WASHINGTON AVENUE CORRIDOR STUDY

November 2025



Houston-Galveston Area Council

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Executive Summary

Washington Avenue has a variable right-of-way that serves commercial and residential uses well. Traffic patterns on Washington Avenue show that the corridor does not display the typical “commuter” pattern; instead, traffic volumes are higher in the “inbound” direction at all hours of the day. Traffic modeling further reveals that vehicular operations are generally good along the Washington Avenue corridor, although congestion was observed in a few locations during the peak hours. Many people walk and bike across Washington Avenue to get between the nearby Bayou Greenways.

This can be challenging because of the limited opportunities for safe crossing along the corridor due to the scarcity of signalized intersections and crosswalks. Over the past five years, just over 1,000 crashes have occurred along the study area corridor. More than 350 people have been injured in these crashes—including 19 seriously—and one person has been killed. Speeding and failure to maintain a lane or changing a lane unsafely were top overall contributing factors.

A deeper analysis reveals several intersection crash hotspots as well as a 7-block segment of particular concern: Washington Ave between TC Jester Blvd and Durham Dr sees a highly disproportionate share of overall crashes, late-night crashes, pedestrian crashes, and serious injury crashes. The peak hour overall for crashes along the entire corridor is 2:00-3:00am, with many of these late-night crashes concentrated on the segment between TC Jester and Durham. Finally, the crash data shows pedestrians in particular danger on the corridor.

While just 2% of all crashes involved a pedestrian, pedestrians represented 26% of all serious injury crash victims. A pedestrian is 28 times more likely to be seriously injured compared to all people involved in a crash within the study area.











Public feedback was conclusive around the vision and goals for the Washington Avenue Corridor.

Existing conditions research formed the foundation for the Washington Avenue Corridor Study.

- Washington Avenue has been one of Houston's main streets for almost 200 years.
- Washington Avenue is a bustling commercial corridor that both serves the immediate neighborhood and draws people from around the region.
- There is a lot of parking along Washington Avenue, but it can be confusing to use and most is privately owned.
- In the last 12 years, 5,550 housing units have been added within a few blocks of Washington Avenue.
- Washington Avenue is on a ridge between watersheds, and it's a crucial connection during flood events.
- Washington is lined with mixed use buildings built up to the street.
- METRO Rt 85 moves people far beyond Washington Avenue.
- Washington Avenue is an important east-west traffic route for a series of neighborhoods.
- Washington Avenue's sidewalks are narrow and uncomfortable.
- There is no east-west bike connection through the neighborhood.
- Traffic patterns on Washington Avenue show that it is used more as a local connector than a commuter corridor.
- Crossing Washington Avenue is very challenging, especially when you are not at a signalized intersection.
- The right-of-way (ROW) is limited along parts of Washington Avenue.
- Crash data reveal several dangerous hotspots on Washington Avenue, with pedestrians significantly more vulnerable to serious injury.
- Center Street parallels Washington Avenue for the majority of its length and provides signalized crossings at most primary north/south streets. However, while Washington Ave has more traffic and crashes, Center Street still has some concerning safety patterns.
- There are many existing policies and previous studies that make recommendations for Washington Avenue.

The Washington Avenue Corridor Study began in December 2023 and has had continual engagement with the Steering Committee as well as multiple presentations at Superneighborhood 22 meetings, other area Civic Club meetings, a neighborhood focus group meeting, and four in-depth rounds of public engagement.

The preliminary round of community engagement for the Washington Avenue Corridor Study was rooted in teaching people what the project team had learned about the corridor and learning from locals about their needs and desires for the main street in their neighborhood. The information collected during that first round of input (summarized on this page), along with the project team's research of the existing conditions of the corridor, formed the Washington Avenue Corridor Study's vision and goals.

- The corridor feels unsafe regardless of how people travel.
- Important connections to ped/bike trails, transit, and major destinations are missing.
- Most buildings lack a strong relationship to the street and places to sit and eat outside.
- People want to feel safe.
- People imagine pleasant outdoor common areas.
- People want transportation options.
- People want to see a thriving, sustainable, livable Washington Corridor.

VISION

The Washington Avenue Corridor is a thriving, sustainable, livable neighborhood.

GOALS

because it....

- **Works effectively.**
- **Is safe for all users.**
- **Connects into a network.**
- **Is a great place with happy residents and prosperous businesses.**

The seven alternatives presented a spectrum of spatial tradeoffs.

A critical part of the Washington Avenue Corridor Study process was creating multiple alternative designs for the corridor to evaluate and present to the public for feedback. The creation of the alternatives began with the process of understanding the current condition of the corridor area and learning what the public desired for the future of the corridor.

Prior to the presentation of the seven final alternatives, the project team hosted a Neighborhood Focus Group with the help of Superneighborhood 22 to look at the major segments of the corridor and to see what types of designs people preferred for each one. This allowed people to give input on very local and specific conditions prior to the project team creating corridor wide design alternatives. At this meeting, it was also discussed what should be included in the baseline for all alternatives.



Neighborhood Focus Group Meeting



Neighborhood Focus Group Meeting

Alternative A: Two wide vehicular lanes each direction with turn lanes

This alternative makes the lanes 12 feet all along Washington, widening it in some places. This creates an environment with limited space for greenery like trees and plantings next to accessible sidewalks. In this alternative, painted sharrows are added to Center Street.

Alternative B: Two vehicular lanes each direction with a median and turn lanes

This alternative has vehicular lanes that are 11' on the curb and 10' in the center. It includes turn lanes at major intersections and medians with trees elsewhere. It adds accessible sidewalks and street trees.

Alternative C: One vehicular lane and one bus-only lane with right turns

This alternative has one vehicular lane and one travel lane for buses only in each direction, creating more reliable and on-time transit. Vehicles use the bus-only lane for right turns at major intersections.

Alternative D: One vehicular lane with a right turn lane and wide sidewalks

This alternative has one vehicular lane in each direction shared with buses, with right turn lanes at major intersections. The additional space is allocated to a large pedestrian realm with room for large street trees, outdoor dining, and public space.

Alternative E: One vehicular lane and off-street bike lanes on Washington

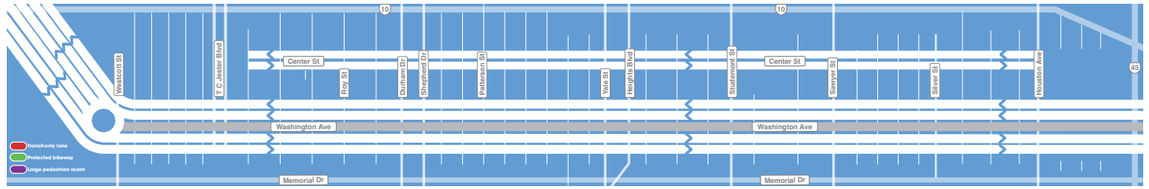
This alternative has one vehicular lane in each direction that is shared with buses. The additional space is allocated to an off-street bike path behind the curb at sidewalk level and street trees.

Alternative F: One vehicular lane plus center-running transit Downtown to Heights Blvd

This alternative has one vehicular lane in each direction with center-running light rail or bus rapid transit east of Heights Blvd. West of Heights Blvd, Washington has two vehicle lanes.

Alternative G: One vehicular lane plus center-running transit Downtown to Northwest TC

This alternative has one vehicular lane in each direction with center-running light rail or bus rapid transit. Northwest of the roundabout, there are two vehicle lanes southbound and one northbound with turn lanes and crosswalks.



Alternative A



Alternative B



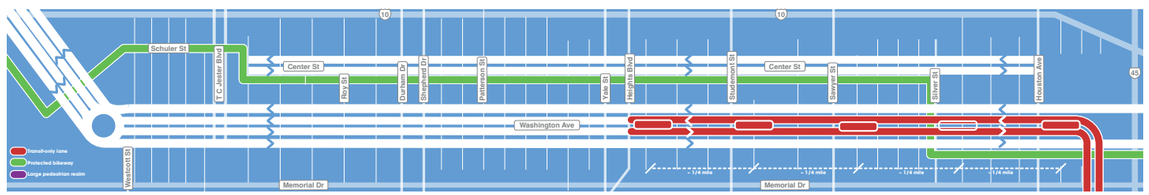
Alternative C



Alternative D



Alternative E



Alternative F

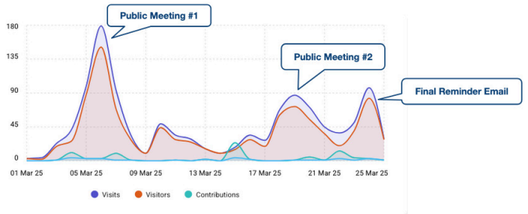


Alternative G

While wide sidewalks were a popular alternative, the public consensus around prioritizing space for transit was clear.

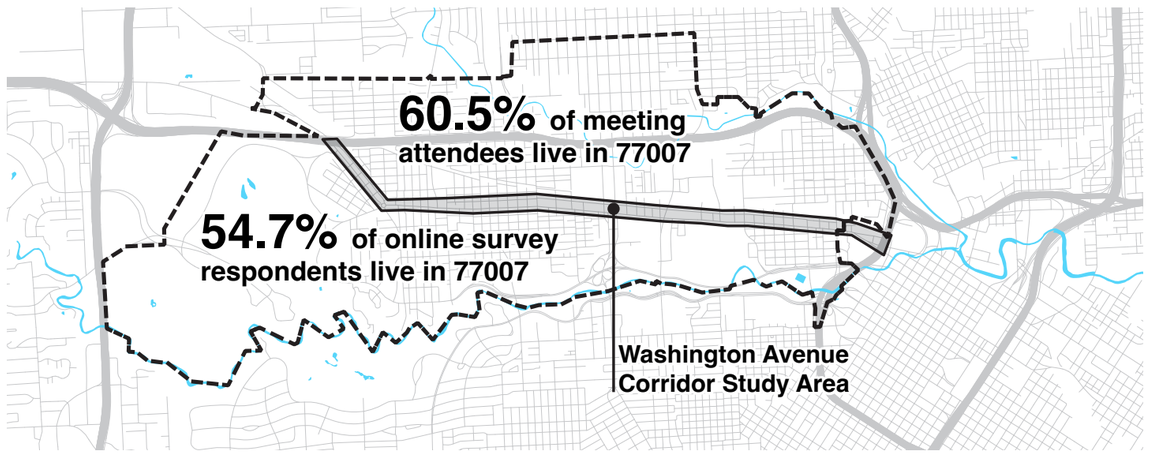
Building on the prior round of engagement and neighborhood focus group meeting, this round of engagement was advertised through the press, through community organizations and civic clubs, and through the steering committee members. Those who live, work, and visit the Washington Corridor were engaged through many methods. Flyers were dropped off at local schools, and Houston Matters, Houston Public Media, and the Houston Landing covered the alternatives engagement.

The design alternatives engagement period included an in-person and a virtual meeting, in addition to attending the SN22 meeting in February 2025 to promote the upcoming meetings. Over 100 people attended the alternatives meetings, and over 200 people completed the survey. During this engagement period, there were over 1000 visits to the project website.



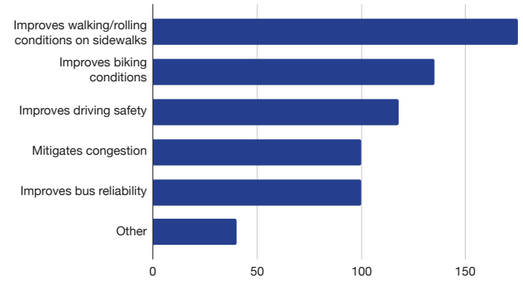
We also reached people on the project website, and we have seen a large amount of traffic during this last engagement period. The red shows unique visitors, whereas purple includes repeat visitors – showing that people are coming back to engage with the material further and interact with the survey.

The majority of public meeting attendees and survey participants live in the Washington Avenue Corridor area.



One of the main questions asked outside of the different alternatives was about which factors were most important to people when choosing their top alternative. Improving walking, rolling, and biking conditions were the most important to people across the board.

Which of these factors was important to you when choosing your top alternative? (check all that apply)

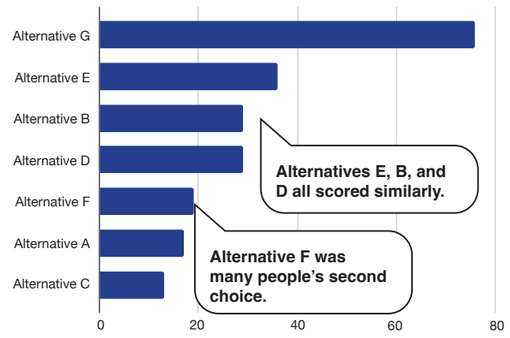


After choosing their top factors, people ranked them from 1-7, allowing the project team to understand not only people's top choice, but also their order of preference for the other choices.

Out of all seven alternatives, including those that were not modeled, participants chose center-running transit 'G' as their top choice.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



"Walkability and safety are most important to me since i live and work in this neighborhood"
- Employer on Washington Avenue

"Slowing down through traffic and improving the pedestrian realm will be beneficial for Washington Ave businesses."
- Resident along Washington Avenue

"Walking and biking along Washington is scary and very dangerous. There is no infrastructure to protect bikers and walkers. This could be a great walkable and bike-able neighborhood (esp being sandwiched between memorial park and buffalo bayou park). We got a taste of it during Covid… please bring it back!"
- Employer on Washington Avenue

In both methods of analyzing the results, wide sidewalks and center-running transit are the most popular options, which align with people's desire for more mobility options along the corridor.

Alternative G also rose to the top in the ranked-choice averages, and Alternatives D and F were ranked highly as well.

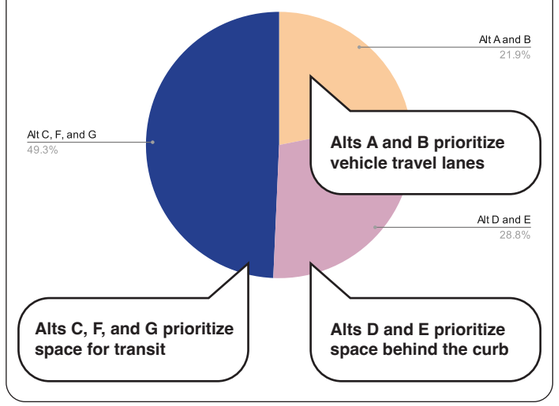
Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Rank	Alternative Design Options	Ranked Choice Averages
#1	Alternative G: One vehicular lane plus center-running transit through I-10	#3.32 average
#2	Alternative D: One vehicular lane with a right turn lane and wide sidewalks	#3.43 average
#3	Alternative F: One vehicular lane plus center-running transit through Heights Blvd	#3.48 average
#4	Alternative C: One vehicular lane and one bus-only lane with right turns	#3.78 average
#5	Alternative E: One vehicular lane and off-street bike lanes on Washington	#3.8 average
#6	Alternative B: Two vehicular lanes each direction with a median and turn lanes	#4.65 average
#7	Alternative A: Two wide vehicular lanes each direction with turn lanes	#5.55 average

While the seven alternatives are unique in their specific design recommendations, the allocation of types of spatial use can be clustered into three groups. These groupings further distill the results of the alternatives engagement based on spatial priority. Alternatives A and B prioritize space for vehicle travel lanes. Alternatives D and E prioritize space between the curb and the property line, and Alternatives C, F, and G prioritize space in the right-of-way for transit.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

#1 Ranked Alternatives by Spatial Allocation



The recommendation for the Washington Avenue Corridor Study includes two parts:

01 Community Preferred Vision:

One vehicular lane in each direction plus center-running transit (bus or rail) connecting to Northwest Transit Center

The Community Preferred Vision has one vehicular lane east of the roundabout with center-running light rail or bus rapid transit. These two modes of transportation have similar footprints and can be planned for as phased options or for final implementation. Northwest of the roundabout, there are two vehicle lanes southbound and one northbound with turn lanes and crosswalks at major intersections.

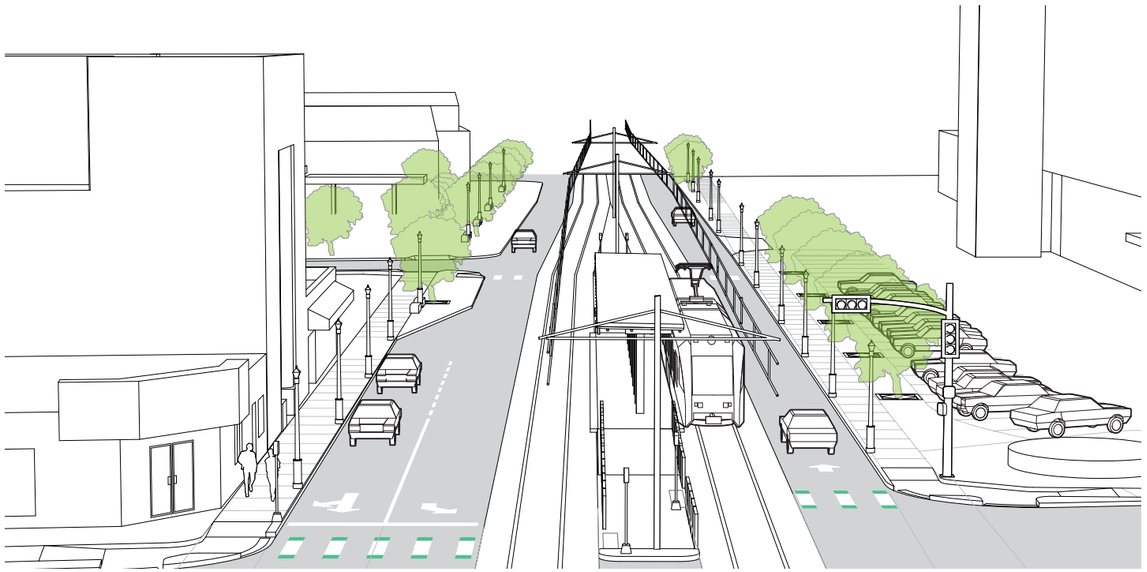
It also includes:

- Accessible sidewalks.

- Repaved car lanes with one lane in each direction on Washington Avenue to the roundabout, two lanes southbound and one lane northbound between the roundabout and Northwest Transit Center.

- Parking management with recommended structured parking.

- More and safer neighborhood bike connections with protected bike lanes on Center Street, Schuler Street, and in the Westcott median, providing connections to Downtown, Buffalo Bayou, White Oak Bayou, and Memorial Park.





02 Baseline Constrained Alternative:

Two vehicular lanes in each direction with a median and turn lanes

The Baseline Constrained Alternative has vehicular lanes very similar to the present condition on Washington. It adds accessible sidewalks and street trees. It includes turn lanes at major intersections and medians with trees elsewhere.

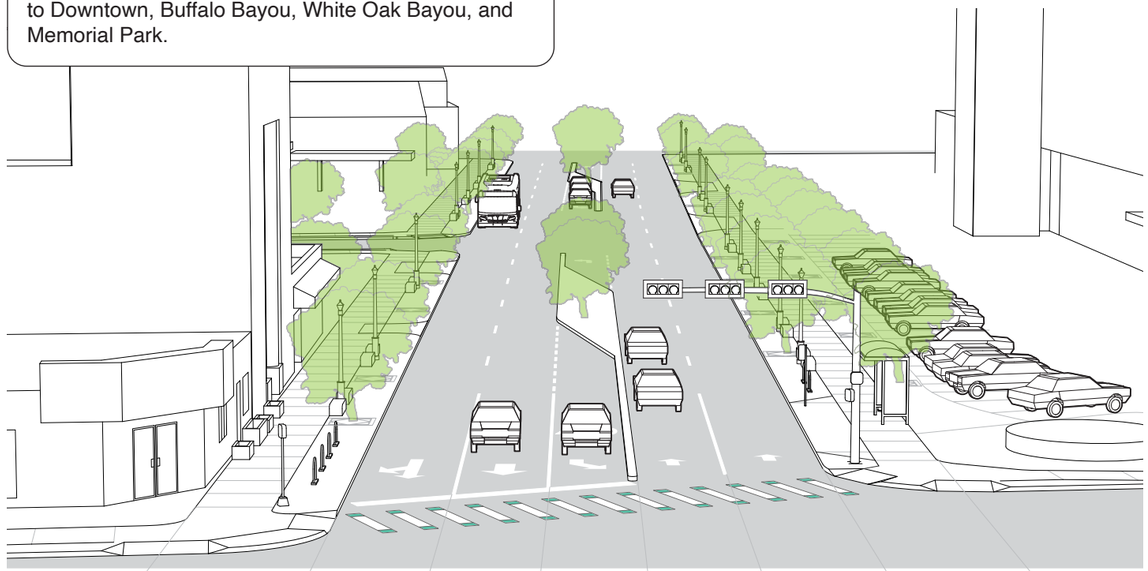
It also includes:

- Accessible sidewalks.

- Parking management with recommended structured parking.

- Frequent transit in mixed traffic.

- More and safer neighborhood bike connections with protected bike lanes on Center Street, Schuler Street, and in the Westcott median, providing connections to Downtown, Buffalo Bayou, White Oak Bayou, and Memorial Park.





These short term improvements require minimal resources and partnerships for implementation.

These improvements allow integration with ongoing efforts under consideration before moving into a full design phase.

01. Pedestrian Crossings

Many areas of Washington Avenue have distances between crossings much greater than the City of Houston's Infrastructure Design Manual specify. To enhance and improve safety, the following short-term improvements should be considered:

- Added signalized intersection at Center St and Durham Dr where traffic on Center St crosses four lanes without a signal.
- Added midblock crossings near METRO stops that are far from signalized intersections.
- Repainting and upgrading existing crossings at signalized intersections.

02. Wayfinding

Install signage that guides both pedestrians and drivers to better navigate the corridor and be more aware of their surroundings, encouraging a more welcoming and user-friendly environment for all users.

- Install visible signage at pedestrian crossings.
- Clearly mark and signalize bus stops.

03. Temporary landscape

Temporary furniture would enhance comfort for pedestrians and encourage outdoor seating for local restaurants and cafes, attracting more foot traffic.

- Can be incorporated throughout the Corridor.
- Place planters with ornamental trees for added shade and planters with shrubs.
- Create gathering areas with small tables, seating and benches.

04. Temporary Bike infrastructure / traffic barriers

Designated bike infrastructure in car-free zones would support the safety of cyclists on the street.

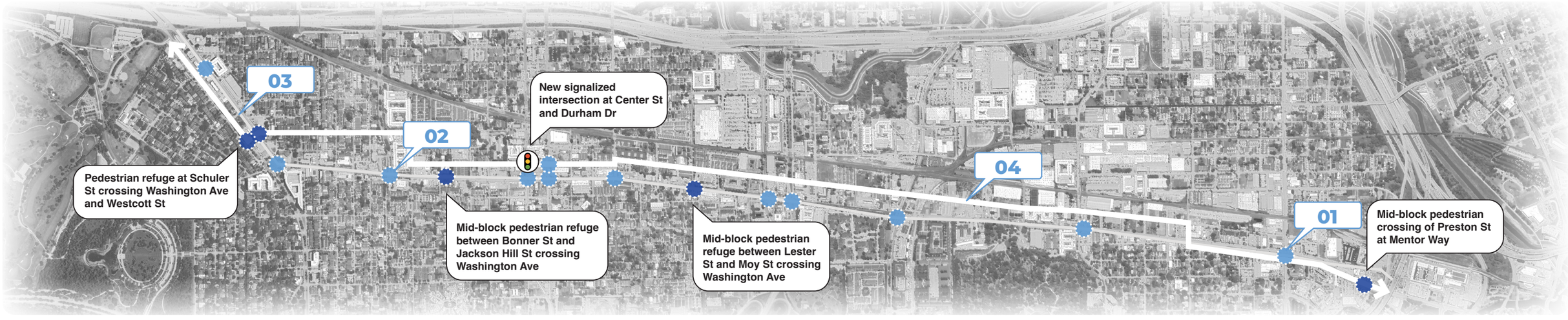
- On Washington Avenue, introduce concrete separators to create dedicated bike infrastructure between downtown and Silver St, and add signage.
- Paint sharrows on Center St from Detering St to Silver St and on Schuler St and add signage
- Install bike racks in key locations.











Upgraded pedestrian conditions at current intersection

Upgraded pedestrian conditions at mid-block location

New signalized intersection

Temporary bike infrastructure/traffic barriers

Implementation costs for each long term and short term recommendation were calcuated using 2025 costs.

Estimated Costs - Long Term Improvements

The estimated costs for both options include updated drainage, buried utilities, and a full street reconstruction with all of the included recommendations within the chosen option. The cost estimation does not include property acquisition. The estimated costs are preliminary and subject to change. They are based on 2025 pricing and the preliminary designs of the projects, both of which may change due to internal and/or external factors.

Community Preferred Vision

The implementation of the Community Preferred Vision is a full reconstruction of the street within the public right-of-way including subsurface elements such as sewer and water and all surface elements. The estimated total cost for the reconstruction of Washington Avenue and Westcott Street between downtown and I-10 include mobilization, demolition of existing pavement, preparing of right of way, and excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing. It does not include vehicle acquisition.

Total Estimated Cost for Community Preferred Vision including light rail: $442,335,300

Baseline Constrained Alternative

The implementation of the Baseline Constrained Alternative is a full reconstruction of the street within the public right-of-way including subsurface elements such as sewer and water and all surface elements. The total costs for the reconstruction of Washington Avenue and Westcott Street between downtown and I-10 include mobilization, demolition of existing pavement, preparing of right of way, excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing.

Total Estimated Cost for Baseline Constrained Alternative: $147,872,900

Center Street

The implementation of recommendations for Center Street can be independent of Washington Avenue and Westcott Street implementation. The total estimated cost for Center Street reconstruction include mobilization, demolition of existing pavement, preparing of right-of-way, excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing. As shown in the drawing below, the cost estimation for Center Street only includes the portions of the bike infrastructure and street reconstruction on Center Street itself, not the complementary infrastructure on Silver St, Detering St, or Schuler St.

Total Estimated Cost for Center Street: $39,035,800

Estimated Costs - Short Term Improvements

These short-term improvements are intended to enhance both the pedestrian and vehicular experience and act as quick wins that demonstrate commitment to the project's goals. They represent measures that can be implemented early in the process with minimal investment, supporting ongoing efforts.

The cost estimates below are preliminary and may change depending on market conditions and additional design development required to determine accurate values.

Pedestrian Crossings

Three different pedestrian crossing scenarios were analyzed, with estimated costs summarized as follows:

1. Upgrade of Existing Crossing: Includes restriping of crosswalks and reconstruction of ramps.

Total estimated cost per intersection: $13,200

2. Mid-Block Crossing: Includes crosswalk striping, construction of median curbs, soil preparation, installation of shade trees, and ramps.

Total estimated cost per crossing: $23,575

3. New Pedestrian Crossing: Includes installation of a pedestrian hybrid beacon, crosswalk striping, and ramps.

Total estimated cost per crossing: $163,200

Wayfinding

The wayfinding cost estimate is based on approximately **½ mile along both sides of the corridor.** Actual costs may vary depending on the location of the signage, as some blocks may require a higher concentration of signs while others may need only minimal installation. Signage installations must be coordinated with METRO and ensure compatibility with real-time information systems for any additional signage.

Total estimated cost per 1/2 mile: $7,575

Temporary landscape

To implement landscaping in strategic locations, costs have been estimated on a per-unit basis, as well as an overall cost per ½ **mile along both sides of the corridor**.
Each unit includes two planters with shrubs, perennials, and an ornamental tree, along with one bench.

Total estimated cost per unit: $5,460

Total estimated cost ½ mile: $82,368

Temporary bike infrastructure

The following cost estimate includes bike infrastructure from Silver Street to Downtown, including parking spots with plastic pylons and strategically located bike racks.

Total estimated cost - barriers (Silver St to Downtown): $42,000

Total estimated cost - bike racks: $5,500

The Washington Avenue Corridor Study involved many agencies, the Superneighborhood, and the public over a two year period.

The Washington Avenue Corridor Study involved many agencies, the Superneighborhood, and the public over a two year period.

The Washington Avenue Corridor Study (WACS) was initiated to provide recommendations to guide short and long-range transportation reinvestments, encouraging development of multimodal transportation options, increased safety, improved traffic flow, reduced congestion, and improved air quality. The study prioritized maintaining the historic character of the corridor. A critical component of this study is safety analysis. The majority of the corridor is considered a component of the City of Houston's "High Injury Network," and there are limited locations for safe pedestrian crossings along the corridor. TxDOT crash data was analyzed for all parts of the study area. Traffic operations were modeled for existing conditions, a future condition with no changes to the corridor, and for three future scenarios representing five of the study alternatives. The future conditions utilized Year 2045 traffic projections which were based on the H-GAC regional model to account for continued regional growth.

The recommendations for the corridor, outlined in Chapter 3, offer equal emphasis on all modes of transportation and follow robust engagement around many different alternative options. Chapter 3 also includes a prioritized list of recommended improvements and implementation strategy. Prior to each round of engagement, area City Council Members were made aware in addition to the Steering Committee Members, the Superneighborhood 22 organization made up of all area Civic Clubs, and all prior participants who signed up for future updates.

A foundational part of this study was the support of the Steering Committee and the Superneighborhood. The work conducted by Superneighborhood 22 and AARP to complete a full sidewalk audit of Washington Avenue preceded the study and provided critical inputs to the project team's understanding of each block of the corridor. The Steering Committee met several times throughout the project, providing important feedback and approving key decisions in addition to helping promote the outreach events.

The technical work throughout the project duration was heavily informed through these discrete but connected engagement periods. Other project inputs included the Washington Avenue Livable Centers Study, TIRZ 13 Mobility Study, and the TIRZ 5 CIP, which describe improvements and projects for the corridor that benefit its livability and economic vitality. These studies included many community meetings and stakeholder input, and some recommendations have already been implemented. Others are still outstanding and will be considered in this study.

Washington Avenue is also part of or relevant to many of H-GAC's 2045 Regional Transportation Plan projects and some City of Houston mobility projects.

Steering Committee:

City of Houston
Texas Department of TxDOT, Houston District
Harris County Precinct 1
Harris County Precinct 4
Houston Police Department
Houston Fire Department
METRO
Old Sixth Ward Redevelopment Authority
Memorial Heights Redevelopment Authority
Main Street/ Market Square Redevelopment Authority

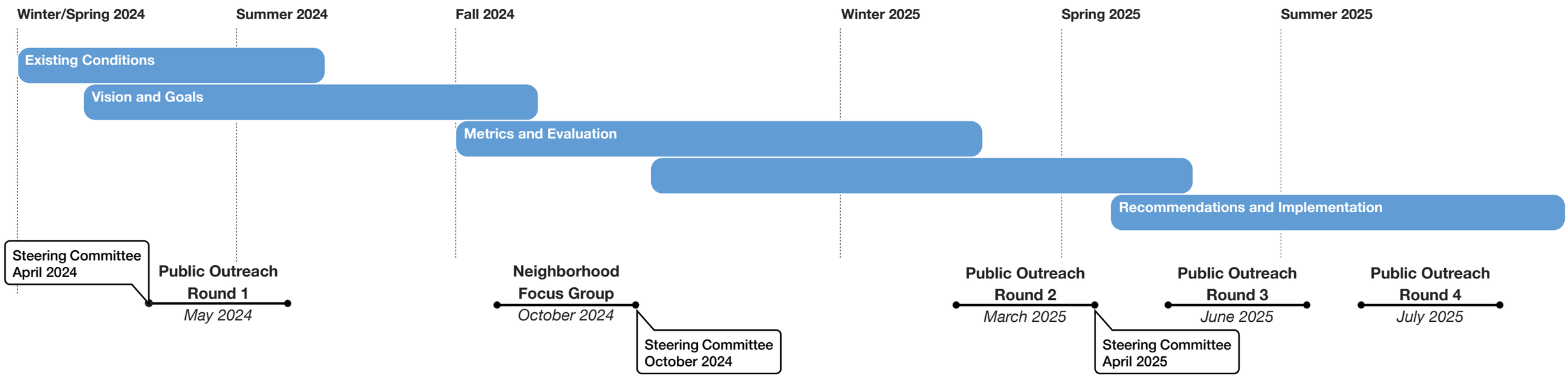
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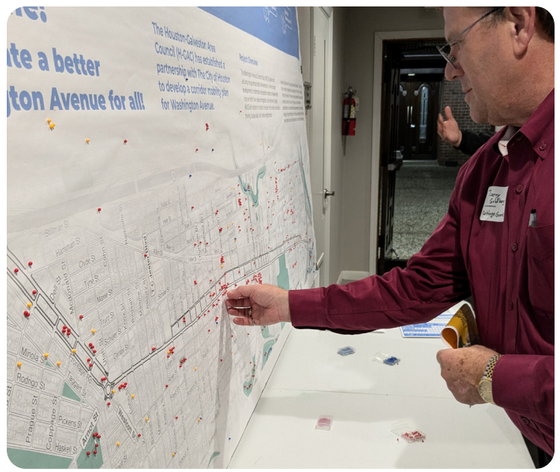


At each meeting, people added pins to this map of where they live, work, and visit along the corridor.

The Washington Avenue Corridor Study aimed to reach people who use the corridor in a variety of ways throughout the project. A major priority throughout the engagement efforts that informed the project results was to hear from people who live in the neighborhood surrounding the corridor. This was accomplished, with over 60% of people who attended meetings and responded to surveys living within 77007, the main zip code in Superneighborhood 22. Another 15% of project-wide participants live in 77019, 77006, 77008, and 77009, which are all adjacent to the corridor's primary zip code.

Effort was also made to engage with Houstonians who work at businesses along the corridor and those who visit parks, medical facilities, schools, or other destinations on the corridor regularly. In early 2025, postcards were sent to businesses to get feedback specifically from those who commute to the neighborhood each day. By reaching out to area churches, schools, art institutions, and other key hubs of community, the public outreach meetings were able to draw people who are frequently using Washington Avenue, Center Street, and Westcott Street.








Orange pins mark where meeting participants live, blue pins mark where they work, and red pins mark where they visit.
Arnot St
Westcott St
T C Jester Blvd
Durham Dr
Shepherd Dr
Patterson St
Yale St
Heights Blvd
Studemont St
Sawyer St
Houston Ave
Washington Ave
Memorial Dr
MKT Trail
Center St
Allen St
Lillian St
Floyd St
Blossom St
Feagan St
Dickson St
Lacy St
Crooms St
Venice St
Scotland St
Augusta St
Willia St
Gibson St
Rose St
Byway St
Schuler St
Maxie St
Eigel St
Inker St
Nolda St
Marina St
Spencer St
Koehler St
Eli St
Nett St
Hicks St
Summer St
Winter St
Bingham St
Crockett St
Sharon St
Ovid St
Alamo St
Edwards St
Dart St
Girard St
Decatur St
Kane St
Lubbock St
State St
Union St
Franklin St
Preston St
Congress St
Harrington St
Hogan St
Gargen St
Elder St
Beachton St
Goliad St
Hickory St
Holly St
Johnson St
Colorado St
Silver St
Sabine St
Taylor St
Hemphill St
Henderson St
White St
Curtis St
Oliver St
Brashear St
National St
Court St
Lakin St
Wichman St
Wagner St
Harvard St
Conrad St
Bass St
Fowler St
Parker St
Thompson St
Bonner St
Jackson Hill St
Leverkuhn St
Hartman St
Waughton St
Hollow Ln
Memorial Heights dr
Roy St
Sandman St
Reinerman St
Detering St
Lester St
Olive St
Parker St
Beltle St
Snover St
Oreilly St
Scotland St
Terrace St
Reinicke St
Knox St
Malone St
Asbury St
Birdsall St
Cohn St
Sandman St
Radcliffe St
Mcdonald St
Dell St
Durford St
Mirola St
Rodrigo St
Prague St
Copeland St
Haskell St
Pickens St
Taggart St
Frontage Rd
Utah St
Clyde St
Tyne St
Truro St
Hamman St
Stillman St
Greenwood Dr
W Cowan Dr
E Cowan Dr
Crestwood Dr
Byway St
Arnot St
Gibson St
Pierce St
Roy St
Moy St
Studer St
Lillian St
Rose St
Floyd St
Blossom St
Feagan St
Dickson St
Lacy St
Crooms St
Venice St
Kuhn
Scotland St
Augusta St
Willia St
Memorial Dr
Oreilly St
Snover St
Beltle St
Parker St
Fowler St
Olive St
Jackson Hill St
Leverkuhn St
Hartman St
Waughton St
Hollow Ln
Memorial Heights dr

The early stages of the process gathered data on the existing conditions of the corridor and sought feedback and consensus on community priorities and concerns. The data and feedback gathered informed the study.

Existing conditions research formed the foundation for the Washington Avenue Corridor Study.

The Washington Avenue Corridor Study began with analysis of the safety conditions and assessment of the vehicular movements along and across the corridor. A critical component of this study is safety analysis. The majority of the corridor is considered a component of the City of Houston's "High Injury Network," and there are limited locations for safe pedestrian crossings along the corridor. The Texas Department of Transportation (TxDOT) crash data was analyzed for all parts of the study area.

Traffic counts were conducted at twelve intersections and at six midblock locations throughout the corridor. Traffic operations were modeled at the intersections for existing conditions, a future condition with no changes to the corridor, and for three future scenarios representing five of the study alternatives. The future conditions utilized Year 2045 traffic projections which were based on the H-GAC regional model to account for continued regional growth. The twelve intersections that were studied are shown below: Washington on Westcott roundabout, TC Jester Boulevard, Roy Street, Durham Drive, Shepherd Drive, Patterson Street, Yale Street, Heights Boulevard, Studemont Street, Sawyer Street, Silver Street, and Houston Avenue.

A foundational part of this study was the support of the Steering Committee and Superneighborhood 22. The work conducted by Superneighborhood 22 and AARP to complete a full sidewalk audit of Washington Avenue preceded the study and provided critical inputs to the project team's understanding of the condition of each block of the corridor.

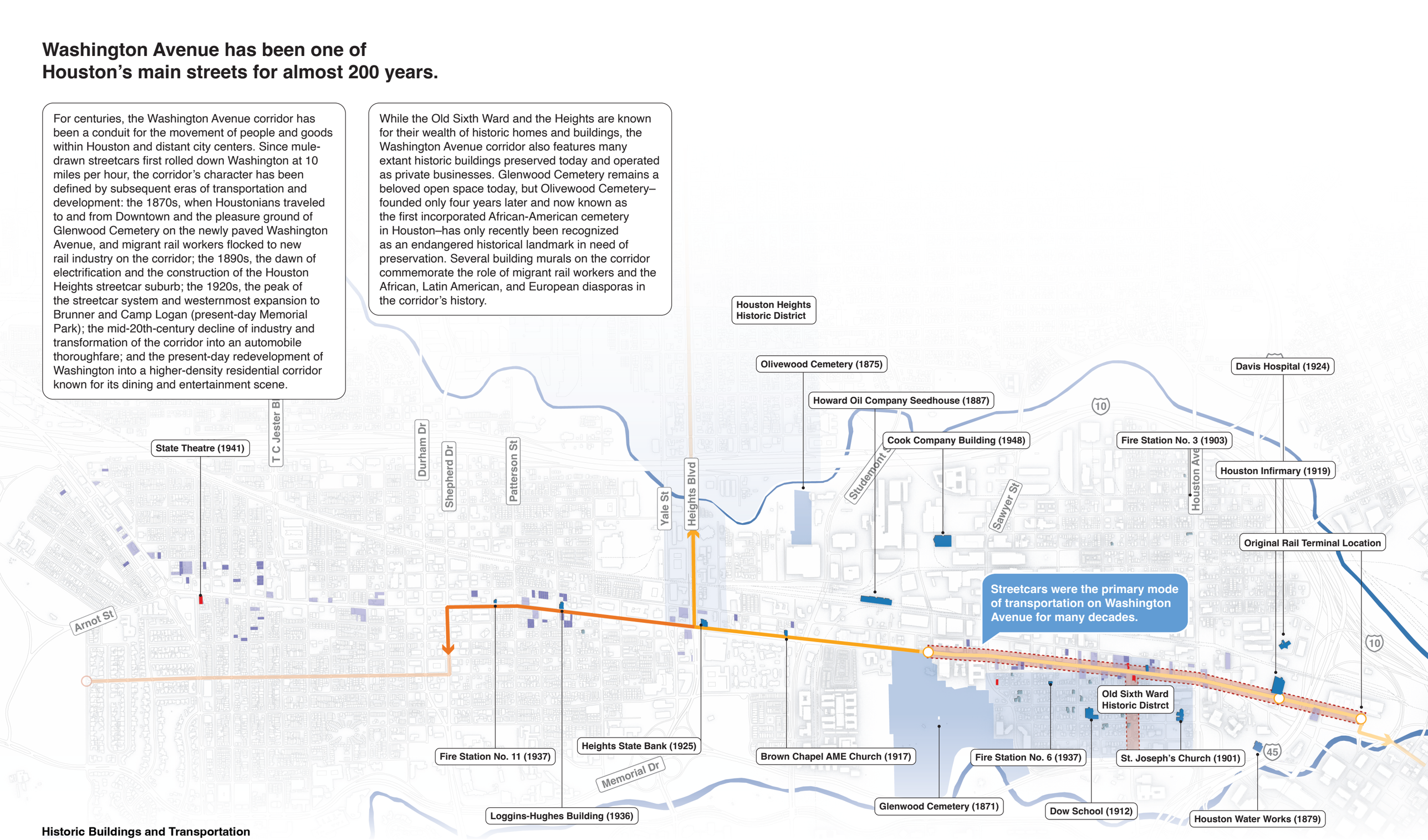
Additionally, the preliminary research included analyzing historical information, land use, parking management and configuration, housing trends, flood data, existing bike and transit connections, and previous studies. The project team, based in Houston, walked, drove, biked, and took transit along the corridor hundreds of times throughout the duration of the study, speaking with people and learning through each experience.



Washington Avenue has been one of Houston's main streets for almost 200 years.

For centuries, the Washington Avenue corridor has been a conduit for the movement of people and goods within Houston and distant city centers. Since mule-drawn streetcars first rolled down Washington at 10 miles per hour, the corridor's character has been defined by subsequent eras of transportation and development: the 1870s, when Houstonians traveled to and from Downtown and the pleasure ground of Glenwood Cemetery on the newly paved Washington Avenue, and migrant rail workers flocked to new rail industry on the corridor; the 1890s, the dawn of electrification and the construction of the Houston Heights streetcar suburb; the 1920s, the peak of the streetcar system and westernmost expansion to Brunner and Camp Logan (present-day Memorial Park); the mid-20th-century decline of industry and transformation of the corridor into an automobile thoroughfare; and the present-day redevelopment of Washington into a higher-density residential corridor known for its dining and entertainment scene.

While the Old Sixth Ward and the Heights are known for their wealth of historic homes and buildings, the Washington Avenue corridor also features many extant historic buildings preserved today and operated as private businesses. Glenwood Cemetery remains a beloved open space today, but Olivewood Cemetery–founded only four years later and now known as the first incorporated African-American cemetery in Houston–has only recently been recognized as an endangered historical landmark in need of preservation. Several building murals on the corridor commemorate the role of migrant rail workers and the African, Latin American, and European diasporas in the corridor's history.



Historic Buildings and Transportation

- Historic Building (Local/State/National Designation)
- Historic Open Space/Cemetery
- Historic Homestead
- Original Paved Section of Corridor (Early 1900s)
- Original Mule-Drawn Streetcar (Early 1870s)
- 1845-1940 Buildings
- First Electrified Streetcar (Early 1890s)
- West End of Streetcar Network (Late 1920s)
- 1940-1970 Residential buildings
- Key Streetcar Stop
- Building Mural

0 — 0.25 — 0.5 — 1 mile

N

Washington Avenue is a bustling commercial corridor that both serves the immediate neighborhood and draws people from the region.

Washington Avenue has experienced rapid population growth given its pace of higher-density residential redevelopment in recent years–much of that growth occurring east of Heights Boulevard despite most of the corridor's population having been west of Heights before 2000 in neighborhoods like Rice Military and Magnolia Grove. Pre-2000 demographic patterns still appear somewhat evident in the higher concentration of commercial uses west of Heights. However, community-serving uses like larger food/grocery stores are concentrated around the Heights Boulevard/Washington Avenue intersection at the center of the corridor. Washington's popular bar and nightlife destinations are concentrated west of Heights Boulevard and draw visitors from across Houston to the corridor.

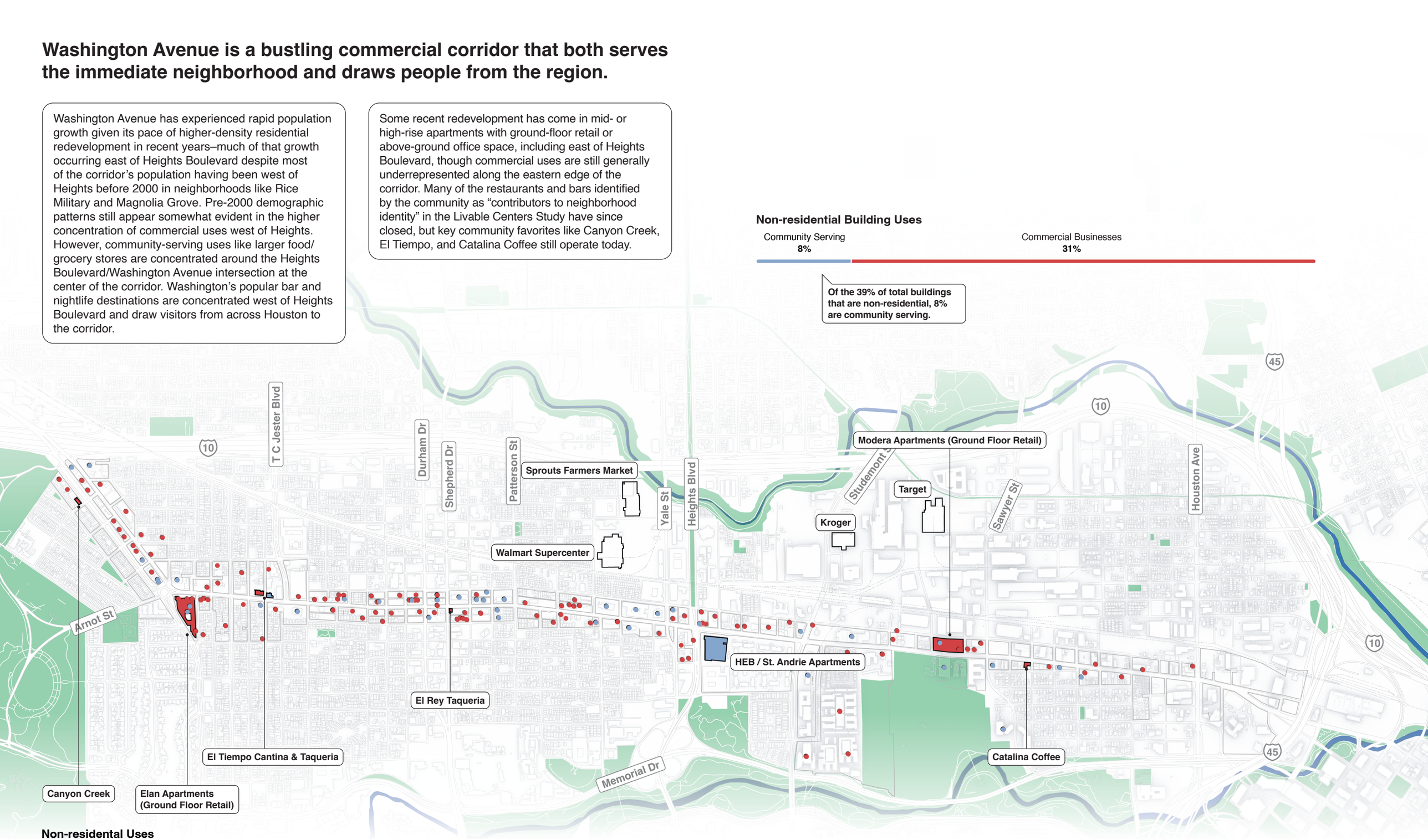
Some recent redevelopment has come in mid- or high-rise apartments with ground-floor retail or above-ground office space, including east of Heights Boulevard, though commercial uses are still generally underrepresented along the eastern edge of the corridor. Many of the restaurants and bars identified by the community as "contributors to neighborhood identity" in the Livable Centers Study have since closed, but key community favorites like Canyon Creek, El Tiempo, and Catalina Coffee still operate today.

Non-residential Building Uses

Community Serving **8%**

Commercial Businesses **31%**

Of the 39% of total buildings that are non-residential, 8% are community serving.



Non-residental Uses

- Community-Serving Businesses (Community Support, Education, Food/Grocery, Health)
- Commercial Businesses (Hospitality, Recreation/Entertainment, Personal Services, Retail, Nightlife)

0 0.25 0.5 1 mile

N

There is a lot of parking along Washington Avenue, but it can be confusing to use and most is privately owned.

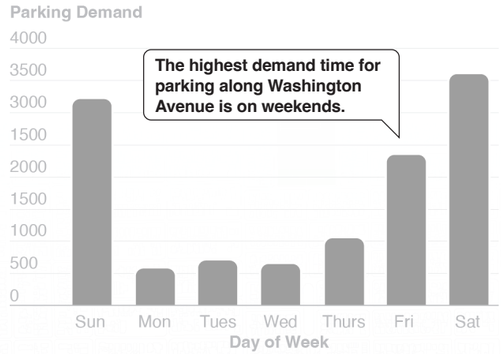
Finding a place to park along or near Washington Avenue can be a very different experience depending on the time of day and day of the week. The majority of parking is privately owned, leading to a patchwork system that strains access and makes it hard for drivers to make efficient parking decisions.

Most of the time, the majority of parking in the corridor is free, and privately owned lots have plenty of capacity. On weekdays there is relatively low demand for parking on the corridor. The highest demand time for parking along Washington Avenue is in the evening and on weekends, especially near bars and restaurants. Because of this, some property owners have started charging for access to private lots during the evening peak. Because most parking is privately-owned with limited access and high costs, people look for free parking in the nearby neighborhoods when street parking is full to avoid paying for the private lots if possible, leading to traffic and crowding on residential streets that are already parking constrained.

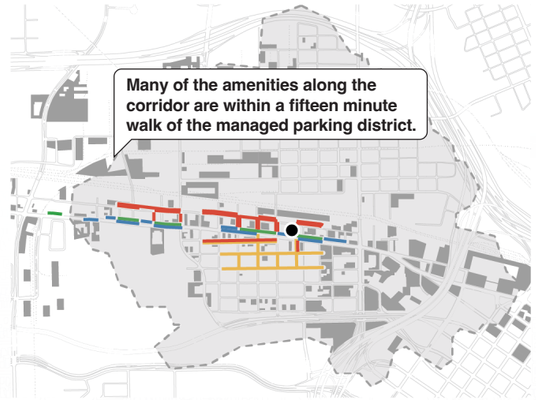
Even outside of the peaks, the current system is confusing. There are a multitude of different payment systems and different parking areas have different time of day restrictions. The patchwork of public and private parking zones is made up of parking lots, parking garages, and metered and unmetered on-street parking, each with its own parking rate.

On other streets around Washington Avenue there is even more variation, with different payment methods, time restrictions, and permit requirements than on Washington Avenue itself. The Washington Avenue Parking Benefits District was created to manage many of these adjacent zones. The District takes some of the revenue from the metered parking along portions of the corridor and uses that to fund transportation projects along the corridor.

Parking Demand on Washington Avenue
ParkHouston



Example 15-minute Walking Distance



Parking

— Washington PBD* Metered — COH Metered — Pay by Phone — Residential Parking Permit — Off-street Parking Lots — Night Scene

*PBD revenue finances district improvements

*Streets with no color do not charge for parking or do not allow parking

0 0.25 0.5 1 mile

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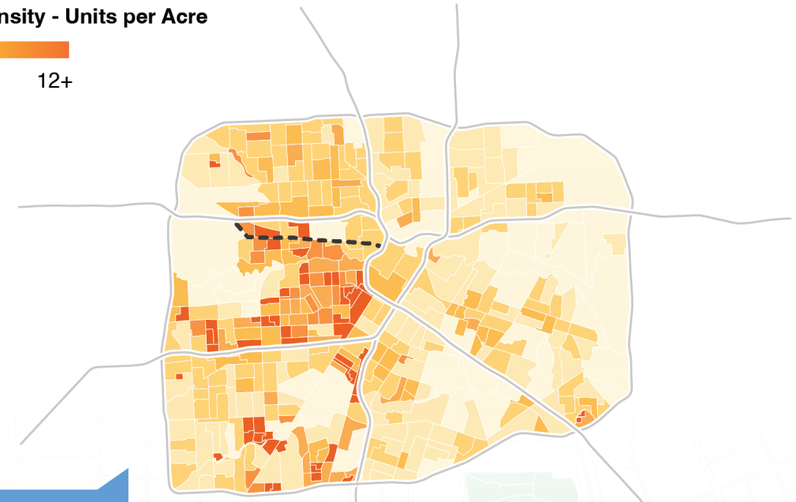
In the last 12 years, 5,550 housing units have been added within a few blocks of Washington Avenue.

Since the Washington Avenue Livable Centers Study report was completed nearly 12 years ago, quite a few new units have been built recently along the corridor. 4,680 multifamily housing units have been added within a few blocks of Washington Avenue, including both rentals and condos; and over 870 single-family homes have been added, primarily as 3 to 4-story townhomes. Over 40 percent of the new multifamily units were built between Sawyer Street and Yale Street, near where most of the older multifamily housing stock is. The rest is fairly scattered along the western stretch of the corridor. Most of the new single-family homes have been built west of Heights Boulevard.

The map on the opposite page shows housing density by block group in Houston's inner loop. According to census housing data, the housing density in Super Neighborhood 22 (not including Memorial Park) is about twice as much as in Houston's inner loop area. This is the result of all the recent multifamily developments as well as the continued single-family development of skinny and tall townhomes.

Housing Density - Units per Acre

2 6 12+



The Washington Avenue corridor is one of the densest areas in Houston.

ACS 2022

Residential Units Built After 2012

Multi-family Housing | Single-family Housing | Housing more than 4 blocks from Washington Ave

0 0.25 0.5 1 mile

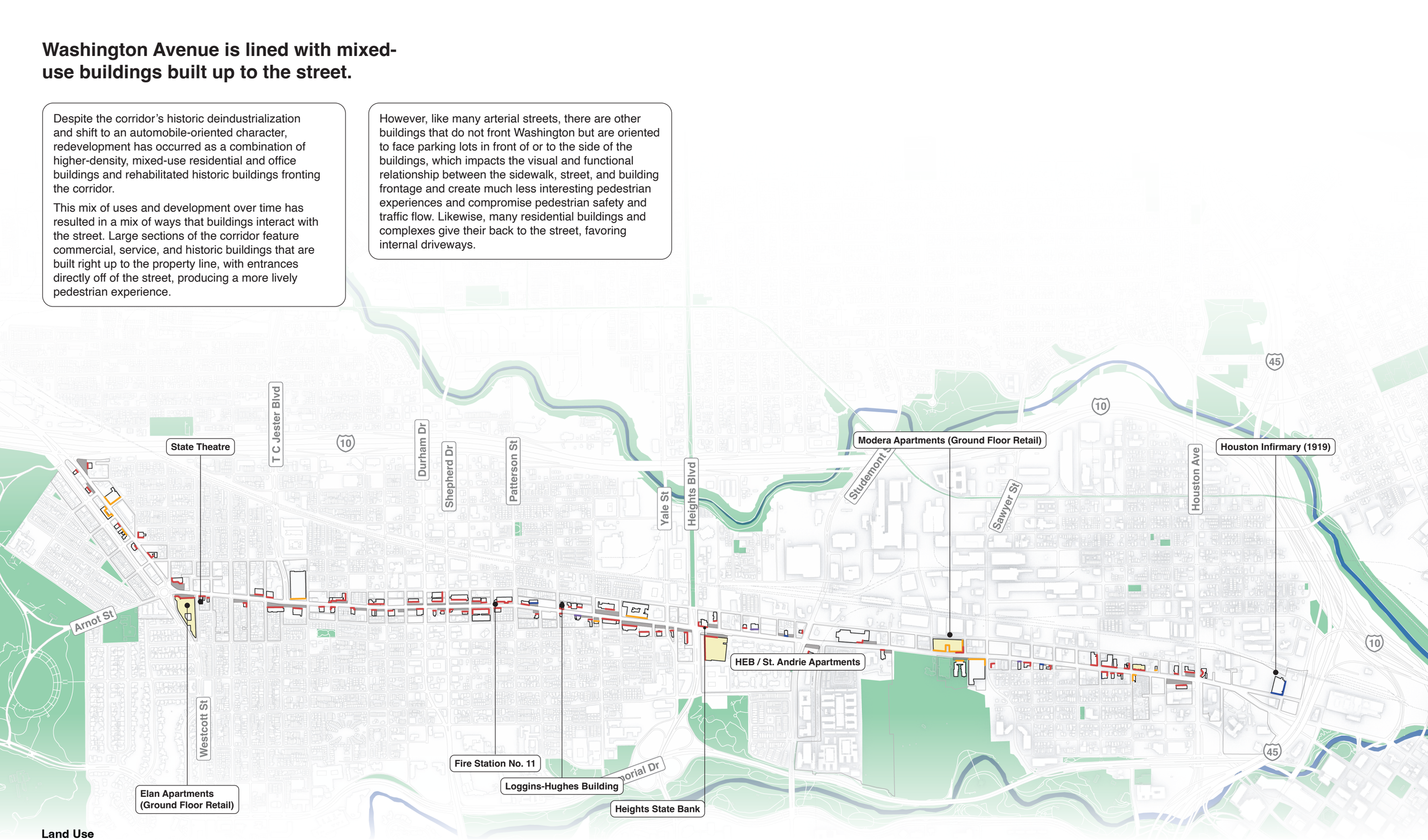
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Washington Avenue is lined with mixed-use buildings built up to the street.

Despite the corridor's historic deindustrialization and shift to an automobile-oriented character, redevelopment has occurred as a combination of higher-density, mixed-use residential and office buildings and rehabilitated historic buildings fronting the corridor.

This mix of uses and development over time has resulted in a mix of ways that buildings interact with the street. Large sections of the corridor feature commercial, service, and historic buildings that are built right up to the property line, with entrances directly off of the street, producing a more lively pedestrian experience.

However, like many arterial streets, there are other buildings that do not front Washington but are oriented to face parking lots in front of or to the side of the buildings, which impacts the visual and functional relationship between the sidewalk, street, and building frontage and create much less interesting pedestrian experiences and compromise pedestrian safety and traffic flow. Likewise, many residential buildings and complexes give their back to the street, favoring internal driveways.



Land Use

- Residential access Fronting Washington Ave
- Commercial access Fronting Washington Ave
- Institutional Fronting Washington Ave
- Vacant Fronting Washington Ave
- Mixed-use (Residential/Commercial)
- Surface Parking fronting Washington Avenue

0 0.25 0.5 1 mile

N

METRO Route 85 moves people far beyond Washington Avenue.

Houston METRO Route 85 moves people between the Greenspoint Transit Center and Downtown, using Washington Avenue for a large portion of its route. For people who live along Washington Avenue, the 85 is an essential connection to major transit hubs in both directions (Downtown, Northwest, and Greenspoint Transit Centers). Route 85 is one of METRO's frequent routes, with service every 15 minutes, and it is one of the highest ridership routes in Houston–based on October 2023 data, it is in the top 10 most ridden routes. Along Washington Avenue, Route 85 stops frequently, sometimes twice within a block, and it intersects many other bus routes that people can transfer to and from.

Amenities at bus stops range widely and are inconsistent; some bus stops have only a sign, some bus stops don't even have a concrete pad to provide ADA access to the bus from the bus stop, some bus stops have a bench, some have trash cans, and some have shelters with benches. Shelters with benches are not present at all transfer points where people would need to wait for another bus that Route 85 intersects.

Due to frequent stops and lack of signal priority at lights, Route 85's speed is inconsistent, making it less reliable than it would otherwise be. This can make transferring between bus routes challenging, especially on low-frequency routes.





Transit

≤ 15 min freq. | 16 - 30 min freq. | ≥ 31 min freq. | Sheltered bus stops | Bus stops without shelter | X Bus route number

0 0.25 0.5 1 mile N

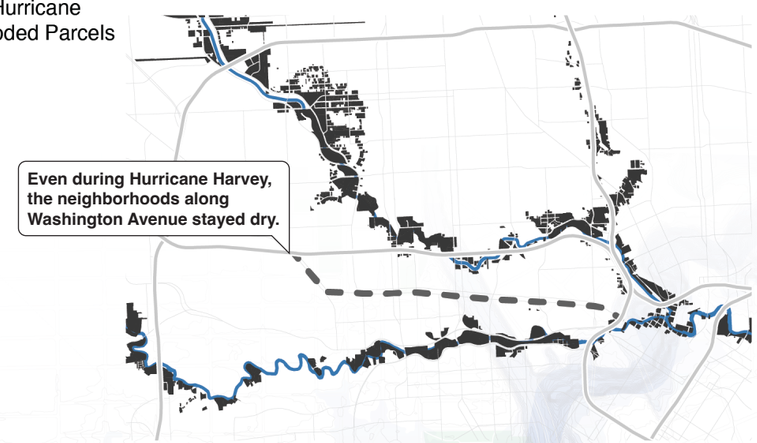
Washington Avenue is on a ridge between watersheds, and it's a crucial connection during flood events.

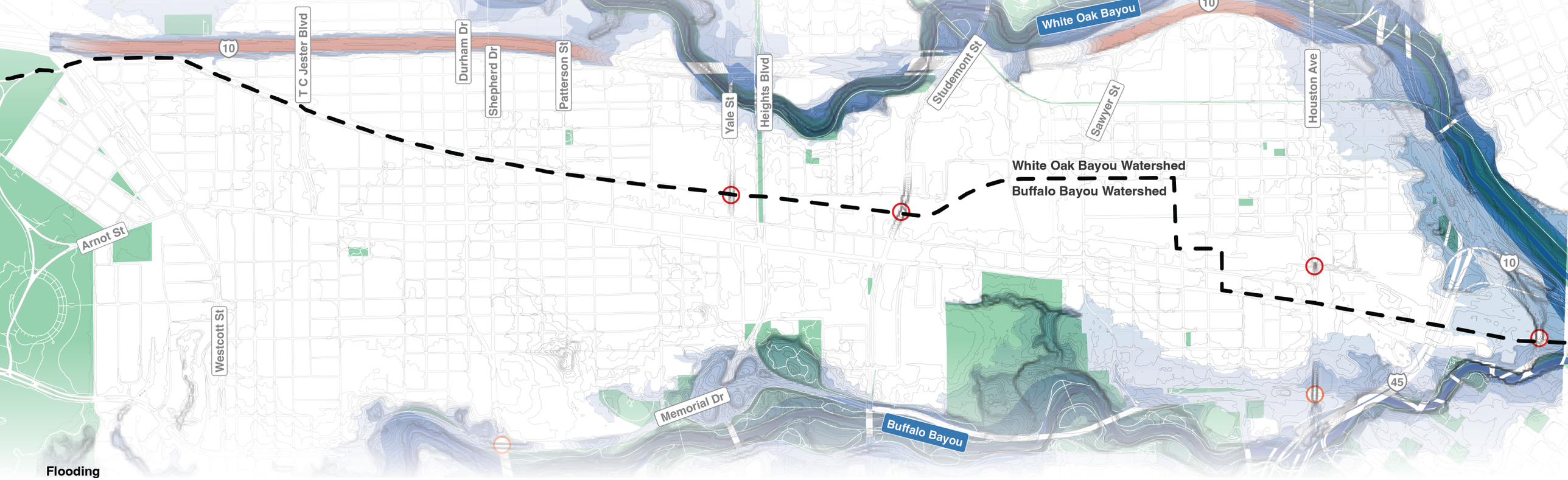
Flooding is not a major issue along the majority of Washington Avenue. In fact, according to the Harris County Flood Control District, the corridor is the ridge of the White Oak and Buffalo Bayou watersheds from Downtown to about Silver Street and runs parallel to the rest of the ridge just north of the corridor. Northern sections of the Glenwood Cemetery are the closest Washington Avenue gets to the floodplain. After crossing into downtown, Washington Avenue becomes Franklin Street, where flooding becomes more likely as the street gets closer to the confluence of White Oak and Buffalo Bayou.

The relatively higher topography makes Washington Avenue a key corridor for east-west traveling during major flood events. Both of the closest major east-west connections have portions that potentially flood, such as depressed portions of I10 and flood-prone underpasses along both Memorial Drive and Allen Parkway.

Past Flooding

■ Estimated Hurricane Harvey Flooded Parcels





Flooding

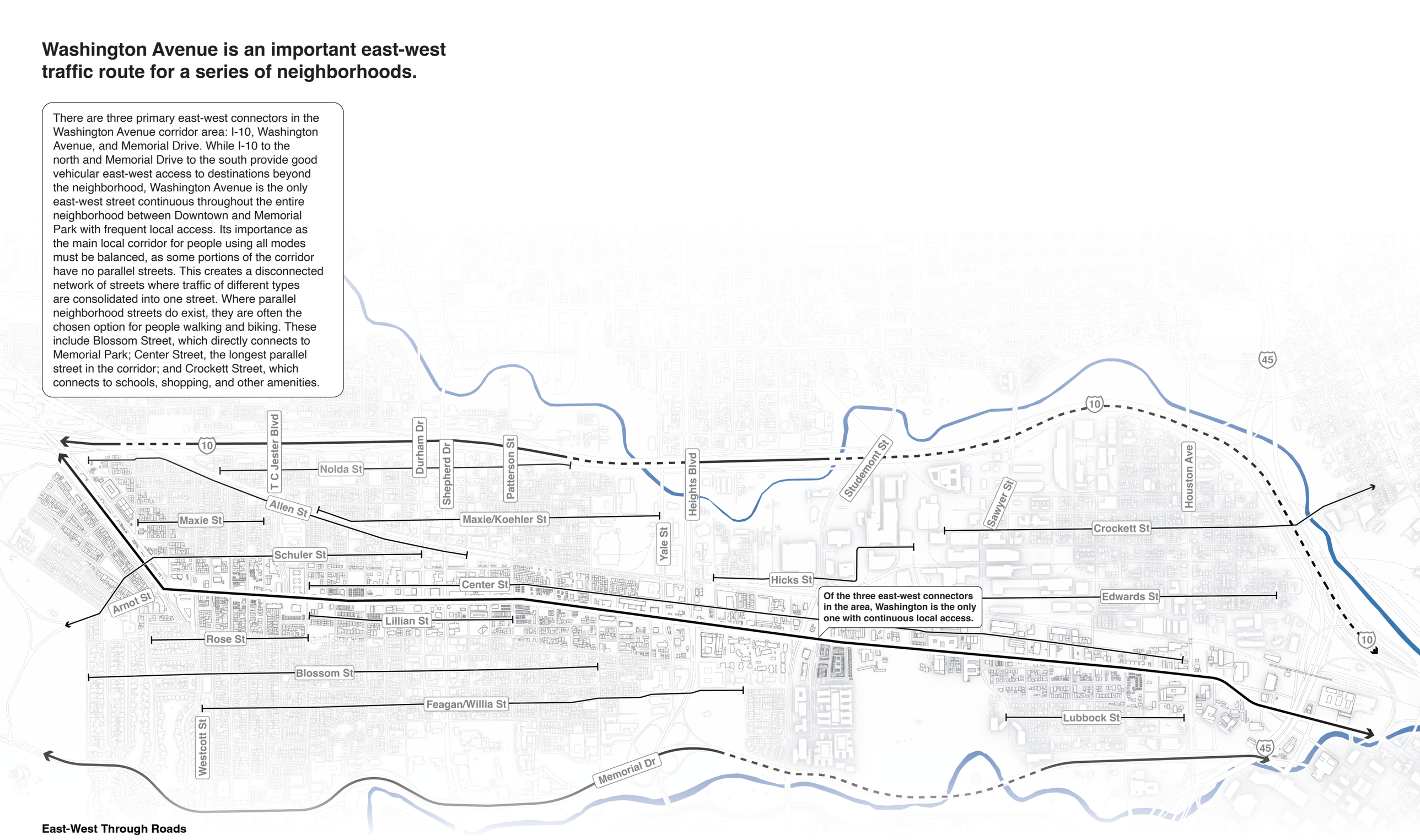
- HCFCD Watershed Ridgeline
- Elevation Contours
- Depressed Freeway
- Underpass Prone to Flooding
- Floodway
- 100- Year Floodplain
- 500- Year Floodplain

0 0.25 0.5 1 mile

N

Washington Avenue is an important east-west traffic route for a series of neighborhoods.

There are three primary east-west connectors in the Washington Avenue corridor area: I-10, Washington Avenue, and Memorial Drive. While I-10 to the north and Memorial Drive to the south provide good vehicular east-west access to destinations beyond the neighborhood, Washington Avenue is the only east-west street continuous throughout the entire neighborhood between Downtown and Memorial Park with frequent local access. Its importance as the main local corridor for people using all modes must be balanced, as some portions of the corridor have no parallel streets. This creates a disconnected network of streets where traffic of different types are consolidated into one street. Where parallel neighborhood streets do exist, they are often the chosen option for people walking and biking. These include Blossom Street, which directly connects to Memorial Park; Center Street, the longest parallel street in the corridor; and Crockett Street, which connects to schools, shopping, and other amenities.



East-West Through Roads

↔ Roads that traverse the whole study area

⊢ Roads that do not traverse the whole study area

- - - Segments of road that do not have local access

0 0.25 0.5 1 mile

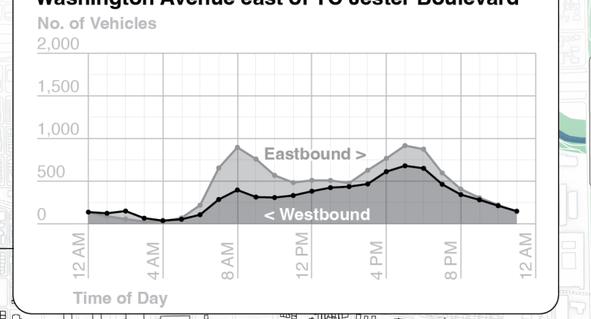
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Traffic patterns on Washington Avenue show that it is used more as a local connector than a commuter corridor.

