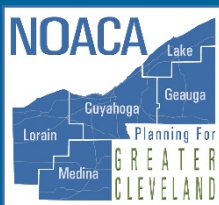




Carnegie Avenue Master Plan

Final Plan

A Transportation for Livable Communities Initiative Planning Study



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November 2019

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EXECUTIVE SUMMARY

Background

The Carnegie Avenue Corridor Study is a planning effort completed by the City of Cleveland, in partnership with MidTown Cleveland Inc. and the Northeast Ohio Areawide Coordinating Agency (the Core Team). The resulting Master Plan aims to capitalize on the history and potential of Carnegie Avenue through the Midtown neighborhood, recognizing that the corridor has a series of strengths and challenges that impact both the immediately adjacent communities and the region as a whole. The urgency of the planning effort comes as the Opportunity Corridor project nears completion and new investments and development are planned throughout Midtown and beyond.

Goals & Objectives

The project's goals and objectives were established by the project co-sponsors to provide guidance throughout the planning process. They include the following:

Goals

- Re-envision the identity of the transportation corridor
- Increase transportation options and traffic calming interventions
- Promote health, equity, sustainability, and a long-term vision
- Support economic development by promoting real estate reinvestment in underutilized or vacant/abandoned properties
- Bring physical and aesthetic cohesion to the corridor
- Develop incremental tasks for implementation within the next two to five years

Objectives

- Determine the long-term vision for Carnegie Avenue
- Assess and project future traffic flow of Carnegie Avenue with the completion of Opportunity Corridor
- Analyze and identify pedestrian improvements along key intersections and consider infrastructure improvements for other modes, including bicycles and public transit
- Identify economically viable land uses that are complementary to nearby residential uses and that promote walkability and transit use
- Encourage north-south connectivity for residents of Central and Fairfax
- Identify key recommendations for green infrastructure and equitable development

Plan Vision & Strategies

The planning process included three rounds of community engagement. Early in the process, the project team worked with the community to identify strengths, weaknesses, opportunities, and threats as part of an extensive assessment of existing conditions. This worked the Core Team and Steering Committee to adopt the following project Vision Statement:

Carnegie Avenue is a safe, accessible, and vibrant corridor that serves as a “connective tissue” between a unique mix of people, businesses, community assets, and neighborhoods.

This vision translates to a series of guiding strategies designed to improve mobility & neighborhood connections, guide future development & growth, and establish a cohesive public realm & identity throughout the corridor. Broadly stated, these include:

Transportation

- Improve key locations along the corridor where enhancing mobility, land use, and streetscapes will set the tone for future growth of a vibrant, multimodal corridor.
- Create stronger / safer connections to Midtown and the surrounding neighborhoods for people of all ages and abilities.
- Emphasize the movement of people by prioritizing development of infrastructure, public realm amenities, and infill development that puts pedestrians first.

Land Use, Zoning, & Development

- Use infill development opportunities to fill gaps in the urban fabric and make Carnegie a desirable place to be.
- Create a balance between smaller-scale, neighborhood-centered commercial development and larger-scale, auto-oriented development, encouraging and supporting establishment and success of locally owned businesses.
- Celebrate the corridor as a place for creative entrepreneurship through new business models.

Streetscape, Wayfinding, & Identity

- Maintain the quirky mixture and character of the street.
- Beautify the public realm through art, streetscape, and storefront improvements.
- Reinforce Carnegie as the “connective tissue” between people, businesses, and neighborhoods.

Plan Recommendations

Building from these strategies, the Plan identifies nine (9) key concepts and actions, supported by more specific recommendations that can be implemented in stages over time.

Key Concepts & Actions

1. **Enhance the streetscape** to stitch together & beautify the corridor’s fabric, promote walkability, calm traffic, and create opportunities for unique “pockets” of activity and expression.
2. **Invest in place defining improvements between E. 65th and E. 69th** that build upon the success of MidTown Tech and create transformative mobility and development opportunities
3. **Reinforce the commercial district centered on E. 77th Street**, establishing a pedestrian-oriented commercial core for the Corridor
4. **Modify existing zoning district code** to align with the new vision for desired development patterns, smart economic growth, and enhanced mobility options.

