

NORTHWEST BOULEVARD STREETSCAPE FEASIBILITY STUDY

WORKING DRAFT

NOT FOR CIRCULATION

AUGUST 2026

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Final Plan Submission Pending Council Review

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VISION AND GOALS
A STREETScape THAT WORKS BEAUTIFULLY FOR EVERYONE



The vision and goals for the Northwest Boulevard corridor establish a shared foundation for guiding future improvements and ensuring that investments align with the needs and priorities of the community. Developed through the City’s initial project initiative, reinforced by public engagement, and informed by ongoing stakeholder coordination, this framework reflects a collective commitment to creating a safer, more connected, and more livable corridor. Central to this effort is a focus on enhancing safety and accessibility for all users, improving overall quality of life, and closing critical gaps in the pedestrian and bicycle network. Together, the vision and goals provide a clear direction for shaping design decisions and advancing a corridor that supports mobility, community identity, and long-term resilience.

PROJECT
DEVELOPMENT PROCESS
SHAPING THE VISION FOR NORTHWEST BOULEVARD

An integrated planning process that evolved from corridor assessment and public input into a phased strategy addressing immediate safety needs and a long-term vision for connectivity and placemaking.

Vision + Alignment

Established a shared vision by aligning City priorities with ongoing and planned corridor initiatives.

Needs Assessment

Evaluated existing corridor conditions and integrated public and stakeholder input to identify key constraints, opportunities, and priorities for improvement.

Concept Development

Developed initial design concepts that respond to identified needs and align with project goals.

Design Evolution

Incorporated feedback to refine concepts into a clearer and more unified corridor approach.

Corridor Strategy

Defined a phased framework addressing near-term safety and accessibility needs while advancing a long-term vision for placemaking, identity, and environmental benefits.

INTRODUCTION

REIMAGINING OUR STREETS TOGETHER

A streetscape feasibility study is the exciting first step in transforming how we experience our public spaces. It’s a thoughtful exploration of what’s possible, looking at how people move, gather, and connect along our streets. This study considers everything from pedestrian and traffic flow to accessibility, safety, aesthetics, and utilities. Most importantly, it asks: **How can we make this space better for everyone?**

By identifying opportunities and challenges early, the process supports informed decisions that lead to improvements that are beautiful, functional, and financially sound. It’s a way to dream big while staying grounded—and to build a foundation for a vibrant, welcoming place that serves everyone.

YOUR VOICE SHAPES THIS SPACE

Community engagement was a critical component of the Northwest Boulevard Feasibility Study and helped ensure that recommendations reflected the needs and priorities of corridor users. The outreach process included coordination with City departments, agency partners, institutional stakeholders, and community organizations, alongside a comprehensive public engagement effort designed to reach residents, businesses, employees, and corridor users.

To raise awareness and encourage participation, more than 600 project mailers were distributed throughout the study area. The project team also hosted two in-person open house events within the corridor and conducted outreach through a dedicated project website, interactive engagement tools, and two rounds of online surveys that remained active for a combined three-month period.

This multi-faceted engagement approach generated input from residents, local employees, business owners, neighborhood representatives, community leaders, institutional partners, and other corridor users. The feedback collected helped identify key challenges, strengths, and opportunities that directly informed the corridor vision, design concepts, and implementation recommendations, resulting in a study that is both technically informed and community-driven.



BACKGROUND

LOCAL CONTEXT

A CITY OF CONNECTION AND CHARACTER

Winston-Salem is a city where history and innovation meet. Known for its rich cultural heritage, thriving arts scene, and strong sense of community, it offers a unique blend of tradition and progress. From vibrant neighborhoods to world-class institutions, Winston-Salem is a place that values creativity, collaboration, and quality of life.

As the city continues to grow, its streets play an essential role in shaping how people live, work, and connect. Streets are more than pathways, they are shared spaces that bring communities together. Beautiful, functional streetscapes create opportunities for walking, gathering, and enjoying the outdoors, while supporting local businesses and enhancing safety for all.

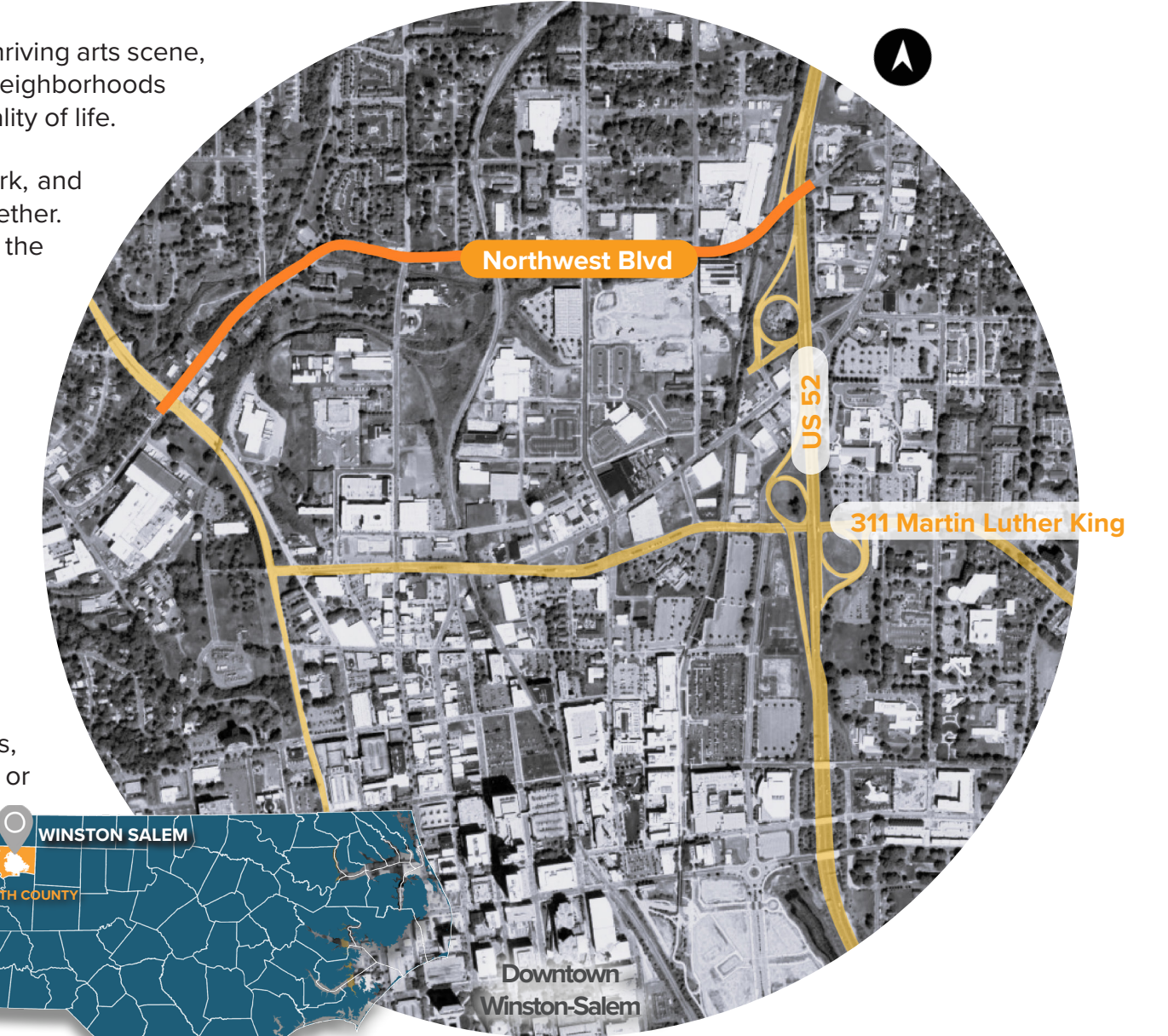
WHY NORTHWEST BOULEVARD MATTERS

The Northwest Boulevard corridor is a key connector within Winston-Salem's urban network, linking residential neighborhoods, educational institutions, local businesses, and healthcare facilities. The study area, stretching from University Parkway to North Liberty Street, sits at the crossroads of rich community history and significant future development potential.

This corridor serves a diverse mix of users: residents walking to nearby homes, students commuting to schools and universities, and vehicles accessing downtown and surrounding areas. It also intersects major transit routes and lies close to destinations such as Wake Forest University, Truist Stadium, and the Innovation Quarter, making it a strategic location for investment and growth.

The corridor currently faces challenges such as inconsistent sidewalks, limited pedestrian crossings, aging infrastructure, and a streetscape that does not fully support multimodal transportation or future development. Evolving land use patterns and adjacent growth highlight the need for a thoughtful, forward-looking approach.

This streetscape feasibility study creates an opportunity to reimagine Northwest Boulevard as a welcoming, efficient, and adaptable public space—one that meets today's mobility needs while preparing for the continued evolution of Winston-Salem's urban core.



COMMUNITY PROFILE

EVERYDAY LIFE ALONG NORTHWEST BLVD

Northwest Boulevard is more than a transportation corridor, it is part of the daily fabric of the surrounding community. The neighborhoods along the corridor are home to long-time residents, families, faith-based organizations, local businesses, and community-serving institutions that provide important services and support networks. For many residents, the corridor is not simply a route to another destination; it is a place where everyday life unfolds, where people access essential services, connect with neighbors, and participate in community activities.

Community institutions play a significant role in defining the character of the corridor. Organizations such as Samaritan Ministries provide critical services to individuals experiencing housing instability and other challenges, offering resources, support, and opportunities that strengthen the broader community. Churches and faith-based organizations, including Union Baptist Church and other congregations along the corridor, serve as important gathering places that extend beyond worship. These institutions host community events, provide outreach programs, support local families, and serve as trusted anchors within the neighborhood.

Local businesses also contribute to the identity and vitality of Northwest Boulevard. Barber shops, laundromats, restaurants, convenience stores, and other small businesses serve practical daily needs while creating places for social interaction and community connection. These establishments often function as informal neighborhood hubs where residents gather, exchange information, and build relationships. Their presence reinforces the corridor's role as a place of activity and service rather than simply a roadway passing through the community.

Together, these community assets create a corridor with a strong sense of resilience, identity, and local pride. Future streetscape improvements have the opportunity to support and strengthen these existing community connections by creating safer and more welcoming public spaces, improving access to important destinations, and enhancing the overall experience for residents, visitors, businesses, and organizations that contribute to the unique character of Northwest Boulevard.

Northwest Boulevard provides access to a variety of destinations that support everyday life, including restaurants, convenience retail, faith-based institutions, social service organizations, and transit facilities. While many of these destinations are located within walking distance of nearby neighborhoods, the corridor lacks continuous pedestrian infrastructure and safe crossing opportunities that would allow residents to comfortably and safely access these services.

The corridor also serves as an important connection between residential areas and commercial activity centers located along University Parkway, North Liberty Street, and downtown Winston-Salem. These areas provide access to grocery stores, pharmacies, employment opportunities, banking services, and other essential destinations that support daily living.



Northwest Boulevard serves as an important connection between surrounding neighborhoods and the services residents rely on every day. While the corridor contains a variety of neighborhood-serving businesses, including restaurants, convenience stores, laundromats, barber shops, churches, and social service organizations, access to essential destinations such as full-service grocery stores, healthcare facilities, employment centers, educational institutions, and government services often requires travel beyond the immediate corridor. As a result, Northwest Boulevard functions as a critical link between residential areas and larger commercial, civic, and employment districts located along University Parkway, North Liberty Street, and downtown Winston-Salem.

For many households, transportation choice plays an important role in accessing these destinations. Citywide data indicates that household incomes are below statewide averages and approximately 16–18 percent of residents live below the poverty line. Additionally, while automobile ownership is common, many residents rely on a combination of walking, transit, rides from family and friends, or limited vehicle availability to meet daily needs. The corridor is also located within communities that include children, older adults, individuals living with disabilities, and residents for whom walking remains an important mode of transportation. These populations are disproportionately impacted by gaps in sidewalks, limited crossing opportunities, inadequate lighting, and a lack of dedicated bicycle facilities.

The community engagement process reinforced the importance of access and connectivity. Residents consistently identified the need for safer pedestrian crossings, continuous sidewalks, improved bicycle facilities, enhanced transit access, and better connections to destinations both within and beyond the corridor. Many of the services that residents depend on are located within walking distance of Northwest Boulevard, while others require connections to the broader transportation network. Improving safety and comfort for people walking, biking, and using transit can help expand access to food, healthcare, employment, recreation, and community services while reducing transportation barriers for households of varying incomes and mobility needs.

