, will be guided by and reflect these Principles.

Principle 1:
Right-size 15th Street with maintainable infrastructure.

Principle 2:
Priority must be given to pedestrians & bicyclists.

Principle 3:
Safety of ALL users is a must!

Principle 4:
Limit property and Right-of-Way takings.

Principle 5:
Support surrounding uses through attractive design and human scale.

CHAPTER 02

Investigation

Existing Conditions.

15th Street's history can only provide so much context. Creating a roadway that is safe and efficient for all users, whether on two feet or two wheels, is accomplished through understanding the road's current performance, from current infrastructure to safety and operations. With challenges and opportunities known, this Plan's recommendations can promote a Complete Street that fosters community cohesiveness, improves quality of life, and contributes to the City's economic development.

The 15th Street corridor study area encompasses a 1.6-mile stretch extending from US 17 Business/ Carolina Avenue in the west to 12th Street/Brown Street in the east. West of the study area, 15th Street connects to Clark Neck Road and US 264, creating a crosstown west-to-east connector that, for some, permits through traffic around Washington's downtown. Neighborhoods on either side of the street are sandwiched between higher-intensity commercial and medical uses on either end.

Figure 2.1: 15th Street corridor study area.

Corridor Profile.

Many of the issues facing the corridor are found in its existing physical characteristics. 15th Street's cross-section is consistent throughout the study area as a four-lane, undivided roadway, measuring 48 feet in width between pavement edges. Signals at US 17 Business, Minuteman Lane, Washington Street, Market Street, and Brown Street/12th Street provide traffic controls along the route with limited opportunities for left turns (turn bays) onto side streets. **Lacking medians, left and right turns are not controlled, which can lead to sight distance problems, and higher rates of angled crashes**.

Adding to the congestion is a lack of multimodal facilities. Currently, neither sidewalks nor bicycle facilities, whether on-road or separated, existing along the corridor, **preventing bicyclists and pedestrians from accessing destinations** or navigating between residential and commercial nodes. The lack of these facilities reinforces the need to drive, rather than walk or bicycle, along 15th Street, and introduces **vehicle-bicycle and vehicle-pedestrian conflict**.

A variety of land uses are found along the nearly 1.6-mile corridor; **suburban retail and commercial uses dominate** the western and eastern termini, while residential neighborhoods and single-family housing adjoin the street throughout. Most commercial properties have separate driveway entrances, lacking interconnectivity, and residential homes facing 15th Street have driveways accessing the corridor. Despite higher intensity land uses located closer to US 17 Business/Carolina Avenue, highest traffic volumes are found in the middle of the corridor, between Washington and Holloman Streets.

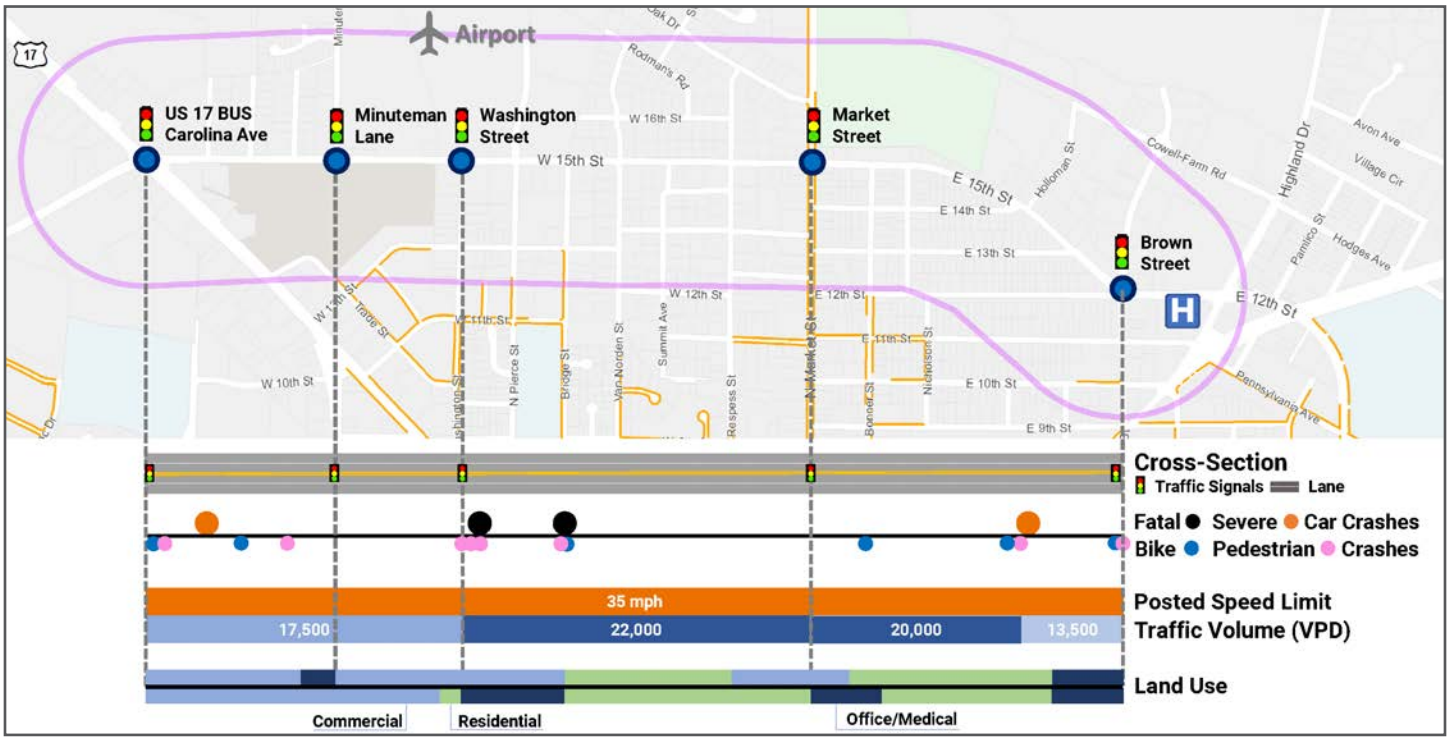


Figure 2.2: Corridor profile.

Vehicular Crashes.

Crashes along 15th Street are typically less severe than similar urban secondary roads in North Carolina; in the five years studied (2015-2020), only one fatal or disabling injury crash occurred within the study area. However, while crashes are less severe, they occur more frequently along the corridor than on similar roads within the state, at a rate **1.34 times the state average for similar roadways** (urban secondary route, four-lane undivided). Accidents are clustered at intersections and noteworthy driveways; Figure 2.5 shows these **high-frequency intersections, which include entrances to Washington Square Mall, Market Street, and 12th Street/Brown Street**.

The types of crashes experienced along a corridor tell us about the problems it faces. Here, angled, rear-end, and left-turn crashes account for 94% of all crashes along 15th Street. Angled and left-turn crashes typically occur where there are no left turn bays, or where adequate turning facilities are lacking, such as exclusive turn lanes or a lack of median-controlled turning, or where sight lines are short or narrow, such as where intersections are skewed. Creating these turn lanes, or restricting locations where left turns may be made along 15th Street, may help to reduce these types of crashes and, in turn, improve the safety of the corridor for all users.

Crash Type		
Type	Number	Percent
Angle	163	39%
Rear End	119	29%
Left Turn	107	26%

Table 2.3: Vehicle intersection crashes by type (2014-2018).

	Crash Severity	Crash Rate
15th Street	3.7	685.8
State-wide Average (NC)*	4.0	510.7

Table 2.4: Corridor crash rates, compared with state-wide average (2014-2018).
*Similar 4-lane undivided State Route.

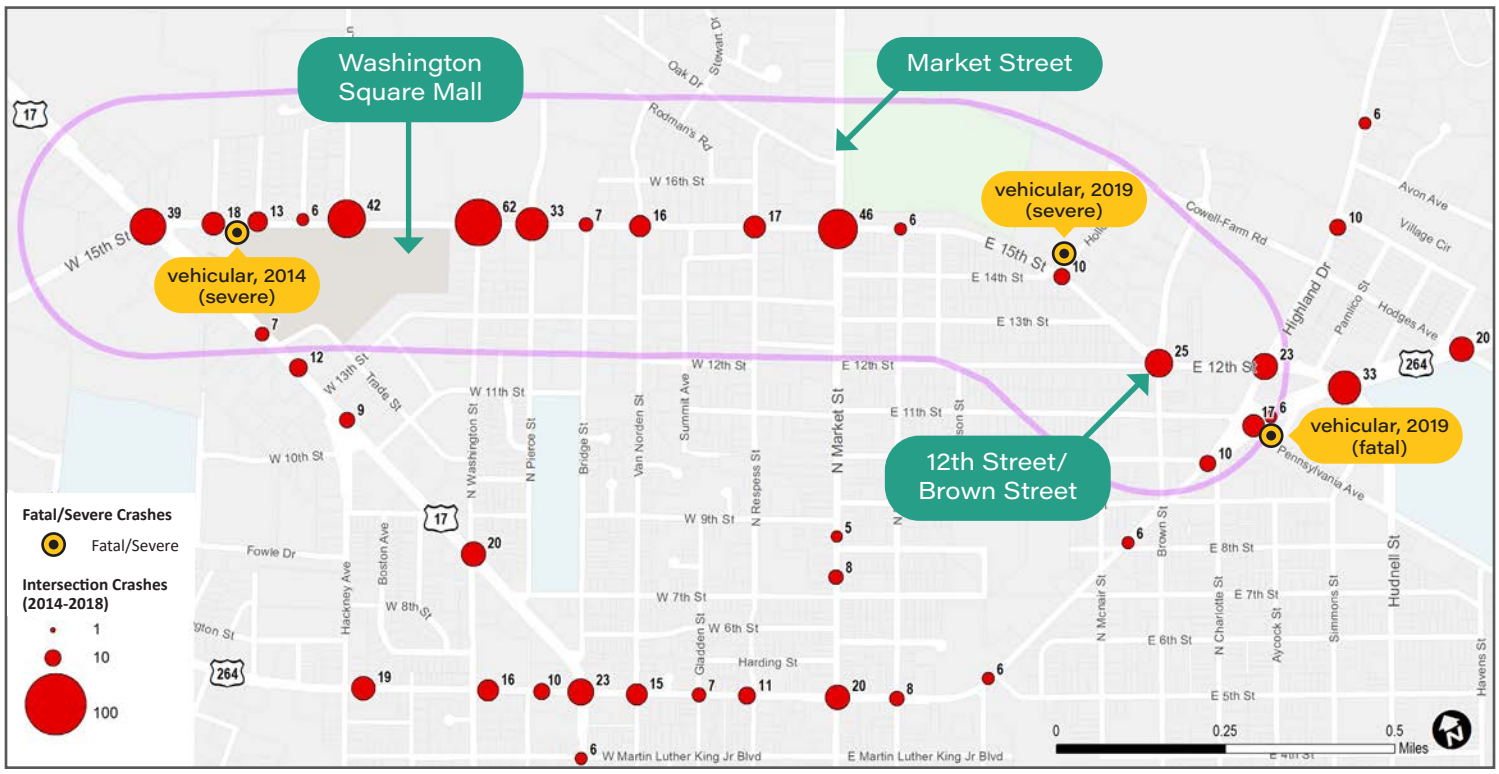


Figure 2.5: Vehicular intersection crashes (2014-2018). Source: NCDOT.

Bicycle & Pedestrian Crashes.

For a corridor lacking bicycle and pedestrian facilities, 15th Street nonetheless experiences a significant number of crashes involving those who travel by biking or walking. While survey responses portray only a small percentage of the population biking or walking along 15th Street, these crashes suggest that those who do find dangerous conditions at these locations, and must also put themselves at risk in order to make use of 15th Street.

Bicycle and pedestrian crashes are shown in Figure 2.6. Similar to motor vehicle crashes, **bicycle and pedestrian crashes are concentrated at intersections and notable driveways, with more occurring in the vicinity of the Washington Square Mall**. Washington Street again shows a particularly large cluster of pedestrian crashes, with seven occurring near its intersection. The intersection with 14th Street and Holloman Street, noteworthy for its skewed approach, is also the site of both bicycle and pedestrian crashes. Taken as a whole, the crash data represents a corridor where dangerous conditions discourage many from biking or walking along 15th Street, instead opting for motor vehicle travel for nearby trips. Adding sidewalks, bike lanes, or sidepaths along 15th Street may alleviate these conditions, improving the road's perception for many and thereby both increasing biking and walking activity and decreasing these unfortunate crashes.

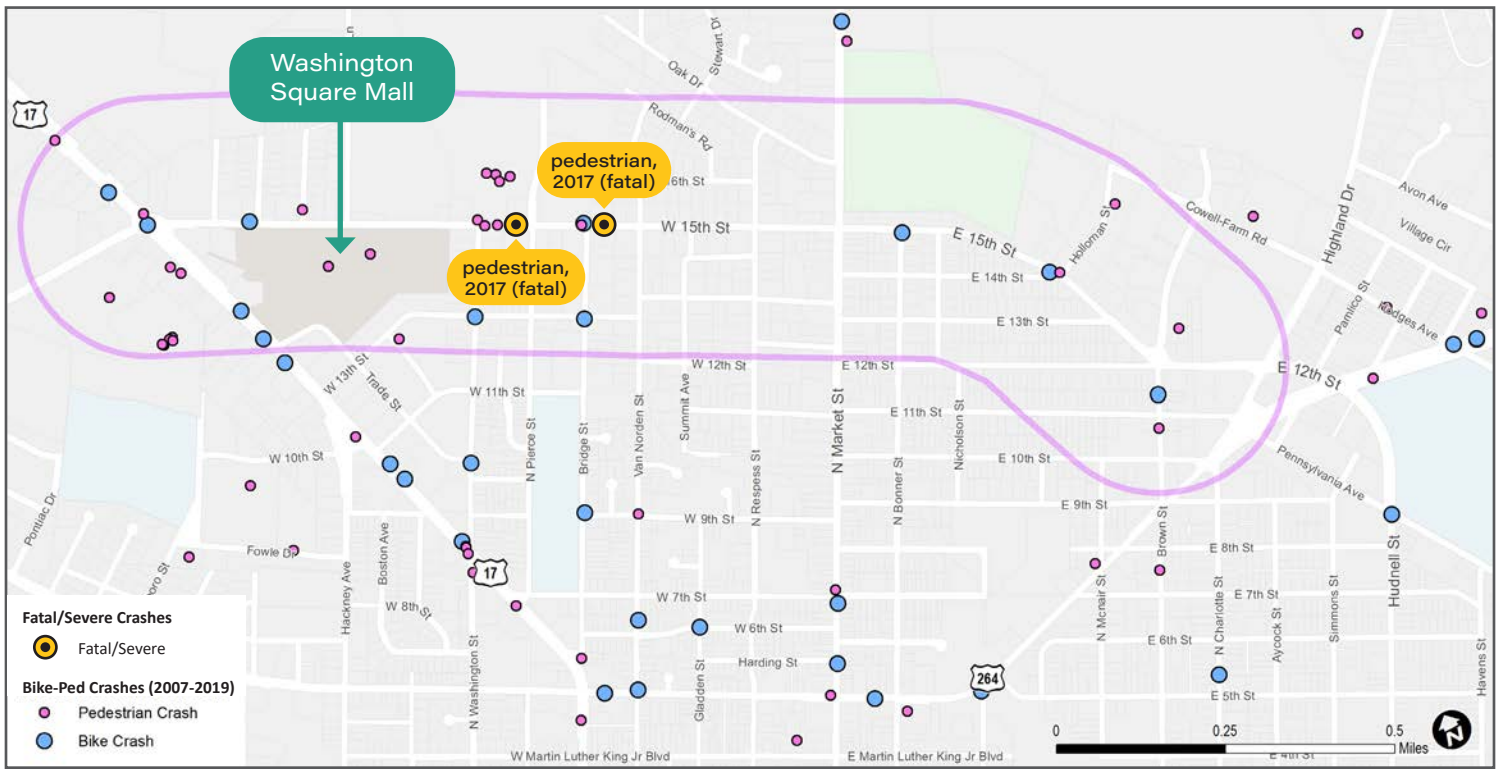


Figure 2.6: Bicycle and pedestrian crashes (2007-2019). Source: NCDOT.

Multimodal Facilities.

Simply put, 15th Street lacks options for non-motorized users, whether walking or biking. Segments of sidewalks from side streets intersect with 15th, providing opportunities for community connectivity. However, lacking sidewalks or bike lanes along the corridor, opportunities to travel to and from local businesses, offices or other residences are limited. Crosswalks, which provide opportunities to cross 15th Street to access key destinations and connect neighborhoods, are likewise lacking. Notably, several bicycle and pedestrian crashes indicated previously occurred in the vicinity of intersections, suggesting that these individuals may have been attempting to cross the street.