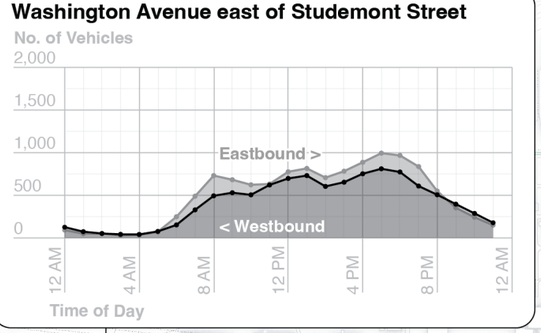
Like most roadways, the volume of vehicular traffic on Washington Avenue is generally highest during the morning and evening rush hours—with some exceptions where lunchtime traffic is higher than the morning peak. Beyond that, the corridor exhibits some unique travel patterns that reflect its role in the area transportation network. Where Washington Avenue operates as a one-way pair with Westcott Street, traffic volumes are roughly two to three times higher than the remainder of the corridor during the morning peak hour; during the evening peak, volumes are 52 to 119 percent higher than the rest of Washington Avenue. Traffic volumes are also significantly higher in the "inbound" direction at all hours of the day, suggesting that it is easier to shift to Washington Avenue from I-10 when traveling toward downtown. Notably, a substantial portion of drivers use Washington Avenue as a connection from the surrounding neighborhood to the busy north-south arterials that cross the study area. At Houston Avenue, nearly 50-60 percent of drivers turn off of Washington Avenue to go north or south during the peak hours; at all other signalized study intersections, between 20 and 40 percent of east-west drivers leave Washington Avenue.

A detailed analysis shows that traffic operation is generally good along the Washington Avenue corridor, with most of the east-west through movements operating at Level of Service (LOS) C or better during the peak hours. Congestion appears in the traffic model on eastbound Washington at Durham Drive and on westbound Washington at Studemont Street, matching field observations at these two locations. Near Durham Drive, a primary factor in this congestion is a heavy right-turn movement for drivers heading to the south, as well as an access management issue for adjacent commercial properties with valet operations that spill out onto the street. At Studemont Street, congestion is due to the very short green light allocated to Washington Avenue, since signal timings favor heavier demand on the north-south street. These circumstances—busy north-south streets with overly large intersection footprints and the challenge of access management along the corridor—affect operation and safety for all users on Washington Avenue.

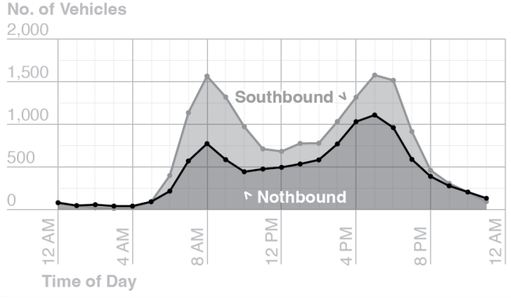
Washington Avenue east of TC Jester Boulevard



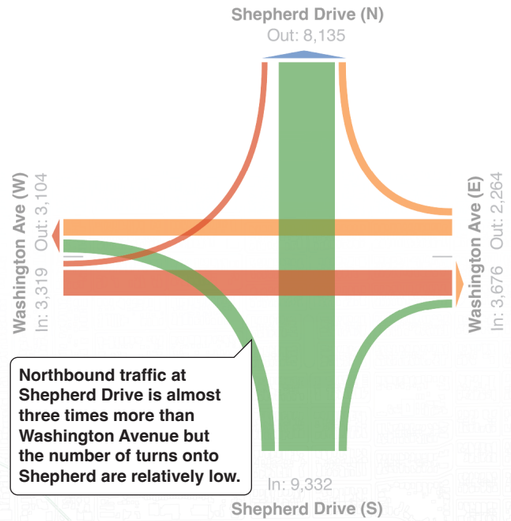
Washington Avenue east of Studemont Street



Washington Avenue north of Arnot Street

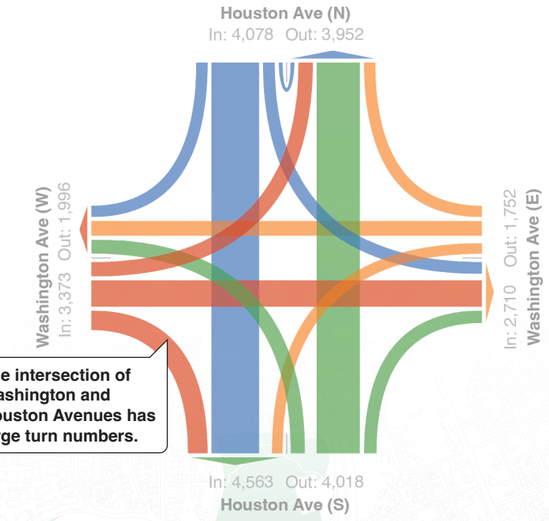


A. Washington at Shepherd Intersection Movements



Northbound traffic at Shepherd Drive is almost three times more than Washington Avenue but the number of turns onto Shepherd are relatively low.

B. Washington at Houston Intersection Movements



The intersection of Washington and Houston Avenues has large turn numbers.

Traffic Analysis by Time of Day

- Point of analysis

Speeding, roadway configuration issues, and late-night impaired driving lead to several dangerous crash hotspots along Washington Avenue and Westcott Street.

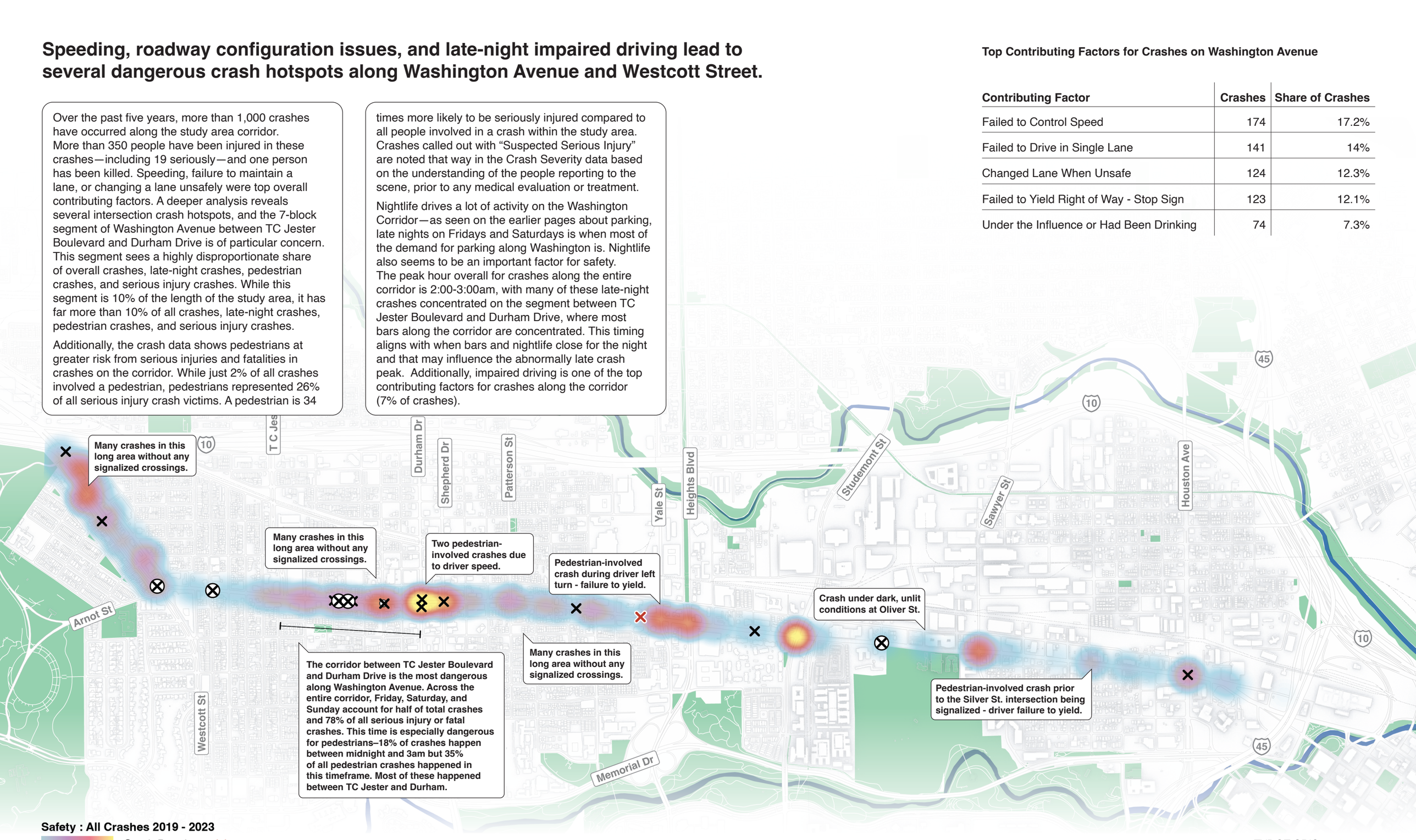
Over the past five years, more than 1,000 crashes have occurred along the study area corridor. More than 350 people have been injured in these crashes—including 19 seriously—and one person has been killed. Speeding, failure to maintain a lane, or changing a lane unsafely were top overall contributing factors. A deeper analysis reveals several intersection crash hotspots, and the 7-block segment of Washington Avenue between TC Jester Boulevard and Durham Drive is of particular concern. This segment sees a highly disproportionate share of overall crashes, late-night crashes, pedestrian crashes, and serious injury crashes. While this segment is 10% of the length of the study area, it has far more than 10% of all crashes, late-night crashes, pedestrian crashes, and serious injury crashes.

Additionally, the crash data shows pedestrians at greater risk from serious injuries and fatalities in crashes on the corridor. While just 2% of all crashes involved a pedestrian, pedestrians represented 26% of all serious injury crash victims. A pedestrian is 34 times more likely to be seriously injured compared to all people involved in a crash within the study area. Crashes called out with "Suspected Serious Injury" are noted that way in the Crash Severity data based on the understanding of the people reporting to the scene, prior to any medical evaluation or treatment.

Nightlife drives a lot of activity on the Washington Corridor—as seen on the earlier pages about parking, late nights on Fridays and Saturdays is when most of the demand for parking along Washington is. Nightlife also seems to be an important factor for safety. The peak hour overall for crashes along the entire corridor is 2:00-3:00am, with many of these late-night crashes concentrated on the segment between TC Jester Boulevard and Durham Drive, where most bars along the corridor are concentrated. This timing aligns with when bars and nightlife close for the night and that may influence the abnormally late crash peak. Additionally, impaired driving is one of the top contributing factors for crashes along the corridor (7% of crashes).

Top Contributing Factors for Crashes on Washington Avenue

Contributing Factor	Crashes	Share of Crashes
Failed to Control Speed	174	17.2%
Failed to Drive in Single Lane	141	14%
Changed Lane When Unsafe	124	12.3%
Failed to Yield Right of Way - Stop Sign	123	12.1%
Under the Influence or Had Been Drinking	74	7.3%



Safety : All Crashes 2019 - 2023

Crash Density (Less — More)

Fatal Injury

Suspected Serious Injury

Suspected Serious Injury Involving Cyclists or Pedestrians

TXDOT CRIS 2023

0 — 0.25 — 0.5 — 1 mile

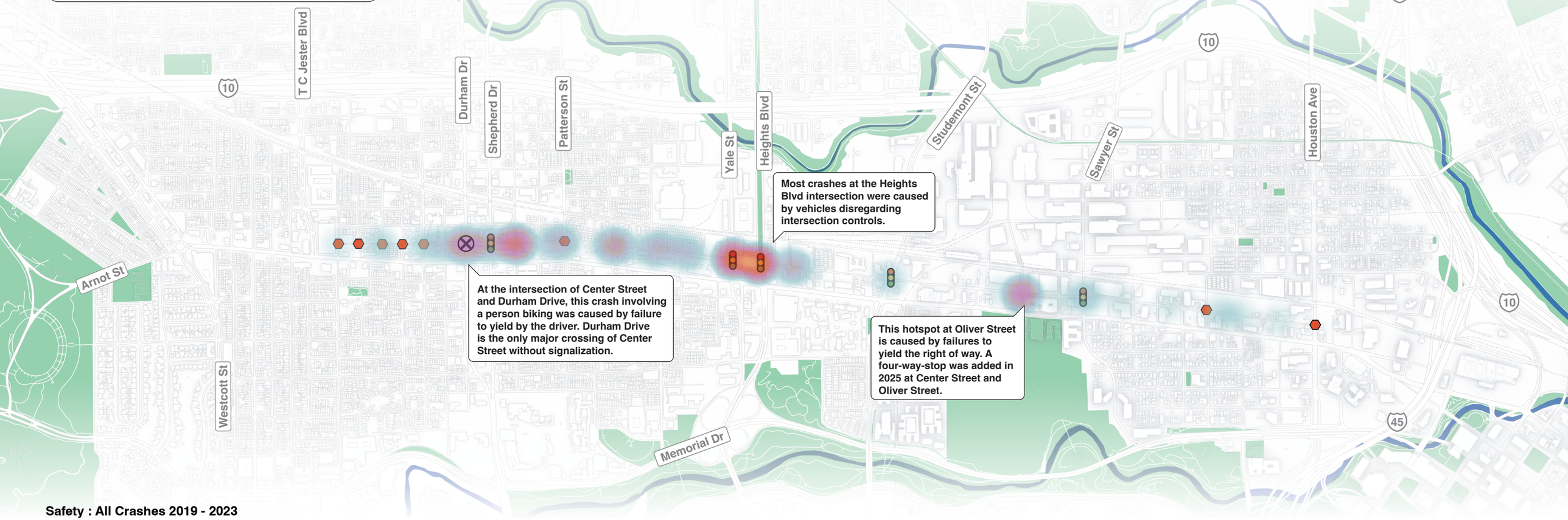
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Center Street parallels Washington Avenue for the majority of its length and provides signalized crossings at most primary north/ south streets. However, while Washington Ave has more traffic and crashes, Center Street still has some concerning safety patterns.

Center Street is a street with less traffic and generally slower travel speeds, and in the past five years, only one of the many crashes on Center Street resulted in a serious injury or fatality. This crash occurred at the intersection of Center and Durham, where a person biking was seriously injured by a vehicle that failed to stop at a stop sign. Durham Drive is the only major crossing of Center Street without signalization. In general, many of the safety concerns on Center are at intersections and related to intersection controls. 73% of crashes on Center are intersection-related, including driveways. The most common cause of crashes were vehicles failing to observe existing safety controls.

Top Contributing Factors for Crashes on Center Street

Contributing Factor	Crashes	Share of Crashes
Failed to Yield Right-of-way - Stop Sign	30	20%
Disregard Stop Sign or Light	16	11%
Failed to Drive in Single Lane	15	10%
Disregard Stop and Go Signal	14	9%
Failed to Control Speed	13	9%



Safety : All Crashes 2019 - 2023

Crash Density (Less — More)

Fatal Injury

Suspected Serious Injury

Suspected Serious Injury Involving Cyclists or Pedestrians

Signalized intersection of high-stress streets

TXDOT CRIS 2023

0 — 0.25 — 0.5 — 1 mile

N

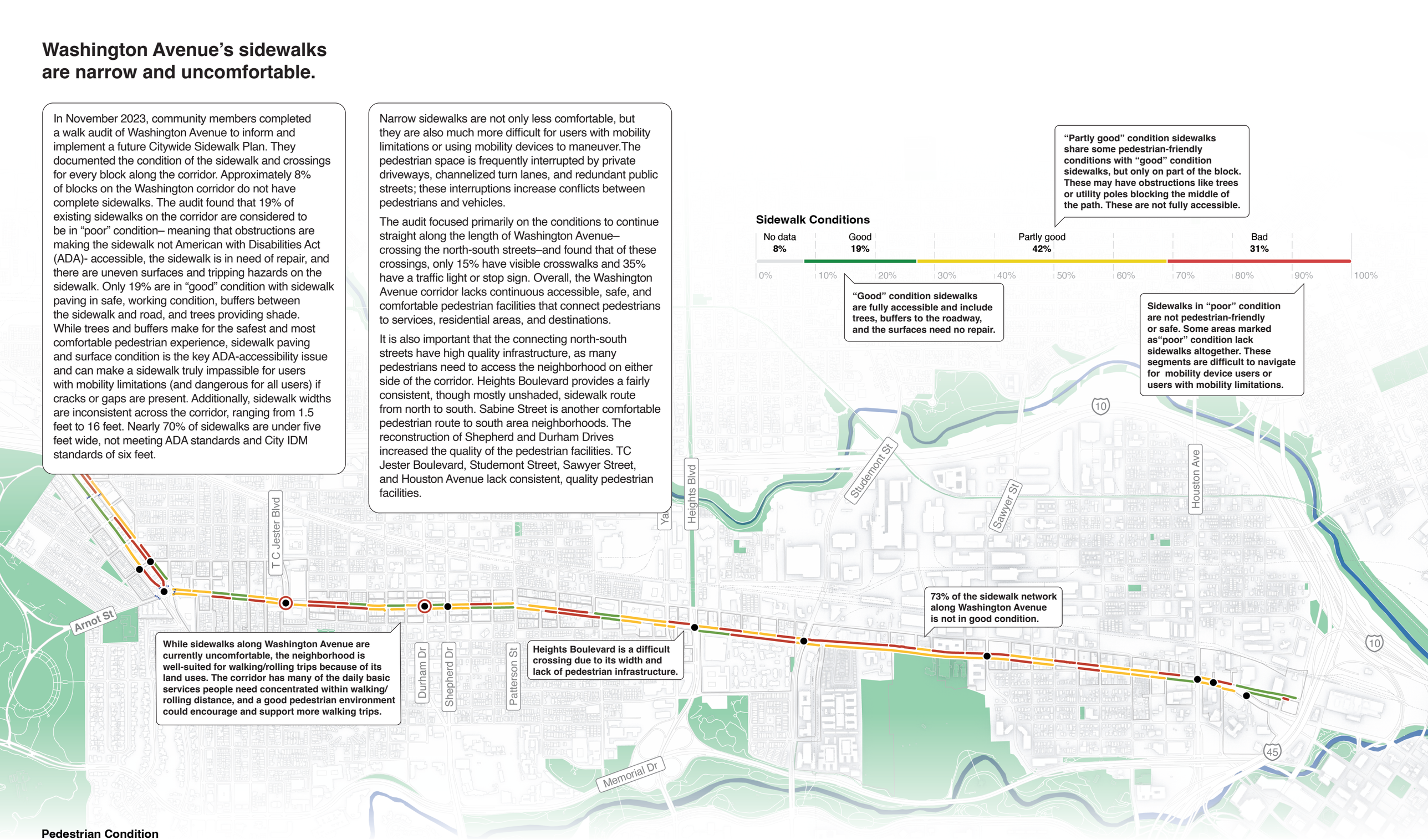
Washington Avenue's sidewalks are narrow and uncomfortable.

In November 2023, community members completed a walk audit of Washington Avenue to inform and implement a future Citywide Sidewalk Plan. They documented the condition of the sidewalk and crossings for every block along the corridor. Approximately 8% of blocks on the Washington corridor do not have complete sidewalks. The audit found that 19% of existing sidewalks on the corridor are considered to be in "poor" condition– meaning that obstructions are making the sidewalk not American with Disabilities Act (ADA)- accessible, the sidewalk is in need of repair, and there are uneven surfaces and tripping hazards on the sidewalk. Only 19% are in "good" condition with sidewalk paving in safe, working condition, buffers between the sidewalk and road, and trees providing shade. While trees and buffers make for the safest and most comfortable pedestrian experience, sidewalk paving and surface condition is the key ADA-accessibility issue and can make a sidewalk truly impassible for users with mobility limitations (and dangerous for all users) if cracks or gaps are present. Additionally, sidewalk widths are inconsistent across the corridor, ranging from 1.5 feet to 16 feet. Nearly 70% of sidewalks are under five feet wide, not meeting ADA standards and City IDM standards of six feet.

Narrow sidewalks are not only less comfortable, but they are also much more difficult for users with mobility limitations or using mobility devices to maneuver.The pedestrian space is frequently interrupted by private driveways, channelized turn lanes, and redundant public streets; these interruptions increase conflicts between pedestrians and vehicles.

The audit focused primarily on the conditions to continue straight along the length of Washington Avenue– crossing the north-south streets–and found that of these crossings, only 15% have visible crosswalks and 35% have a traffic light or stop sign. Overall, the Washington Avenue corridor lacks continuous accessible, safe, and comfortable pedestrian facilities that connect pedestrians to services, residential areas, and destinations.

It is also important that the connecting north-south streets have high quality infrastructure, as many pedestrians need to access the neighborhood on either side of the corridor. Heights Boulevard provides a fairly consistent, though mostly unshaded, sidewalk route from north to south. Sabine Street is another comfortable pedestrian route to south area neighborhoods. The reconstruction of Shepherd and Durham Drives increased the quality of the pedestrian facilities. TC Jester Boulevard, Studemont Street, Sawyer Street, and Houston Avenue lack consistent, quality pedestrian facilities.



Crossing Washington Avenue is very challenging, especially when not at a signalized intersection.

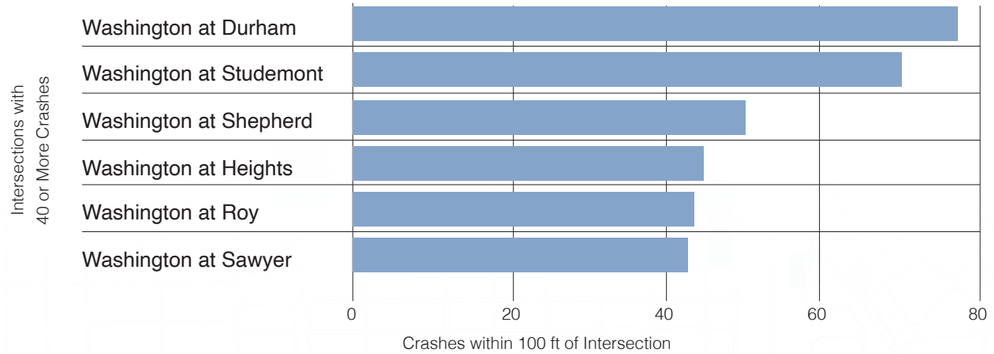
Major thoroughfares are important to be able to move along, but the ability to cross them is also critical. If you live north of the corridor, but your grocery store is on the south side of the street, you cannot access the grocery store if you cannot safely cross the street. Without ample safe crossings, corridors like Washington Avenue can become barriers to movement throughout the nearby neighborhoods. One of the basic features that make crossings safer are traffic signals at intersections. There are just 9 signalized intersections over the 3.9 mile corridor. Even some of the intersections with traffic lights need better infrastructure for crossing outside a vehicle, primarily in the form of crosswalks. Marked crosswalks are provided at only 5 unsignalized intersections along the corridor.

Per engineering standards, a pedestrian is not expected to walk more than a block (300 to 600 feet) out of their way to get to a safe crossing location, but most of the Washington corridor violates this standard. The City of Houston Infrastructure Design Manual echoes this, stating that safe, convenient crossings should be spaced approximately every 500-720 feet (17.3.03.B.3.b). There are 7 stretches longer than a quarter mile and 3 stretches longer than a half mile between all marked crossings.

The wider a street is, the more difficult and unsafe it is for a pedestrian to cross, especially if unsignalized. Most unsignalized marked crossings require crossing 3-5 lanes of traffic. Even when signalized, wider streets lead to less safe conditions. These wide streets also result in less efficient signal timings and extends the amount of time it takes for any mode to get across the intersection. One key example of this is the intersection at Heights Boulevard and Washington. The north leg of Heights Boulevard, for example, is nearly 115 feet wide; this is 74% wider than necessary to provide the same number of travel lanes at 11 feet per lane. Additionally, the north and southbound right-only yield lanes for vehicles create dangerous interactions between drivers and pedestrians.

Farther west on the corridor, Westcott Street from Washington Avenue to I-10 is a wide, high-speed corridor with low visibility on some cross streets. This creates a barrier for people in the neighborhood walking and biking to Memorial Park as well as other nearby destinations. Many stretches along this corridor need more safe crossings for pedestrians and bike users.

Intersection Hotspots on Washington Avenue



There is no east-west bike connection through the neighborhood.

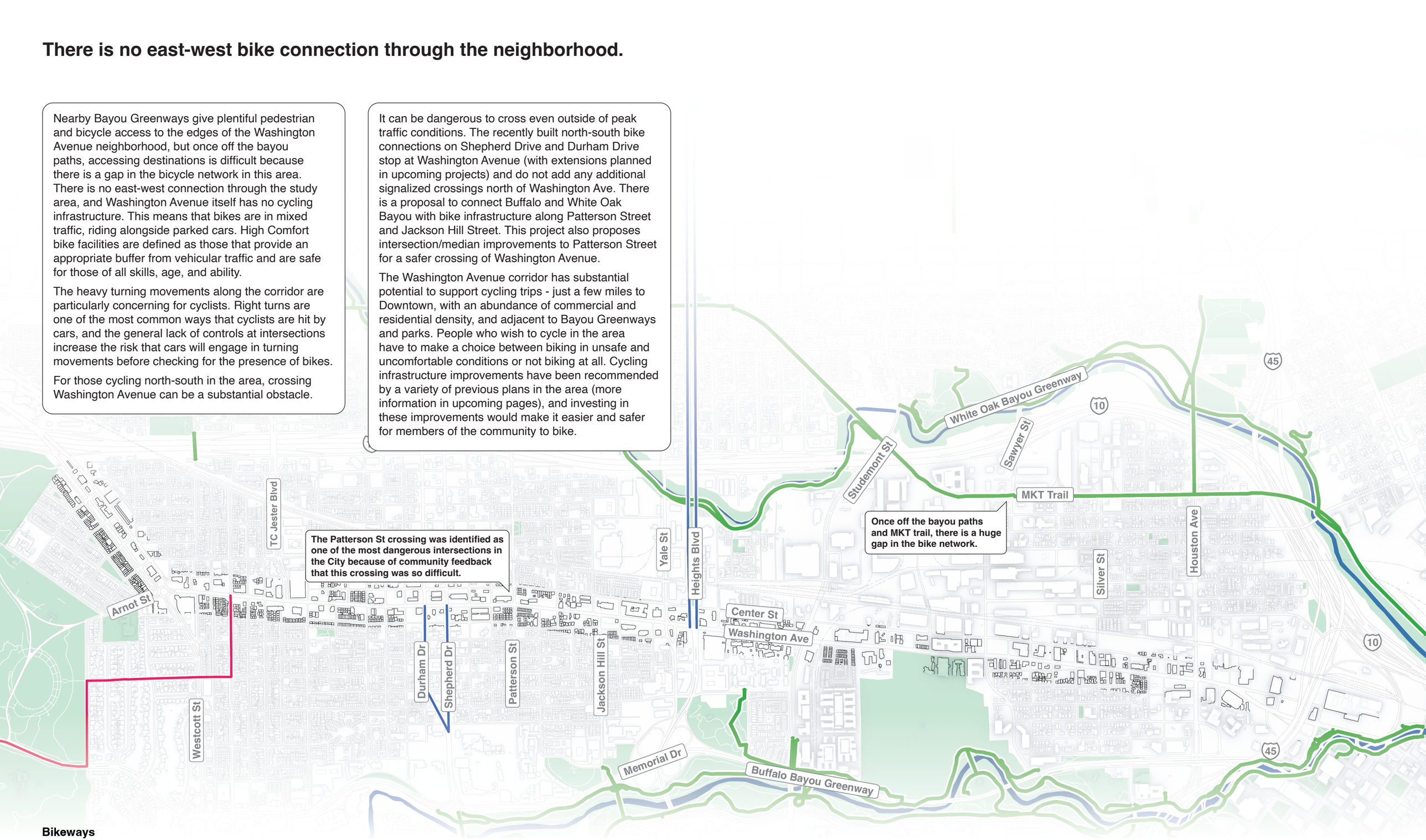
Nearby Bayou Greenways give plentiful pedestrian and bicycle access to the edges of the Washington Avenue neighborhood, but once off the bayou paths, accessing destinations is difficult because there is a gap in the bicycle network in this area. There is no east-west connection through the study area, and Washington Avenue itself has no cycling infrastructure. This means that bikes are in mixed traffic, riding alongside parked cars. High Comfort bike facilities are defined as those that provide an appropriate buffer from vehicular traffic and are safe for those of all skills, age, and ability.

The heavy turning movements along the corridor are particularly concerning for cyclists. Right turns are one of the most common ways that cyclists are hit by cars, and the general lack of controls at intersections increase the risk that cars will engage in turning movements before checking for the presence of bikes.

For those cycling north-south in the area, crossing Washington Avenue can be a substantial obstacle.

It can be dangerous to cross even outside of peak traffic conditions. The recently built north-south bike connections on Shepherd Drive and Durham Drive stop at Washington Avenue (with extensions planned in upcoming projects) and do not add any additional signalized crossings north of Washington Ave. There is a proposal to connect Buffalo and White Oak Bayou with bike infrastructure along Patterson Street and Jackson Hill Street. This project also proposes intersection/median improvements to Patterson Street for a safer crossing of Washington Avenue.

The Washington Avenue corridor has substantial potential to support cycling trips - just a few miles to Downtown, with an abundance of commercial and residential density, and adjacent to Bayou Greenways and parks. People who wish to cycle in the area have to make a choice between biking in unsafe and uncomfortable conditions or not biking at all. Cycling infrastructure improvements have been recommended by a variety of previous plans in the area (more information in upcoming pages), and investing in these improvements would make it easier and safer for members of the community to bike.



Bikeways

- High Comfort Off-Street
- High Comfort On-Street
- High Comfort Shared on-street

0 0.25 0.5 1 mile

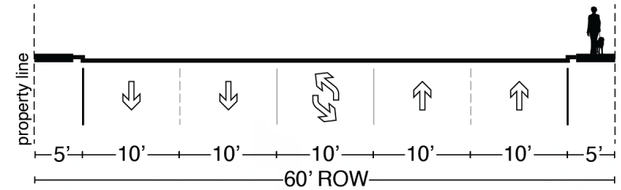
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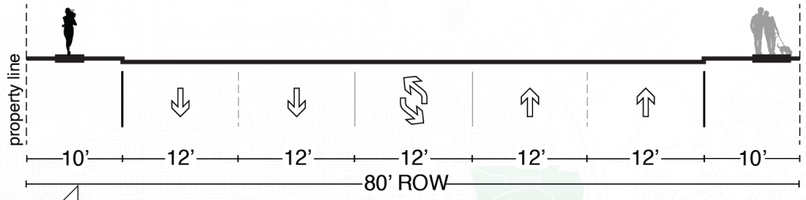
The right-of-way is limited along parts of Washington Avenue.

Washington Avenue corridor generally consists of two lanes in each direction with a middle turn lane. During off-peak hours, some portions of the outer lane turn into street parking in each direction. Although the number of lanes is fairly consistent throughout the corridor, the right-of-way (ROW) along Washington Avenue varies greatly, with the widest areas being up to 160 feet wide and the tightest segments being as narrow as 60 feet wide. The lane widths along the corridor also vary from 10-foot lanes to 12-foot lanes. This makes adding pedestrian or bike facilities (or even dedicated street parking) difficult because of the wide range in ROW space along the corridor; in some areas, there is plenty of space to work with, and in others, it's incredibly tight to add sidewalks, street trees, or bike facilities without taking away space for cars.

Right-of-way Configurations

With only 60 feet of ROW, five 10-foot lanes take up almost the entire ROW, leaving only enough space for a 5-foot sidewalk on either side at best (and most are not even that wide, even though current ADA and IDM standards require at least five feet).





A more generous 80-foot ROW allows space for five wide 12-foot lanes with enough space on either side for a wide sidewalk and some landscaped buffer space.

Right-of-way (ROW) is defined as the distance between property lines across the street.

Street ROW

30’ 40’ 50’ 60’ 70’ 80’ 90’ 100’ 120’ 150’ 160’ Variable

0 0.25 0.5 1 mile

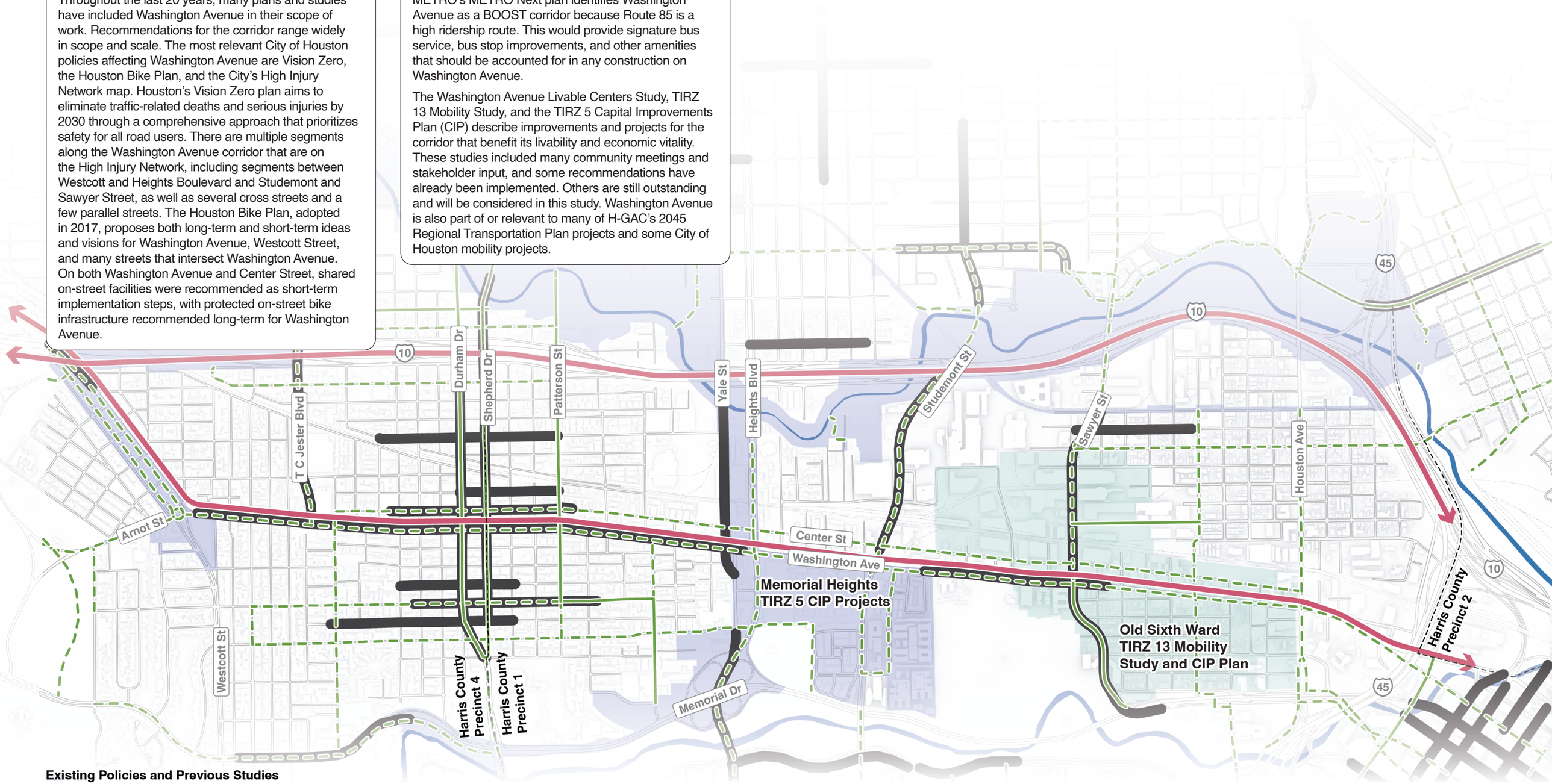
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There are many existing policies and previous studies that make recommendations for Washington Avenue.

Throughout the last 20 years, many plans and studies have included Washington Avenue in their scope of work. Recommendations for the corridor range widely in scope and scale. The most relevant City of Houston policies affecting Washington Avenue are Vision Zero, the Houston Bike Plan, and the City's High Injury Network map. Houston's Vision Zero plan aims to eliminate traffic-related deaths and serious injuries by 2030 through a comprehensive approach that prioritizes safety for all road users. There are multiple segments along the Washington Avenue corridor that are on the High Injury Network, including segments between Westcott and Heights Boulevard and Studemont and Sawyer Street, as well as several cross streets and a few parallel streets. The Houston Bike Plan, adopted in 2017, proposes both long-term and short-term ideas and visions for Washington Avenue, Westcott Street, and many streets that intersect Washington Avenue. On both Washington Avenue and Center Street, shared on-street facilities were recommended as short-term implementation steps, with protected on-street bike infrastructure recommended long-term for Washington Avenue.

METRO's METRO Next plan identifies Washington Avenue as a BOOST corridor because Route 85 is a high ridership route. This would provide signature bus service, bus stop improvements, and other amenities that should be accounted for in any construction on Washington Avenue.

The Washington Avenue Livable Centers Study, TIRZ 13 Mobility Study, and the TIRZ 5 Capital Improvements Plan (CIP) describe improvements and projects for the corridor that benefit its livability and economic vitality. These studies included many community meetings and stakeholder input, and some recommendations have already been implemented. Others are still outstanding and will be considered in this study. Washington Avenue is also part of or relevant to many of H-GAC's 2045 Regional Transportation Plan projects and some City of Houston mobility projects.



Existing Policies and Previous Studies

- COH Bike Plan - Programmed
- COH Bike Plan - Proposed
- Vision Zero High Injury Network
- MetroNEXT Corridor Projects

0 0.25 0.5 1 mile

N

Each segment of Washington Avenue is distinctive.

The corridor was divided into seven segments for further analysis. Within these segments on the following spreads, the variable right-of-way (ROW) is analyzed, along with sidewalk condition, building use, and locations of crosswalks, bus stops, and parking lots. Key destinations are highlighted, and crash locations are marked. These drawings were used to gather initial public feedback (Appendix D) as well as to demonstrate the recommendations (Appendix C).









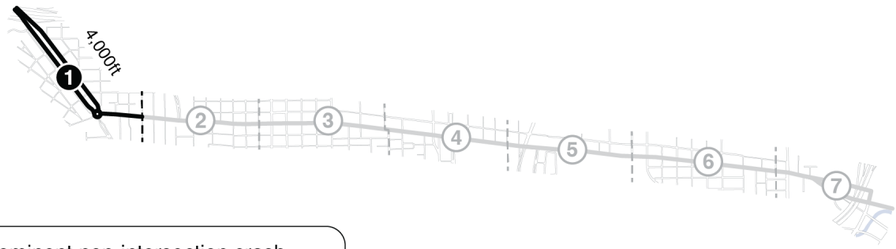


Segments

Washington Ave Segment cut line 0 Segment numbers

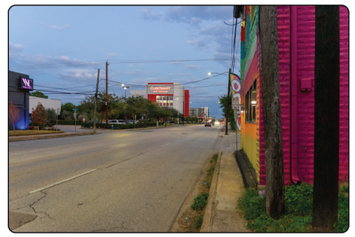
0 0.25 0.5 1 mile N

Segment 1 I-10 to Birdsall Street: Existing Conditions



This segment is defined by two one-way streets: northbound Washington Street and southbound Westcott Street. This area has high-volumes of traffic during peak hours—the right-of-way and lane count increase dramatically here to accommodate traffic coming to and from the highway. This is also an important area for pedestrians, with an elementary school nearby and many amenities like benches and sculptures.

A prominent non-intersection crash hotspot appeared at the northwest end of the study corridor, along Westcott between the Katy Freeway on-ramps and Durford St. Of particular note, 20% of all driveway-involved crashes in the study area occurred in these two blocks.



Former state theatre building

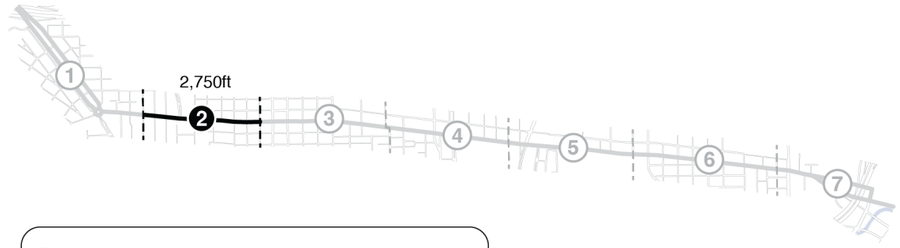


Westcott Traffic Circle

Legend

- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

Segment 2 Birdsall Street to Sandman Street: Existing Conditions



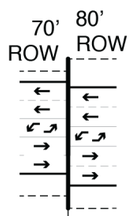
The Washington Avenue corridor segment between Birdsall Street and Sandman Street reveals disproportionate safety issues across many factors:

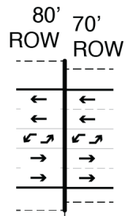
- Heatmapping shows this segment responsible for disproportionate overall crashes, serious injuries and pedestrian crashes compared to the remainder of the corridor.
- 45% of all study area crashes between midnight-3am occurred between TC Jester and Durham.
- 75% of pedestrian crashes that occurred between midnight-3am occurred between Detering and Durham.
- 32% of all single-unit crashes on the corridor occurred between TC Jester and Durham, peaking at the intersection of Roy and Washington.

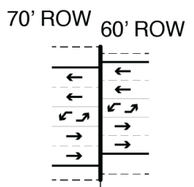


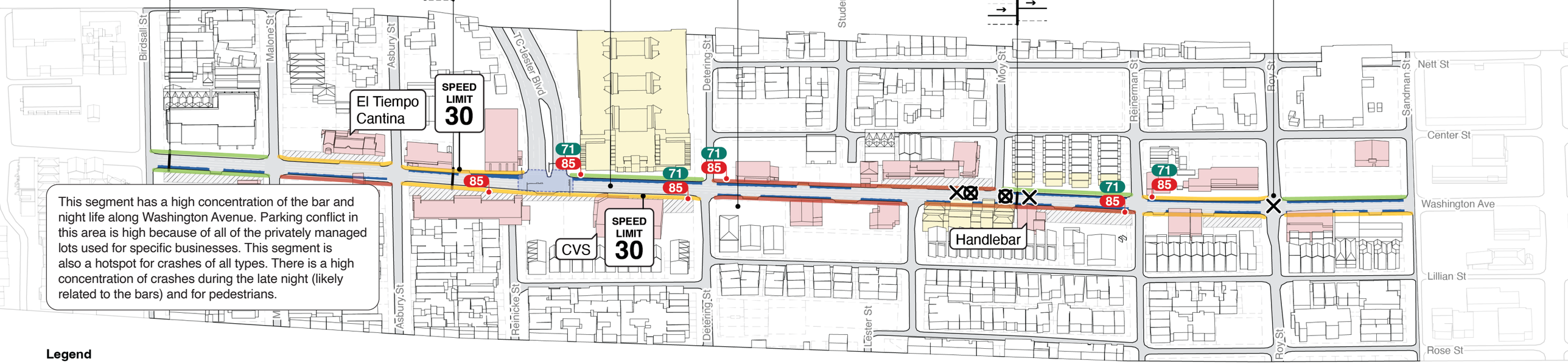
Pedestrian level activity

The leading contributing factor to crashes at Roy Street was failure to yield the right of way at a stop sign (35%) followed by failure to control speed (26%). Driver inattention was a bigger contributing factor to crashes at this intersection than any other hotspot intersection. Nearly 35% of crashes at this intersection were single-unit crashes. Crashes spiked at this intersection between midnight and 3:00am (30% of all crashes). A total of 19% of all crashes at this intersection occurred in just the one hour between 2:00am-3:00am.







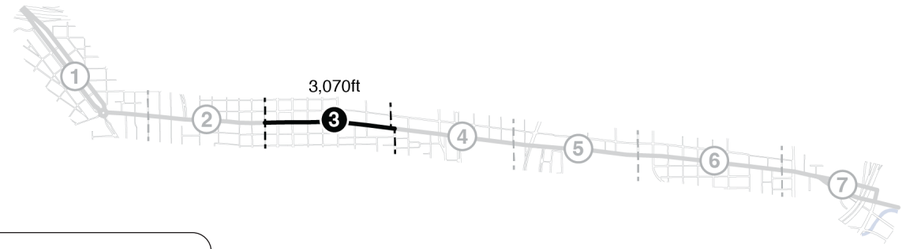


This segment has a high concentration of the bar and night life along Washington Avenue. Parking conflict in this area is high because of all of the privately managed lots used for specific businesses. This segment is also a hotspot for crashes of all types. There is a high concentration of crashes during the late night (likely related to the bars) and for pedestrians.

Legend

- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

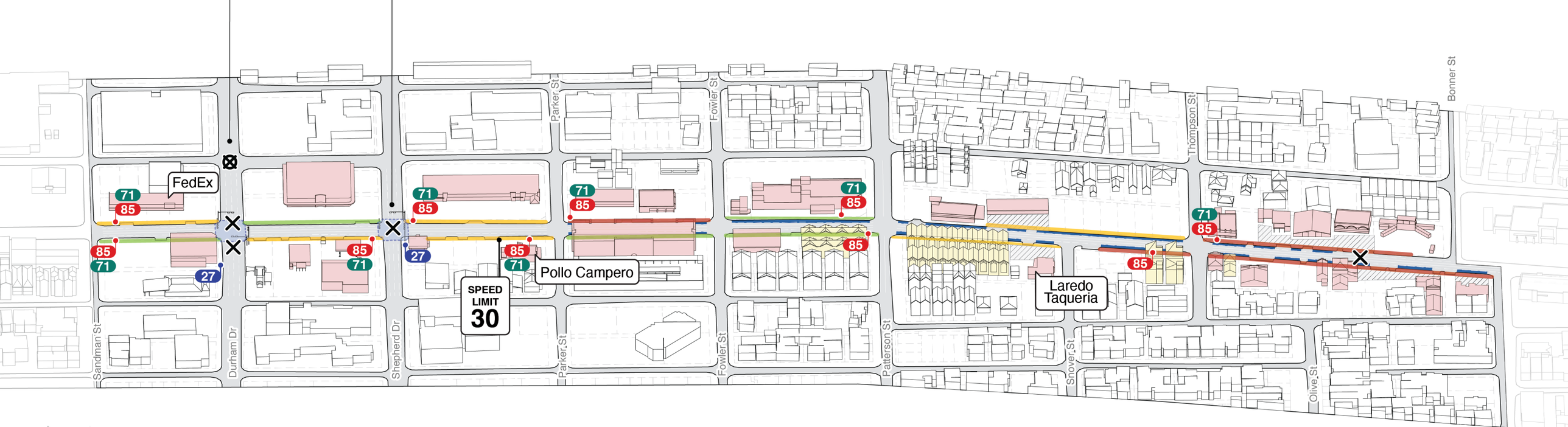
Segment 3 Sandman Street to Bonner Street: Existing Conditions



The intersection at Durham Drive saw a substantial peak in crashes within the timeframe that roughly correlates with its active reconstruction (spring 2022-early 2023). Crashes were down 34% in 2023 compared to the annual average of the three years prior to reconstruction. More than half of all crashes at this intersection occurred overnight, between 9:00pm – 4:00am. The leading contributing factor to crashes was “turning improperly-wrong lane” (21%) followed by failure to control speed (16%). At the intersection of Center Street and Durham Drive, this crash involving a person biking was caused by failure to yield by the driver.

The leading contributing factor to crashes at Shephed Drive was not properly yielding while turning left (17%). Nearly 30% of crashes involved one driver turning left and one going straight, and no other intersection in the study area saw more crashes with improper left turning. Further, 16% of crashes involved drivers disregarding traffic signals. A particular cluster of crashes (32%) occurred in the late afternoon/early evening hours (2:00pm-6:00pm).

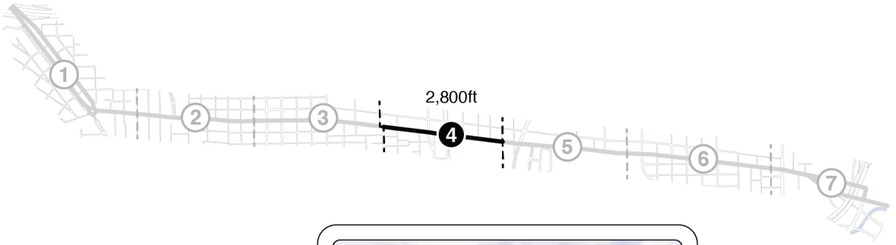
Nightlife and restaurants continue onto this segment, with similar parking issues present. This area has very little high quality sidewalk, and is one of the few areas that sees significant congestion along the corridor, often influenced by some of the parking and access management issues. Durham Drive and Shepherd Drive are the most heavily traveled north-south cross streets in the corridor.



Legend

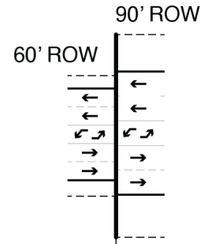
- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

Segment 4 Bonner Street to Wichman Street: Existing Conditions



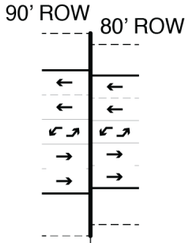
Here, lanes widen and sidewalks narrow, making it a very uncomfortable pedestrian environment. In some portions of this segment, lanes are up to 75% wider than necessary and intersections are large and dangerous. The only fatal crash to happen on the corridor in the past five years happened in this segment. Density drops off in this segment compared to the western segments.





The leading contributing factor to crashes at Heights Boulevard was failure to control speed (30%), and just over a quarter of all crashes involved disregarding a traffic signal, sign, or light. Just under one third of all crashes occurred between 4:00pm – 7:00pm.

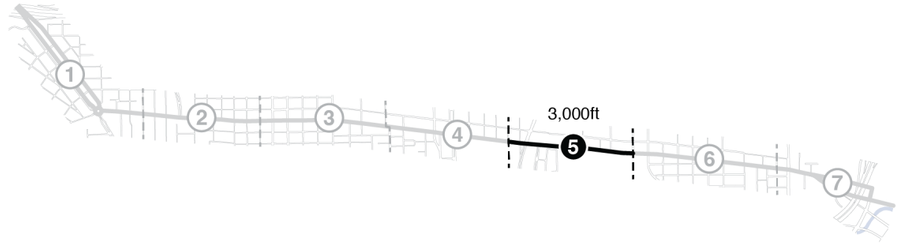




Legend

- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

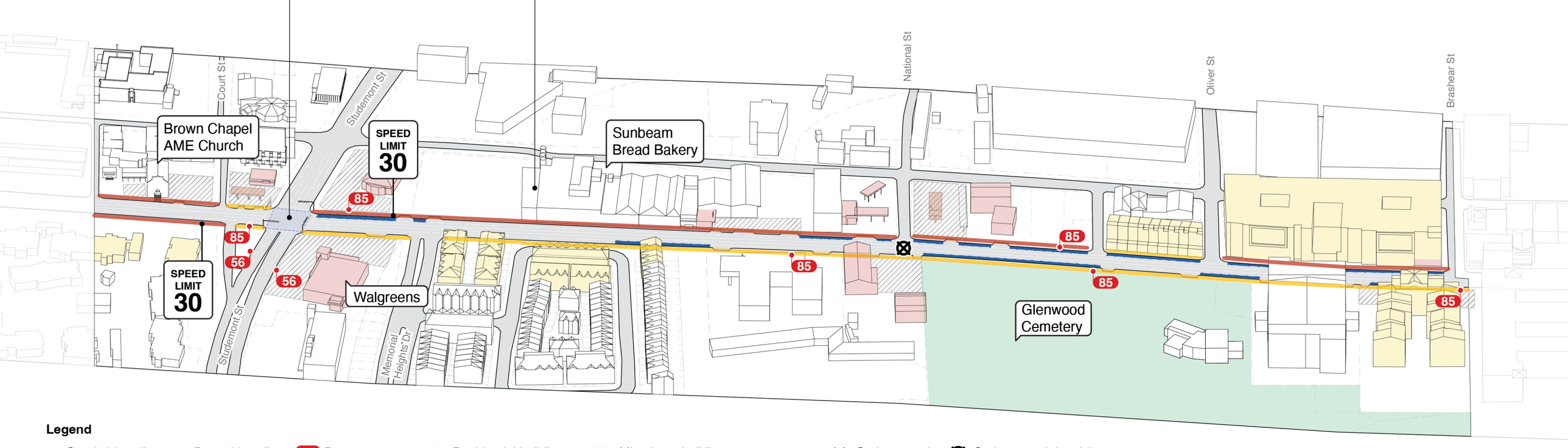
Segment 5 Wichman Street to Brashear Street: Existing Conditions



The leading contributing factor to crashes at Studemont Street was not properly yielding while turning left (17%). Nearly 30% of crashes involved one driver turning left and one going straight, and no other intersection in the study area saw more crashes with improper left turning. Further, 16% of crashes involved drivers disregarding traffic signals. A particular cluster of crashes (32%) occurred in the late afternoon/early evening hours (2:00pm-6:00pm).



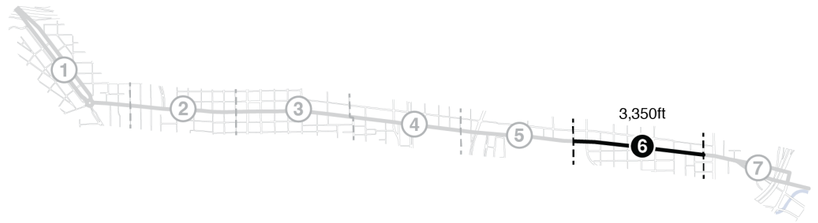
The east side of the corridor is more industrial than the west, but there are still clusters of residential development. Sidewalk conditions remain poor and there are many interruptions to the pedestrian environment. There is heavy traffic on north-south streets in this segment, increasing back-ups at lights for westbound traffic.



Legend

- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

Segment 6 Brashear Street to Colorado Street: Existing Conditions

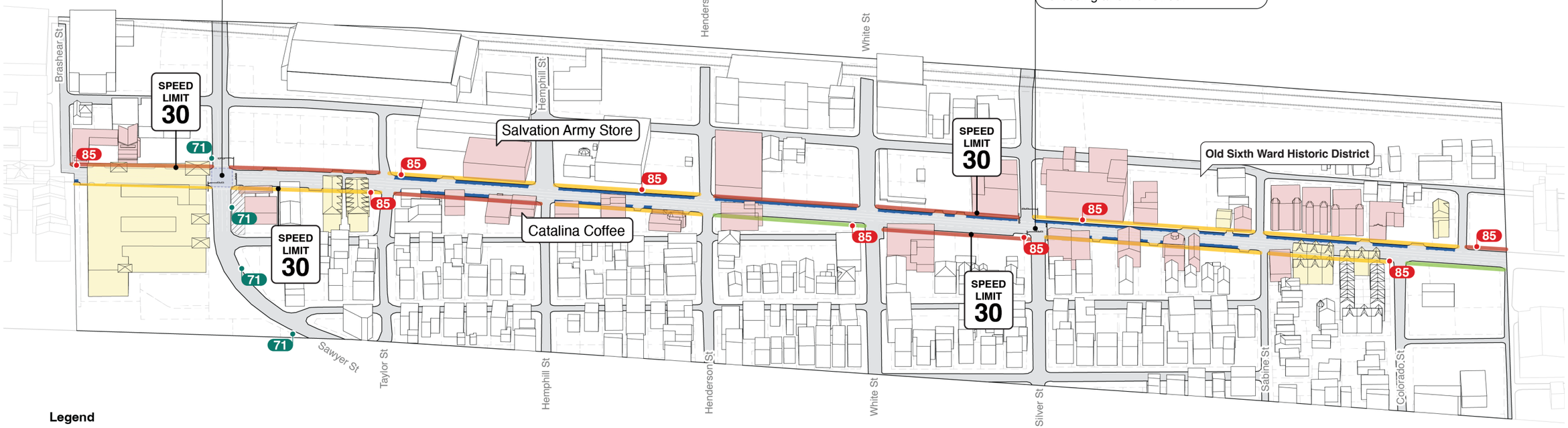


The leading contributing factor to crashes at Sawyer Street was failure to yield the right of way while turning left (24%) followed by disregarding a traffic signal (17%). Crashes experienced somewhat of a spike between 10:00am-2:00pm (19% of all crashes).

This segment is the neighborhood's historic core, with denser residential areas south of the corridor and historic buildings fronting the street, changing the urban design of the area. This area has prominent murals and mixed-use buildings, with newer development occurring at Silver Street. This area has great traffic flow with newly installed signals, and the Route 85 makes frequent stops.



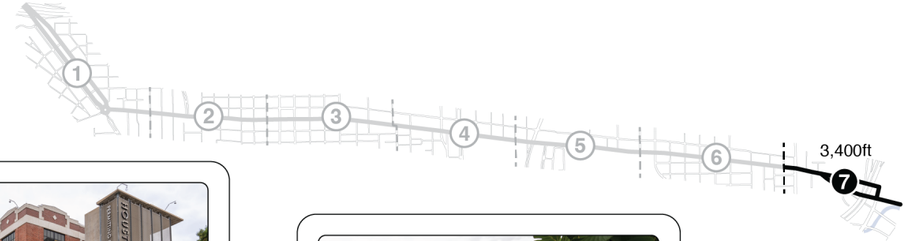
Crossing at Silver Street



Segment 7 Colorado Street to Smith Street: Existing Conditions



Heading into downtown, the corridor starts to change character. More government buildings and social services line the street. Here it becomes clearer how the Route 85 connects into the broader transit network.





Houston Permitting Center



80’ ROW

60’ ROW

100’ ROW

SPEED LIMIT 30

Houston Permitting Center

Amtrak Station

Hickory St

Goliad St

Houston Ave

Trinity St

Franklin St

Buffalo Bayou

Preston St

Bagby St

Prairie St

At the intersection of Washington Avenue and Houston Avenue, 25% of crashes were due to speeding, 18% were due to a disregard of the intersection controls, and 13% were due to changing lanes when unsafe. Most crashes at this intersection happened on weekdays and during the day–between 6am and 6pm–, which differs from other areas of Washington Avenue. Most traffic at this intersection is traveling across Washington to continue on Houston Ave, with much less traffic on Washington itself or from cars turning onto either street.

Legend

- Good sidewalk
- Fair sidewalk
- Poor sidewalk
- Crosswalk
- Bus stop
- Street parking
- Residential building
- Commercial building
- Mixed-use building
- Surface parking lot
- Serious crash
- Fatal crash
- Serious crash involving cyclist or pedestrian

In the first round of outreach, we heard from hundreds of people at the community meeting and online throughout interactive activities.

The preliminary round of community engagement for the Washington Avenue Corridor Study was rooted in teaching people what the project team had learned about the corridor and learning from locals about their needs and desires for the main street in their neighborhood. Feedback was collected in May 2024 through online and in-person activities.

One of the primary activities, both online and in-person, was called “Fill in the Gaps” which asked the question “What works, and what doesn’t?,” giving participants the chance to place pins with their comments in specific locations along the corridor. It received over 300 comments. “Corridor Experience” gave people the opportunity to rate their current satisfaction and level of importance for three factors: Safety, Comfort, and Parking. This feedback about the corridor augmented the research of the project team, creating a holistic set of existing conditions documentation for the study area.

Other activities provided information that informed the project’s vision, goals, and alternatives: “Imagine the Future” allowed the project team to see what types of places people want to see built on Washington Avenue through pictures of other streets. Through the “Mobility Tomorrow” activity, the project team learned what modes people would choose if they were equally safe and comfortable. “Spatial Tradeoffs” showed how people prioritized the limited public right of way. These activities, along with the “What’s Your Vision?” board, helped form the project vision, goals, and metrics.

In total, during the first round of engagement, over 150 people participated and gave over 600 comments.

Prior to the first Steering Committee meeting, many Steering Committee members provided critical data that contributed to the Existing Conditions report and the materials presented at the first public meeting. At the first Steering Committee meeting, the findings from the Existing Conditions report were presented and members were invited to make additions. The meeting focused heavily on understanding the universe of possibilities for the corridor and determining the boundaries of the study--what items should be included and which shouldn’t. At the second meeting, the feedback from the first Outreach meeting was presented and the Steering Committee discussed what the vision statement and goals should be for the project given both the Existing Conditions findings and the public input.





Public Engagement Round 1 Meeting







Public Engagement Round 1 Meeting

In the first round of outreach, we heard what people want to see from the Corridor through the Imagine the Future activity.

How do you imagine Washington Avenue Corridor in the future?

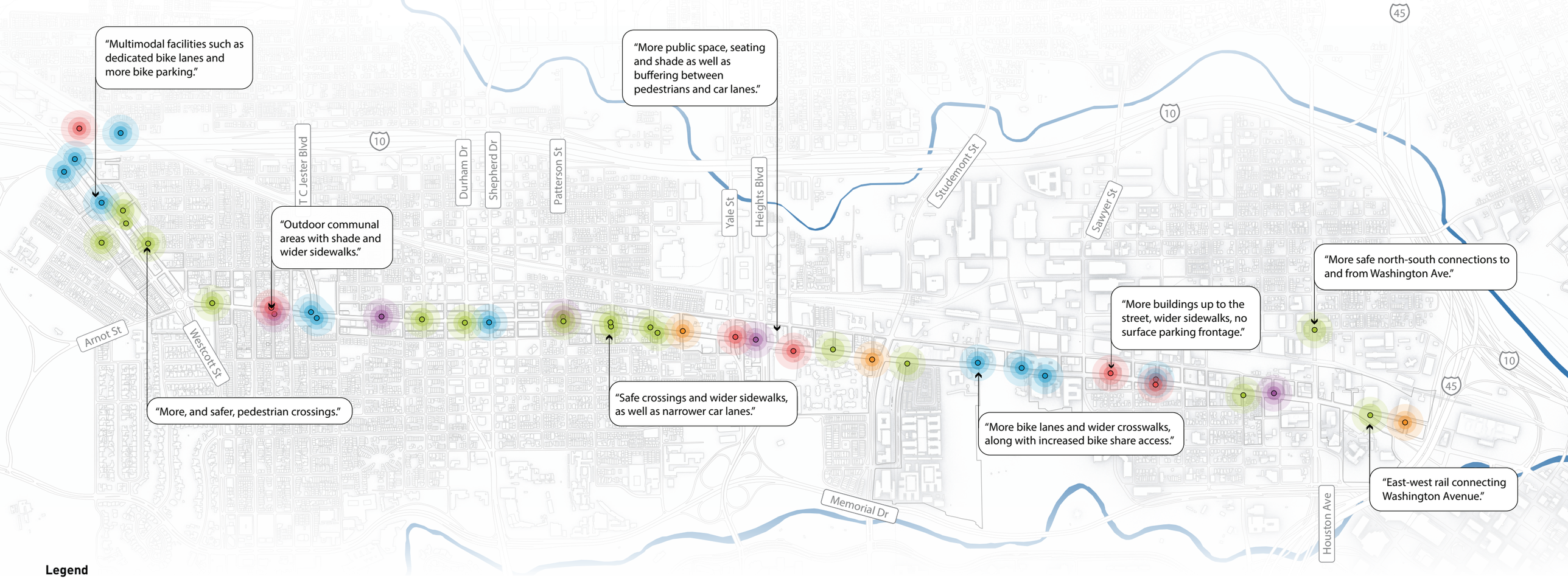
Community members selected image cards depicting a streetscape or scene representing their ideal future experience of the Corridor. They placed their chosen cards on the spot on Washington Avenue where they would like to experience that future condition.

The highest percentage of the over 100 answers related to Public Realm & Safety elements, followed those related to by Transit and Built Form elements.



Corridor-wide needs: dedicated bus lanes, sheltered bus stops, and safer crosswalks.





Legend

- Transit (Bus stops, bus lanes, light rail)
- Public Realm & Safety (Crosswalks, wider sidewalks,buffers, street trees)
- Multimodal Facilities (bicycle lanes and parking spots)
- Street Furnishing (seating, lighting)
- Built form (building scale, variety of shops, mixed use)

0 0.25 0.5 1 mile

N

The Fill in the Gaps activity revealed what is working well about the corridor today.

What works about the Washington Avenue Corridor?

We asked for people's experiences on and near Washington Ave. Two types of pins were used to understand what works and what doesn't work along the corridor. This heatmap illustrates comment hotspots and a summaries of the main comment themes for what is working well for people today.



Corridor-wide, people approve of recent efforts to make it easier to cross and walk along Washington Avenue and area cross streets.



Crossing at Silver Street

The recent raised crosswalk improvements and signaling have increased safety for both drivers and pedestrians at the roundabout. Residents feel happy with the way traffic flows through the area.

The bike lane on Bagby Street is a key connection to downtown destinations, including seasonal experiences like the holiday light installations.

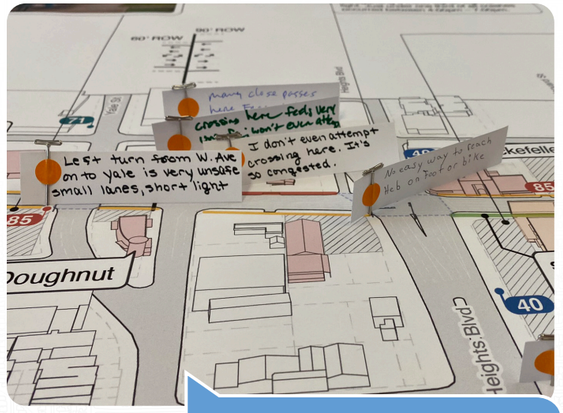
The recent installation of a signalized intersection at Silver Street makes it safer for all modes. The built form, including short setbacks, of the area around the intersection encourages active commercial activity.

The new improvements at Shepherd/Durham are working, including the new bike lanes, crosswalks, and crossing signalization.

The Fill in the Gaps activity revealed what isn't working well about the corridor today.

What doesn't work about the Washington Avenue Corridor?

We asked for people's experiences on and near Washington Ave. Two types of pins were used to understand what works and what doesn't work along the corridor. This heatmap illustrates comment hotspots and a summaries of the main comment themes for what is not working for people today.



Of the hundreds of comments received on this activity, 87% of comments were about what is not working along the corridor today.

A series of crossings accross Washington Ave and Westcott St are unsafe because of speed, road width, and lack of crossing infrastructure.

Patterson is the only neighborhood street that gets you from Buffalo Bayou up to White Oak Bayou. As such, it needs a protected crossing that benefits the safety of all modes.

Crossing conflicts, traffic because of nearby rail line, and confusing transit transfers.

Roundabout needs signaling, lane management and general maintenance improvements.

Major nightlife destination with conflicts of modes and inadequate infrastructure.

Very important crossing due to the connection to the Elementary School on the west side of the street. Current design does not merit a safe crossing for pedestrians and cyclists.

Very unsafe intersection for all modes. Important intersection that connects to the Heights and Montrose neighborhoods, the crossing experience does not match the importance of the local and larger connections.

The connections for all modes are confusing or non-existent and dangerous in this area of the corridor. The Buffalo Bayou trails and Bagby St bike lane do not connect to POST or Washington Ave. Intersection crossings in this area are not accessible, and connections across the highway are small and unclear.

Quality, safety, and readability of the road fork split and sidewalks is not working.

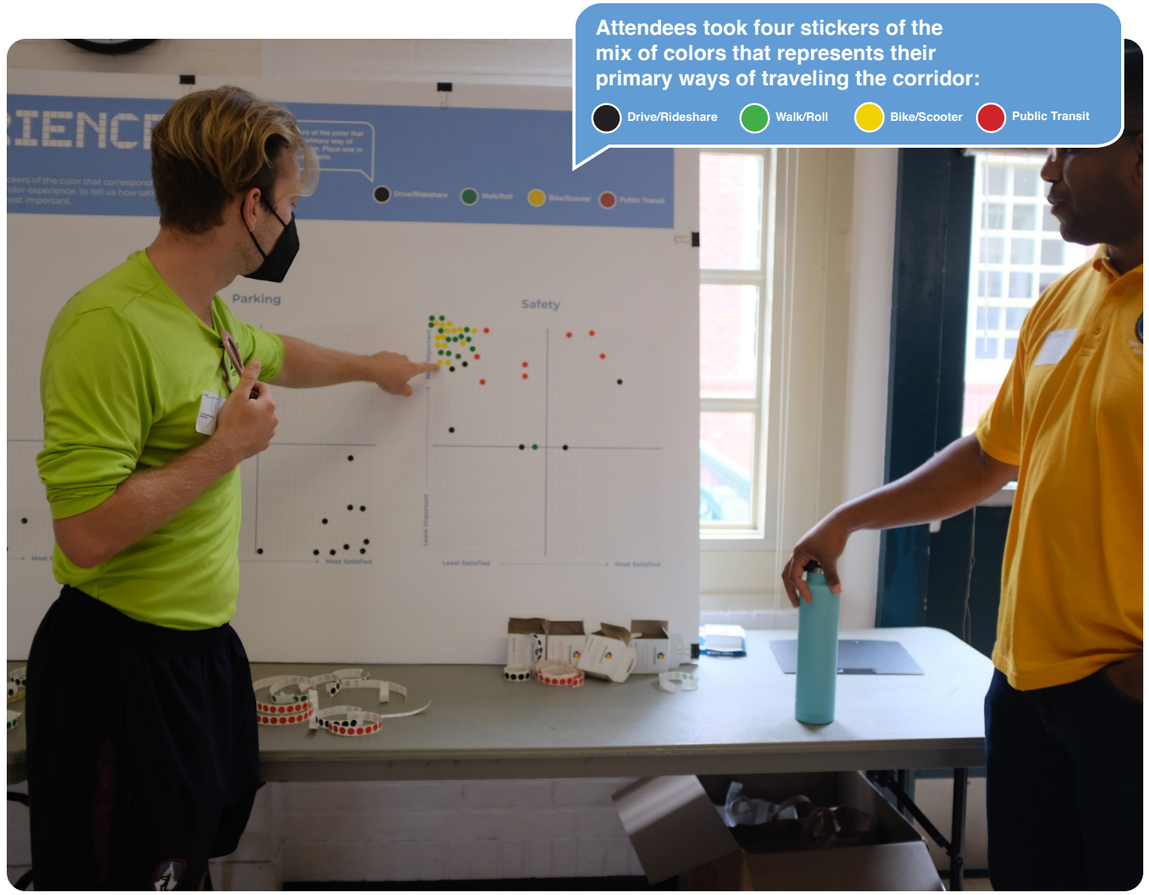
Houston Ave has missed opportunities for bike connections, the width and design of the intersection make it unsafe for people crossing on foot or bike, and there are potential economic benefits that could result from a safer intersection due to the concentration of restaurants just west of here.