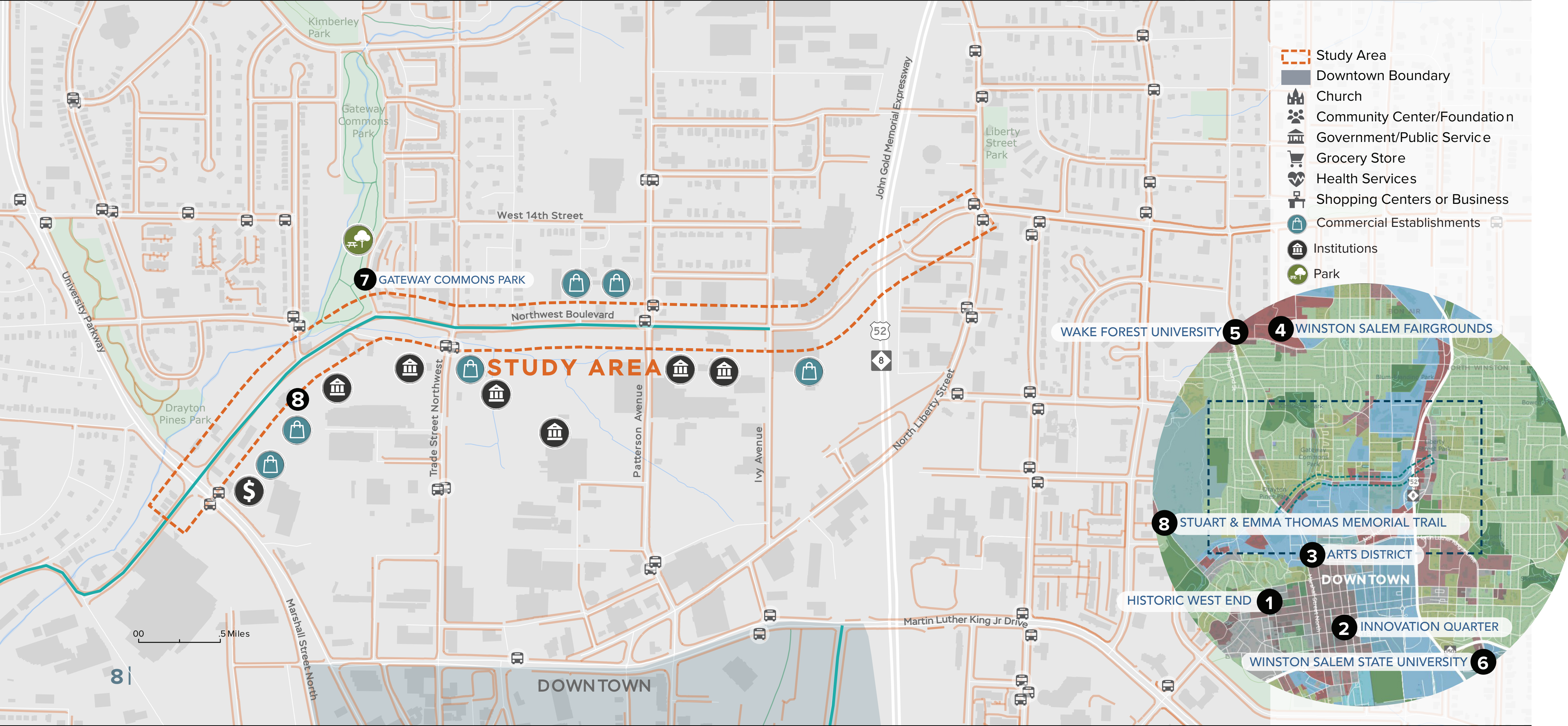
Ultimately, investments along Northwest Boulevard represent more than transportation improvements. They create opportunities to strengthen connections between people and essential services, support healthy and active lifestyles, improve access to opportunity, and reinforce the corridor's role as a vital community connector linking neighborhoods to the broader Winston-Salem region.

COMMUNITY SNAPSHOT (¼-MILE STUDY AREA CONTEXT)



- » Located within: North, Northeast, and East Wards
- » Serves established residential neighborhoods and community institutions
- » 23% under 18 years old
- » 15% age 65+
- » 19.5% speak a language other than English at home
- » Median household income: ~\$59,000
- » Poverty rate: ~16-18%
- » 9.3% of residents live with a disability
- » Key destinations include: downtown, transit routes, schools, churches, nonprofits, and employment centers





COMMUNITY PROFILE

EVERYDAY LIFE ALONG NORTHWEST BLVD

The assets, destinations, and community institutions shown on the following map help illustrate how Northwest Boulevard functions as more than a transportation corridor. Together, these destinations create a network of services, opportunities, and community connections that residents rely on every day.



BUILDING ON A STRONG FOUNDATION

Every great vision begins by understanding what has come before. Reviewing existing plans offers insight into past priorities, community aspirations, and design strategies that have shaped Winston-Salem’s growth. These plans—such as comprehensive plans, transportation strategies, and neighborhood revitalization efforts—provide valuable context for anticipated growth, infrastructure priorities, and land use patterns. Integrating this information supports a coordinated approach, helps identify synergies with other projects, and positions proposed improvements to be both strategic and sustainable.

FORWARD 2045: WINSTON-SALEM’S VISION FOR THE FUTURE

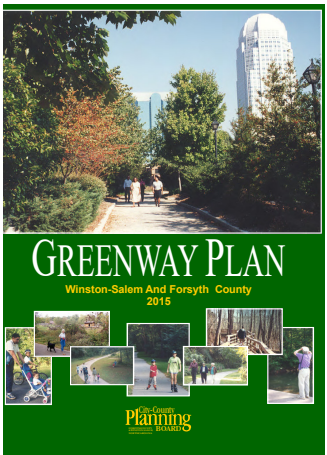
The plan envisions a connected, livable, and resilient community supported by multimodal transportation, economic development, and high-quality public spaces. The Northwest Boulevard corridor directly supports these goals through opportunities to improve connectivity, enhance pedestrian and bicycle infrastructure, strengthen community identity, support reinvestment, and create stronger linkages between neighborhoods, businesses, and employment centers. Applying Forward 2045 principles can help transform Northwest Boulevard into a more accessible, attractive, and economically vibrant corridor that serves residents, workers, and visitors alike.



- ▶ Strengthen multimodal connections between residential, commercial, and industrial areas.
- ▶ Improve pedestrian, bicycle, and transit accessibility throughout the corridor.
- ▶ Support reinvestment in aging commercial and industrial properties.
- ▶ Enhance corridor identity through streetscape, landscaping, and gateway improvements.
- ▶ Improve connections to employment centers and neighborhood destinations.
- ▶ Integrate natural features and green infrastructure into future corridor enhancements.
- ▶ Create a safer, more attractive corridor that supports long-term economic vitality.

GREENWAY PLAN: CONNECTING NATURE AND COMMUNITY

The Greenways Plan, shaped by the Legacy Development Guide, aims to create a countywide network of parks and natural areas linked by greenways. The Winston-Salem/Forsyth County Greenway Plan promotes a connected network of trails, greenways, and community destinations that support transportation, recreation, and environmental stewardship. For Northwest Boulevard, the plan’s principles support improved connections between neighborhoods, businesses, parks, and regional trail facilities while enhancing access to natural features and open spaces. Applying these concepts can help transform the corridor into a more connected, attractive, and multimodal community asset that links people to destinations both within and beyond the study area.



- ▶ Create stronger connections between Northwest Boulevard and nearby greenway facilities.
- ▶ Improve access to parks, neighborhoods, employment centers, and community destinations.
- ▶ Incorporate landscape enhancements and green infrastructure into corridor improvements.
- ▶ Utilize natural features along the corridor as placemaking and connectivity assets.
- ▶ Strengthen multimodal connections between sidewalks, bicycle facilities, transit, and the regional greenway system.
- ▶ Support a more attractive and connected corridor that balances mobility, recreation, and environmental goals

WALKABLE WINSTON-SALEM: BUILDING CONNECTED STREETS

Adopted by City Council in August 2021, the Walkable Winston-Salem Pedestrian Master Plan provides a strong foundation for creating a city where walking is safe, comfortable, and enjoyable. The plan champions high-quality pedestrian environments through strategic investments in sidewalks, crossings, and connectivity, especially in areas with high foot traffic and historically undeserved neighborhoods. Walkable Winston-Salem emphasizes creating a connected, safe, and accessible pedestrian network that serves users of all ages and abilities. The plan’s priorities, including closing sidewalk gaps, improving ADA accessibility, enhancing crossing safety, and connecting neighborhoods to destinations, align closely with existing conditions along Northwest Boulevard. Applying these principles would help address documented pedestrian deficiencies, improve multimodal connectivity, and support the corridor’s evolution into a safer and more walkable community asset.



- ▶ Fill sidewalk gaps throughout the corridor.
- ▶ Address existing ADA and accessibility deficiencies.
- ▶ Improve crossing opportunities at major intersections.
- ▶ Resolve utility conflicts affecting pedestrian access.
- ▶ Strengthen connections between residential, commercial, and industrial areas.

WINSTON-SALEM BICYCLE MASTER PLAN

The Winston-Salem Bicycle Master Plan emphasizes the development of a connected, low-stress bicycle network that improves access to neighborhoods, employment centers, commercial destinations, schools, parks, and transit facilities. For the Northwest Boulevard corridor, the plan’s guiding principles support closing existing multimodal gaps, enhancing intersection safety, implementing Complete Streets strategies, and providing comfortable bicycle facilities that accommodate users of all ages and abilities. These recommendations align closely with corridor objectives related to safety, accessibility, connectivity, and multimodal mobility. Northwest Boulevard was identified as a Priority Route within the Bicycle Master Plan, recognizing its importance as a key east-west connection within the City’s bicycle network.

The buffered bicycle lanes proposed as part of the Short-Term Concept directly advance the goals of the Bicycle Master Plan by providing a dedicated bicycle facility



that improves rider comfort and safety while establishing a critical link between existing and planned bicycle routes. The proposed improvements help address current network gaps, strengthen connections to surrounding neighborhoods and destinations, and create a more predictable and accessible corridor for bicyclists of varying skill levels. As an early-action improvement, the buffered bicycle lanes represent a practical step toward achieving the City’s long-term vision of a connected, multimodal transportation network while laying the foundation for future Shared Use Path investments identified in the Long-Term Concept.

- ▶ Close Bicycle Network Gaps
- ▶ Connect Neighborhoods to Destinations
- ▶ Create Low-Stress Bicycle Facilities
- ▶ Support Complete Streets Implementation
- ▶ Enhance Intersection Safety
- ▶ Improve Access to Transit and Employment Centers

DOWNTOWN WINSTON-SALEM STREETSCAPE MASTER PLAN

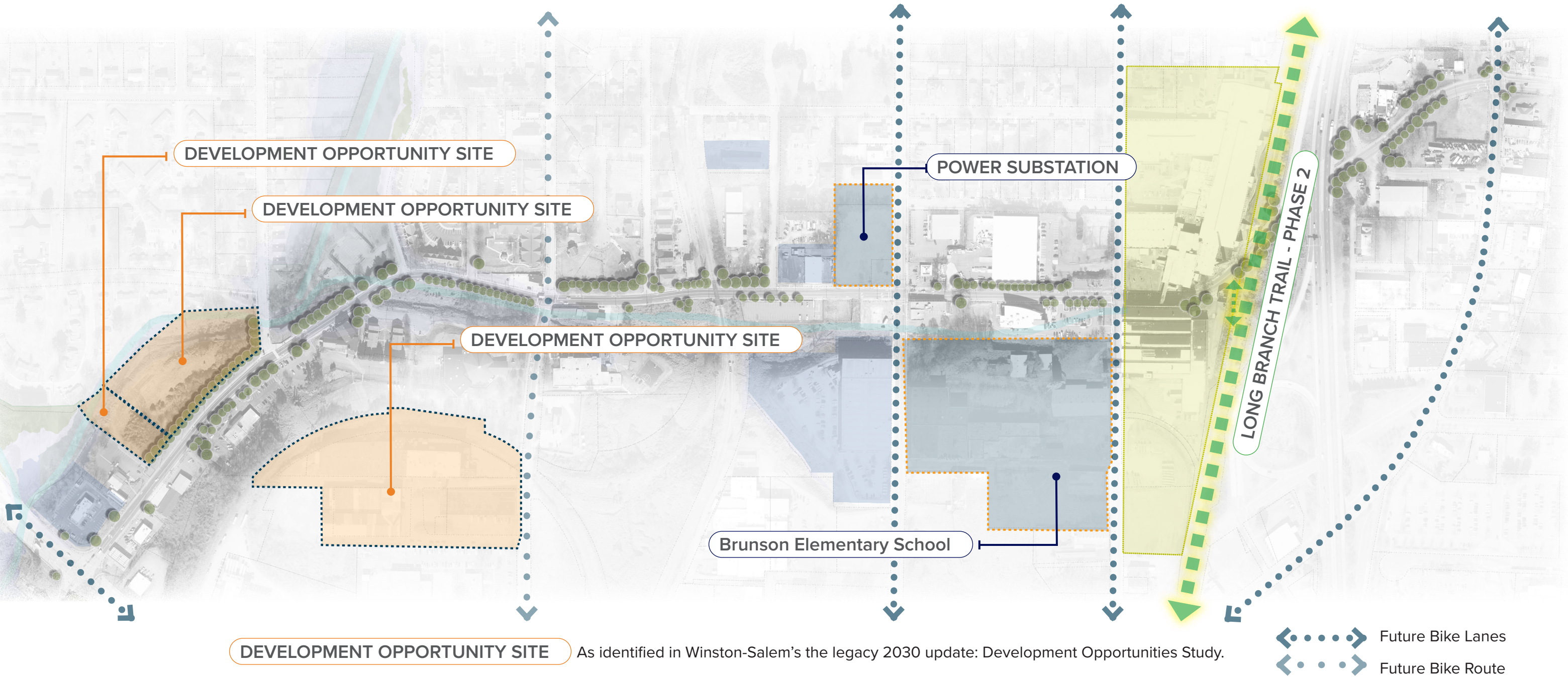
This plan emphasizes the creation of a cohesive, pedestrian-oriented public realm through consistent streetscape design, enhanced landscaping, improved pedestrian facilities, and corridor identity elements. Although Northwest Boulevard serves a different transportation and land use function than downtown, these principles provide a useful framework for corridor improvements. Applying streetscape design standards, gateway treatments, landscape enhancements, pedestrian-focused infrastructure, and placemaking elements could strengthen corridor identity, improve accessibility, support economic development, and reinforce connections between the diverse residential, commercial, and industrial areas that define Northwest Boulevard.



- ▶ Reinforce a recognizable identity from University Parkway to Liberty Street.
- ▶ Introduce gateway features, landscaping, and corridor branding.
- ▶ Improve the appearance of underutilized and industrial areas while preserving their unique character.
- ▶ Create a more comfortable and attractive multimodal corridor for residents, employees, and visitors.

PLANNING FOR THE FUTURE

Planned and proposed investments within and adjacent to the Northwest Boulevard corridor provide important context for future streetscape improvements. Understanding how these initiatives may influence land use, mobility, and redevelopment opportunities helps ensure that recommendations support both current needs and the community's long-term vision. This map highlights key projects and future developments that may shape the corridor over time.



LONG BRANCH TRAIL - PHASE 2

The planned extension of the Long Branch Trail presents a significant opportunity to strengthen connections between Northwest Boulevard, surrounding neighborhoods, and downtown Winston-Salem. By linking the corridor to the broader greenway and trail network, the extension can provide residents and employees with safe, convenient access to employment centers, parks, schools, cultural destinations, and other community resources while creating new opportunities for recreation, active transportation, and economic activity.