Moreover, neighborhoods adjacent to the corridor lack cross-access to shopping destinations, such as the Food Lion at Washington Square Mall. This forces residents who would otherwise walk or bike into driving along 15th Street, contributing to traffic and congestion.

TRANSPORTATION DEPENDENT POPULATIONS

Households with **no vehicle**:

20.3% Renter occupied

6.5% Owner occupied

COMMUTE TO WORK BY ALTERNATIVE MODES

5% Walking

<1% Biking

<1% Public Transit

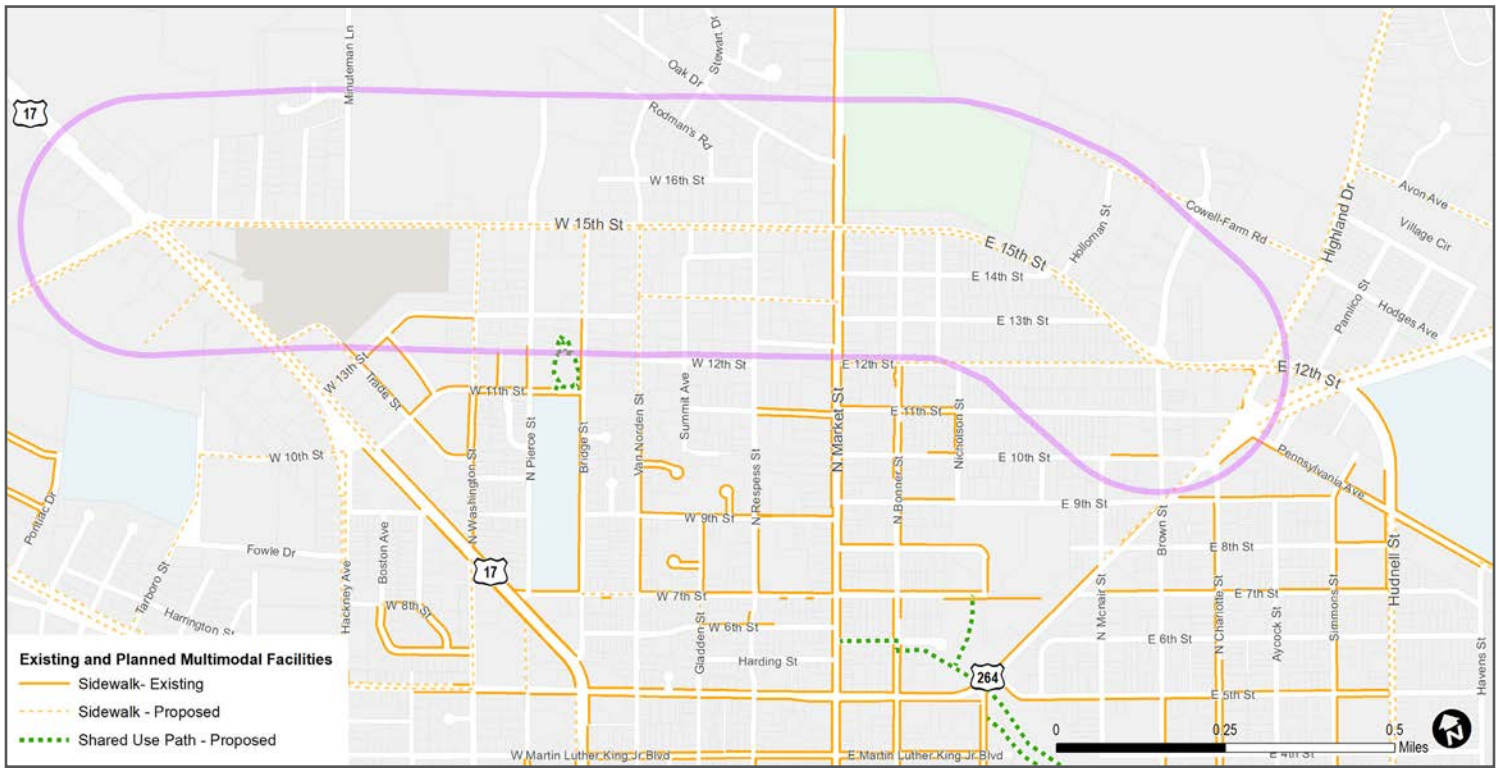
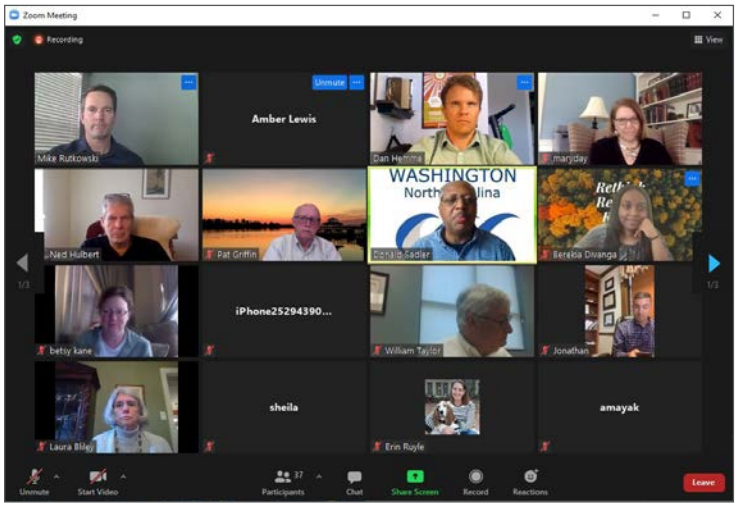


Figure 2.7: Existing and proposed multimodal facilities.

Public Engagement.

Public engagement plays an integral role in any design or study, as its results will impact the daily lives of community members and local businesses. Planning for a community of any size is not as successful as planning with the community; meaningful engagement means stronger results, tighter community bonds, and its implementation is harder fought for. Furthermore, engagement provides invaluable feedback to planners, engineers, and designers regarding current conditions and problems that might not be fully understood looking at data alone; the human element and a diversity of perspectives helps to reframe the project team's view of the issues and provide better suggestions for improvement.



View of the Design Charrette (March 2021) in action.

A note on COVID-19

During this planning process, our world, nation, and community continued to grapple with the COVID-19 pandemic, an unprecedented moment in history with profound implications on traditional means of public engagement. Social gatherings were restricted with limitations on types of events and attendance, or outright banned, in order to limit the spread of the coronavirus. Large public meetings, such as the project symposium, as well as small gatherings, such as advisory committee meetings and stakeholder interviews, would need to find new formats in order to engage the public meaningfully in the planning process.

Like our community, this study adjusted to the new normal and shifted traditionally in-person means of outreach into the virtual realm. Coupling new online capabilities, such as Zoom cloud meeting technology, with familiar methods of online engagement such as interactive web mapping and surveys, virtual public engagement stepped up to meet the needs of this project. While many of the engagement opportunities described herein were intended as in-person meetings, innovation borne out of this challenging time provided a virtual format that nonetheless fostered deep engagement and robust participation from a large segment of the community.

"I do not drive, currently I have to get a ride to get from my home to where I work on 15th. This looks terrific as I would be able to walk/ ride a bike when this is finished."

- Attendee

"This could turn out to be the most appealing mile and a half in NC."

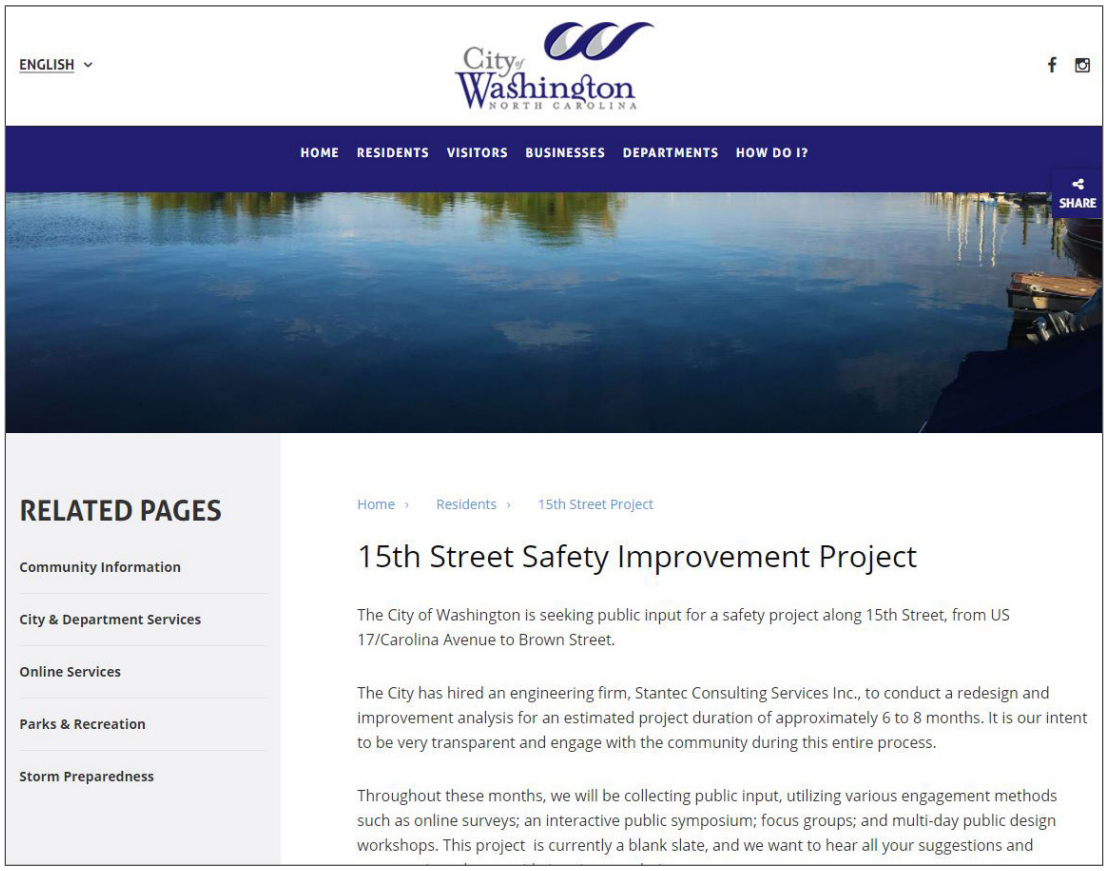
- Attendee

Project Website.

Early in the process, the City created a project website so **residents, property owners, business owners and other stakeholders could access information and provide input on the discussions surrounding the plan's development**. The website featured information on project purpose, dates and locations of upcoming meetings, meeting results, related documents, and options to get involved with the project. Ahead of major public events, event notices were shared by email and social media alerting the public and inviting them to attend. When combined with the publicizing efforts of community members and news organizations, hundreds of people were able to hear about the Plan during its development.

Among the ways to get involved through the website were an online survey and an interactive map tool. The survey and map were open for interaction for several months and closed when the design recommendations were completed. The results were left viewable on the website and are documented in the digital appendices of this report. Summaries of both are shown in the following figures.

Visit the Project Website **HERE.**

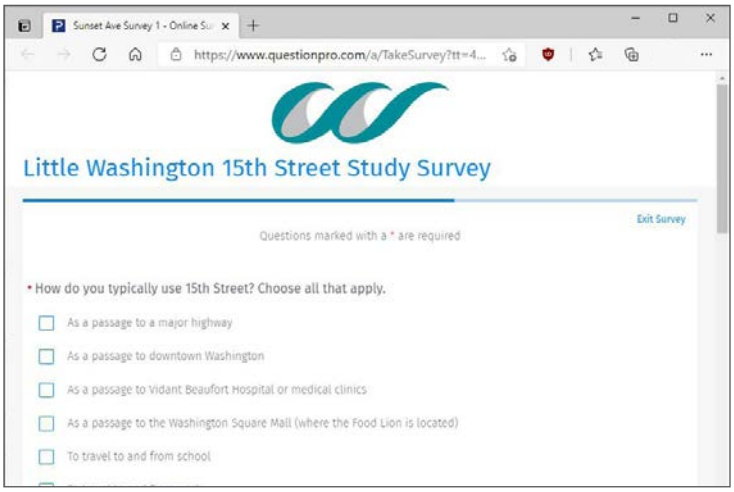


View of the Project Website.

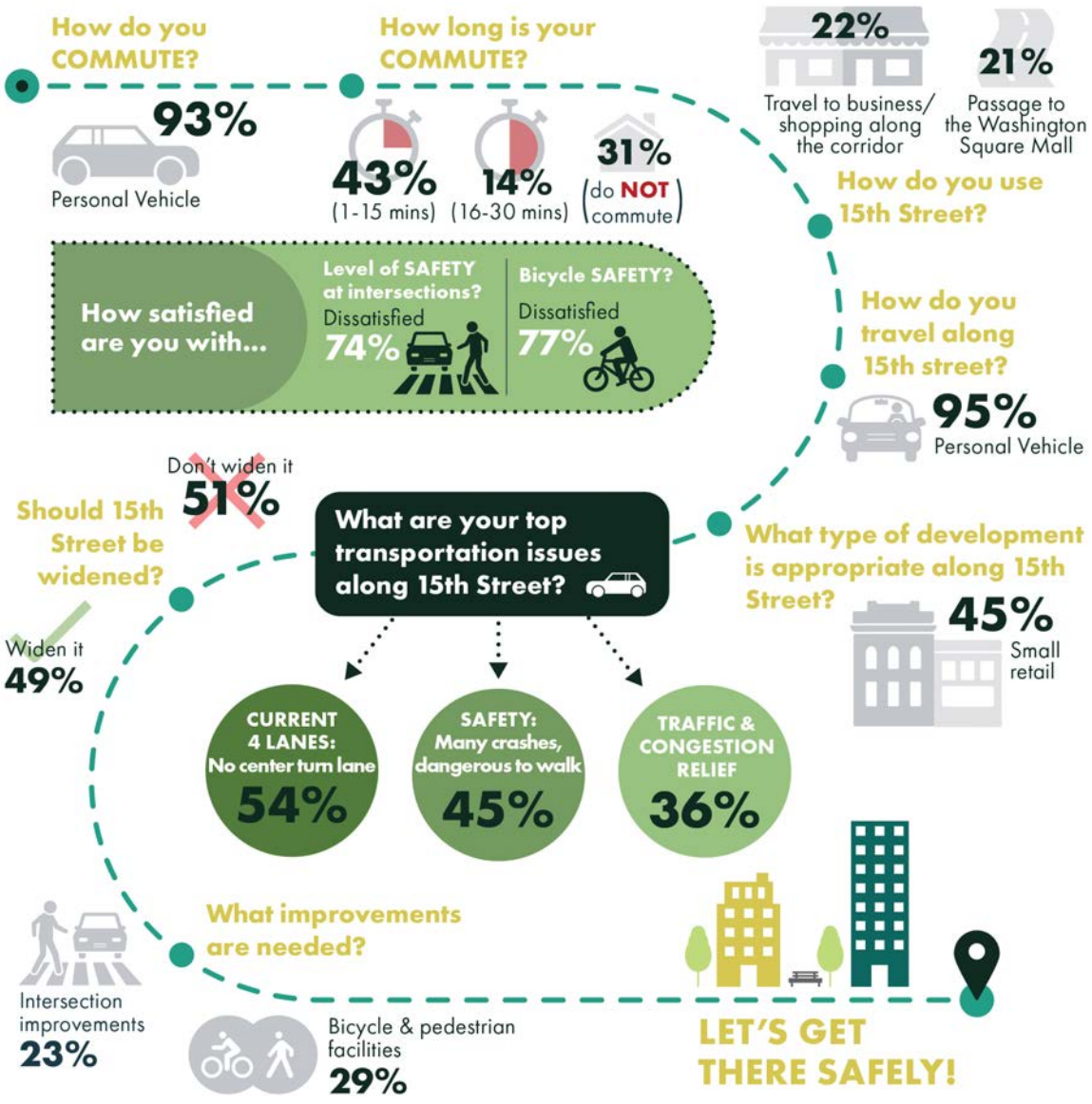
Online Survey.

The online survey measured the pulse of community sentiment regarding 15th Street's present. It featured a series of 10 questions related to traveling conditions, needed improvements, safety, and growth. These broad, general questions and their responses complemented the specific, targeted discussions with focus groups. Major takeaways from the survey are summarized below.