The Corridor Experience activity gathered important feedback on comfort, safety, and parking.

How do you feel about your current experience traveling the Corridor?

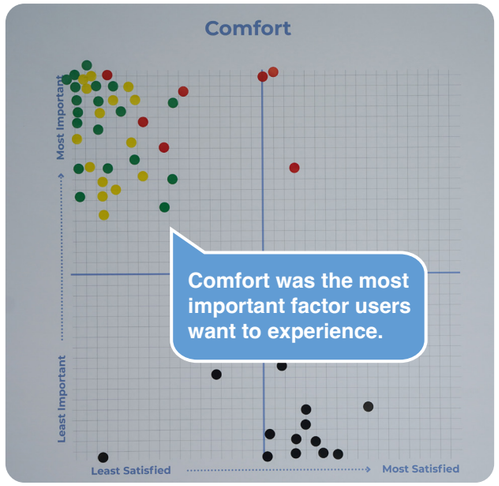
Attendees were provided with an example list of elements (sidewalks, travel lanes, crossings, trees/ landscaping, public space, outdoor dining, noise levels, and shade) to consider when rating satisfaction and importance on three factors: Safety, Comfort, and Parking.

These qualitative observations and value statements helped the design team and significantly influenced the development of the goals and evaluation metrics for Washington Avenue and Center Street.



Comfort

The attendees who chose walking/rolling or biking/ scootering as their primary means of traveling the Corridor all expressed a low level of comfort in their current travel experience and the continued importance of comfort in the future—suggesting a strong desire to enhance the comfort for those forms of travel in the future Corridor. About half of the attendees who chose public transit felt similarly, though the other half expressed that they were somewhat satisfied with their current experience. Most attendees who drive/rideshare as their primary means of travel expressed that they are somewhat satisfied with their current level of travel comfort but do not feel that comfort is an essential factor in their consideration of driving/ridesharing in the future Corridor.



Parking

Attendees who primarily walk/roll or take public transit on the Corridor did not express their views on parking as a factor in traveling the Corridor. Attendees who primarily bike/scooter voiced dissatisfaction with the currently available bicycle parking. On the other hand, of the attendees who chose driving/ridesharing as their primary means of travel, a significant majority expressed their high level of satisfaction with the current parking experience, providing reassurance about the existing parking situation on the Corridor.



Safety

Attendees who chose walking/rolling or biking/ scootering as their primary means of traveling the Corridor all expressed a low level of safety in their current travel experience, highlighting the shared concern for safety. They also emphasized the continued importance of safety, suggesting a strong desire to enhance safety in the future Corridor. Most attendees who primarily use public transit to travel Washington Avenue also expressed dissatisfaction with current safety and feel that safety is an important issue to address. Unlike with their ratings for “comfort” and “parking,” attendees who primarily drive/rideshare the Corridor also feel that safety will continue to be vital for them in the future, and most currently feel dissatisfied with the safety of their travel experience.



Through the Mobility Tomorrow activity, the project team learned what modes people would choose if they were equally safe and comfortable.

What modes would you use if the experience were safe and comfortable?

Attendees were provided four categories for methods of travel based on the type of space they require. Driving and rideshare both use personal vehicles, which drive in lanes. Bikes and scooters move at a similar speed and use a similar amount of space per person. People walking or rolling in a wheelchair or other mobility device share sidewalk space. Public transit users, regardless of what type of vehicle they are riding in, use a travel lane either partially or fully and need infrastructure at stops.

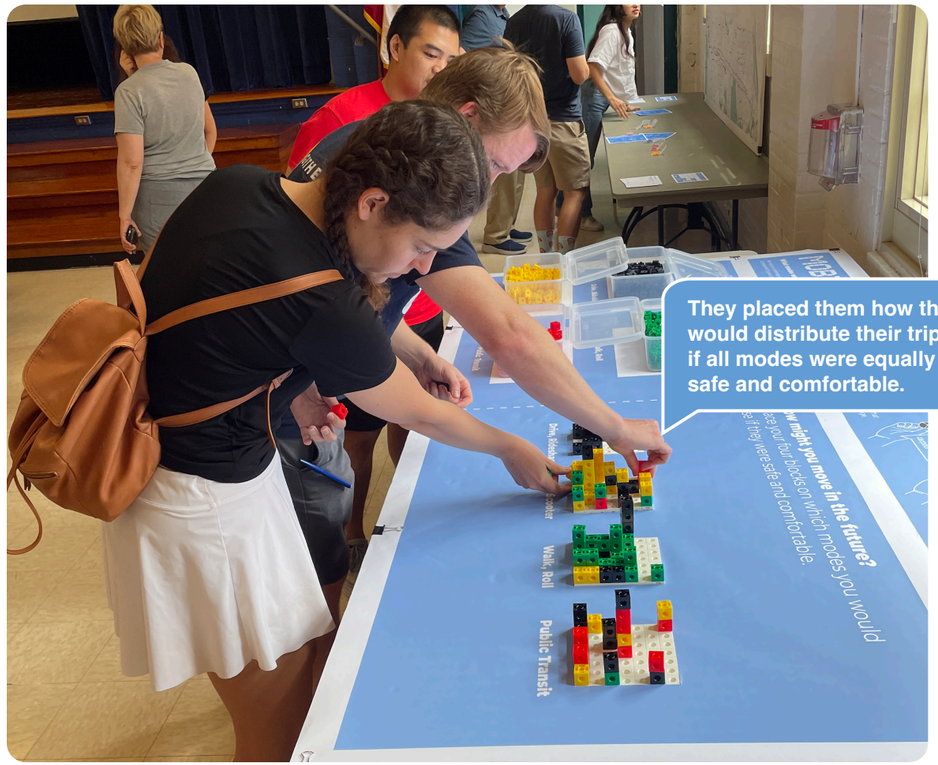
Today, these modes are not equally safe or comfortable. This activity was posed to capture people's desires agnostic of those factors. People also use many different modes throughout their day to day lives. All people who drive become people walking or rolling once they've parked their car. The same is true for people riding transit.

By allowing people to select four blocks that represent their current trip distribution, the feedback produced was more realistic than if people had only chosen one block to represent all of their trips today.

Many people showed that they would choose different ways of traveling. If all the blocks in the "bike, scooter" category were green, that would show that only people who currently bike and scooter would do so in a future where it was safe and comfortable. However, many people showed that their driving, rideshare, walking, and rolling trips may become bike trips. Many driving, rideshare, walking, and rolling trips would also become transit trips.

Overall, people desire safe and comfortable travel in all modes throughout the Washington Avenue Corridor.





What modes would you use if the experience were safe and comfortable?

Place your four blocks on which modes you would use if they were safe and comfortable.



The Spatial Tradeoffs activity showed how people prioritized the limited public right of way.

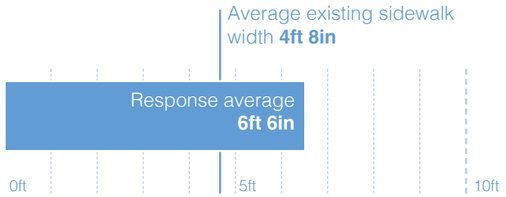
Do all your preferred street features fit within the right-of-way?

Space is limited within the current right-of-way in the Washington Avenue Corridor. This activity allowed participants to design their own version of the use of the street space. Overall, many people created sections with increased sidewalk width, including buffer space between the moving traffic and the sidewalk.



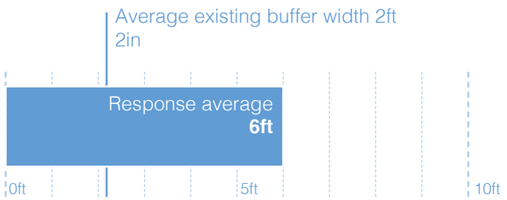
Sidewalks

On average, respondents would like to see a **34% increase in sidewalk width.**



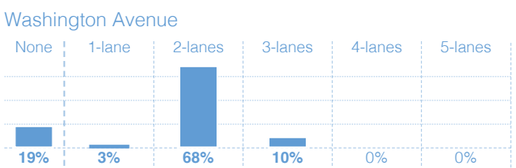
Buffer space

Respondents would like to see a **176% increase** in buffer between the sidewalk and the street.



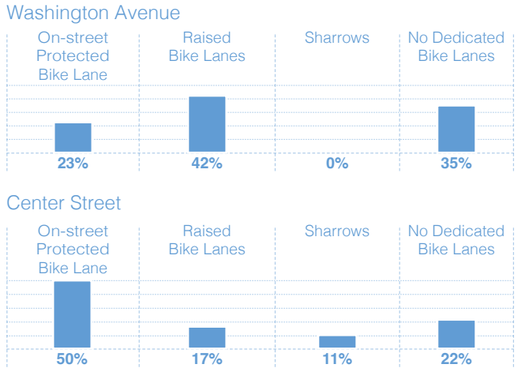
Traffic Lanes

100% of respondents reduced the number of traffic lanes on Washington Avenue. The average width of travel lanes chosen by respondents was **9ft 5in**.



Bike Infrastructure

65% of respondents would like to see dedicated bike lanes on Washington Avenue and **77%** would like to see bike lanes or sharrows on Center Street.



Turn Lanes/Medians

Only **10%** of respondents kept the middle turn lane in their configurations and **100%** of those that kept the turn lane, opted for raised medians.

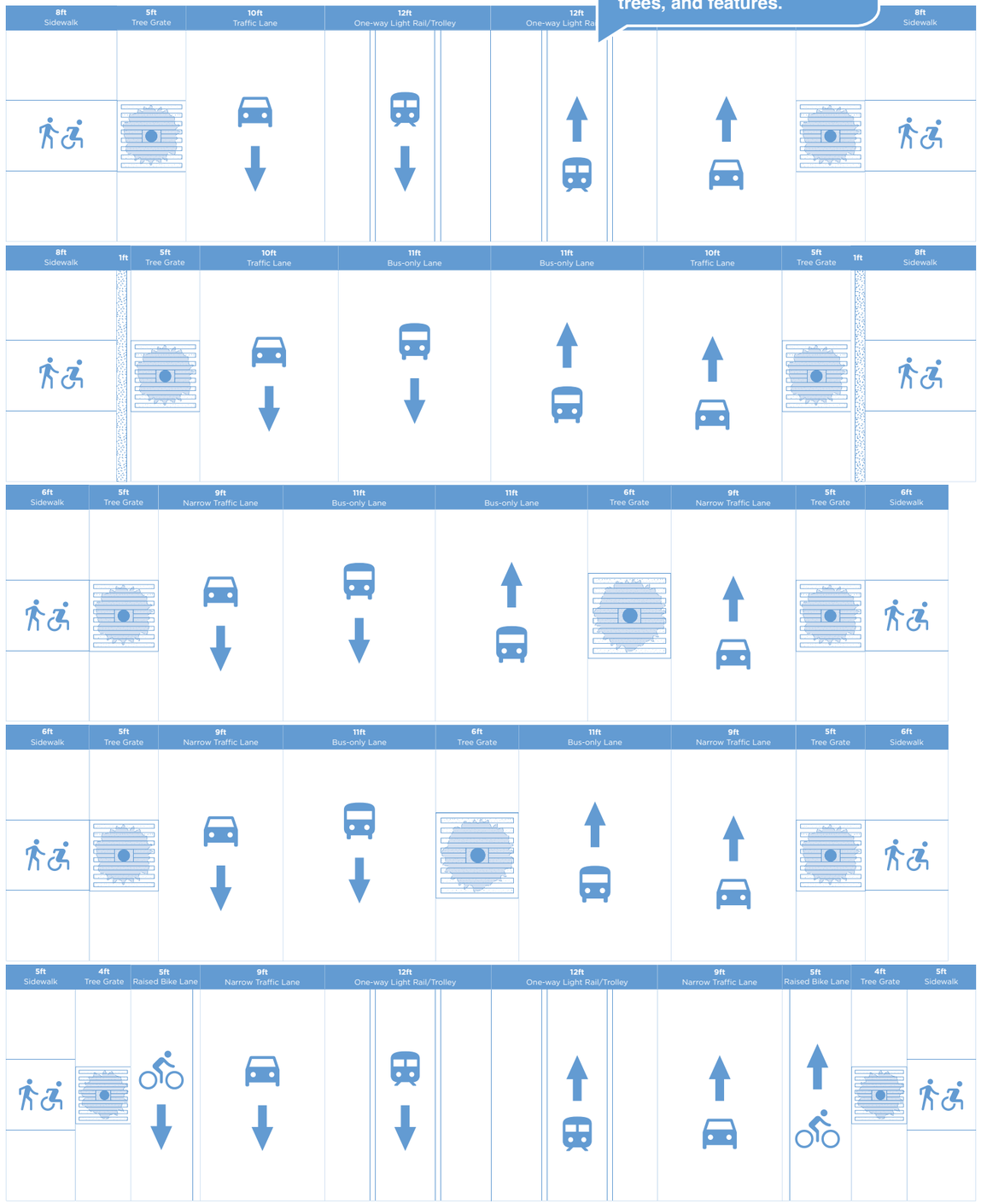
Transit

93% of respondents would like to see some dedicated transit on Washington Avenue. Of those **81%** would like to see light rail and **19%** would like to see bus-only lanes.

Parking

0% of respondents included parking in their sections on Washington Avenue and only **11%** included parking on Center Street.

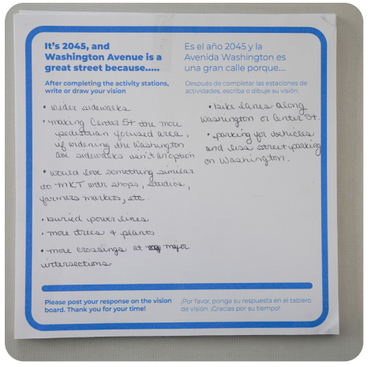
Attendees made many different options for the spatial distribution of lanes, trees, and features.

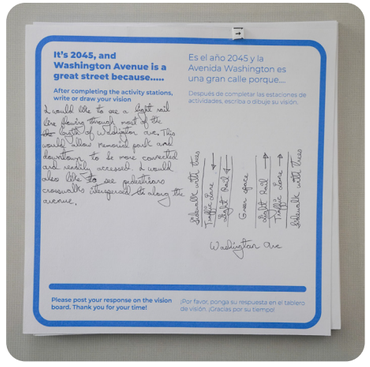


Asking people what their vision for the corridor is in 2045 helped form the project vision, goals, and metrics.

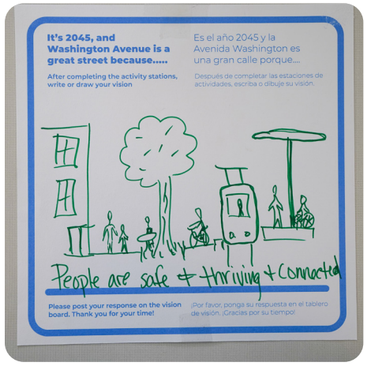
What's your vision?

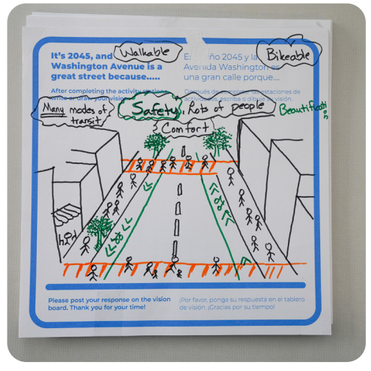
This activity provided meeting participants with an open-ended format to describe their visions for what the Washington Avenue Corridor should be like in 2045.

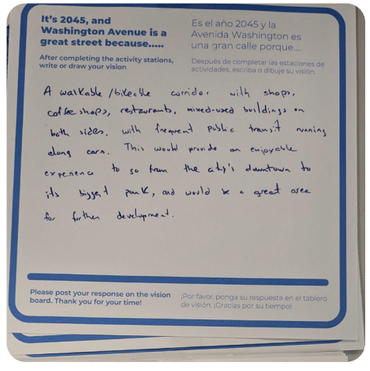


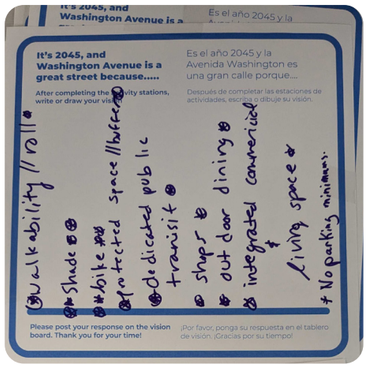


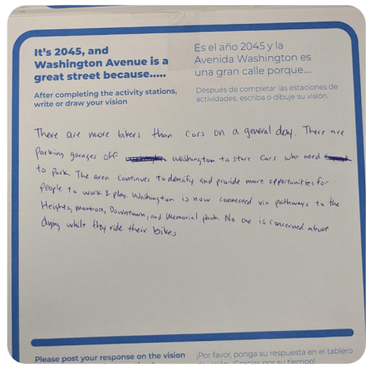


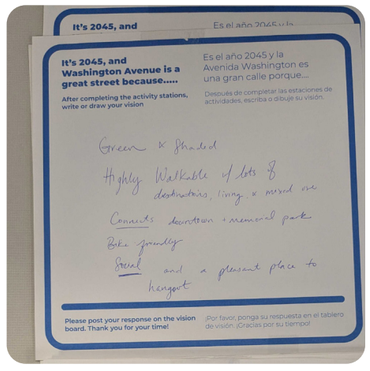


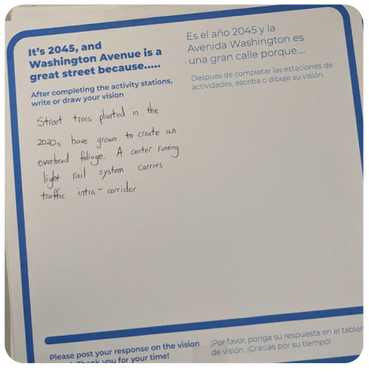


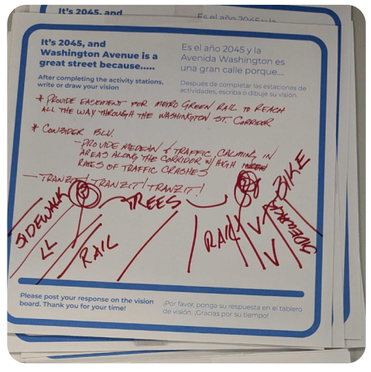


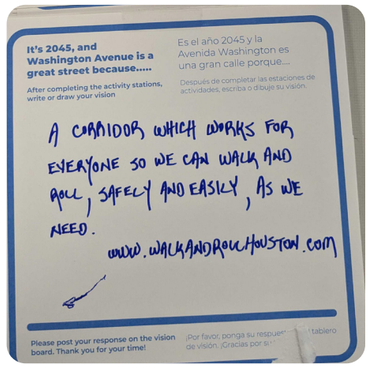


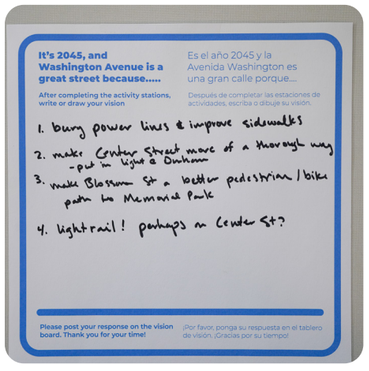


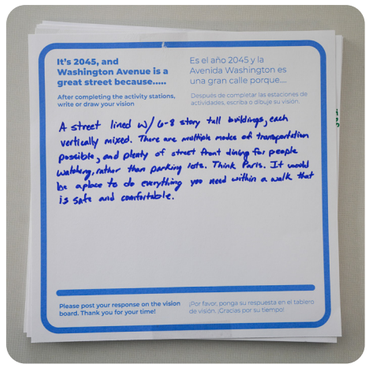






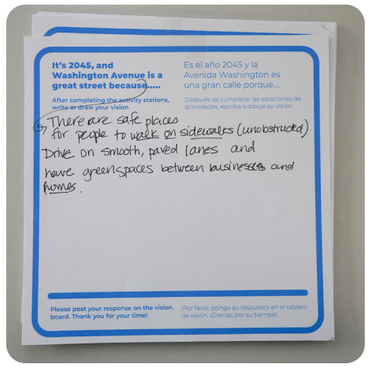


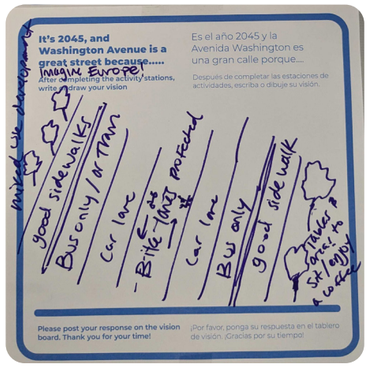












Public feedback was conclusive around the vision and goals for the Washington Avenue Corridor.

The corridor feels unsafe regardless of how people travel.

Providing a safe corridor for everyone was the most important issue. People rolling, moving on foot, biking, riding transit, and driving are unsatisfied with the safety of the corridor, citing unsafe crossings, intersections, sidewalks, and road design as their main concerns for the corridor.

Important connections to ped/bike trails, transit, and major destinations are missing.

Two Bayou trails run parallel to Washington, but don't connect to the corridor, even where connections would be easy to make. Transfers between bus routes are unclear and lead to missed connections, and major destinations are hard to get to by car due to turning conflicts, at grade railroad crossings, and lack of signalization.

Most buildings lack a strong relationship to the street and places to sit and eat outside.

The lack of interest and the space between sidewalks and buildings makes the corridor less interesting and more exposed to walk along and doesn't encourage people to interact with each other or shop.

People want to feel safe.

People moving along and across the Washington Avenue Corridor do not feel comfortable regardless of mode. Most people want to see bike lanes, wider sidewalks, improved crossings, and narrower car lanes. Pedestrians, cyclists, and transit users say comfort is very important, and if every mode of transportation felt equally comfortable, 75% of their driving trips may switch to a different mode. Over 90% of walking/rolling trips might switch to biking or taking transit, and almost 80% of bike trips would switch to walking/rolling.

People imagine pleasant outdoor common areas.

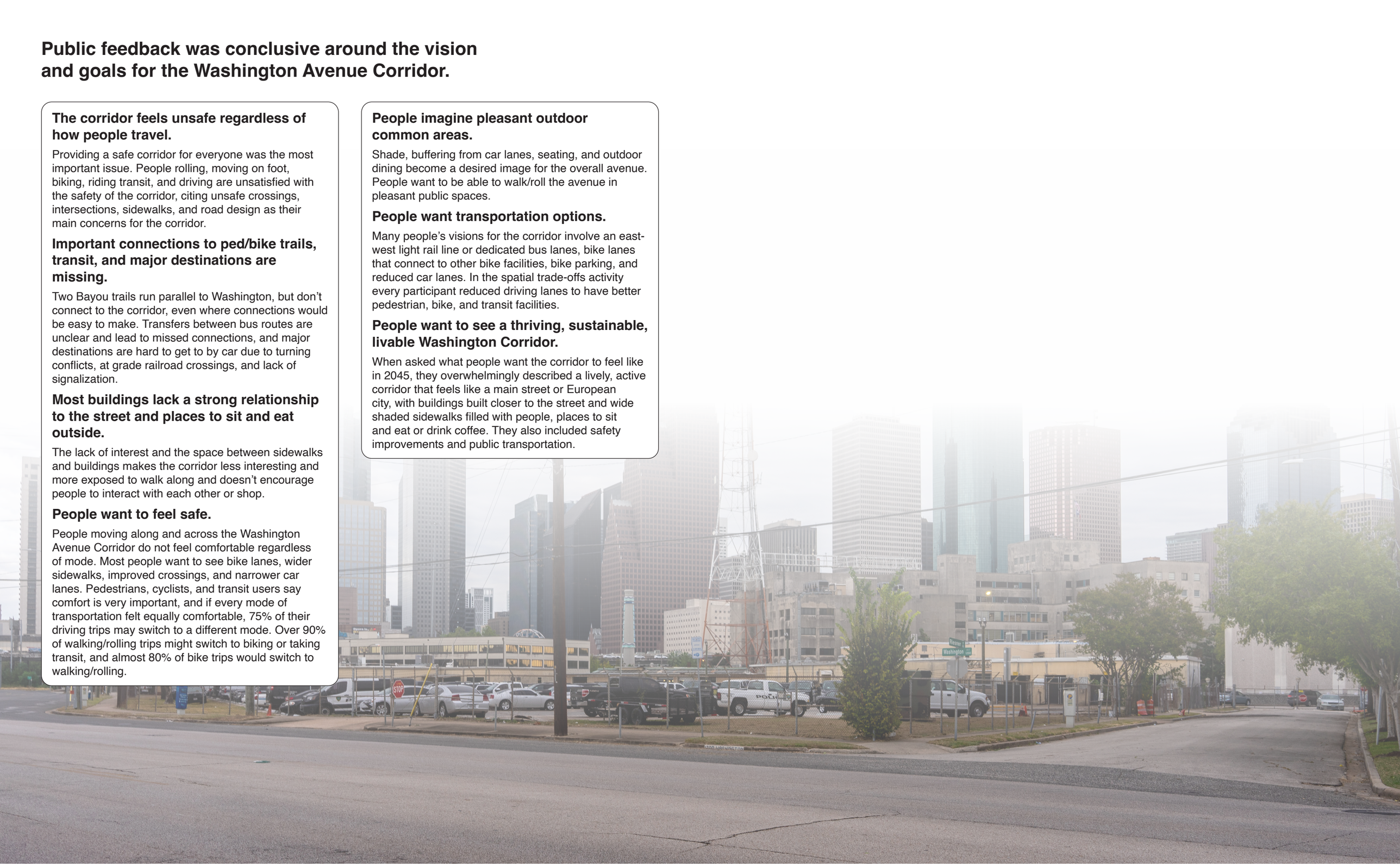
Shade, buffering from car lanes, seating, and outdoor dining become a desired image for the overall avenue. People want to be able to walk/roll the avenue in pleasant public spaces.

People want transportation options.

Many people's visions for the corridor involve an east-west light rail line or dedicated bus lanes, bike lanes that connect to other bike facilities, bike parking, and reduced car lanes. In the spatial trade-offs activity every participant reduced driving lanes to have better pedestrian, bike, and transit facilities.

People want to see a thriving, sustainable, livable Washington Corridor.

When asked what people want the corridor to feel like in 2045, they overwhelmingly described a lively, active corridor that feels like a main street or European city, with buildings built closer to the street and wide shaded sidewalks filled with people, places to sit and eat or drink coffee. They also included safety improvements and public transportation.



The study vision statement and goals reflect the community and steering committee vision for the Washington Avenue Corridor in 2045:

VISION

The Washington Avenue Corridor is a thriving, sustainable, livable neighborhood.

GOALS

because it....

- **Works effectively.**
- **Is safe for all users.**
- **Connects into a network.**
- **Is a great place with happy residents and prosperous businesses.**



Seven alternatives were presented to the public. While wide sidewalks were a popular alternative, the public consensus around prioritizing space for transit was clear.

The seven alternatives presented a spectrum of spatial tradeoffs.

A critical part of the Washington Avenue Corridor Study process was creating multiple alternative designs for the corridor to evaluate and present to the public for feedback. The creation of the alternatives began with the process of understanding the current condition of the corridor area and learning what the public desired for the future of the corridor.

Prior to the presentation of the seven final alternatives, the project team hosted a Neighborhood Focus Group with the help of Superneighborhood 22 to look at the major segments of the corridor and to see what types of designs people preferred for each one. This allowed people to give input on very local and specific conditions prior to the project team creating corridor wide design alternatives. At this meeting, it was also discussed what should be included in the baseline for all alternatives. The Steering Committee also went through a similar exercise and gave feedback on the elements that should be included in the alternatives.



Neighborhood Focus Group Meeting



Neighborhood Focus Group Meeting

Alternative A: Two wide vehicular lanes each direction with turn lanes

This alternative makes the lanes 12 feet all along Washington, widening it in some places. This creates an environment with limited space for greenery like trees and plantings next to accessible sidewalks. In this alternative, painted sharrows are added to Center Street.

Alternative B: Two vehicular lanes each direction with a median and turn lanes

This alternative has vehicular lanes that are 11' on the curb and 10' in the center. It includes turn lanes at major intersections and medians with trees elsewhere. It adds accessible sidewalks and street trees.

Alternative C: One vehicular lane and one bus-only lane with right turns

This alternative has one vehicular lane and one travel lane for buses only in each direction, creating more reliable and on-time transit. Vehicles use the bus-only lane for right turns at major intersections.

Alternative D: One vehicular lane with a right turn lane and wide sidewalks

This alternative has one vehicular lane in each direction shared with buses, with right turn lanes at major intersections. The additional space is allocated to a large pedestrian realm with room for large street trees, outdoor dining, and public space.

Alternative E: One vehicular lane and off-street bike lanes on Washington

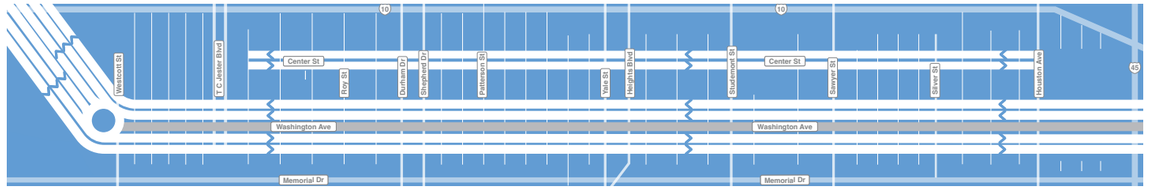
This alternative has one vehicular lane in each direction that is shared with buses. The additional space is allocated to an off-street bike path behind the curb at sidewalk level and street trees.

Alternative F: One vehicular lane plus center-running transit Downtown to Heights Blvd

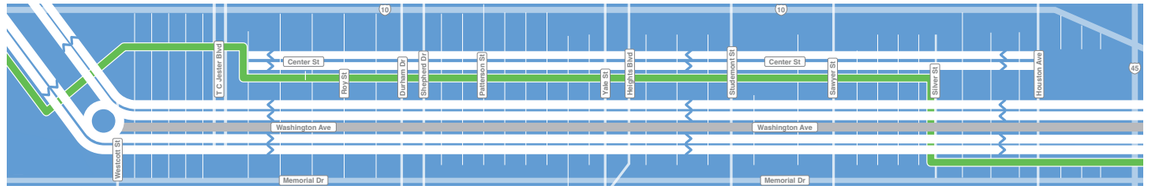
This alternative has one vehicular lane in each direction with center-running light rail or bus rapid transit east of Heights Blvd. West of Heights Blvd, Washington has two vehicle lanes.

Alternative G: One vehicular lane plus center-running transit Downtown to Northwest TC

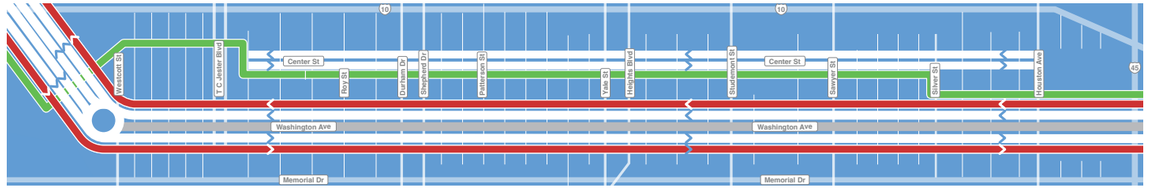
This alternative has one vehicular lane in each direction with center-running light rail or bus rapid transit. Northwest of the roundabout, there are two vehicle lanes southbound and one northbound with turn lanes and crosswalks.



Alternative A



Alternative B



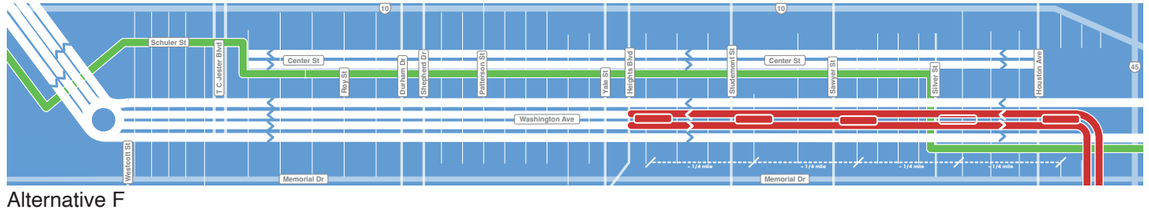
Alternative C



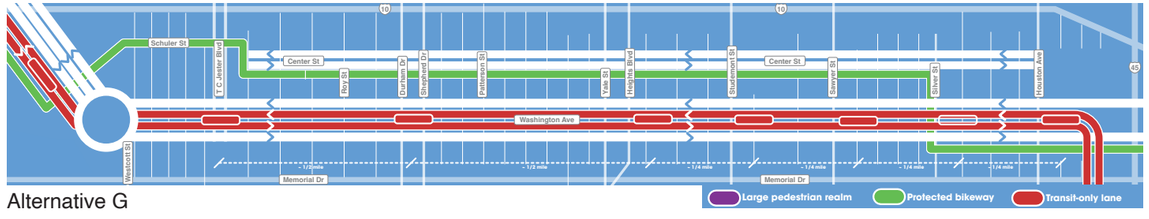
Alternative D



Alternative E



Alternative F



Alternative G

Alternative A Two wide vehicular lanes in each direction with turn lanes

Alternative A Overview

- Accessible sidewalks
- Repaved car lanes **with two wide lanes in each direction on Washington Avenue**
- Parking management
- Frequent transit
- More and safer neighborhood bike connections **with sharrows on Center Street**

This alternative makes the lanes 12 feet all along Washington, widening it in some places. This creates an environment with limited space for greenery like trees and planting next to accessible sidewalks.

Alternative A includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

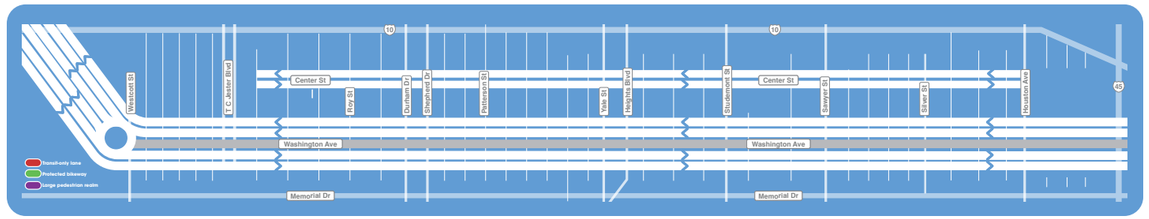
- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



CENTER STREET

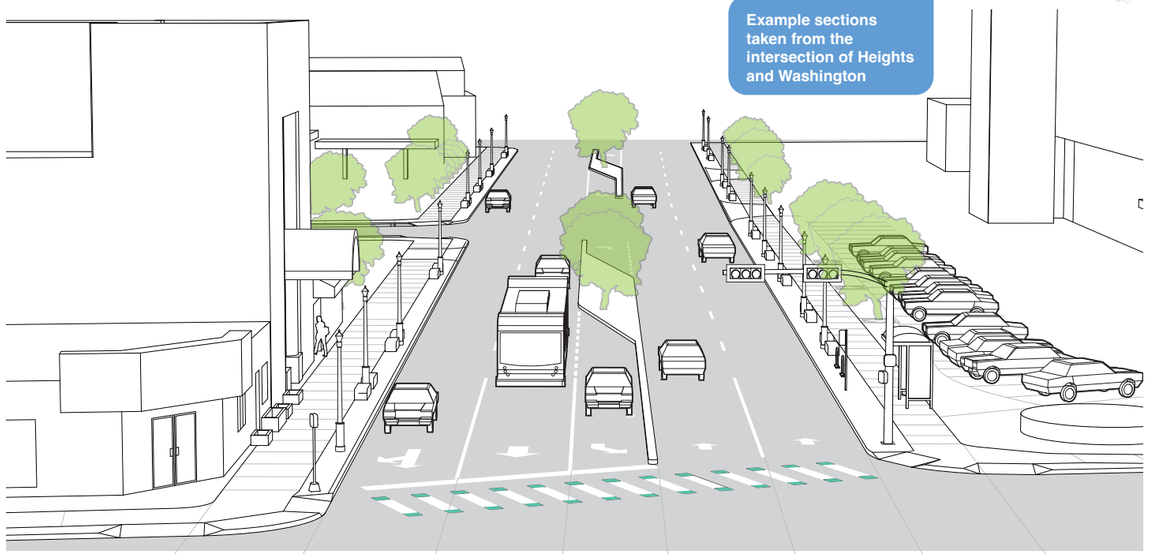


Parking may be included to one side where needed.

Intersection	Back of Curb 13'	Sharrow 12'	Sharrow 12'	Back of Curb 13'
Mid-block	Back of Curb 13'	Sharrow 12'	Sharrow 12'	Back of Curb 13'
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies

WASHINGTON AVENUE

Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 6' - 15' 6"	Travel Lane 12'	Travel Lane 12'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 12'	Travel Lane 12'	Back of Curb 6' - 15' 6"
Mid-block	Back of Curb 6' - 15' 6"	Travel Lane 12'	Travel Lane 12'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 12'	Travel Lane 12'	Back of Curb 6' - 15' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Alternative B Two vehicular lanes in each direction with a median and turn lanes

Alternative B Overview

- Accessible sidewalks **with street trees on both sides**
- Repaved car lanes with two lanes in each direction on Washington Avenue
- Parking management
- Frequent transit
- More and safer neighborhood bike connections **with protected bike lanes on Center Street**

This alternative has vehicular lanes that are 11' on the curb and 10' in the center. It includes turn lanes at major intersections and medians with trees elsewhere. It adds accessible sidewalks and street trees.

Alternative B includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

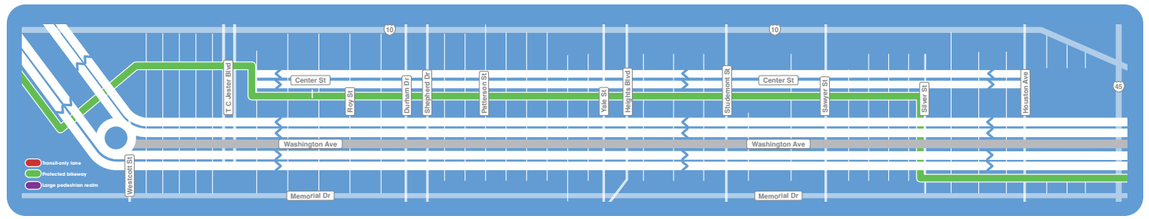
- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



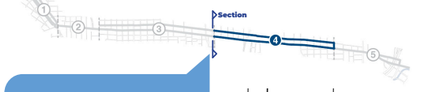
CENTER STREET



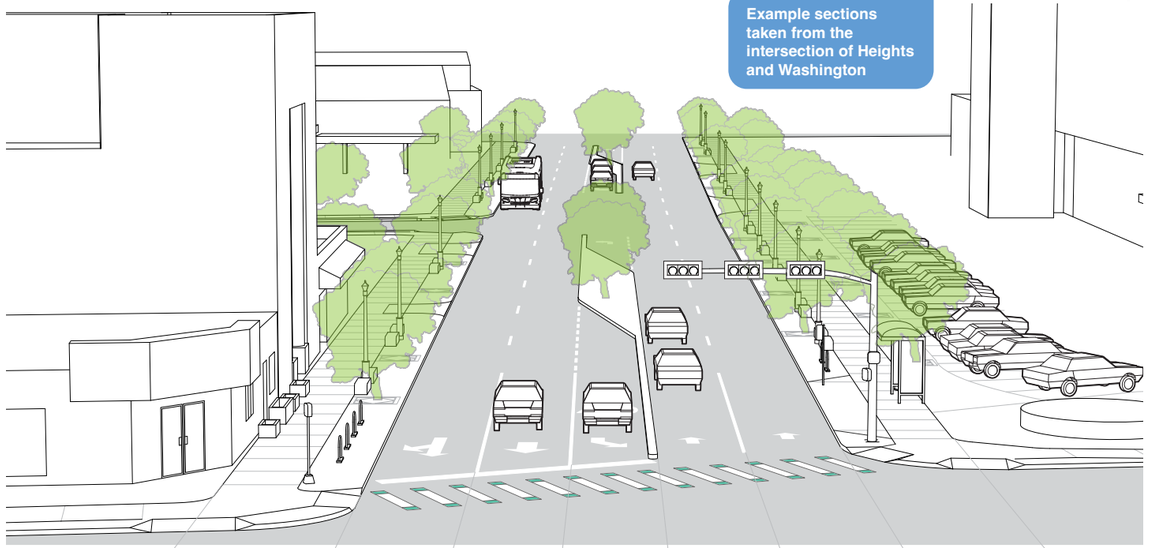
Parking may be included to one side where needed.

Intersection	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'	
Mid-block	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'	
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies	

WASHINGTON AVENUE



Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 6' - 18' 6"	Travel Lane 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Travel Lane 11'	Back of Curb 6' - 18' 6"
Mid-block	Back of Curb 6' - 18' 6"	Travel Lane 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Travel Lane 11'	Back of Curb 6' - 18' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Alternative C One vehicular lane and one bus-only lane in each direction with right turns

Alternative C Overview

- Accessible sidewalks **with street trees on both sides**
- Repaved car lanes with one lane in each direction on Washington Avenue
- Parking management
- Frequent transit **with bus-only lanes that allow right turns**
- More and safer neighborhood bike connections **with protected bike lanes on Center Street**

This alternative has one vehicular lane and one travel lane for buses only, creating more reliable and on-time transit. Vehicles use the bus-only lane for right turns at major intersections.

Alternative C includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

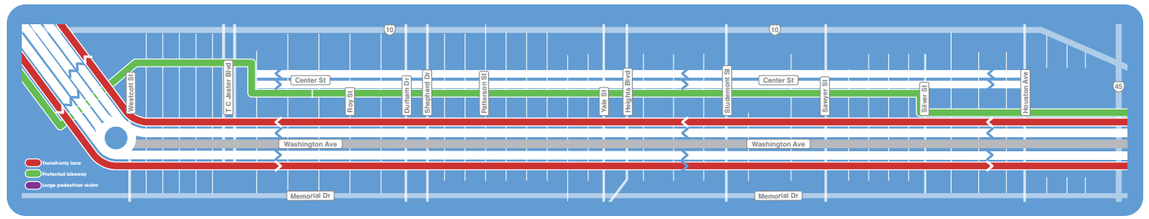
- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

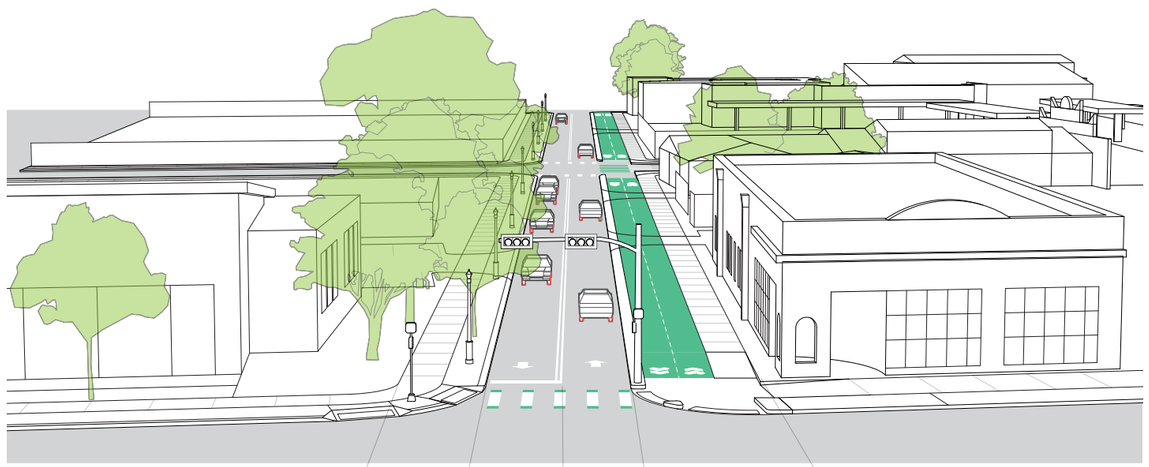
- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



CENTER STREET

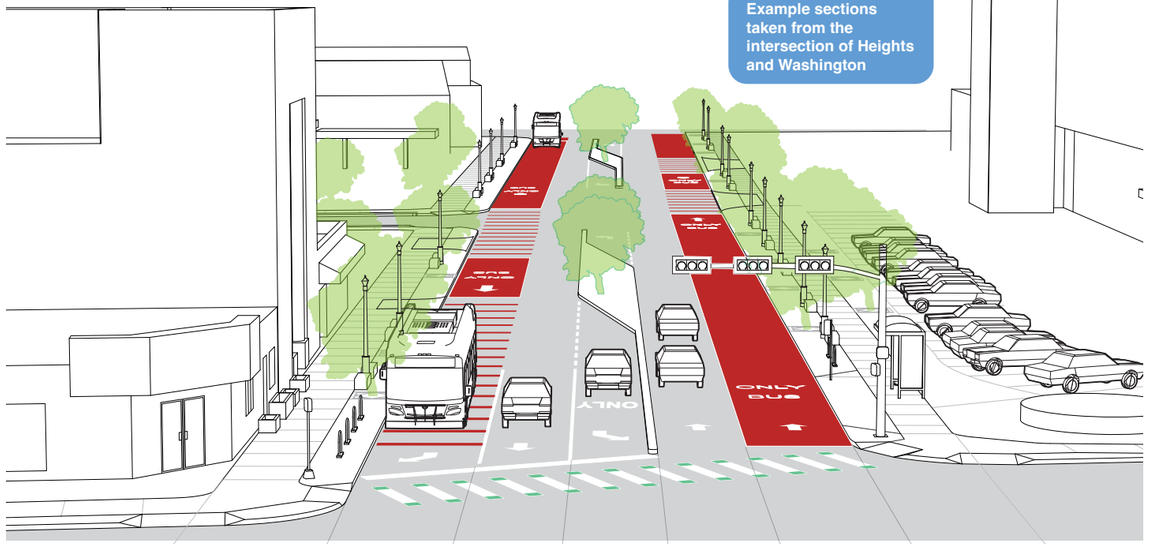


Parking may be included to one side where needed.

Intersection	Back of Curb 12'	Drive 10'	Drive 10'		Back of Curb 18'
Mid-block	Back of Curb 12'	Drive 10'	Drive 10'		Back of Curb 18'
Existing	Back of Curb Varies	Drive 13'		Drive 13'	Back of Curb Varies

WASHINGTON AVENUE

Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 6' - 18' 6"	Bus Lane / Right Turn 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Bus Lane / Right Turn 11'	Back of Curb 6' - 18' 6"	
Mid-block	Back of Curb 6' - 18' 6"	Bus Lane / Right Turn 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Bus Lane / Right Turn 11'	Back of Curb 6' - 18' 6"	
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"	

Alternative D One vehicular lane in each direction with a right turn lane and wide sidewalks

Alternative D Overview

- **Wide,** accessible sidewalks **with street trees on both sides**
- Repaved car lanes with one lane in each direction on Washington Avenue
- Parking management
- Frequent transit
- More and safer neighborhood bike connections **with protected bike lanes on Center Street**

This alternative has one vehicular lane shared with buses, with right turn lanes at major intersections. The additional space is allocated to a large pedestrian realm with room for large street trees, outdoor dining, and public space.

Alternative D includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

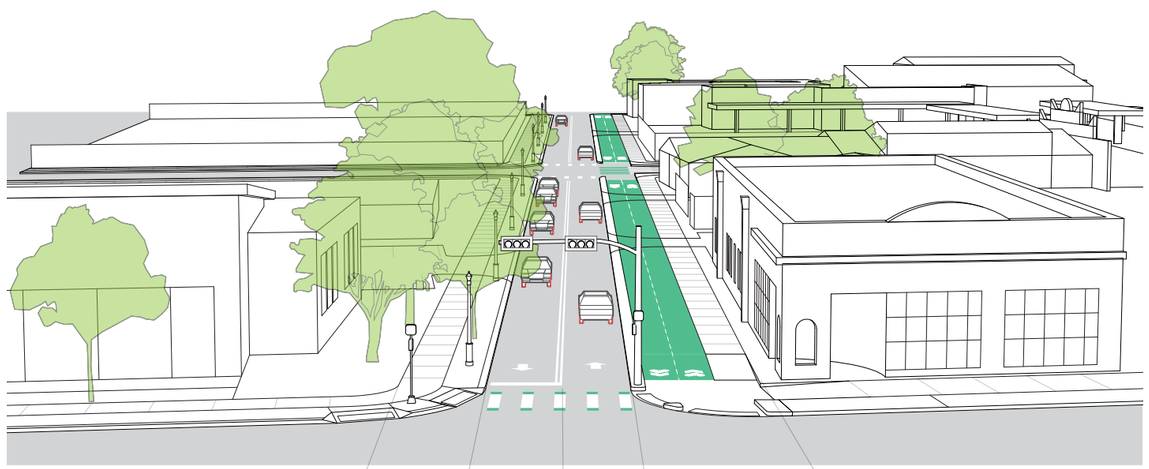
- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



CENTER STREET

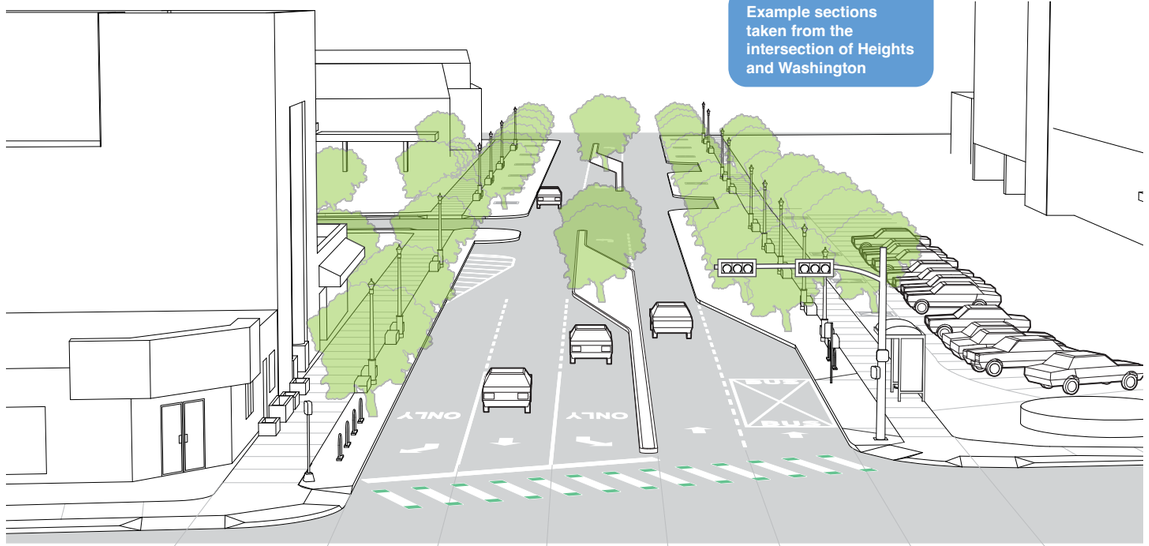


Parking may be included to one side where needed.

Intersection	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'	
Mid-block	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'	
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies	

WASHINGTON AVENUE

Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 6' - 18' 6"	Right Turn Lane 10' (At major intersections)	Travel Lane 11'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 11'	Right Turn Lane 10' (At major intersections)	Back of Curb 6' - 18' 6"
Mid-block	Back of Curb 19' - 28' 6"		Travel Lane 11'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 11'	Back of Curb 19' - 28' 6"	
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Alternative E One vehicular lane and off-street bike lanes on Washington

Alternative E Overview

- Accessible sidewalks **with street trees on both sides**
- Repaved car lanes with one lane in each direction on Washington Avenue
- Parking management
- Frequent transit
- More and safer neighborhood bike connections **with protected bike lanes on Washington Avenue**

This alternative has one vehicular lane that is shared with buses. The additional space is allocated to an off-street bike path behind the curb at sidewalk level and street trees.

Alternative E includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

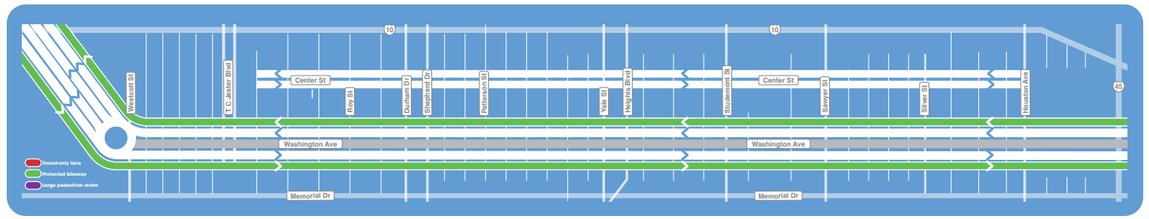
- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

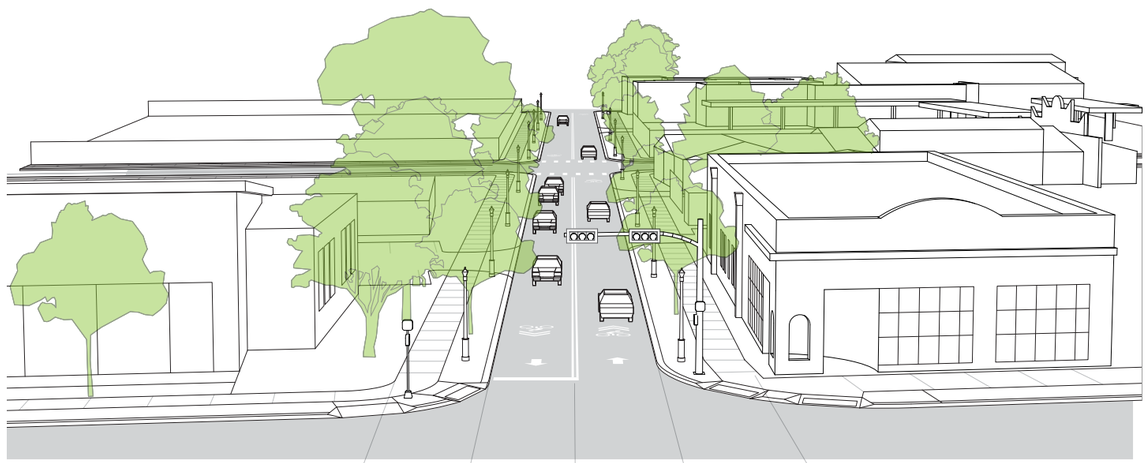
- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



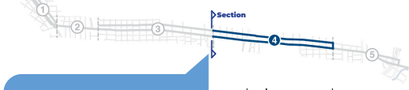
CENTER STREET



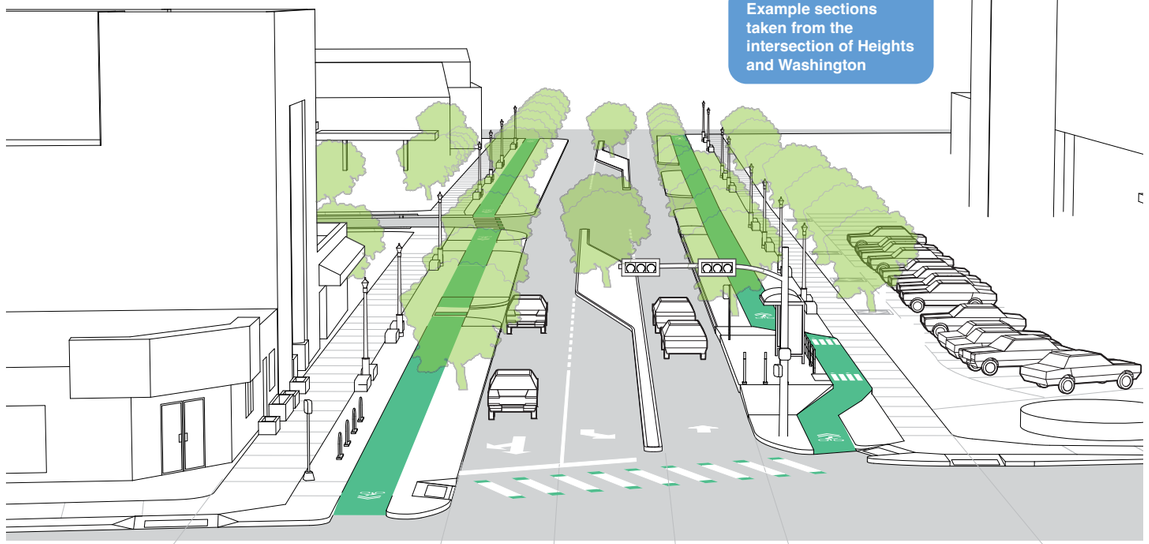
Parking may be included to one side where needed.

Intersection	Back of Curb 13'	Sharrow 12'	Sharrow 12'	Back of Curb 13'
Mid-block	Back of Curb 13'	Sharrow 12'	Sharrow 12'	Back of Curb 13'
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies

WASHINGTON AVENUE



Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 19' - 28' 6"	Travel Lane 11'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 11'	Back of Curb 19' - 28' 6"		
Mid-block	Back of Curb 18' - 27' 6"	Travel Lane 12'	Median / Turn Lane 0' - 11' (0' in segment 3)	Travel Lane 12'	Back of Curb 18' - 27' 6"		
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Alternative F One vehicular lane plus center-running transit Downtown to Heights Blvd

Alternative F Overview

- Accessible sidewalks
- Repaved car lanes with one lane in each direction on Washington Avenue
- Parking management
- Frequent transit **with center-running light rail or bus rapid transit**
- More and safer neighborhood bike connections **with protected bike lanes on Center Street**

This alternative has one vehicular lane with center-running light rail or bus rapid transit east of Heights Blvd. West of Heights Blvd, Washington has two vehicular lanes.

Alternative F includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

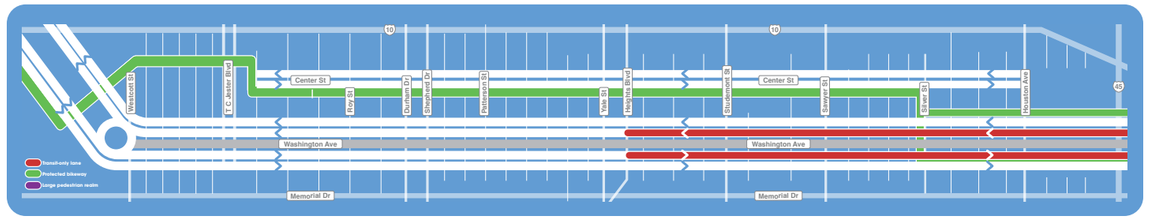
- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

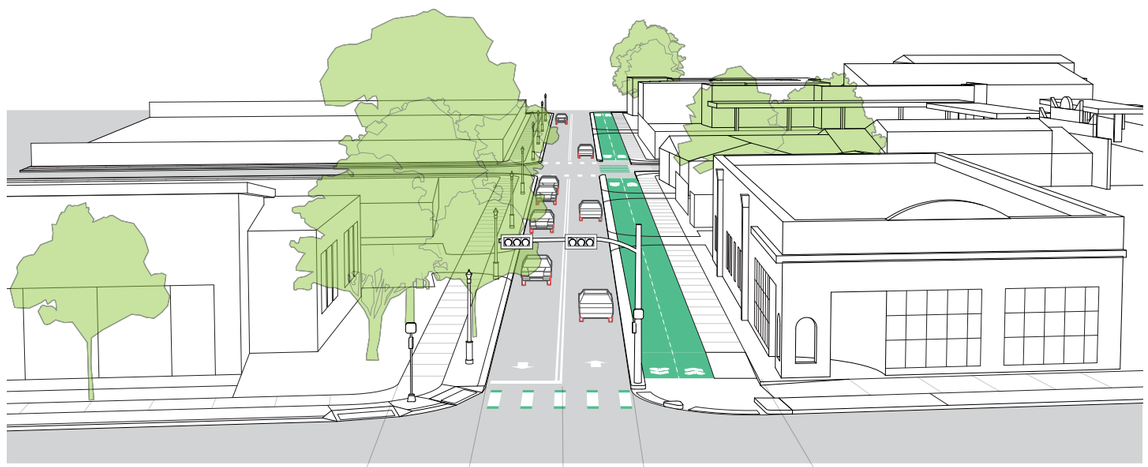
- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



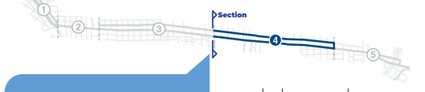
CENTER STREET



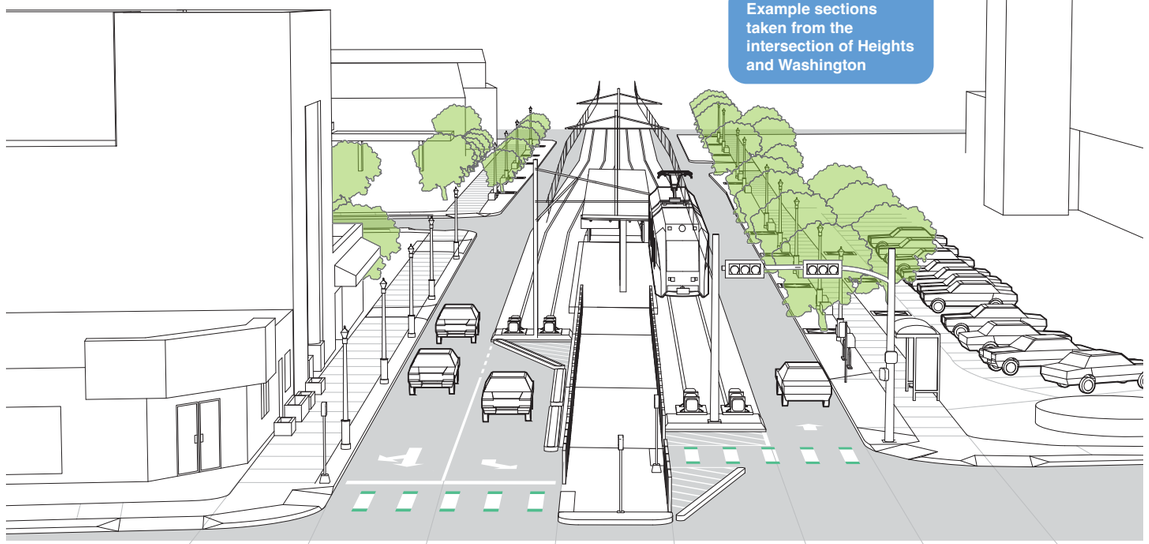
Parking may be included to one side where needed.

Intersection	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'
Mid-block	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies

WASHINGTON AVENUE



Example sections taken from the intersection of Heights and Washington



Intersection	Back of Curb 6' - 13' 6"	Travel Lane 10' - 11' (11' West of LR)	Left Turn Lane / Rail 10' - 13' (10 west of LR) (13 for LR where possible)	Station / Median 6' - 11' (6' in segment 3 - no LR)	Left Turn Lane / Rail 10' - 13' (10 west of LR) (13 for LR where possible)	Travel Lane 10' - 11' (11' West of LR)	Back of Curb 6' - 13' 6"
Mid-block	Back of Curb 6' - 13' 6"	Travel Lane 10' - 11' (11' West of LR)	Left Turn Lane / Rail 10' - 13' (10 west of LR) (13 for LR where possible)	Station / Median 6' - 11' (6' in segment 3 - no LR)	Left Turn Lane / Rail 10' - 13' (10 west of LR) (13 for LR where possible)	Travel Lane 10' - 11' (11' West of LR)	Back of Curb 6' - 13' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Alternative G One vehicular lane plus center-running transit Downtown to Northwest Transit Center

Alternative G Overview

- Accessible sidewalks
- Repaved car lanes with one lane in each direction on Washington Avenue
- Parking management
- Frequent transit **with center-running light rail or bus rapid transit**
- More and safer neighborhood bike connections **with protected bike lanes on Center Street**

This alternative has one vehicular lane with center-running light rail or bus rapid transit. Northwest of the roundabout, there are two vehicle lanes southbound and one northbound with turn lanes and crosswalks at major intersections.

This alternative became the foundation for the Community Preferred Alternative, which is drawn in more detail in Chapter 4.

Alternative G includes baseline improvements seen in all alternatives:

Operational Baseline Improvements:

- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections, safe crossings
- Parking management (ie. structured parking)
- Signal timings appropriate for all ages and abilities

Access Baseline Improvements:

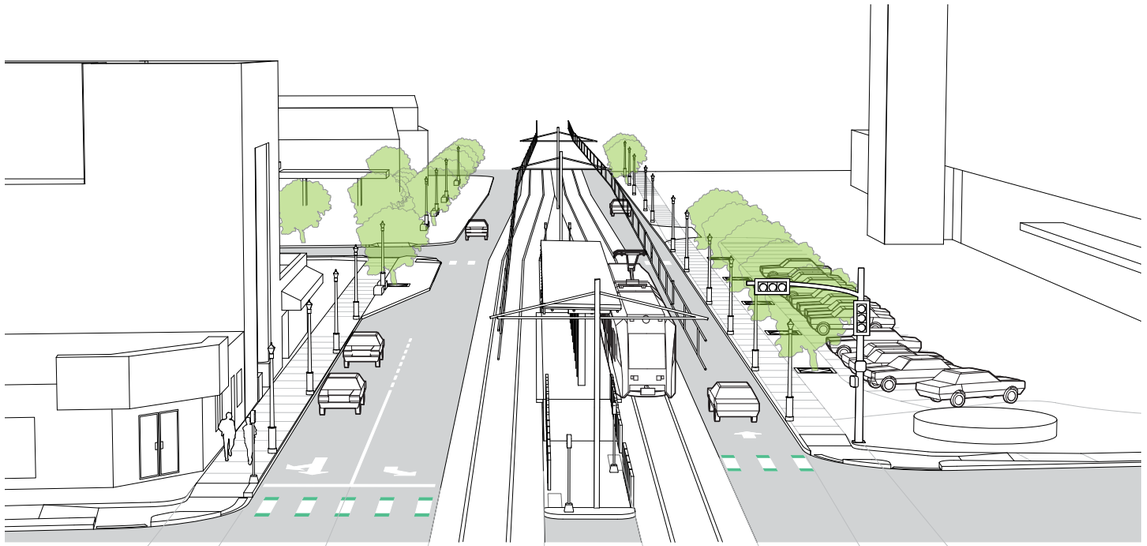
- Access management (ie. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

Quality Baseline Improvements:

- Pavement quality
- Drainage
- Lighting
- Burying of utilities



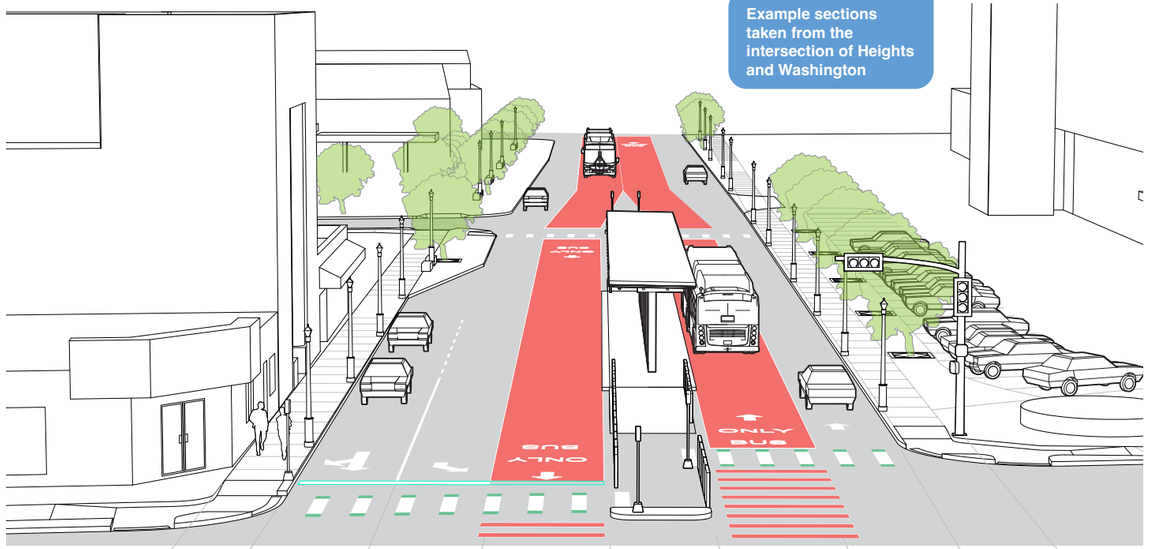
WASHINGTON AVENUE: LIGHT RAIL



Intersection	Back of Curb 7' - 11'	Travel Lane 11'	Left Turn Lane 10'	Rail 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Rail 12 - 13"'	Travel Lane 11'	Back of Curb 7' - 11'
Mid-block	Back of Curb 6' - 15' 6"	Travel Lane 11'	Rail 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Rail 12' - 13'	Travel Lane 11'	Back of Curb 6' - 15' 6"	
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"	

WASHINGTON AVENUE: BUS

Example sections taken from the intersection of Heights and Washington

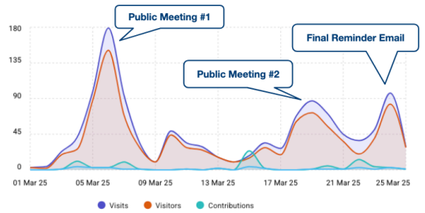


Intersection	Back of Curb 7' - 11'	Travel Lane 11'	Left Turn Lane 10'	Bus Rapid Transit 12 - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Bus Rapid Transit 12 - 13'	Travel Lane 11'	Back of Curb 7' - 11'
Mid-block	Back of Curb 6' - 15' 6"	Travel Lane 11'	Bus Rapid Transit 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Bus Rapid Transit 12' - 13'	Travel Lane 11'	Back of Curb 6' - 15' 6"	
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"	

The public gave feedback on seven different alternatives for the corridor.

Building on the prior round of engagement and neighborhood focus group meeting, this round of engagement was advertised through the press, through community organizations and civic clubs, and through the steering committee members. Those who live, work, and visit the Washington corridor were engaged through many methods. Fliers were dropped off at local schools; and Houston Matters, Houston Public Media, and the Houston Landing covered the alternatives engagement.