The planned Long Branch Trail Extension from Martin Luther King Jr. Drive to 25th Street includes a future connection at Northwest Boulevard, creating an important gateway between the corridor and Winston-Salem's expanding active transportation network. In the short term, proposed buffered bicycle lanes, enhanced crossings, and ADA improvements help establish a safer, more comfortable connection to the future trail extension while advancing the Bicycle Master Plan's vision for a connected, low-stress bicycle network. In the long term, the Shared Use Path will build upon this investment by extending the trail user experience along Northwest Boulevard through a separated, accessible facility that strengthens east-west connectivity, supports trail-oriented amenities, and reinforces the corridor's role as a key link within the City's broader bicycle, pedestrian, and greenway network. Together, these improvements create a continuous multimodal spine connecting downtown, neighborhoods, destinations, and future trail investments throughout the area.

BRUNSON ELEMENTARY SCHOOL

The construction of Brunson Elementary School is expected to become a significant influence on future activity patterns along the Northwest Boulevard corridor. As the school opens and enrollment grows, the corridor will experience increased vehicle traffic associated with student drop-off and pick-up operations, school buses, staff commuting, and special events. The presence of the school will also generate additional pedestrian and bicycle activity as students and families travel between surrounding neighborhoods and the campus.

This increased activity will elevate the importance of safe multimodal infrastructure throughout the corridor. Improvements such as continuous sidewalks, ADA-compliant curb ramps, enhanced crossings, traffic calming measures, bicycle facilities, and school-zone safety treatments will help accommodate anticipated demand while reducing conflicts between vehicles, pedestrians, and cyclists. The school also creates an opportunity to strengthen neighborhood connectivity by establishing safe routes to school that link nearby residential areas with educational, recreational, and community resources.

SUBSTATION

As future corridor improvements are advanced, collaboration with Duke Energy presents an opportunity to leverage utility investments to support community goals related to placemaking, sustainability, aesthetics, and long-term corridor revitalization.

The substation's frontage and associated streetscape improvements could also serve as a gateway element along Northwest Boulevard, helping establish a stronger visual presence while supporting broader corridor beautification efforts. Thoughtfully designed walls, enhanced landscaping, and coordinated materials can soften the visual impact of the facility, improve the pedestrian experience, and demonstrate how critical infrastructure can contribute positively to the public realm.

DEVELOPMENT OPPORTUNITY SITES

The City of Winston-Salem identifies Development Opportunity Sites as properties that possess characteristics favorable for future investment, redevelopment, adaptive reuse, or infill development. These sites are typically evaluated based on factors such as location, parcel size, access to transportation infrastructure, proximity to utilities and services, surrounding land use patterns, market conditions, and consistency with adopted planning objectives. The purpose of identifying these areas is to guide future public and private investment toward locations that can support community growth while leveraging existing infrastructure and development assets.

Within the Northwest Boulevard corridor, the presence of designated development opportunity sites highlights the area's potential to accommodate future economic development, business growth, housing investment, and redevelopment of underutilized properties. The corridor's mix of commercial, industrial, business, and residential zoning further enhances its ability to support diverse redevelopment opportunities.

From a long-term planning perspective, these sites represent opportunities to align future growth with the goals of Forward 2045, the Bicycle Master Plan, and Walkable Winston-Salem by concentrating investment in locations that can support multimodal transportation, economic development, neighborhood connectivity, and a stronger sense of place. As redevelopment occurs, Northwest Boulevard has the potential to evolve into a more active, connected, and economically productive corridor that better serves residents, businesses, employees, and visitors alike.



NEEDS ASSESSMENT

SETTING THE SCENE

CONTEXT

Building upon the previously completed plan and policy review, this phase of work integrates technical analysis and community input to develop a comprehensive understanding of Northwest Boulevard as both a transportation corridor and a community-serving place. Unlike corridors defined primarily by regional commercial activity, Northwest Boulevard is characterized by a diverse mix of residential neighborhoods, faith-based institutions, nonprofit organizations, community services, transit routes, and neighborhood-serving businesses. Destinations such as Samaritan Ministries, The Parenting PATH, Union Baptist Church, local restaurants, convenience stores, laundromats, and personal service businesses play an important role in the daily lives of corridor users and contribute to the area's unique identity and function.

Recognizing these characteristics, the study team employed a multi-layered approach that combined desktop analysis with targeted field investigations. Desktop efforts included a review of land use patterns, transportation networks, demographic data, property ownership, and previously adopted plans to better understand both existing conditions and future growth opportunities. Particular attention was given to identifying community assets, pedestrian generators, transit activity, and connections between neighborhoods and essential destinations. Field observations were then conducted to document the physical conditions of the corridor, including pedestrian and bicycle infrastructure, roadway operations, transit access, lighting, maintenance needs, environmental conditions, and opportunities for Placemaking and streetscape enhancements.

Community engagement was a central component of the Needs Assessment process and reflected the corridor's role as an important community connector. Outreach activities engaged residents, business owners, faith-based organizations, service providers, transit users, and other stakeholders to better understand how Northwest Boulevard is experienced on a day-to-day basis. Feedback helped identify mobility barriers, safety concerns, accessibility challenges, maintenance issues, and opportunities to improve the corridor's appearance and functionality. The engagement process also provided valuable insight into the importance of community institutions and local businesses, many of which serve as gathering places, service hubs, and destinations for residents throughout the area.

Findings from the technical analysis and community engagement were synthesized into a layered assessment of corridor conditions and community needs. This approach examined how mobility, land use, community services, economic activity, and public space interact to shape the corridor experience. By understanding Northwest Boulevard as a place that connects people to housing, employment, food, transit, social services, worship, and recreation, the study was able to identify opportunities that extend beyond transportation improvements alone.

The insights derived from this Needs Assessment directly informed the development of the conceptual design alternatives. By aligning data-driven analysis with community priorities and the corridor's unique context, the study establishes a framework for implementing improvements that enhance safety, accessibility, connectivity, and community identity while supporting broader City goals related to quality of life, economic vitality, and neighborhood reinvestment.



EXISTING CONDITIONS INVENTORY AND ANALYSIS

Existing conditions along the Northwest Boulevard corridor were evaluated through field observations, stakeholder input, and available data to identify the needs, constraints, and opportunities that will shape future improvements. Aging infrastructure, constrained roadway geometry, and gaps in pedestrian and bicycle accommodations contribute to safety, accessibility, and operational challenges, while features such as the low-clearance railroad bridge, limited right-of-way, and surrounding topography create additional design constraints. Collectively, these conditions highlight opportunities to improve connectivity, enhance the user experience, and modernize the corridor. The following maps and diagrams summarize the key themes that will guide future planning and design decisions.

CORRIDOR CONTEXT

The corridor is defined by a constrained roadway passing beneath an aging railroad bridge structure, creating a visually and physically narrow environment. Surrounding features include steep embankments, vegetation, and limited development visibility, contributing to a corridor character that feels enclosed and vehicle-dominated. The adjacent natural landscape, including mature vegetation, drainage features, and floodplain areas, influences both corridor function and future improvement opportunities. Field observations and site photography highlight how these environmental features shape user experience, roadway conditions, and potential enhancements related to multimodal connectivity, stormwater management, and corridor aesthetics.

UTILITIES, OWNERSHIP + RIGHT-OF-WAY (ROW) CONSIDERATIONS

Overhead utility infrastructure, including Duke Energy distribution lines and supporting poles, occupies portions of the corridor and will require careful coordination as improvements are advanced. Opportunities exist to consolidate attachments on City- and utility-owned poles and strategically phase future relocations where they support long-term corridor goals; however, utility modifications can be costly and time-intensive, making it desirable to work around infrastructure that is in good condition whenever feasible. Combined with limited right-of-way, the railroad bridge, and adjacent embankments, these constraints reinforce the need to maximize improvements within the existing corridor footprint while minimizing impacts to both utilities and private property.

MULTIMODAL CONDITIONS

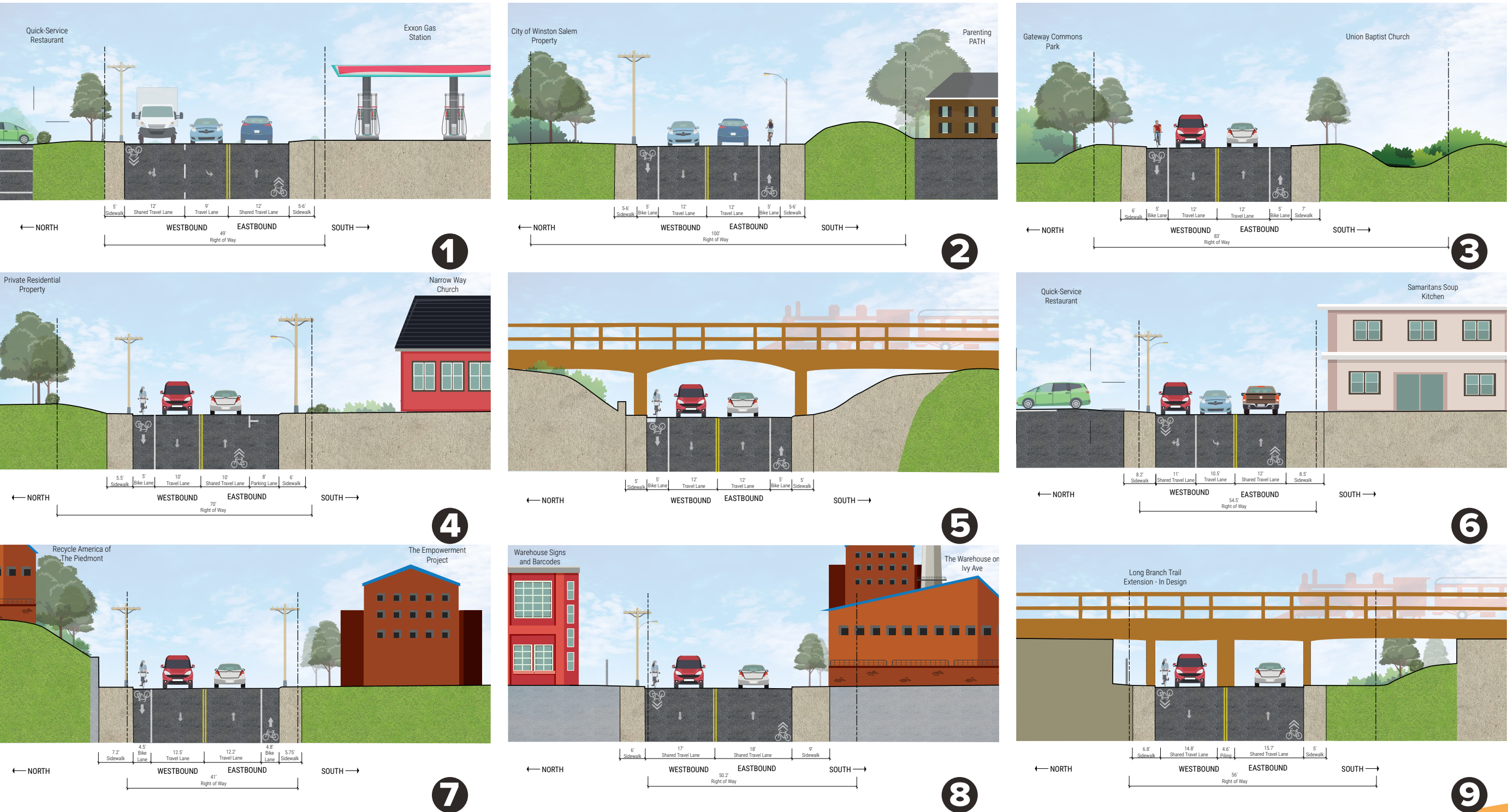
The corridor serves a wide range of users, including pedestrians, bicyclists, transit vehicles, personal vehicles, service and delivery traffic, and organizations that rely on convenient access for donations and supply drop-offs. While some bicycle infrastructure and pedestrian accommodations exist, gaps in connectivity, constrained roadway geometry, and limited separation between users reduce comfort and safety for all modes. Future improvements should build upon existing facilities to create a more connected and accessible corridor while maintaining efficient operations, supporting multimodal travel, and enhancing safety for the diverse mix of daily users.

SAFETY OBSERVATIONS

Existing conditions suggest elevated safety concerns due to constrained geometry, reduced bridge clearances (posted 14'-3"), and limited visibility beneath the railroad bridge, all of which increase driver workload and the potential for vehicle conflicts. Safety considerations were evaluated through field observations, intersection operations assessments, crash history and trend analysis, and review of pedestrian and bicycle conditions throughout the corridor. These findings indicate opportunities to improve roadway predictability, enhance multimodal safety, and reduce conflict points while maintaining efficient access and circulation for the corridor's diverse mix of users.

PUBLIC PERCEPTION + EXPERIENCE

Public input and stakeholder engagement helped identify the corridor's key challenges, strengths, and opportunities from the perspective of those who use it most frequently. Feedback from residents, businesses, institutions, and corridor users was combined with field observations and technical analysis to better understand concerns related to safety, accessibility, connectivity, maintenance, and overall corridor character. These insights provide valuable context for future improvements and help ensure proposed solutions address both operational needs and community priorities.