Total # of surveys taken: 421



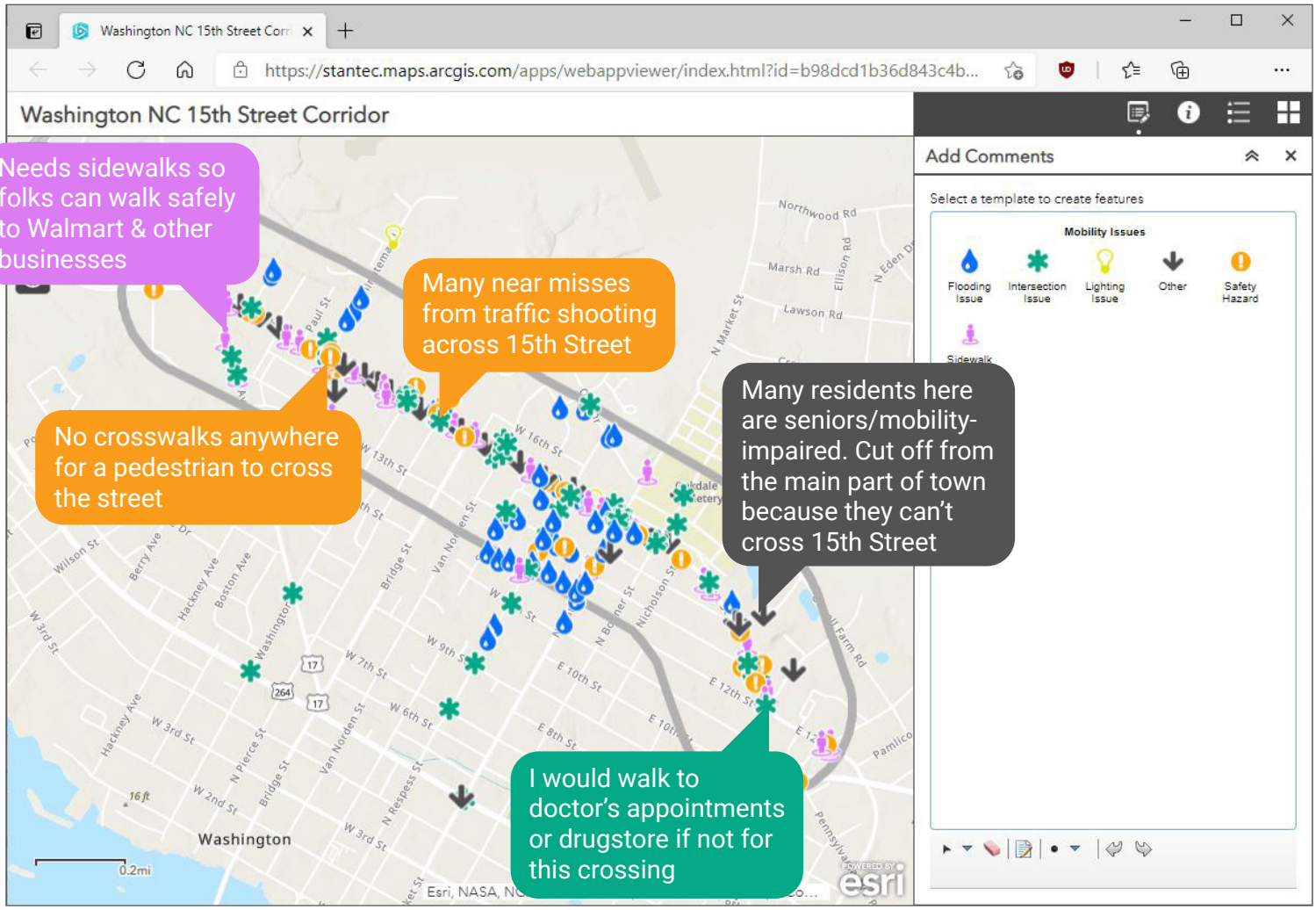
View of the Online Survey



Visual summary of the Survey results

Interactive Map.

The interactive map illustrated the public's collectively-identified problem areas and points of interest within the corridor. Using ArcGIS Online mapping capabilities, respondents identified a variety of features, including needed intersection improvements, safety hazards, flooding issues, barrier to walking or biking, among others, portrayed as points and icons on the interactive map. The web map **provided a different and needed perspective on these corridor-level issues** that could not be fully captured through traditional survey methods or focus group discussions. Representative comments can be seen below. A detailed report of the map and survey responses are included in the digital appendices to this Plan.



View of the Interactive ArcGIS Online Map

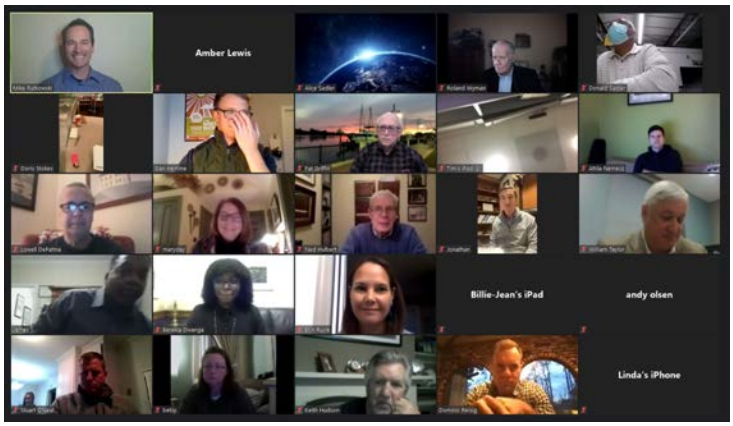
214 comments total

- **63** *Intersection Issues*
- **51** *Flooding Issues*
- **40** *Safety Issues*
- **34** *Mobility Issues*
- **24** *"Other" Issues*
- **2** *Lighting Issues*

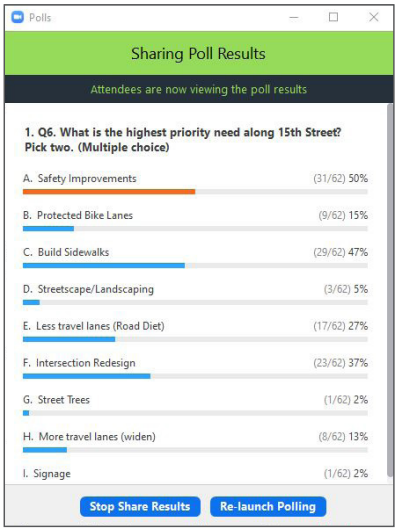
Project Symposium.

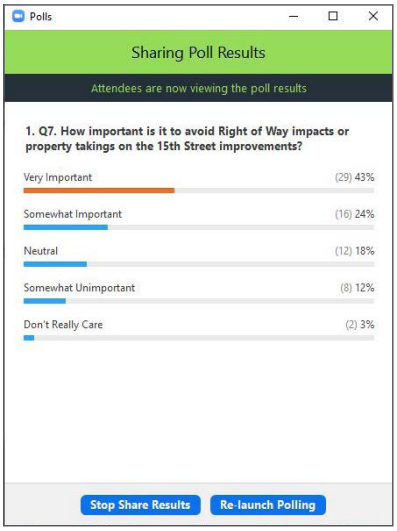
The Virtual Symposium offered the first opportunity for the public to collaborate with the project team. In so doing the team received vital feedback on project principles and objectives, which was used to **refine key themes and principles that guide subsequent design phases of the planning process**. The Symposium was held virtually via Zoom on January 21, 2021, with very high attendance: over eighty members of the public joined in to participate.

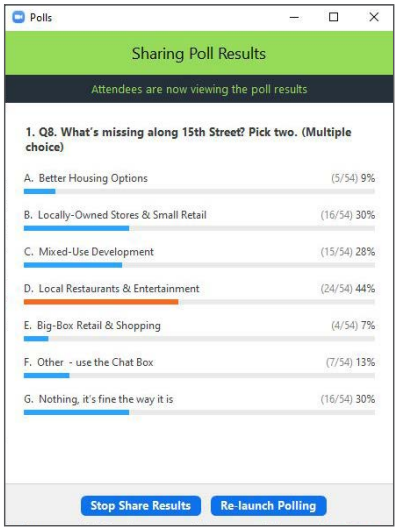
67%
of respondents wanted to avoid property and ROW takings



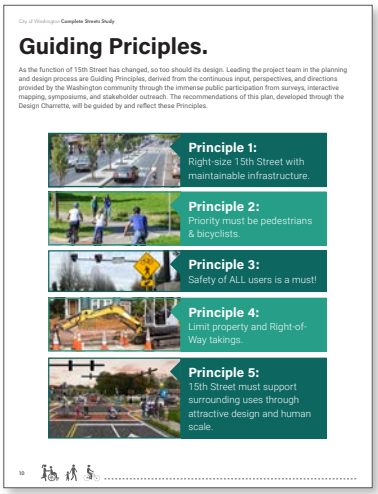
Participants







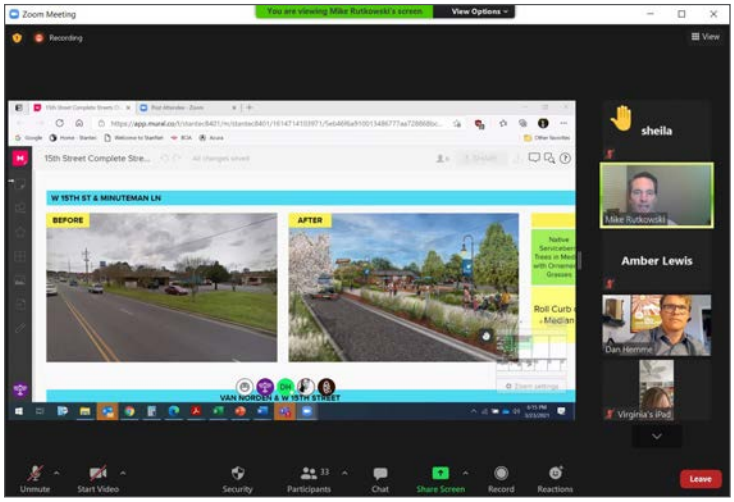
Live polling questions



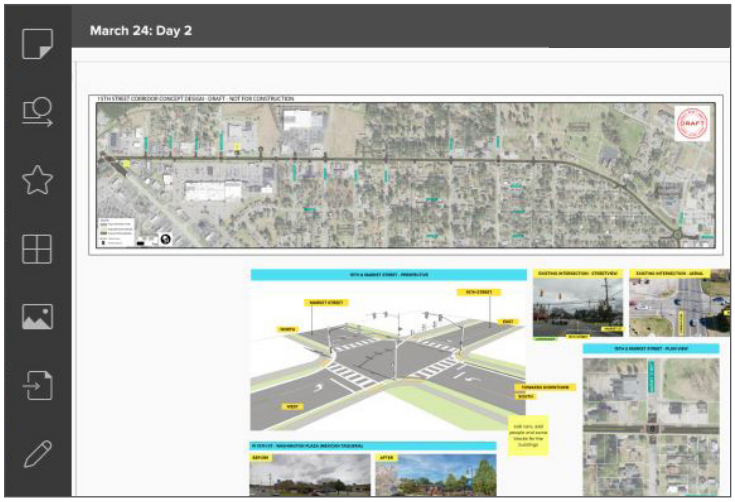
Results helped to ***refine key themes and principles***

Design Charrette.

The Design Charrette, held in late March 2021, was the largest and most coordinate effort for the Study. During the Charrette, a multidisciplinary team of planners, urban designers, and engineers collaborated to create new concepts for a redesigned, reimagined 15th Street that responded to the concerns identified through data analysis and public engagement. Held over three days via Zoom and MURAL, an online collaborative platform, **public-facing sessions were regularly held to present concepts and receive feedback from stakeholders and the public**. Morning meetings with stakeholders allowed the team to drill down into design nuances, while evening pin-up sessions invited the entire public to attend, provide feedback, and see the influence of their participation on designs over the course of the charrette. Following the charrette, all materials produced during the week were viewable through the project website.



View of the Design Charrette in action!



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Design firm presents first of several 15th Street options

By Steve Barnes
Email the author

Published 7:50 pm Tuesday, March 23, 2021

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01:46 Powered by Trinity Audio

15th Street in Washington will look decidedly different if the city council ultimately approves the option Stantec Engineering presented Tuesday evening during the first of a three-day virtual design workshop.

Each day of the Design Charrette received local front page coverage in the Washington Daily News.

Focus Group Interviews.

During the Design charrette, focus group interviews were held with representatives comprised of community stakeholders, including residents, agency representatives, community leaders, advocates, and elected officials. Meetings were held as a series of one-hour interviews centering on a single topic. Group members were identified by the steering committee and project team for their ability to provide different perspectives on the topic at hand representing different facets of the community.

Focus group meetings **supplemented both quantitative corridor data and broad public engagement with qualitative feedback on targeted topics and areas of concern, capturing local insights and perspectives not captured through data**. In total, six focus groups were conducted, with a total of 30 attendees over three days in March. Groups touched on the **business community, adjacent neighborhoods, emergency services, economic development, bicycle and pedestrian issues, and historic preservation & beautification**.

1. ***Dangerous conditions for bicyclists & pedestrians.***
2. ***Need to control speeds.***
3. ***Connecting neighborhoods across 15th Street.***
4. ***Attractive corridor will help support local businesses & invite new ones.***

Key Themes from the Focus Group interviews

Focus Group comments collected on the MURAL page

Open House.

The final public meeting of the planning process, the Open House, was held June 8, 2021. With COVID restrictions loosening, the Open House was held in-person, at the Washington Square Mall. Nearly ## community members attended the Open House, providing excellent feedback on the final design as well as recommendations for implementation and phasing of the project's completion.

The Open House allowed for community members to meet the project team, other stakeholders, and to view the final concept design for 15th Street. While much of the design was completed during the Design Workshop, the project team continued to refine the ideas afterward into the complete vision.

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HOME NEWS SPORTS OPINION SOCIETY OBITUARIES CLASSIFIEDS RECORDS CALEND

Stantec Engineering project manager Mike Rutkowski explains the final 15th Street design at Tuesday night's meeting in Washington. The next step is for the City Council to review and approve the final design before it goes to the state Department of Transportation. (Steve Barnes/Washington Daily News)

Design firm presents first of several 15th Street options

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Local front page coverage of the Open House in the Washington Daily News.

View of the Open House in action!

Key Takeaways.

This investigation chapter examined the corridors current operations, as well as the public perception of 15th Street, providing the project team with volumes of insight on how the corridor serves its residents. From this data, a select number of important issues and observations emerged. These issues, summarized below, represent the key takeaways of this investigative phase.

Poor roadway design.

Lack of turn lanes causes access issues, angle (turning) crashes and congestion.

Lack of biking and walking facilities.

With no bike lanes, sidewalks or crosswalks, users of 15th St. have only a motor vehicle to travel along the corridor.

Unsafe conditions for all users.

High crash rates and recent fatalities highlight the need for design changes.

Keep it within the curb.

Design must respect adjacent property owners and limit impacts to residents & businesses.


WASHINGTON
MOTORS
948-2323
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CHAPTER 03

Recommendations

Bird's-eye view of US-17 & Carolina Ave intersection

Design Priorities

The 15th Street Complete Streets Project envisions a new corridor that embraces and supports active transportation choices, promotes the safety and wellbeing of its residents, and attends to the needs of all users – whether on two feet or two wheels. It is the Complete Streets process that has led the project team to the following recommendations, a process requiring the involvement of property and business owners, underserved populations, bike advocates, emergency services, the development community, City representatives and elected officials. Public input, technical analyses by the project team, and the physical realities of 15th Street all influenced the final elements of the corridor design. Through this process, the Washington community has created a holistic vision for transforming this important corridor into a safe, active and attractive community asset.

The retrofitting of 15th Street was led by five key objectives tied back to the **Guiding Principles**. The descriptions at right illustrate how the design team addressed stakeholders' concerns while respecting the desire to maintain an overall vision and physical "constructibility" space for a separated multiuse path.

The concept design for 15th Street integrates all of the data received, whether through corridor travel analyses or public engagement. From this data emerged key themes, which, in combination with Complete Streets principles, led to the creation of Guiding Principles for this project:

Right-size 15th Street with maintainable infrastructure.

Priority must be given to pedestrians & bicyclists.

Safety of ALL users is a must!

Limit property and Right-of-Way takings.

Support surrounding uses through attractive design and human scale.

Principles of Complete Streets.

Complete Streets are streets designed for everyone. According to the National Complete Streets Coalition:

"They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities."

A Complete Streets version of 15th Street makes it easier to cross the corridor, walk to businesses, and bike to and from locations along the street without feeling unsafe. These improvements would be beneficial to everyone from children and the elderly going to church, neighbors walking to the cemetery to exercise and residents and visitors doing their shopping or banking at the Washington Square Mall.