5. **Redevelop vacant land and buildings** using a combination of existing tools and new models / strategies to meet the current and future needs of the business and residential markets.
6. **Establish the E. 40th and E. 71st Street corridors as north-south bicycle routes**, enhance them through upcoming capital projects and integrate them into the City's Bike Plan update.
7. **Implement traffic calming & safety measures at all intersections** to reduce crashes, establish gateways, and facilitate safe crossings for all travelers.
8. **Pilot a community circulator** that complements RTA service and connects residents to vital assets within the Midtown, Hough, Central, and Fairfax neighborhoods.
9. **Locate a series of "mobility hubs"** along the corridor to enhance connections to the broader community.

The Plan also identifies two primary focus areas where conditions are ripe for the types of interventions that can help usher in more dramatic transformation of the Carnegie Avenue corridor in the years to come. The Plan recommends a series of transportation, development, and placemaking measures in each area to help improve access and mobility and set the stage for additional investment in the area.

Focus Area 1: E. 65th Street – E. 69th Street

The first area extends from the intersection of E. 65th and Carnegie, where a significant vacant land redevelopment opportunity exists on the south side of the street, to E. 69th Street, where additional vacant land stands poised for investment. It includes anchors such as the MidTown Tech Park, Schaffer Partners, and Cityview Healthcare and Rehabilitation.

Focus Area 2: E. 74th Street – E. 99th Street

The second area extends from the west of the Central Kitchen/Food Hub property, to E. 79th and Carnegie. Visible investments have taken root in this area in recent years and additional improvements to vacant properties, existing buildings, sidewalks & pedestrian networks, and streetscapes can help Midtown capture this momentum and accelerate it to help the commercial district reach its potential.

Implementation Plan

The final section of the Plan outlines a phased approach to implementation, highlighting steps that can be taken in the near-term (1-3 years) to set the stage for future development, as well as those that should be kept in view over the medium to long-term. The Plan concludes with an Implementation Plan Matrix, which summarizes near-term actions and outlines the resources needed to complete them.

1 INTRODUCTION

BACKGROUND

Cleveland's Midtown neighborhood has long been a hub for commercial and industrial activity. Positioned between Chester and Carnegie, from E. 21st Street to E. 79th Street, the neighborhood's logistics assets, including freight rail access and proximity to the interstate system, have attracted and supported businesses for decades. In recent years, however, development in Midtown has evolved to include new and revitalized residences, arts & cultural destinations, health care and health tech facilities, and a focus on businesses that not only produce goods and services, but also cater to local residents and workers. Most of this development has taken place along Euclid Avenue, where significant investment in public infrastructure and amenities has spurred private investment in new and renovated buildings. This shift has brought with it a need and desire to re-envision key pieces of the community, including the transportation network that serves it.

Traversing the southern boundary of Midtown, Carnegie Avenue is a high-volume commuter corridor that connects multiple City neighborhoods and employment centers to the City and the broader region. The avenue also represents a barrier to community accessibility, with wide crossing distances, fast moving traffic, and limited features that support safe, comfortable travel by people on foot, bicycle, or wheelchair. These limitations prevent many of the residents of Midtown, and adjacent neighborhoods of Fairfax, Hough, Central, Asia Town, and Campus District from taking advantage of jobs, services, and other amenities that have made the Midtown area a growing destination for commercial, cultural, and institutional investment. This also includes connections to RTA's HealthLine bus rapid transit (BRT) corridor on Euclid Avenue, which provides valuable transit access to local jobs and services, as well as the broader region.

The opportunity for re-envisioning the Carnegie Avenue Corridor to promote further investment and improved access for all members of the community is magnified by the upcoming completion of the Opportunity Corridor, which stands to significantly impact traffic conditions in several Cleveland neighborhoods when it opens in 2022. The recent investments throughout Midtown, referenced above, further suggest that the profile and function of Carnegie Avenue, and the north-south community connectors that cross it, warrant new thinking and a more specific focus on the movement of people, and not just cars. Simultaneously evaluating the corridor's land will further align and magnify potential gains from this new vision, enabling a future Carnegie that continues to serve the region, while also supporting the neighborhoods and residents closest to it.