EXISTING CONDITIONS TYPICAL SECTIONS

CORRIDOR CONTEXT

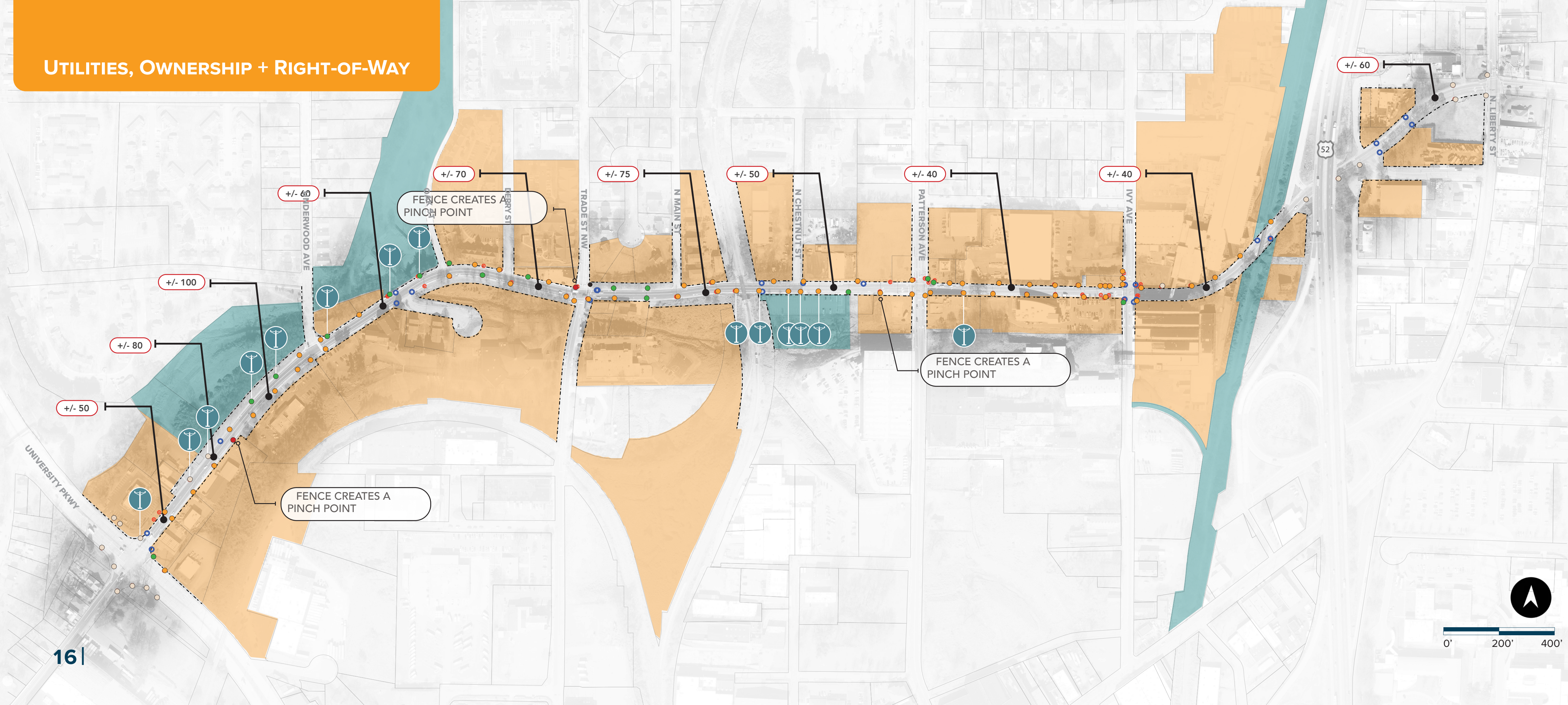


EXISTING CONDITIONS

Understanding the existing conditions of the Northwest Boulevard corridor is a critical first step in guiding effective streetscape improvements. A thorough assessment of the current physical environment, land uses, transportation patterns, infrastructure, and community context provides a foundation for informed decision-making. By carefully analyzing what already exists, planners and designers can identify opportunities and challenges, ensure that proposed interventions are practical and responsive, and create a vision that respects the corridor's unique character while accommodating future growth. This baseline understanding helps to align project goals with community needs, promote safety and accessibility, and ultimately support a vibrant, functional, and sustainable streetscape.

Overall, the corridor demonstrates a logical and consistent land use progression from commercial and office uses near University Parkway, to mixed commercial-residential development, into predominantly residential neighborhoods, and ultimately to industrial and employment-focused uses at the eastern terminus. This pattern reflects both historic development trends and local zoning policies that seek to balance housing, commerce, and employment opportunities while minimizing land use conflicts between residential and industrial activities. The resulting land use framework creates a corridor that accommodates a broad range of community functions and supports both local accessibility and regional economic activity.

UTILITIES, OWNERSHIP + RIGHT-OF-WAY



DEFINING THE SPACE FOR FUTURE IMPROVEMENTS

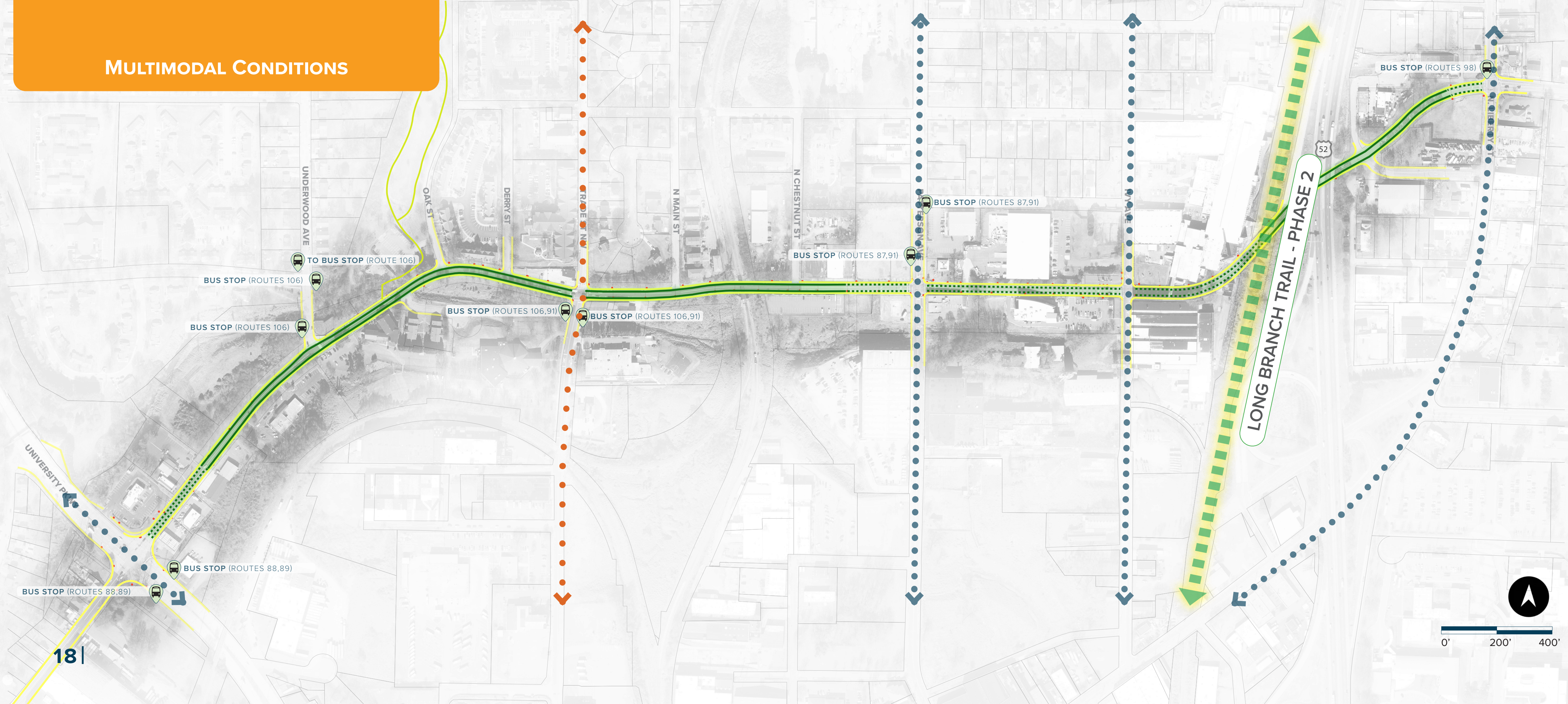
This analysis illustrates the existing right-of-way limits, adjacent land ownership patterns, and utility infrastructure that define the physical boundaries of the Northwest Boulevard corridor. Understanding these elements is critical to identifying where space is available for improvements and where constraints may limit design flexibility. The map highlights how the corridor is shaped not only by the roadway itself, but also by surrounding parcels, infrastructure systems, and supporting elements that influence how the corridor can evolve over time.

The information presented is based on a compilation of available GIS data, desktop review, and field observations, and is intended to provide a high-level understanding of corridor conditions. No formal survey was conducted as part of this study; therefore, right-of-way limits, utility locations, and property boundaries are presented conceptually and should be verified during future design phases. In addition to identifying the general location of overhead and underground utilities, this analysis highlights areas where right-of-way is constrained by embankments, structures, or adjacent development. Together, these factors establish the practical framework within which improvements must be designed and inform both the feasibility and complexity of implementation.

LEGEND

- Private Property
- Public Property
- Right of Way
- Utility Poles
 - < 3' Pedestrian Clearance
 - 3-4' Pedestrian Clearance
 - 4'+ Pedestrian Clearance
- Storm Drains

MULTIMODAL CONDITIONS



ASSESSING MULTIMODAL FUNCTION AND GAPS

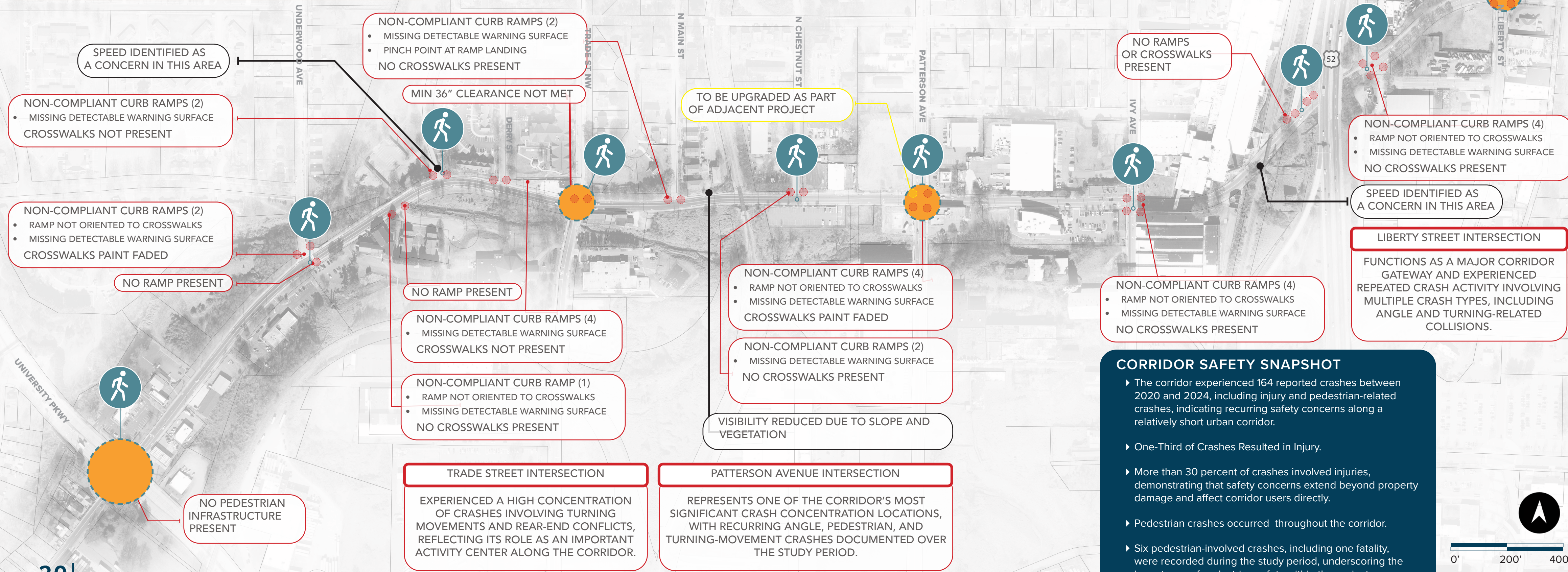
This analysis examines how the Northwest Boulevard corridor accommodates pedestrians, bicyclists, transit users, and vehicles, and how existing infrastructure influences mobility, comfort, and accessibility. Based on GIS data, field observations, and adopted planning documents, the corridor currently functions primarily as a vehicle-oriented facility, with limited pedestrian and bicycle accommodations and several multimodal gaps.

Despite these constraints, Northwest Boulevard is identified as a Priority Bicycle Route in the Winston-Salem Bicycle Master Plan and serves as an important east-west connection between neighborhoods, community destinations, employment centers, and transit services. The corridor is also served by multiple WSTA transit routes and contains several bus stops that provide access to surrounding areas, reinforcing its role as a multimodal transportation corridor.

Future transportation investments present significant opportunities to strengthen these connections. The planned Long Branch Trail Phase II extension, which will extend from Martin Luther King Jr. Drive to 25th Street with a connection at Northwest Boulevard, creates an opportunity to link the corridor to Winston-Salem's expanding greenway and active transportation network. Near-term recommendations, including buffered bicycle lanes, pedestrian crossing enhancements, and ADA improvements, begin addressing existing network gaps and improve access to transit and future trail facilities. Long-term recommendations, including a continuous Shared Use Path, further advance the City's vision for a connected, low-stress transportation network that safely accommodates users of all ages and abilities while enhancing overall corridor accessibility and connectivity.

- Bike Lane
- Sidewalk
- Shared Lane (Bicycles and Vehicles)
- Light Pole
- Park Trail
- Bus Stop
- Future Bike Lanes
- Future Bike Route

SAFETY OBSERVATIONS



ASSESSING FACTORS THAT AFFECT USER SAFETY

A review of crash data along Northwest Boulevard between Chatham Street and Liberty Street indicates that the corridor's primary safety concerns are associated with intersection-related conflicts and vehicle interactions at key activity nodes. The most common crash types were angle, rear-end, and sideswipe collisions, suggesting that turning movements, access points, and driver decision-making are significant contributors to crash occurrence. The corridor also experienced a number of injury crashes and several pedestrian-involved crashes during the study period, indicating the presence of multimodal safety considerations.

BOULEVARD SERVES MORE THAN TRAFFIC

The corridor supports access between downtown Winston-Salem, surrounding neighborhoods, schools, businesses, utility infrastructure, and community destinations, making safety improvements beneficial to a wide range of users.

With an Annual Average Daily Traffic (AADT) of approximately 5,300 vehicles per day, crash activity appears to be driven more by intersection conflicts and multimodal interactions than by overall traffic volume.

Approximately one-quarter of crashes occurred during nighttime conditions, highlighting opportunities to improve visibility and user awareness throughout the corridor roadway departure and impacts with roadside features.