Depending on one's perspective, Complete Streets may be viewed as welcome relief or pause for concern. Drivers who are accustomed to automobile-dominated development tend to see Complete Streets as an idea guaranteed to take away valuable travel lanes for what is *perceived to be* seldom-used sidewalks and bothersome bike lanes that infringe on their territory between the curb.

In truth, Complete Streets is not a one size fits all approach; a Complete Street redesign of an existing roadway must be tailored to existing and future travel demands, surrounding development and land use, and to that specific town or community. What an enacted Complete Streets policy might look like in a small coastal town is going to be different from that of a dense, urban center, and it should be. The same can be said for complete streets in the same town or city. For example, what might work along Main Street Washington might not be feasible along 15th Street.

Complete Streets considers every aspect of the roadway, from the perspective of both policy and the physical construction. It is not just about what occurs between curb to curb; it matters what happens between and behind the walls of the buildings facing the street. A street that becomes safer to walk along and cross is a street where kids can walk to school safely, older adults can retain independence if their driving ability is impaired, and those with physical or visual impairments can walk safely. This can be accomplished by improving the roadway with facilities like widened sidewalks, enhanced crosswalks, street trees, and pedestrian lighting.

A Complete Street:

- Accommodates all users and allows for efficient and high quality travel experiences.
- Provides travel options for users of all ages and abilities that are safe, universally designed, context sensitive, and operable in all seasons.
- Adapts to accommodate the needs of the present and future. As development and redevelopment occurs along a corridor, so too should the function and design of the street.
- Contributes to the environmental sustainability and resiliency of the community.
- Considers both direct and indirect costs in planning and design, as well as the value of the public right of way and the adjacent real estate.
- Is a vibrant, attractive people place in all seasons and contributes to an improved quality of life.

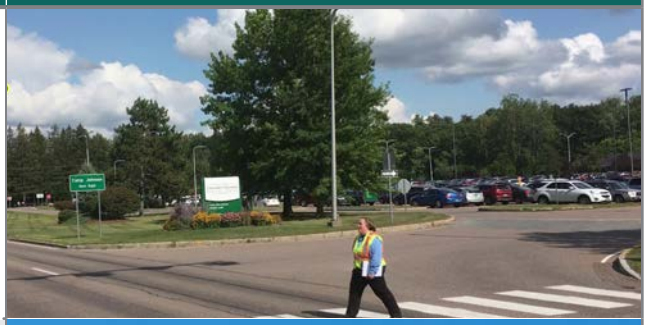
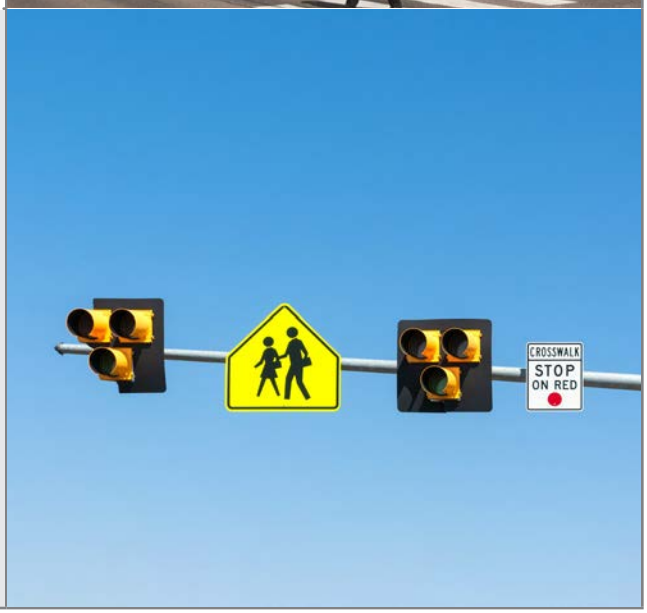
Complete Street Treatments	Description	
Crosswalks	■ Standard sidewalks have 2 parallel lines (for side streets). For increased visibility, we recommend the Ladder design or Zebra design (high-visibility) ■ Improves visibility from the driver's perspective ■ Improves safety of the pedestrian	
Pedestrian Beacons	■ Pedestrian hybrid beacon (PHB) signal, such as a HAWK, is a traffic control device designed to help pedestrians safely cross busy or higher-speed roadways at midblock crossings and uncontrolled intersections ■ Steady and flashing lights direct motorists to slow and come to a stop ■ An immediate option between a flashing beacons and a full pedestrian signal because it assigns right of way and provides positive stop control ■ **SAFETY BENEFIT:** The use of pedestrian hybrid beacons have seen a 55% reduction in pedestrian crashes, 29% reduction in total crashes, and a 15% reduction in serious injury/fatal crashes	

Table 3.8: Typical Complete Streets treatments.

Complete Street Treatments (cont.)	Description	
Sidewalks	■ Physically separated from the roadway by a curb or planted buffer ■ Sidewalk above the curb with a 4' vegetative separation from traffic ■ Minimum 5' (preferably 6') wide to allow pedestrians to pass each other ■ Well-designed sidewalks improve the mobility of pedestrians ■ **SAFETY BENEFIT:** Sidewalks have seen a 65-89% reduction in crashes involving pedestrians walking along roadways	
Multiuse Path / Sidepath	■ 10' minimum for 2-way passing ■ 5' minimum operating width for bicyclists ■ Sidewalk buffer or vegetative strip ■ 4' vegetative buffer off the curb ■ Avoid signs that overhang ■ Edges should be free from pedal and handlebar hazards ■ Have bollards at the end of the block to discourage motorized vehicles on the path ■ Side path is shared by users, not separated bicycle and pedestrian lanes	

Table 3.8: Typical Complete Streets treatments.

Preferred Access Plan.

The Preferred Access Plan (PAP) forms the conceptual basis for the design. At a high-level, this perspective reflects how all elements work together – connectivity, access management, and key nodal points that allow for pedestrian walksheds. Looking at the corridor holistically, it transforms key takeaways and guiding principles, along with design considerations from corridor analyses, into an actionable framework over which potential designs can be prepared and tested through review and public engagement.

Three primary focus areas for the redesign of 15th Street were to a) eliminate or minimize to the greatest degree possible property impacts beyond the existing right-of-way; b) provide dedicated space for bicyclists and pedestrians; and c) create a safe, functional corridor for all users. Additional criteria were used when designing the improvements to 15th Street (see Figure 3.9).

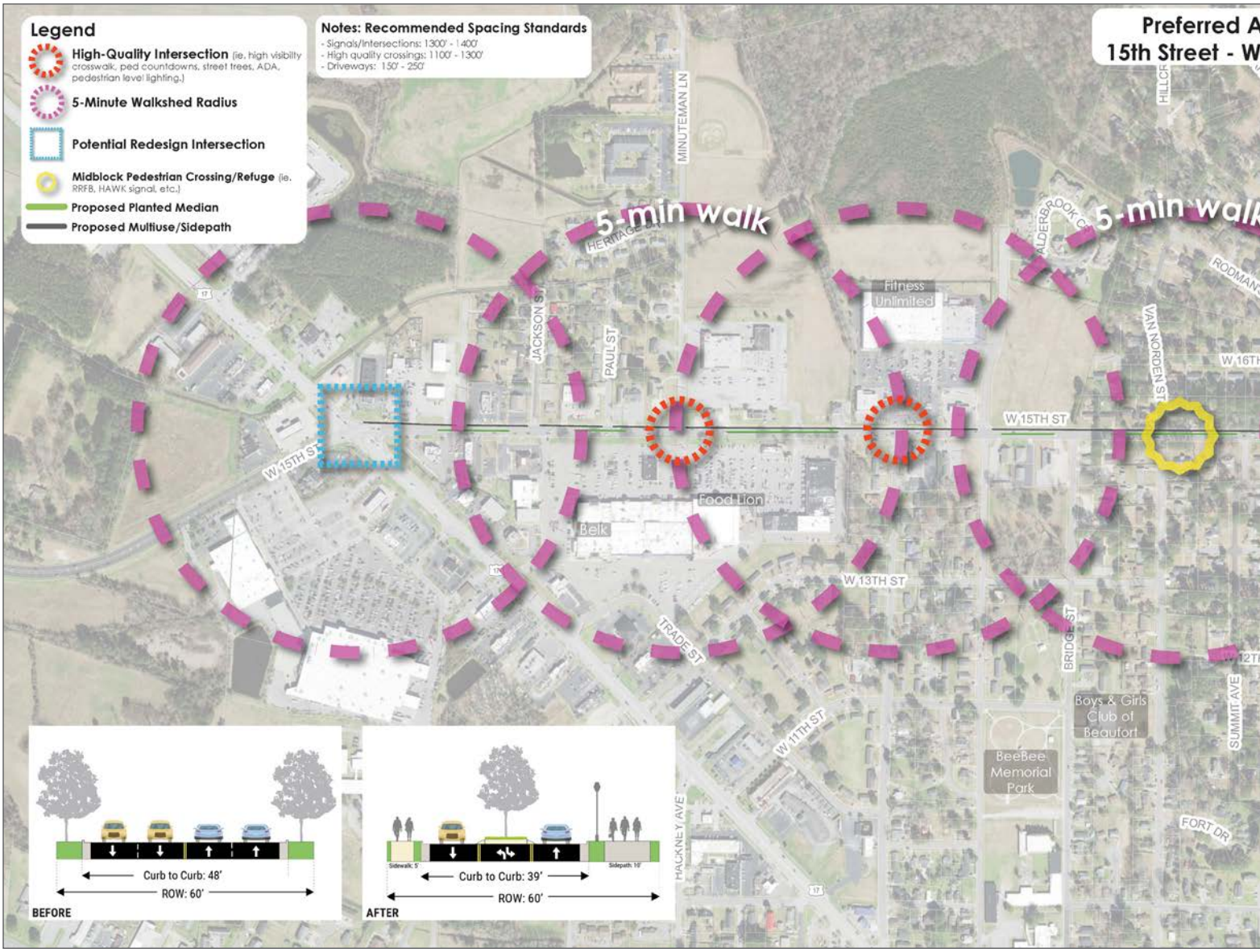
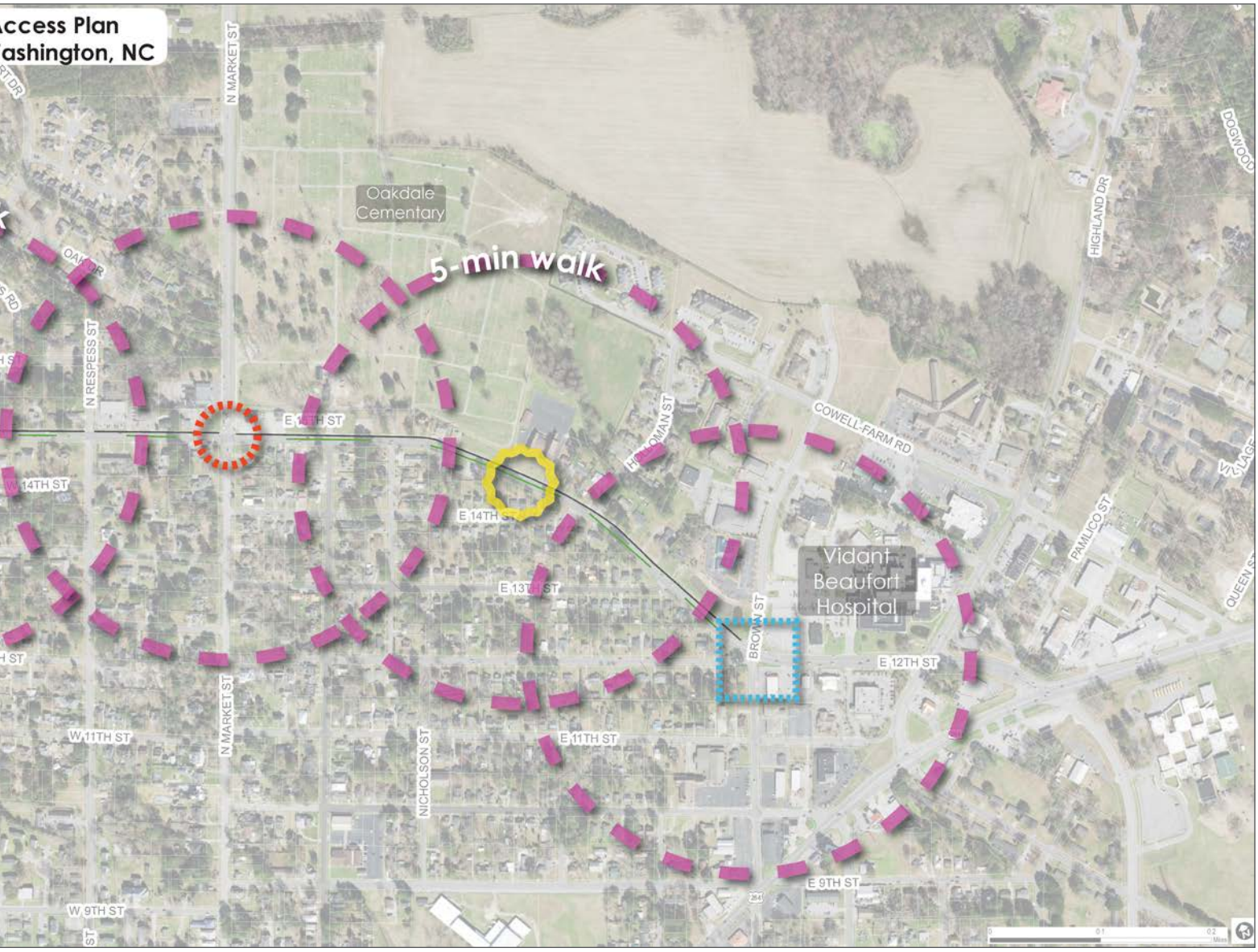


Figure 3.9: Preferred Access Plan.

It is important to note that the PAP suggests median locations. The use of these medians is confirmed to these specific locations with the purpose of controlling turning movements, slowing down vehicle speeds (traffic calming), and improving the predictability of traffic movements, while simultaneously improving crossing conditions by allowing for median refuge crossings. Some median locations will require cross access or "back door" connections between development of complementary uses for vehicle circulation. That way, not all trips have to be accommodated along 15th Street corridor.

In addition to the use of planted medians, the PAP recommends high-quality intersections and mid-block crossings to enhance the safe passage of pedestrians and bicyclists. These intersection treatments include high-visibility crosswalks, pedestrian countdowns, shade trees and pedestrian level lighting. Some intersection locations may include mast-arm signals, brick pavers and high-visibility crosswalks for enhanced beautification.



15th Street Cross-Section.

The Current Cross-Section

As previously discussed in Chapter 2, 15th Street is currently a four-lane, undivided roadway with approximately 12' travel lanes, totaling 48' from curb to curb. So how did we get to this point? Originally, 15th Street was a two lane dirt road and cross town connector. Over time and as things developed, this road was paved and then widened simply by adding two additional lanes. However, no additional right-of-way was acquired to accommodate any other mode or to allow adequate room for utilities. In fact, existing sewer lines were never relocated and portions of the lines still exist under the roadway.

Today, this street has no sidewalks, no bike lanes or bike facilities, and few crossing opportunities for pedestrians as well as folks with disabilities trying to cross 15th Street. Because 15th Street lacks medians or any controls on left turns, the inner two travel lanes *effectively becomes a turn lane*, creating unexpected stops in traffic as cars attempt to make a left turn. This unexpected stopping also causes drivers to jockey for position, seeking continuous traffic flow by weaving into the right lane. In doing so, 15th Street actually operates with the capacity of a three-lane road, despite its current design. Moreover, the jockeying and unexpected stopping movements create hazards for drivers, dangerous travel conditions and contributing to the current high crash rates seen along this corridor.