The Carnegie Avenue Corridor Study is sponsored by the City of Cleveland. The study is supported by the Northeast Ohio Areawide Coordinating Agency (NOACA), which provided funding for the project through the Transportation for Livable Communities Initiative (TLCI) and is represented on the Core Team, along with MidTown Cleveland and the Cleveland City Planning Commission.

The study began with analysis of past plans and current conditions, and included evaluation of transportation alternatives, land use & nodal recommendations, and streetscape & wayfinding enhancements. These study elements were vetted through a series of community engagements, including the project Steering Committee. The transportation component of the study extends from E. 30th Street to E. 105th Street, with traffic counts at the intersections marked in **Figure 1**, below, while the land use study is focused between E. 55th Street and E. 79th Street.

Figure 1 Carnegie Avenue Study Area



NOACA's TLCI provides assistance to communities and public agencies for integrated transportation and land use planning, and projects that strengthen community livability. TLCI advances the goals of NOACA's Regional Strategic Plan by:

- Developing transportation projects that provide more travel options
- Promoting reinvestment in underutilized or vacant/abandoned properties
- Supporting economic development
- Ensuring that the benefits of growth and change are available to all community members
- Enhancing regional cohesion
- Providing people with safe and reliable transportation choices

The project Steering Committee included representatives of the following organizations. Core Team members are **in bold**:

- **MidTown Cleveland**
- **Cleveland City Planning Commission**
- **Northeast Ohio Areawide Coordinating Agency**
- Cleveland City Councilwoman Phyllis Cleveland, Ward 5
- Cleveland City Councilman Blaine Griffin, Ward 6
- City of Cleveland, Traffic Engineering
- Greater Cleveland Regional Transit Authority
- Ohio Department of Transportation
- Midtown residents
- Burten Bell Carr
- Fairfax Renaissance Development
- Campus District
- University Circle Inc.
- Cleveland Clinic Foundation
- University Hospitals
- LAND studio

- PNC Fairfax Connection
- MidTown Cleveland Board of Trustees

Figure 2 Carnegie Avenue, Looking East (from E 30th Street)



Source: Aerial Agents

GOALS & OBJECTIVES

The project's goals and objectives were established by the project co-sponsors to provide guidance throughout the planning process. They include the following:

Goals

- Re-envision the identity of the transportation corridor
- Increase transportation options and traffic calming interventions
- Promote health, equity, sustainability, and a long-term vision
- Support economic development by promoting real estate reinvestment in underutilized or vacant/abandoned properties
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- Analyze and identify pedestrian improvements along key intersections and consider infrastructure improvements for other modes, including bicycles and public transit

- Identify economically viable land uses that are complementary to nearby residential uses and that promote walkability and transit use
- Encourage north-south connectivity for residents of Central and Fairfax
- Identify key recommendations for green infrastructure and equitable development

2 UNDERSTANDING THE CORRIDOR

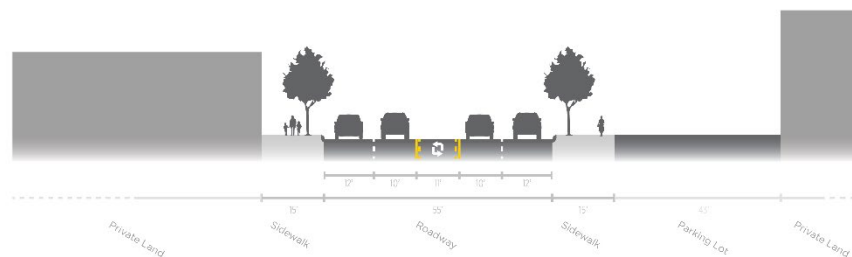
In order to achieve the study's goals and objectives, the Consulting Team worked with the Core Team and Steering Committee to conduct an analysis of current conditions, including transportation, land use, development, zoning, and streetscape conditions throughout the corridor. This analysis led to a summary of strengths, weaknesses, opportunities, & threats (SWOT) that helped to establish a vision for the corridor and guide strategy development.