Overall, the crash history suggests that safety concerns along Northwest Boulevard are largely concentrated around intersections, turning movements, and areas of increased vehicular and pedestrian activity rather than being driven by overall traffic volumes or corridor capacity constraints.

CORRIDOR SAFETY SNAPSHOT

- ▶ The corridor experienced 164 reported crashes between 2020 and 2024, including injury and pedestrian-related crashes, indicating recurring safety concerns along a relatively short urban corridor.
- ▶ One-Third of Crashes Resulted in Injury.
- ▶ More than 30 percent of crashes involved injuries, demonstrating that safety concerns extend beyond property damage and affect corridor users directly.
- ▶ Pedestrian crashes occurred throughout the corridor.
- ▶ Six pedestrian-involved crashes, including one fatality, were recorded during the study period, underscoring the importance of pedestrian safety within the project area.

- Pedestrian Safety Opportunities
- High Incident Location



ENGAGING THE COMMUNITY



The corridor is loved for its **sidewalk**, seamless **east-west connection**, easy **access to downtown** and its local shops.



Desired additions included **enhanced pedestrian infrastructure**, more **green spaces**, neighborhood branding, and decorative **street lighting**.



Elements identified for removal include **invasive vegetation** that detracts from safety and visual quality, **outdated signage**, and **utility poles**.



SURVEY INSIGHTS

We conducted a public survey both in person and online, gathering input from a wide range of community members.

The results revealed several overlapping interests and shared priorities, which are highlighted here and helped guide the overall design direction. *The percentages represent the total share of respondents who indicated support for that particular feature, helping us understand which elements the community values most.



COMMUNITY INSIGHTS MAPPED

As part of the Northwest Boulevard Streetscape Study, we invited community members to share their thoughts directly on a corridor map. This interactive exercise captured real-time feedback tied to specific locations, providing valuable context for understanding how people experience the street today.

The comments reflect a range of perspectives, including:

- Challenges – Areas where safety, accessibility, or maintenance issues were observed.
- Ideas – Suggestions for improvements, enhancements, and new features.
- Clarifications – Notes that help explain local conditions or priorities.

Mapping these insights allows us to see where concerns and opportunities cluster, helping guide design solutions that respond to actual conditions and community priorities. This spatial feedback is a critical step in ensuring that future improvements are context-sensitive, equitable, and aligned with local needs.

WHAT COULD BE ADDED

Community-supported features such as public art, branding, wayfinding, and small retail or gathering spaces can help create a more vibrant, connected, and engaging corridor.





3 CONCEPT DEVELOPMENT

CONCEPT DEVELOPMENT + CORRIDOR VISION

The concept development process translated the findings of the existing conditions assessment and community engagement into design strategies that respond to the unique challenges and opportunities of the Northwest Boulevard corridor. Building upon the established vision and goals, this phase explored how the corridor could evolve to better support safety, accessibility, and connectivity while reflecting the character and needs of the surrounding community.

Through an iterative and collaborative approach, design concepts were developed and refined using input from the City, stakeholders, and the public. Initial concepts focused on addressing immediate deficiencies in multimodal infrastructure and safety, while subsequent refinements expanded upon these ideas to incorporate streetscape enhancements, placemaking elements, and long-term corridor identity. This process resulted in a layered set of concepts that collectively define both near-term improvements and a long-term vision for the corridor.

Rather than representing competing alternatives, the concepts are structured as complementary phases of implementation. Together, they provide a flexible framework that balances practicality with vision, allowing the City to advance incremental improvements while maintaining a clear direction for the corridor's future.



CONCEPT ALTERNATIVES

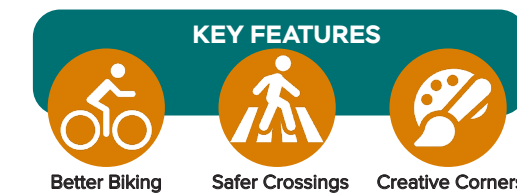
The concept alternatives developed for the Northwest Boulevard corridor reflect an iterative and collaborative process grounded in the needs identified through analysis and community engagement. Initial efforts focused on establishing a concept that directly addresses the most immediate concerns expressed by stakeholders and corridor users, particularly related to safety, accessibility, and multimodal connectivity. This foundational concept emphasizes the corridor's role as a key east-west connection, improving access to surrounding neighborhoods and points of interest while maintaining vehicular functionality. Enhancements are centered on improving the pedestrian and bicycle experience through more complete and comfortable facilities.

As the design process advanced, additional concepts were explored that introduced more robust multimodal strategies, including expanded pedestrian infrastructure, dedicated bicycle facilities, and the potential for shared-use paths. These alternatives considered a more comprehensive rethinking of the corridor, evaluating how additional space and design interventions could further enhance mobility, safety, and overall user experience. Throughout this process, opportunities for placemaking and corridor identity were also identified, leading to the integration of streetscape elements, environmental enhancements, and focal areas that contribute to a stronger sense of place.

Through multiple rounds of refinement, coordination with the City, stakeholder input, and the development of planning-level cost estimates, the concepts evolved into two complementary approaches. The first concept remains focused on near-term, implementable improvements that address critical safety and accessibility needs. The second concept presents a more ambitious, long-term vision for the corridor that builds upon these foundational elements, incorporating a shared-use path, enhanced intersections and traffic control, and a more cohesive streetscape that emphasizes identity and environmental performance. While these concepts differ in scope, they are not mutually exclusive. Instead, they represent a phased and scalable approach to corridor improvement. Elements such as public art and identity features can be incorporated into either concept through coordination with the Winston-Salem Public Art Commission, ensuring that community character and placemaking opportunities can be advanced alongside infrastructure improvements over time.

EARLY-ACTION IMPROVEMENTS SHORT-TERM CONCEPT

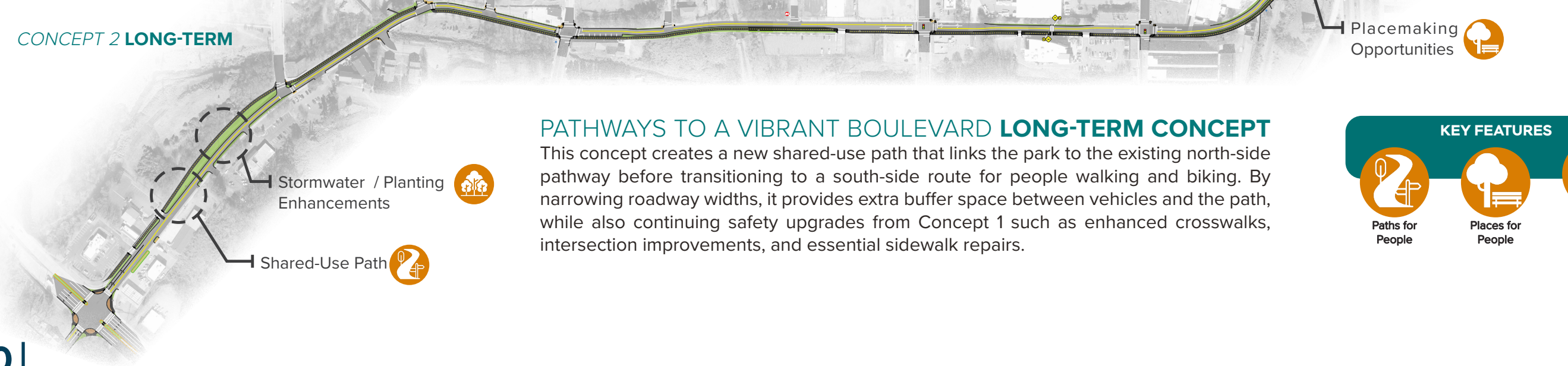
This concept improves safety with updated pavement markings, clearer signage, a painted bike buffer, narrowed lanes at pinch points, and green conflict-zone markings. It adds new or upgraded crosswalks, ADA compliant curb ramps, and improved wayfinding to support safer, more intuitive pedestrian movement. Together, these changes create a more predictable, accessible, and comfortable corridor for everyone.



CONCEPT 1 SHORT-TERM

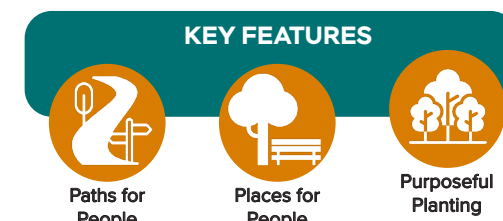


CONCEPT 2 LONG-TERM



PATHWAYS TO A VIBRANT BOULEVARD LONG-TERM CONCEPT

This concept creates a new shared-use path that links the park to the existing north-side pathway before transitioning to a south-side route for people walking and biking. By narrowing roadway widths, it provides extra buffer space between vehicles and the path, while also continuing safety upgrades from Concept 1 such as enhanced crosswalks, intersection improvements, and essential sidewalk repairs.



CONCEPT DEVELOPMENT + CORRIDOR VISION

The concept development process translated the findings of the existing conditions assessment and community engagement into design strategies that respond to the unique challenges and opportunities of the Northwest Boulevard corridor. Building upon the established vision and goals, this phase explored how the corridor could evolve to better support safety, accessibility, and connectivity while reflecting the character and needs of the surrounding community.

MOVE SAFELY

Continuous Sidewalks

Provide a complete and accessible pedestrian network through **sidewalk gap closures, ADA-compliant curb ramps, utility conflict mitigation, widened pedestrian zones, and buffered sidewalks where right-of-way permits**. Design approaches should prioritize continuous connections between neighborhoods, transit stops, businesses, schools, and employment centers.

Protected Bike Facilities

Incorporate protected **bike lanes, shared-use paths, buffered bicycle lanes, and dedicated bicycle crossings** to create a low-stress bicycling environment. Supporting elements may include bicycle wayfinding, intersection treatments, bicycle parking, and connections to the broader bicycle and greenway network.

Safer Crossings and Intersections

Improve safety through **high-visibility crosswalks, pedestrian refuge islands, curb extensions, accessible pedestrian signals, enhanced lighting, and reduced crossing distances**. Intersection upgrades should prioritize multimodal safety while maintaining roadway operations and access.

CREATE PLACE

Gateways and Corridor Branding

Establish a recognizable identity through **monument signage, gateway features, district**

branding, decorative lighting, public art, and coordinated streetscape materials. These elements can reinforce arrival points, improve wayfinding, and create a consistent visual character throughout the corridor.

High-Quality Public Spaces

Create inviting community spaces through **plazas, seating areas, and pedestrian amenities**. Design strategies should focus on comfort, usability, and activating underutilized spaces to encourage community interaction and support local businesses.

Industrial Heritage and Cultural Identity

Celebrate the corridor's history and character through interpretive signage, industrial-inspired design features, **public art, historic references, and preservation of defining visual elements**. These approaches can strengthen sense of place while reflecting the area's economic and cultural legacy.

CONNECT COMMUNITIES

Green Infrastructure and Landscaping

Enhance corridor aesthetics and environmental performance through **street trees, planting buffers, native landscaping, and stormwater management features such as bioretention**. Green infrastructure can improve comfort, reduce runoff, expand tree canopy, and reinforce corridor character.

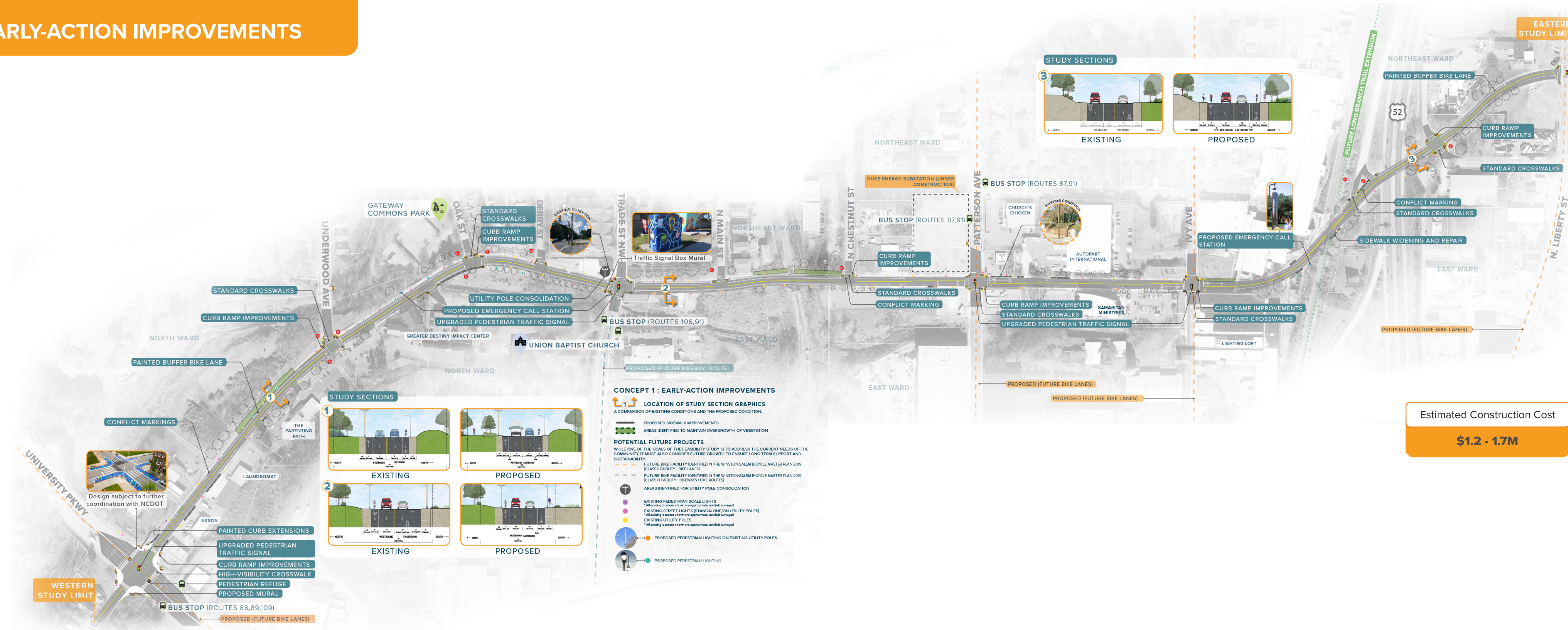
Transit and Trail Connections

Strengthen multimodal mobility through improved **trail access points, shared-use paths, bicycle parking, wayfinding systems, and pedestrian connections to nearby destinations**. These investments support seamless movement between transit, walking, bicycling, and regional trail facilities.