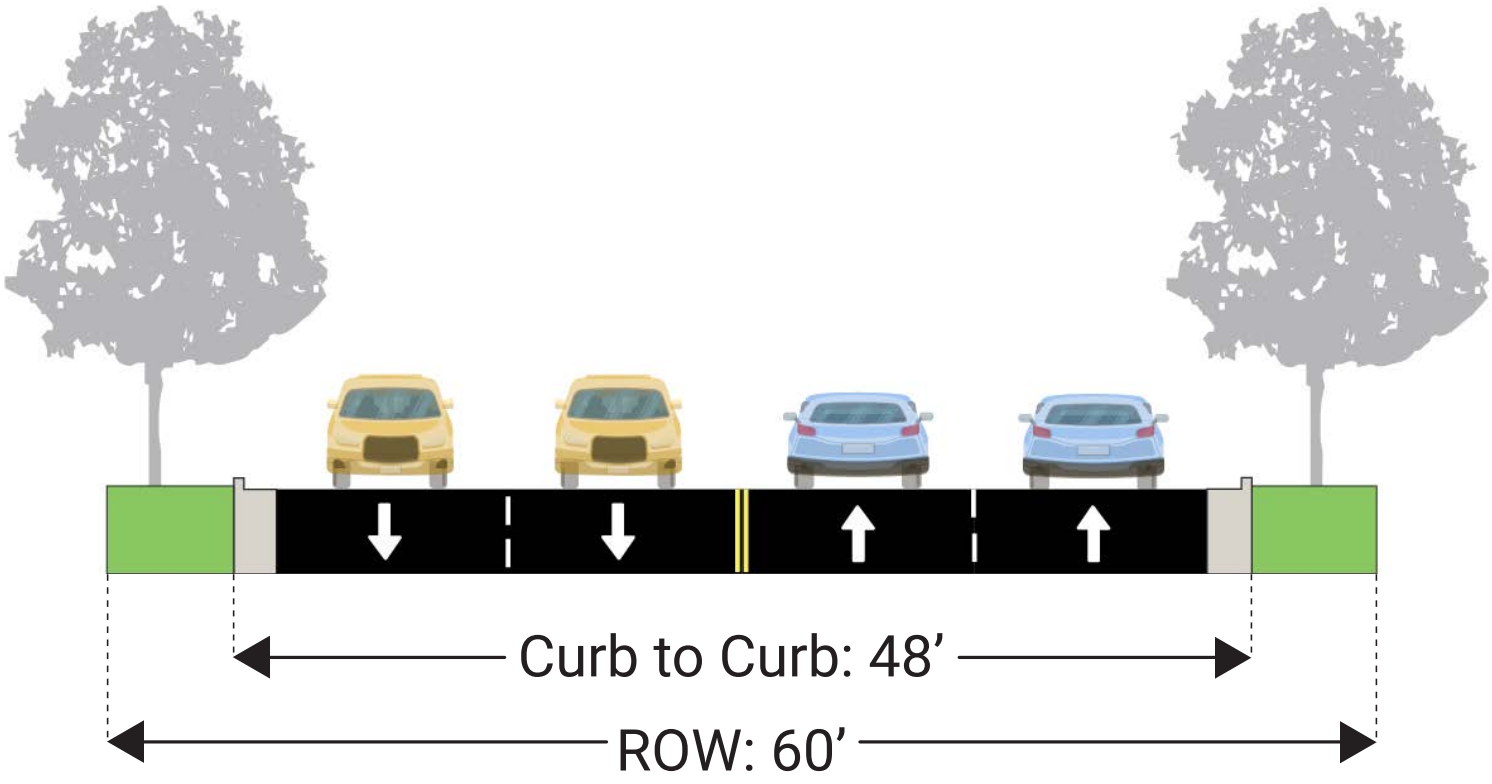


Figure 3.10: Current cross-section.

The Proposed Cross-Section

Resolving these operational challenges while adhering to guiding principles and the takeaways from public engagement results in tradeoffs being made within the corridor. The key considerations in this new cross-section are (1) improve roadway safety and operations, (2) create safe, dedicated facilities for bicyclists, and pedestrians, and (3) avoid property impacts. To accomplish these three tasks, the proposed cross-section reimagines space within the existing curb lines. It creates a center turn lane using medians throughout the corridor, controlling left turns while creating space for those movements in designated areas. Two travel lanes, one in either direction, are freed from lane jockeying and slowdowns from turns, making traffic flow smoother and more predictable. Lastly, the newly created space within the existing right-of-way from removing a travel lane creates room for a sidewalk along the south side of the corridor, as well as a 10' multi-use path along the north side. And all of this is created **within the existing right-of-way, with limited impacts to property owners**.

The key to this decision process is about priorities and tradeoffs. Traditionally, the priority has been given to cars, whether intentional or unintentional. But as this corridor has evolved in the way it has developed and who it serves, priority must be given to the pedestrian. Safety is paramount. Multimodal treatments are a must; while this reality means that cars may travel slower during peak periods, this is the tradeoff for dedicate space for bicyclists and pedestrians, which will significantly improve safety for all.

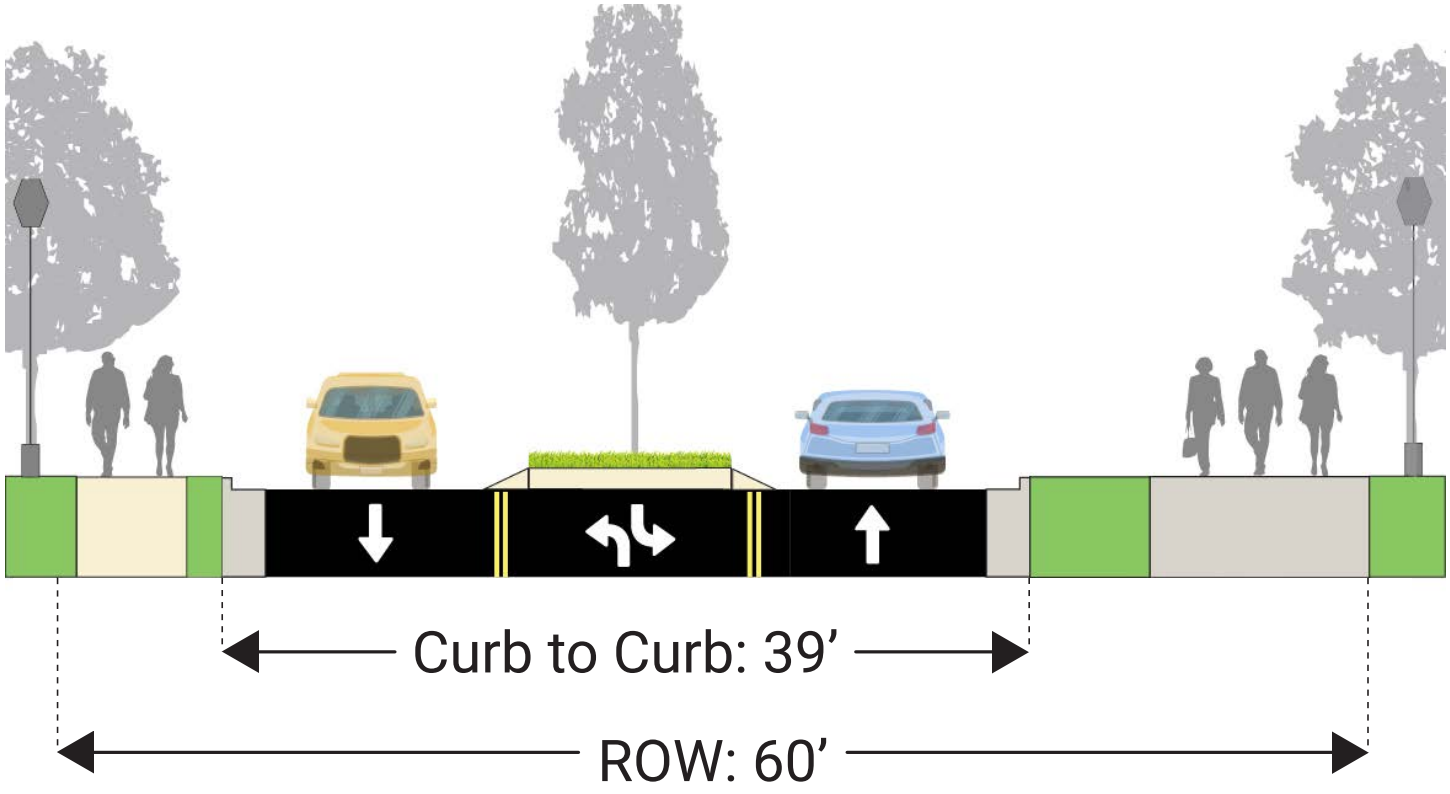


Figure 3.11: Proposed cross-section.

Concept Designs.

The design considerations for each section of the roadway are described first followed by the concept designs (15%-20% level of detail). This section shows graphically how the cross sections developed for this project are used to create a context-sensitive and seamless set of design solutions that address the specific needs of the entire corridor. Photo-simulations of what the proposed result might look like, as well as imagery of built examples are provided where applicable. Today, this street has no sidewalks, no bike lanes or bike facilities, and few crossing opportunities for pedestrians as well as folks with disabilities trying to cross 15th Street. Because 15th Street lacks medians or any controls on left turns, the inner two lanes act like a de facto turn lane, causing traffic congestion and creating conflicts between motorists. Resolving these two safety issues is critical to recasting 15th Street as a Complete Street.

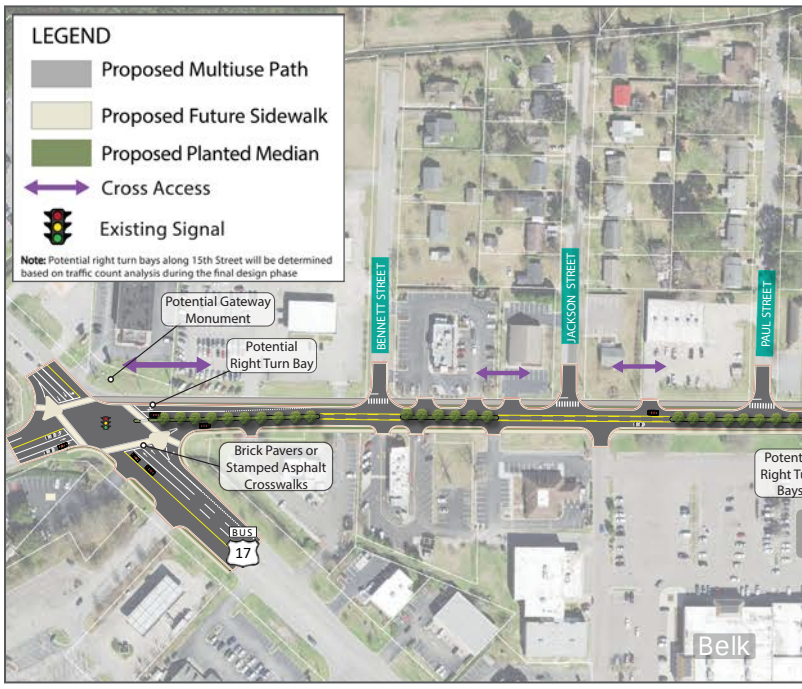
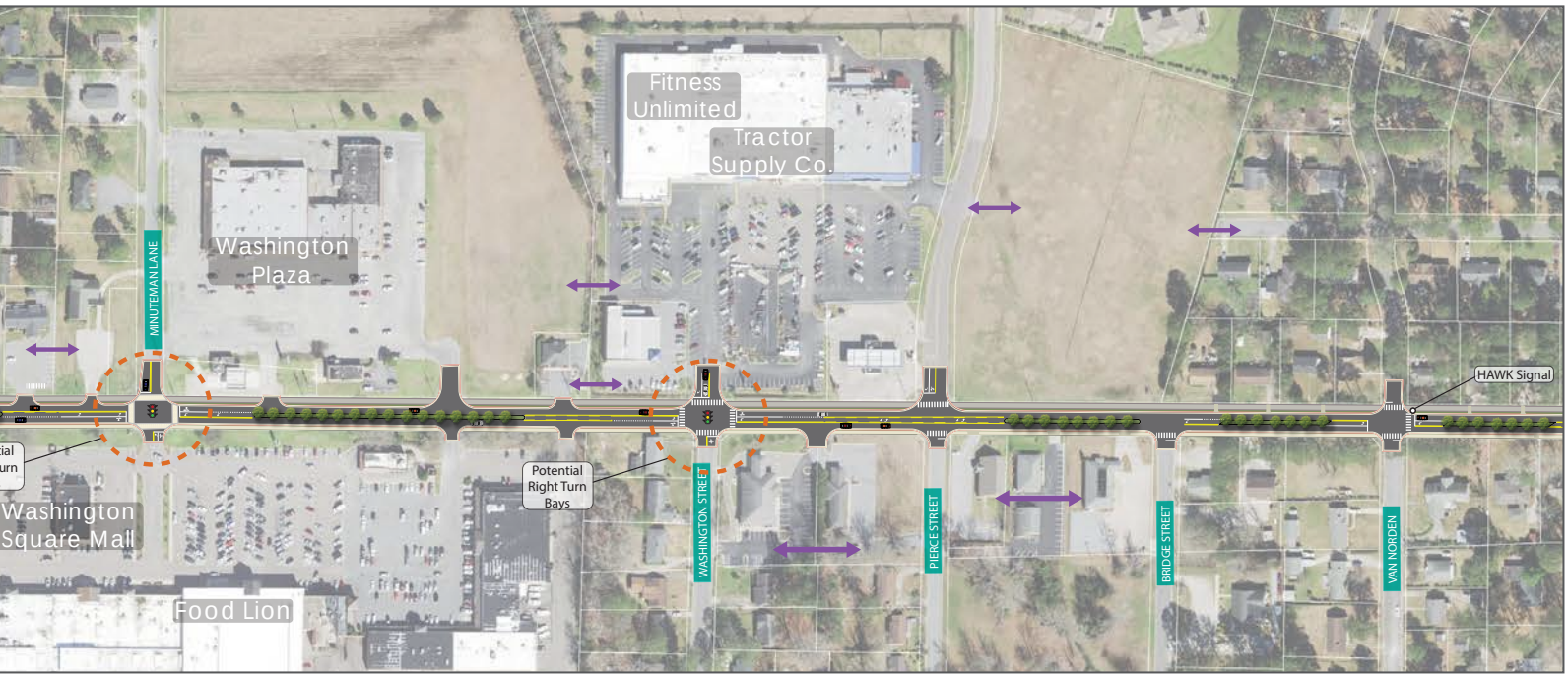


Figure 3.12: Proposed concept designs for Carolina Avenue to Van

Recommendations

- 39’ curb-to-curb cross-section with two 11’ travel lanes, 11’ center turn lane with pocket medians where indicated
- 10’ Multiuse Path along north side of 15th Street, separated by planting strip
- 5’ Sidewalk along south side of 15th Street, separated by planting strip
- Two Mid-Block crossings with High-Intensity Activated Crosswalk (HAWK) Beacons:
  - Van Norden Street
  - Holloman Street
- One Mid-Block crossing Rectangular Rapid Flashing Beacon (RRFB):
  - Bonner Street
- High-quality Intersections, featuring Mast-Arm Signals, High-Visibility or Brick-Stamped Crosswalks, Pedestrian Signals and ADA ramps:
  - Carolina Ave
  - Minuteman Lane
  - Washington Street
  - Market Street
- Gateway Monument at US 17 Business/ Carolina Avenue and E Brown Street/15th Street Intersection

- Single-lane roundabout at 15th and Brown Street:
  - Median diverters at all approaches to roundabout
  - 125’ inscribed circle with 10’ apron for trucks
  - Design vehicle: WB-50 (Tractor Trailer)
  - High-Visibility crosswalks at all approaches (Raised Crosswalk at E 12th Street leg)
- Progression-controlled signal system including connection to the proposed HAWK Signals
- Connectivity and cross access improvements through redevelopment opportunities
- Streetscape and the use of local foliage should be provided throughout the corridor using utilizing NCDOT-approved species and caliper trees



Norden Street.