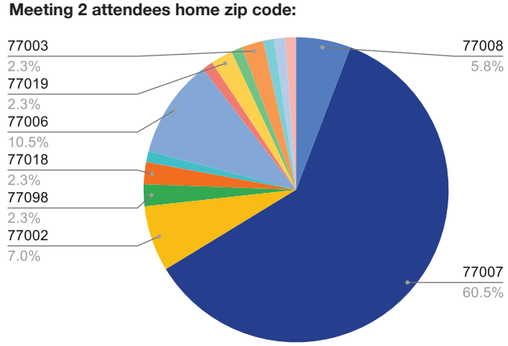
The design alternatives engagement period included an in-person and virtual meeting, in addition to attending the SN22 meeting in February 2025 to promote the upcoming meetings. Over 100 people attended the alternatives meetings, and over 200 people completed the survey. During this engagement period, there were over 1000 visits to the project website.



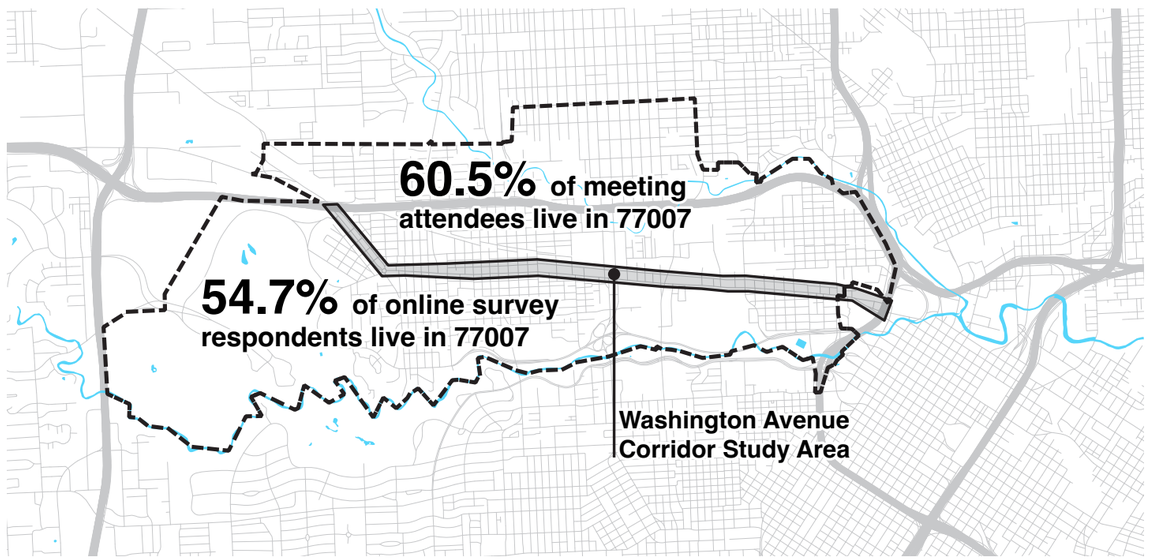
We also reached people on the project website, and we saw a large amount of traffic during the last engagement period. The red shows unique visitors, whereas purple includes repeat visitors – showing that people are coming back to engage with the material further and interact with the survey.

The majority of public meeting attendees and survey participants live in the Washington Avenue corridor area.

Meeting 2 attendees home zip code:

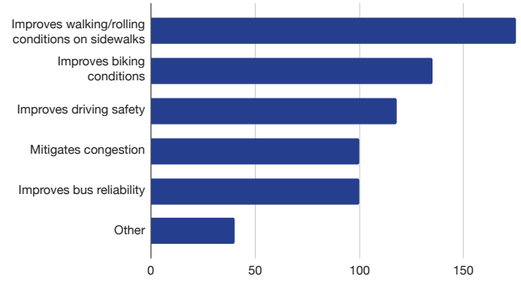


The majority of participants at those meetings live in 77007, which spans the corridor. Other areas with large numbers of participants include 77002–downtown and the area closest to the bayou, which are also part of the corridor area. 77006 and 77008 are on either side to the north and south, which also makes sense as Washington Avenue is a major draw in the area. Paralleling that data, most of the survey responses are from 77007 and the other nearby zipcodes.



One of the main questions asked outside of the different alternatives was about which factors were most important to people when choosing their top alternative. Improving walking, rolling, and biking conditions were the most important to people across the board.

Which of these factors was important to you when choosing your top alternative? (check all that apply)



Some of the "other" responses include:

- "Improves overall public transit"
- "Improve conflict at the railroad crossings north of Washington"
- "Improve road condition WITHOUT reducing vehicle lanes"
- "Improves bike safety"
- "Opportunities for trees and green"
- "Light Rail extension"
- "Aesthetically pleasing"
- "Producing usable transit along this corridor would boost accessibility"
- "Beauty"
- "medians. medians. medians. We need to limit turning and put in proper turn lanes. Also, medians create a pedestrian refuge."
- "Congestion will not be improved until the UP Rail Line is addressed such as "Trenched"."
- "Shade and comfort"
- "More frequent transit with more stops connecting to the wider network"

Walkability and safety are most important to me since i live and work in this neighborhood
- Employer on Washington Avenue

"Keep the number of car lanes to two in each direction while improving safety and reducing congestion at intersections."
- Resident along Washington Avenue

"Please prioritize transit, biking, and walkability. Make a corridor for all, not just drivers."
- Resident along Washington Avenue

Walking and biking along Washington is scary and very dangerous. There is no infrastructure to protect bikers and walkers. This could be a great walkable and bike-able neighborhood (esp being sandwiched between memorial park and buffalo bayou park). We got a taste of it during Covid… please bring it back!
- Employer on Washington Avenue

"Please put all resources and effort into improved pedestrian/biking infrastructure, and safer crossings for said pedestrians and bikers. This corridor is full of so many amazing businesses and restaurants, please make it a safer and friendlier environment outside of a car."
- Visitor of Washington Avenue

While wide sidewalks were a popular alternative, the public consensus around prioritizing space for transit was clear.

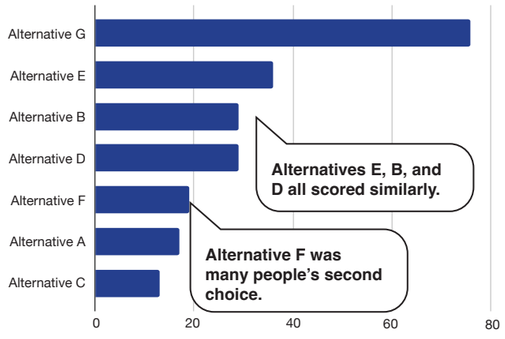
During the third round of outreach, the public was presented with 7 alternative design options for the corridor, with a wide range of mobility priorities and options. All alternatives included baseline improvements such as burying utilities and parking management.

After choosing their top factors, people ranked them from 1-7, allowing the project team to understand not only people's top choice, but also their order of preference for the other choices.

Out of all seven alternatives, including those that were not modeled, participants chose center-running transit 'G' as their top choice.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



In both methods of analyzing the results, wide sidewalks and center-running transit were the most popular options, which aligned with people's desire for more mobility options along the corridor.

Alternative G also rose to the top in the ranked-choice averages, and Alternatives D and F were ranked highly as well.

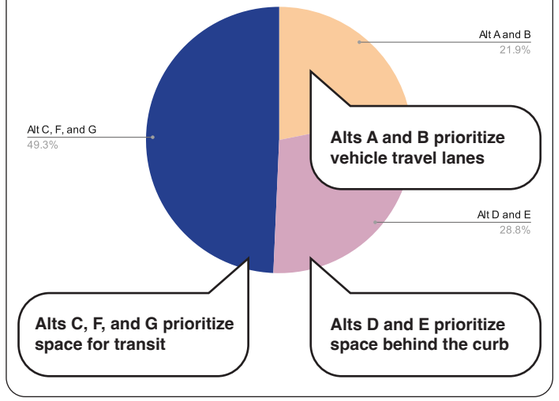
Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Rank	Alternative Design Options	Ranked Choice Averages
#1	Alternative G: One vehicular lane plus center-running transit through I-10	#3.32 average
#2	Alternative D: One vehicular lane with a right turn lane and wide sidewalks	#3.43 average
#3	Alternative F: One vehicular lane plus center-running transit through Heights Blvd	#3.48 average
#4	Alternative C: One vehicular lane and one bus-only lane with right turns	#3.78 average
#5	Alternative E: One vehicular lane and off-street bike lanes on Washington	#3.8 average
#6	Alternative B: Two vehicular lanes each direction with a median and turn lanes	#4.65 average
#7	Alternative A: Two wide vehicular lanes each direction with turn lanes	#5.55 average

While the seven alternatives are unique in their specific design recommendations, the allocation of types of spatial use can be clustered into three groups. These groupings further distill the results of the alternatives engagement based on spatial priority. Alternatives A and B prioritize space for vehicle travel lanes. Alternatives D and E prioritize space between the curb and the property line, and Alternatives C, F, and G prioritize space in the right-of-way for transit.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

#1 Ranked Alternatives by Spatial Allocation



The Steering Committee provided feedback throughout the alternatives and evaluation process, influencing what evaluation measures were used and what alternatives were presented to the public. Following the public meeting and survey, the results were presented to the Steering Committee. The Steering Committee then discussed the overall preferences of the public based on all rounds of outreach and prior engagement in the neighborhood in combination with the data from the safety analysis and existing conditions report. While the Steering Committee did not give individualized feedback on each of the alternatives, the group determined it was best to move forward with a Community Preferred design and a Baseline design.

"I live 2 blocks from Washington Ave and would absolutely begin utilizing a reliable public transportation option. Driving locally to the grocery store or just a restaurant, especially between 4:30pm and 7pm, is difficult and hazardous along Washington. Crossing it is extremely dangerous. Bus times now are unreliable and there is zero cover at bus stops for hot sun or rain. The metro rail has always been an ideal scenario for us that we've mentioned often and we are excited at the possibility of it coming to fruition. This is exactly the place for it."
- Resident along Washington Avenue

"Slowing down through traffic and improving the pedestrian realm will be beneficial for Washington Ave businesses."
- Resident along Washington Avenue

"Add better transit options to Washington and add wide pedestrian realm to better improve the business environment on the avenue."
- Resident along Washington Avenue

"Washington has a broad mix of uses. It should accommodate a mix of transportation modes."
- Resident along Washington Avenue

"We need our streets to be more walkable and people-oriented. In order to do that, it means fewer people taking cars and more taking transit, walking, or biking. So we must promote the most transit-prioritizing, walk-friendly, bike-friendly designs." *- Visitor of Washington Avenue*

There are short and long term improvements to the Washington Avenue Corridor that will make the street safer and that have broad community support.

The recommendation for the Washington Avenue Corridor Study includes two parts:

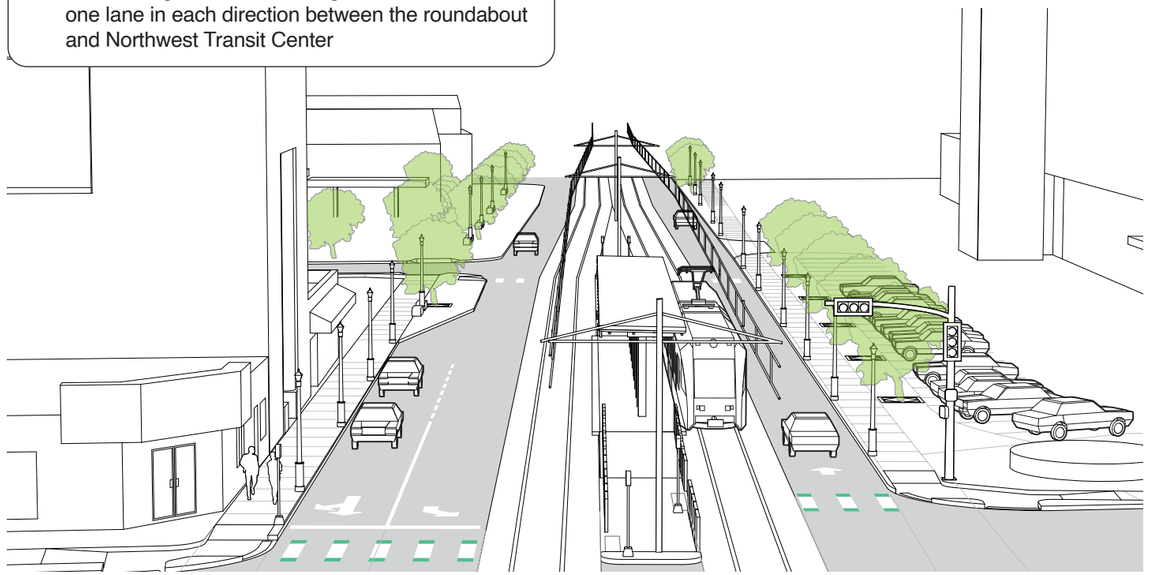
01 Community Preferred Vision:

One vehicular lane plus center-running transit (bus or rail) connecting to Northwest Transit Center

The Community Preferred Vision has one vehicular lane east of the roundabout with center-running light rail or bus rapid transit. These two modes of transportation have similar footprints and can be planned for as phased options or for final implementation. Northwest of the roundabout, there are two vehicle lanes in each direction, which matches vehicular capacity at the roundabout.

It also includes:

- Accessible sidewalks
- Repaved car lanes with one lane in each direction on Washington Avenue through the roundabout, one lane in each direction between the roundabout and Northwest Transit Center
- Parking management with recommended structured parking
- More and safer neighborhood bike connections with protected bike lanes on Center Street, Schuler Street, and in the Westcott median, providing connections to Downtown, Buffalo Bayou, White Oak Bayou, and Memorial Park.





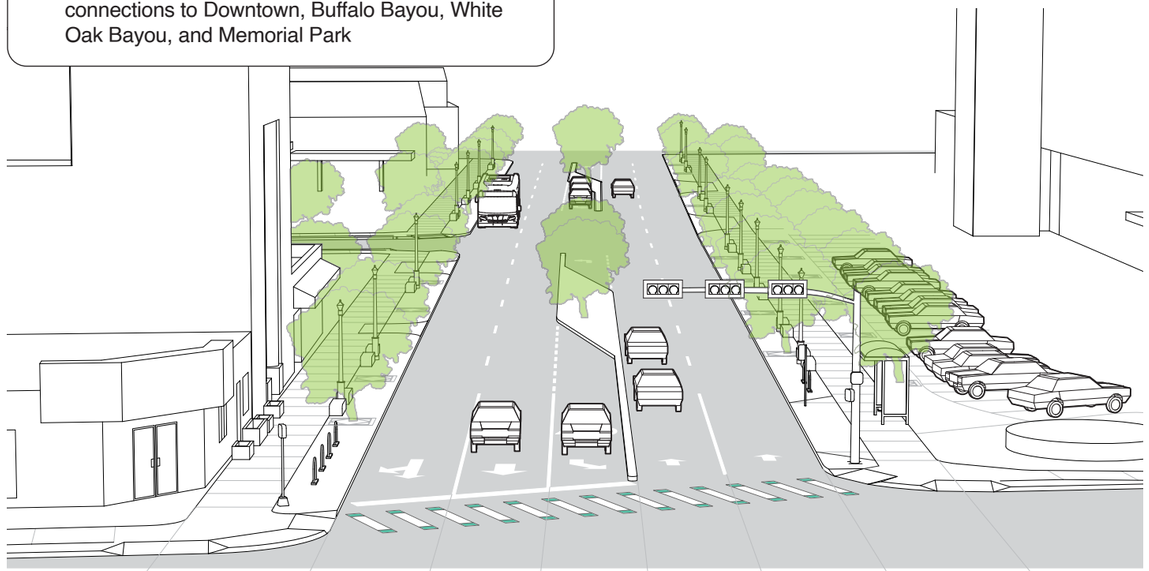
02 Baseline Constrained Alternative:

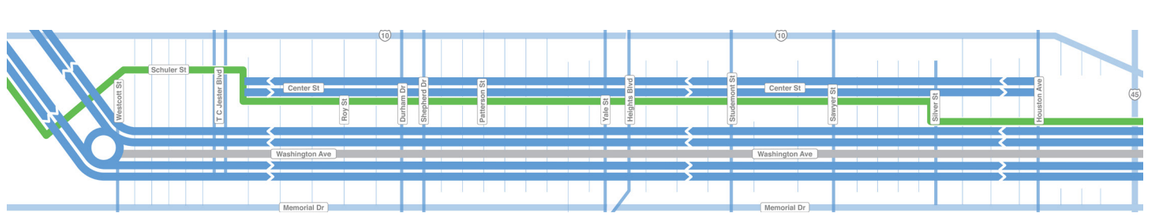
Two vehicular lanes each direction with a median and turn lanes

The Baseline Constrained Alternative has vehicular lanes very similar to the present condition on Washington. It adds accessible sidewalks and street trees. It includes turn lanes at major intersections and medians with trees elsewhere.

It also includes:

- Accessible sidewalks
- Parking management with recommended structured parking
- Frequent transit in mixed traffic
- More and safer neighborhood bike connections with protected bike lanes on Center Street, Schuler Street, and in the Westcott median, providing connections to Downtown, Buffalo Bayou, White Oak Bayou, and Memorial Park





Certain Recommendations apply to both the Community Preferred Vision and Baseline Constrained Alternative.

Overall Improvements

While the vision for Washington Avenue focuses on creating a safe and connected network, enhancing the overall aesthetic of the streetscape is also a key improvement.

Upgrading sidewalks will provide ample space for both pedestrians and street trees, improving the pedestrian experience by creating a comfortable buffer from vehicular traffic. This not only increases safety but also benefits both pedestrians and drivers by contributing to a more attractive, functional, and welcoming streetscape. These improvements will elevate the overall operation, accessibility, and quality of public spaces along Washington Avenue.

Operation

- Operational and intersection improvements
- Maintain access for EMS and Fire to all properties
- Additional signalized intersections and safe crossings
- Parking management via recommended structured parking at key nodes
- Signal timings appropriate for all ages and abilities

Access

- Access management (i.e. driveway consolidation)
- ADA accessible sidewalks
- Wayfinding and parking signs

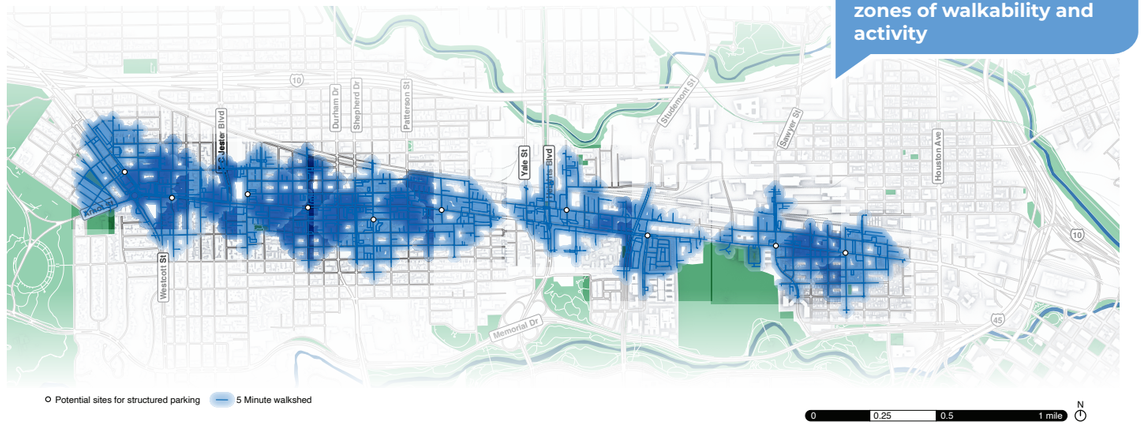
Quality

- Pavement quality
- Drainage
- Lighting
- Burying of utilities

Recommended Parking Nodes

The dots indicate intersections with adjacent vacant land or existing surface parking. These sites present opportunities for shared or structured parking that could support multiple land uses. Structured parking creates shade and should also include ground-floor retail to activate the street. Partnerships of various funding and management strategies will be considered to implement these improvements.

Options for structured parking that create lively zones of walkability and activity



Recommended intersection treatments

Shift Green Space from Medians to Edges

On southbound TC Jester Boulevard and southbound Heights Boulevard, there are wide center medians that increase the size of the intersections, which makes them less efficient and less safe by increasing crossing distances for all modes.

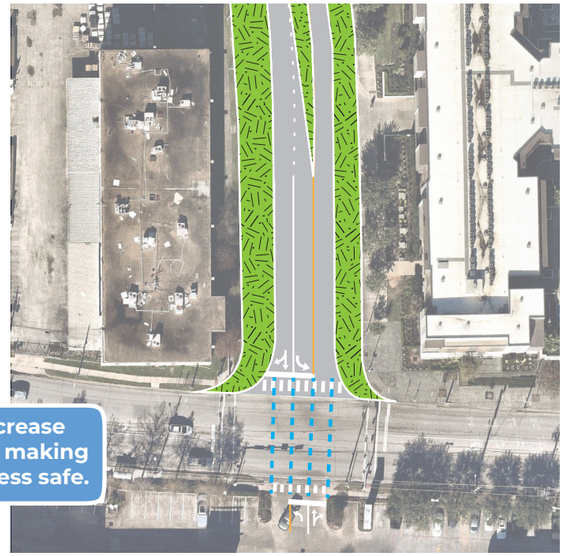
Benefits:

- Reduced crash exposure for drivers, pedestrians, and cyclists with reduced travel distance through intersections.
- Opportunity for more efficient signal timing and phasing.
- Increased sidewalk space without necessarily reducing vehicular space.

Affected Locations:

- TC Jester Boulevard
- Heights Boulevard





Conceptual renderings - All intersection modifications are subject to full engineering design.

TC Jester

Consolidate Excess Channelization

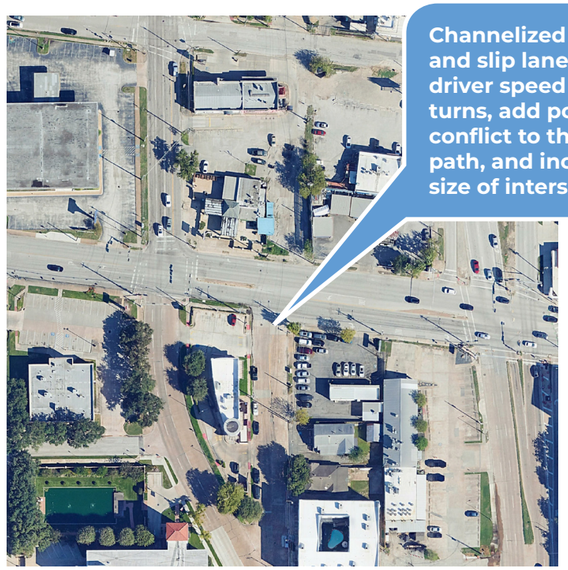
At three of the study intersections, there are channelized turn lanes or slip lanes, which add points of conflict to the pedestrian path, increase the size of intersections, and serve to accelerate driver speed through turns.

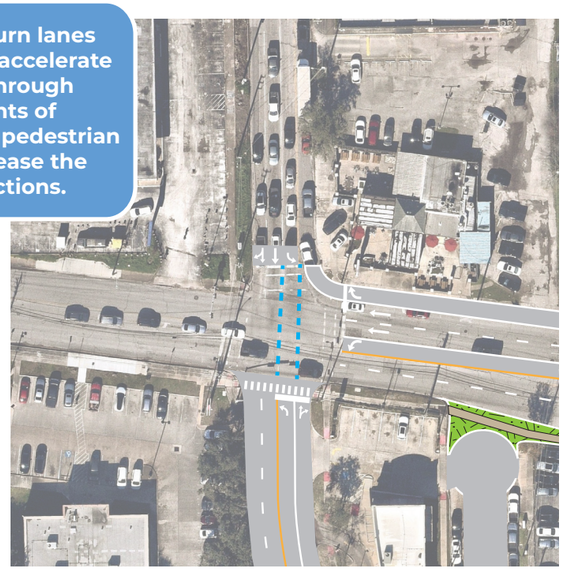
Benefits:

- Reduced vehicular speeds when turning across crosswalks.
- Reduced crash exposure for drivers, pedestrians, and cyclists with reduced travel distance through intersection.
- Opportunity to create more direct pedestrian crossing paths.

Affected Locations:

- Waugh Drive (Waughford Street)
- Heights Boulevard
- Studemont Street (Sachs Street)





Conceptual renderings - All intersection modifications are subject to full engineering design.

Yale / Waugh

General Recommendations

Remove Extra Receiving Lanes

Another condition identified at multiple locations along the corridor that is detrimental to pedestrian safety is the presence of extra receiving lanes on the intersecting streets.

Benefits:

- Reduced crash exposure for drivers, pedestrians, and cyclists with reduced travel distance through intersection.
- Increased sidewalk space without necessarily reducing vehicular capacity.

Affected Locations:

- Washington Avenue north of roundabout
- Durham Drive
- Shepherd Drive
- Yale Street/Waugh Drive
- Heights Boulevard
- Sawyer Street
- Houston Avenue

Excess receiving lanes on the far side of an intersection extend pedestrian crossing distance without increasing vehicular capacity.





**Conceptual renderings - All intersection modifications are subject to full engineering design.*

Add Dual Left-Turn Lanes

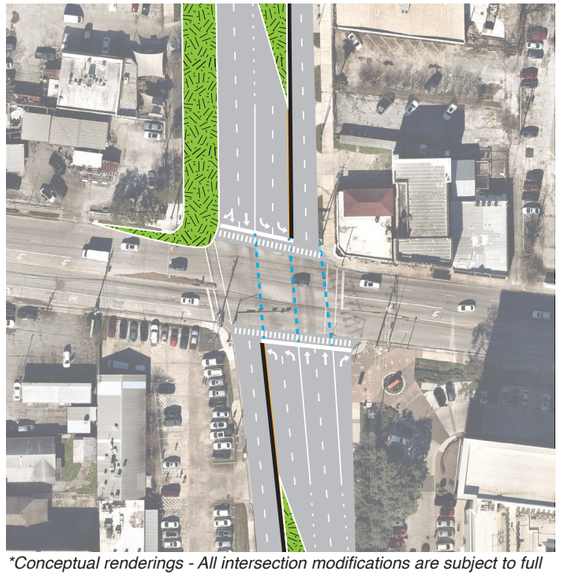
Dual left-turn lanes are recommended on both directions of Heights Boulevard in order to accommodate the heavy left-turning movements there.

Benefits:

- Additional capacity for heavy left-turning movements without the need for more green time for left-turn arrows.
- Reduced spillback from left-turn queues into the through lanes, which can block through traffic.

Affected Locations:

- Heights Boulevard



**Conceptual renderings - All intersection modifications are subject to full engineering design.*

General Recommendations

Modify Signal Phasing

Signal phasing modifications are also recommended at two intersections: TC Jester Boulevard and Sawyer Street.

Benefits:

- Add new left turn arrows where they are needed.
- Opportunity to allow left turns during a green ball instead of only during a green arrow.
- Opportunity to eliminate split phasing, which is when opposite through movements are not green at the same time.

Affected Locations:

- TC Jester Boulevard
- Sawyer Street

Additional Signalization

Evaluate signalization at additional intersections along the corridor for crossing opportunities as the project progresses.

Benefits:

- Improves comfort and safety for drivers, pedestrians, and cyclists crossing Washington Avenue.
- Reduced distance between signalized intersections can lead to less speeding.

Affected locations in both options:

- Patterson at Washington
- Durham at Center*

Additional signalization in Community Preferred Vision:

- Schuler at Washington and Westcott*
- Roy at Washington*

** Community suggestions for further study.*

Potential Outcomes

Vehicular operations:

- Reduced rush hour left-turn delay up to 25% where a new left-turn phase is added (EB Sawyer)
- Reduced peak hour delay up to 19% where signal phasing improvements are facilitated by a smaller intersection footprint (TC Jester)
- Improved peak hour maximum volume to capacity ratio by 13% where signal phasing improvements are facilitated by a smaller intersection footprint (TC Jester)

Crash modification factors:

- 30% reduction in crashes attributable to reduced pedestrian crossing distance[1]
- 12% increase in crashes attributable to changing from protected-only left-turn phasing to protected-permitted left-turn phasing[2]
- 47% reduction in crashes attributable to installing dual left turn lanes[3]

[1] ODOT I33 Curb Extension CMF

[2] CMF ID 7686 [3] ODOT H63 Dual Left Turn Lane CMF

[3] ODOT H63 Dual Left Turn Lane CMF

The public provided feedback on both the Community Preferred Vision and Baseline Constrained Alternative.

Steering committee feedback informed initial project alternatives and their input ultimately formed the Washington Avenue Corridor Study's recommendations: the visionary Community Preferred Vision and the streamlined Baseline Constrained Alternative.

In the third round of outreach, the community was asked specific questions about various intersections throughout the corridor. These questions focused on bicycle infrastructure connections, station locations, and median placement. This public meeting was the last opportunity for in-person engagement.

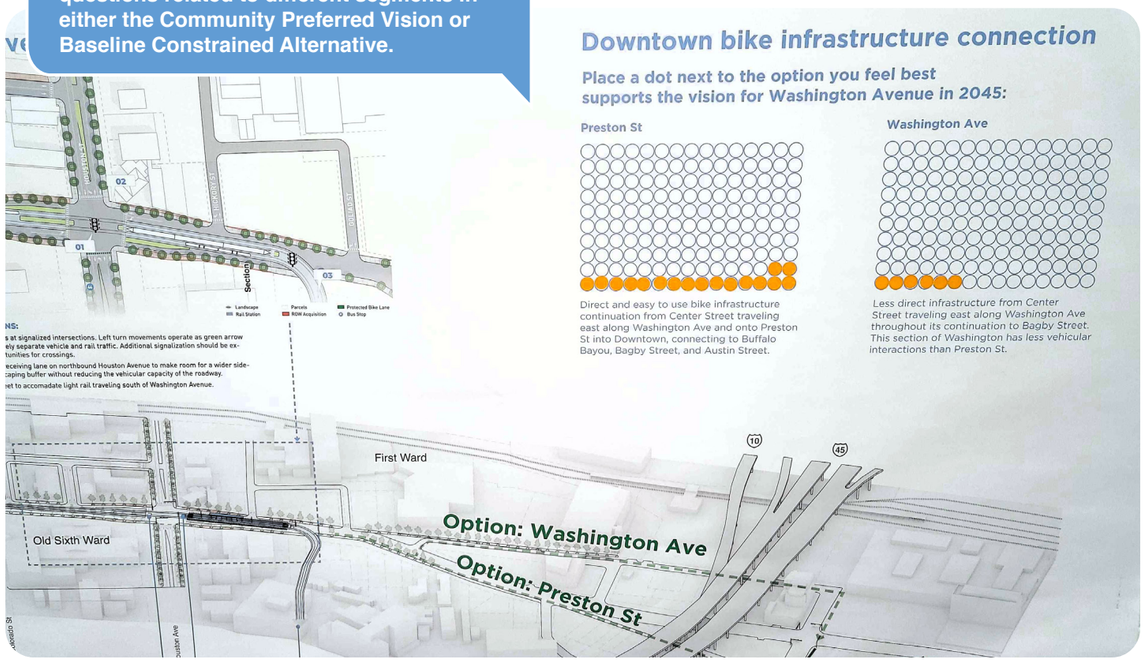
These comments were used to update the Community Preferred Vision and Baseline Constrained Alternative.

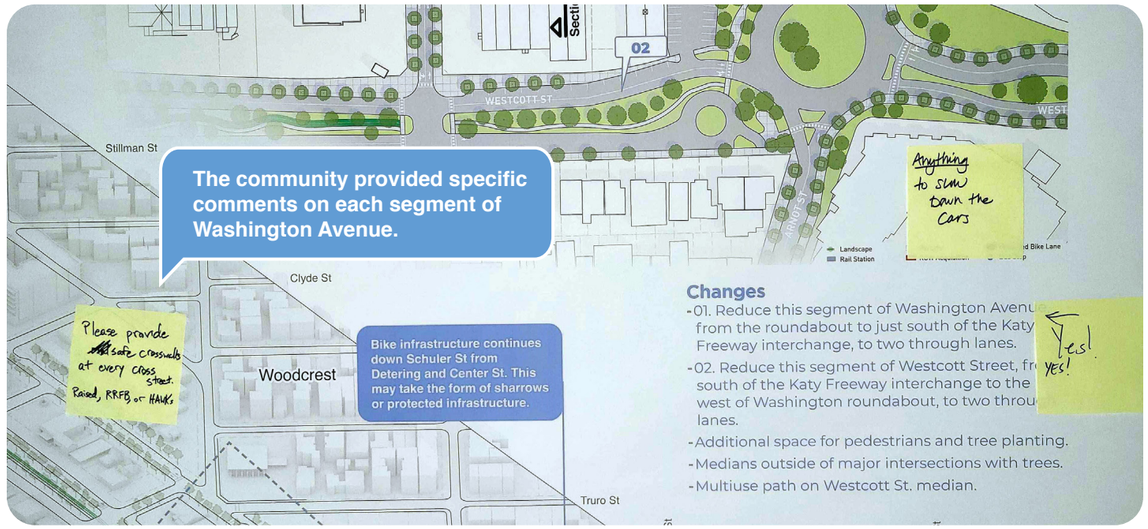
Approximately 60 community members attended the in-person open house.

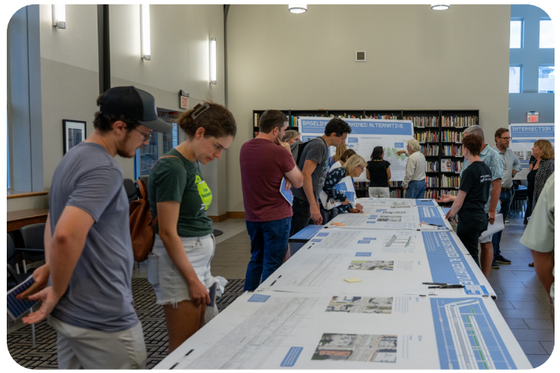




The community responded to a number of questions related to different segments in either the Community Preferred Vision or Baseline Constrained Alternative.









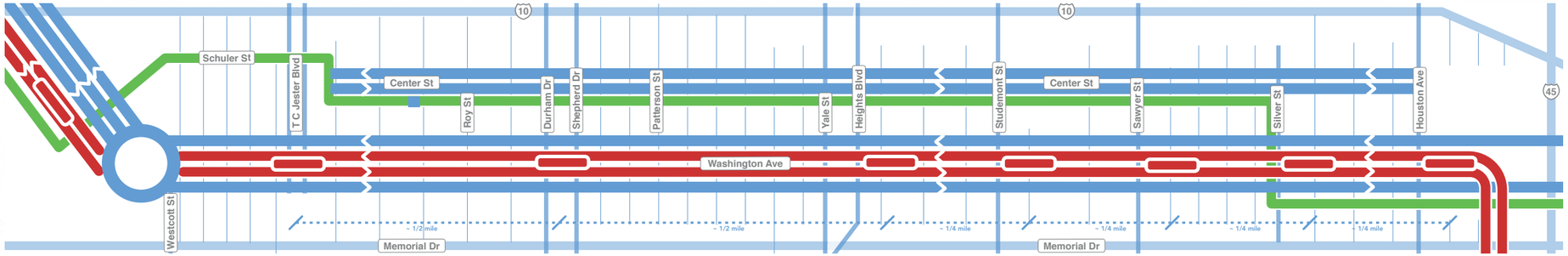




Community Preferred Vision

One vehicular lane plus center-running transit Downtown to Northwest Transit Center

The Community Preferred Vision (adapted from Alternative G) has one vehicular lane with center-running light rail or bus rapid transit from downtown to the roundabout. Northwest of the roundabout, there are two vehicle lanes. This alternative requires some land acquisition, especially at and around stations. A mid-term option for this alternative is to build center-running transit through Heights Boulevard. On Center Street, the Community Preferred Vision includes dedicated bike infrastructure behind the curb in addition to burying utilities and drainage. See Alternative G for the evaluation results.



Legend

- Key Intersections

0 0.25 0.5 1 mile

N

Community Preferred Vision

Light Rail Transit (LRT)

Advantages

- Higher ridership capacities
- Potentially greater economic impact
- Better rider approachability and wayfinding
- Connected to existing METRO Green and Purple lines with a one seat ride to East End, Third Ward, Downtown, Theater District, University of Houston

Tradeoffs

- Expensive to construct
- Longer construction timeline
- Requires slightly more space due to larger turn radii
- Additional overhead infrastructure



Similar Condition: Fulton Street

Bus Rapid Transit (BRT)

Advantages

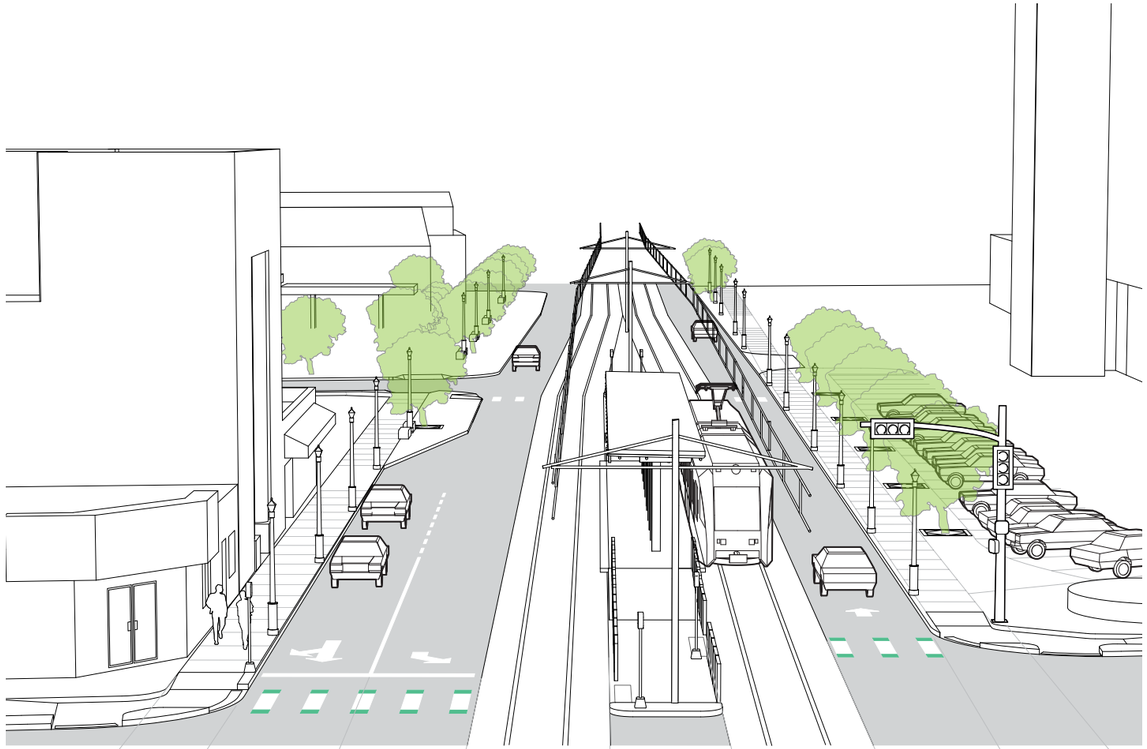
- Less expensive and faster to construct
- No overhead wires or infrastructure
- More flexible routing
- Slightly less acquisition due to smaller turn radii

Tradeoffs

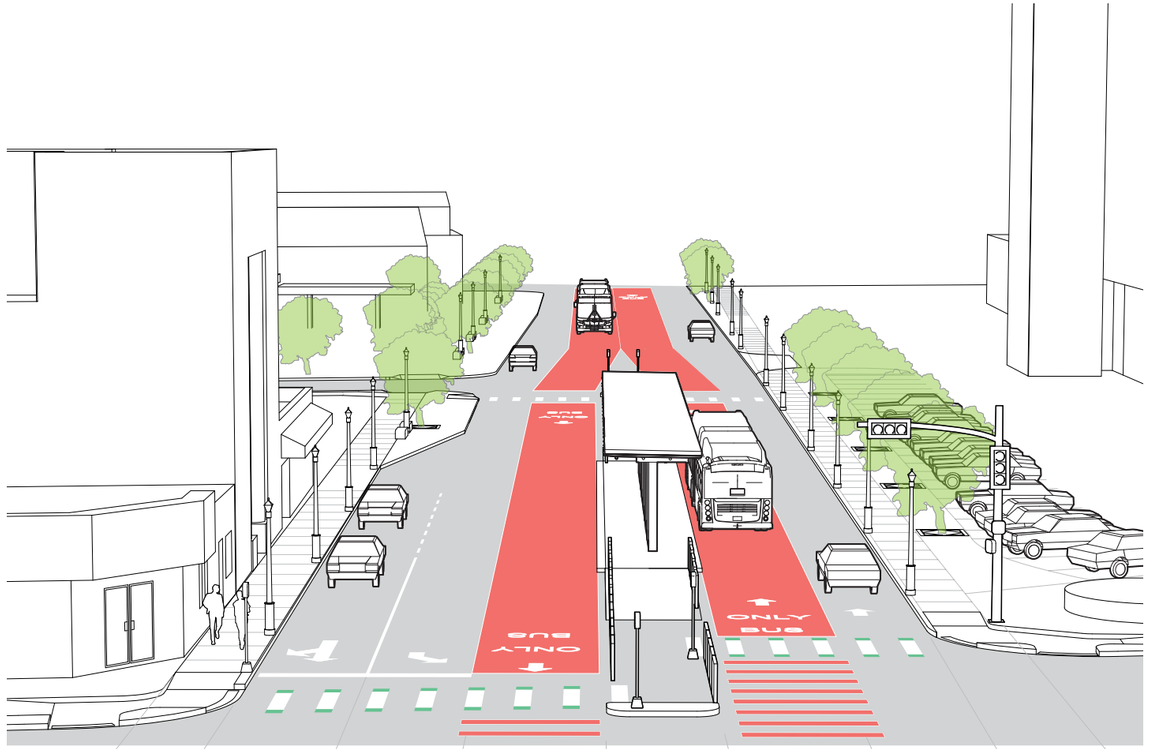
- Requires transfer to other METRO Rail Services in Downtown
- Can lead to poor reliability if personal vehicular lane compliance is not high
- Greater potential to be scaled back



Similar Condition: Indianapolis BRT

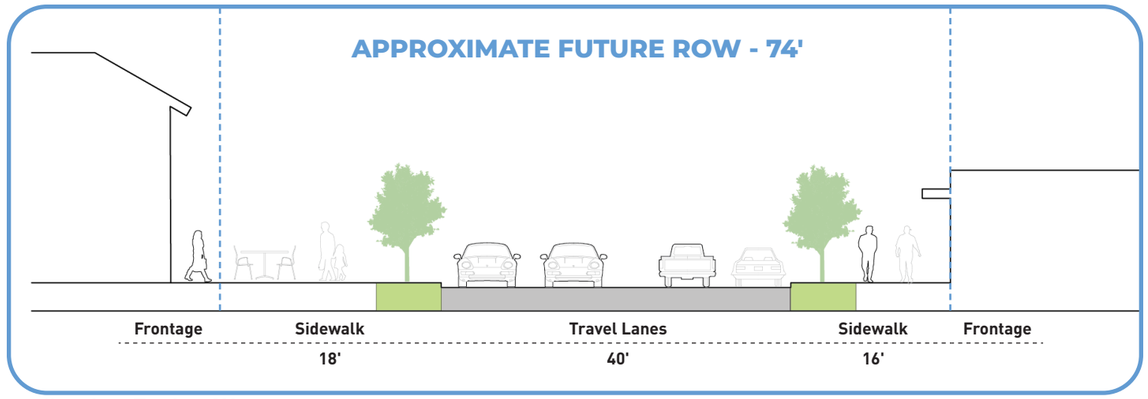


Intersection	Back of Curb 7' - 11'	Travel Lane 11'	Left Turn Lane 10'	Rail 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Rail 12' - 13"'	Travel Lane 11'	Back of Curb 7' - 11'
Mid-block	Back of Curb 6' - 15' 6"	Travel Lane 11'		Rail 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Rail 12' - 13'	Travel Lane 11'	Back of Curb 6' - 15' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'		Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

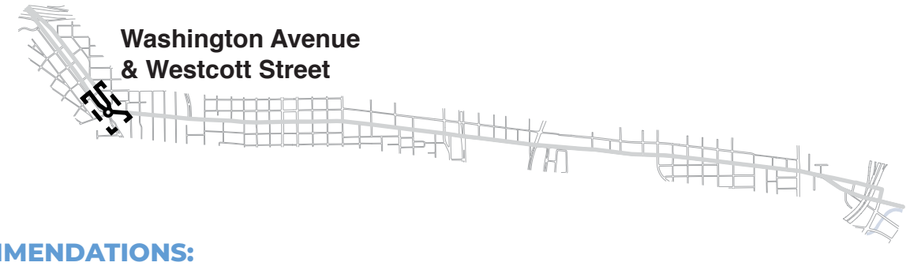


Intersection	Back of Curb 7' - 11'	Travel Lane 11'	Left Turn Lane 10'	Bus Rapid Transit 12 - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Bus Rapid Transit 12 - 13'	Travel Lane 11'	Back of Curb 7' - 11'
Mid-block	Back of Curb 6' - 15' 6"	Travel Lane 11'		Bus Rapid Transit 12' - 13'	Station / Median 0' - 11' (0' in segment 3 w/o station)	Bus Rapid Transit 12' - 13'	Travel Lane 11'	Back of Curb 6' - 15' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'		Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

Westcott Street and Washington Avenue (Roadway Redesign) Enlarged Plan



Section Facing West



RECOMMENDATIONS:

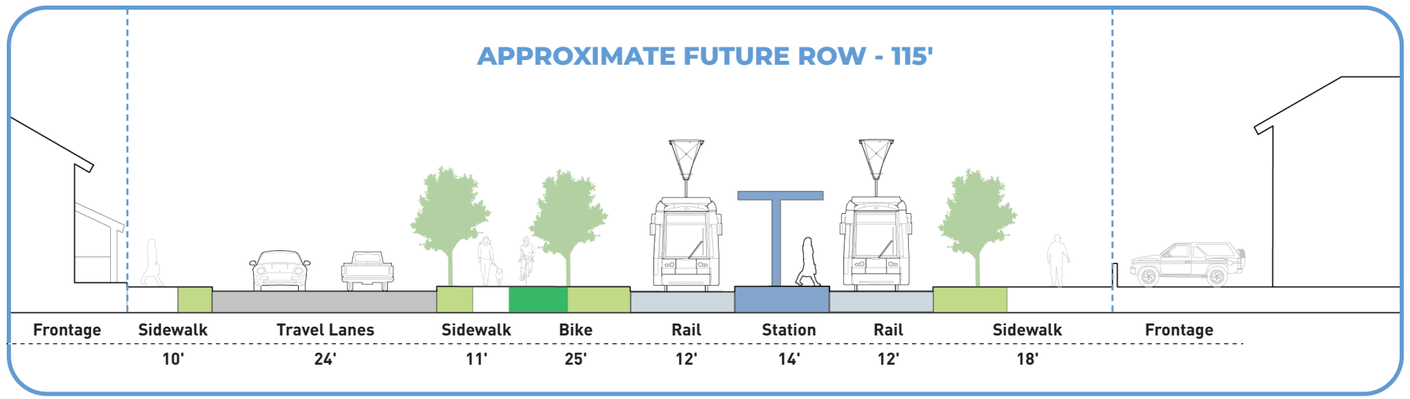
01. Redesign this segment of Washington Avenue, from the roundabout to just south of the Katy Freeway interchange, to have one lane of traffic in each direction to utilize Westcott for light rail.

02. Light rail continues from Westcott Street to Washington Avenue by traveling underground, beneath the roundabout, from the intersection of Schuler Street and Westcott Street to the intersection of Knox Street and Washington Avenue.

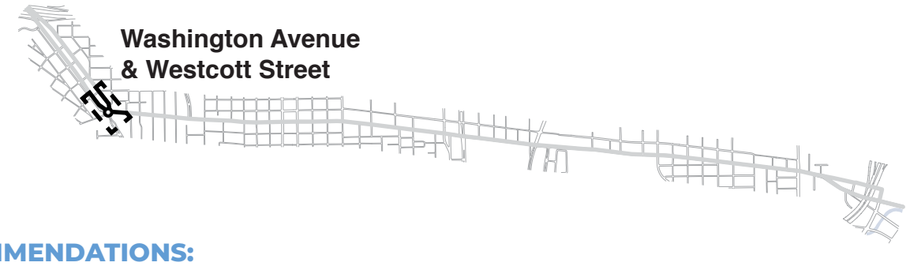
CONCEPTUAL ONLY - SUBJECT TO CHANGE



Westcott Street and Washington Avenue (Light Rail) Enlarged Plan



Section Facing West



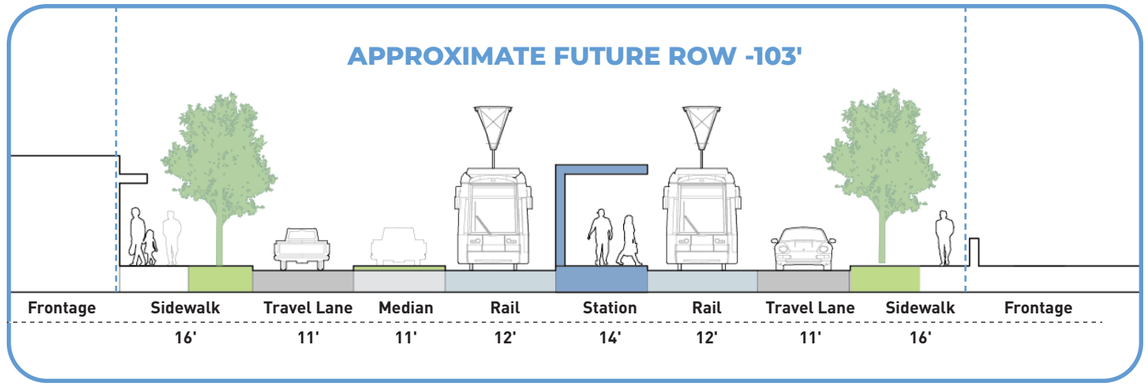
RECOMMENDATIONS:

01. Redesign this segment of Washington Avenue, from the roundabout to just south of the Katy Freeway interchange, to have one lane of traffic in each direction to utilize Westcott for light rail.

02. Light rail continues from Westcott Street to Washington Avenue by traveling underground, beneath the roundabout, from the intersection of Schuler Street and Westcott Street to the intersection of Knox Street and Washington Avenue.



TC Jester Boulevard Enlarged Plan



Section Facing West



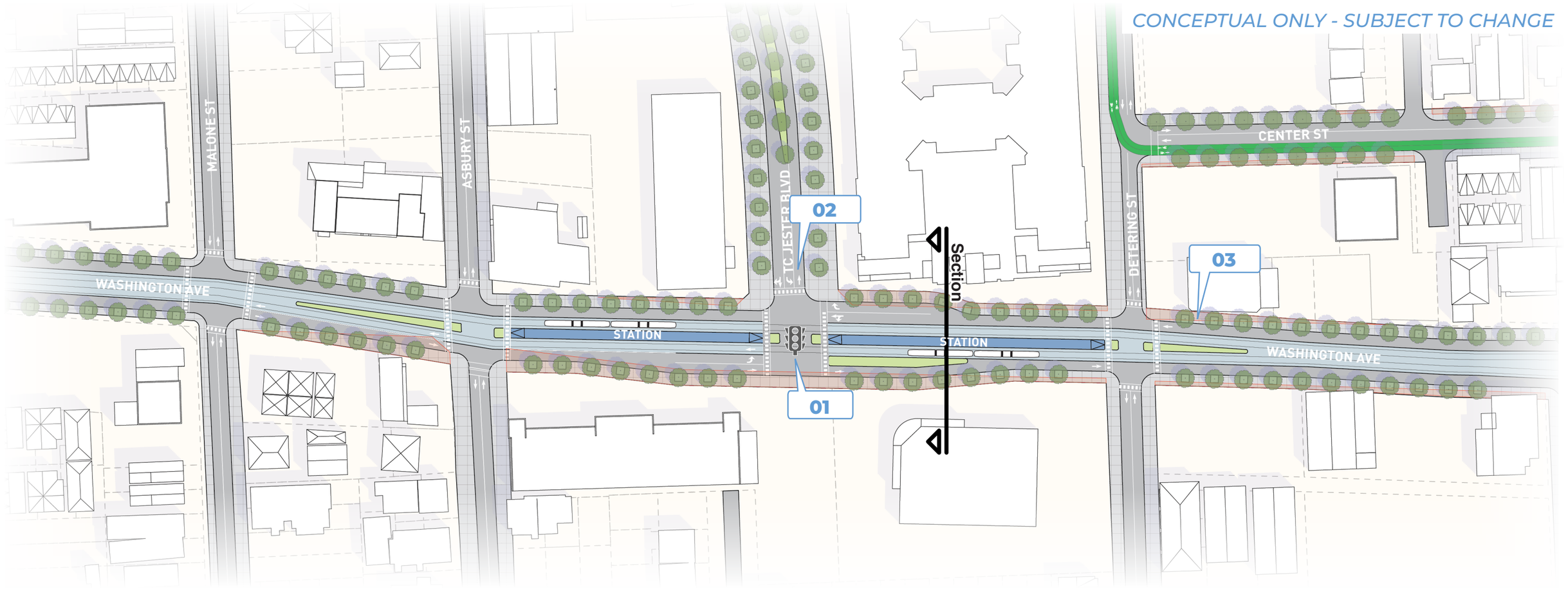
RECOMMENDATIONS:

01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

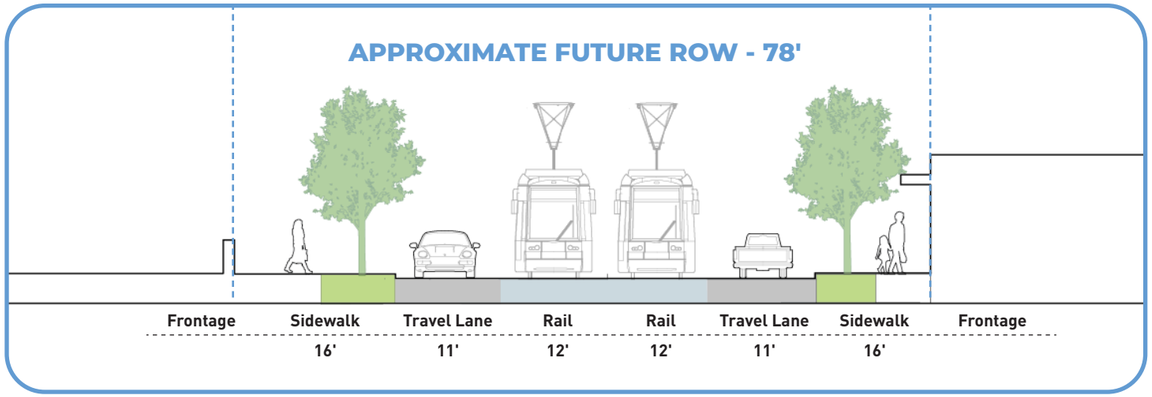
02. Remove the center median to allow for better alignment of TC Jester Boulevard with the parking lot access drive to the south to enable more efficient signal timing and phasing, as well as more pedestrian area.

03. Acquire right-of-way in order to create ADA accessible sidewalks.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Roy Street Enlarged Plan



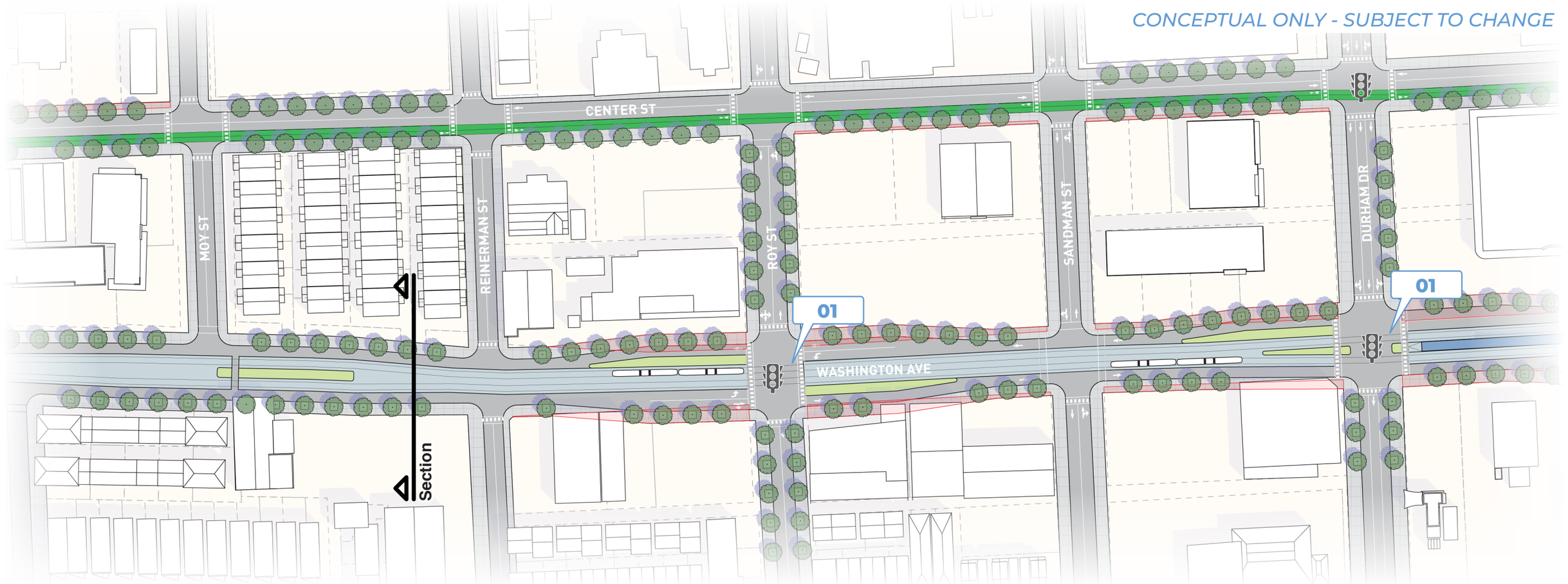
Section Facing West



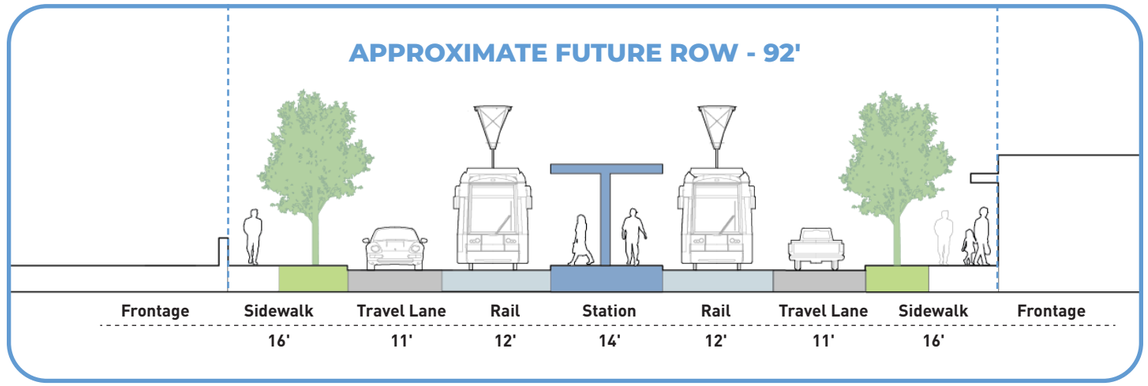
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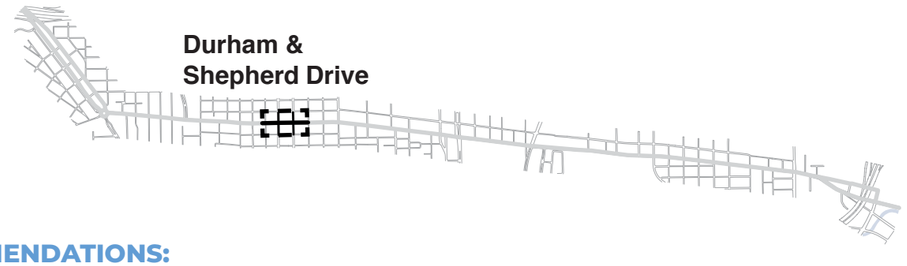
CONCEPTUAL ONLY - SUBJECT TO CHANGE



Durham Drive and Shepherd Drive Enlarged Plan



Section Facing West



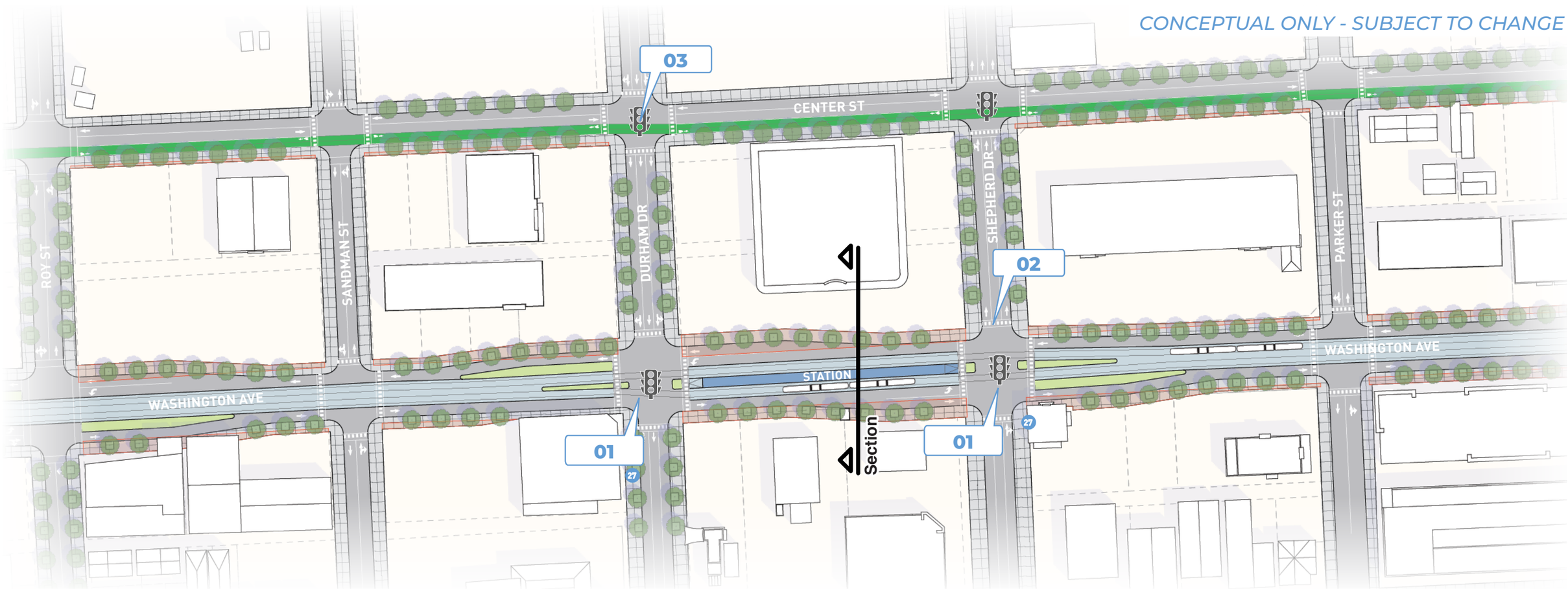
RECOMMENDATIONS:

01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

02. Remove the extra receiving lane on Shepherd Drive to make more pedestrian area without reducing the vehicular capacity of the roadway.

03. Implement new signal at Center St and Durham Dr to provide safe crossings and turns for all users.

CONCEPTUAL ONLY - SUBJECT TO CHANGE

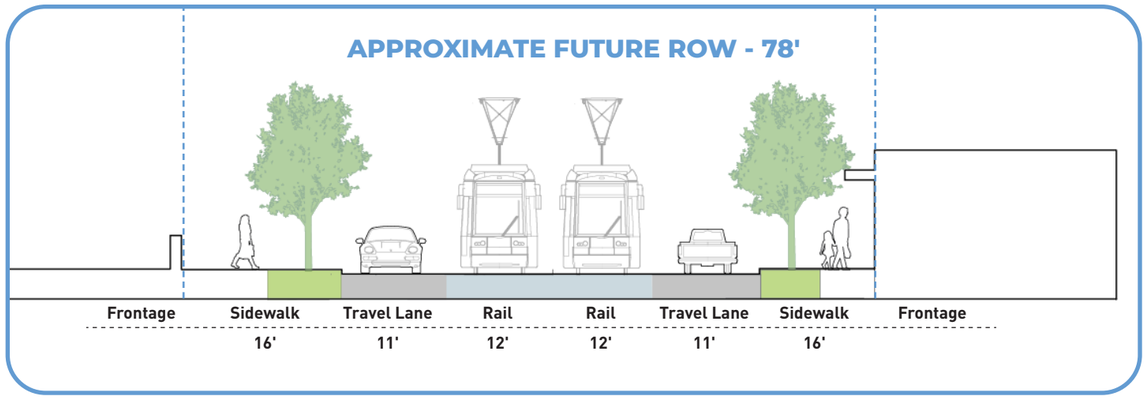


Buildings
Road Surface
Sidewalks
Rail Surface
Median / Landscape
Rail Station
Parcels
ROW Acquisition
Protected Bike Lane
Bus Stop

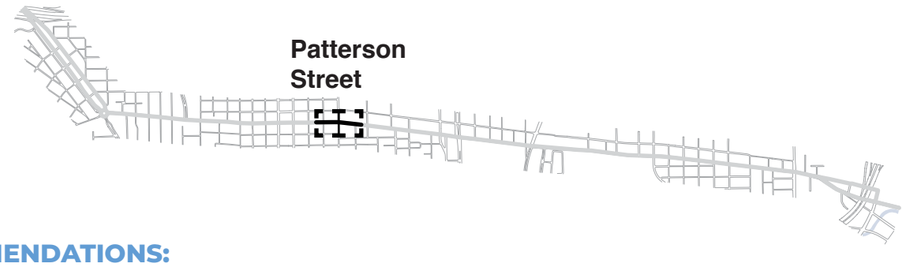
0 100 200 feet

N

Patterson Street Enlarged Plan



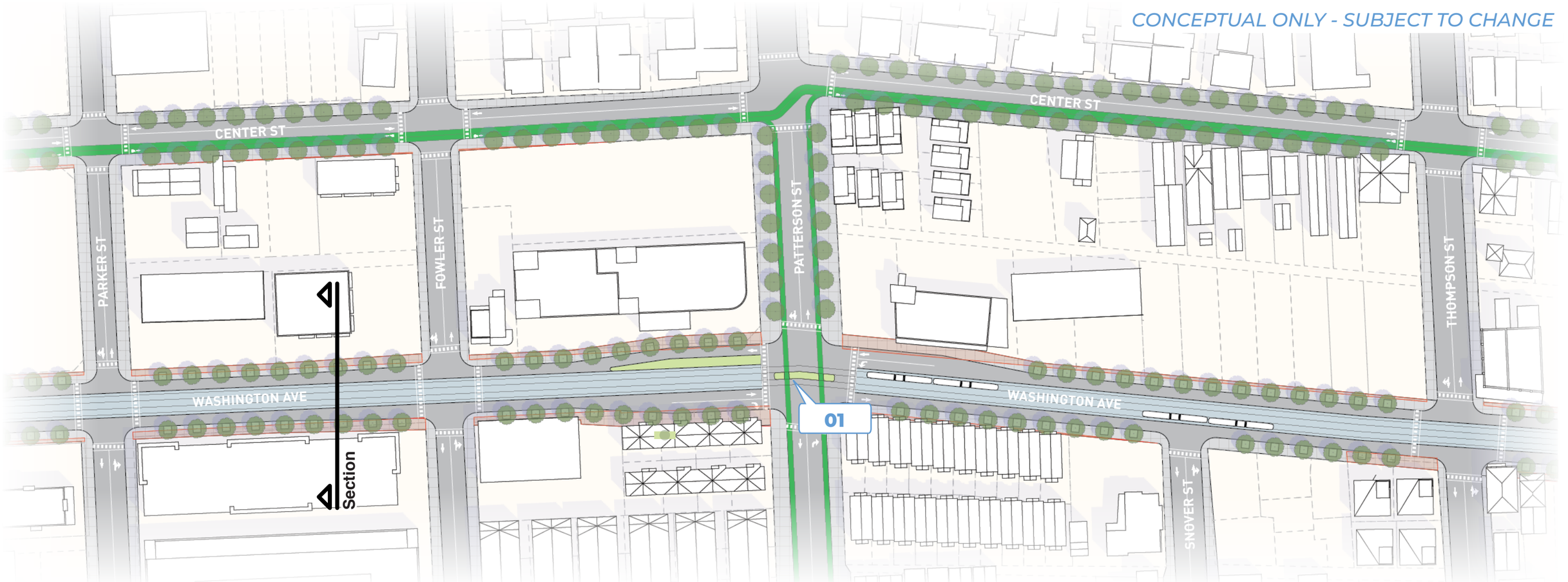
Section Facing West



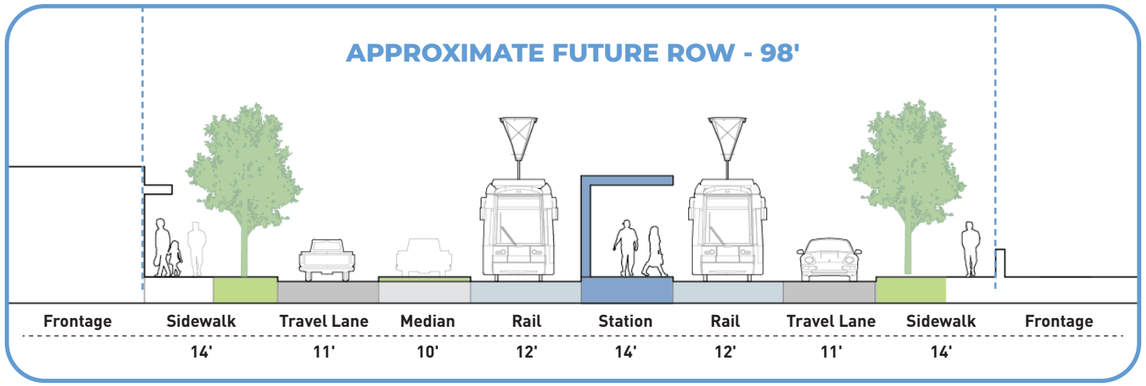
RECOMMENDATIONS:

01. In lieu of a signalized intersection, install a median at the intersection of Patterson St and Washington Ave to close north-south traffic, reduce traffic volumes and speeds on the residential street, and provide a safer crossing for pedestrians and cyclists.