Seamless Access Between Neighborhoods, Businesses, and Employment Centers

Improve connectivity through **sidewalk and bicycle network completion, enhanced crossings, access management strategies, and traffic calming measures**. Design solutions should reduce barriers between residential areas, commercial districts, industrial employment centers, parks, and community destinations, creating a more connected and accessible corridor for all users.

EARLY-ACTION IMPROVEMENTS



CONCEPT NOTES

The Short-Term Concept is a practical implementation strategy focused on addressing the most immediate safety, accessibility, and connectivity needs along the Northwest Boulevard corridor. Developed through an evaluation of existing conditions, public input, stakeholder feedback, and adopted plans, the concept establishes a foundation for future investments while delivering meaningful benefits that can be implemented incrementally.

At its core, the short-term concept seeks to transform Northwest Boulevard from a vehicle-oriented corridor into a safer and more balanced multimodal facility. Proposed improvements include dedicated buffered bicycle lanes, targeted sidewalk repairs and widening, upgraded curb ramps, enhanced crosswalks, pedestrian refuge areas, and improved pedestrian signal infrastructure. Together, these improvements address gaps in the bicycle and pedestrian network while improving access to transit stops, community destinations, neighborhoods, and local businesses throughout the corridor.

A key focus of the short-term concept is strengthening connectivity. Proposed bicycle facilities build upon existing infrastructure and connect to planned routes identified in the Winston-Salem Bicycle Master Plan, helping establish safer east-west travel options and supporting future connections to the broader active transportation network. Enhanced pedestrian crossings, conflict markings, and accessibility improvements further improve safety and mobility for users of all ages and abilities.

While safety and mobility are the primary objectives, the short-term concept also incorporates targeted placemaking and streetscape enhancements that improve the corridor's identity and user experience. Proposed pedestrian-scale lighting, utility pole consolidation, public art opportunities, and murals help create a more welcoming and visually cohesive environment while positioning the corridor for future enhancements and partnerships.

The concept also addresses maintenance and environmental concerns identified during the planning process. Selective vegetation management, corridor clean-up efforts, and targeted infrastructure repairs are proposed to improve visibility, reduce maintenance challenges, and enhance the overall appearance and function of the corridor. These improvements can be implemented along the corridor to create a safer and more attractive public realm.

Overall, the Short-Term Concept provides an actionable roadmap for improving the function, safety, and appearance of Northwest Boulevard. By focusing on achievable infrastructure upgrades, operational improvements, and targeted placemaking investments, the concept addresses current community needs while establishing the framework for future investments and long-term corridor transformation.

SHORT TERM NEXT STEPS

Supplemental Lighting

- Coordinate with the City and utility providers to utilize existing poles where feasible and ensure compatibility with long-term corridor improvements.
- Install lighting improvements at strategic locations while reserving future additions and relocations for subsequent corridor enhancement projects.

Curb Ramp Upgrades

- Upgrade curb ramps and ADA facilities at priority crossings and transit access points where improvements can be implemented with minimal impacts to existing utilities, drainage infrastructure, and right-of-way.
- Address deficiencies related to ramp orientation, grading, and detectable warning surface compliance to improve accessibility and pedestrian safety.
- Advance more complex locations requiring utility, drainage, or roadway reconstruction as part of future corridor improvement projects.

University Parkway Intersection Improvements

- Coordinate with NCDOT and City staff to advance review, approvals, and implementation.
- Conduct traffic, turning-movement, and vehicle-tracking analyses to validate the proposed geometry.
- Install painted curb extensions and channelization to test the ultimate intersection layout and inform future permanent improvements.

Implement Proposed Signing and Striping Plan

- Finalize corridor-wide signing, pavement marking, and resurfacing plans to enhance bicycle, pedestrian, and vehicular operations.
- Coordinate with City departments to incorporate improvements into maintenance, paving, and implementation programs.
- Install proposed signage and striping upgrades to improve safety, connectivity, and multimodal wayfinding throughout the corridor.

Targeted Sidewalk Upgrades

- Implement targeted sidewalk repairs and accessibility improvements at priority locations to address maintenance deficiencies, pedestrian pinch points, and identified safety concerns.
- Improve pedestrian connectivity and comfort through localized widening, obstruction removal, and enhanced crossing treatments where feasible within existing right-of-way.
- Coordinate improvements with future utility, drainage, and Shared Use Path projects to maximize long-term value and minimize reconstruction.

Mid-Block Crossing Implementation (300 Block of Northwest Boulevard)

- Advance design and implementation of the proposed mid-block crossing, including pavement markings, signage, accessibility improvements, and appropriate crossing enhancements.

Intersection Studies

- Conduct traffic operations and safety analyses at key signalized intersections, including turning-movement counts, signal timing, and pedestrian phasing evaluations.
- Identify opportunities to improve intersection efficiency, reduce conflicts, and enhance pedestrian crossings for all users.
- Develop recommended signal, signing, striping, and operational improvements for future implementation and coordination with relevant agencies.

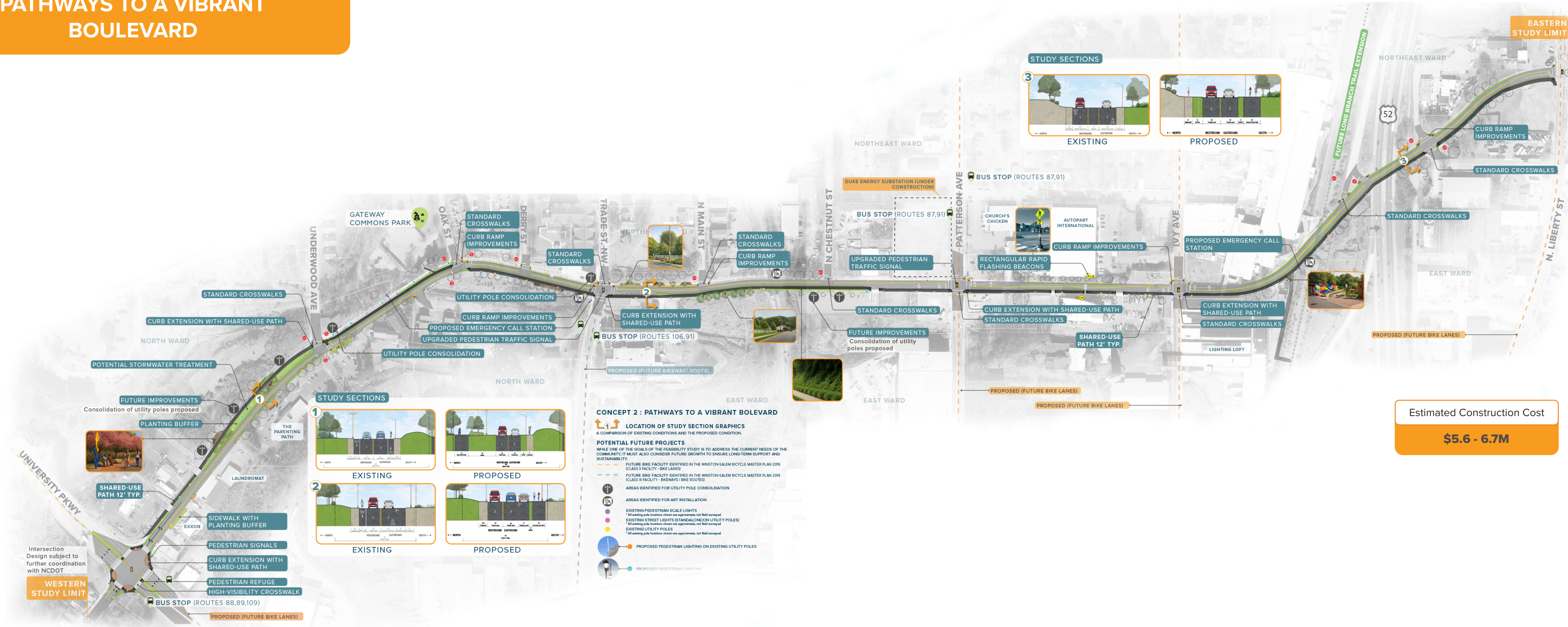
Targeted Utility Pole Consolidation

- Coordinate with Duke Energy to identify opportunities for utility pole consolidation and relocation at existing pedestrian pinch points.
- Prioritize improvements that increase pedestrian clear width while minimizing impacts to existing utility infrastructure and right-of-way.
- Advance targeted relocations through utility planning and capital projects to support future corridor and Shared Use Path improvements.

Blue Light Emergency Call Box Enhancements

- Evaluate existing emergency call box coverage and identify priority locations for additional blue light installations based on pedestrian activity, trail access, transit connections, and safety needs.
- Coordinate placement with lighting, accessibility, and future corridor improvements to maximize visibility, usability, and coverage.
- Install additional blue light call boxes at strategic locations to enhance user safety and support emergency response throughout the corridor.

PATHWAYS TO A VIBRANT BOULEVARD



CONCEPT NOTES

The Long-Term Concept builds upon the foundation established by the short-term improvements and presents a transformative vision for Northwest Boulevard. While maintaining the core goals of improving safety, accessibility, and connectivity, the concept reimagines the corridor as a multimodal community asset that supports active transportation, placemaking, environmental stewardship, and future growth. It is intended to guide future investments and provide a framework for phased implementation as funding opportunities and corridor improvements are advanced.

The defining feature of the long-term concept is the introduction of a continuous Shared Use Path (SUP) along the corridor. Unlike the bicycle lanes proposed in the short-term concept, the Shared Use Path provides a dedicated facility for pedestrians and bicyclists separated from vehicular traffic by landscaped buffers and enhanced streetscape elements. This approach creates a safer, more comfortable user experience while establishing a critical east-west connection between neighborhoods, community destinations, and future active transportation investments throughout Winston-Salem. The Shared Use Path also strengthens connections to the Long Branch Trail Extension and the broader bicycle and pedestrian network.

Safety remains a cornerstone of the long-term vision. Enhanced crossings, upgraded pedestrian signals, ADA-compliant curb ramps, curb extensions, and other pedestrian-focused improvements are incorporated throughout the corridor to improve visibility, accessibility, and user comfort. Together, these enhancements reduce conflicts between transportation modes and provide safer, more intuitive access to transit stops, businesses, community services, and surrounding neighborhoods.

Beyond mobility, the long-term concept expands opportunities for placemaking and corridor identity. Landscaped buffers associated with the Shared Use Path create space for street trees, native plantings, green infrastructure, and stormwater management features that improve both the appearance and environmental performance of the corridor. Utility consolidation, pedestrian-scale lighting, public art, trail-oriented amenities, and gateway features can further reinforce a unique sense of place while celebrating the corridor's connection to the Long Branch Trail and surrounding community.

The long-term concept is envisioned as an ultimate build-out strategy that can be implemented incrementally over time. While it requires greater investment and coordination than the short-term improvements, it provides a clear roadmap for transforming Northwest Boulevard into a safer, more connected, and more attractive multimodal corridor that serves residents, businesses, institutions, and trail users for years to come.

LONG TERM NEXT STEPS

Additional Park Connection

- Design and construct a Shared Use Path spur connection linking the corridor to the park's existing trail and pathway network.
- Coordinate alignment, accessibility, and wayfinding improvements to provide a seamless connection between the park, trail system, and surrounding neighborhoods.

Implement Pedestrian Lighting

- Coordinate with Duke Energy and City staff to design and install pedestrian-scale lighting that supports the Shared Use Path and enhances visibility, safety, and comfort for corridor users.
- Identify lighting locations that provide continuous coverage, improve key crossings and activity areas, and complement existing roadway lighting infrastructure.

Drainage and Stormwater

- Complete drainage and stormwater analyses to assess impacts associated with curb relocation, green infrastructure opportunities, and Shared Use Path construction.
- Identify necessary drainage improvements and opportunities to enhance stormwater management, water quality, and corridor resiliency.

Implement Permanent Intersection Design

- Advance design and construction of the ultimate intersection configuration, including reconstructed curb lines, ADA-compliant curb ramps, and integration with the planned Shared Use Path.
- Coordinate final design with NCDOT, utility providers, and corridor improvement projects to ensure compatibility with long-term multimodal goals.

Implement Shared Use Path

- Advance final design and construction of the Shared Use Path to provide a continuous, accessible, and comfortable multimodal connection along the corridor.
- Coordinate implementation with roadway, drainage, utility, lighting, and streetscape improvements to maximize project efficiency and corridor integration.

Utility Consolidation and Relocation Strategy

- Develop a utility relocation and consolidation plan in coordination with Duke Energy, City departments, and other utility providers.
- Identify opportunities to reduce corridor conflicts through pole consolidation, relocation, and optimized utility placement while minimizing impacts to existing service and right-of-way.
- Phase utility improvements to align with future capital projects, reducing construction costs, minimizing disruption, and supporting long-term corridor enhancement goals.

Coordination with Planned Active Transportation Projects

- Coordinate corridor improvements with planned projects such as the Long Branch Trail Extension and other local and regional active transportation initiatives.
- Identify opportunities to leverage funding, align project schedules, and create seamless multimodal connections between trails, neighborhoods, transit, and community destinations.

Passive Parklets and Placemaking Amenities

- Develop plans for passive parklets, seating areas, landscaping, public art, and wayfinding features that enhance the corridor's connection to the Long Branch Trail and surrounding neighborhoods.