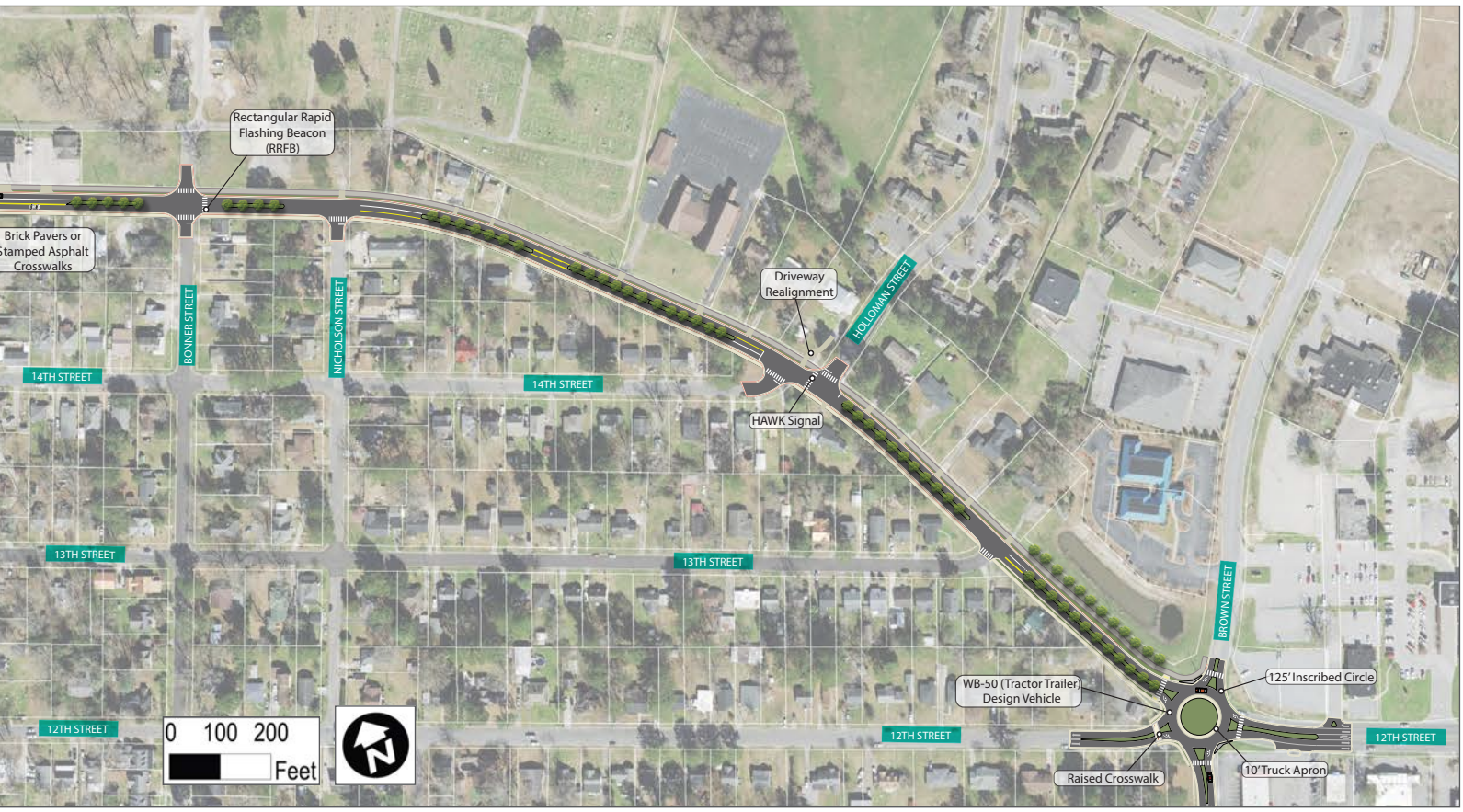
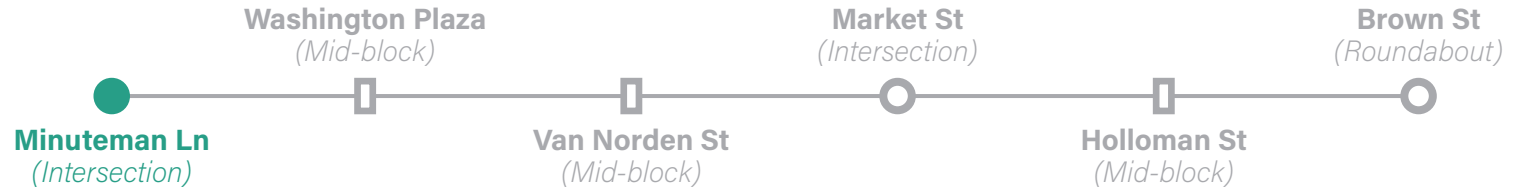


Figure 3.13: Proposed concept designs for Van Norden Street to Brown Street.

Minuteman Lane



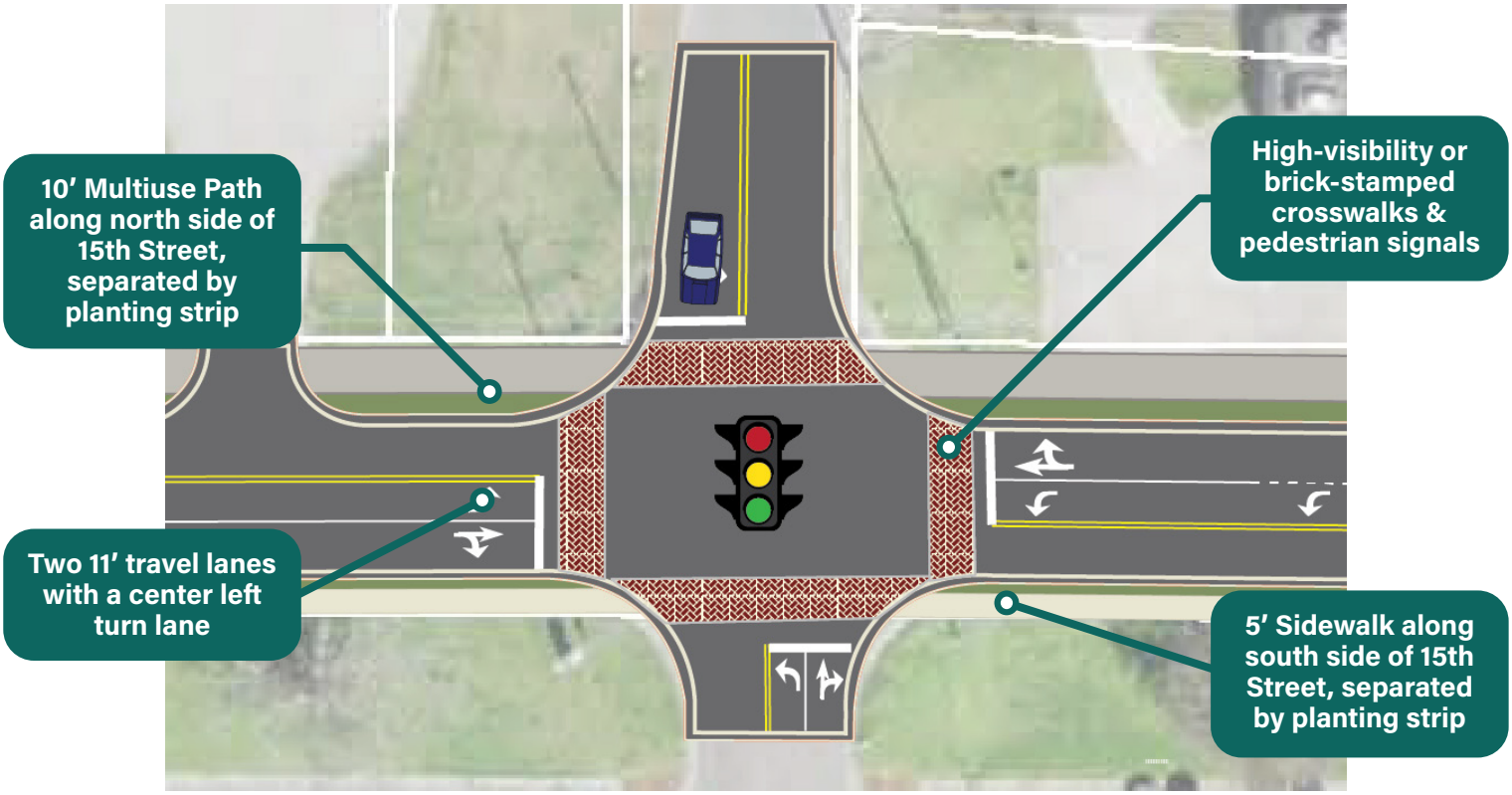


Figure 3.14: Conceptual design of Minuteman Lane intersection.

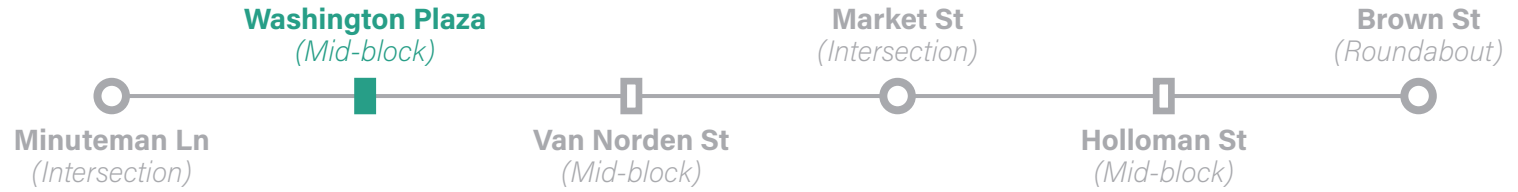
Recommendations:

Upgrade to high-quality intersection featuring:

- Mast-arm signals
- High-visibility or brick-stamped crosswalks
- Pedestrian signals
- ADA ramps
- Two 11′ travel lanes with a center left turn lane
- 10′ Multiuse Path along north side of 15th Street, separated by planting strip
- 5′ Sidewalk along south side of 15th Street, separated by planting strip
- Pedestrian-level street lighting on north and south sides
- Proposed upgrade to progression-controlled traffic signal

Looking EAST
Conceptual design of:
Minuteman Lane intersection

Washington Plaza



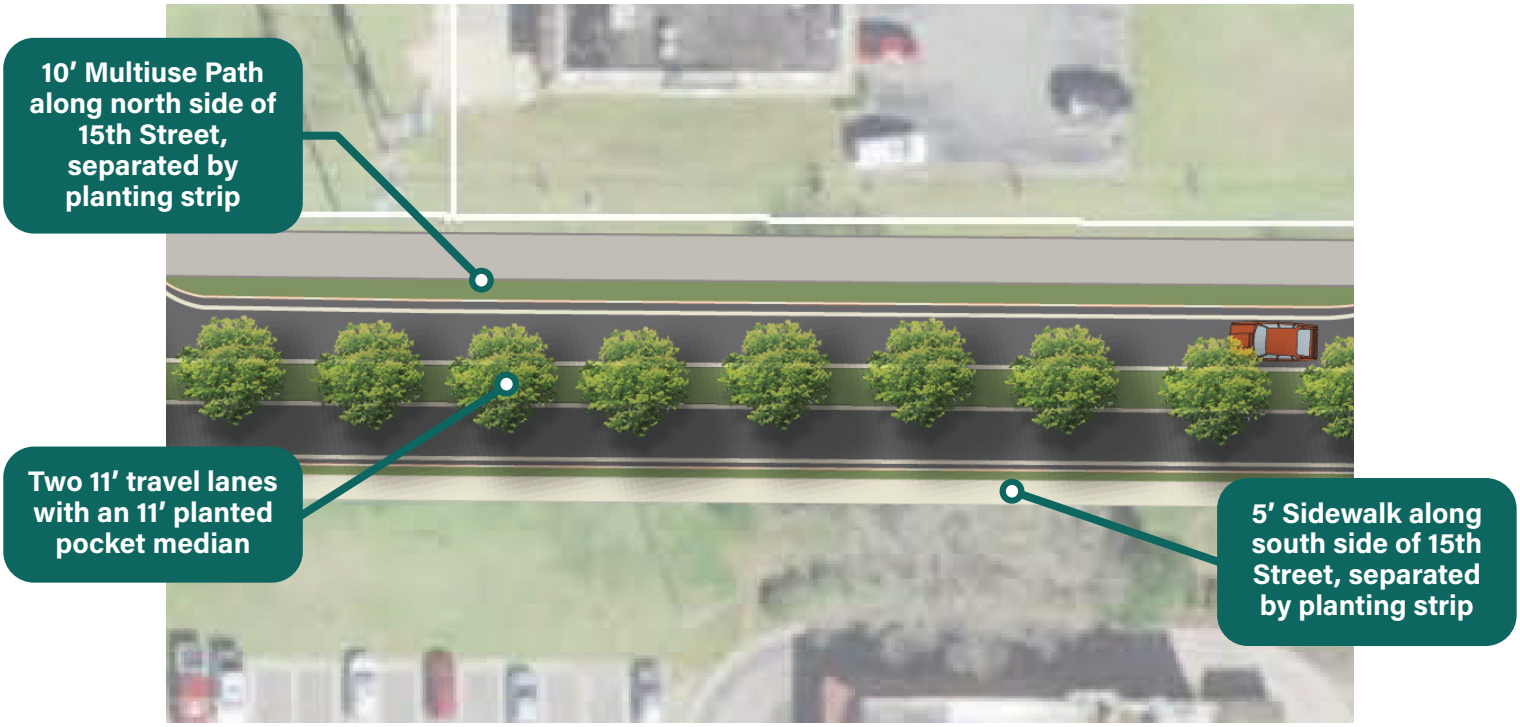


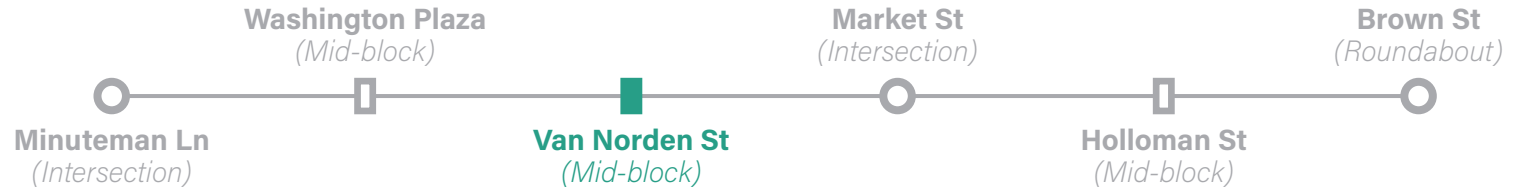
Figure 3.15: Conceptual design of Washington Plaza mid-block.

Recommendations:

- Two 11′ travel lanes with an 11′ planted pocket median, with street trees where appropriate
- 10′ Multiuse Path along north side of 15th Street, separated by planting strip
- 5′ Sidewalk along south side of 15th Street, separated by planting strip
- Pedestrian-level street lighting on north and south sides

Looking WEST
Conceptual design of:
Washington Plaza mid-block

Van Norden Street



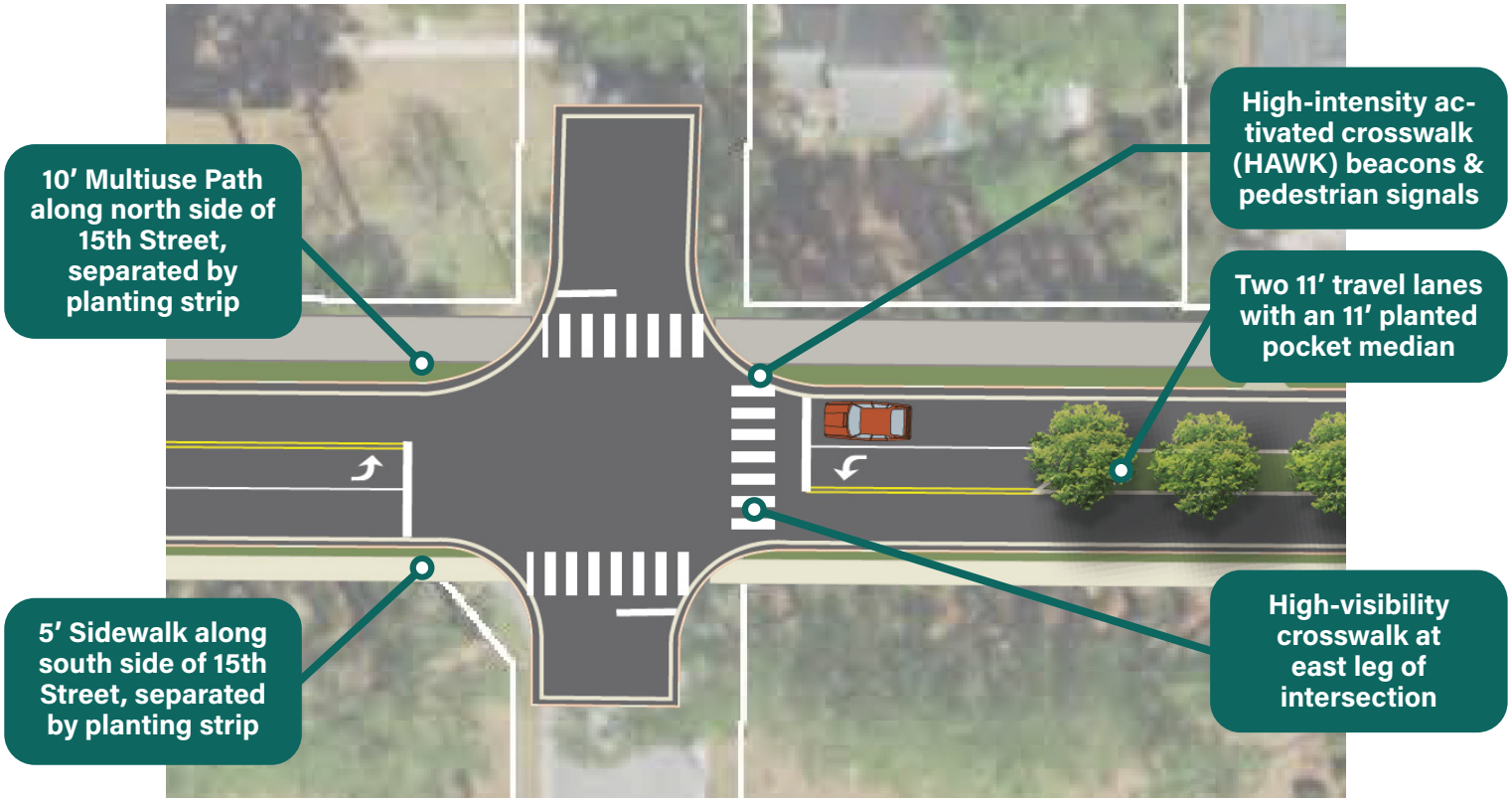


Figure 3.16: Conceptual design of Van Norden Street mid-block pedestrian crossing.