TRANSPORTATION

Carnegie Avenue is a 5-lane, 35 MPH arterial roadway that serves as one of the City of Cleveland's primary commercial and industrial thoroughfares. The typical cross section west of E. 55th Street includes 85 feet of public right-of-way, with 55 feet of curb-to-curb roadway width and 30 feet of sidewalk and amenity space.

Figure 3 Carnegie Avenue, Between E. 36th – E. 40th Street

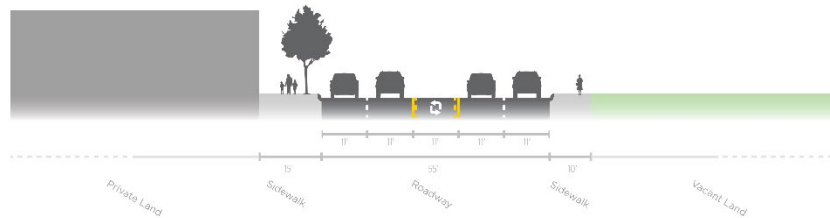
Carnegie Ave. between 36th St. & 40th St. Existing Conditions | Looking East



The typical cross section east of E. 55th Street includes 80 feet of public right-of-way, with 55 feet of curb-to-curb roadway width and 25 feet of sidewalk and amenity space. The roadway's 5 lanes include two continuous through lanes in each direction and one continuous center turn lane.

Figure 4 Carnegie Avenue, West of E. 77th Street

Carnegie Ave. at 77th St. Existing Conditions | Looking East



The configuration changes twice adjacent to the Cleveland Clinic campus – first with an added westbound right-turn lane at E. 89th Street, and next widening to 112 feet near the intersection with E. 105th Street. The only location where on-street parking is allowed is on the south side of Carnegie, between E. 77th and E. 79th, during off-peak hours (9 AM – 4 PM).

Nelson\Nygaard led the analysis of transportation conditions along Carnegie Avenue, from E. 30th Street to E. 105th Street. Twenty-four-hour traffic counts were conducted over a 4-day period from October 25-28, 2018 at three locations and turn movement counts were collected at 8 intersections on October 25th. Traffic count data, observed roadway configurations, and signal timings provided by the City of Cleveland were modeled in the Synchro 9 traffic modeling software. **Figure 5** provides an overview of the results. *A more comprehensive review of the outputs can be found in the Existing Conditions Report, which is available as a separate document.*

What is Level of Service?

Level of Service (LOS) is a metric used to describe varying traffic operations conditions. It uses an alphabetical scale from A to F to describe traffic operations at an intersection, where A represents free-flowing conditions with little to no delay, and F represents extremely constrained operations with a large amount of expected delay. LOS can generally be categorized as follows:

- **LOS A & B** – Stable traffic flow, with little delay for vehicles. May indicate excess capacity and lead to inappropriate traffic speeds.
- **LOS C & D** – Stable traffic flow with tolerable delays. Often a good target for cities.
- **LOS E** – Unstable traffic flow with longer delays. Not ideal, but may be acceptable for short periods, especially if it facilitates safe/convenient pedestrian movement.
- **LOS F** – Congested conditions. Generally not acceptable.

only 25 bikes counted.

Key Findings

Level of Service and Delay

All signalized intersections operate at Level of Service (LOS) C or better during both AM and PM peaks, indicating “stable traffic flow with tolerable delays.”

Turning Movements

- All turning movements from E. 30th Street to E. 79th Street are fairly low during the AM peak (50 or less), with the exception of AM eastbound left turns at E. 30th Street (211 vehicles).
- Turning movements are somewhat higher in the PM overall, but follow a similar pattern to the AM movements.