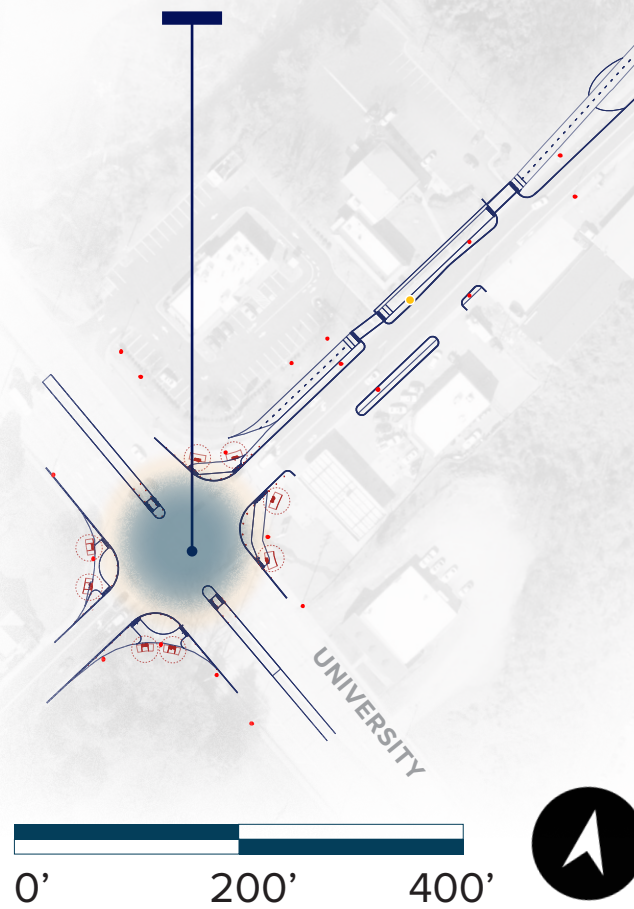
Highway Design Coordination and Evaluation

- Monitor and evaluate future highway, bridge, and corridor improvement projects that may affect Northwest Boulevard, including changes to roadway geometry, operations, access, or multimodal accommodations.
- Coordinate with NCDOT and local stakeholders to identify opportunities to integrate corridor recommendations into planned transportation investments.

CONCEPT OVERLAY

Intersection Improvements

The interim painted curb extensions and channelization define the ultimate intersection geometry while allowing coordination with NCDOT and local review agencies to evaluate operational performance through traffic analysis and vehicle-turning studies. By establishing the proposed curb line in paint, the project can validate turning movements, safety benefits, and multimodal operations before advancing to a permanent hardened curb installation in the long-term build-out.



Shared Use Path Implementation

The short-term concept focuses on targeted sidewalk repairs and ADA curb ramp upgrades to address immediate pedestrian deficiencies while avoiding costly wholesale sidewalk reconstruction that would be superseded by the future Shared Use Path (SUP). This phased approach represents an efficient use of resources by maintaining and improving existing pedestrian infrastructure in the near term while preserving flexibility for the long-term SUP alignment, which will replace adjacent sidewalk segments and provide enhanced separation from traffic, opportunities for roadway lighting placement, and potential stormwater treatment features within the corridor.

Curb Ramp Reconstruction

Targeted ADA curb ramp upgrades included in the near-term concept address deficiencies related to grading, ramp orientation, and detectable warning surface compliance in locations where improvements can be implemented with minimal impacts to existing utilities, drainage infrastructure, and right-of-way constraints. This focused approach improves accessibility and safety in the short term while maximizing cost efficiency and minimizing construction impacts.

Building Today's Improvements around Tomorrow's Vision

The concepts are intended to function as complementary phases of a broader corridor vision rather than competing alternatives. The first focuses on achievable near-term improvements that address immediate needs related to safety, accessibility, and multimodal connectivity, while the second builds upon these investments to realize a more comprehensive transformation of Northwest Boulevard. This phased approach allows the City to deliver meaningful benefits today while maintaining a clear roadmap for future enhancements as funding and redevelopment opportunities emerge.

Implementing early-action improvements with the long-term vision in mind can improve efficiency and reduce future construction costs. Investments such as pedestrian lighting, utility coordination, streetscape enhancements, and crossing improvements should be strategically located to accommodate future shared-use path construction and corridor improvements. By planning each phase as part of a larger system, improvements made today can directly support tomorrow's investments, minimizing disruption and avoiding redundant work.

Alignment with Capital Improvement Projects (CIP) and Repairs

As utility, drainage, and stormwater infrastructure projects are undertaken between the short-term and long-term implementation phases, repairs and replacements should be coordinated with the ultimate corridor concept to ensure future curb lines, drainage structures, and utility infrastructure are compatible with the planned Shared Use Path (SUP) and streetscape improvements. Designing interim infrastructure investments to reflect the long-term alignment reduces redundant construction, minimizes future reconstruction costs, and facilitates more efficient implementation of the ultimate multimodal corridor vision. This approach also creates opportunities to incrementally advance corridor enhancements through the incorporation of green infrastructure practices, strategic lighting placement, and native vegetation plantings, establishing a foundation for the long-term character, sustainability, and functionality of the corridor while delivering interim environmental and aesthetic benefits.

Lighting

Pedestrian lighting and supplemental roadway lighting improvements should be strategically phased to support both near-term and long-term corridor objectives, ensuring that lighting infrastructure installed in the short term does not require relocation or reconstruction as future improvements are implemented. Near-term lighting investments should prioritize installations on existing poles and at locations where pole placements are anticipated to remain unchanged under the ultimate corridor configuration, providing immediate safety and visibility benefits while maximizing cost efficiency. Additional lighting can be phased in as part of the long-term plan as the Shared Use Path, roadway, and streetscape improvements are constructed, with any lighting associated with poles requiring relocation, consolidation, or adjustment deferred until those infrastructure modifications occur. This approach minimizes redundant construction and coordinates lighting with future utility and roadway improvements.

Long Branch Trail Connection

The long-term implementation of the Shared Use Path (SUP) will build upon the existing Long Branch Trail trailhead by extending a continuous, accessible, and comfortable multimodal connection along the corridor. By expanding the trail network beyond the existing terminus, the SUP will improve east-west connectivity for pedestrians and bicyclists, enhance access to adjacent destinations, and create a more cohesive transportation system that supports both recreational and everyday travel. The long term concept also presents an opportunity to incorporate placemaking elements that celebrate the corridor's connection to the Long Branch Trail, including gateway features, seating areas, public art, landscaping, wayfinding, and other community amenities that enhance the user experience. These improvements can create a recognizable neighborhood destination that serves both local residents and trail users, fostering community identity, encouraging active transportation, and strengthening the corridor's role as a multimodal and social space.

Utility Consolidation and Coordination

By focusing near-term investments on locations with the greatest safety and operational constraints, the project delivers immediate benefits to pedestrians while avoiding costly utility relocations that may be better coordinated with future corridor improvements. More substantial utility consolidation, pole relocation, and associated infrastructure modifications can be evaluated and implemented as part of the long-term plan, allowing these efforts to be integrated with larger-scale roadway, drainage, and multimodal enhancements for greater overall cost efficiency and reduced construction disruption.

4 DESIGN GUIDELINES

A GUIDE FOR FUTURE IMPROVEMENTS

The design guidelines establish a framework for implementing future improvements along the Northwest Boulevard corridor in a consistent, coordinated, and context-sensitive manner. They translate the study's goals, public input, existing conditions analysis, and conceptual recommendations into a set of principles that can guide planning, design, maintenance, and capital investment decisions over time.

Rather than prescribing a single design solution, the guidelines provide flexible direction for how transportation, accessibility, streetscape, utility, lighting, drainage, and placemaking improvements should be integrated as opportunities arise. The guidelines are intended to support both short-term and long-term implementation by helping ensure that individual projects contribute to a cohesive corridor vision, improve safety and functionality for all users, and maximize the value of future public investments.

As projects advance, these guidelines should be used in coordination with applicable City of Winston-Salem, NCDOT, ADA, and active transportation design standards to create a safer, more connected, and more attractive multimodal corridor.

READING THE CORRIDOR'S EXISTING IDENTITY

The Northwest Boulevard corridor is defined by a variety of existing architectural, landscape, infrastructure, and streetscape elements that contribute to its unique character and sense of place. These features reflect the corridor's history, development patterns, and community identity, while influencing how residents, businesses, and visitors experience the area today.

Understanding and building upon this existing context is an important component of future corridor improvements. Existing materials, landmarks, natural features, and community assets can help inform design decisions, reinforce local character, and create a more cohesive corridor experience. By celebrating and incorporating these defining elements, future investments can enhance functionality and safety while preserving the qualities that make Northwest Boulevard distinctive.



BRICK & PATTERN



WALLS



FENCES



FACADES



STONE

UTILITY + LIGHTING



EXISTING CONDITIONS AND NEED

Lighting along Northwest Boulevard is limited and inconsistent, particularly near the railroad bridge and key pedestrian areas. Reduced visibility can make it more difficult for drivers to identify pedestrians and bicyclists, while also decreasing comfort and perceived safety for corridor users during nighttime hours.

PROPOSED LIGHTING IMPROVEMENTS

Proposed improvements include adding roadway lighting to existing utility poles where feasible and installing supplemental pedestrian-scale lighting at crossings, transit stops, and future Shared Use Path facilities. These enhancements will improve visibility, increase safety for all modes, and create a more comfortable and inviting corridor while supporting the long-term streetscape vision.



Open Traditional LED @ Pole Style A

PEDESTRIAN LIGHTING

- Open Traditional LED by Duke Energy
- 12 foot tall option mounted on Pole Style A (Duke Energy) for pedestrian lighting applications.
- Victorian-style fixture with energy efficient LED luminaire.
- Shielding to limit unwanted uplight into neighboring residences at night.
- 4,000K color temperature.
- 4,330 Lumens of light output (70 watts).

- Existing Light Pole
- Proposed Pedestrian Light
- Proposed Fixture on Existing Utility Pole

STREET TREES + PLANTING

0' 200' 400'



UNDERWOOD AVE

OAK ST

DERRY ST

TRADE ST NW

N MAIN ST

N CHESTNUT ST

PATTERSON AVE

IVY AVE

52

N LIBERTY ST

SMALL TREES

CANOPY TREES



Appalachian Red
Eastern Redbud



Snow Goose Japanese
Flowering Cherry



Golden Globe Ginkgo



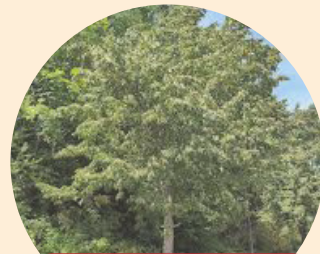
Spirit Fringetree



Natchez Crape Myrtle



Lacebark Elm



Littleleaf Linden



Black Gum



White Oak



Willow Oak



Acorus gramineus
'Oborozuki'



Acorus gramineus
'Ogon'



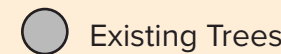
Carex cherokeensis



Carex divulsa



Carex rosea



Existing Trees



Proposed Canopy Trees



Proposed Understory Trees



Proposed Bioretention / Buffer

GROUND COVER



STORMWATER TREATMENT

Bioretention facilities should be incorporated feasible to capture and treat stormwater runoff adjacent roadways and paved surfaces. These landscaped areas can help reduce runoff volumes, improve water quality, support vegetation, and provide additional visual buffering within the corridor. When integrated with streetscape and Shared Use improvements, bioretention features can environmental performance while contributing to character, sustainability, and long-term resilience.

EXISTING CONDITIONS AND NEED

The Northwest Boulevard corridor contains a mix of mature trees, scattered vegetation, and natural landscape features that contribute to its character and should be preserved where feasible. However, streetscape planting is generally limited and inconsistent, with few landscaped buffers between users and the roadway. Existing vegetation includes invasive species in some areas, and opportunities exist to introduce more native plantings that enhance corridor aesthetics, support local habitat, and improve environmental performance.

PROPOSED LANDSCAPE IMPROVEMENTS

Landscape improvements should incorporate a mix of canopy trees, understory trees, and shrub plantings to create a more attractive, comfortable, and cohesive corridor environment. Plantings should be designed to maintain clear sight lines at intersections, crossings, and driveways while respecting setback requirements from roadways, utilities, and other infrastructure. In addition to strengthening corridor identity and providing seasonal interest, enhanced landscaping can offer shade, reduce urban heat impacts, improve air quality, support pollinators and native wildlife, and provide opportunities for stormwater treatment through integrated green infrastructure practices.

PLACEMAKING ELEMENTS



A PLACE FOR PEOPLE

A successful streetscape is more than a functional corridor, it is an experience that reflects the identity and aspirations of the community. By weaving cultural, historical, and aesthetic elements into the design, the corridor becomes a destination rather than just a passageway. Creating a sense of place fosters pride, encourages social interaction, and strengthens the connection between residents and their environment.

A LINEAR PARK ALONG SHARED USE PATH

- Create a cohesive corridor identity through consistent planting palettes, durable paving materials, and repeated design elements that reinforce wayfinding, visual continuity, and a recognizable sense of place along the shared-use path.
- Incorporate passive amenities such as benches, shade, and small gathering nodes that provide opportunities for rest and trail use while discouraging large congregations, maintaining visibility, and supporting a safe, welcoming community destination.

B POCKET PARKLET AND PLACEMAKING NODES

- Use landscaping, fencing, public art, seating, and other streetscape elements to create a rhythm of small-scale destinations that reinforce corridor identity, provide visual interest, and encourage passive use while maintaining visibility and discouraging unauthorized parking, prolonged loitering, and underutilized spaces.

C GATEWAY + PLACEMAKING NODES

- Celebrate corridor landmarks and unique features, such as the railroad overpass, through murals, public art, architectural lighting, and coordinated planting that frames views, creates memorable gateway experiences, and reinforces a distinct sense of place along the corridor.

D E LANDSCAPE ENHANCEMENTS

- Utilize available right-of-way and landscape buffers to introduce native plantings that frame pedestrian spaces, soften the corridor edge, and strengthen corridor identity. Incorporate public art and utility pole enhancements where appropriate to transform dominant infrastructure into placemaking features.

F CORRIDOR DESTINATIONS

- Enhance key destinations, such as the future Long Branch Trail trailhead and major corridor connections, with distinctive paving, landscaping, bicycle parking, seating, wayfinding, public art, and other streetscape elements that create recognizable places and celebrate points of arrival, gathering, and connection.

STREETSCAPE ELEMENTS

Streetscape elements and site furnishings play an important role in shaping the character, comfort, and functionality of the Northwest Boulevard corridor. Establishing consistent design guidelines for features such as benches, lighting, bicycle racks, trash receptacles, fencing, wayfinding, and other amenities helps create a cohesive identity while improving long-term maintenance and operations.