Recommendations:

Improve to mid-block crossing featuring:

- Two 11’ travel lanes with a center left turn lane and an 11’ planted pocket median, with street trees where indicated
- High-intensity activated crosswalk (HAWK) beacons at intersection
- High-visibility crosswalk at east leg of intersection
- Pedestrian signals
- ADA ramps
- 10’ Multiuse Path along north side of 15th Street, separated by planting strip
- 5’ Sidewalk along south side of 15th Street, separated by planting strip
- Pedestrian-level street lighting on north side

Looking WEST
Conceptual design of:
Van Norden Street mid-block pedestrian crossing

Market Street

Washington Plaza *(Mid-block)*
Market St *(Intersection)*
Brown St *(Roundabout)*
Minuteman Ln *(Intersection)*
Van Norden St *(Mid-block)*
Holloman St *(Mid-block)*

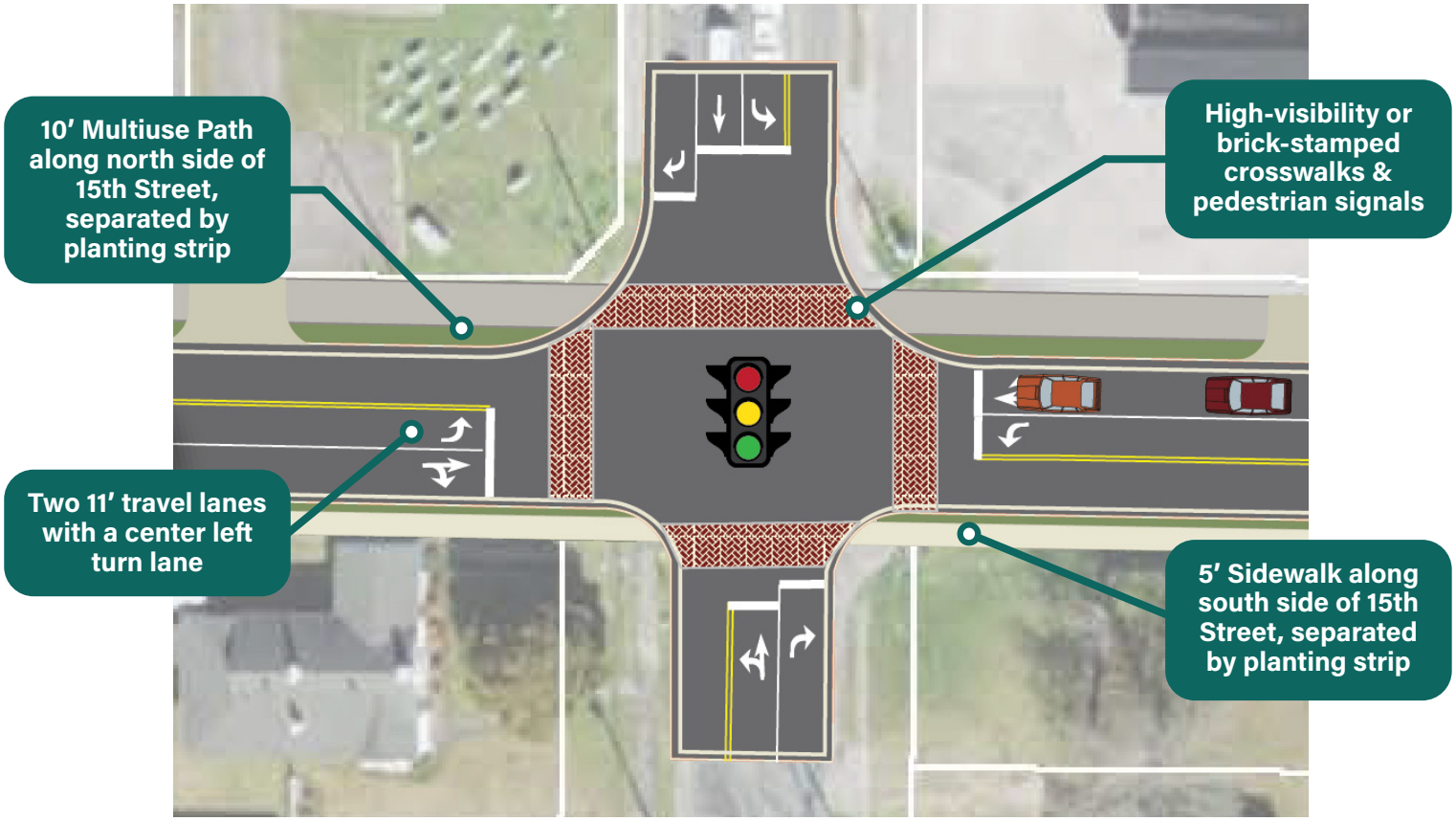
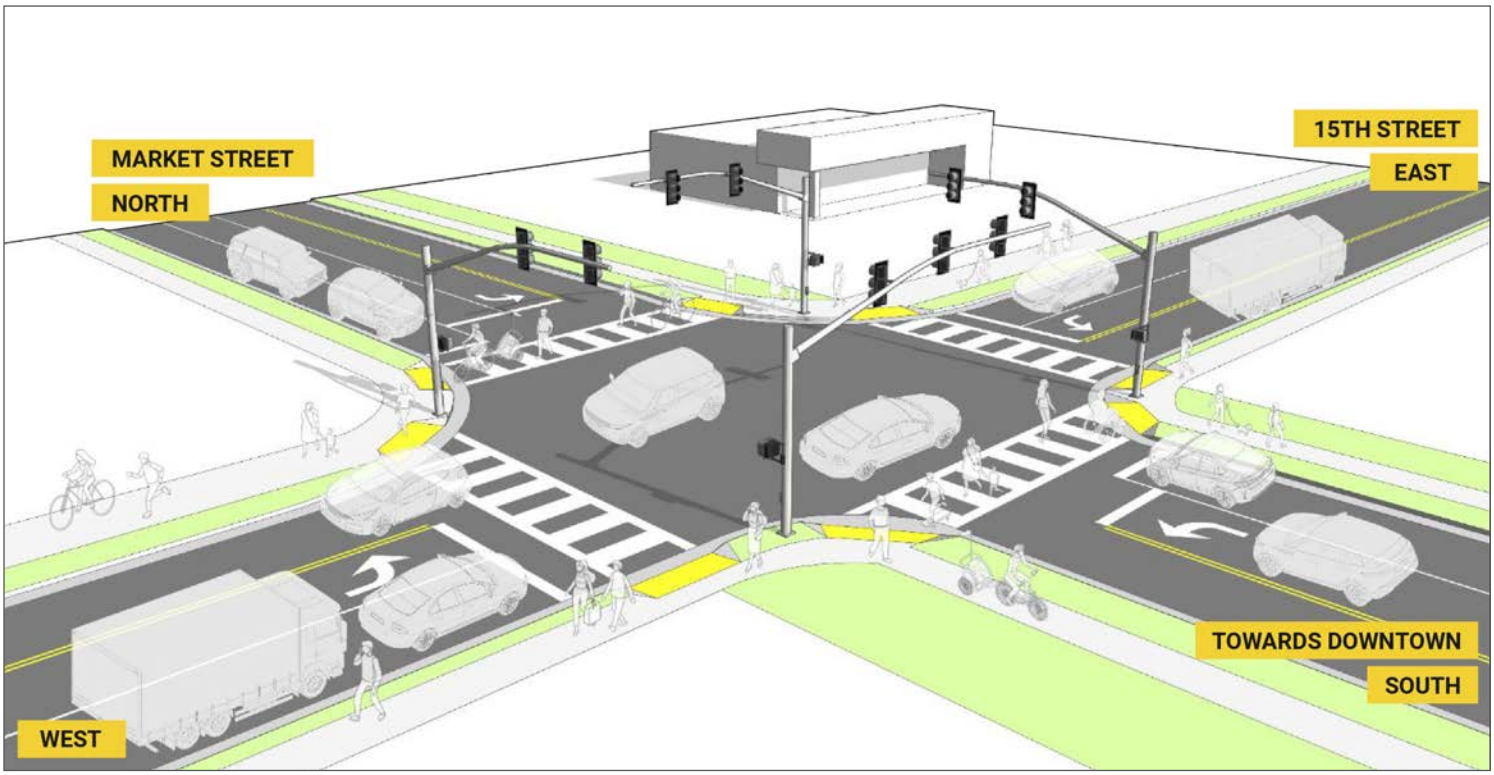


Figure 3.17: Conceptual design of Market Street intersection.

Recommendations:

Upgrade to high-quality intersection featuring:

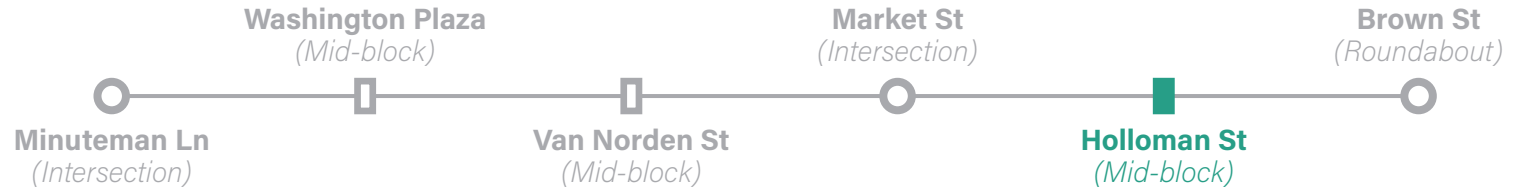
- Mast-arm signals
- High-visibility or brick-stamped crosswalks
- Pedestrian signals
- ADA ramps
- Two 11’ travel lanes with a center left turn lane
- 10’ Multiuse Path along north side of 15th Street, separated by planting strip
- 5’ Sidewalk along south side of 15th Street, separated by planting strip
- Proposed upgrade to progression-controlled traffic signal



Conceptual design of Market Street intersection, NOT for construction.

Bird's-eye view
Conceptual design of:
Minuteman Lane intersection

Holloman Street



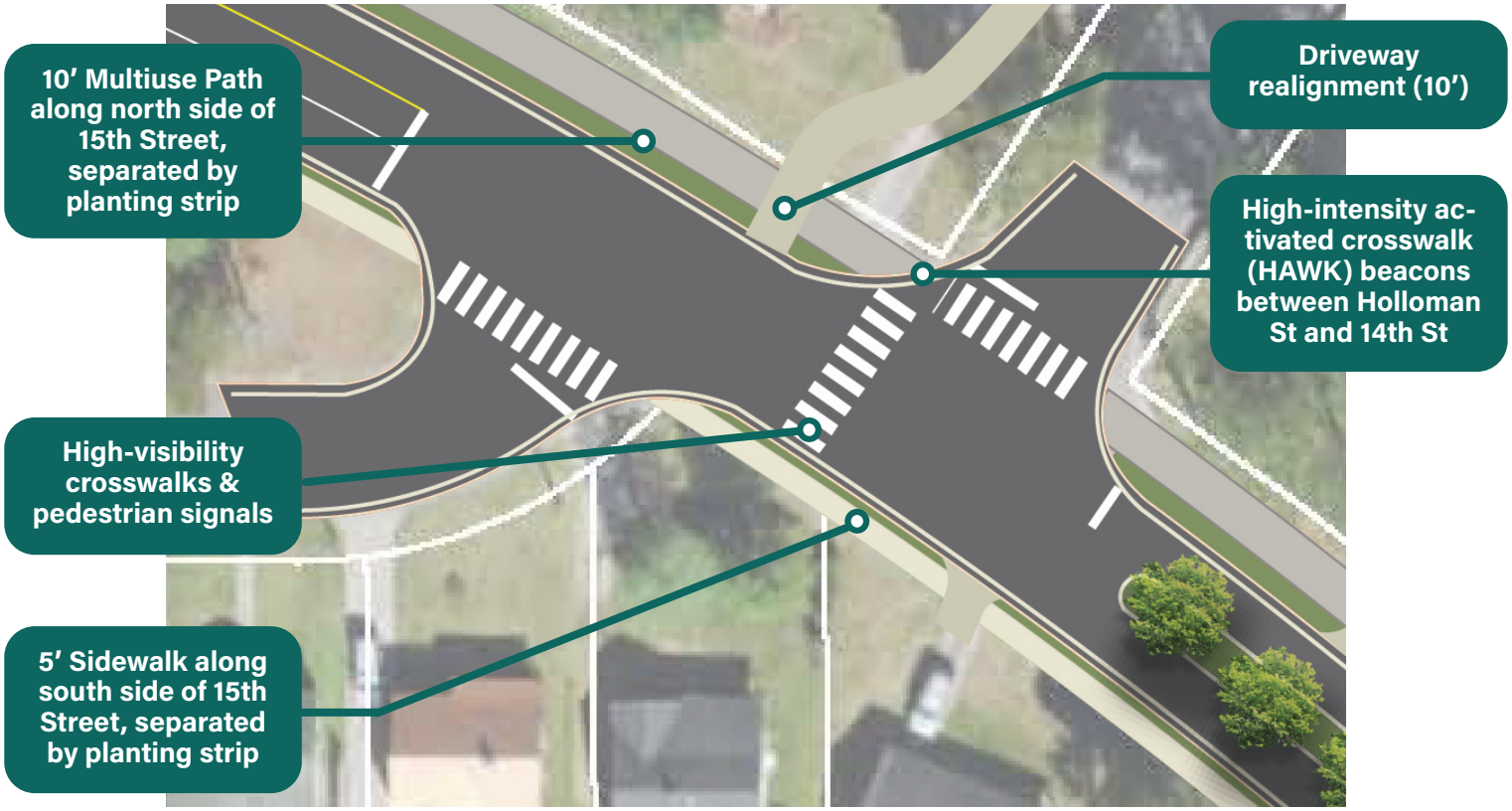


Figure 3.18: Conceptual design of Holloman Street mid-block pedestrian crossing.