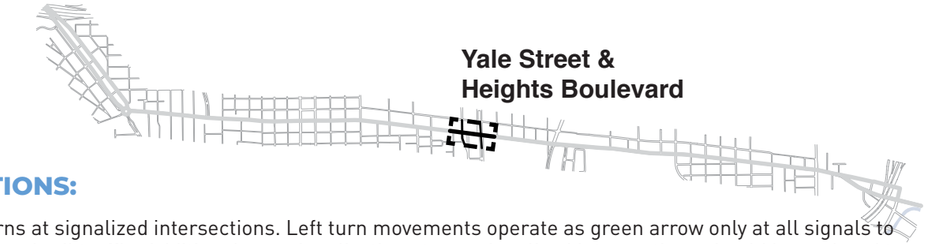
CONCEPTUAL ONLY - SUBJECT TO CHANGE



Yale Street and Heights Boulevard Enlarged Plan



Section Facing West



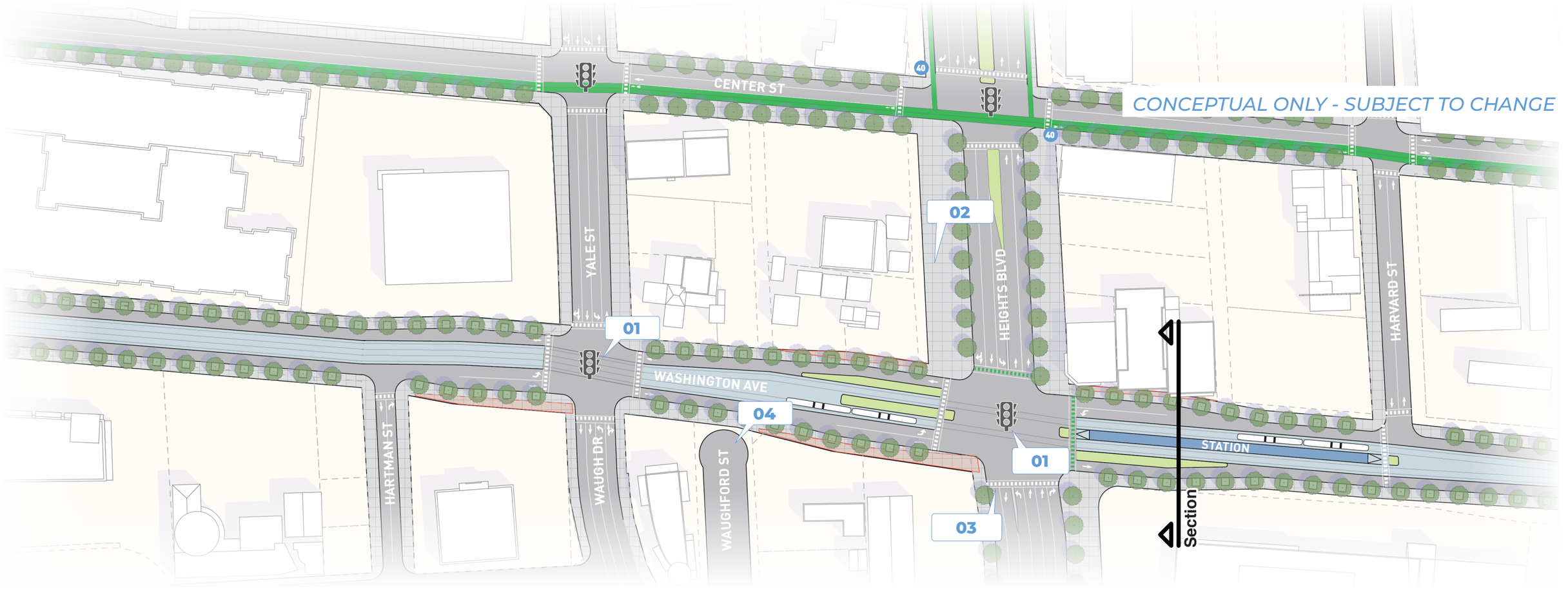
RECOMMENDATIONS:

01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

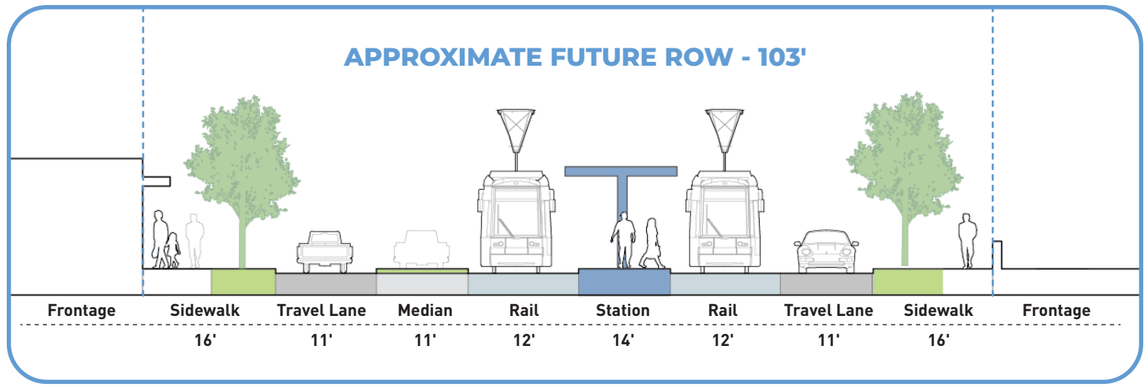
02. Shift green space from the median on the north side of the street to the west side, making space for needed vehicular capacity and wider pedestrian space at the edges of the street.

03. Remove southbound receiving lane on Heights Boulevard to increase pedestrian space at the edge of the street without reducing vehicular capacity.

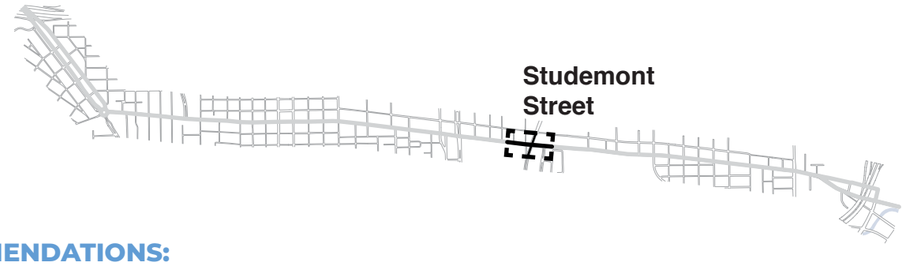
04. Use existing width on Waugh Drive to convert roadway to two-way travel, enabling a cul-de-sac of Waughford Drive on Washington Avenue to reduce conflicts for pedestrians/drivers while maintaining access to residences/businesses.



Studemont Street Enlarged Plan



Section Facing East

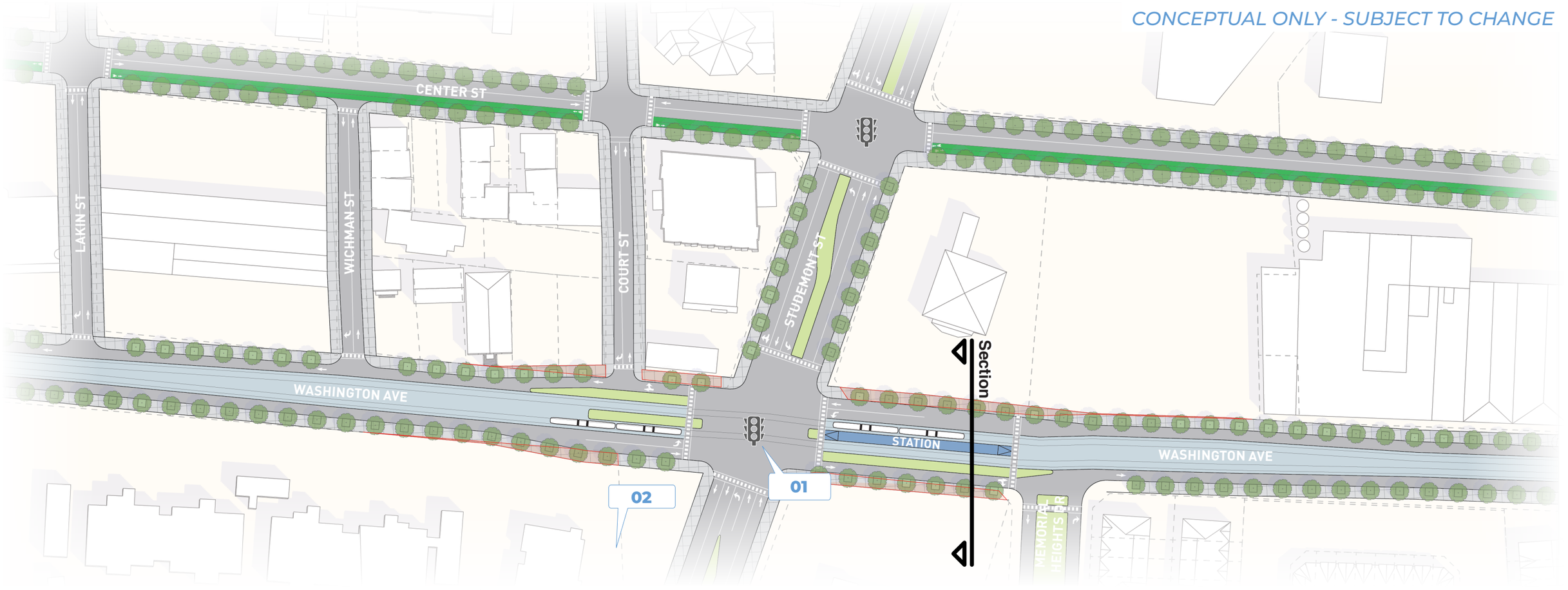


RECOMMENDATIONS:

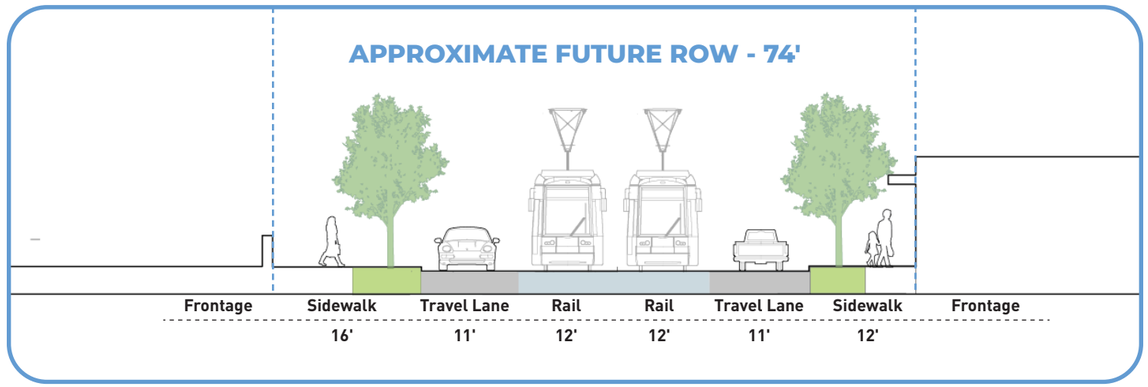
01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

02. Close Sachs Drive to prevent it being used as a slip lane for eastbound right turns onto Studemont Street. This removes a point of conflict between pedestrians and vehicles, could lead to slower eastbound right turning speeds at Studemont, and would open up more space for pedestrian area.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Sawyer Street Enlarged Plan



Section Facing West

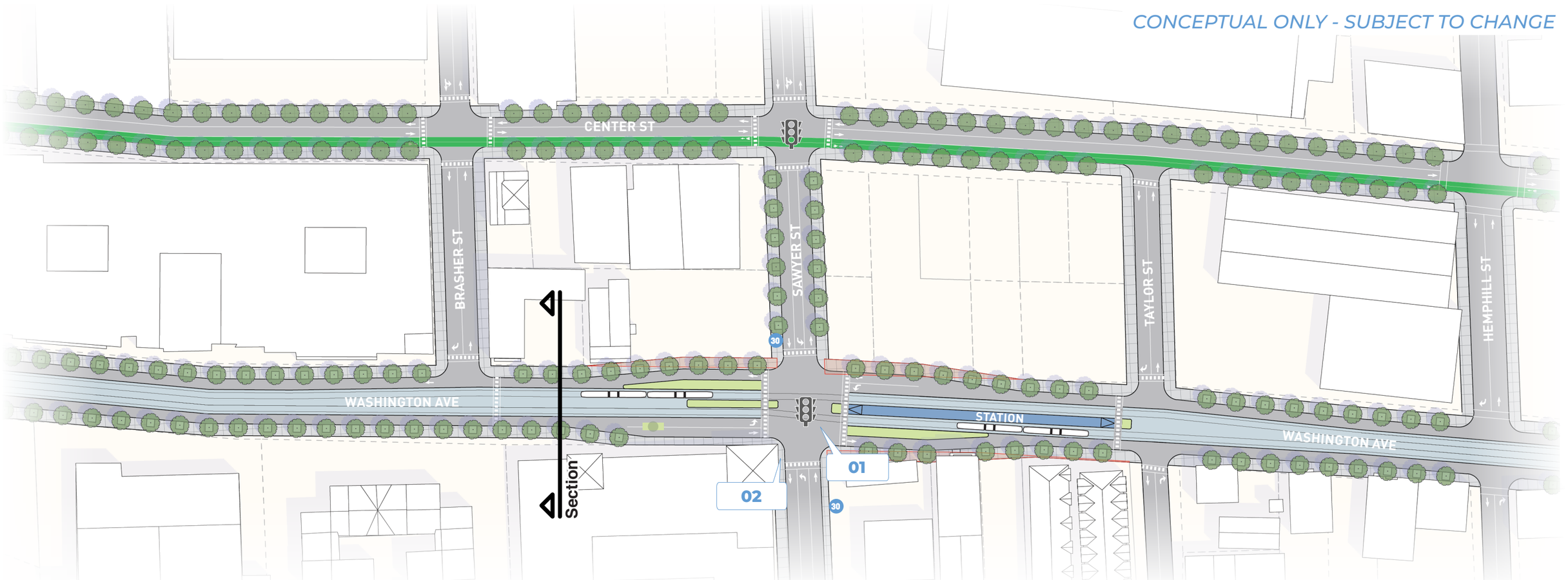


RECOMMENDATIONS:

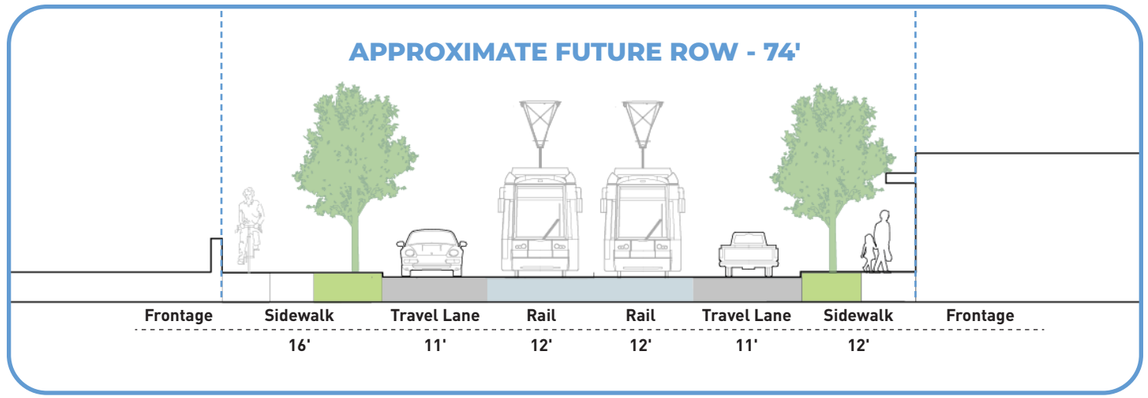
01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

02. Remove extra receiving lane on southbound Sawyer Street to open up additional pedestrian space along the edge of the street without reducing vehicular capacity.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Silver Street Enlarged Plan



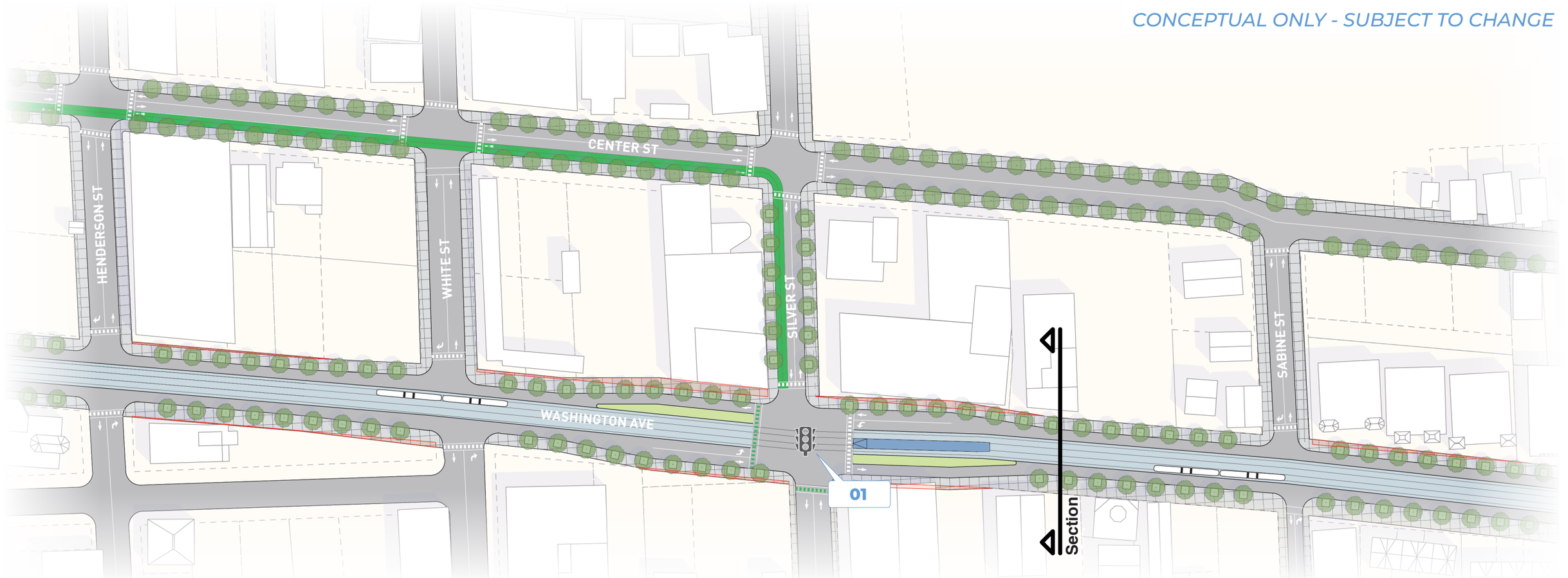
Section Facing West



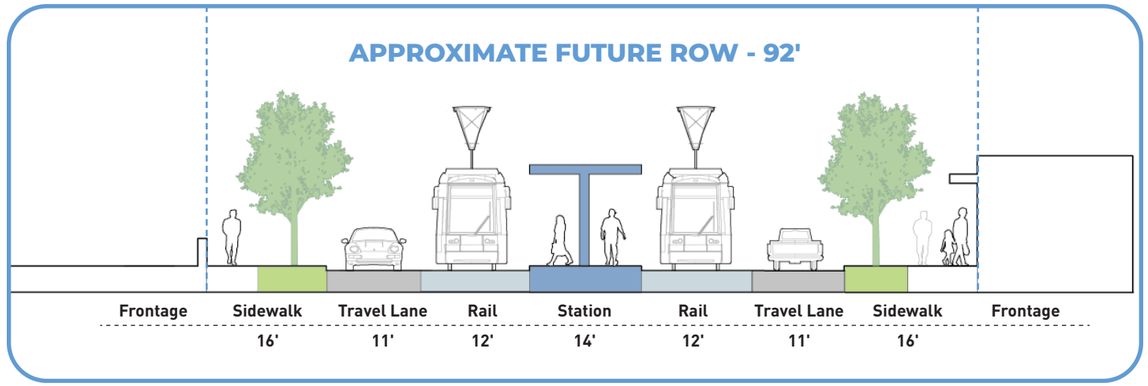
RECOMMENDATIONS:

01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Houston Avenue Enlarged Plan



Section Facing West



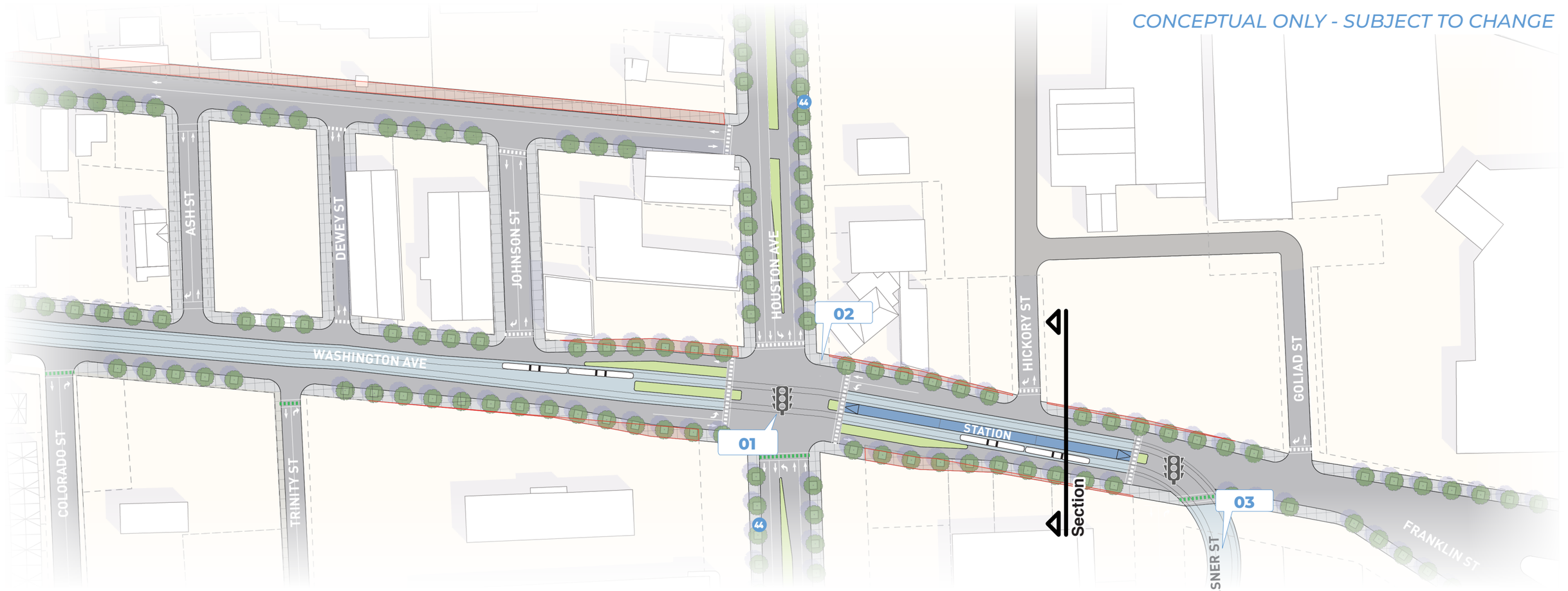
RECOMMENDATIONS:

01. Only permit left turns at signalized intersections. Left turn movements operate as green arrow only at all signals to safely separate vehicle and rail traffic. Additional new signalization at non-signalized intersections should be explored to provide opportunities for crossings.

02. Remove the extra receiving lane on northbound Houston Avenue to make room for a wider sidewalk or a larger landscaping buffer without reducing the vehicular capacity of the roadway.

03. Close Riesner Street to accommodate light rail traveling south of Washington Avenue.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Baseline Constrained Alternative

Two vehicular lanes in each direction with a median and turn lanes

The Baseline Constrained Alternative (adapted from Alternative B) has vehicular lanes very similar to the present condition on Washington. It adds accessible sidewalks and street trees. It includes turn lanes at major intersections and medians with trees elsewhere.

On Center Street, the Community Preferred Vision includes dedicated bike infrastructure behind the curb in addition to burying utilities and drainage. See Alternative B for the evaluation results.



Overall, people care about safe mobility for people walking, rolling, biking, driving, and taking transit on the corridor.

Over 3/4 of people prioritized space for active and public transportation.

Many respondents believe that Center Street is safer for bicyclists.

Participants who chose this alternative felt Washington Avenue should have two vehicular lanes in both directions.

Improving driving safety and mitigating congestion was the most important factor to participants who chose this alternative.

Legend

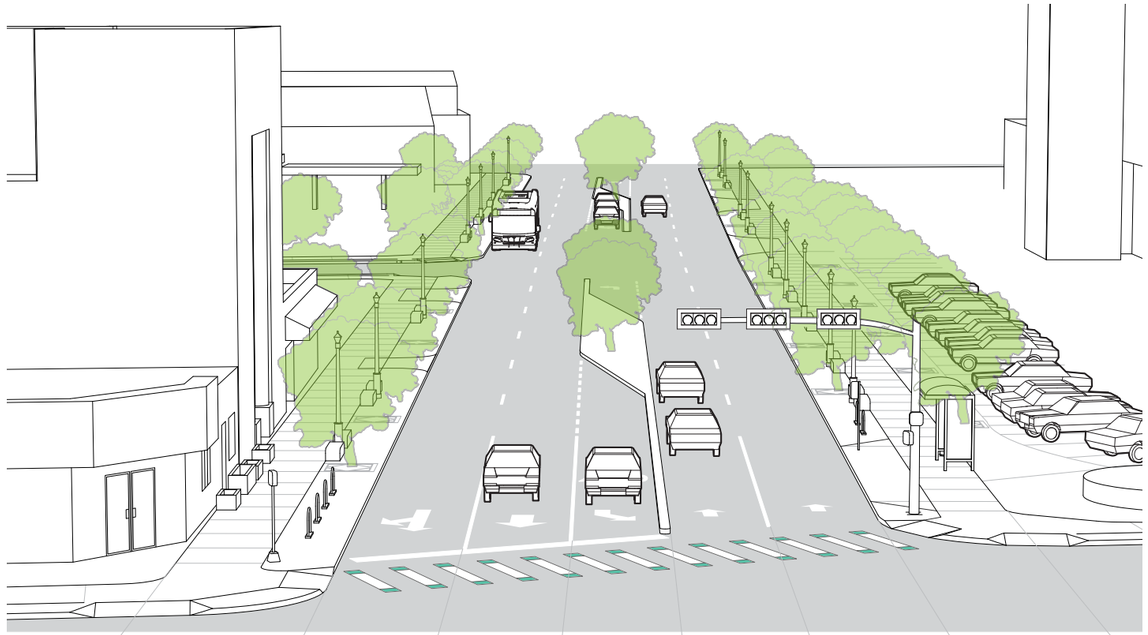
- Key Intersections

0 0.25 0.5 1 mile

N

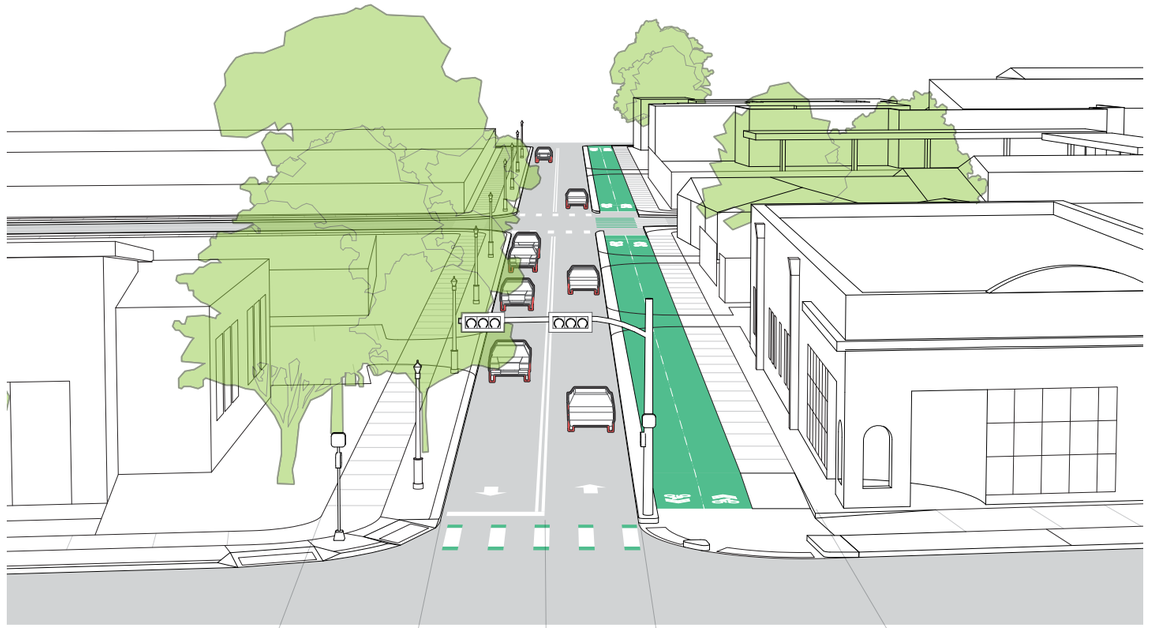
Baseline Constrained Alternative

WASHINGTON AVENUE



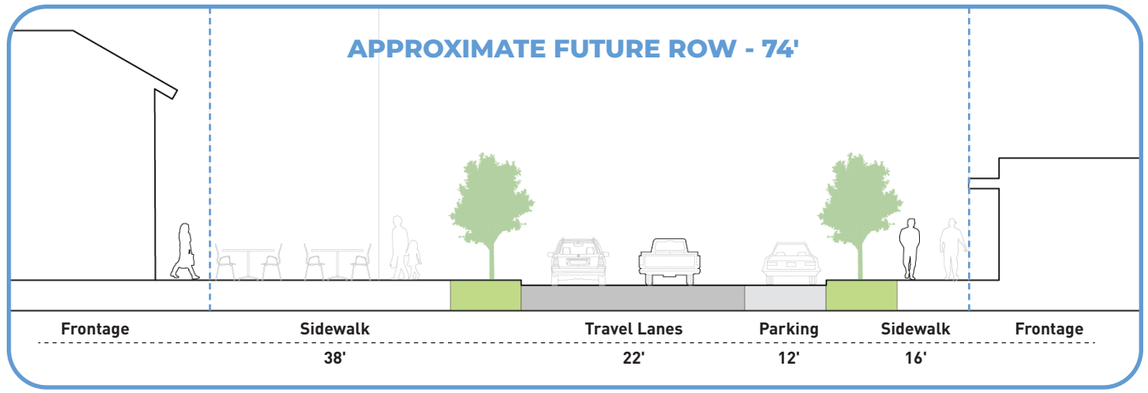
Intersection	Back of Curb 6' - 18' 6"	Travel Lane 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Travel Lane 11'	Back of Curb 6' - 18' 6"
Mid-block	Back of Curb 6' - 18' 6"	Travel Lane 11'	Travel Lane 10'	Median / Turn Lane 6' - 11' (6' in segment 3)	Travel Lane 10'	Travel Lane 11'	Back of Curb 6' - 18' 6"
Existing	Back of Curb 2' - 14' 6"	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Turn / Median 10' - 12'	Travel Lane 10' - 12'	Travel Lane 10' - 12'	Back of Curb 2' - 14' 6"

CENTER STREET

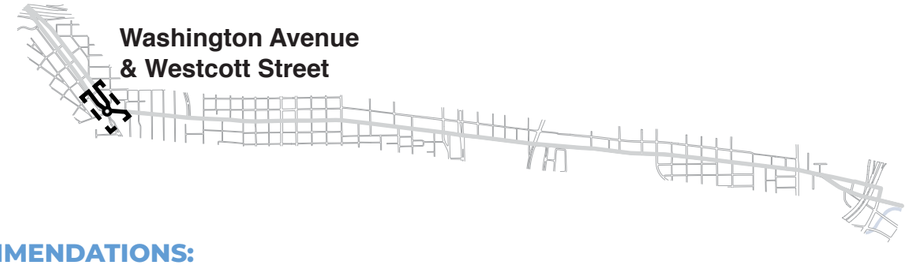


Intersection	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'
Mid-block	Back of Curb 12'	Drive 10'	Drive 10'	Back of Curb 18'
Existing	Back of Curb Varies	Drive 13'	Drive 13'	Back of Curb Varies

Westcott Street and Washington Avenue Intersection



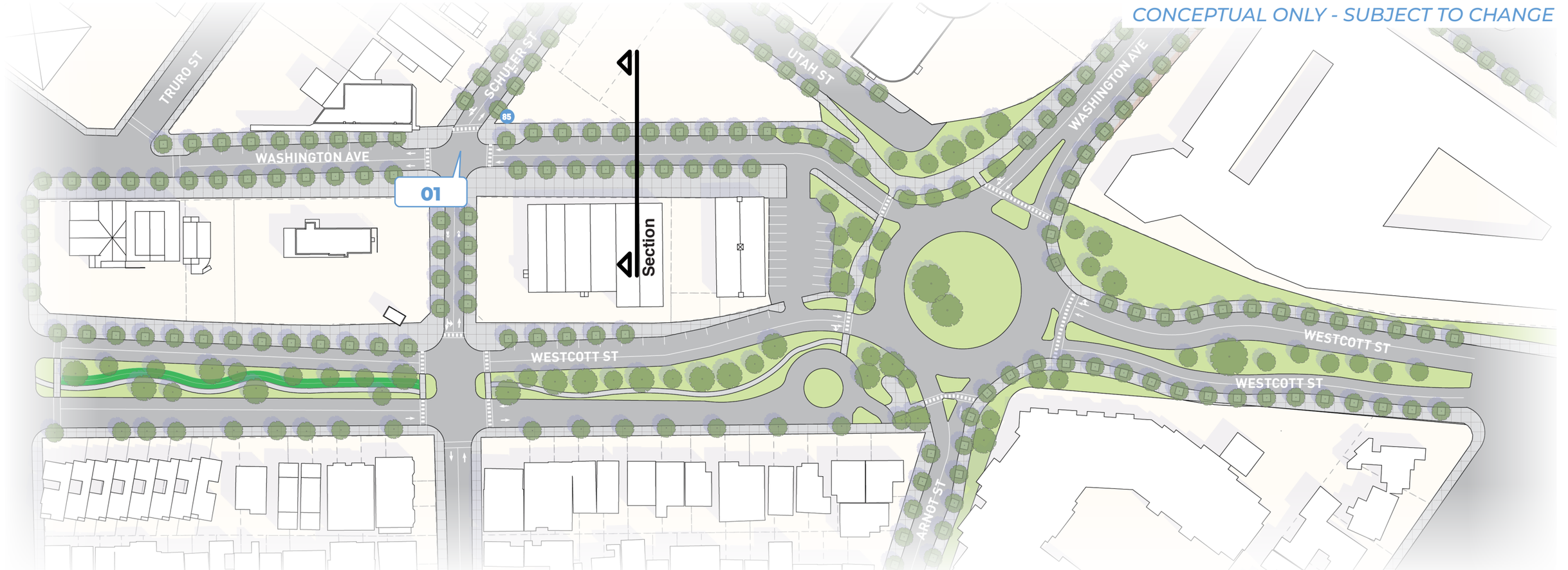
Section Facing West



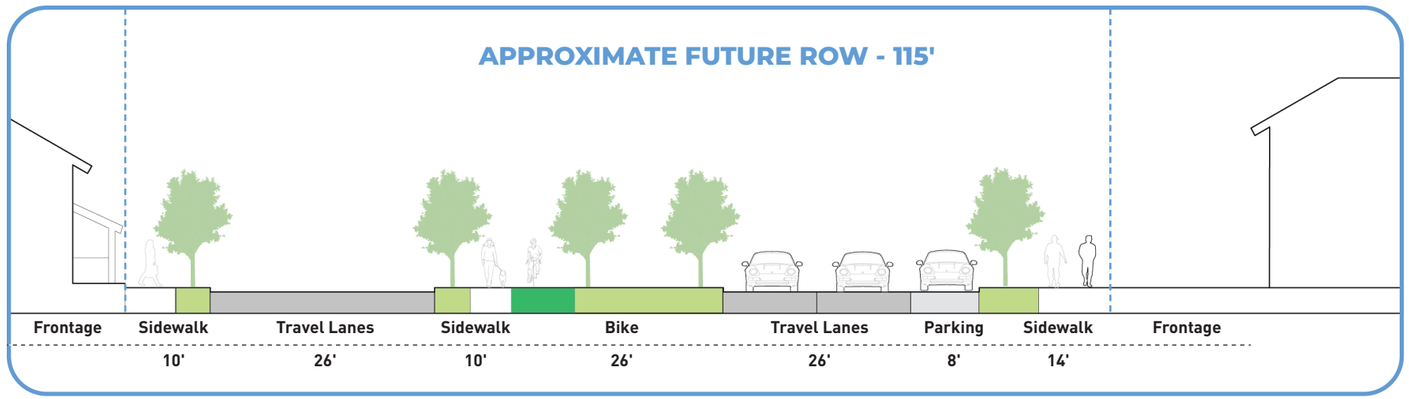
RECOMMENDATIONS:

01. Reduce this segment of Washington Avenue, from the roundabout to just south of the Katy Freeway interchange, to two through lanes.

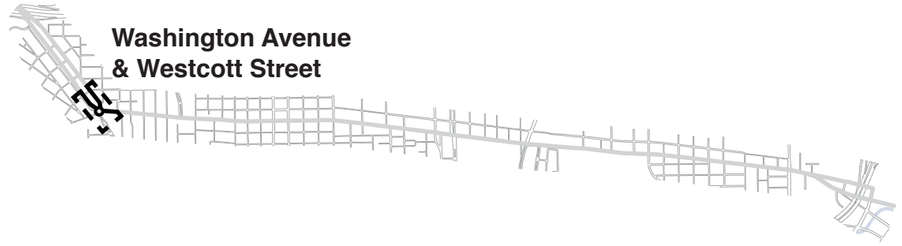
CONCEPTUAL ONLY - SUBJECT TO CHANGE



Westcott Street and Washington Avenue Intersections



Section Facing West



RECOMMENDATIONS:

01. Reduce this segment of Westcott Street, from south of the Katy Freeway inter-change to the west of Washington roundabout, to two through lanes.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



TC Jester Boulevard and Roy Street Intersections

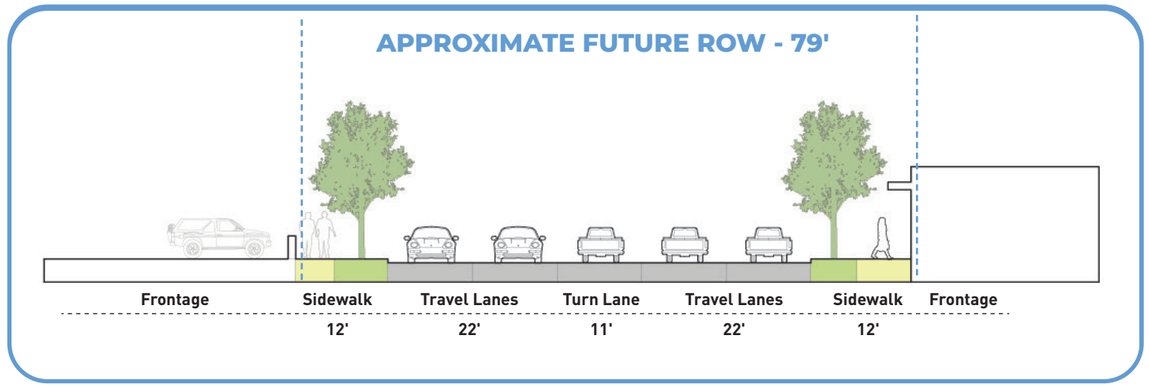


Conceptual renderings - All intersection modifications are subject to full engineering design.

Changes

- Remove the center median to allow for better alignment of TC Jester Boulevard with the parking lot access drive to the south to enable more efficient signal timing and phasing, as well as more pedestrian area.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

TC Jester



Typical Section Facing West

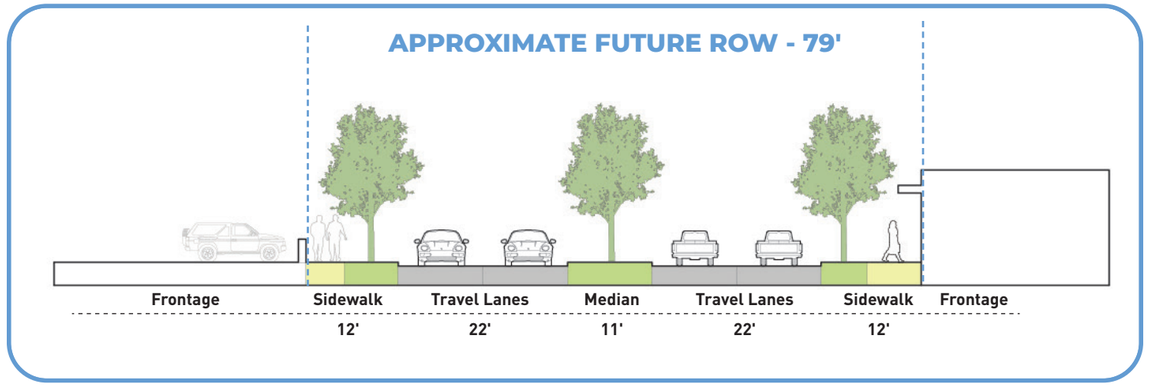


Conceptual renderings - All intersection modifications are subject to full engineering design.

Changes

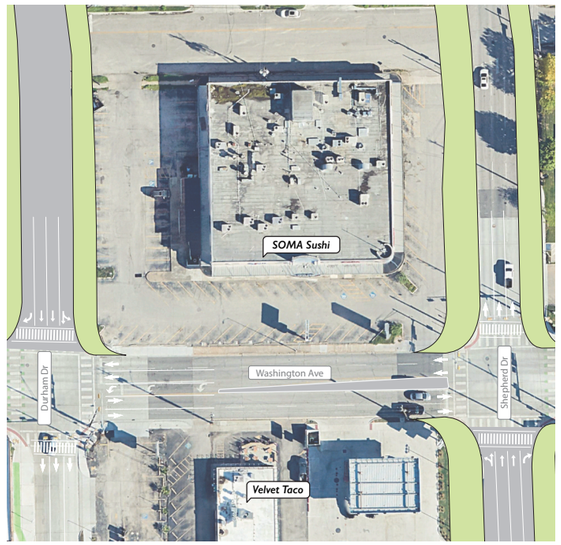
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

Roy



Typical Section Facing West - with Median

Shepherd Drive, Durham Drive and Patterson Intersections

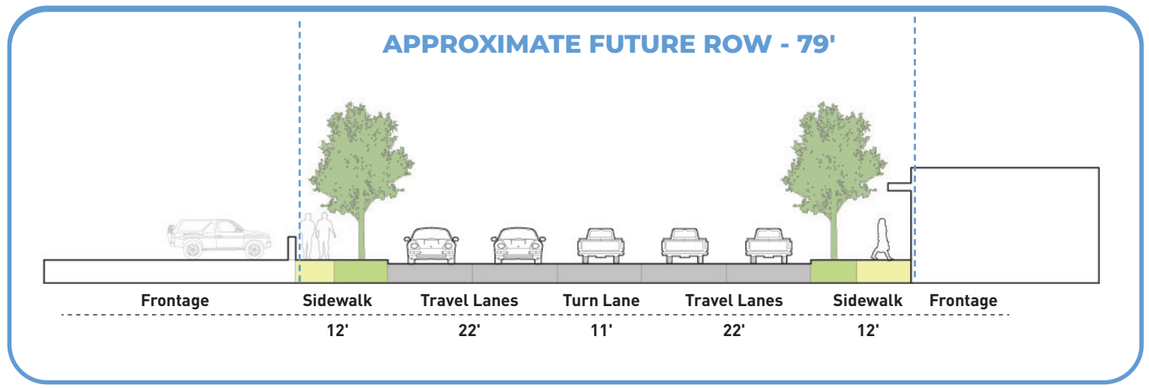


Conceptual renderings - All intersection modifications are subject to full engineering design.

Changes

- Remove the extra receiving lane on Shepherd Drive to make more pedestrian area without reducing the vehicular capacity of the roadway.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

Shepherd/Durham



Typical Section Facing West

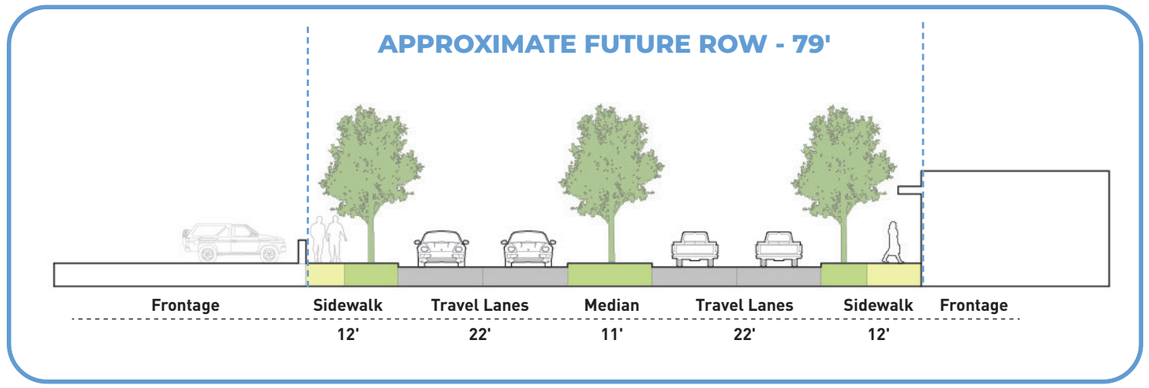


Conceptual renderings - All intersection modifications are subject to full engineering design.

Changes

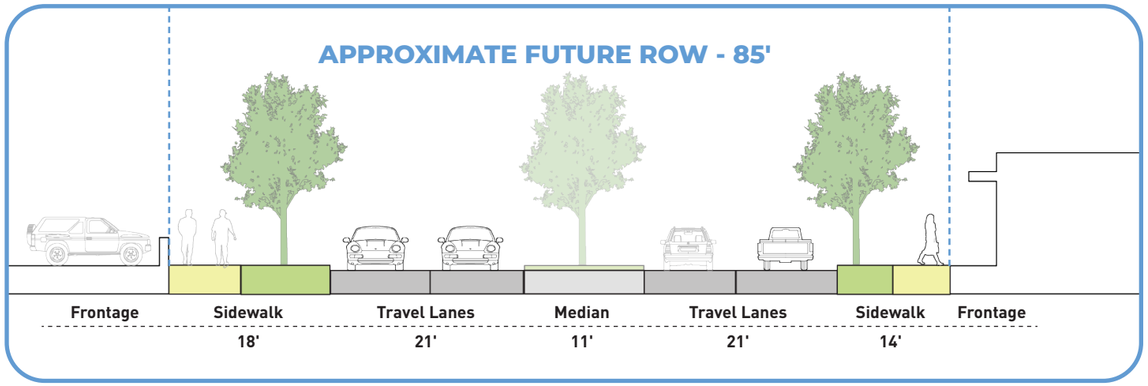
- Safety improvements for those crossing and turning left.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

Patterson

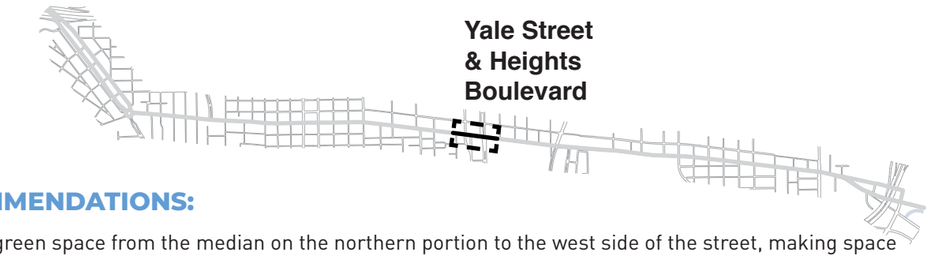


Typical Section Facing West - with Median

Yale Street and Heights Boulevard Intersections



Section Facing West



RECOMMENDATIONS:

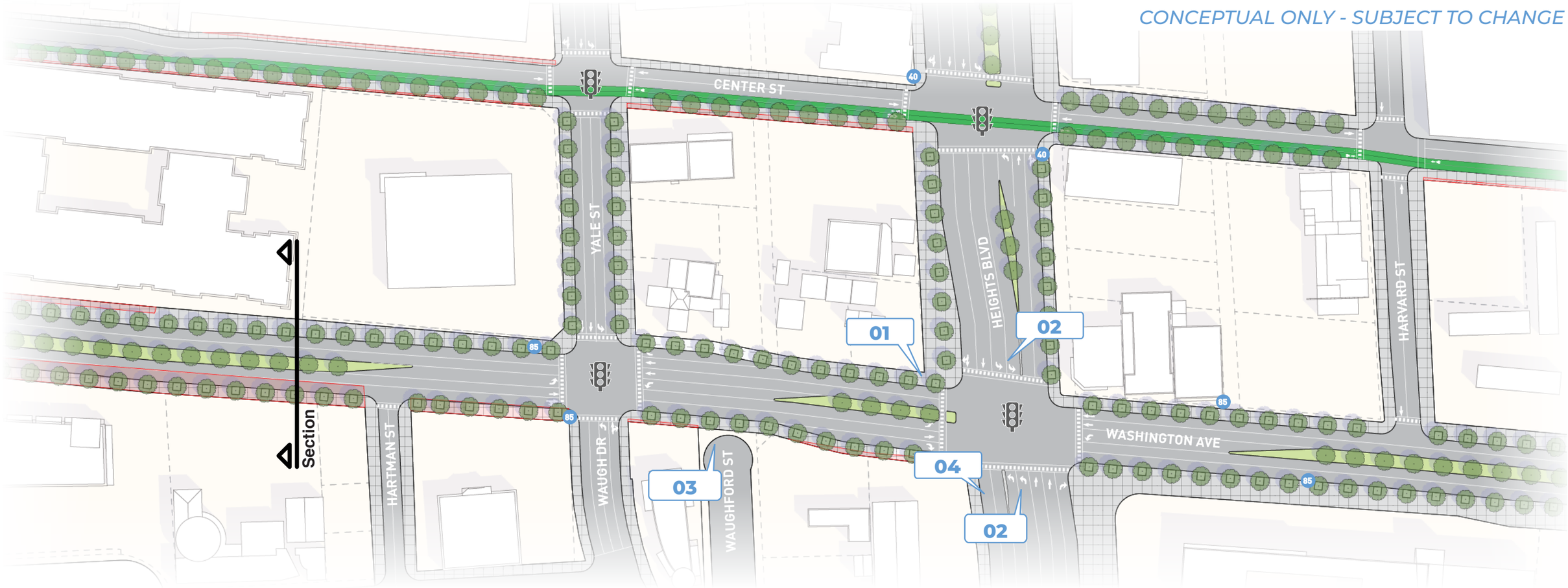
01. Shift green space from the median on the northern portion to the west side of the street, making space for needed vehicular capacity and also for wider people space at the edges of the street.

02. Add dual left-turn lanes on Heights Boulevard to increase capacity for heavy left-turning movements and allow more efficient signal timing.

03. Use existing width on Waugh Drive to convert this roadway to two-way travel, enabling a cul-de-sac of Waughford Drive on Washington Avenue to reduce conflicts for pedestrians and for drivers while maintaining access to residences and businesses.

04. Remove the extra southbound receiving lane on the south leg of Heights to make room for wider people space at the edge of the street without reducing the vehicular capacity of the roadway.

CONCEPTUAL ONLY - SUBJECT TO CHANGE



Studemont Street Intersection

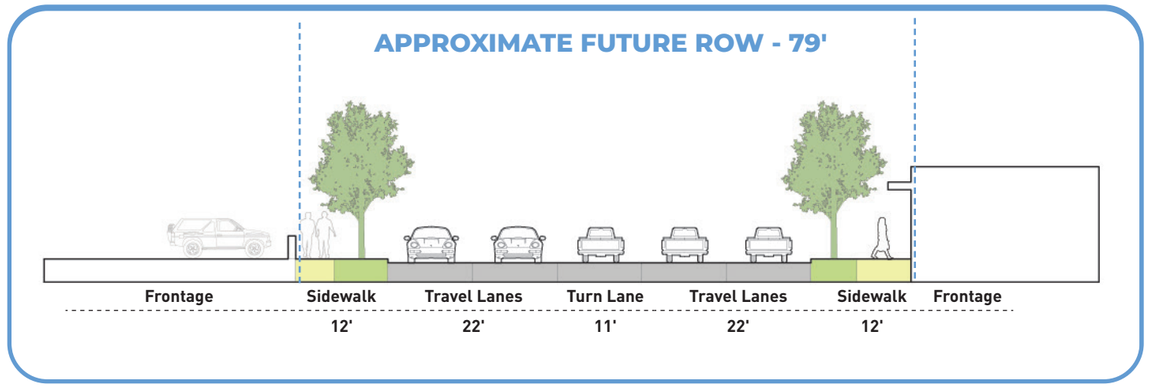


Conceptual renderings - All intersection modifications are subject to full engineering design.

Changes

- Close Sachs Drive to prevent it being used as a slip lane for eastbound right turns onto Studemont Street. This removes a point of conflict between pedestrians and vehicles, could lead to slower eastbound right turning speeds at Studemont, and would open up more space for pedestrian area.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

Studemont



Typical Section Facing West

Sawyer Street and Silver Street Intersections



Conceptual renderings - All intersection modifications are subject to full engineering design.



Conceptual renderings - All intersection modifications are subject to full engineering design.

Sawyer

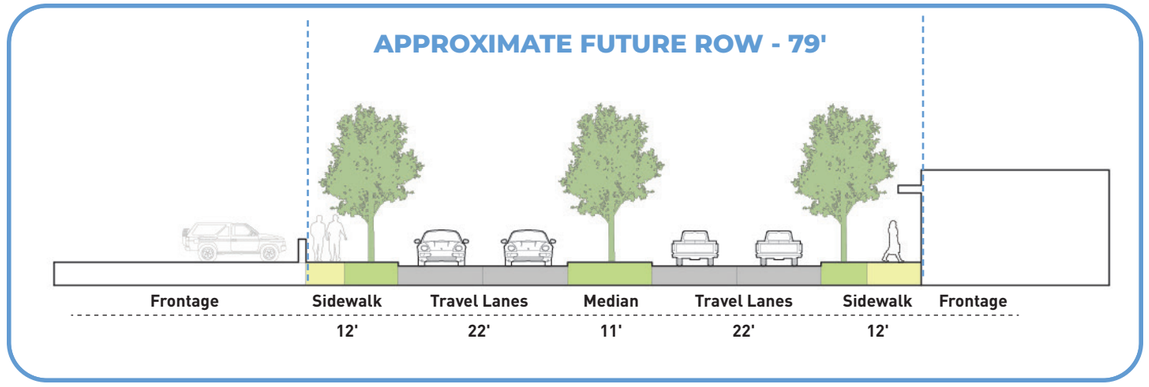
Changes

- Remove extra receiving lane on southbound Sawyer Street to open up additional pedestrian space along the edge of the street without reducing vehicular capacity.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.

Silver

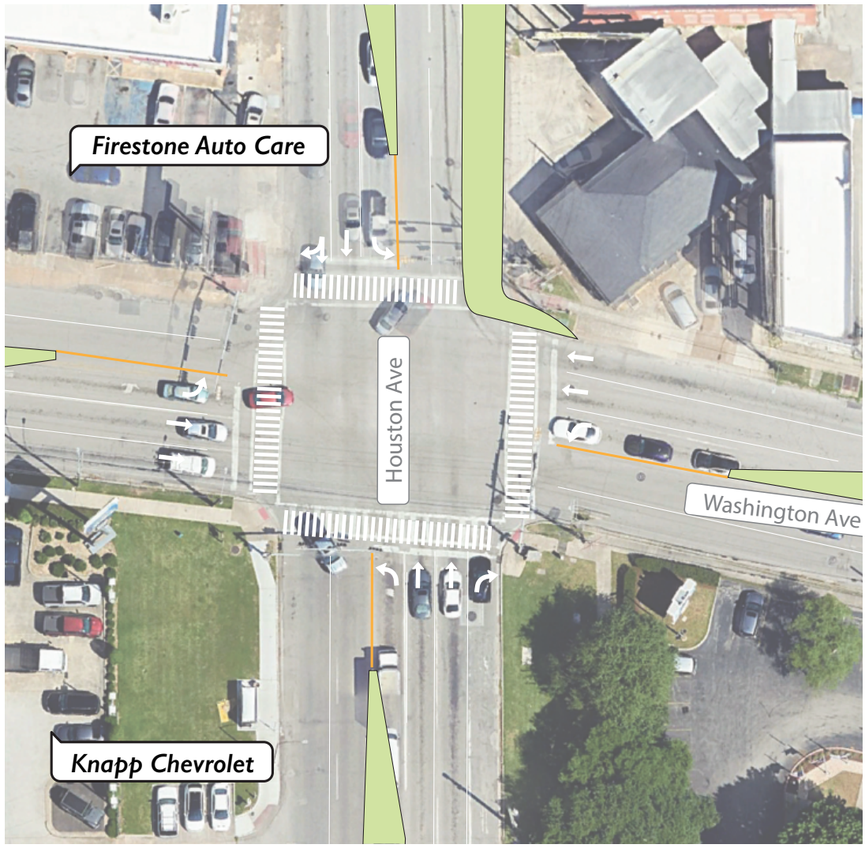
Changes

- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.



Typical Section Facing West - with Median

Houston Avenue Intersection

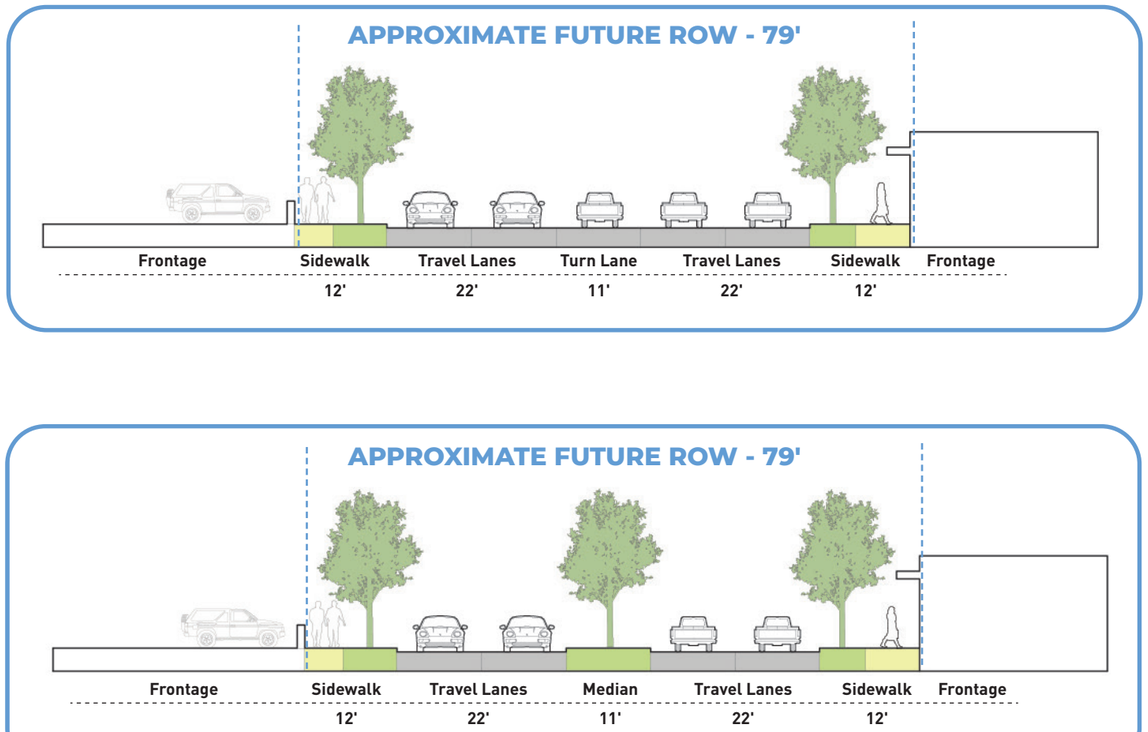


**Conceptual renderings - All intersection modifications are subject to full engineering design.*

Houston

Changes

- Remove the extra receiving lane on northbound Houston Avenue to make room for a wider sidewalk or a larger landscaping buffer without reducing the vehicular capacity of the roadway.
- Additional space for pedestrians and tree planting.
- Medians with trees outside of major intersections.



Typical Sections Facing West - with and without Median

These short term improvements require minimal resources and partnerships for implementation.

These improvements allow integration with ongoing efforts under consideration before moving into a full design phase.

01. Pedestrian Crossings

Many areas of Washington Avenue have distances between crossings much greater than the City of Houston's Infrastructure Design Manual specify. To enhance and improve safety, the following short-term improvements should be considered:

- Added signalized intersection at Center St and Durham Dr where traffic on Center St crosses four lanes without a signal.
- Added midblock crossings near METRO stops that are far from signalized intersections.
- Repainting and upgrading existing crossings at signalized intersections.

02. Wayfinding

Install signage that guides both pedestrians and drivers to better navigate the corridor and be more aware of their surroundings, encouraging a more welcoming and user-friendly environment for all users.

- Install visible signage at pedestrian crossings.
- Clearly mark and signalize bus stops.

03. Temporary landscape

Temporary furniture would enhance comfort for pedestrians and encourage outdoor seating for local restaurants and cafes, attracting more foot traffic.

- Can be incorporated throughout the Corridor.
- Place planters with ornamental trees for added shade and planters with shrubs.
- Create gathering areas with small tables, seating and benches.

04. Temporary Bike infrastructure / traffic barriers

Designated bike infrastructure in car-free zones would support the safety of cyclists on the street.

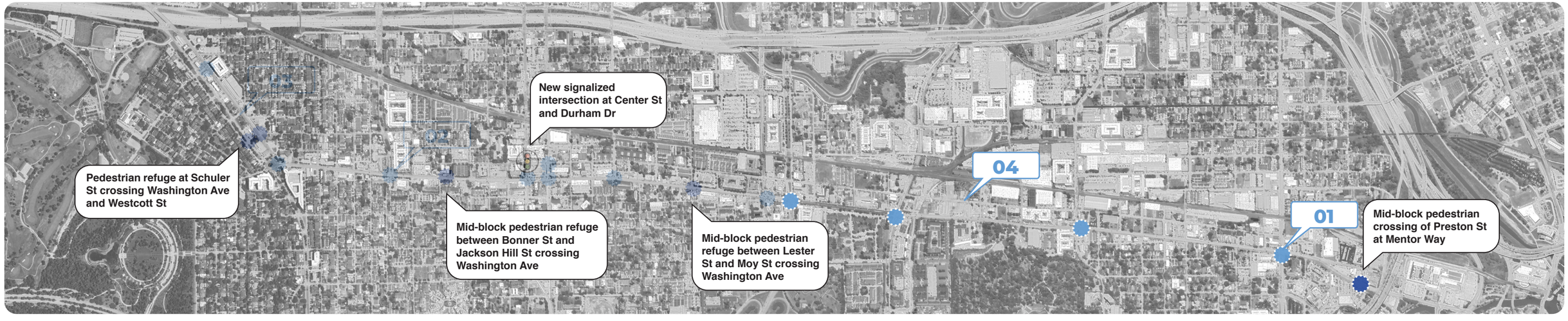
- On Washington Avenue, introduce concrete separators to create dedicated bike infrastructure between downtown and Silver St, and add signage.
- Paint sharrows on Center St from Detering St to Silver St and on Schuler St and add signage
- Install bike racks in key locations.











Upgraded pedestrian conditions at current intersection

Upgraded pedestrian conditions at mid-block location

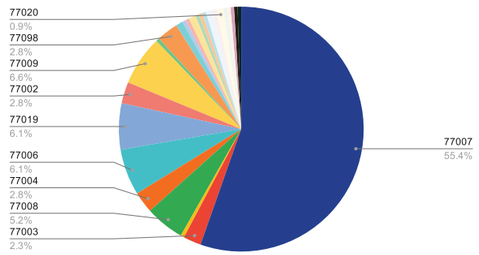
New signalized intersection

Temporary bike infrastructure/traffic barriers

The fourth round of outreach asked about improvements that could be made prior to a major reconstruction.

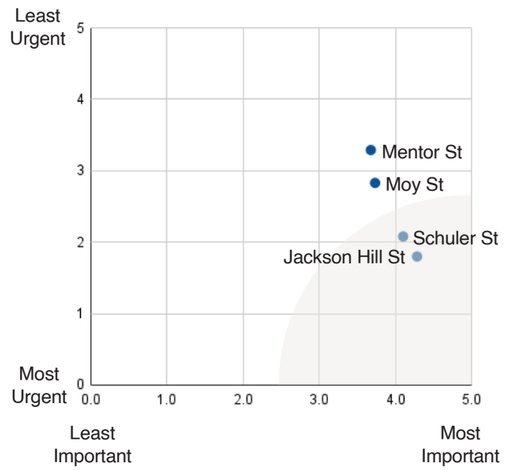
During the fourth round of outreach, conducted fully online, the community was asked to rank the importance and urgency of a number of short term improvements. Four locations were asked about that meet several criteria: they have METRO bus stops adjacent to them, they do not have a safe crossing nearby, and mid-block crossings could be implemented without interrupting vehicular operations. The heatmap below illustrates comment hotspots from the first round of outreach regarding what is not working for people today. The locations marked are those that were included in the fourth round of outreach. These locations are candidates for mid-block crossings.

Over half of people who responded to the survey live in 77007, while many others live in the nearby zip codes.



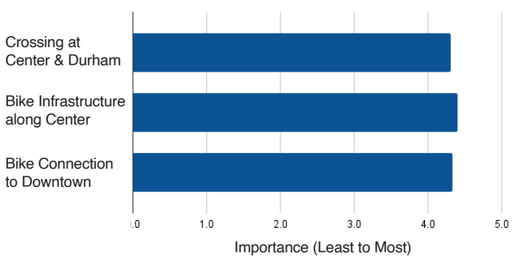
The public provided feedback on several short term improvements including safer crossings and wayfinding.

Overall, people believe safer pedestrian crossings are needed at all intersections, but the most urgent were at Jackson Hill Street and Schuler Street.



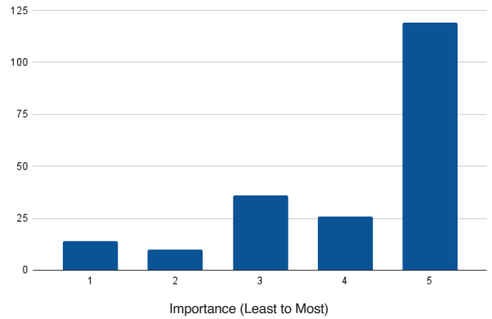
Other questions from the survey let people rank the importance of elements along Center Street.

People think it is important to have a safe crossing at Center Street and Durham Drive for bicyclists, safe bicycle infra-structure along Center Street, and a safe connection to Downtown for bicyclists.



Respondents were asked whether increased or improved wayfinding is important along the corridor.

Most people would like to see increased or improved wayfinding.



Some of the areas where respondents mentioned wayfinding to and from the Washington Avenue corridor could be increased or improved include:
- **Multiple intersections on Washington Avenue**
- **Downtown**
- **Buffalo Bayou**
- **White Oak Bayou**
- **University of Houston**
- **Memorial Park**
- **Museum District**
- **Old Sixth Ward**
- **Montrose**

A number of respondents added additional comments in the survey, some of which are included on this page.

"I want more bike lanes, I want big sidewalks, I want road diets, I want transit lanes on Wash, I want better connections to Buffalo Bayou, to White Oak bayou, I want more homes, more businesses, and I want to end traffic violence and I want more trees"

" I do not want bike lanes reducing vehicle lanes."

"Even for short-term improvements, these recommendations are quite underwhelming compared to the community's feedback and what it seems could be done now."

"I am excited to see the community's preferred vision!! I think that would be a wonderful solution to improve safety for the entire community as well improve access for transit, biking, walking, and rolling."

"Pedestrian crossing at Patterson is far more important to me than the listed ones here"

"any bike lanes on Center will be dangerous by design, and I will oppose them. There are too many bars and bar parking lots; people will get killed"

"Possibly more visible signs placed earlier before getting to Westcott/Washington Roundabout so people have time to digest the information and make flow of traffic smoother"

"Improving on street parking could be a low cost immediate task. Current parking pattern is confusing and causes conflicts - especially around Silver St and Patterson where vehicles have to merge to avoid sudden parking while traveling east"

"Please look into a safe crossing at Washington at Hemphill Street (where the salvation army is - lots of bus riders cross the street here)."