24 Hour Counts

- Weekday daily traffic is between 31,000 – 36,000 vehicles, which is at the upper end of what ODOT defines as a “principal arterial.”
- The weekday PM peak shows the greatest overall volumes
- AM peak volumes are greater in the eastbound direction in the western and central portions of the study area, but greater heading westbound in the vicinity of the Cleveland Clinic. The opposite is true during the PM peak.
- Weekday volumes dip significantly between the AM and PM peaks, and fall off rapidly when the PM peak ends.
- Weekend volumes are greatest during the midday peak but are still well below the AM and PM weekday peaks.

Pedestrians & Bicycles

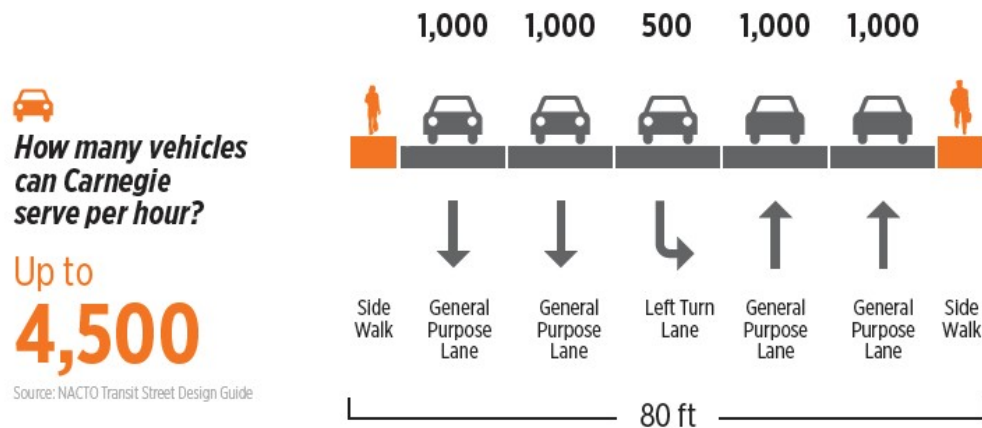
- Pedestrian counts during the AM and PM peaks ranged from 43 at the intersection of E. 71st Street, to 3,042 at E. 105th Street, adjacent to the Cleveland Clinic. Other notable intersections included E. 89th (1,006) and E. 30th (212).
- Bicycle counts were low along the entire corridor, with a total of

Figure 5 Carnegie Avenue Traffic Volumes & Vehicular Level of Service



According to the National Association of City Transportation Officials (NACTO) standards, each of Carnegie's through travel lanes has capacity to carry approximately 1,000 vehicles per hour, while the center turn lane accounts for another 500. As this standard and the results of the above Synchro analysis illustrate, Carnegie's existing conditions provide ample capacity to facilitate stable traffic flows with minimal delay.

Figure 6 Existing Carnegie Avenue Vehicular Capacity



Opportunity Corridor Impacts

The Opportunity Corridor is a 3.6-mile boulevard that will run from E. 55th Street at I-490 to E. 105th Street at Chester Avenue in University Circle when complete in 2021. The 5-lane roadway is intended to increase access and connectivity between the interstate system and a number of Cleveland's East Side neighborhoods by including a series of new intersections, sidewalks, and an

off-road multi-use path. Phase 1 of the project, which connects Quebec Avenue to Chester Avenue along E. 105th Street, was completed in 2018.

Figure 7 Opportunity Corridor, South of Cedar Avenue (looking north)



The Opportunity Corridor traffic model provided by NOACA was reviewed for projected impacts to Carnegie Avenue traffic volumes. The model projects volumes in 2040 along Carnegie that are largely unchanged from today's volumes. The most significant impacts are projected for the corridor's north-south streets, including E. 30th Street, E. 36th Street and E. 55th Street. For the purposes of this analysis, the annual change was prorated over the next 6 years, showing forecasted impacts by 2025. While these north-south streets are forecasted to see between 10% – 24% less traffic by 2025, Carnegie itself is expected to see only a slight decrease of between 2% - 4%. These findings led to the conclusion that the Opportunity Corridor could not be expected to significantly change the use of Carnegie as an east-west commuter route in the near-term.