Recommendations:

Improve to mid-block crossing featuring:

- Two 11′ travel lanes with a center left turn lane and an 11′ planted pocket median, with street trees where indicated
- High-intensity activated crosswalk (HAWK) beacons between Holloman Street and 14th Street where indicated
- High-visibility crosswalk where indicated
- Pedestrian signals
- ADA ramps
- 10′ Multiuse Path along north side of 15th Street, separated by planting strip
- 5′ Sidewalk along south side of 15th Street, separated by planting strip
- Realign driveway to adjacent property at Holloman Street

Looking SOUTH
Conceptual design of:
Holloman Street mid-block pedestrian crossing

Brown Street Roundabout

Minuteman Ln *(Intersection)*
Washington Plaza *(Mid-block)*
Van Norden St *(Mid-block)*
Market St *(Intersection)*
Holloman St *(Mid-block)*
Brown St *(Roundabout)*

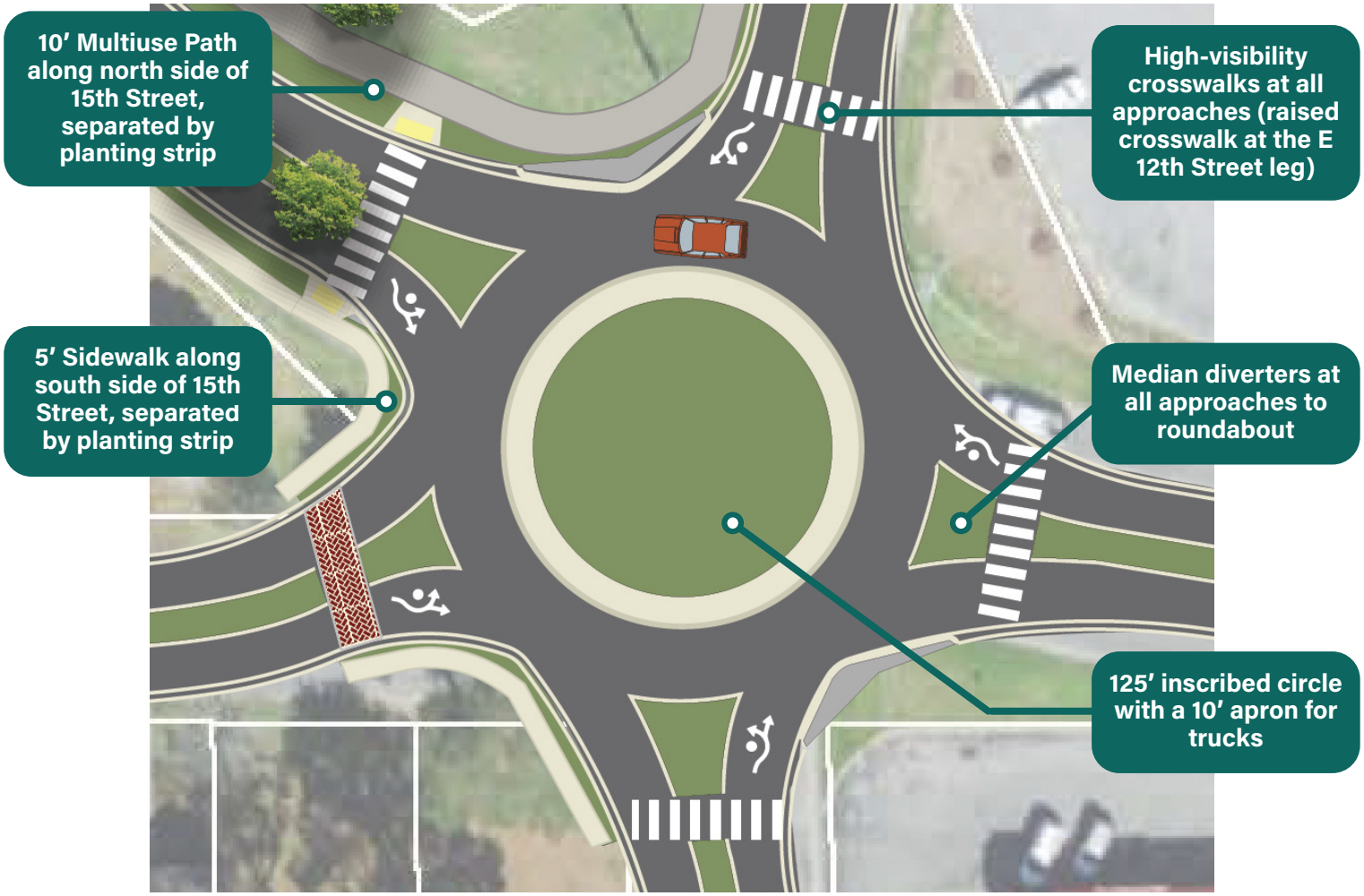


Figure 3.19: Conceptual design of Brown Street roundabout.

Recommendations:

Upgrade to a single-lane roundabout featuring:

- Median diverters at all approaches to roundabout
- 125′ inscribed circle with a 10′ apron for trucks
- Design vehicle: WB-50 (Tractor Trailer)
- High-visibility crosswalks at all approaches (raised crosswalk at the E 12th Street leg)
- ADA ramps
- 10′ Multiuse Path along north side of 15th Street, separated by planting strip
- 5′ Sidewalk along south side of 15th Street, separated by planting strip

Bird's-eye view
Conceptual design of:
Brown Street roundabout

CHAPTER 04

Implementation

Implementation.

The ultimate success of this Study rests on local and state leaders' ability to carry out these recommendations. Making this plan a reality requires the coordination, collaboration and combined efforts of many stakeholders and organizations. This effort is made easier by laying out a series of steps – an action plan – to moving the process forward from planning to funding, design, and ultimately construction. Defining costs, tailoring phases of construction to meet funding projections and community needs, and defining subsequent steps in the transformation of 15th Street will help create the ultimate environment conducive to a truly walkable, Complete Street.

Cost Estimates

As the project segments were identified, project construction quantities were developed based on the Design Concepts using CAD design software. In turn, construction costs estimates were calculated using NCDOT standard unit costs values. Right of way (ROW) impacts were minimal and primarily located at the intersection of Brown Street. The design team tried to stay within the existing ROW where ever possible. That said, there may be areas identified during the final design stage that may require temporary or permanent easements during construction. A 10% design fee and 30% contingency were included in the cost assumptions. These estimates are for 2021 costs and subject to change following full surveys and final design computations.

Key Elements	Carolina Avenue to Brown Street
Bicycle and Pedestrian Treatments-includes Multiuse Path, Sidewalk, Crossing Signals	$6.2M
Roadway Design Elements-includes medians, new curbing and resurfacing	$1.9M
Streetscaping-includes trees, landscaping, and lighting	$1.5M
Roundabout	$1.7M
Sewer line relocation	$1.2M

Table 4.20: Cost Estimates
*this list is not exhaustive of all costs.

Total: **$12.5M**

Best Practices for Transformation

Creating walkable development is more than making places easier to navigate on foot. Yes, the objective is to provide pedestrian facilities and connect them in a logical pattern to maximize access to a variety of places. However, **walkability** refers to all aspects of pedestrian comfort, including the scale of spaces, the proximity to (distance between) destinations, the availability of places to rest or escape from the elements, and the perception of safety. Addressing all these important attributes demands attention to the mix of uses, heights and setbacks of buildings, amenities, streetscape, site landscaping, lighting, and areas of potential vehicle-pedestrian conflict (street crossings and parking lots). Enhancing the pedestrian experience requires **placemaking,** which refers to a higher level of design that incorporates features that add interest and make the experience of a place more memorable. Retrofitting development that is auto-oriented and not designed with pedestrians in mind, such as the shopping centers pictured in the following three images, can be particularly challenging, especially where multiple property owners are involved.

The design presented in this plan is one giant step towards making 15th Street a more walkable, bikeable, Complete Street. Beyond the scope of this Plan, however, the transformation of 15th Street to more a walkable "place" will require the City of Washington to take steps to initiate and facilitate change within their respective planning and zoning jurisdictions. A combination of tools must be employed, including incentives that help offset redevelopment costs. The following are a set of best practices to consider in order to realize types of changes the Washington community has articulated during this Plan's development.

Best Practices for Retrofitting 15th Street

Discussed in this chapter:

1. Adopt the Vision
2. Make Road Improvements
3. Support Quality Redevelopment
4. Address Infrastructure
5. Streamline Development Review & Permitting
6. Offer Incentives

1. Adopt the Vision

Typical corridor in need of redevelopment

At its most basic level, a plan is a communication tool. It should clearly express the community-supported vision. Adoption is one way a local government can demonstrate its commitment to effecting change in accordance with the community's expectations. Publicly supported by elected and appointed leaders, an *adopted* plan carries more weight than one that is simply accepted or endorsed. It gives credence to local decision making and should be referenced when decisions stem from the plan recommendations. It can increase the chances of being awarded grant funding when attached to relevant grant applications, and it is essential in influencing the direction of projects funded by the North Carolina Department of Transportation (NCDOT).

2. Work with NCDOT in Support of SPOT Program

In support of the Vision, modifications to the roadway itself may be one of the most important steps in initiating change. However, since this street is owned by the NCDOT, the recommended changes can be successfully accomplished only through their partnership -- and **in coordination with their strategic prioritization process (SPOT),** to ensure that this project remains part of the State Transportation Improvement Program (STIP)**.** The following are two actions that each local government should consider:

Coordinate with NCDOT

As 15th Street is a state-owned road, NCDOT must be engaged in discussions about funding, design and construction of roadway design and streetscape elements. Given this project's unique history, this includes a formal request to the Mid-East Rural Planning Organization to recalculate the SPOT analysis for NCDOT consideration. Implementing the full vision for 15th Street may require financial or "in kind" contribution by Washington. Once funded, local governments should utilize the adopted plan to provide input on a range of details, including facility type, cross-sections, access, and enhancements that address aesthetics, as well as safety for various modes.

Maintain Enhancements within the ROW

Roadway improvements may include features that enhance the quality of the facility but contribute little to its functionality. Examples include specialty pavers at crosswalks, landscaping in the medians, and stone veneers and murals applied to bridges. Ongoing maintenance of such features may become an obligation of the local jurisdiction, because NCDOT may be unwilling to assume such responsibilities. For each enhancement incorporated within the right-of-way, a maintenance agreement, as well as a corresponding budget, should be established.

THE IMPORTANCE OF CROSS-ACCESS

One of the most important ways to ensure that 15th Street operates in a safe manner after construction is to improve internal connections between businesses through **cross-access** requirements. Requiring complementary properties to connect allows vehicles to circulate between businesses without having to re-enter 15th Street. Here are three ways to accomplish this in your land development ordinance:

1. **Require stub-outs for adjacent development projects**
2. **Establish driveway spacing standards for new development and redevelopment, including minimum distances from intersections**
3. **Encourage cooperation between adjacent existing properties to develop shared driveways and parking**

Don't forget to require bike and pedestrian easements between compatible uses!

3. Support Quality Redevelopment.

Making investments that demonstrate the local government's commitment to reinvestment in the area is of critical importance in the early stages of plan implementation. Visible improvements that can have an immediate, positive impact include streetscape enhancements, which should be accomplished in conjunction with planned roadway improvement projects. Think of the corridor edge (property frontages) as the foreground of the image created for investors as they visit the place and form their initial impressions. A well-planned, well-executed streetscape can upgrade the appearance of a corridor to a level that instills investor confidence. Guided by the concepts in the adopted plan, local governments should develop and implement streetscape plans that specify details for street trees, lighting, sidewalks, and other features that are consistent along the entire segment of the roadway. As needed, seek landscape easements on private property and establish maintenance agreements with NCDOT for areas within the NCDOT-maintained right-of-way.

Corridor Overlay

A corridor overlay district is one of the most powerful zoning tools Washington can use to guide the walkable, bikeable future development of 15th Street in a manner compatible with current and future development. The intent of the overlay ordinance is to regulate the built environment in a way that values form, with the specific purpose of creating high-quality, integrated development patterns that support the objectives of improving walking/bicycling environments; improving safety; and increasing the quality of the aesthetics along the corridor. Any overlay should address the following topics:

DEVELOPMENT PROCESS. Applicants should present a preliminary sketch plan to review with the City staff early in the design and planning process to work collaboratively to meet the overlay's requirements.

PARKING. Generally, parking shall be provided to the rear and sides of buildings.

STREETSCAPING. Generally, property owners and developers should be responsible for installing and maintaining street trees, benches, and other facilities.

SIGNAGE. Signage standards should be developed for the entire corridor; signs should be unobtrusive and complimentary with the City's historic character.

DRIVEWAYS. Generally, streets in the Corridor Overlay District are to be oriented towards both pedestrian traffic and persons in motorized vehicles that park and walk to their destinations. Limitations on the number of driveways is crucial to maintaining continuity of streetscaping and reducing vehicular conflicts and crashes. Shared driveways for complimentary uses should be highly encouraged.

CROSS ACCESS. Between complementary uses should be a requirement for redevelopment.

The conceptual site plan (right) suggests a mix of the following development types to facilitate walkable & bikeable streets:

Narrow lot single family

Cottage houses

Townhomes

Multifamily apartments (4-pack & 2-pack)

Neighborhood-scale retail

Mixed use

Focus on Neighborhood Connectivity & Suburban Corridor Retrofit/Placemaking

The conceptual site plan explores potential private investments catalyzed by the public investments along 15th Street. Improved multimodal facilities create opportunities for successful neighborhood centers that focus on walkability and bikability to housing, services, and amenities. The existing auto-dominated development pattern is not uncommon; however, communities across the country are reimagining these areas by creating more pedestrian-scaled blocks and facilitating incremental infill that includes a mix of uses. Cross-parcel connections along the corridor frontage begin to create more cohesion and highlight placemaking opportunities such as public art, open-air markets, and outdoor dining. Interior blocks transition through a variety of housing typologies and densities that ultimately tie directly into the existing neighborhoods giving people more choices in how they move around the community. Highlighting natural features such as the stream through restoration and neighborhood trail access also enhances active living in the area.

Conceptual site plan for undeveloped area north of 15th Street. Creating internal connectivity, with pedestrian-scaled blocks, can help ease the pressure on 15th Street and invite more walkable, bikeable development.

4. Address Infrastructure

Redevelopment projects are more challenging than "greenfield" development, due to aging infrastructure. Typically, infrastructure must be upgraded or retrofitted to serve the intended development program. But the extent to which such improvements are needed is sometimes difficult to estimate. Therefore, the condition of existing infrastructure is often a major factor influencing location decisions. The provision of public infrastructure by the local government can make redevelopment projects more feasible and remove some of the uncertainty associated with it. By directing a portion of the CIP budget toward a corridor, that geography can become the focus of new private investment.

Upgrade Utility Infrastructure

For roads maintained by NCDOT, engage NCDOT in discussions about roadway design. As each project is defined and funded, local governments should utilize the adopted plan to provide input on a range of details, including facility type, cross-sections, access, and enhancements that address aesthetics, as well as safety for various modes.

Provide Supporting Infrastructure, Facilities, and Amenities

The provision of—or improvements to—public infrastructure and facilities can eliminate the deterrents to reinvestment and, in some instances, bolster efforts to attract investment. With a clear delineation of targeted areas, local governments should prioritize public investments, directing funding toward these areas or making commitments to fund (in part or whole) specific projects within the areas. Projects should be considered that serve private development projects and address a public need, potentially reducing costs associated with development. Among them are the following:

- Parks and other public (or publicly accessible) open space, and reduce requirements for improved open space on site(s)
- Parking (on-street and public parking structures or lots), and reduce minimum off-street parking requirements
- Transit facilities

5. Streamline Development Review & Permitting

Time involved in review and permitting processes can add cost to any development project. Local governments should examine review procedures to determine ways to streamline the approval processes for applications, rewarding those projects that are consistent with the Vision with an expedited review. Consider amending the regulations to improve clarity and increase predictability of approval for developers. Define opportunities for by-right development that can be approved administratively (at the staff level). Ideally, applications that are consistent with the Vision in the adopted plan should not be subject to additional public scrutiny, which adds time (and cost).

6. Offer Incentives

Some land development regulations intended to create the multi-modal environment described for the corridors equate to site development costs that could deter investment. Incentives, on the other hand, should attract investment by lowering (if not offsetting) those development costs. The following are a few incentives a local government may consider alleviating concerns about new or more stringent regulations and to stimulate investment.

Provide Project Funding Assistance

Improvements to be made by private property owners and developers can be more easily accomplished with funding assistance from the local government. Offer funding assistance to those property owners willing to upgrade sites in accordance with the new requirements (per the amended regulations). This tool may be most attractive to those considering investments in the corridor's redevelopment projects to increase the feasibility of such projects. However, any property owner interested in participating in the transformation should be considered eligible for assistance when making improvements that meet funding criteria.

- Consider delineating the areas where funding assistance will be available. Furthermore, consider priorities within each corridor and establish criteria for increasing funding levels for high-priority sites to offset the costs of more stringent design standards. A point-based system could be utilized for one or more programs to determine allocations. For example:
  - **LOCATION** - Eligibility and funding availability should be based on location in corridor.
  - **SCALE OF PROJECT** - The scale of the

proposed private investment should determine the funding made available to an applicant. The size of the project in terms of acres or square footage of building area could also define the scale.

- Determine the types of assistance programs.
  - ***Reimbursement*** – Investments in infrastructure that has a public benefit could be eligible for reimbursement, provided the design standards for comparable public facilities are met. Consider the types of on-site infrastructure to be provided through development, including those listed below, and develop a reimbursement schedule for approved projects based on the type of facility, cost of improvement, and population served.
    - Sidewalk connections
    - Crosswalks at entrances (and medians with pedestrian refuges)
    - New shared driveway connections (and existing driveway removal with consolidation)
    - Public and private street connections, particularly those that help create a cross-access easement and a parallel route (parallel to 15th Street)
    - Publicly accessible open space (park, plaza, etc.)
    - Stormwater detention facilities serving multiple sites
  - ***Grants*** - Investigate the range of grants to be made available. Examples include the following:
    - Façade and Landscape Grants
    - Land Use Incentive Grants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