Short and Long Term Recommendations Matrix

RECOMMENDATION	PHASE	DESCRIPTION	COMMUNITY PREFERRED VISION	BASELINE CONSTRAINED ALTERNATIVE	INDEPENDENT OF REBUILD	IMPLEMENTATION PARTNERS	FUNDING SOURCES
Safer pedestrian crossing of Washington Ave and Westcott St at Schuler St	Short Term	Midblock Crossing			X	City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 4	City Of Houston, City Council Discretionary, METRO, Harris County Precinct 4, Safe Routes to School funding
Safer pedestrian crossing at Washington Ave and Moy St	Short Term	Midblock Crossing			X	City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 4	City Of Houston, City Council Discretionary, METRO, Harris County Precinct 4
Safer pedestrian crossing at Washington Ave and Jackson Hill St	Short Term	Midblock Crossing			X	City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 1	City Of Houston, City Council Discretionary, METRO, Harris County Precinct 1
Safer pedestrian crossing at Washington Ave and Mentor St	Short Term	Midblock Crossing			X	City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 1	City Of Houston, City Council Discretionary, METRO, Harris County Precinct 1
Safer crossing at Center St and Durham Dr	Short Term	Signalization	X	X	X	City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 4	City Of Houston, City Council Discretionary, METRO, Harris County Precinct 4
Safer bike infrastructure along Center St	Short Term	Protected, High-Comfort Bike Infrastructure	X	X	X	City Of Houston, Superneighborhood 22, Harris County Precinct 1, Harris County Precinct 4, Old Sixth Ward TIRZ, Memorial Heights TIRZ	City Of Houston, City Council Discretionary, Harris County Precinct 1, Harris County Precinct 4, Old Sixth Ward TIRZ, Transportation Alternatives Set-Aside, Active Transportation funding
Safer bike connection between Downtown and Center St	Short Term	Protected, High-Comfort Bike Infrastructure	X	X	X	City Of Houston, Superneighborhood 22, Harris CountyPrecinct 1, Downtown Houston+	City Of Houston, Harris County Precinct 1, Downtown Houston+
Parking strategy - nodes of structured parking	Short And Long Term	Structured Parking	X	X	X	City Of Houston, Superneighborhood 22, Harris County Precinct 1, Harris County Precinct 4, Old Sixth Ward TIRZ, Memorial Heights TIRZ	City Of Houston, METRO, Harris County Precinct 1, Harris County Precinct 4, Old Sixth Ward TIRZ
Community Preferred Vision - Washington Avenue	Long Term	Holistic Rebuild Of The Street Per The Recommendations	X			City Of Houston, METRO, Superneighborhood 22, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ	H-GAC, City Of Houston, METRO, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ, Complete Streets funding
Baseline Constrained Alternative - Washington Avenue	Long Term	Holistic Rebuild Of The Street Per The Recommendations		X		City of Houston, METRO, Superneighborhood 22, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ	H-GAC, City of Houston, METRO, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ
Planting landscape	Medium Term	Enhance the aesthetic appeal and comfort of streetscapes	X	X	X	City of Houston, Superneighborhood 22, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ	City of Houston, Harris County Precinct 1, Harris County Precinct 4, Downtown Houston+, Old Sixth Ward TIRZ

Implementation Strategy

Implementation Approach

This plan recommends two phases for implementation that apply to either option: short term items that can bring significant benefit to the corridor without major construction and/or long term reconstruction of the corridor. The long term reconstruction includes mobility improvements in addition to overarching capital improvements such as upgraded drainage, burying of utilities, and landscaping.

The Community Preferred Alternative represents a high level of effort for completion, while the Baseline Constrained Alternative represents an option more similar to today's street. Implementation is dependent on political will, funding, and a clear lead implementation entity.

Project schedules are preliminary and depend greatly on how much the implementation entity can take on, what partnership opportunities are available, and available funding. If opportunities for funding or partnerships on other projects come up, project timelines may change.

Estimated Costs

The estimated costs for both options include updated drainage, buried utilities, and a full street reconstruction with all of the included recommendations within the chosen option. The cost estimation does not include property acquisition. The estimated costs are preliminary and subject to change. They are based on 2025 pricing and the preliminary designs of the projects, both of which may change due to internal and/or external factors.

Funding Strategies

Funding is key to project implementation. The corridor is owned by the City of Houston and has METRO services operating on it, making those two agencies primary stakeholders in the funding and implementation. The corridor spans Harris County Precincts 1 and 4, which also could provide some funding toward the project. Federal formula funding via H-GAC and other federal grants like BUILD could contribute to the overall funding strategy. For short term implementation items, City Council Members' discretionary funds could be used in addition to METRO and City of Houston funding.

Implementation Strategy: Short Term Recommendations

Estimated Costs - Short Term Improvements

These short-term improvements are intended to enhance both the pedestrian and vehicular experience and act as quick wins that demonstrate commitment to the project's goals. They represent measures that can be implemented early in the process with minimal investment, supporting ongoing efforts.

The cost estimates below are preliminary and may change depending on market conditions and additional design development required to determine accurate values.

Pedestrian Crossings

Three different pedestrian crossing scenarios were analyzed, with estimated costs summarized as follows:

1. Upgrade of Existing Crossing: Includes restriping of crosswalks and reconstruction of ramps.

Total estimated cost per intersection: $13,200

2. Mid-Block Crossing: Includes crosswalk striping, construction of median curbs, soil preparation, installation of shade trees, and ramps.

Total estimated cost per crossing: $23,575

3. New Pedestrian Crossing: Includes installation of a pedestrian hybrid beacon, crosswalk striping, and ramps.

Total estimated cost per crossing: $163,200

Temporary landscape

To implement landscaping in strategic locations, costs have been estimated on a per-unit basis, as well as an overall cost per ½ **mile along both sides of the corridor**.
Each unit includes two planters with shrubs, perennials, and an ornamental tree, along with one bench.

Total estimated cost per unit: $5,460

Total estimated cost ½ mile: $82,368

Wayfinding

The wayfinding cost estimate is based on approximately ½ **mile along both sides of the corridor.** Actual costs may vary depending on the location of the signage, as some blocks may require a higher concentration of signs while others may need only minimal installation. Signage installations must be coordinated with METRO and ensure compatibility with real-time information systems for any additional signage.

Total estimated cost per 1/2 mile: $7,575

Temporary bike infrastructure

The following cost estimate includes bike infrastructure from Silver Street to Downtown, including parking spots with plastic pylons and strategically located bike racks.

Total estimated cost - barriers (Silver St to Downtown): $42,000

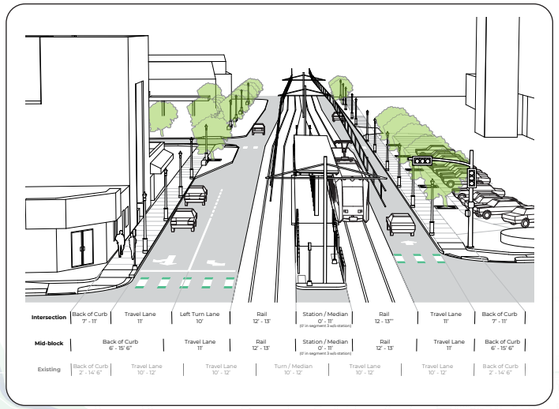
Total estimated cost - bike racks: $5,500

Implementation Strategy: Community Preferred Vision

Estimated Costs

The implementation of the Community Preferred Vision is a full reconstruction of the street within the public right-of-way including subsurface elements such as sewer and water and all surface elements. The estimated total cost for the reconstruction of Washington Avenue and Westcott Street between downtown and I-10 include mobilization, demolition of existing pavement, preparing of right of way, and excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing. It does not include vehicle acquisition.

Total Estimated Cost for Community Preferred Vision including light rail: $442,335,300

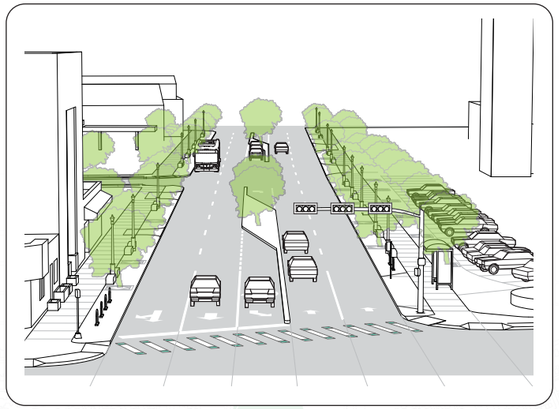


Implementation Strategy: Baseline Constrained Alternative

Estimated Costs

The implementation of the Baseline Constrained Alternative is a full reconstruction of the street within the public right-of-way including subsurface elements such as sewer and water and all surface elements. The total costs for the reconstruction of Washington Avenue and Westcott Street between downtown and I-10 include mobilization, demolition of existing pavement, preparing of right of way, excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing.

Total Estimated Cost for Baseline Constrained Alternative: $147,872,900



Implementation Strategy: Center Street

Estimated Costs

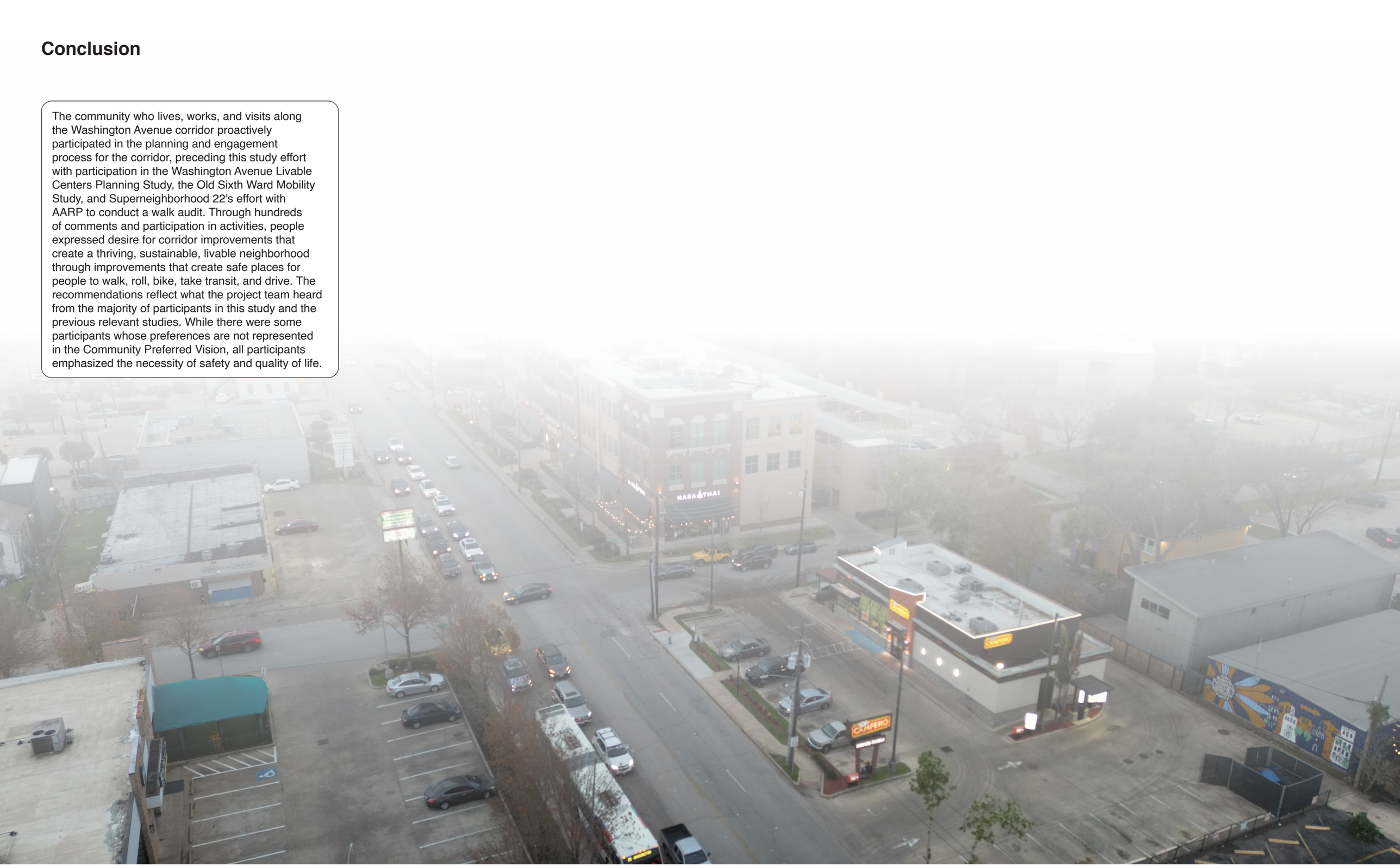
The implementation of recommendations for Center Street can be independent of Washington Avenue and Westcott Street implementation. The total estimated cost for Center Street reconstruction include mobilization, demolition of existing pavement, preparing of right-of-way, excavation, the proposed pavement, subgrade, curb and back-of-curb, traffic signals, water line and storm sewer improvements, underground electrical, and street lighting in addition to all temporary facilities required for construction. It also includes all softscape and hardscape elements for the landscaping and pedestrian realm: tree zone and suspended pavement, pedestrian lighting, irrigation, trees, shrub, and planting soil. The estimation does not include contingency or right-of-way acquisition and is based on 2025 pricing. As shown in the drawing below, the cost estimation for Center Street only includes the portions of the bike infrastructure and street reconstruction on Center Street itself, not the complementary infrastructure on Silver St, Detering St, or Schuler St.

Total Estimated Cost for Center Street: $39,035,800



Conclusion

The community who lives, works, and visits along the Washington Avenue corridor proactively participated in the planning and engagement process for the corridor, preceding this study effort with participation in the Washington Avenue Livable Centers Planning Study, the Old Sixth Ward Mobility Study, and Superneighborhood 22's effort with AARP to conduct a walk audit. Through hundreds of comments and participation in activities, people expressed desire for corridor improvements that create a thriving, sustainable, livable neighborhood through improvements that create safe places for people to walk, roll, bike, take transit, and drive. The recommendations reflect what the project team heard from the majority of participants in this study and the previous relevant studies. While there were some participants whose preferences are not represented in the Community Preferred Vision, all participants emphasized the necessity of safety and quality of life.

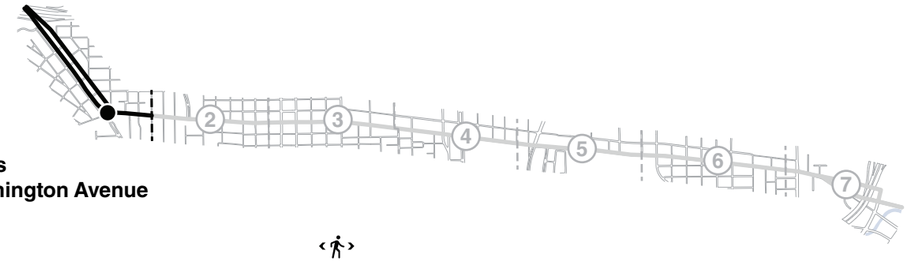


05: APPENDIX

APPENDIX A
EXISTING CONDITIONS

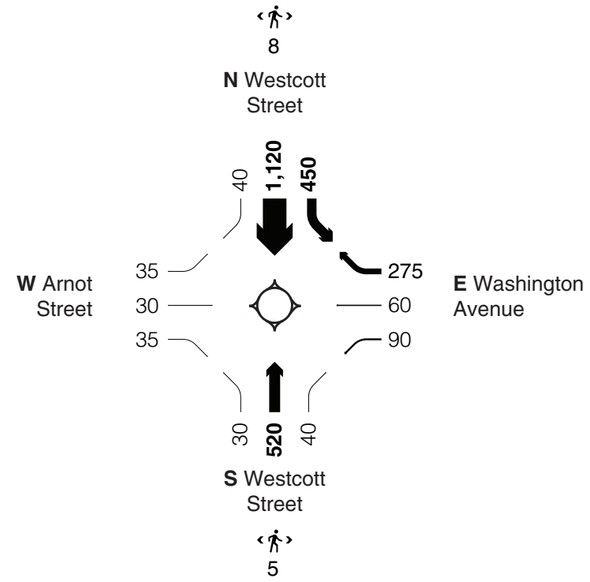
Segment 1 Westcott Washington Roundabout: Existing Conditions



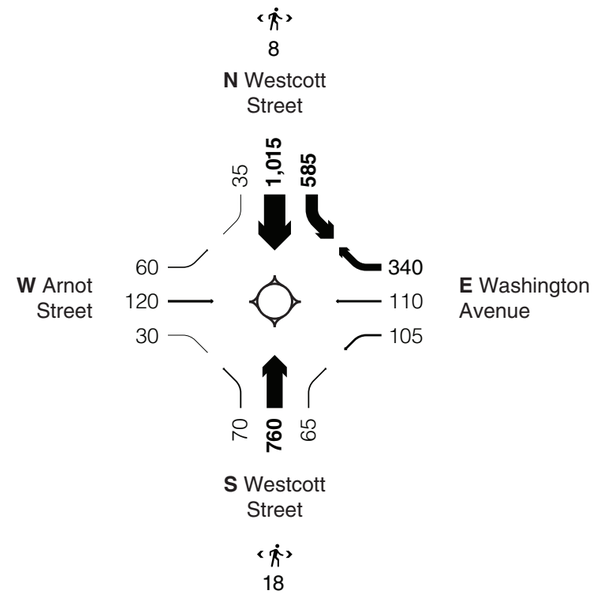


Peak hour traffic counts
Westcott Street at Washington Avenue

AM Weekday
7:45 - 8:45 AM
11.01.2023

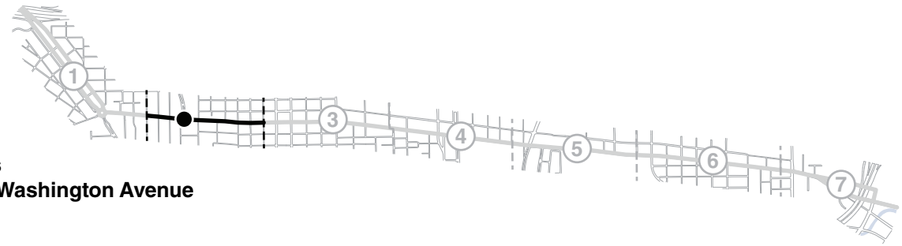


PM Weekday
5:15 - 6:15 PM
11.01.2023

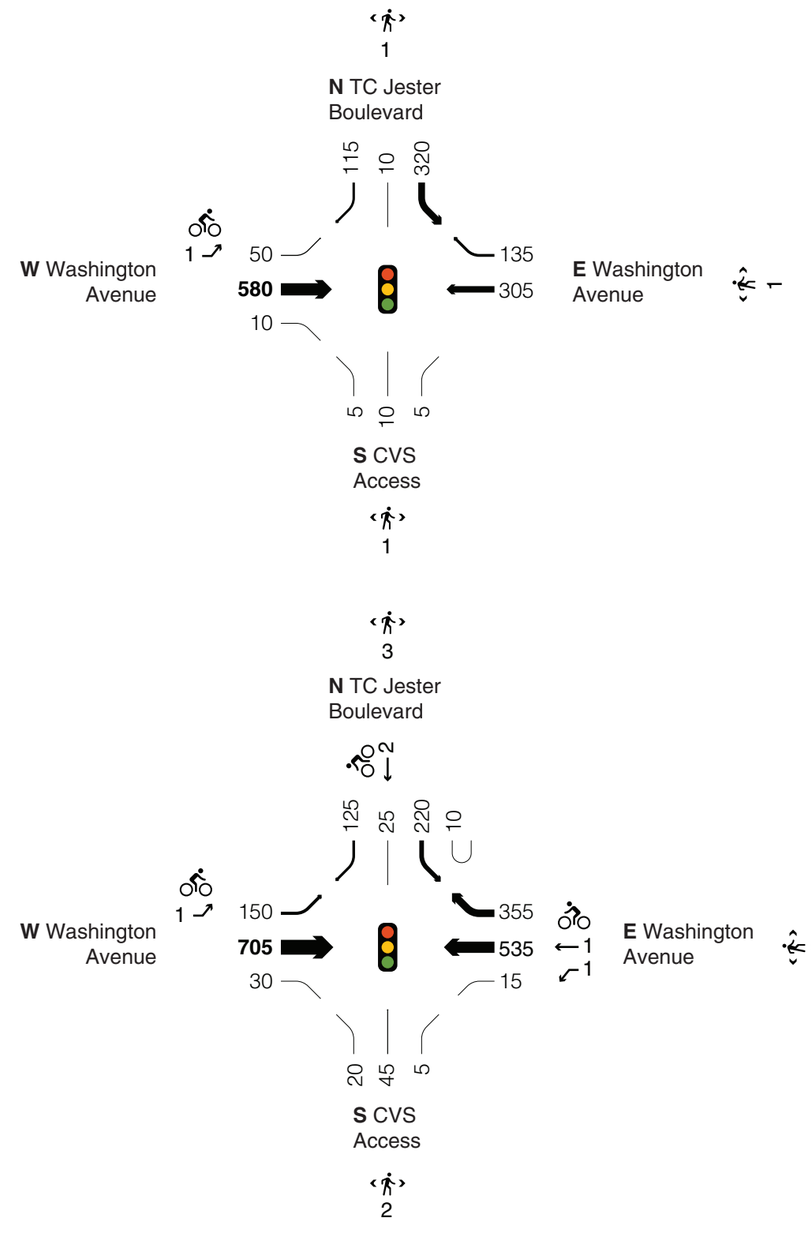


Segment 2 Birdsall Street to Sandman Street: Existing Conditions





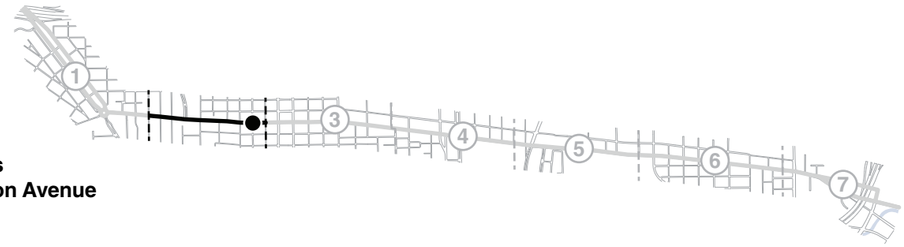
Peak hour traffic counts
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AM Weekday
7:45 - 8:45 AM
11.01.2023



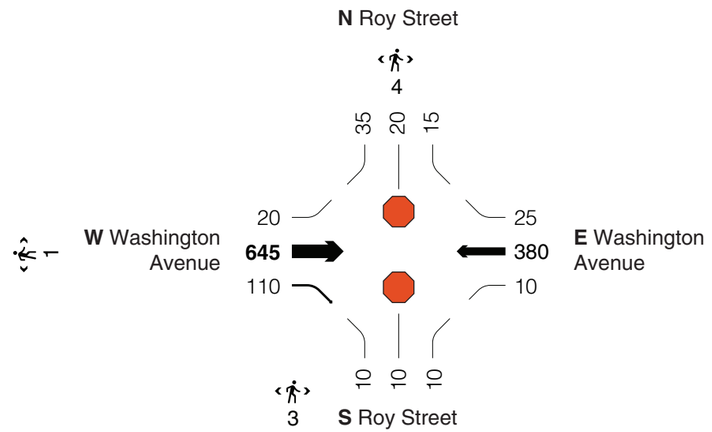
PM Weekday
5:15 - 6:15 PM
11.01.2023

Segment 2 Birdsall Street to Sandman Street: Existing Conditions

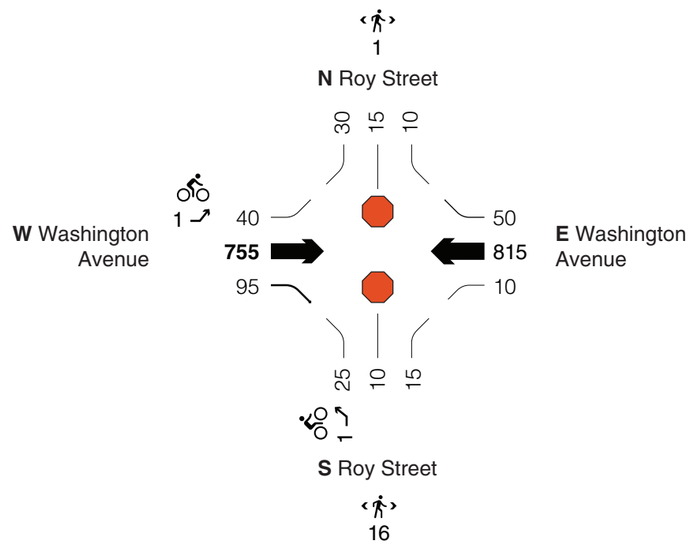




Peak hour traffic counts
Roy Street at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

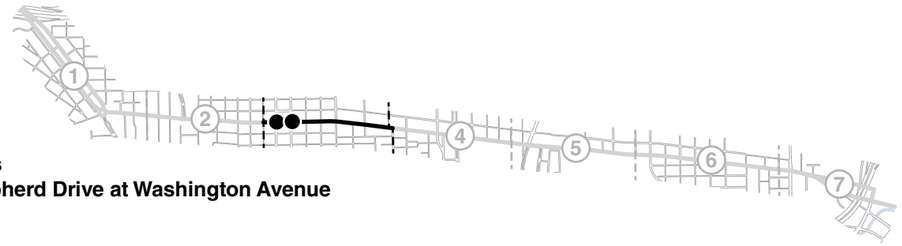


PM Weekday
5:15 - 6:15 PM
11.01.2023

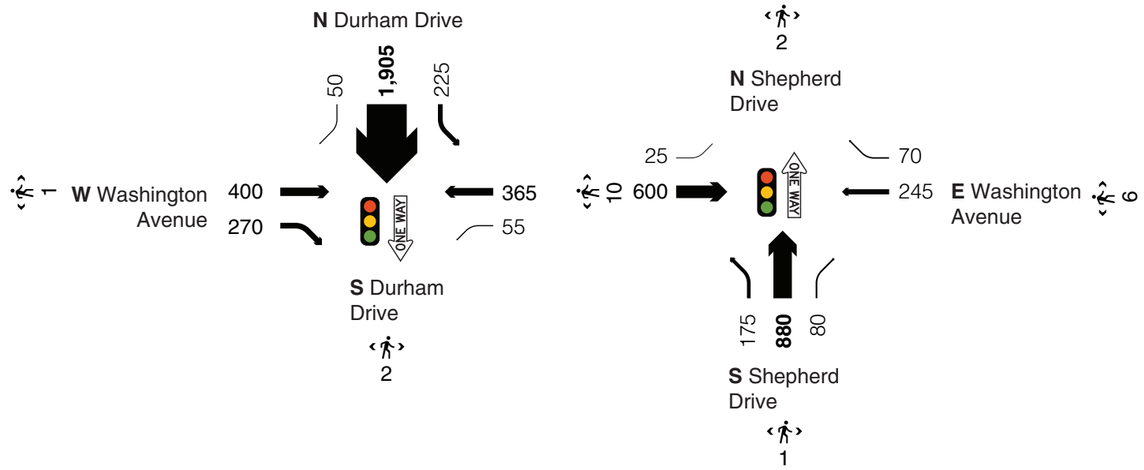


Segment 3 Sandman Street to Bonner Street: Existing Conditions

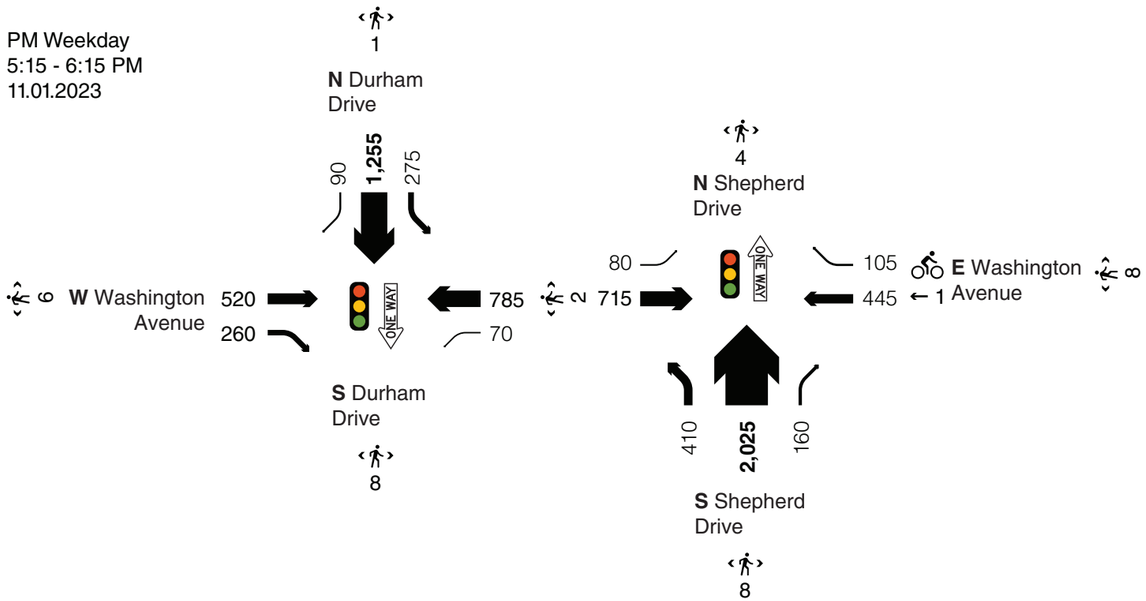




Peak hour traffic counts
Durham Drive and Shepherd Drive at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

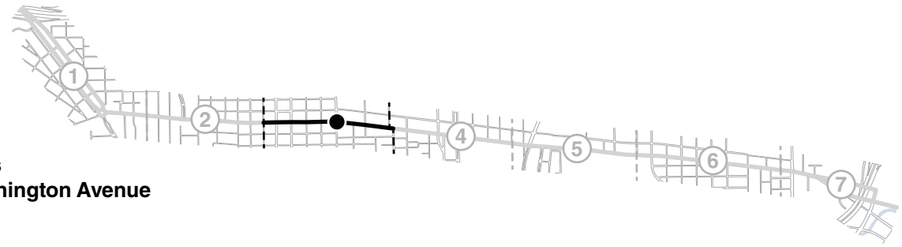


PM Weekday
5:15 - 6:15 PM
11.01.2023

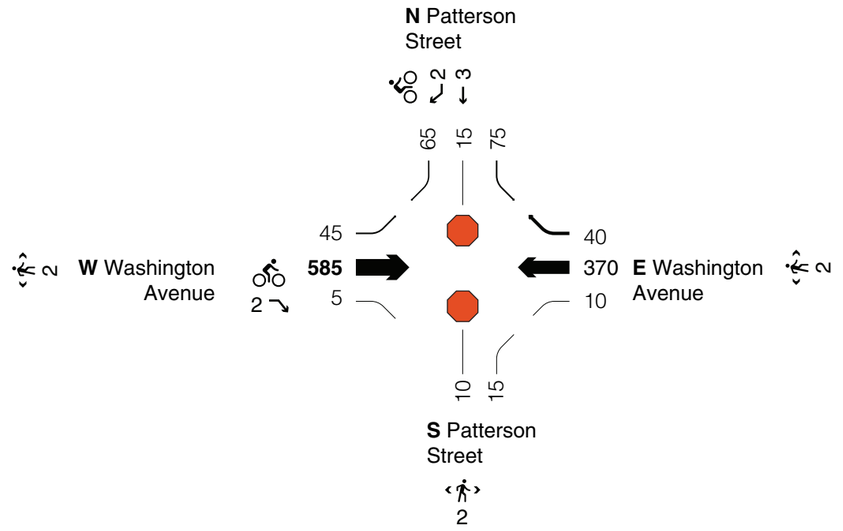


Segment 3 Sandman Street to Bonner Street: Existing Conditions

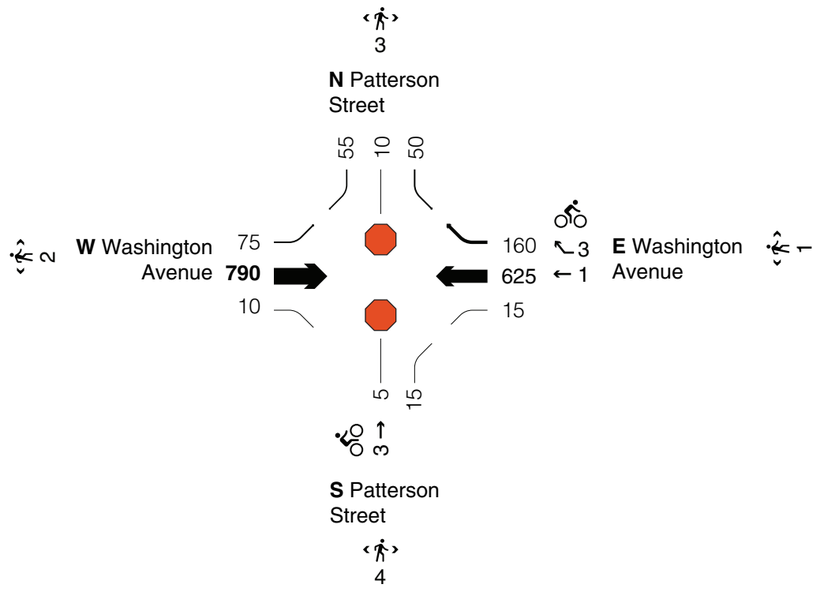




Peak hour traffic counts
Patterson Street at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

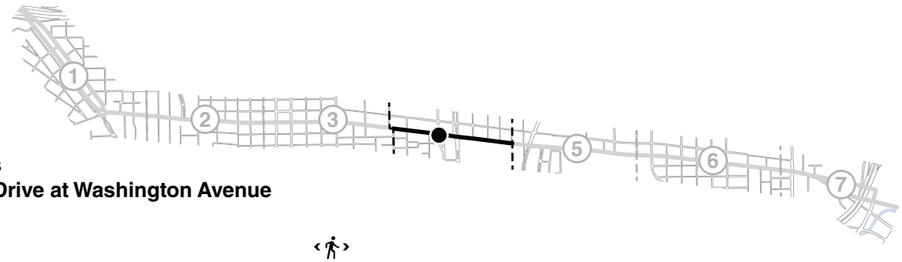


PM Weekday
5:15 - 6:15 PM
11.01.2023

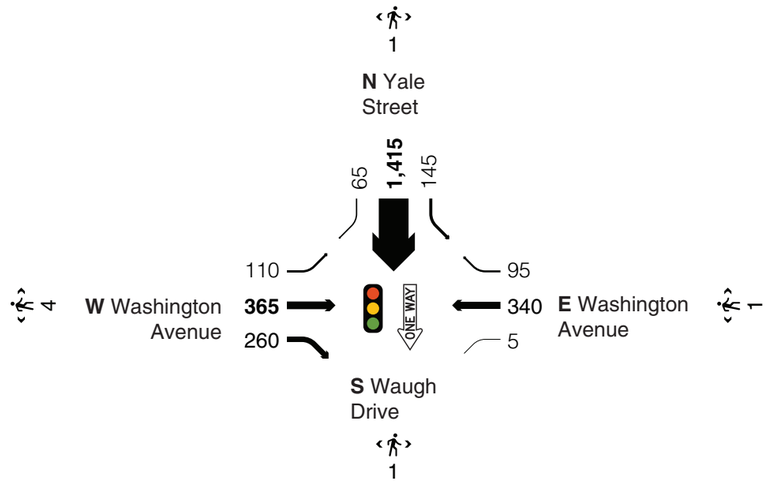


Segment 4 Bonner Street to Wichman Street: Existing Conditions

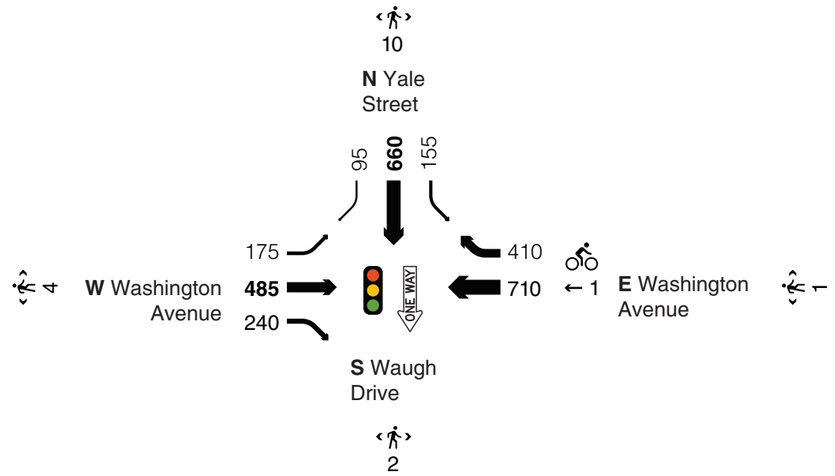




Peak hour traffic counts
Yale Street and Waugh Drive at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

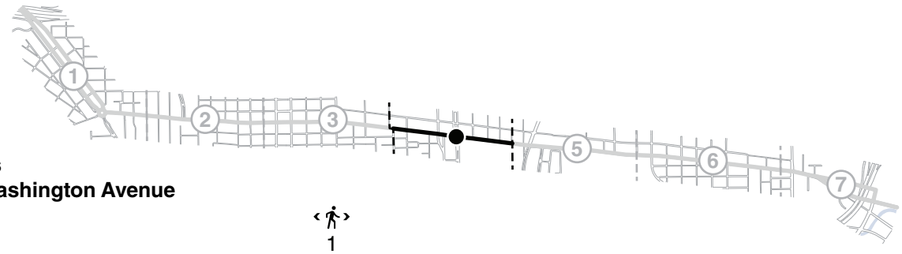


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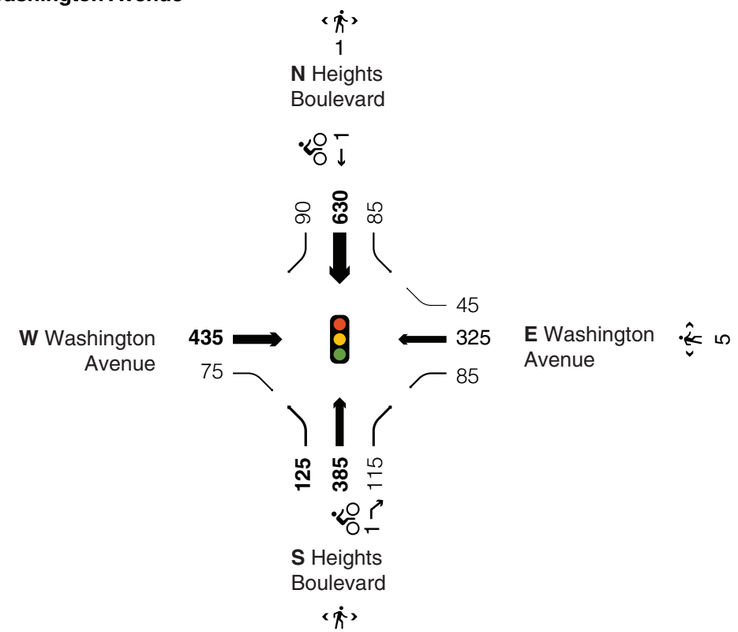


Segment 4 Bonner Street to Wichman Street: Existing Conditions

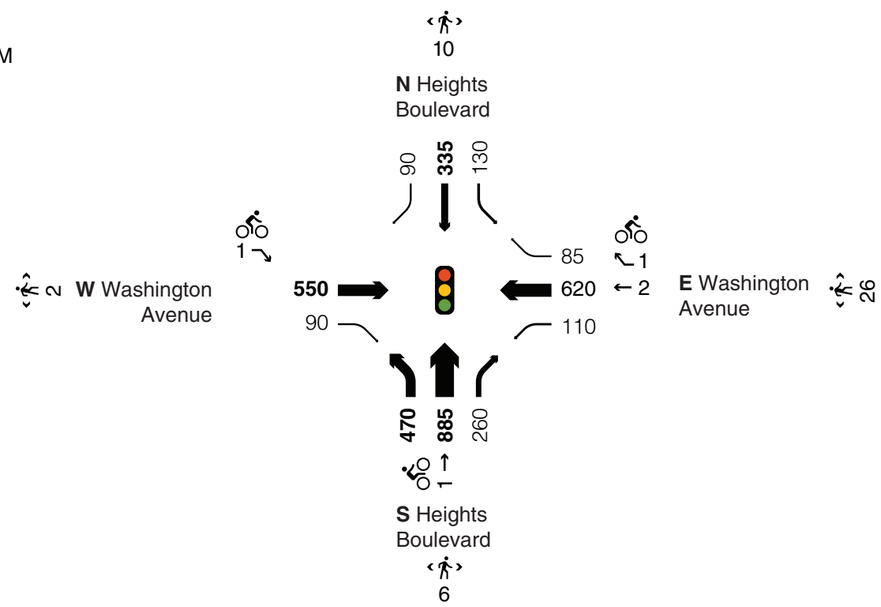




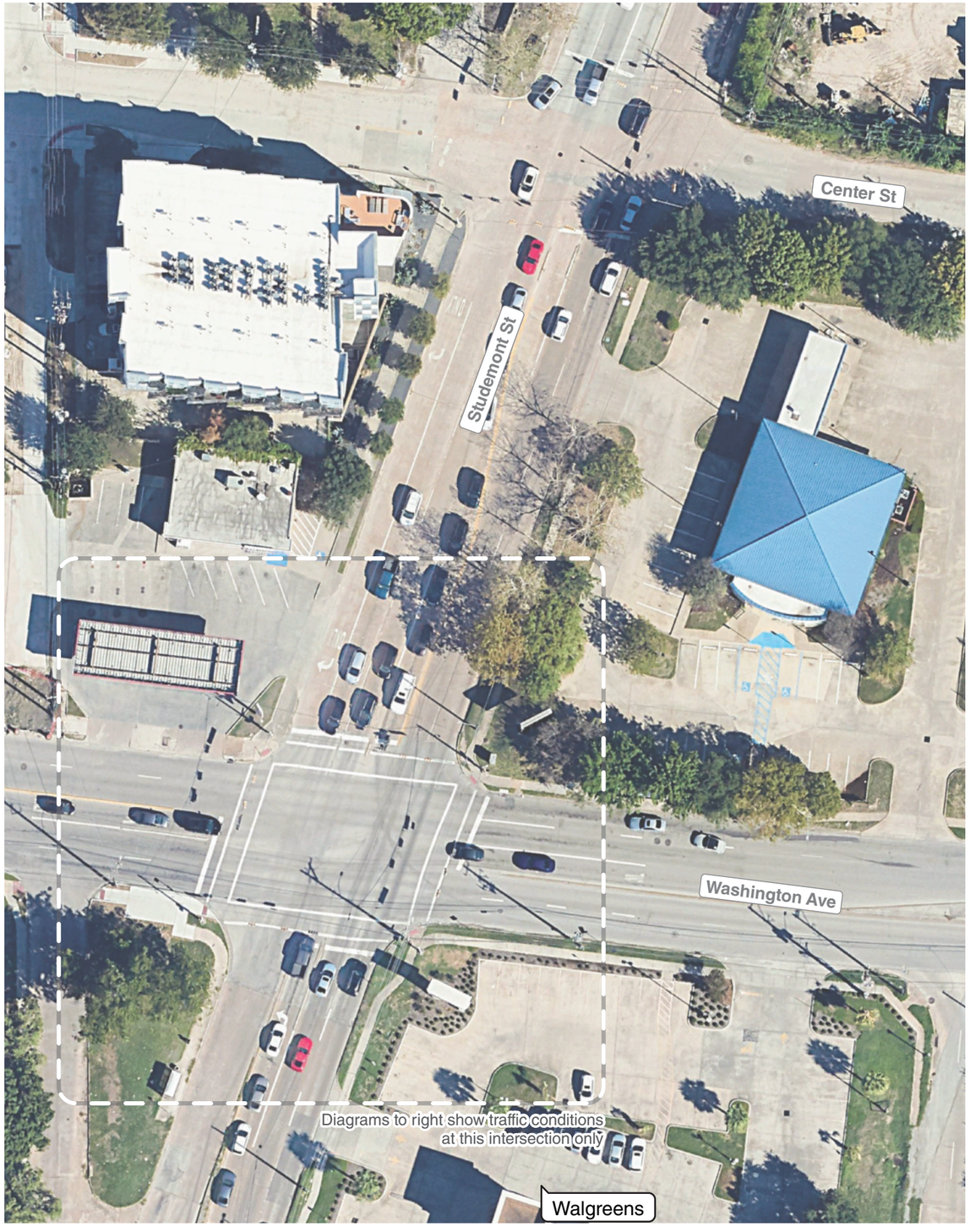
Peak hour traffic counts
Heights Boulevard at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

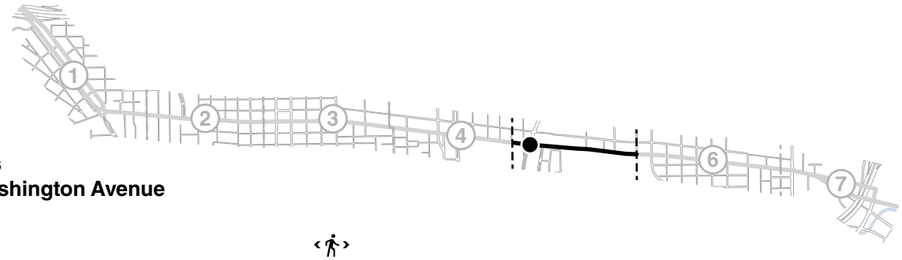


PM Weekday
5:15 - 6:15 PM
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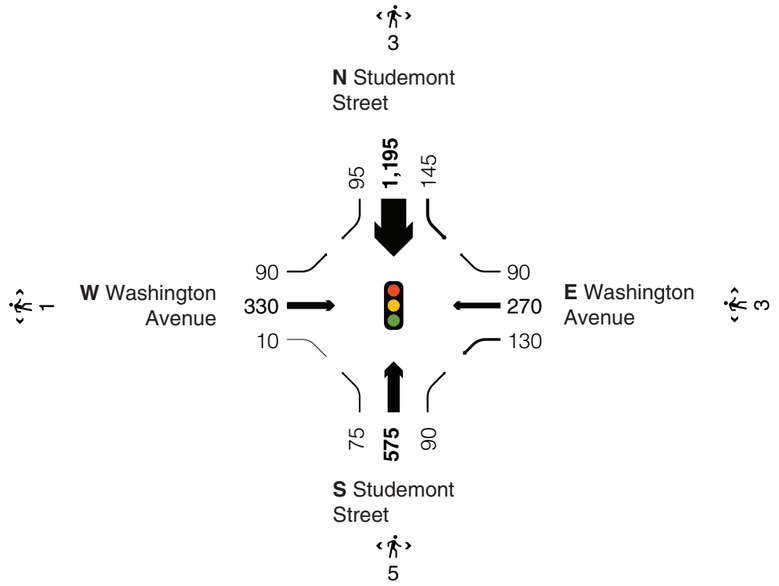


Segment 5 Wichman Street to Brashear Street: Existing Conditions

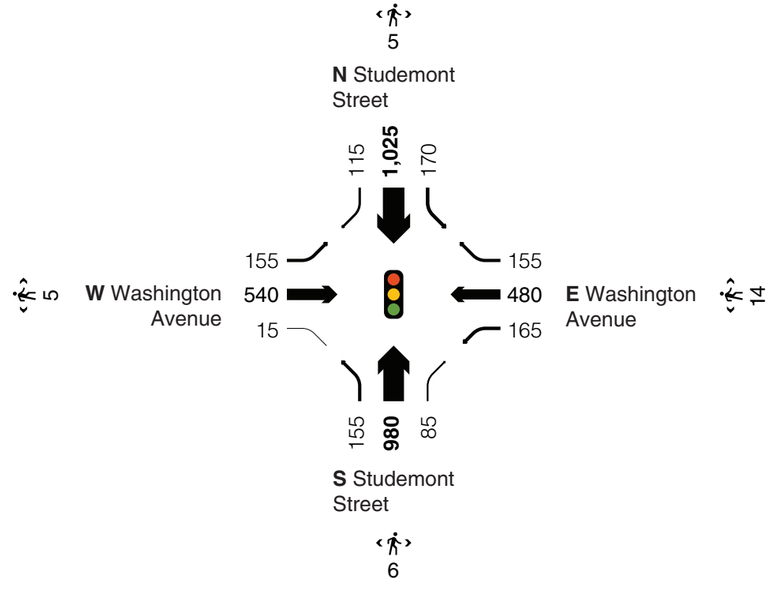




Peak hour traffic counts
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AM Weekday
7:45 - 8:45 AM
11.01.2023

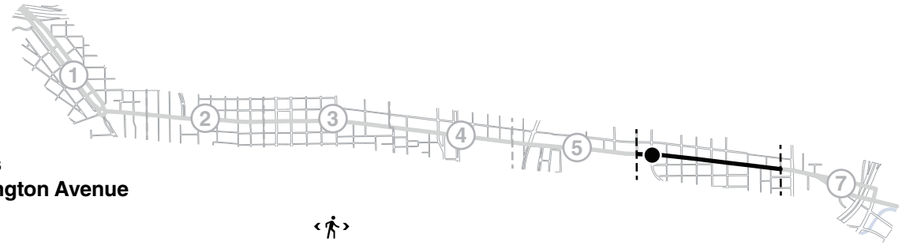


PM Weekday
5:15 - 6:15 PM
11.01.2023

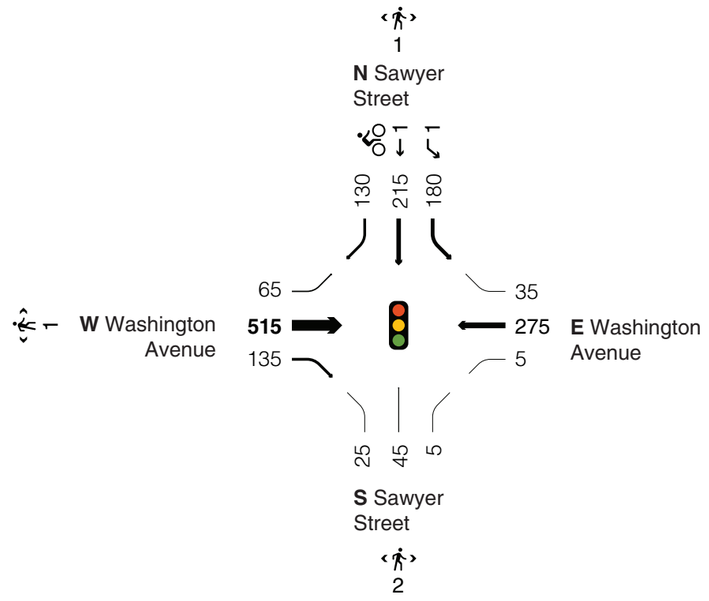


Segment 6 Brashear Street to Colorado Street: Existing Conditions

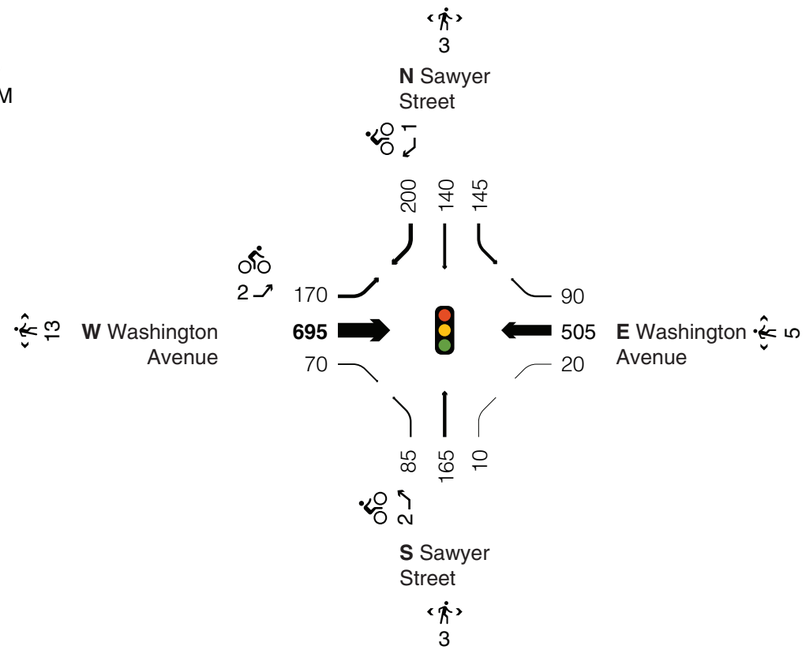




Peak hour traffic counts
Sawyer Street at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

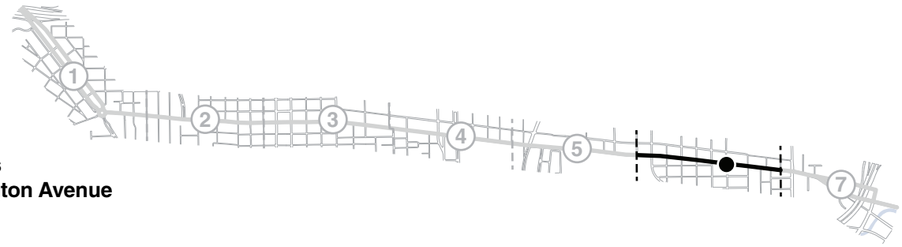


PM Weekday
5:15 - 6:15 PM
11.01.2023

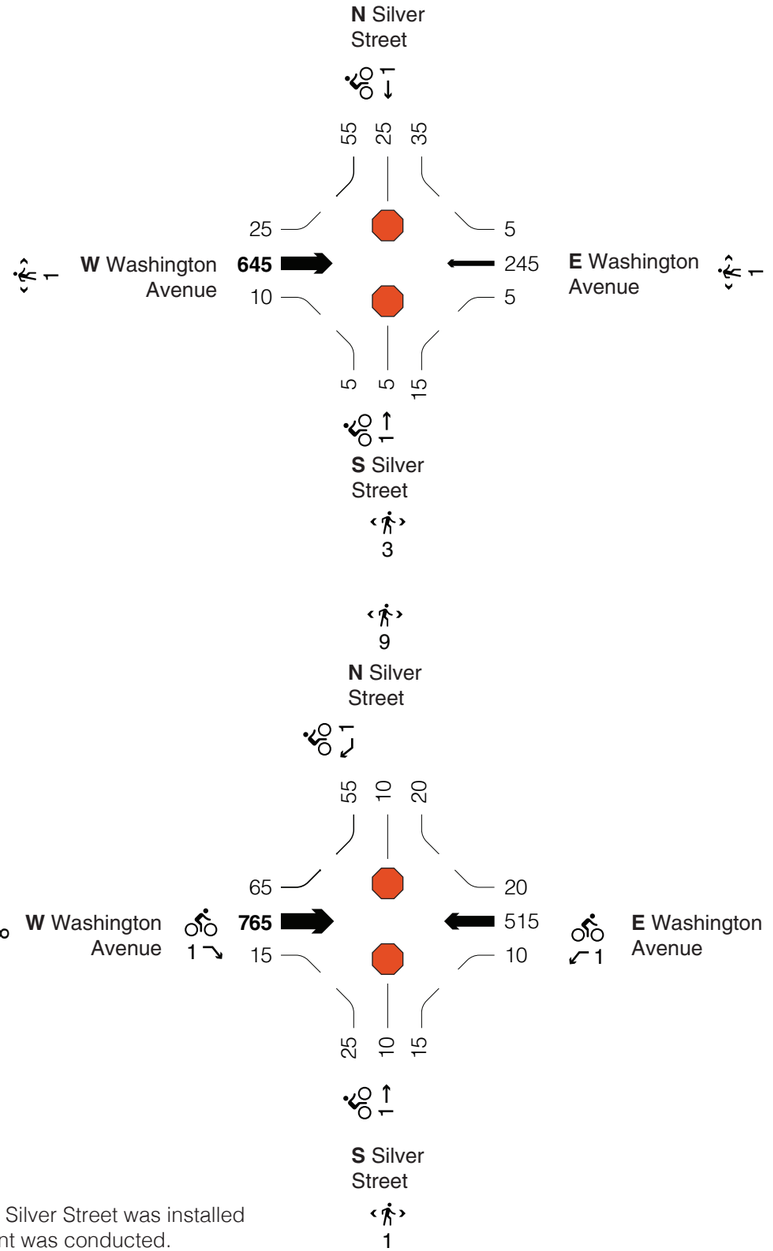


Segment 6 Brashear Street to Colorado Street: Existing Conditions





Peak hour traffic counts
Silver Street at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023

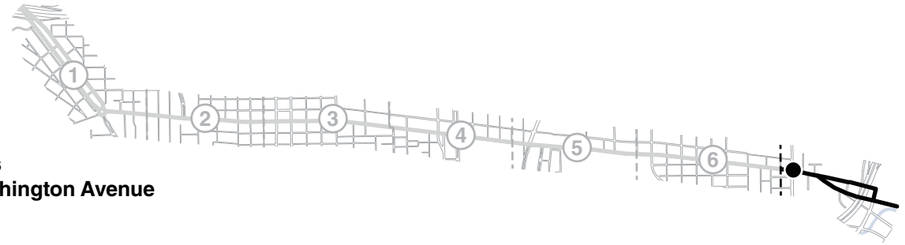


PM Weekday
5:15 - 6:15 PM
11.01.2023

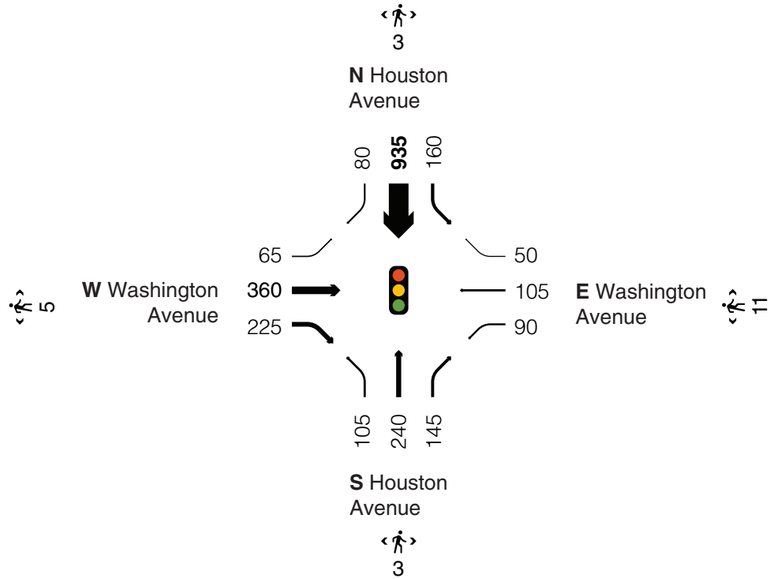
The traffic signal at Silver Street was installed after the traffic count was conducted.

Segment 7 Colorado Street to Smith Street: Existing Conditions

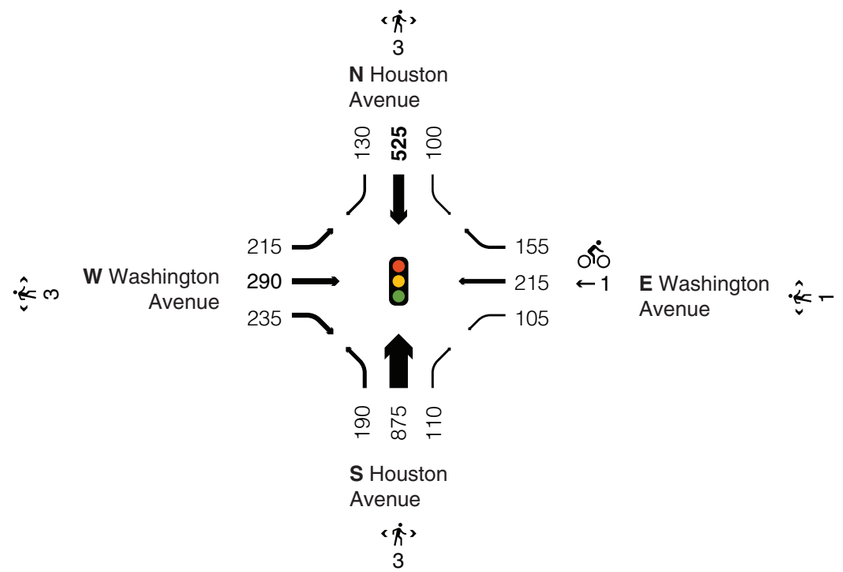




Peak hour traffic counts
Houston Avenue at Washington Avenue
AM Weekday
7:45 - 8:45 AM
11.01.2023



PM Weekday
5:15 - 6:15 PM
11.01.2023



APPENDIX B
ALTERNATIVES

The evaluation criteria for the seven alternatives is based on the project goals.

The project team studied the impacts of each of the alternatives based on the three primary project goals: Works Effectively, Safe for All Users, and Connects into a Network. The alternatives were measured through many criteria on a scale from -2 to 2, from worst to best for each criteria. Criteria that are binary used -2 and 2, whereas criteria that housed a spectrum within the design alternatives used -2, -1, 0, 1, and 2 to describe those differences. Each criteria was measured based on the elements that change within the alternative designs. The corridor was evaluated for each criteria in five segments which were normalized based on the distance per segment to arrive at the final measurement for each alternative. Traffic engineers TYLin performed traffic analyses to help inform the development of alternatives and the selection of a preferred alternative for the study corridor.

Goal Area: Works Effectively

Level of Service at Intersections

Traffic operations were modeled for existing conditions, a future condition with no changes to the corridor, and for three future scenarios representing five of the study alternatives. The future conditions utilized Year 2045 traffic projections which were based on the H-GAC regional model to account for continued regional growth. The three study alternative Models are briefly described below:

Model 1 maintains two vehicular lanes in each direction on Washington Avenue and represents the “Baseline Constrained Alternative”, which was shown as Alternative B at the community meetings in March 2025. Model 1 is also a reasonable, slightly conservative approximation of Alternative A.

Model 2 removes the outside vehicular lanes in each direction on Washington Avenue, leaving a single general travel lane in each direction. This scenario models Alternative C as it was shown at the community meetings in March 2025, which converts the outside vehicular lanes into dedicated bus lanes. It also represents a reasonable approximation of Alternative D, which converts the outside vehicular lanes into additional sidewalk space.

Model 3 reduces Washington Avenue to a single lane of travel in each direction and assumes raised, sidewalk-level bike lanes in both directions. This scenario models Alternative E as it was shown at the community meetings in March 2025.

All Models included the recommended intersection treatments, which are detailed later in this report.

Alternatives F and G, which both incorporate the addition of light rail to the Washington Avenue corridor, were unmodeled for the purposes of this study due to limitations on Synchro software to adequately model the complex operations that occur when light rail infrastructure is provided on street.

Scores ranging from -2 and 2 were given to each Alternative segment based on the level of service at the intersections within that segment. A -2 score was given to the Alternative segments where vehicles are expected to experience the highest amounts of delay at intersections, whereas a 2 score was given to the Alternative segments where vehicles are expected to experience the lowest amount of delay at intersections.

Bus Reliability

In measuring transit reliability in future alternatives, the type of infrastructure the bus or light rail is running within determined the evaluation measurement as it is the main factor that changes between the alternatives that effects transit reliability. Since transit service, particularly bus service, is the most reliable when in center-running lanes, segments with that infrastructure were given a 2, whereas a bus in one lane of mixed bus and single occupancy vehicle traffic is the least reliable and segments with that condition were given a -2.

Stress Levels - Bicycles

A bicycle level of traffic stress (LTS) analysis was conducted for each Alternative segment. This analysis was based on methodology from the Maryland Department of Transportation (MDOT), which assigns a LTS score from 1 (comfortable for almost everyone) to 4 (comfortable only for “strong and fearless” bicyclists) based on several criteria. These criteria include vehicular speed and volume on the adjacent roadway, as well as the type of bicycle infrastructure provided and its amount of separation from vehicular traffic. Scores of 2, 1, -1, and -2 were given to each segment directly correlating to LTS 1-4.

Parking Space

Segments with dedicated parking space received a 2 and segments without dedicated parking space received a -2.

Pedestrian Space

The pedestrian realm was measured by the amount of space between the curb and the property line. This space can include a variety of amenities like landscaping, outdoor dining, bike racks, and transit stops. All alternatives include a minimum of 6ft sidewalks, so segments with that minimum were evaluated at a -1. Segments with over 24ft of pedestrian space received a 2.

Goal Area: Safe for All Users

Crossing Distance

Many crashes, especially severe ones, happen at intersections between two streets. The distance one vehicle or person is exposed to oncoming traffic increases the likelihood of a crash. Segments with less than 18 ft between exposure received a 2, and segments with more than 40 ft of exposure received a -2.

Crash Modification Factor (CMF)

The crash modification factor analysis is based on resources provided by the Federal Highway Administration (FHWA) called the Crash Modification Factors Clearinghouse. CMFs are research-backed estimates of the expected change in crash frequency after a roadway design change is implemented. Each alternative shows the CMFs by segment. For the overall evaluation, the expected safety impact of each alternative was consolidated into the -2 to 2 scale based on the alternatives CMFs, with segments scoring a 2 having the most expected safety benefit and segments scoring -2 having the least.

Back of Curb Width

The amount of space behind the curb between the curb and property line is measured as an increased amount of space in that area creates a safer environment for people within it. None of the alternatives have below 6 ft behind the curb, so the spectrum of scores range from -1 for 6ft to 2 for 20+ ft.

Goal Area: Connects into a Network

The following “direct path” criteria take into account the ways that different users connect into the networks for those modes.

Direct Path - Vehicular

All alternatives maintain single occupancy vehicular travel throughout the corridor, so the directness of safe and accessible vehicular access is measured based on the number of through lanes and turn lanes, resulting in a similar measure to Level of Service. Alternative segments with two lanes of single occupancy vehicle traffic and turning lanes received a 2 at intersections, whereas segments with one lane of single occupancy vehicle traffic and no right turn lane at major intersections received a -2, with the spectrum of intersection lane configurations scoring between those points.

Direct Path - Bicyclists

For people biking, the directness of safe and accessible connections to the Bayou Greenways and existing bike network changes between the design alternatives. Segments without high-comfort facilities but that include some type of painted infrastructure and signage received a -1, while bike infrastructure on the primary thoroughfare received a 2. Bike infrastructure on a side street, which is less direct, received a 1.

Direct Path - Transit

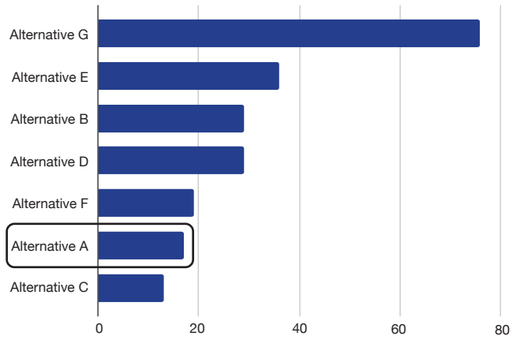
All alternatives maintain some transit service connected to the METRO network, so the directness of safe and accessible transit service along the corridor measures similarly to its reliability. Segments with center-running transit infrastructure were given a 2, whereas a bus in one lane of mixed bus and single occupancy vehicle traffic is the least reliable and segments with that condition were given a -2.

Alternative A Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative A was not favored by the majority of participants in the engagement process: 8% of people ranked Alternative A as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



When taking into account people's ranked choices, Alternative A scored at #7 of the seven alternative options, ranking at #5.55 on average.

Few people ranked Alternative A first and many people ranked it low in their overall choice between all of the alternatives. People who chose Alternative A disliked most other alternatives, particularly C-G. Nearly everyone who ranked Alternative A first ranked Alternative B second. Some people who chose Alternative A as their top choice noted that they prefer the Center Street shown in Alternative B. Some also emphasized that the additional signalization, phasing, and dual left turn lanes shown for all alternatives are needed. Upcoming construction on I-10 and I-45 was mentioned as a need for Alternative A.

Participants were asked about the factors that matter most when choosing their top alternative, and "Mitigates congestion" was the most important factor to participants who chose Alternative A.

"Alt A only. I did not want to rank other alternatives because they do not improve mobility on WAC. Any Alt that has Bike Lanes on WA are automatically eliminated.

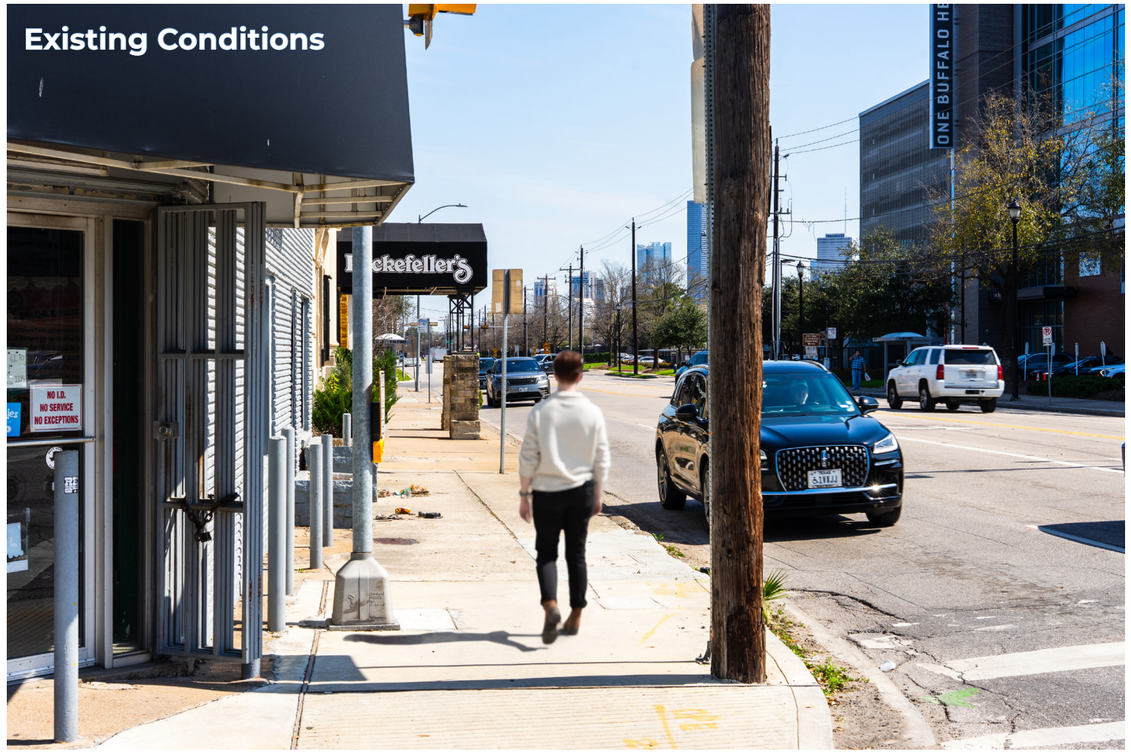
WA is already at peak capacity. Removing lanes for bike lanes will result in gridlock and overflow into already crowded neighborhoods. Side streets are not capable of handling any significant traffic - narrow, usually ditches and cars parked."

"The best alternative would be to combine Alternative A for Washington Avenue and Alternative B for Center Street"

"I would have preferred to not include C thru G in the ranking."