Standardized materials, furnishings, and design details can simplify procurement, reduce maintenance costs, and ensure future improvements contribute to a unified corridor vision. As enhancements are implemented over time, these guidelines provide a framework for integrating new amenities and streetscape investments in a manner that is durable, recognizable, and supportive of the corridor's evolving character.

PAVING + HARDSCAPE

Special paving can be used to highlight key destinations, crossings, plazas, and gathering areas while reinforcing corridor identity and improving wayfinding. Drawing inspiration from Winston-Salem's heritage of hand-formed brick, complementary paving materials and patterns can be incorporated to celebrate local character and visually distinguish important pedestrian spaces and activity nodes.

SEATING

Alternative seating elements can provide opportunities for rest and social interaction while discouraging long-term occupancy. Features such as seat walls, leaning rails, seat blocks, planter edges, and integrated landscape seating offer durable, flexible accommodations that support corridor users while maintaining visibility, accessibility, and ease of maintenance.

ART INSTALLATIONS

Functional art installations can enhance corridor identity while providing practical benefits for users. Sculptural elements that incorporate seating, bicycle parking, wayfinding, lighting, screening, or gateway features create memorable destinations and strengthen the public realm while serving everyday transportation and community needs.

FENCE + EDGE TREATMENTS

Fencing and edge treatments can help define spaces, establish boundaries, and enhance the visual character of the corridor. Decorative fencing, railings, landscape barriers, and similar elements should be selected to complement corridor aesthetics, improve safety, guide pedestrian movement, and create a more cohesive and well-defined public realm.

BICYCLE PARKING AND SUPPORT AMENITIES

Bicycle parking and related amenities should be integrated throughout the corridor to support its multimodal function and encourage bicycle use as a viable transportation option. Bicycle racks, repair stations, wayfinding, and other cyclist-supportive elements should be located at key destinations, trail connections, transit stops, and activity areas to improve convenience, accessibility, and the overall user experience.

MURALS + GRAPHIC ELEMENTS

Murals, graphic elements, and corridor branding can celebrate local history, culture, and community identity while creating a more engaging corridor experience. These features may be incorporated on bridges, retaining walls, utility infrastructure, and buildings, or through flexible elements such as banners, signage, and seasonal displays that can evolve over time and reinforce a recognizable corridor identity.

PUBLIC ART + COMMUNITY IDENTITY

APPLICATION

- * Functional / Sculptural
- Ground plane Mural
- ... Gateway Mural

PUBLIC ART OPPORTUNITIES

Public art can serve as a unifying element throughout the corridor, creating a distinct identity while celebrating local history, culture, and community character. In partnership with the Winston-Salem/Forsyth County Public Art Commission and other community organizations, future initiatives may include murals, sculptural installations, artist-designed infrastructure, and interactive features integrated into key destinations and public spaces.

Art investments should be coordinated as part of a corridor-wide strategy to create a cohesive visual experience, establish memorable landmarks, and reinforce Northwest Boulevard as a unique community and multimodal corridor.



MAINTAINING MOMENTUM

The Northwest Boulevard Feasibility Study establishes a clear vision for transforming the corridor into a safer, more connected, and more attractive multimodal transportation corridor. Through existing conditions analysis, stakeholder engagement, public input, and conceptual planning, the study identifies a series of phased improvements that respond to current challenges while positioning the corridor for long-term success.

The recommendations presented throughout this study are intended to serve as a framework for future decision-making rather than a single implementation project. Together, the short-term and long-term concepts provide a roadmap for advancing safety, accessibility, mobility, placemaking, and environmental improvements through a coordinated and strategic approach. While individual projects may be implemented independently, each investment should support the broader corridor vision and contribute to a cohesive and connected user experience.

Implementation of the recommendations identified in this study is expected to produce measurable improvements in safety, accessibility, mobility, corridor character, and overall user experience. As projects advance, the following outcomes are anticipated.

SHORT-TERM CONCEPT OUTCOMES

- Improved pedestrian safety and ADA accessibility through targeted curb ramp, crossing, sidewalk, and lighting upgrades.
- Enhanced bicycle connectivity through corridor-wide signing, striping, and bicycle facility improvements.
- Reduced conflict points and improved intersection operations through traffic analysis, signal optimization, and interim intersection reconfiguration.
- Enhanced access to transit stops, businesses, institutions, and neighborhoods through targeted multimodal improvements.
- Establishment of a foundation for future capital investments by validating proposed intersection geometry, corridor operations, and multimodal design concepts.

LONG-TERM CONCEPT OUTCOMES

- Creation of a continuous Shared Use Path providing a safe and comfortable east-west connection for pedestrians and bicyclists.
- Expanded connectivity to the Long Branch Trail Extension, parks, neighborhoods, destinations, and regional active transportation networks.

- Improved corridor safety through permanent intersection reconstruction, upgraded crossings, and enhanced multimodal facilities.
- Strengthened corridor identity through placemaking, public art, trail-oriented amenities, landscaping, and gateway features.
- Enhanced environmental performance through green infrastructure, native landscaping, stormwater management, and urban tree canopy improvements.
- Reduced utility conflicts and improved streetscape quality through coordinated utility relocation and consolidation efforts.
- Increased recreational opportunities and community gathering spaces through linear park features, pocket parklets, trailhead enhancements, and destination nodes.

LONG-TERM COMMUNITY BENEFITS

- A safer and more accessible corridor for users of all ages and abilities.
- Improved multimodal mobility and transportation choice.
- Greater connectivity between neighborhoods, destinations, parks, trails, and transit services.
- Enhanced community identity and sense of place.
- Increased corridor attractiveness for residents, institutions, businesses, and visitors.
- A coordinated framework for future investment, maintenance, and implementation that supports the long-term vision for Northwest Boulevard.

Moving forward, the City should prioritize implementation efforts based on available funding, project readiness, maintenance needs, partnership opportunities, and coordination with planned utility, roadway, drainage, and active transportation projects. Continued collaboration with NCDOT, Duke Energy, community stakeholders, institutional partners, and adjacent property owners will be important to successfully advancing corridor improvements and maximizing available resources.

The following section outlines potential funding opportunities and identifies key planning, design, implementation, and maintenance considerations that can help guide future investments. By aligning future projects with the recommendations contained in this study, the City can incrementally advance improvements that enhance safety, strengthen neighborhood and trail connections, reinforce corridor identity, and support the long-term vision for Northwest Boulevard.

FUNDING AND IMPLEMENTATION OPPORTUNITIES

Implementation of the Northwest Boulevard corridor vision will require a coordinated and phased funding strategy that aligns transportation, placemaking, utility, environmental, and community development investments. Because the proposed improvements address a broad range of public benefits—including safety, multimodal mobility, accessibility, trail connectivity, streetscape enhancements, public art, green infrastructure, and environmental stewardship—the project is well-positioned to pursue multiple funding sources and partnership opportunities.

Many improvements can be advanced incrementally through routine maintenance programs, capital improvement projects, and utility initiatives, while larger corridor enhancements may be implemented through competitive grant programs and public-private partnerships. Coordinating future investments with regional transportation initiatives, utility projects, and adjacent development activity can further improve implementation efficiency and leverage available funding resources.

COMPETITIVE GRANT OPPORTUNITIES

BETTER UTILIZING INVESTMENTS TO LEVERAGE DEVELOPMENT (BUILD)

- **Eligible Improvements:** Shared Use Path, streetscape enhancements, crossings, safety improvements, utility coordination, multimodal corridor projects.
- **Funding Available:** Approximately \$1.5 billion available nationally in FY 2026. Awards typically range from \$1 million to over \$25 million depending on project type and scale.
- **Match Requirements:** 20%, some rural and disadvantaged communities may qualify for higher federal participation.
- **Application Cycle:** Annual competitive application process, typically released in winter with applications due in late winter or early spring.
- **Considerations:** Highly competitive national grant program with a complex application process requiring significant technical documentation, benefit-cost analysis, project readiness, stakeholder support, and demonstrated regional or national significance. Projects that advance multimodal transportation, safety, community connectivity, economic development, and long-term implementation readiness tend to be more competitive.

NORTH CAROLINA PARKS AND RECREATION TRUST FUND (PARTF)

- **Eligible Improvements:** Trails, trailheads, linear parks, passive recreation areas, park connections, and placemaking amenities.
- **Funding Available:** Maximum grant award of \$500,000 per project.
- **Match Requirements:** Dollar-for-dollar (50%) local match required.
- **Application Cycle:** Applications are typically due annually in the spring.
- **Considerations:** Well suited for trail, trailhead, linear park, placemaking, and recreation-oriented improvements, but requires a clear public recreation benefit and a dollar-for-dollar local match. Projects are evaluated competitively based on recreation value, public access, community need, site readiness, and long-term maintenance commitments, making strong project justification and local support important to securing funding.

FUNDING THROUGH THE METROPOLITAN PLANNING ORGANIZATION

The Winston-Salem Area Transportation Planning Organization (WSATPO) administers several federal transportation funding programs that can support implementation of multimodal, safety, and corridor improvement projects. Approximately \$10–12 million annually is distributed through a competitive project selection process across multiple funding categories.

TRANSPORTATION ALTERNATIVES PROGRAM (TAP)

- **Eligible Improvements:** Sidewalks, Shared Use Paths, bicycle facilities, pedestrian crossings, Safe Routes to School projects, streetscape improvements, and trail connections.
- **Considerations:** Well suited for bicycle and pedestrian improvements identified in this study. Projects should demonstrate connectivity benefits, safety improvements, ADA compliance, and consistency with adopted local and regional plans.

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)

- **Eligible Improvements:** Roadway improvements, Complete Streets projects, intersection upgrades, bicycle and pedestrian facilities, transit-supportive infrastructure, and corridor modernization efforts.
- **Considerations:** Provides flexibility to fund a wide range of transportation projects and can often be paired with other funding sources. Projects that address regional mobility, safety, and transportation system performance are generally competitive

CONGESTION MITIGATION AND AIR QUALITY PROGRAM (CMAQ)

- **Eligible Improvements:** Bicycle and pedestrian infrastructure, transit enhancements, traffic operations improvements, signal optimization, and projects that reduce vehicle trips and emissions.
- **Considerations:** Best suited for projects that demonstrate air quality benefits, mode shift opportunities, congestion reduction, or increased use of active transportation and transit. Multimodal projects with measurable reductions in vehicle reliance are typically the strongest candidates.

FUNDING THROUGH NCDOT'S PRIORITIZATION PROCESS

In addition to MPO-administered funding, a variety of state and federal transportation programs provide opportunities to advance corridor improvements through the North Carolina Department of Transportation (NCDOT) and the State Transportation Improvement Program (STIP). These programs collectively distribute billions of dollars statewide to support projects that improve safety, mobility, accessibility, freight movement, bicycle and pedestrian connectivity, and overall transportation system performance. The Northwest Boulevard corridor may be eligible for several of these funding sources as projects advance from planning into design and implementation.

STATE AND FEDERAL FUNDING is allocated through the NCDOT prioritization process and the State Transportation Improvement Program (STIP), which guides transportation investments over a ten-year period.

Relevant funding programs may include the:

- **Surface Transportation Block Grant (STBG),**
- **Transportation Alternatives Program (TAP),**
- **Highway Safety Improvement Program (HSIP),** and
- Other state and federal transportation funding opportunities.

Considerations: Funding is highly competitive and generally requires demonstrated transportation benefits, alignment with local and regional plans, technical analysis, stakeholder support, and inclusion within NCDOT and regional transportation planning processes. Early project development and coordination can improve competitiveness and position projects for future funding opportunities.

ADDITIONAL FUNDING OPTIONS

FEDERAL TRANSPORTATION PROGRAMS

- **RAISE (Rebuilding American Infrastructure with Sustainability and Equity)**
 - Multimodal transportation, safety, placemaking, and community connectivity projects.
- **Transportation Alternatives Set-Aside (TASA)**
 - Sidewalks, shared use paths, bicycle facilities, crossings, streetscape improvements, and active transportation infrastructure.
- **Congestion Mitigation and Air Quality (CMAQ)**
 - Bicycle and pedestrian improvements that reduce vehicle trips and emissions.
- **Highway Safety Improvement Program (HSIP)**
 - Safety-focused roadway, crossing, lighting, and operational improvements.

STATE TRANSPORTATION PROGRAMS

- **NCDOT Integrated Mobility Division**
- **Strategic Transportation Investments (STI) Program**
- **Safe Routes to School Programs**
- **Division-level transportation and safety funding opportunities**

PARKS, TRAILS, AND ENVIRONMENTAL FUNDING

- **North Carolina Parks and Recreation Trust Fund (PARTF)**
- **North Carolina Land and Water Fund**
- **Recreational Trails Program (RTP)**
- **Urban and Community Forestry Grants**
- **Environmental and watershed improvement programs**

STREETSCAPE, PLACEMAKING, AND PUBLIC ART FUNDING

- **National Endowment for the Arts (NEA)**
- **Winston-Salem/Forsyth County Public Art Commission partnerships**
- **Community development and placemaking grants**
- **Private foundations supporting active transportation, public space, and community enhancement projects**
- **Utility and Partnership Opportunities**
- **Duke Energy Foundation Grants**
- **Utility cost-sharing opportunities associated with lighting, pole consolidation, and infrastructure upgrades.**
- **Partnerships with adjacent institutions, businesses, and property owners.**

LOCAL FUNDING SOURCES

- **City Capital Improvement Program (CIP)**
- **Bond funding initiatives**
- **Public-private partnerships**
- **Neighborhood investment programs**
- **Economic development and redevelopment funding opportunities**

FUNDING STRATEGY

Because Northwest Boulevard combines transportation, safety, active transportation, placemaking, environmental, and trail-related improvements, a phased funding strategy is recommended. Near-term improvements such as striping, crossings, lighting, ADA upgrades, and safety enhancements may be well suited to TAP, HSIP, and City capital funding, while larger investments such as the Shared Use Path, streetscape enhancements, trailhead improvements, and corridor reconstruction may be competitive for BUILD, PARTF, and other state and federal grant programs. Coordinating implementation with utility, drainage, roadway resurfacing, and trail extension projects can further improve funding competitiveness and implementation efficiency.

Final Plan Submission Pending Council Review