Transit

Figure 8 Transit Serving Carnegie Avenue & Adjacent Corridors



While Carnegie Avenue itself carries no transit lines, there are several RTA routes that cross the corridor or provide service along adjacent corridors. The Euclid Avenue HealthLine is the most significant among these, carrying more than 2 million riders during the first half of 2017, for which data was provided by GCRTA. In total, the routes that either run parallel to or cross Carnegie Avenue carried more than 3 million passengers between January and June 2017.¹

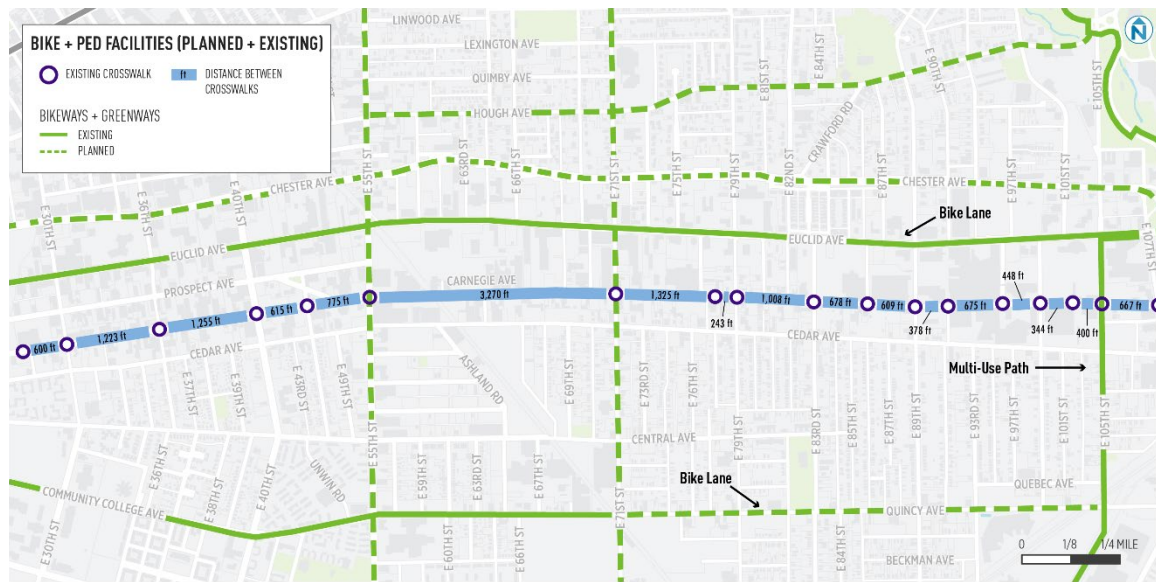
Active Transportation

As is outlined in the previous sections, Carnegie Avenue is an arterial that primarily serves automobile traffic. Adjacent corridors and crossing streets provide a series of active transportation network (bicycle & pedestrian) connections to complement Carnegie's vehicular function. **Figure 9** illustrates the network of existing and planned bicycle facilities, which include bike lanes on Euclid Avenue and Community College Avenue and multi-use paths along E. 105th Street and Martin Luther King, Jr. Drive.

Relative to pedestrian connections, continuous sidewalks of at least four feet are provided throughout the corridor. However, as **Figure 9** illustrates, there are significant gaps between marked north-south crossings in some areas. The distance between E. 55th Street and E. 71st Street is the most significant example, with more than .6 miles between marked crossings.