Similar condition: Woodway Drive





Alternative A Evaluation

Traffic Modeling

All alternatives include a number of intersection treatments that could improve vehicular operations like removing channelized turn lanes and slip lanes, removing extra receiving lanes, adding dual left-turn lanes in key locations, implementing signal phasing and timing modifications, and signalizing select additional intersections throughout the corridor. With these modifications, the traffic analyses for the Model 1, which was used for Alternative A, found that Washington Avenue would be projected to operate similar to existing conditions from a vehicular standpoint.

Level of Service

- Meets the typical standard of LOS D at most intersections.
- Roundabout would be congested if background traffic growth occurs at the rate forecasted by H-GAC. Drivers on stop-controlled minor streets would also experience high delays.
- Reduced cross-section on one-way pairs (north of roundabout) may require some traffic to shift–up to 22% of traffic volume for up to 5 hours/weekday. No need for traffic to shift away from Washington east of the roundabout.

Safety Outcomes

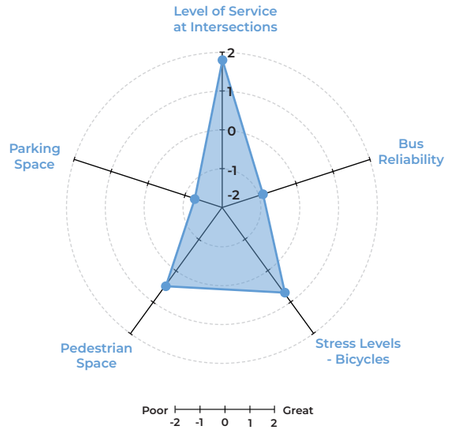
- Safety benefits from the addition of bike facilities (some of which are on Center St, not Washington).
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.

Bike Level of Stress

- While Washington Avenue would remain uncomfortable for most cyclists, Center Street was evaluated as “comfortable for most bicyclists” throughout the section with “sharrow” treatment. The addition of protected lanes at the far east and west ends of the corridor would allow most people (and possibly even some families) to feel comfortable biking on those particular segments.

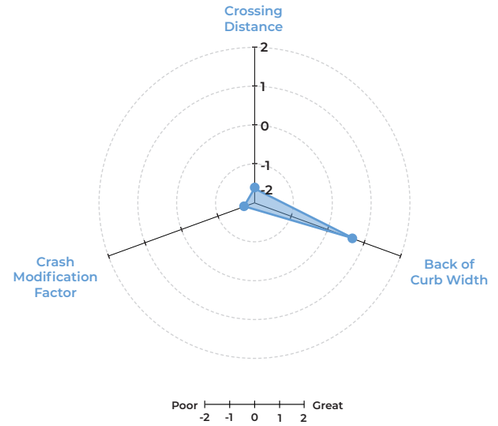
The appendix has more details on evaluation criteria.

Works Effectively



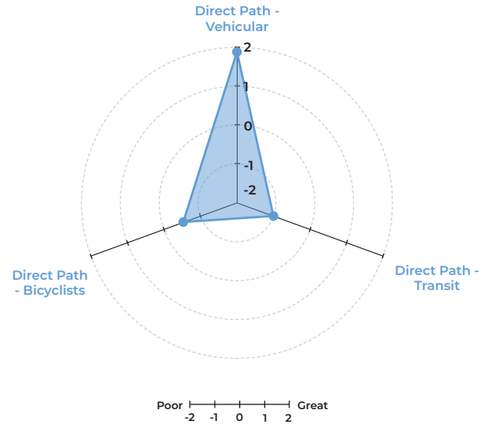
This alternative prioritizes vehicle movement, especially personal automobiles, and bus reliability would be similar to today. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, while Center Street would be comfortable for most to bike on.

Safe for all Users



With long crossings for pedestrians and minimal opportunity for traffic calming, this alternative provides little safety improvement for most of the corridor.

Connects into a Network



This alternative Connects into a Network by providing a direct path for vehicles to travel Washington Avenue.

Level of Service



The crash modification factor (CMF) analysis is based on resources provided by the Federal Highway Administration (FHWA) called the Crash Modification Factors Clearinghouse. CMFs are research-backed estimates of the expected change in crash frequency after a roadway design change is implemented.

With 2 travel lanes per direction for vehicles, rush hour traffic operation meets the typical standard (LOS D or better) at most intersections. Drivers on unsignalized minor streets and at the Washington/ Westcott roundabout could experience high delays.

Under Year 2045 conditions for this alternative, drivers may shift their trip to a different route, different time of day, or different mode of transportation north of the Washington/Westcott roundabout.

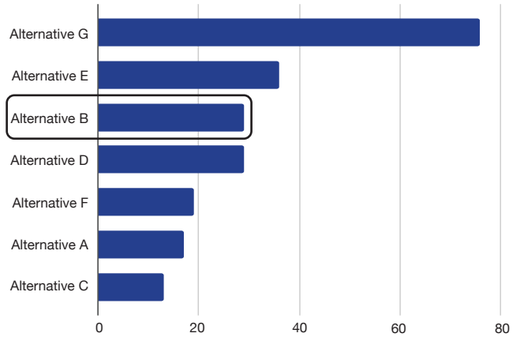
For southbound Westcott, traffic may shift in up to 5 hours of the day. % diversion anticipated = 15% on average, 22% maximum.
For northbound Washington, traffic may shift for up to 1 hour of the day with a 4% diversion.

Alternative B Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative B was favored by some of the participants in the engagement process: 13% of people ranked Alternative B as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



When taking into account people's ranked choices, Alternative B scored at #6 of the seven alternative options, ranking at #4.65 on average.

While Alternative B was 13% of people's top choice, it did not rank highly overall, as most respondents would prefer all options other than A or B. People who chose Alternative B as their top choice appreciated that it has two lanes for vehicular traffic, like today, while adding medians and other safety treatments. Most people who ranked Alternative B first ranked Alternative A second. Many commented that it balances the interests of drivers, bikers, and walkers. People also commented on how important Center Street is as a bikeway connector and emphasized the importance of the Patterson intersection being made safer for those crossing north and south to access the Bayou Greenways. Some mentioned that the current parking on Washington Avenue is a hazard and should be removed as there is ample off-street parking on Washington Avenue. It was noted that it is a realistic and cost effective option that addresses the current safety and sidewalk issues. Some people who chose Alternative B expressed interest in Alternative D in their comments.

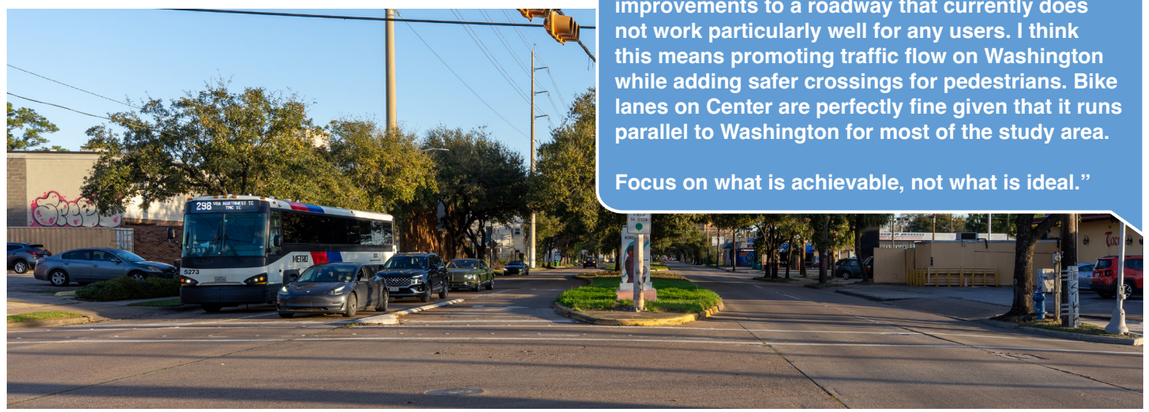
Participants were asked about the factors that matter most when choosing their top alternative, and "Improves driving safety" was the most important factor to participants who chose Alt B in addition to "mitigates congestion."

"Alternative B: 1) minimizes impact to existing right-of-way, 2) Center becomes friendlier to active transportation, 3) seems most likely (least costly) to fund."

"The options with transit are not realistic, given that METRO has neither the will nor the political capital to proceed even with existing high-capacity transit projects that have been in planning for decades.

This project should focus on making incremental improvements to a roadway that currently does not work particularly well for any users. I think this means promoting traffic flow on Washington while adding safer crossings for pedestrians. Bike lanes on Center are perfectly fine given that it runs parallel to Washington for most of the study area.

Focus on what is achievable, not what is ideal."



Similar condition: Montrose Boulevard





Alternative B Evaluation

Traffic Modeling

All alternatives include a number of intersection treatments that could improve vehicular operations like removing channelized turn lanes and slip lanes, removing extra receiving lanes, adding dual left-turn lanes in key locations, implementing signal phasing and timing modifications, and signalizing select additional intersections throughout the corridor. With these modifications, the traffic analyses for the Model 1, which was used for Alternative B, found that Washington Avenue would be projected to operate similar to existing conditions from a vehicular standpoint.

Level of Service

- Meets typical standard of LOS D at most intersections.
- Roundabout would be congested if background traffic growth occurs at the rate forecasted by H-GAC. Drivers on stop-controlled minor streets would also experience high delays.
- Reduced cross-section on one-way pairs (north of roundabout) may require some traffic to shift–up to 22% of traffic volume for up to 5 hours/weekday. No need for traffic to shift away from Washington east of roundabout.

Safety Outcomes

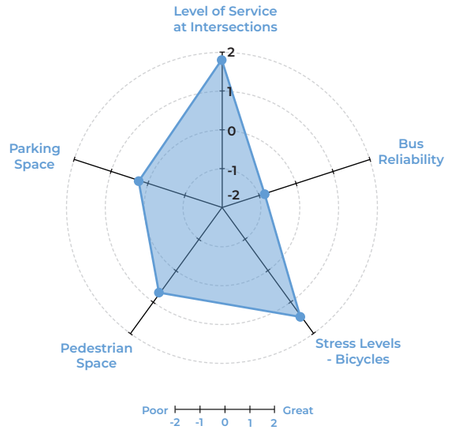
- Safety benefits from the addition of bike facilities (some of which are on Center, not Washington).
- Raised medians reduce injury crashes by separating opposing directions of traffic and limiting conflict points, especially on corridors with many driveways, and by providing a refuge island for pedestrians to cross.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- While Washington Avenue would remain uncomfortable for most cyclists along the majority of the study segment, the addition of protected lanes at the far east and west ends of the corridor and on Center would allow most people to feel comfortable biking end to end.

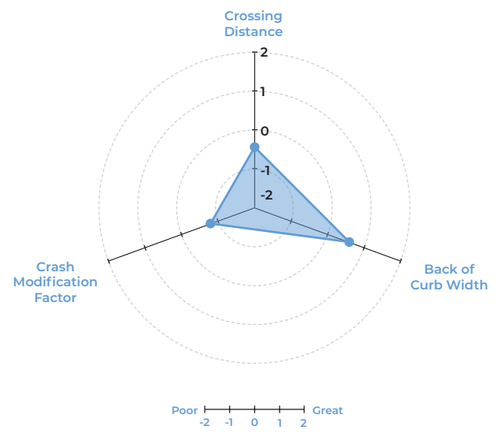
The appendix has more details on evaluation criteria.

Works Effectively



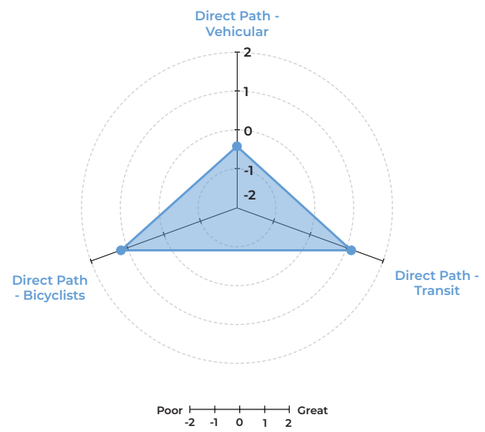
This alternative prioritizes vehicle movement, though narrower lanes are correlated with lower travel speeds for improved safety. Bus reliability would be similar to today. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be bikeable for all ages.

Safe for all Users



With design features that reduce driver speed and additional protected bike facilities, some safety improvements can be expected with this alternative—but long crossing distances still leave travelers vulnerable, especially when outside of a vehicle.

Connects into a Network



This alternative Connects into a Network by providing a direct path for vehicles to travel Washington Avenue.

Level of Service



With 2 travel lanes per direction for vehicles, rush hour traffic operation meets the typical standard (LOS D or better) at most intersections. Drivers on unsignalized minor streets and at the Washington/ Westcott roundabout could experience high delays.

Under Year 2045 conditions for this alternative, drivers may shift their trip to a different route, different time of day, or different mode of transportation north of the Washington/Westcott roundabout.

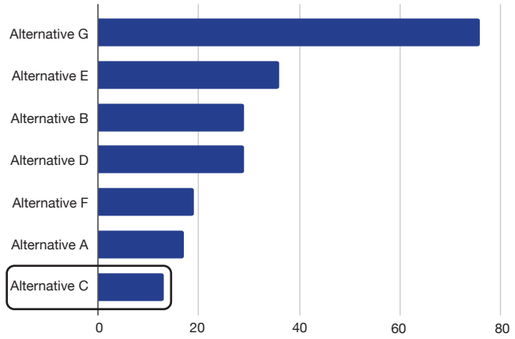
For southbound Westcott, traffic may shift in up to 5 hours of the day. % diversion anticipated = 15% on average, 22% maximum.
For northbound Washington, traffic may shift for up to 1 hour of the day with a 4% diversion.

Alternative C Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative C was not highly favored by participants in the engagement process: 6% of people ranked Alternative C as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



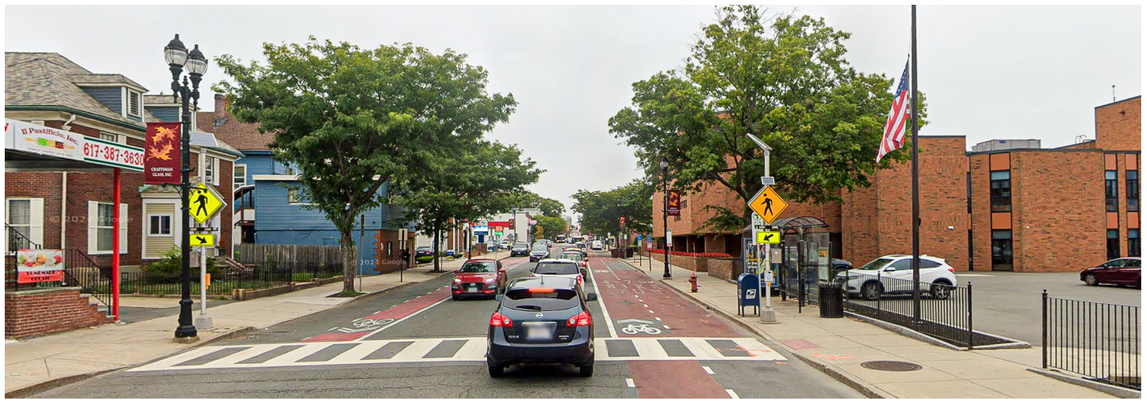
When taking into account people's ranked choices, Alternative C scored at #4 of the seven alternative options, ranking at #3.78 on average.

While few people chose Alternative C as their top choice for the corridor, it ranked relatively highly amongst in people's overall rankings. People who chose Alternative C as their top choice appreciate that it would improve bus reliability and make it a more attractive mobility option. As the bus lane allows for right turns, it was noted that it balances the needs of drivers while increasing the usability of the current bus service. People noted that having Memorial Drive parallel to Washington Avenue alleviates the need for Washington to serve as a route for bypass traffic, and that reducing vehicular volumes on Washington Avenue is important. Some noted that it should be easier to access Memorial Park on transit. Many people who prefer Alternative C emphasized the importance of Center Street for east-west bike connectivity and noted that it is an important part of making the transit lanes work well. Some also mentioned the potential for the curb-running bus lane to be used as a pick up/drop off lane during the nighttime hours when the bus is not in service.

Participants were asked about the factors that matter most when choosing their top alternative, and all of the factors were important to those who chose Alt C, except "Mitigates congestion."

"We have to offer the best alternative to driving in order to relieve congestion in this area, and throughout the city. Between the options given, adding a lane dedicated to buses only would be the best way to reduce congestion."

"Austin's red line along Guadelupe is an example of successful rapid bus transit that Metro should consider; displayed arrival times and the ability to synchronize lights for buses improved the ridership experience to make it approachable to those who hadn't used mass transit before. We found ourselves using it quite a bit when we lived there."



Similar condition: Broadway Street, Everett, MA





Alternative C Evaluation

Traffic Modeling

With the intersection modifications included in all alternatives, the analyses for Model 2, which was used for Alternative C, showed increasing delays and queues throughout the corridor, with the projected delay at many intersection approaches exceeding typical standards.

Level of Service

- LOS exceeds the typical threshold of LOS D during peak hours at most intersections. Bus lanes provide more flexible access for drivers to use right-turn lanes than if the sidewalks were widened.
- Roundabout would be congested if background traffic growth occurs at the rate forecasted by H-GAC. Drivers on stop-controlled minor streets would also experience high delays.
- The need for traffic to shift to other routes/times of day/modes is most pronounced for eastbound Washington (up to 39% for 4-11 hours/day). Westbound, the shift is expected to be up to 28% for 0-8 hours/day. The need for traffic to shift is highest near Studemont and lowest east of Houston and west of TC Jester (including on the one-way pairs).

Safety Outcomes

- Safety benefits from the addition of bike facilities (some of which are on Center, not Washington).
- Adding transit lanes with transit priority at signals is shown to reduce crashes at intersections.
- Raised medians reduce injury crashes by separating opposing directions of traffic and limiting conflict points, especially on corridors with many driveways, and by providing a refuge island for pedestrians to cross.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- While Washington Avenue would remain uncomfortable for most cyclists along the majority of the study segment, the addition of protected lanes at the far east and west ends of the corridor and on Center would allow most people to feel comfortable biking end to end.

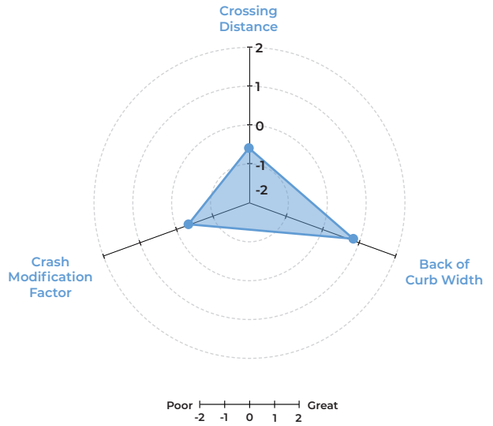
The appendix has more details on evaluation criteria.

Works Effectively



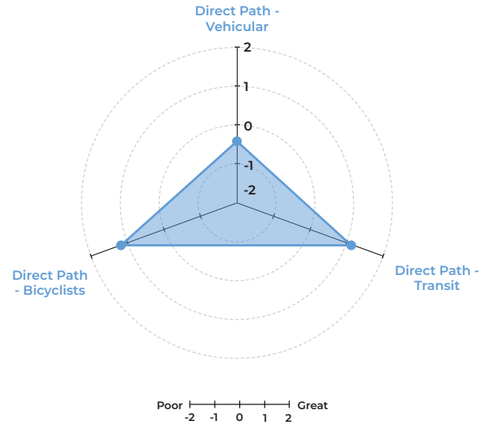
Dedicated bus lanes improve transit reliability while also supporting heavy driver turns at intersections by allowing space for right-turn lanes. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be bikeable for all ages.

Safe for all Users



Narrow lane widths and the presence of the bus lane would be expected to calm traffic speeds for some overall safety improvements, but long crossing distances still leave travelers vulnerable, especially when outside of a vehicle.

Connects into a Network



This alternative Connects into a Network by providing a direct path for transit and bicyclists to travel Washington Avenue.

Level of Service



With 1 travel lane per direction, congestion exceeds typical standards (LOS D) at several study intersections due to vehicular delay. At intersections, bus lanes provide flexible access to turn lanes.

Under Year 2045 conditions for this alternative, drivers along the study corridor may shift their trip to a different route, different time of day, or different mode of transportation.

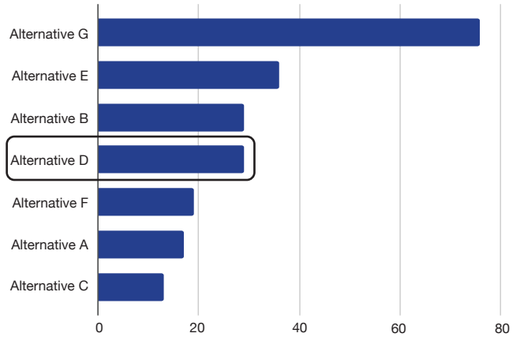
In the eastbound direction, traffic may shift 4 to 11 hours of the day. % diversion anticipated = 17% on average, 39% maximum. In the westbound direction, traffic may shift 0 to 8 hours of the day. % diversion anticipated = 11% on average, 28% maximum.

Alternative D Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative D was favored by some of the participants in the engagement process: 13% of people ranked Alternative D as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



When taking into account people's ranked choices, Alternative D scored at #2 of the seven alternative options, ranking at #3.43 on average.

While Alternative D was not a majority of participants' top choice, it was ranked highly by nearly all participants. People who chose Alternative D as their top choice emphasized the need for large root space for heritage trees to thrive, which attracted them to Alternative D. Shade and walkability was a primary decision factor for those who ranked Alternative D first. Many people noted that walkability is critical for those taking transit, and that slowing down traffic would benefit all users of the street. People appreciated that Alternative D would make crossing Washington Avenue easier at all intersections. People noted that with the large number of restaurants, businesses, and apartments in the area, it would be a more lively street if it was more safe and comfortable to walk. The proximity to schools is also a major factor for those who chose Alternative D. Some people who live in the neighborhood expressed concern about medians blocking left turns into neighborhood streets, and many people emphasized the need for a safer crossing at Patterson Street for people walking and biking across Washington Avenue.

Participants were asked about the factors that matter most when choosing their top alternative, and "Improves driving safety" and "Improve walking/rolling conditions on sidewalks" was the most important to participants who chose Alt D as their top choice.

"Room for large shade trees. So productive for local businesses and quality of life, while allowing right turn lanes to mitigate traffic. Foot traffic will go up when it has shade and buffer from traffic; bikes can use Center Street; restaurants might even use outdoor dining space; while reducing the urban heat island effect for a region of the city with a lot of housing density."

"Prioritize safety for walkers rollers and drivers. Current design is unsafe for all in and out of cars. This road is not a highway. If folks want a highway, they can take the new I-10 lane not Washington avenue."



Similar condition: Navigation Boulevard





Alternative D Evaluation

Traffic Modeling

With the intersection modifications included in all alternatives, the analyses for Model 2, which was used for Alternative D, showed increasing delays and queues throughout the corridor, with the projected delay at many intersection approaches exceeding typical standards.

Level of Service

- LOS exceeds the typical threshold of LOS D during peak hours at most intersections. Wider sidewalks provide less flexible access for drivers to use right-turn lanes than bus lanes.
- Roundabout would be congested if background traffic growth occurs at the rate forecasted by H-GAC. Drivers on stop-controlled minor streets would also experience high delays.
- The need for traffic to shift to other routes/times of day/modes is most pronounced for eastbound Washington (up to 39% for 4-11 hours/day). Westbound, the shift is expected to be up to 28% for 0-8 hours/day. The need for traffic to shift is highest near Studemont and lowest east of Houston and west of TC Jester (including on the one-way pairs).

Safety Outcomes

- Safety benefits from the addition of bike facilities (some of which are on Center, not Washington).
- Shortening pedestrian crossing distances improves safety outcomes for pedestrian-involved crashes.
- Raised medians reduce injury crashes by separating opposing directions of traffic and limiting conflict points, especially on corridors with many driveways, and by providing a refuge island for pedestrians to cross.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- While Washington Avenue would remain uncomfortable for most cyclists along the majority of the study segment, the addition of protected lanes at the far east and west ends of the corridor and on Center would allow most people to feel comfortable biking end to end.

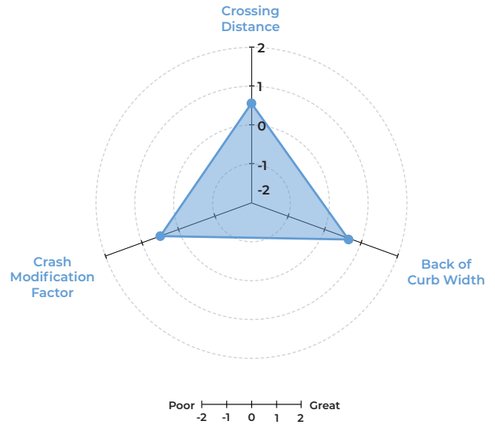
The appendix has more details on evaluation criteria.

Works Effectively



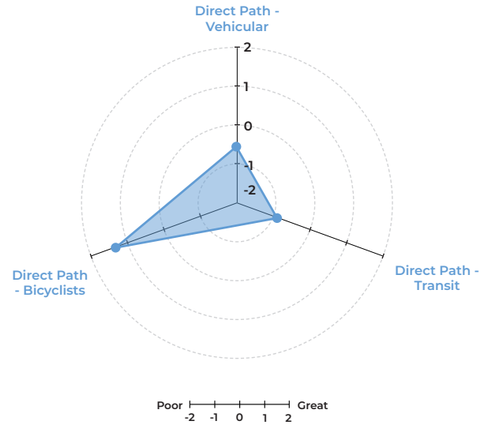
With a single lane in each direction for all vehicles (including buses), vehicular delays would be expected to increase, though right-turn lanes at major intersections would provide some minor relief. Wide sidewalk space would support comfortable pedestrian movement, as well as gathering and beautification. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be bikeable for all ages.

Safe for all Users



Reduced driver speeds and shortened crossing distances would be expected to improve safety for all users, especially pedestrians.

Connects into a Network



This alternative Connects into a Network by providing a direct path for bicyclists to travel Washington Avenue.

Level of Service



With one travel lane per direction, congestion exceeds typical standards (LOS D) at several study intersections due to vehicular delay. Turn lanes are more constrained under this alternative to maximize sidewalk space,

so right-turn queues may spill out of turn lanes and greatly increase congestion during rush hours. Under Year 2045 conditions for this alternative, drivers along the study corridor may shift their trip to a different route, different time of day, or different mode of transportation.

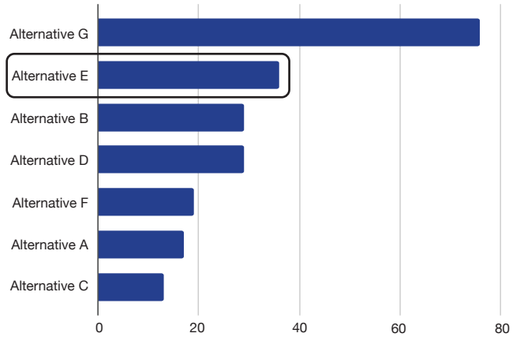
In the eastbound direction, traffic may shift 4 to 11 hours of the day. % diversion anticipated = 17% on average, 39% maximum. In the westbound direction, traffic may shift 0 to 8 hours of the day. % diversion anticipated = 11% on average, 28% maximum.

Alternative E Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative E was favored by many of the participants in the engagement process: 16% of people ranked Alternative E as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



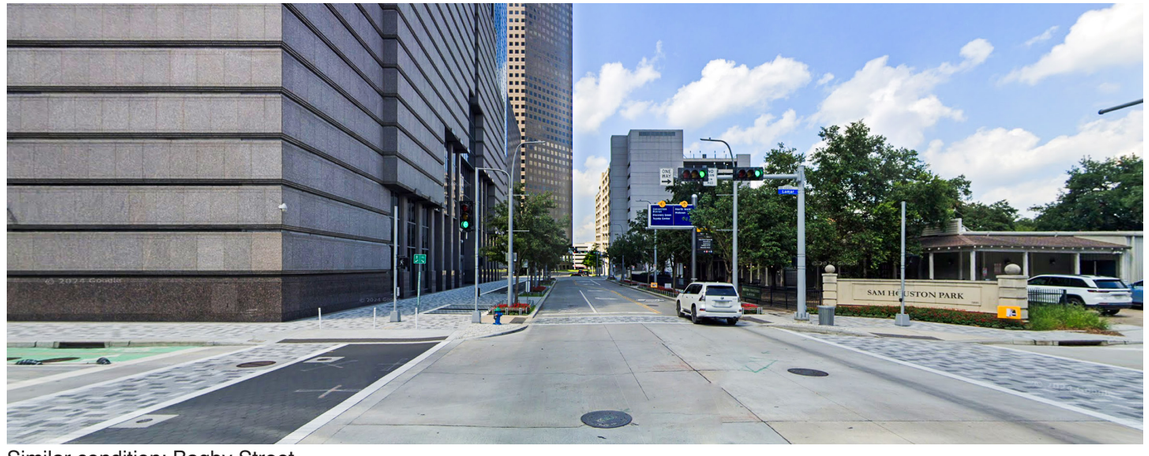
When taking into account people's ranked choices, Alternative E scored at #5 of the seven alternative options, ranking at #3.80 on average.

"We need help at Patterson/Washington. We need a new Jackson Hill Pedestrian Bridge current one is rusting out. I bike to work downtown 2 or 3 days a week now from west end"

While Alternative E was many participants' top choice, it was not ranked very highly overall by all participants. People who chose Alternative E as their top choice noted the amount of people currently biking on Washington Avenue based on data available on Strava and emphasized that adding separated bike infrastructure to Washington Avenue would also make it safer for drivers and pedestrians as speeding causes many crashes today. Many people wrote that this would be beneficial for businesses on Washington Avenue and that the broad mix of uses on the street should be accommodated. Patterson Street was also noted as in need of a median treatment or signal.

Participants were asked about the factors that matter most when choosing their top alternative, and "Improve walking/rolling conditions on sidewalks" and "improves biking conditions" was most important to participants who chose Alt E, F, and G.

"This corridor has the potential to be beautiful and well utilized by everyone. There are already sections with vibrant nightlife and entertainment in quick walking distance, but walking on the sidewalk or biking in the right lane is terrifying. As it is now the street speeds are well above posted limits, it's dangerous to cross even at a crosswalk, and I see near-collisions regularly. As someone who takes public transit, bikes, and walks in addition to using a private vehicle, I want my streets to de-prioritize the focus on vehicle traffic only and make it safer for all modes of transit."



Similar condition: Bagby Street





Alternative E Evaluation

Traffic Modeling

With the intersection modifications included in all alternatives, the analyses for Model 3, which was used for Alternative E, exhibited further increased delays and queues compared to Model 2, primarily because right-turning vehicles at high-volume intersections would be severely constrained by short protected-only right-turn phases, which are necessitated by the sidewalk-level bicycle lanes.

Level of Service

- LOS exceeds the typical threshold of LOS D during peak hours at most intersections, and this is further exacerbated by the need for bike signal priority at intersections with right-turn lanes on Washington. Wider sidewalks provide less flexible access for drivers to use right-turn lanes than bus lanes.
- The need for traffic to shift to other routes/times of day/modes is most pronounced for eastbound Washington (up to 39% for 4-11 hours/day). Westbound, the shift is expected to be up to 28 percent for 0-8 hours/day. The need for traffic to shift is highest near Studemont and lowest east of Houston and west of TC Jester (including on the one-way pairs).

Safety Outcomes

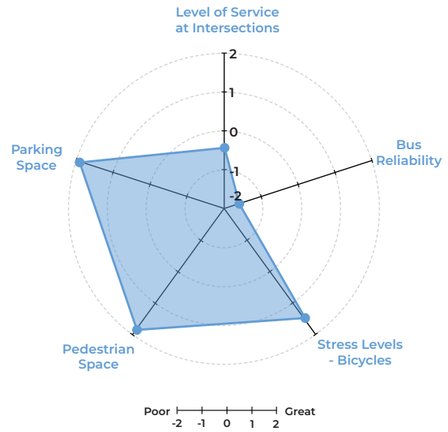
- Safety benefits from the addition of bike facilities, as well as a bike phase at signalized intersections. (Bike signals are required by FHWA when there is a dedicated right-turn lane to the left of a dedicated bike lane, as we have here.)
- Raised medians reduce injury crashes by separating opposing directions of traffic and limiting conflict points, especially on corridors with many driveways, and by providing a refuge island for pedestrians to cross.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- Under this alternative, biking would be comfortable for most people who want to bike along the entirety of the Washington Avenue study corridor, including Center Street and Westcott Street.

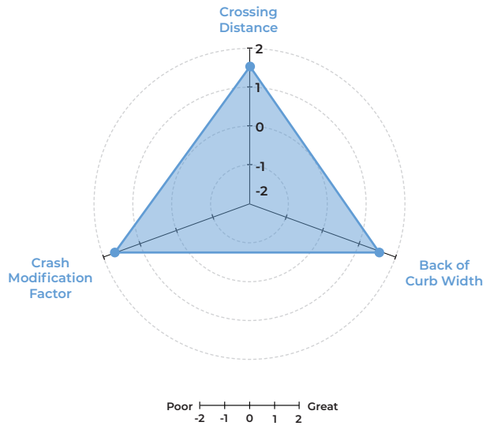
The appendix has more details on evaluation criteria.

Works Effectively



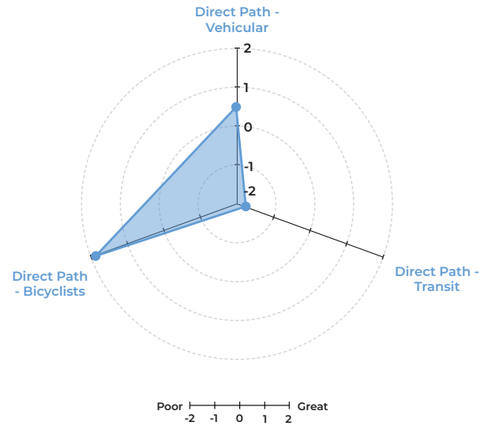
With a single lane in each direction for all vehicles (including buses) and bike signal separation at major intersections, vehicular delays would be expected to increase substantially. Pedestrians would have comfortable sidewalks, and bicyclists of all ages could benefit from raised bike facilities along Washington.

Safe for all Users



Reduced driver speeds, shortened crossing distances, and off-street bike facilities along Washington Avenue would be expected to significantly improve safety for all users, especially pedestrians and bicyclists.

Connects into a Network



This alternative Connects into a Network by providing a direct path for vehicles and bicyclists to travel Washington Avenue.

Level of Service



With 1 travel lane per direction, plus additional signal protection for cyclists, right-turn delays and queues increase significantly, further increasing congestion during rush hours. The traffic model assumes right-turn lanes would be provided at some signalized intersections.

Under Year 2045 conditions for this alternative, drivers along the study corridor may shift their trip to a different route, different time of day, or different mode of transportation.

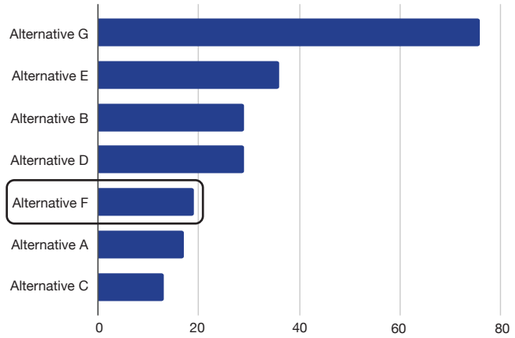
In the eastbound direction, traffic may shift 4 to 11 hours of the day. % diversion anticipated = 17% on average, 39% maximum.
In the westbound direction, traffic may shift 0 to 8 hours of the day. % diversion anticipated = 11% on average, 28% maximum.

Alternative F Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative F was favored by some of the participants in the engagement process: 9% of people ranked Alternative F as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



When taking into account people's ranked choices, Alternative F scored at #3 of the seven alternative options, ranking at #3.48 on average.

While Alternative F was not many participants' top choice, it was many people's second or third choice and ranked highly among all participants. People who chose Alternative F as their top choice noted the importance of the Washington Avenue corridor in the high-frequency transit network, especially the METRO Rail Green and Purple lines, which currently terminate downtown. They also emphasized the importance of the corridor redesign providing shade and pedestrian prioritization as well as bicycle facilities and transit. Many people who ranked Alternative F first also ranked Alternatives D, C, and E highly in addition to Alternative G.

Participants were asked about the factors that matter most when choosing their top alternative, and "Improve walking/rolling conditions on sidewalks" and "improves biking conditions" was most important to participants who chose Alt E, F, and G. "Improve bus reliability" was most important to participants who chose Alt F and G.

"I want light rail in the corridor, extend purple green metrorail that way!"

"There are lots of great opportunities to improve multimodal planning along Washington Avenue. However, ideal results will manifest if land use modifications (e.g. elimination of parking minimums, elimination of setback minimums, etc) take place within Houston's code.

"As the study highlighted, Washington Ave (outside of specific points) is quite dangerous for pedestrians and bikers alike. Increasing side walk space, boosting public transit connectivity with other areas, and reducing motorized traffic pressure on the street would massively improve living conditions in the neighbourhood."



Similar condition: Harrisburg Blvd





Alternative F Evaluation

Traffic Modeling

Alternatives F and G, which both incorporate the addition of light rail to the Washington Avenue corridor, were unmodeled for the purposes of this study due to limitations on Synchro software to adequately model the complex operations that occur when light rail infrastructure is provided on street.

Level of Service

- West of Heights Blvd, the corridor meets typical standard of LOS D at most intersections, matching Model 1 (Alt B), but no traffic analysis was done specifically for this alternative. LOS east of Heights for vehicle traffic would likely be F.
- Reduced cross-section on one-way pairs (north of roundabout) may require some traffic to shift – up to 22% of traffic volume for up to 5 hours/weekday. Because two vehicle lanes are maintained from the roundabout east to Heights Boulevard, there is no need for traffic to shift in this segment. However, where the cross-section is reduced to one vehicle lane in each direction east of Heights Boulevard, up to 39% of eastbound traffic may need to shift for 7-11 hours of a typical weekday. Up to 28% of westbound traffic may also need to shift for 0-8 hours of a typical weekday in this same section.

Safety Outcomes

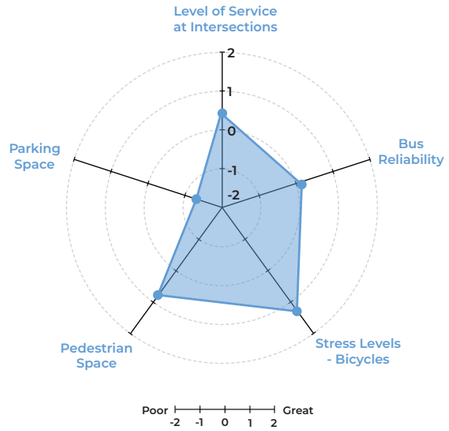
- Safety benefits from the addition of bike facilities (some of which are on Center, not Washington).
- Adding transit lanes with transit priority at signals is shown to reduce crashes at intersections.
- Raised medians reduce injury crashes by separating opposing directions of traffic and limiting conflict points, especially on corridors with many driveways, and by providing a refuge island for pedestrians to cross.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians. (Only relevant for the west half of the corridor)
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- The addition of protected lanes at the far east and west ends of the corridor and on Center would allow most people to feel comfortable biking end to end.

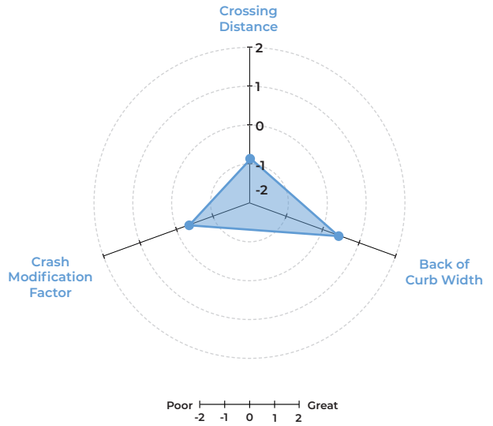
The appendix has more details on evaluation criteria.

Works Effectively



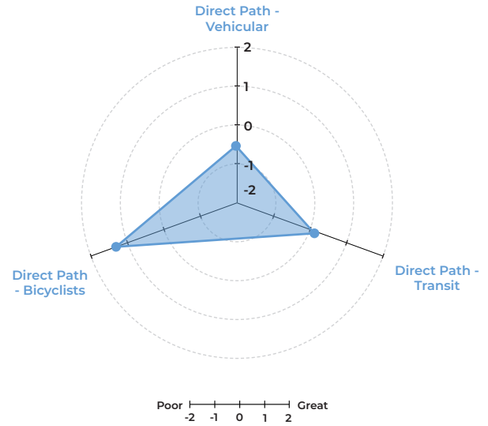
This alternative prioritizes vehicle movement on the western half of the corridor while significantly increasing transit capacity and service on the eastern half. Where light rail is present, vehicular capacity would be very constrained. Sidewalk space would be functional and comfortable for moving along the corridor. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be bikeable for all ages.

Safe for all Users



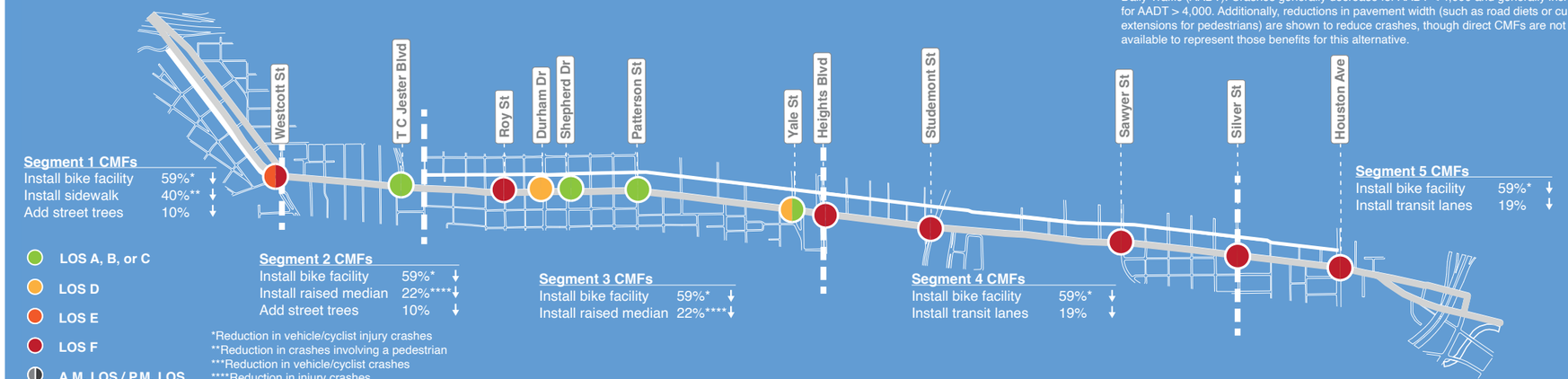
With design features that reduce driver speed and additional protected bike facilities, some safety improvements can be expected with this alternative—but long crossing distances still leave travelers somewhat vulnerable, especially when outside of a vehicle.

Connects into a Network



This alternative Connects into a Network by providing a direct path for bicyclists to travel Washington Avenue.

Level of Service



With 2 travel lanes per direction west of Heights, drivers experience low delay with operations at or above typical standards (LOS D).

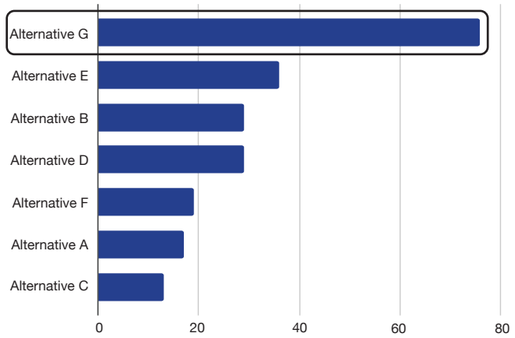
East of Heights, the addition of light rail would remove a travel lane in each direction and significantly reduce green time for left turns, expected to cause substantial congestion during rush hours.

Alternative G Public Feedback

Public engagement participants ranked each of the seven alternatives from their top choice to their last choice for the future corridor design. Alternative G was the most favored by participants in the engagement process: 35% of people ranked Alternative G as their first choice for the future Washington Avenue corridor.

Considering the strengths and weaknesses of each alternative, please rank the alternatives:

Count of Respondent's First Ranked Alternative



When taking into account people's ranked choices, Alternative G scored at #1 of the seven alternative options, ranking at #3.32 on average.

Alternative G was most people's first choice, and the majority of those who ranked Alternative G first ranked Alternative F second. People who chose Alternative G as their top choice noted the importance of walkability increasing with increased transit infrastructure. Many people commented that light rail connecting downtown with all of Washington Avenue and Memorial Park would reimagine what is possible for Houston and the neighborhood. Participants noted the high-capacity vehicular facilities immediately north and south of Washington Avenue (IH-10 and Memorial Drive) and the importance of prioritizing local transit service on Washington Avenue.

Participants were asked about the factors that matter most when choosing their top alternative, and "Improve walking/rolling conditions on sidewalks" and "improves biking conditions" was most important to participants who chose Alt E, F, and G. "Improve bus reliability" was most important to participants who chose Alt F and G.

"My current bus route to my office in the heights that goes along Washington is an hour; any of these options that include improvements for bus or the addition of light rail would greatly improve my quality of life and I assume it would do the same for many others!!"

"Great presentation, loved the data on sidewalks. Alternative G is incredible, but all of the Alternatives are a great improvement. As a power chair user, Washington is unusable, scary, and depressing. 6" sidewalks would be insufficient w/ bistro seating and would violate ADA, as I understand. Hoping for much wider!"



Similar condition: Fulton Street





Alternative G Evaluation

Traffic Modeling

All alternatives include a number of intersection treatments that could improve vehicular operations like removing channelized turn lanes and slip lanes, removing extra receiving lanes, adding dual left-turn lanes in key locations, implementing signal phasing and timing modifications, and signalizing select additional intersections throughout the corridor. Alternatives F and G, which both incorporate the addition of light rail to the Washington Avenue corridor, were unmodeled for the purposes of this study due to limitations on Synchro software to adequately model the complex operations that occur when light rail infrastructure is provided on street.

Level of Service

- The corridor likely meets LOS F at intersections, but no traffic analysis was done for this alternative.
- The reduced cross-section north of the roundabout may require a significant amount of traffic to shift, particularly in the northbound direction, which has been reduced to one lane – up to 52% of the northbound volume for up to 9 hours each weekday and up to 22% of the southbound volume for up to 5 hours each weekday. On the segment east of the roundabout, the need for traffic to shift is most pronounced for eastbound Washington (up to 39% for 4-11 hours/weekday). Westbound, the shift is expected to be up to 28% for 0-8 hours/weekday. The need for traffic to shift is highest near Studemont and lowest east of Houston and west of TC Jester to the roundabout.

Safety Outcomes

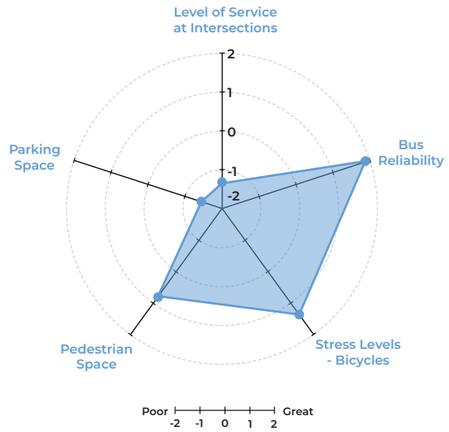
- Safety benefits from the addition of bike facilities (some of which are on Center, not Washington).
- Adding transit lanes with transit priority at signals is shown to reduce crashes at intersections.
- Street trees also have a traffic calming effect that benefits safety, as well as providing a buffer between vehicles and pedestrians.
- While there is an adverse CMF for narrowing travel lanes on streets that carry > 4,000 vehicles daily (like Washington does), narrower lanes are correlated with lower speeds and are therefore expected to reduce crash severity.

Bike Level of Stress

- The addition of protected lanes at the far east and west ends of the corridor and on Center would allow most people to feel comfortable biking end to end.

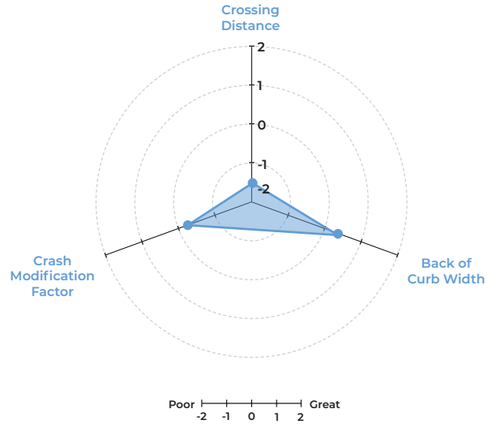
The appendix has more details on evaluation criteria.

Works Effectively



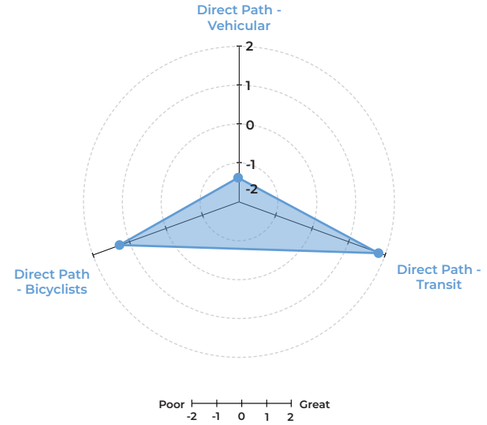
Transit capacity and service is highly prioritized, resulting in reduced lanes and significant increases in driver delay due to substantial constraints on turning traffic. Sidewalk space would provide a basic level of comfort for moving along the corridor. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be bikeable for all ages.

Safe for all Users



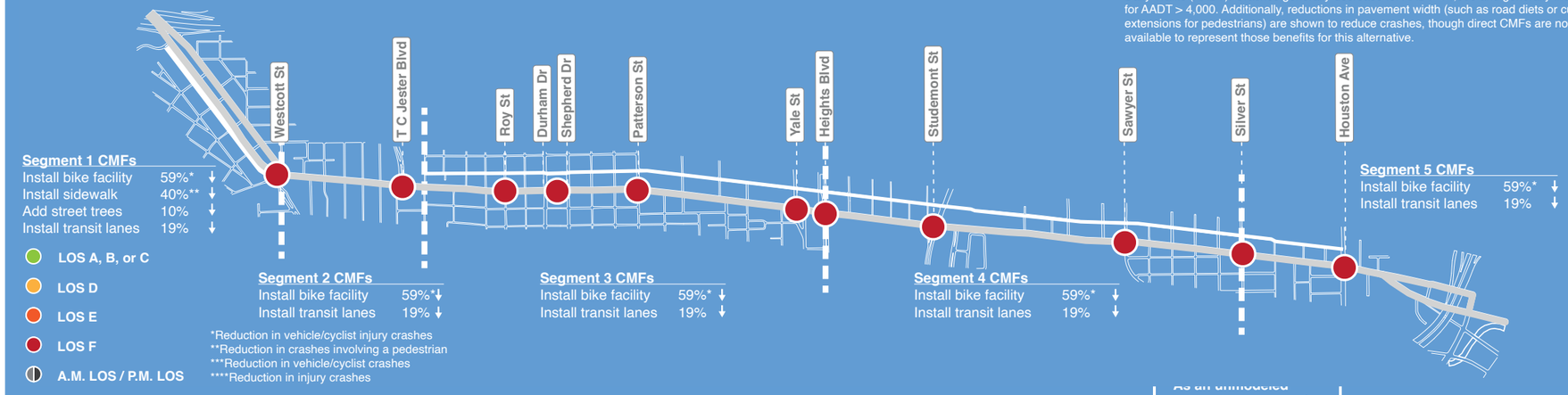
With design features that reduce driver speed and additional protected bike facilities, some safety improvements can be expected with this alternative—but long crossing distances still leave travelers somewhat vulnerable, especially when outside of a vehicle.

Connects into a Network



This alternative Connects into a Network by providing a direct path for transit and bicyclists to travel Washington Avenue.

Level of Service

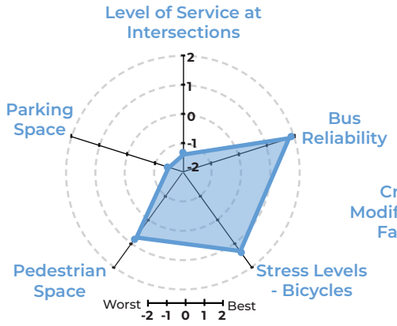


The addition of light rail would remove a travel lane in each direction and significantly reduce green time for left turns, expected to cause substantial congestion during rush hours.

APPENDIX C
RECOMMENDATIONS

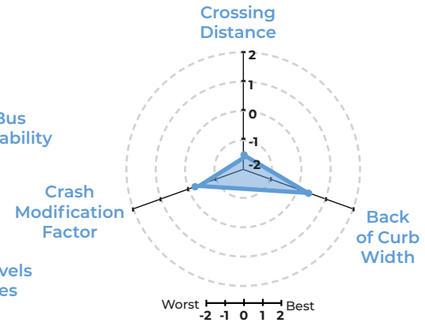
Community Preferred Vision: Evaluation Results

Works Effectively



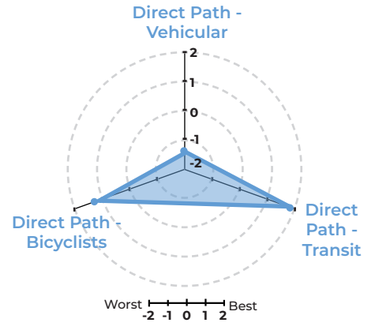
Transit capacity and service is highly prioritized, resulting in reduced lanes and significant increases in driver delay due to substantial constraints on turning traffic. Sidewalk space would provide a basic level of comfort for moving along the corridor. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be comfortable for all ages.

Safe for all Users



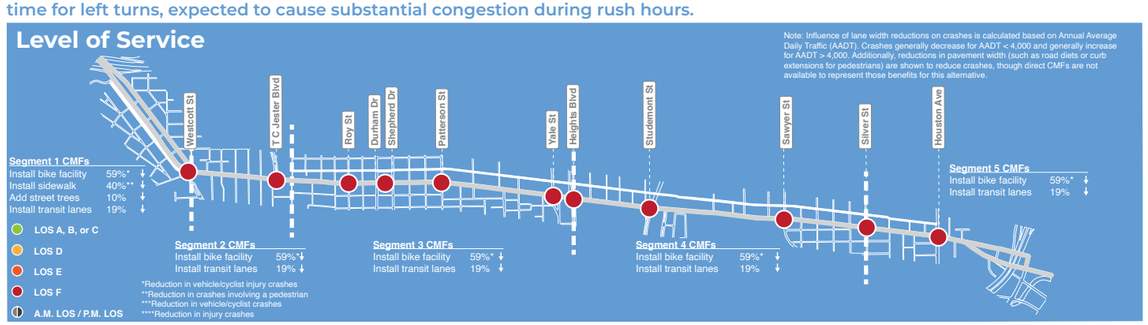
With design features that reduce driver speed and additional protected bike facilities, some safety improvements can be expected with this alternative—but long crossing distances still leave travelers somewhat vulnerable, especially when outside of a vehicle.

Connects into a Network



This alternative Connects into a Network by providing a direct path for transit and bicyclists to travel Washington Avenue.

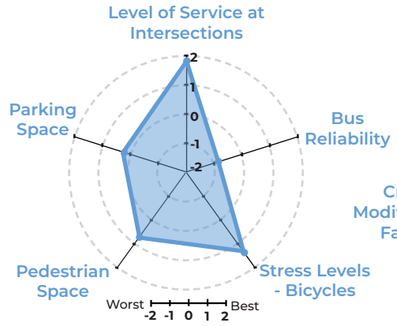
The addition of light rail would remove a travel lane in each direction and significantly reduce green time for left turns, expected to cause substantial congestion during rush hours.



**Unmodeled Alternative, levels of service are estimated.*

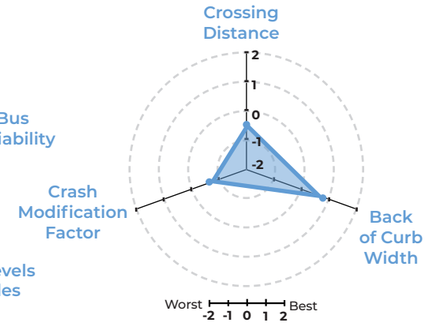
Baseline Constrained Alternative: Evaluation Results

Works Effectively



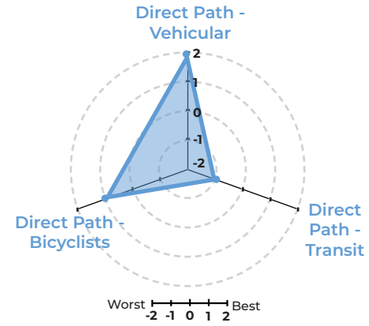
Vehicle movement is prioritized though narrower lanes are correlated with lower travel speeds for improved safety. Bus reliability would be similar to today. Much of Washington Avenue would remain uncomfortable for even the most confident cyclists, but protected bike lanes on Center Street could be comfortable for all ages.

Safe for all Users



With design features that reduce driver speed and additional protected bike facilities, some safety improvements can be expected with this alternative—but long crossing distances still leave travelers vulnerable, especially when outside of a vehicle.

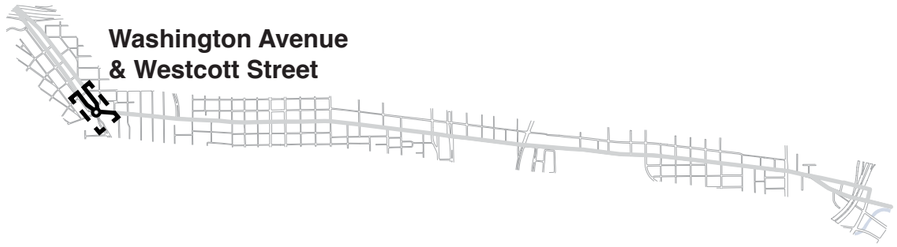
Connects into a Network



This alternative Connects into a Network by providing a direct path for vehicles and bicycles to travel Washington Avenue.



Community Preferred Vision:
Westcott Street and Washington Avenue Intersections



In this alternative, METRO Rt 85 operates express to downtown after Northwest Transit Center using I10. When the Inner Katy BRT project is complete, riders could transfer to that at Northwest Transit Center.

Median provides safe refuge for people crossing Washington Avenue outside of a vehicle.

Bike infrastructure continues down Schuler St from Detering and Center St. This may take the form of sharrows or protected infrastructure.

Bike and pedestrian connection to Memorial Park.

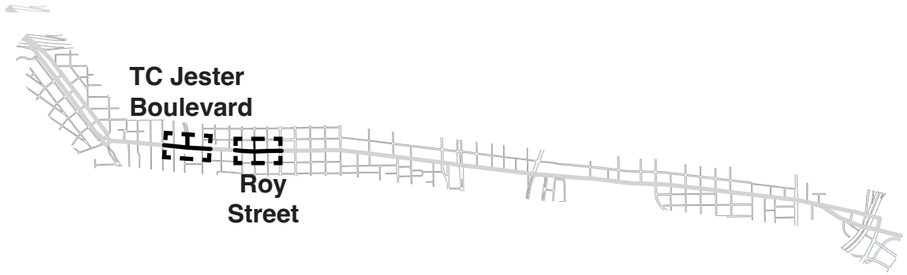
Bike infrastructure continues east down Schuler from Detering and Center toward Memorial Elementary in addition to turning north from Schuler to Westcott median.

Transit underpass could also be designed as an overpass, providing similar reliability benefits to the transit service without limiting vehicular capacity at the roundabout.

In this alternative, the existing four-lane, northbound-only segment of Washington Avenue north of the roundabout has been converted into a bidirectional roadway with two southbound lanes, one northbound lane, and northbound left-turn lanes at some locations. This configuration was chosen over a four-lane undivided roadway with two travel lanes in each direction, since the *FHWA Road Diet Informational Guide* indicates that four-lane undivided roadways can exhibit variable travel speeds, frequent slowing or lane changes due to the lack of dedicated left-turn lanes, and drivers weaving in and out of traffic lanes at high speeds.

By providing only one northbound through lane, some of these speed-related safety concerns may be lessened. Additionally, this layout allows space for a pedestrian refuge island that shortens crossing distance and pedestrian exposure to vehicular traffic. It should be noted, however, that the proposed lane geometry does not eliminate the multi-threat crossing for pedestrians across southbound lanes. With a single northbound travel lane, it is anticipated that driver routing behavior would have to change significantly due to reduced vehicular capacity, and the roundabout will have to undergo design modifications since the two northbound approach lanes will only have one northbound receiving lane.

Community Preferred Vision:
TC Jester Boulevard and Roy Street Intersections



Under this alternative, left turns would only be permitted at signalized intersections. Additional signalization should be explored to provide opportunities for crossing.

Removal of the center median on TC Jester Boulevard at its intersection with Washington Avenue would allow for better alignment of TC Jester with the parking lot access drive to the south, which in turn would enable more efficient signal timing and phasing. Removing the median would also enable creating more people space on either side of the street.

Bike infrastructure transitions south from Schuler to Detering then east on Center St.

Additional signalization should be explored, including Roy St.

Woodcrest

Rice Military

Westwood Grove

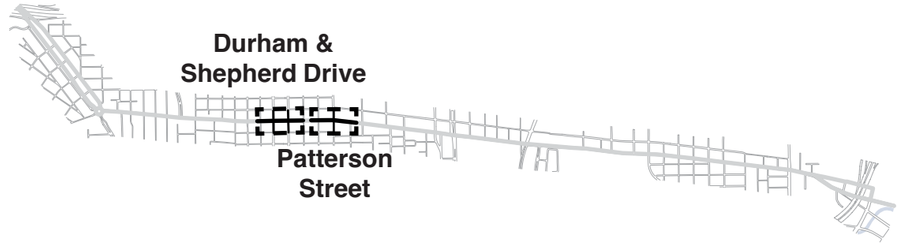
Birdsall St
Malone St
Asbury St
T C Jester Blvd
Detering St
Studer St
Moy St
Reinerman St
Roy St
Sandman St
Nett St
Center St
Washington Ave
Lillian St
Reinicke St
Lester St

CONCEPTUAL ONLY - SUBJECT TO CHANGE

N

0 250 500 1,000 ft

Community Preferred Vision:
Durham Drive, Shepherd Drive, and Patterson St Intersections



Recommendation for future study to evaluate options for freight rail grade separation of Shepherd and Durham north of Washington Ave and Center St. An underpass or overpass with some at grade access is appropriate at this location.

Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

Additional new signalization at non-signalized intersections should be explored at Durham Dr and Center St to create a safer crossing more consistent with other Center St crossings of major N/S streets.

Removal of the extra receiving lane on Shepherd Drive to make room for a wider sidewalk or a larger landscaping buffer without reducing the vehicular capacity of the roadway.

A median treatment is proposed at this location instead of a signal, preventing vehicular through and left-turn movements and providing a refuge for pedestrians and cyclists crossing Washington Avenue at Patterson.

In community meetings, participants preferred a median diverter at Washington Avenue and Patterson over a traffic signal. The diverter would create a refuge island for pedestrians and cyclists, allowing safer two-lane crossings while restricting through and left-turn vehicle movements. Eliminating these movements means a signal would no longer be warranted, though traffic would likely shift to nearby intersections at Durham and Yale, increasing congestion there.

Approximately two-thirds of all respondents prefer a median crossing to a signalized crossing on Patterson Street.

Westwood Grove

Rice Military

Old West End

Magnolia Grove

Sandman St
Durham Dr
Shepherd Dr
Parker St
Fowler St
Patterson St
Snover St
Thompson St
Bonner St

CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N

Community Preferred Vision:
Yale Street and Heights Boulevard Intersections



Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

Shift green space from the wide median on the north leg to the west side of the street, making space for needed vehicular capacity and also for wider people space at the edges of the street.

Old West End

Magnolia Grove

Memorial Heights

Bonner St

Yale St

Heights Blvd

Harvard St

Wagner St

Lakin St

Wichman St

Jackson Hill St

Waugh Dr

Use existing width on Waugh Drive to convert this roadway to two-way travel, enabling a cul-de-sac of Waughford Drive on Washington Avenue to reduce conflicts for pedestrians and for drivers while maintaining access to residences and businesses.

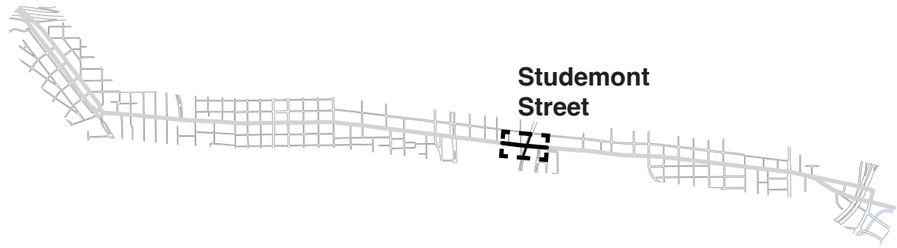
Remove the extra southbound receiving lane on the south leg of Heights to make room for wider people space at the edge of the street without reducing the vehicular capacity of the roadway.

CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N

Community Preferred Vision: Studemont Street Intersection



Close Sachs Drive to prevent it being used as a slip lane for eastbound right turns onto Studemont Street. This removes a point of conflict between pedestrians and vehicles, could lead to slower eastbound right turning speeds at Studemont, and would open up more space for a wider sidewalk and additional green space.

Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

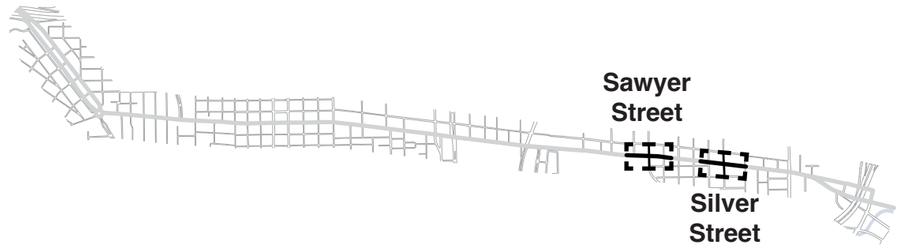


CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N

Community Preferred Vision:
Sawyer Street and Silver Street Intersections



Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

Bike infrastructure continues from Center St down Silver St and onto shared path on south side of Washington Avenue eastward.

Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

Brash

Sawyer St

Hemphill St

Henderson St

White St

Silver St

Old Sixth Ward

The majority of the respondents mentioned they want to see a light rail station at Silver Street.

Community interest in shared use path on Sawyer St to and from MKT trail & Bayou.

Remove the extra receiving lane on southbound Sawyer Street to open up additional people space along the edge of the street without reducing the vehicular capacity of the roadway.

Hemphill St

Henderson St

White St

Silver St

Sabir

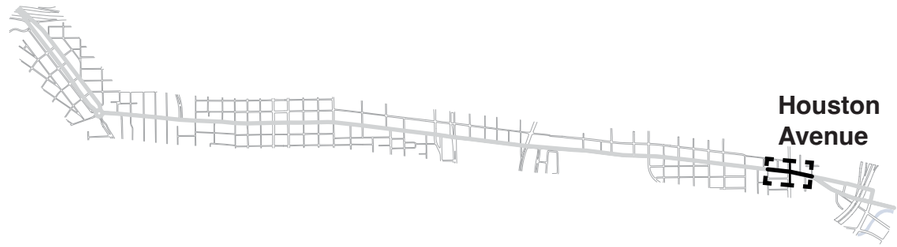
olorado St

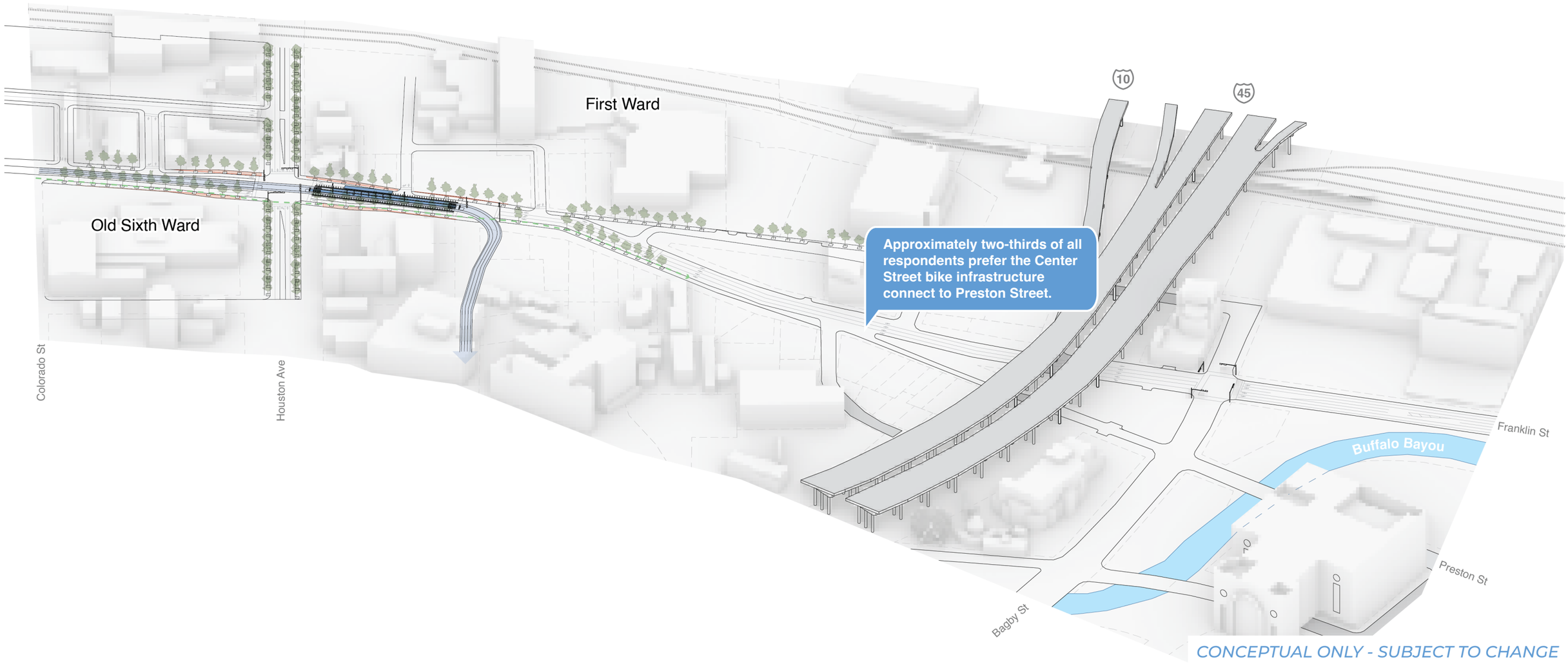
CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

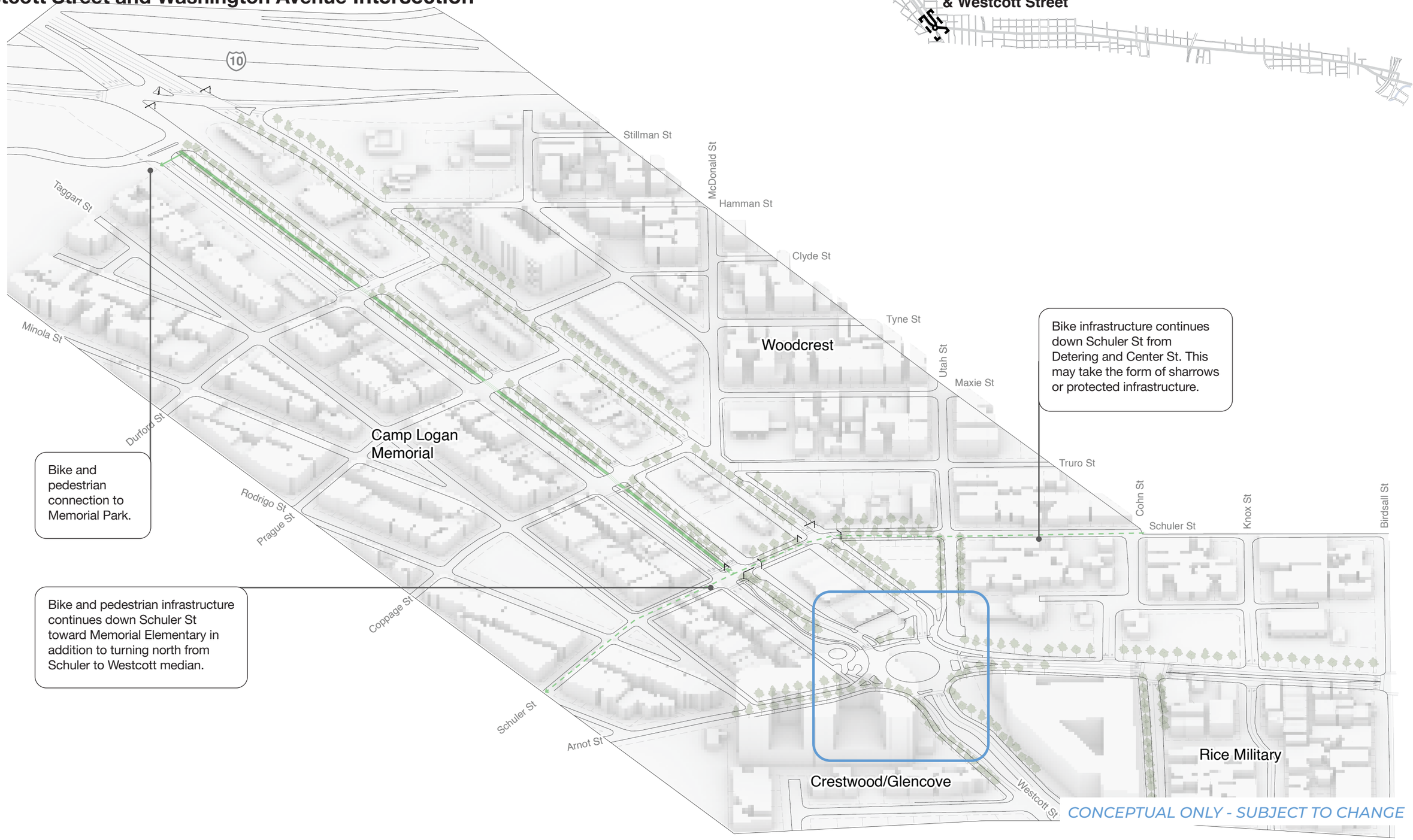
N

Community Preferred Vision:
Houston Avenue Intersection

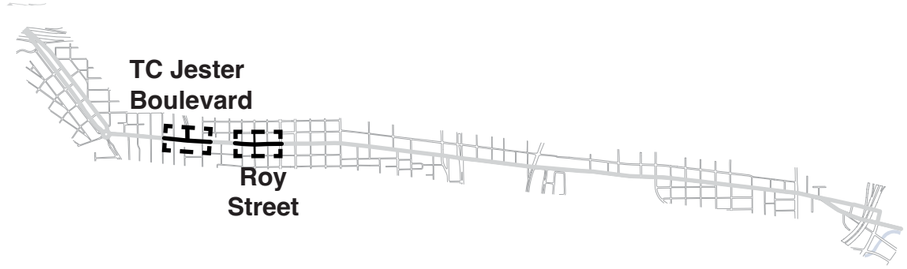




Baseline Constrained Alternative:
Westcott Street and Washington Avenue Intersection

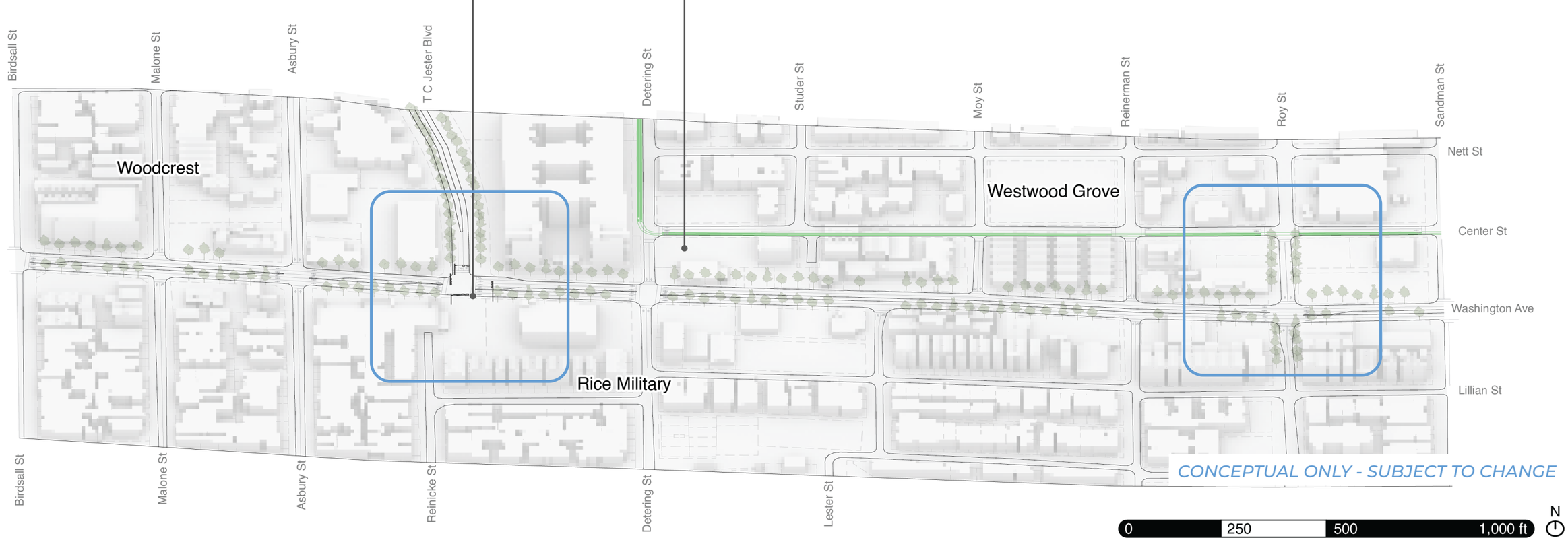


Baseline Constrained Alternative:
TC Jester Boulevard and Roy Street Intersections

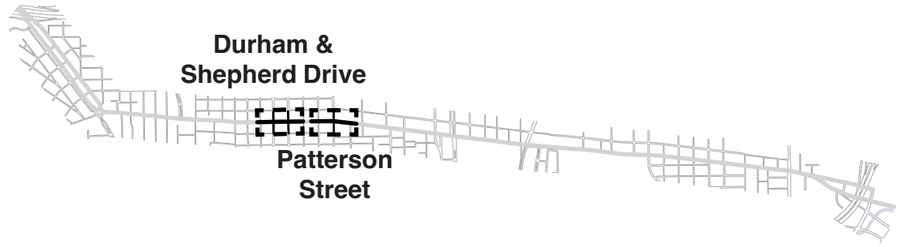


Removal of the center median on TC Jester Boulevard at its intersection with Washington Avenue to allow for better alignment of TC Jester with the parking lot access drive to the south, which in turn would enable more efficient signal timing and phasing. Removing the median would also enable creating more people space on either side of the street. Traffic analysis showed that this configuration will work acceptably in Year 2045, even if TC Jester is reduced to two lanes to create even more sidewalk space.

Bike infrastructure continues north and west on Detering St and Schuler St when Center St ends.



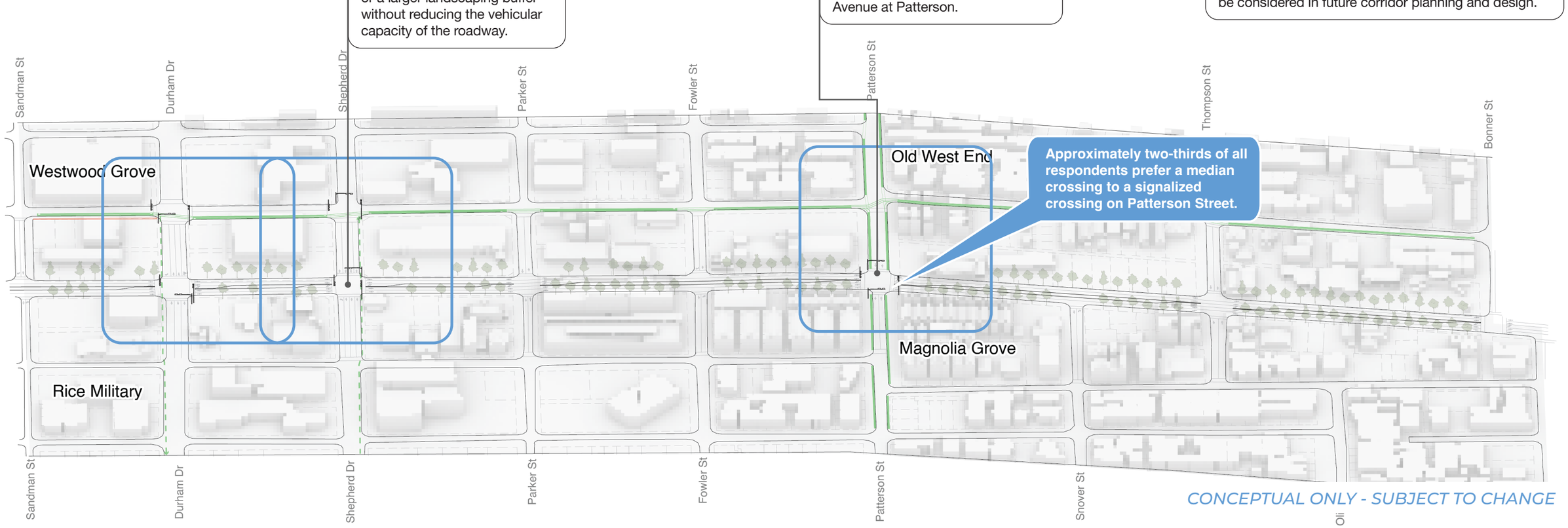
Baseline Constrained Alternative:
Shepherd Drive, Durham Drive and Patterson Intersections



Removal of the extra receiving lane on Shepherd Drive to make room for a wider sidewalk or a larger landscaping buffer without reducing the vehicular capacity of the roadway.

A median treatment is proposed at this location instead of a signal, preventing vehicular through and left-turn movements and providing a refuge for pedestrians and cyclists crossing Washington Avenue at Patterson.

In community meetings, participants preferred a median diverter at Washington Avenue and Patterson over a traffic signal. The diverter would create a refuge island for pedestrians and cyclists, allowing safer two-lane crossings while restricting through and left-turn vehicle movements. Eliminating these movements means a signal would no longer be warranted, though traffic would likely shift to nearby intersections at Durham and Yale, increasing congestion there. While safer than the current layout, if this treatment were used in the Baseline Constrained Alternative,the diverter could still pose multiple-threat crash risks. This option was not included in the traffic analysis but could be considered in future corridor planning and design.



Baseline Constrained Alternative:
Yale Street and Heights Boulevard Intersections



Shift green space from the wide median on the north leg to the west side of the street, making space for needed vehicular capacity and also for wider people space at the edges of the street.

Add dual left-turn lanes on Heights Boulevard to increase capacity for heavy left-turning movements and allow more efficient signal timing. Traffic analysis shows that these additional turn lanes are needed for acceptable traffic operation in Year 2045.

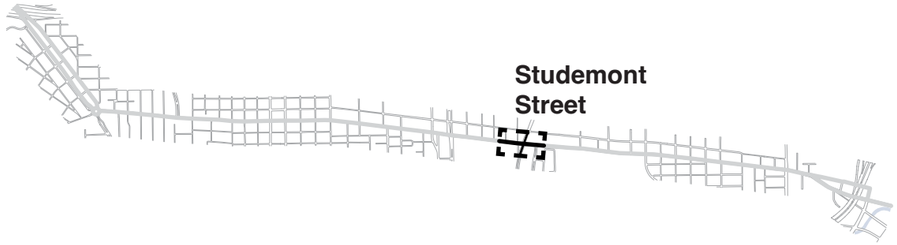
Use existing width on Waugh Drive to convert this roadway to two-way travel, enabling a cul-de-sac of Waughford Drive on Washington Avenue to reduce conflicts for pedestrians and for drivers while maintaining access to residences and businesses. Traffic analysis showed that this configuration will work acceptably in Year 2045.

CONCEPTUAL ONLY - SUBJECT TO CHANGE

N

0 250 500 1,000 ft

Baseline Constrained Alternative: Studemont Street Intersection



Close Sachs Drive to prevent it being used as a slip lane for eastbound right turns onto Studemont Street. This removes a point of conflict between pedestrians and vehicles, could lead to slower eastbound right turning speeds at Studemont, and would open up more space for a wider sidewalk and additional green space.

Studemont St

National St

Oliver St

Brashear St

Studemont St

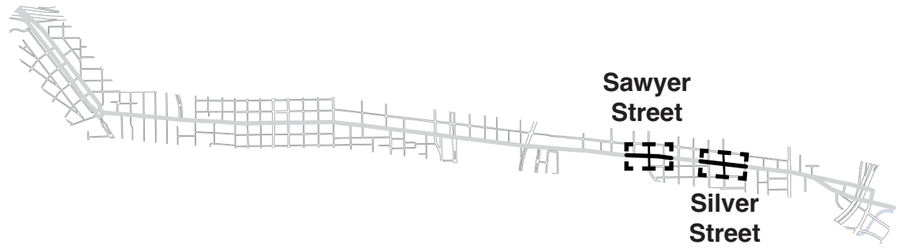
Memorial Heights Dr

Old Sixth Ward

CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N



Left turn movements would operate as green arrow only at all signals to safely separate vehicle and rail traffic.

Bike infrastructure continues from Center St down Silver St and onto shared path on south side of Washington Avenue eastward.

Old Sixth Ward

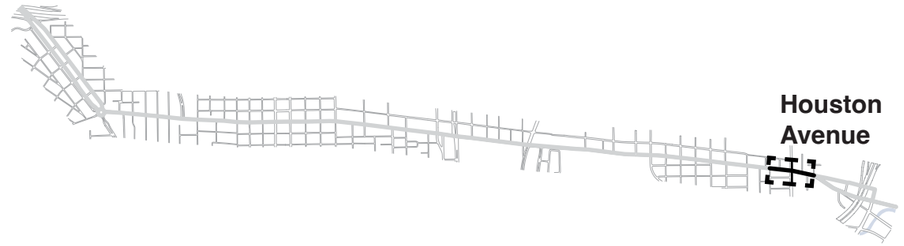
Brashear St
Sawyer St
Hemphill St
Henderson St
White St
Silver St
Sawyer St
Taylor St
Hemphill St
Henderson St
White St
Silver St
Sabir
olorado St

CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N

Baseline Constrained Alternative: Houston Avenue Intersection



Houston Ave

Hickory St

Goliad St

First Ward

Old Sixth Ward

Colorado St

Houston Ave

10

45

Approximately two-thirds of all respondents prefer the Center Street bike infrastructure connect to Preston Street.

Remove the extra receiving lane on northbound Houston Avenue to make room for a wider sidewalk or a larger landscaping buffer without reducing the vehicular capacity of the roadway.

Franklin St

Buffalo Bayou

Preston St

Bagby St

CONCEPTUAL ONLY - SUBJECT TO CHANGE

0 250 500 1,000 ft

N

APPENDIX D
PUBLIC FEEDBACK

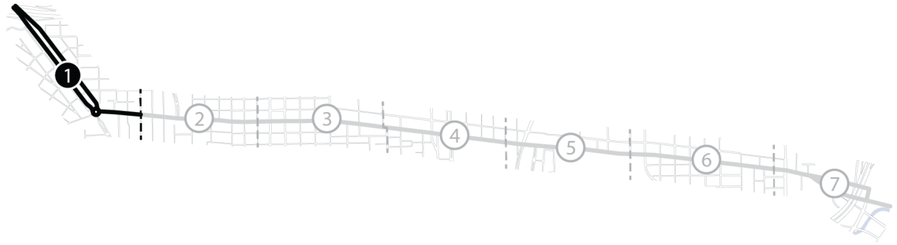
Over 300 people contributed to the results of this study.

We appreciate the time energy of the members of the public whose insights shaped this plan:

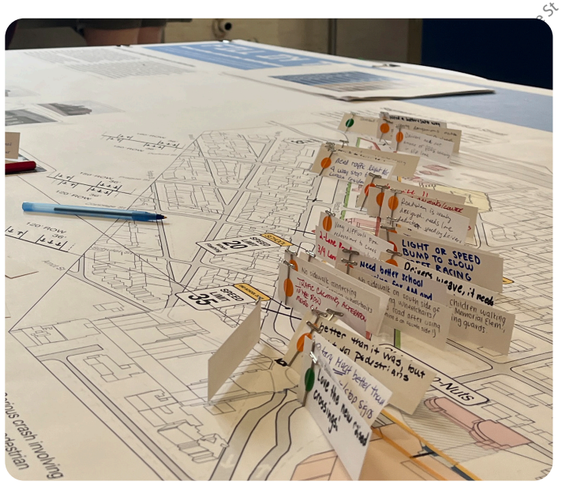
Abbie Culver
Abhi Sreerama
Abi Pineda
Akhil Ganesh
Alejandro Alegria
Alejandro Hagan
Alex Gardner
Alexander Carranza
Alexander spike
Alice Bailey
Alyson Landry
Alyssa Charsky
Amy Jones
Andrew Munoz
Andy Waggenspack
Anthony Hernandez
Arielle Castle
Arlene Gillman
Auhona Hoq
Austin Pooley
Avi Levy
Barbara Burda
Belinda Munsell
Ben Helms
Ben Russell
Ben Zimmerman
Bill Records
Bob Choate
Bob Korby
Bobby Carter
Brad Begault
Braunger
Brian Rausch
Briana Barr
Britt Jones
Bryce Gurick
Cade Herbert
Carla Cantrell
Carlos Iniguez
Caroline Griffin
Caroline Roberts
Cathy Colburn
Cecilia Tetlow
Chandler Barton
Cherrelle Duncan
Chris Burns
Chris Fohlin
Chris Haine
Chris Parma
Chris Smith
Chris Whaley
Citlaly Estrada
Clayton Price
Connie Huch
Cory Miles
Courtney Blechle
Crag Schofer
Dan Warden
DARIUS
David Comeaux
David Fields
David Roberts
David Shonnon
Davis Burton
Davis Land
Debbie Chance
Denise St. John
Derry Vann
Dev Amlis
Dexter Handy
Diana Nguyen
Dillon Garner
DJ Meyers
Dominic Mazoch
Donna Carnahan
Donna Kacmar
Doug Gallardo Jr
Dough Sweet
Dougie Steinbach
Eddie Millard
Eileen Wolfowicz
Eleni Pappas
Elise Sheppard
Elise Westhoff
Elizabeth Chambers
Ellie Morse
Emily Preston
Emmanual Nunez
Erica DeLaney
Ethan Campbell
Evan Bernard
Felix Palacios
Frank Blake
Frank Fagan
Gabriella
greentyco
Hanieh Nasizadeh
Herschel Rothchild
Hunter Johnson
Ian Johnson
Inaki Sagarzow
Itay Porat
Jack Valinski
Jackson Hurst
Jacob Russell
Jahnavi Jagannath
Jake Juliot
James Ronje
James Schriver
Jamie and Lee Walton
Jeana Nam
Jennifer Ostlind
Jennifer Wingard
Jeremiah Russell
Jeremy Kubicek
Jesse Bellow
Jim von Suskil
Jing Chen
Jintae Park
Joe Bailey
Joe Cutrufo
Joe Hood
Joe U
Joe Upcauecm
John Brems
John Cejka
John Curtis
John Leask
John White
john zavala
Jonathan Myers
Jonathan Styrt
Jorge
Jorge Alcalá Garcia
Jorge Bustamante
Jose Garcia
Joy Roth
Judy Reed-Wells
Julian Villarreal
Justin Silhavy
Justin Welling
KAIA
Kaitlin Fohlin
Karen Mattern
Karl Strope
Kate Hood
Katharine Nichols
Katie Niemann
Keaton Wyatt
Keiji Asakura
Kelsey Lofton
Ken Mobley
Kenan Sizemore
Kenneth Browning
Kerri Meaney
Kevin
Kevin Gault
Kevin Parker
Kevin Quist
Kevin Strickland
Kimberly Davis
Kira Elbert
Kirsten Dorrier
Kristin Andrichik
Kristin Laymon
KyMara Guidry
Laura Cuervo
Laura Parker
Lauren
Lauren Friese
Lawrence Goldberg
Leah Chambers
Leah Fretwell
Leann Gaver
Letha Allen
Lex Perez
Linda Trevino
Lindsey Anderson
Lisa Graiff
Luke Lewis
Madeline Farrell
Manuel Perez
Margaret (Meg) Poissant
Marian Wright
Marie Carlisle
Marika Mohr
Mark Bair
Mark Fairchild
Mark Kosiara
Mark reeves
Marsha Schenau
Matt Tetlow
Matt Thomas
Matthew Michal
Mauri
Mauri Lucas
Meagan Oglesby
Michael
Michael Adams-Hurta
Michael Dorn
Michael Herman
Micheal Donatti
Micheal Kavalerchik
Micheal Mcauley
Michelle Buckley
Michelle Jasmin
Michelle Wolpert
Mike and Maria Garcia
Mike Feewey
Mike McAuley
Mike Perez
Mike VanDusen
MMoritz
Morgan Munoz
Muizz Akhtar
Neyvin Deleon
Nick Huch
Oksang Haby
Oscar Orias
Patrick
Patrick Anstine
Paul Herrera
Payton Arens
Payton Finch
Peter Eccles
Ranjan Roy
Renee Lieber
Richard Otwell
Rick Robyak
Ricki Hanson
Ricky Cardenes
Robert Davis
Robert Grobe
Robin Holzer
Ronald Richards
Ross Griffey
Ross Mattern
Ruben Garza
Ruben Rios
Russell Etherton
Ryan Colburn
Ryan Weller
Sallie Alcorn
Samuel Wagner
Sandra Puente
Sara Jane Kleber
Sara Passone
Sara Pybus
Sarah
Scott Currasw
Sebastian Lecourt
Shannon Cheng
Sherry Weesner
Simone
Stacie Fairchild
Stefanie Thomas
Steven chiara
Susan Rogers
Syd Sepulveda
Sydney Sepulveda
Tanner Oetjen
Thomas Metke
Tiffanie Vaughan
Tom Kornegay
Tom Rommel
Tony Asch
Trevor Reichman
Troy Kleber
Troy Reed
Ty Joplin
Val Brock
Victoria Mota
Virginia Lynn
Wei Xiao
Wendy and Will Wilkinson
Wendy Cooper
Wilfredo
Will
William Ratnoff
WJones
Zaach Taylor
Zoe Belden
and 76 others.

We appreciate Memorial Elementary, Messiah Lutheran Church, and St. Theresa Catholic Church for hosting public meetings for the study.

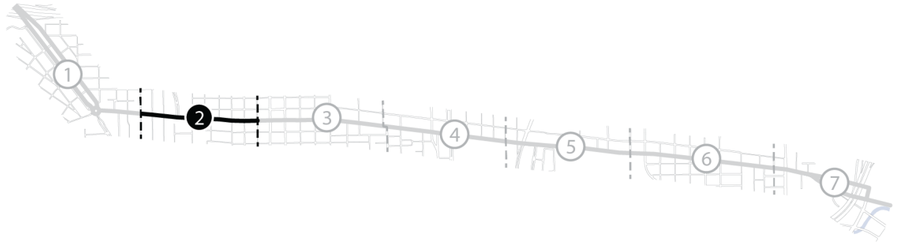
Segment 1 I-10 to Birdsall Street: Community Feedback

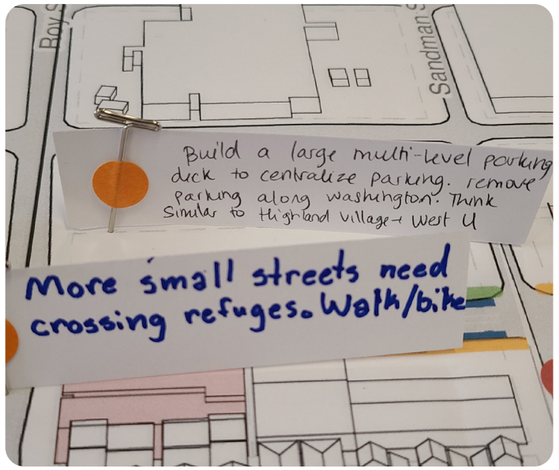


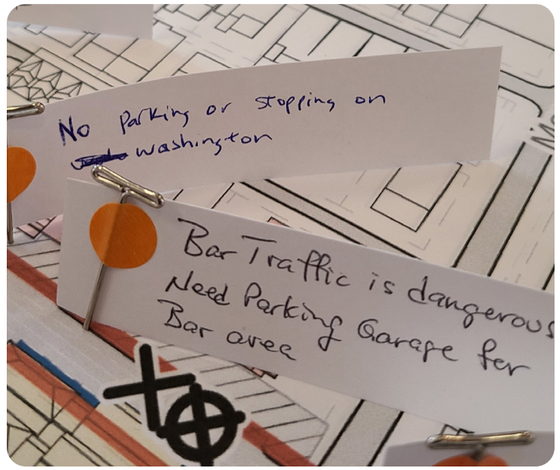




Segment 2 Birdsall Street to Sandman Street: Community Feedback









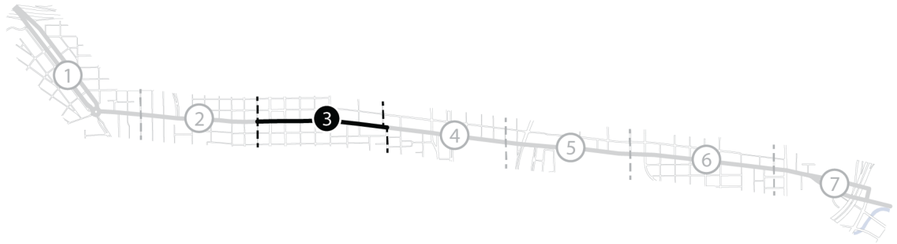
Fast vehicular traffic and no safe crossing between TC Jester and Wesctott roundabout.

"Pedestrian priority not clear at this intersection. Midblock crossing needed north on TC Jester."

Narrow sidewalks, need for parking garages, and dangerous traffic at all hours of the night.



Segment 3 Sandman Street to Bonner Street: Community Feedback







"Center & Durham does not have a traffic light. Difficult to cross for people driving, biking, or walking."

At grade crossing of freight rail causes traffic issues on Shepherd and Durham near Washington Avenue.

Narrow sidewalks, need for safe crossing of Washington Avenue between businesses and housing.

FedEx

Pollo Campero

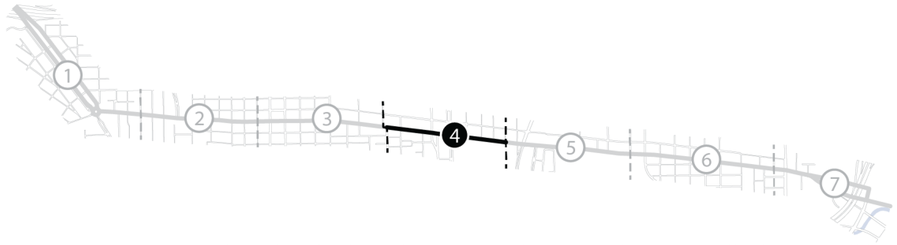
Laredo Taqueria

"Bollards needed as speeding traffic sometimes jumps curbs."

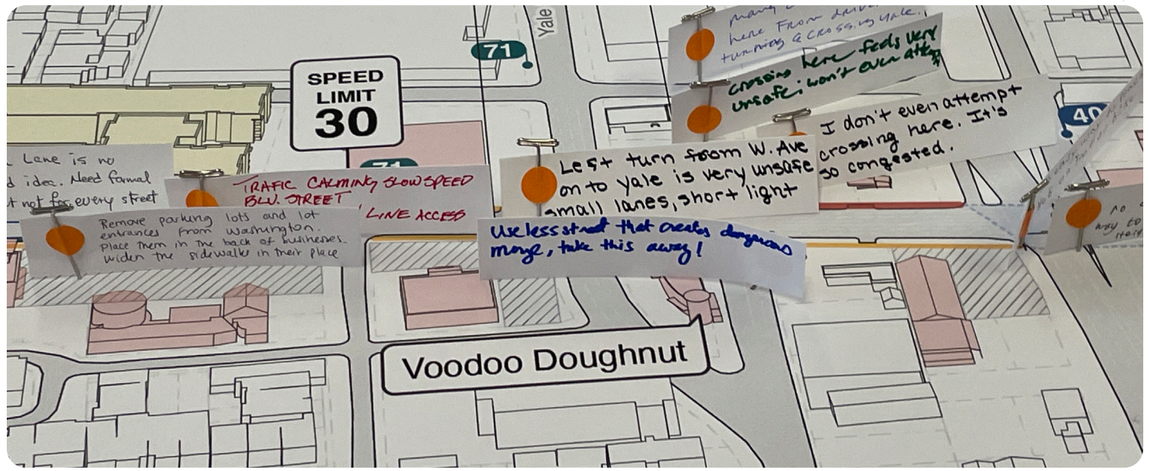
Treatment needed for safe crossing at Paterson for people walking and biking.

Sandman St
Durham Dr
Shepherd
Parker St
Fowler St
Paterson St
Snover St
Thompson St
Olive St
Bonner St

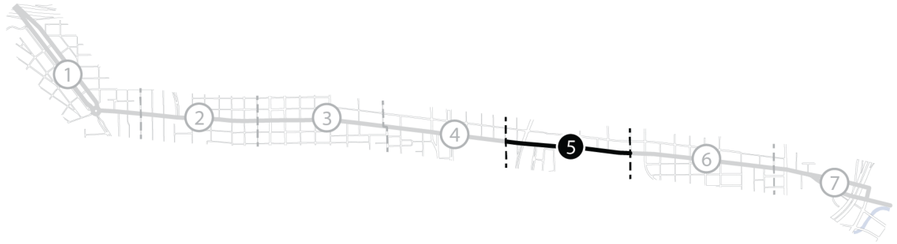
Segment 4 Bonner Street to Wichman Street: Community Feedback



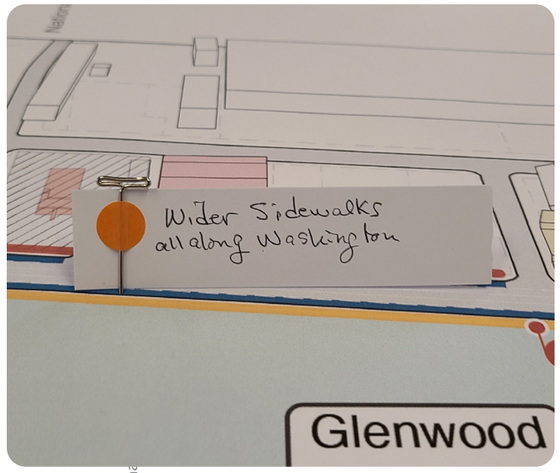




Segment 5 Wichman Street to Brashear Street: Community Feedback



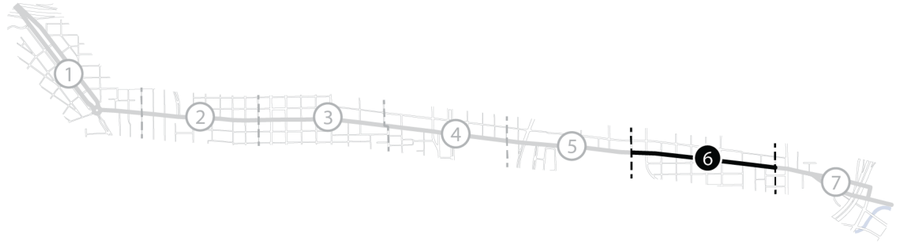




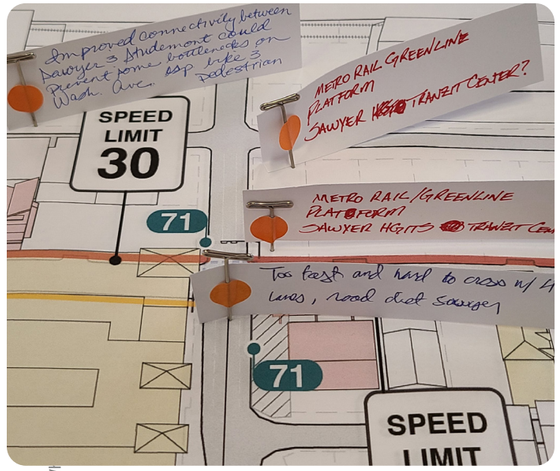
Crossing dangerous especially with fast speeds of drivers turning right. Walk signal light very short. Difficulty crossing to METRO stops.

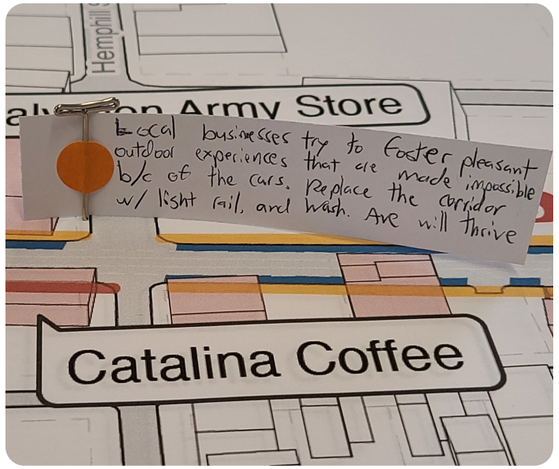
Court St
Studemont St
National
Oliver St
Brashear St
Brown Chapel AME Church
Sunbeam Bread Bakery
Walgreens
Studemont St
Memorial Heights Dr
Glenwood Cemetery

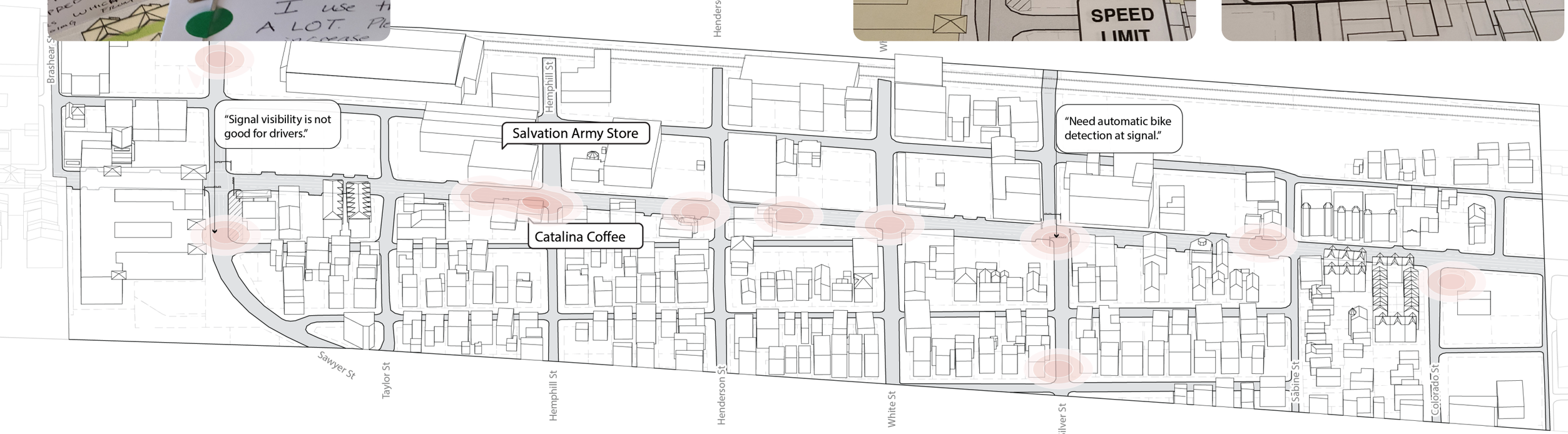
Segment 6 Brashear Street to Colorado Street: Community Feedback



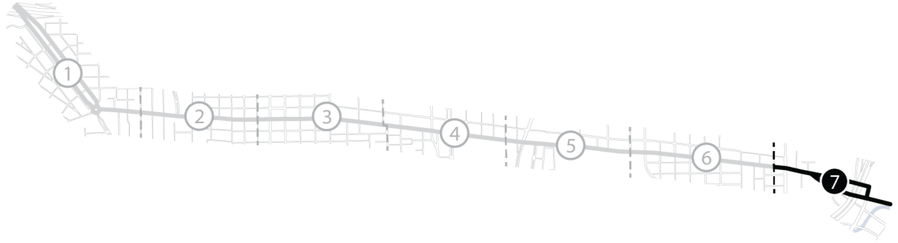


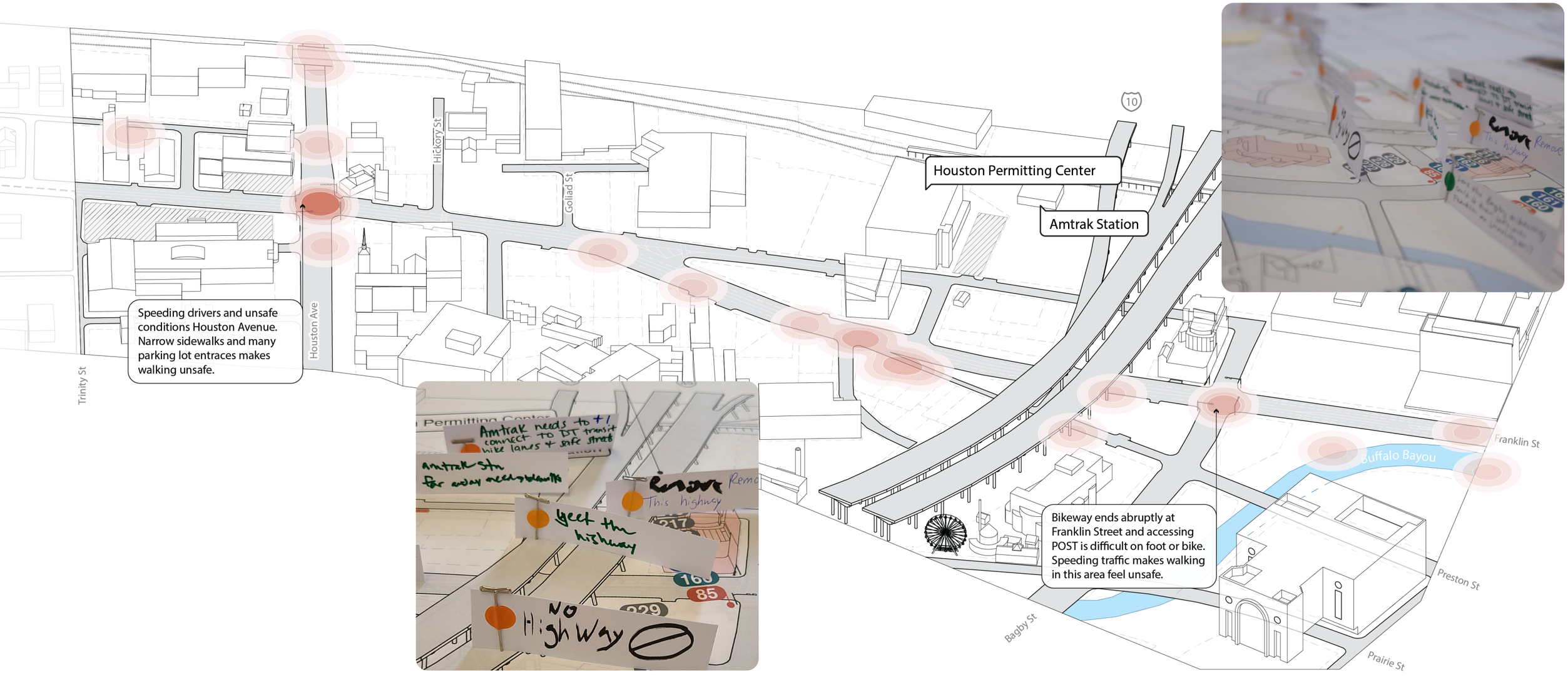






Segment 7 Colorado Street to Smith Street: Community Feedback





Alternatives Survey Questions



Please give your feedback on the Washington Avenue Corridor Study Design Options.

If you have not reviewed the alternatives, please visit the project website for more information about each of them.

Takes 4 minutes

Give feedback press Enter ↵

→ Considering the strengths and weaknesses of each alternative, please rank the alternatives:

If bike infrastructure is not mentioned in the description below, it is being provided on Center St through painted sharrows or protected bike lanes.

Drag and drop to rank options

- Alternative A: Two wide vehicular lanes each direction with turn lanes
- Alternative B: Two vehicular lanes each direction with a median and turn lanes
- Alternative C: One vehicular lane and one bus-only lane with right turns
- Alternative D: One vehicular lane with a right turn lane and wide sidewalks
- Alternative E: One vehicular lane and off-street bike lanes on Washington
- Alternative F: One vehicular lane plus center-running transit through Heights Blvd
- Alternative G: One vehicular lane plus center-running transit through I-10

2 → Which of these factors was important to you when choosing your top alternative? (check all that apply)*

Choose as many as you like

- A Mitigates congestion
- B Improves driving safety
- C Improves bus reliability
- D Improves walking/rolling conditions on sidewalks
- E Improves biking conditions
- F Other

3 → OPTIONAL: Do you have any additional comments?

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

OK press Enter ↵

4 → If you could only choose between the four alternatives listed below, please pick your top choice: Alternative A, Alternative B, Alternative C, Alternative D*

- A Alternative A: Two wide vehicular lanes each direction with turn lanes
- B Alternative B: Two vehicular lanes each direction with a median and turn lanes
- C Alternative C: One vehicular lane and one bus-only lane with right turns
- D Alternative D: One vehicular lane with a right turn lane and wide sidewalks

OK

5 → OPTIONAL: Why is that your top choice?

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

OK press Enter ↵

6 → Please enter your home zip code.*

Type your answer here...

7 → What age range are you in?*

- A Under 18
- B 19 to 34
- C 35 to 49
- D 50 to 64
- E 65 and older

8 → OPTIONAL: How do you describe yourself? Select all that apply.

Choose as many as you like

- A Asian or Asian American
- B Black or African American
- C Hispanic or Latino/a
- D Middle Eastern or North African
- E Native American or Alaska Native
- F Native Hawai`ian or Pacific Islander
- G White or European
- H Other

9 → OPTIONAL: To which gender do you most identify?

- A Woman
- B Man
- C Prefer not to say
- D Other

10 → Would you like future updates about the Washington Avenue Corridor Study?

name@example.com

Submit press Cmd ⌘ + Enter ↵

Alternatives Survey Questions: Employee-specific questions

11→ Employee*

Description (optional)

What is your first and last name?*

Type your answer here...

What is the name of the place you work in the Washington Avenue Corridor?*

Type your answer here...

What is the address of the location where you work?*

Type your answer here...

How many days of the week do you typically work on Washington Avenue?*

- A 6 – 7 days a week
- B 4 – 5 days a week
- C 2 – 3 days a week
- D One day a week
- E A few times a month
- F Once a month
- G Less than monthly

What days of the week are you at the Washington Avenue location? Select all that apply.*

- A Monday
- B Tuesday
- C Wednesday
- D Thursday
- E Friday
- F Saturday
- G Sunday

During which of the following time periods are you commuting on a typical weekday? Select all that apply.*

- A Weekdays 6:00am-9:00am
- B Weekdays 9:00am-3:00pm
- C Weekdays 3:00pm-6:00pm
- D Weekdays 6:00pm-10:00pm
- E Weekdays 10:00pm-6:00am
- F None of these times

During which of the following time periods are you commuting on a typical weekend? Select all that apply.*

- A Saturday 6:00am-9:00a
- B Saturday 9:00am-3:00pm
- C Saturday 3:00pm-6:00pm
- D Saturday 6:00pm-10:00pm
- E Saturday 10:00pm-6:00am
- F Sunday 6:00am-9:00am
- G Sunday 9:00am-3:00pm
- H Sunday 3:00pm-6:00pm
- I Sunday 6:00pm-10:00pm
- J Sunday 10:00pm-6:00am
- K None of these times

Alternatives Survey Questions: Employer-specific questions

12 → Employer Survey*

Description (optional)

Your Name:*

Type your answer here...

Your Title:*

Type your answer here...

Company Name:*

Type your answer here...

Address:*

Type your answer here...

Which category does your business align with best?*

- A Food and Beverage
- B Hotel
- C Health and Beauty
- D Legal
- E Financial Services
- F Education
- G Retail
- H Residential/Apartment
- I Other

How does your establishment handle deliveries and loading needs?*

- A All deliveries happen on-property (in a parking lot)
- B All deliveries happen from Washington Avenue
- C All deliveries happen from side streets
- D All deliveries happen from Center Street
- E A mix of street and on-property deliveries
- F No deliveries

Does your business primarily serve people in the neighborhood or people coming from throughout the region?*

- A Neighborhood
- B Region
- C 50/50

How do your customers get to the business? Select all that apply.*

- A Walk or use a mobility device
- B Car
- C Carpool
- D Transit
- E Bike
- F Scooter
- G Other

What days of the week are employees at your Washington Avenue location? Select all that apply.*

- A Monday
- B Tuesday
- C Wednesday
- D Thursday
- E Friday
- F Saturday
- G Sunday

If you employee full time/permanent employees, please list the number here:*

Type your answer here...

If you employee part time/contractor employees, please list the number here:*

Type your answer here...

If you employee seasonal employees, please list the number here:*

Type your answer here...

For which season(s) does your company hire seasonal employees? Select all that apply and leave blank if not applicable.

- A Spring
- B Summer
- C Fall
- D Winter

When do shifts start? Select all that apply.*

- A before 5:00 am
- B 5:00 am to 10:00 am
- C between 10:00 am and 4:00 pm
- D between 4:00 pm and 8:00 pm
- E after 8:00 pm

Do any employees end work at the following times? Select all that apply.*

- A before 5:00 am
- B between 5:00 am to 10:00 am
- C between 10:00 am and 4:00 pm
- D between 4:00 pm and 8:00 pm
- E after 8:00 pm

Has access to the Washington Avenue area impacted hiring employees to your worksite?*

- Y Yes
- N No

Do any of your employees express concerns about commuting issues? *

- Y Yes
- N No

Does your company provide employee parking?*

- Y Yes
- N No

If yes, is it free or paid?
If no, do your employees use a paid parking lot if they travel by car?

Type your answer here...

Are you willing to send our survey about the Washington Avenue study to your employees? A survey link and suggested language can be provided for an email or newsletter.*

- Y Yes
- N No

Do you need the employee survey translated into a language other than English?*

- Y Yes
- N No

Short Term Recommendations Survey Questions



Please give your feedback on the Washington Avenue Corridor Study short term improvements.

Takes 3 minutes

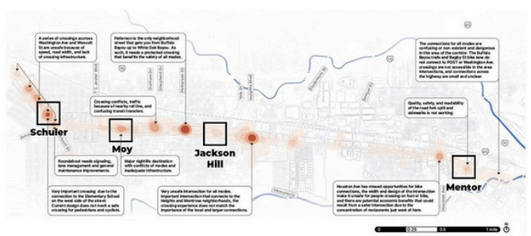
Start press Enter ↵

1→ These questions will help the project team prioritize short-term recommendations:

a. How important is a safer pedestrian crossing of Washington Ave and Westcott St at Schuler St to you? *

A safer crossing at Schuler in the short term could include a HAWK signal/ pedestrian hybrid beacon (a traffic control device used to stop road traffic and allow pedestrians to cross safely), additional lighting, a raised crosswalk, and/or pedestrian refuge islands.

1 star is Not Important; 5 stars is Very Important



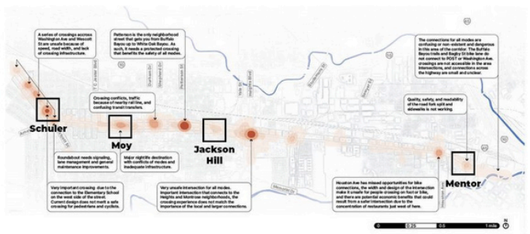
☆ ☆ ☆ ☆ ☆

1 2 3 4 5

b. How important is a safer pedestrian crossing of Washington Ave at Moy St to you? *

A safer crossing at Moy in the short term could include additional lighting and a midblock pedestrian refuge.

1 star is Not Important; 5 stars is Very Important



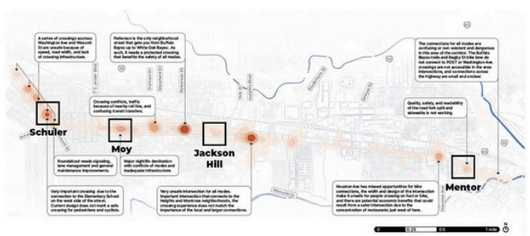
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1 2 3 4 5

c. How important is a safer pedestrian crossing of Washington Ave at Jackson Hill St to you? *

A safer crossing at Jackson Hill in the short term could include additional lighting and a midblock pedestrian refuge.

1 star is Not Important; 5 stars is Very Important



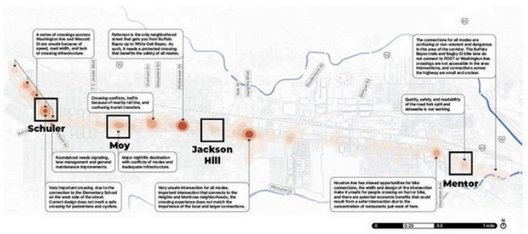
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1 2 3 4 5

d. How important is a safer pedestrian crossing of Washington Ave at Mentor St to you? *

A safer crossing at Mentor in the short term could include additional lighting and a midblock pedestrian refuge.

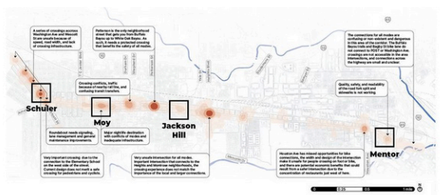
1 star is Not Important; 5 stars is Very Important



☆ ☆ ☆ ☆ ☆

1 2 3 4 5

e. Please rank these safer crossings from most urgent to least urgent:

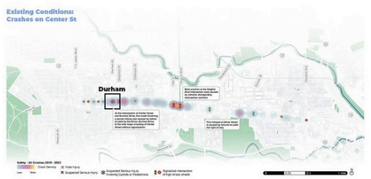


Drag and drop to rank options

- Schuler
- Moy
- Jackson Hill
- Mentor

f. How important is a safer crossing at Center St and Durham Dr to you? *

1 star is Not Important; 5 stars is Very Important



☆ ☆ ☆ ☆ ☆

1 2 3 4 5

g. How important is safer bike infrastructure along Center St to you?*

1 star is Not Important; 5 stars is Very Important

☆ ☆ ☆ ☆ ☆

1 2 3 4 5

h. How important is a safer bike connection between Downtown and Center St to you?*

1 star is Not Important; 5 stars is Very Important

☆ ☆ ☆ ☆ ☆

1 2 3 4 5

i. How important is increased and improved wayfinding for people walking, rolling, and biking along the corridor to you?*

1 star is Not Important; 5 stars is Very Important

☆ ☆ ☆ ☆ ☆

1 2 3 4 5

j. Are there any specific areas or destinations that you think need better wayfinding?

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

Short Term Recommendations Survey Questions (cont)

2 → OPTIONAL: Do you have any additional comments?

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

3 → Please enter your home zip code.*

Type your answer here...

4 → What age range are you in?*

- A Under 18
- B 19 to 34
- C 35 to 49
- D 50 to 64
- E 65 and older

5 → OPTIONAL: How do you describe yourself? Select all that apply.

- A Asian or Asian American
- B Black or African American
- C Hispanic or Latino/a
- D Middle Eastern or North African
- E Native American or Alaska Native
- F White or European
- G Other

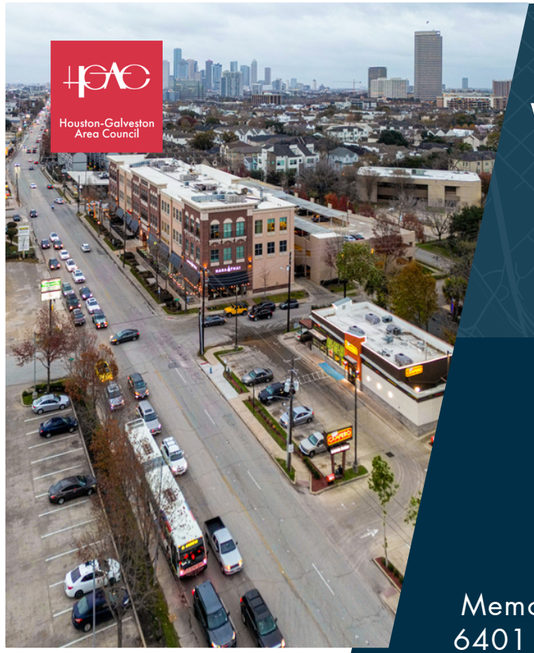
6 → OPTIONAL: To which gender do you most identify?

- A Man
- B Woman
- C Prefer not to say
- D Other

7 → Would you like future updates about the Washington Avenue Corridor Study? If so, please add your email address below:

name@example.com

Submit press Cmd ⌘ + Enter ↵



WASHINGTON AVENUE CORRIDOR STUDY

Corridor-wide Mobility Plan
Meeting: May 11, 2024
10 AM - 12 PM

Presentation and Q&A
starts at 10:30 AM

Memorial Elementary School Cafeteria
6401 Arnot Street, Houston, TX 77007

LET'S CREATE A BETTER WASHINGTON AVENUE FOR ALL!

Register for project updates and give feedback by scanning the QR code or visiting the website at:

https://engage.h-gac.com/WACS

This meeting is accessible via METRO Rt. 85, biking along Blossom Street or Schuler Street via Buffalo or White Oak Bayous, or by driving to the address above.



ESTUDIO DE LA AVENIDA WASHINGTON

Plan de Movilidad del Corredor
Reunión: 11 de mayo del 2024
10 AM - 12 PM

Presentación y sesión de preguntas
comienza a las 10.30 AM

Cafetería de la escuela Memorial Elementary
6401 Arnot Street, Houston, TX 77007

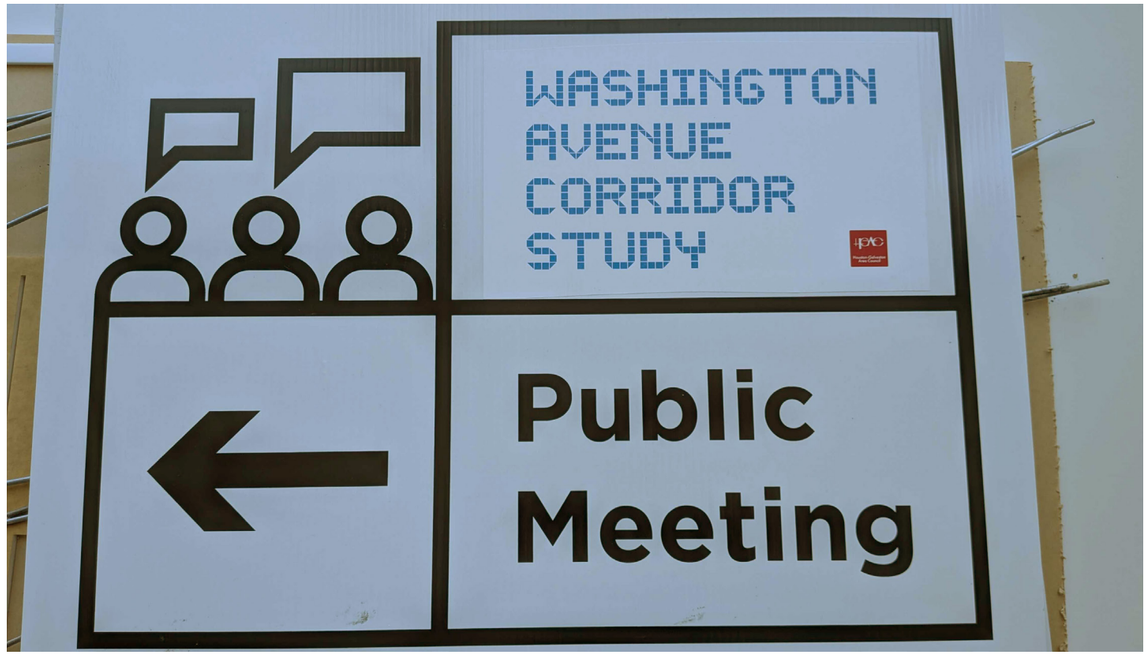
¡CONSTRUYAMOS UNA MEJOR AVENIDA WASHINGTON PARA TODOS!

Regístrese para recibir actualizaciones del proyecto y dar comentarios adicionales usando el código QR o visitando la página web:

https://engage.h-gac.com/WACS

Esta reunión es accesible a través de METRO Rt 85, en bicicleta por Blossom Street o Schuler Street a través de Buffalo o White Oak Bayous, o en coche manejando a la dirección en este folleto


Houston-Galveston Area Council
WASHINGTON AVENUE CORRIDOR STUDY
Super Neighborhood 22
Meeting: May 16, 2024
6:30 PM - 8:00 PM
Messiah Lutheran Church
Fellowship Hall
816 Roy Street
Houston, TX 77007
LET'S CREATE A BETTER WASHINGTON AVENUE FOR ALL!
Register for project updates and give feedback by scanning the QR code or visiting the website at:
https://engage.h-gac.com/WACS


WASHINGTON AVENUE CORRIDOR STUDY
Public Meeting



WASHINGTON AVENUE CORRIDOR STUDY

Round 3 Public Meeting:

Thursday, May 29, 2025
6:00 PM - 7:30 PM

MECA
1900 Kane St.
Houston, TX 77007

Short presentation at 6:30pm

Review and provide feedback on the final alternatives!

Learn about the project by scanning the QR code or visiting:

https://engage.h-gac.com/WACS

In compliance with the Americans with Disabilities Act (ADA), H-GAC will provide for reasonable accommodations for persons attending H-GAC functions. Requests from persons needing special accommodations should be received by H-GAC staff 24 hours before a function. The public meeting will be conducted in English, and requests for language interpreters or other special communication needs should be made at least two working days before a function. Call 832-681-2629 for assistance.

**This meeting was rained out



ESTUDIO DEL CORREDOR DE WASHINGTON AVENUE

Tercera Reunión Pública:

Jueves, 29 de mayo de 2025
6:00 PM - 7:30 PM

MECA
1900 Kane St.
Houston, TX 77007

Presentación breve a las 6:30 pm

¡Revise las alternativas finales y comparta sus comentarios!

Infórmese sobre el proyecto escaneando el código QR o visitando:

https://engage.h-gac.com/WACS

En cumplimiento con la Ley de Estadounidenses con Discapacidades (ADA), H-GAC proporcionará adaptaciones razonables para las personas que asistan a eventos de H-GAC. Las solicitudes de personas que necesiten adaptaciones especiales deben ser recibidas por el personal de H-GAC al menos 24 horas antes del evento. La reunión pública se llevará a cabo en inglés, y las solicitudes de intérpretes de idiomas u otras necesidades especiales de comunicación deben hacerse al menos dos días hábiles antes del evento. Llame al 832-681-2629 para obtener asistencia.

**This meeting was rained out



WASHINGTON AVENUE CORRIDOR STUDY

Round 3 Public Meeting:

Monday, June 23, 2025
6:00 PM - 7:30 PM
St. Theresa Catholic Church's
Fellowship Hall
6622 Haskell St
Houston, TX 77007

Review and provide feedback on the final alternatives!

Learn about the project by scanning the QR code or visiting:

https://engage.h-gac.com/WACS

In compliance with the Americans with Disabilities Act (ADA), H-GAC will provide for reasonable accommodations for persons attending H-GAC functions. Requests from persons needing special accommodations should be received by H-GAC staff 24 hours before a function. The public meeting will be conducted in English, and requests for language interpreters or other special communication needs should be made at least two working days before a function. Call 832-681-2629 for assistance.



ESTUDIO DEL CORREDOR DE WASHINGTON AVENUE

Tercera Reunión Pública:

Lunes, 23 de junio de 2025
6:00 p.m. - 7:30 p.m.
St. Theresa Catholic Church's
Fellowship Hall
6622 Haskell St
Houston, TX 77007

¡Revise las alternativas finales y comparta sus comentarios!

Infórmese sobre el proyecto escaneando el código QR o visitando:

https://engage.h-gac.com/WACS

En cumplimiento con la Ley de Estadounidenses con Discapacidades (ADA), H-GAC proporcionará adaptaciones razonables para las personas que asistan a eventos de H-GAC. Las solicitudes de personas que necesiten adaptaciones especiales deben ser recibidas por el personal de H-GAC al menos 24 horas antes del evento. La reunión pública se llevará a cabo en inglés, y las solicitudes de intérpretes de idiomas u otras necesidades especiales de comunicación deben hacerse al menos dos días hábiles antes del evento. Llame al 832-681-2629 para obtener asistencia.



hougalvareacog

hougalvareacog Let's pave the way for a better Washington Avenue! 💥

The Houston-Galveston Area Council and the city of Houston are teaming up to develop a corridor mobility plan, and your voice matters. 🗣️

Join us on May 11 from 10am-12pm at Memorial Elementary School Cafeteria, 6401 Arnot Street, Houston, TX 77007, for our first public meeting – an opportunity to shape the future of this historic avenue.

Don't worry if you can't make it in person – your input is valued virtually too! Visit engage.h-gac.com/WACS to share your thoughts on the interactive map and pinboard. If you need accessibility accommodations, please email Caroline Bailey at caroline.bailey@h-gac.com by May 9.

We look forward to this conversation and prioritizing safety, accessibility, and sustainability to create a better Washington Avenue!

#HGAC #HGACRegion #HoustonGalvestonAreaCouncil #WACStudy #HoustonMobility #CommunityEngagement

Liked by **jytoplin** and **32 others**

May 7, 2024

Add a comment... Post



hougalvareacog

hougalvareacog Missed our initial gathering on the Washington Avenue Corridor Study? No problem!

💥 Join us for the second meeting from 6:30 - 8 p.m. on Thursday, May 16, at the Messiah Lutheran Church Fellowship Hall (816 Roy Street, Houston, TX 77007). 🗣️ Your voice is crucial as the Houston-Galveston Area Council and the city of Houston collaborate on a corridor mobility plan.

Can't attend in person? Your virtual input is just as valuable! Visit engage.h-gac.com/WACS to share your thoughts on our interactive map and pinboard. For accessibility accommodations, reach out to Caroline Bailey at caroline.bailey@h-gac.com.

Let's engage in this dialogue, prioritizing safety, accessibility, and sustainability for a better Washington Avenue! 💬🚌

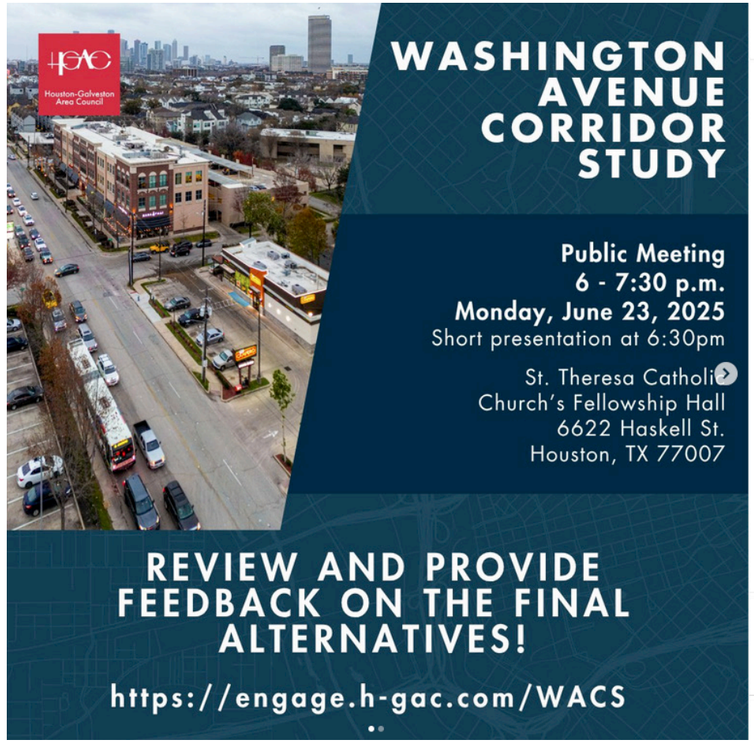
#HGAC #HGACRegion #HoustonGalvestonAreaCouncil #WACStudy #HoustonMobility #CommunityEngagement #HGACPublicMeeting #WashingtonAve #HoustonRoads

74w

Liked by **dcopelandloredo** and **14 others**

May 13, 2024

Add a comment... Post



hougalvareacog

hougalvareacog 📣 Don't miss your chance to weigh in!

Join us for the next public meeting of the Washington Avenue Corridor Study and help shape the future of this vital corridor.

🕕 6 – 7:30 p.m.
Short presentation at 6:30 p.m.
📅 Monday, June 23, 2025
📍 St. Theresa Catholic Church's Fellowship Hall, 6622 Haskell St, Houston, TX 77007

This is your opportunity to review the final proposed alternatives and share your feedback before the plan is finalized. Make your voice heard!

🔗 Learn more and share your input: https://engage.h-gac.com/WACS

#WashingtonAve #PublicMeeting #CommunityInput #HGAC #CorridorStudy #HoustonPlanning #YourVoiceMatters #HGACRegion #HoustonGalvestonAreaCouncil

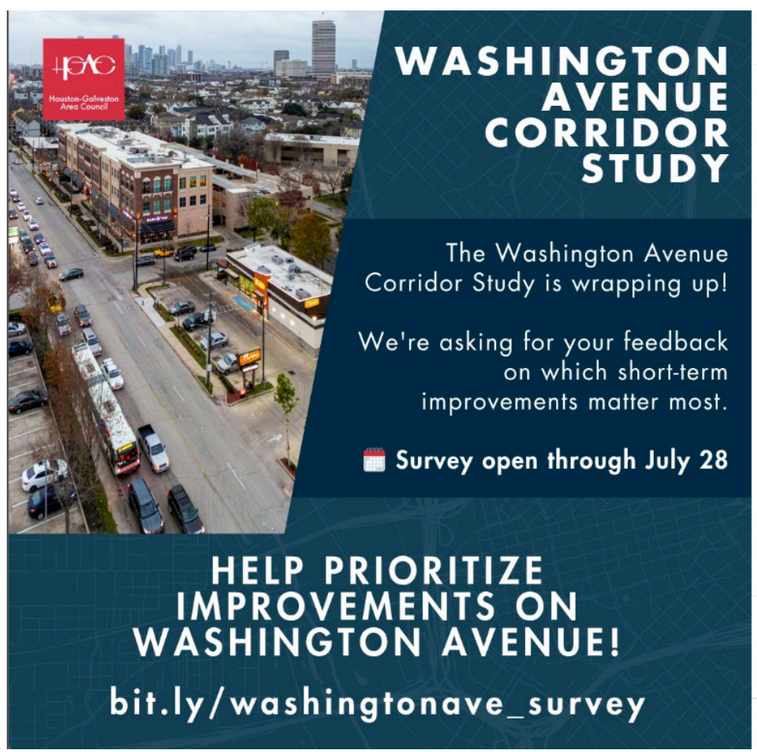
📣 ¡No pierdas la oportunidad de participar!

Acompáñanos en la próxima reunión pública

Liked by **parma_chris** and **13 others**

June 18

Add a comment... Post



hougalvareacog

hougalvareacog 📣 Washington Avenue & Center Street – What Matters Most to You?

We're wrapping up the Washington Avenue Corridor Study and want your help prioritizing short-term improvements. Whether you walk, bike, drive, or ride – your feedback can help shape what's next.

🗓️ The survey is open through July 28 – take a moment to share your thoughts!
🔗 bit.ly/washingtonave_survey

#HoustonPlanning #TransportationStudy #WashingtonAve #HGAC #HGACRegion #HoustonGalvestonAreaCouncil

11w

Liked by **classicryan17** and **6 others**

July 22

Add a comment... Post

APPENDIX E
TECHNICAL DATA