¹ Source: Greater Cleveland Regional Transit Authority (GCRTA)

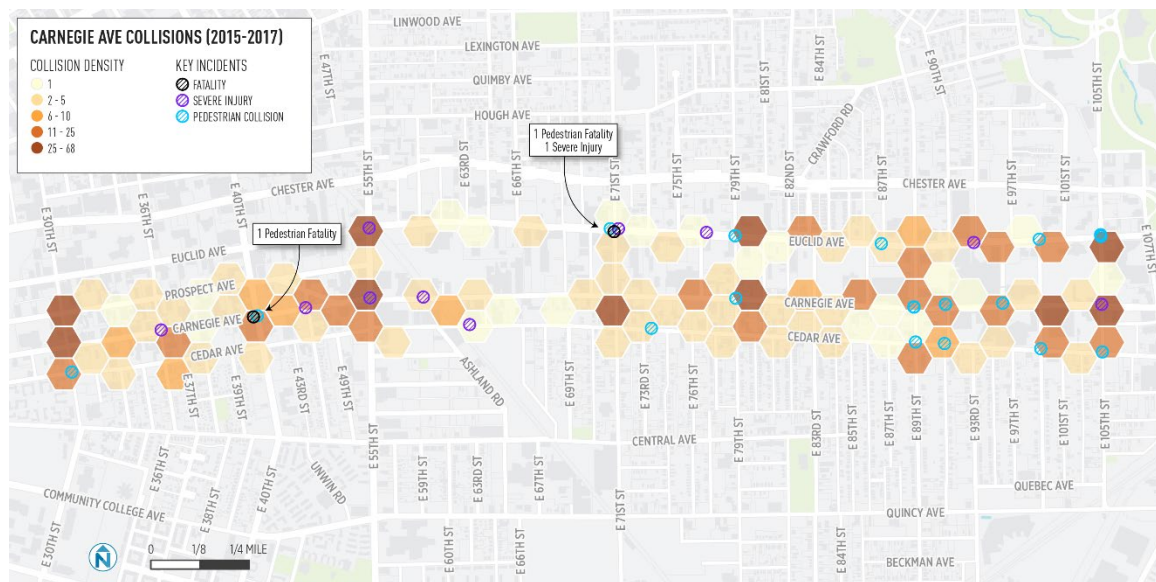
Figure 9 Existing & Planned Bicycle Facilities



Crashes

Crash data for the corridor was collected from NOACA and the Ohio Department of Transportation for the most recent period available (2015-2017). While a detailed analysis of crash type and conditions was not performed as part of this study, **Figure 10** provides a high-level view of crash “hot spots,” including several locations on or adjacent to Carnegie Avenue where pedestrian collisions, fatalities, and severe injuries were reported.

Figure 10 Collisions Along Carnegie Avenue & Adjacent Corridors



LAND USE & DEVELOPMENT

Beyond the analysis of Carnegie Avenue traffic, transportation, and right-of-way conditions, this study also took a closer look at land use, zoning, & development of the area between Euclid and Cedar Avenues from East 55th Street to East 79th Street. Parcel sizes, building position and setbacks, and land uses were studied across current and historic maps to get a better understanding of development patterns over time and the general character of the corridor today.

Figure 14 includes a summary of recent planning efforts and development projects.

According to old plat maps, Carnegie Avenue, or East Prospect Street as it was originally named, was built sometime in the 1860s or early 1870s. This road bisected a number of deep lots that extended from Euclid Avenue to Cedar Street, many of which were prominent residences that fronted Euclid. Gradually, frontages were split off from these large properties and smaller lots of 40-60 feet in width were cut in to front East Prospect. These contained homes, small businesses, and a few churches. East Prospect Street was renamed Carnegie Avenue SE in 1906 when Cleveland's City Council passed an ordinance that adopted a new city-wide street naming and numbering system.

Gradually, more manufacturing and industrial facilities took over lots near to the railroad and began spreading down the street. Some buildings were contained on the narrow lots, while others consolidated adjacent parcels to construct wider structures. Hotels and apartment buildings also dotted some of the existing and newly cut north-south corridors, namely East 65th, East 69th, and East 71st Streets. The emergence of the automobile brought with it a number of repair shops and gas stations. By the end of the 1930's, nearly all of the large residential tracts of land that fronted Euclid Avenue and extended through to Carnegie had been replaced with subdivided lots, larger buildings, and a range of front and side setbacks. It was during this time that the development patterns that we see today started to emerge.

The irregular feel of the Carnegie Avenue corridor is a result of decades of development with minimal regard for matching adjacent setbacks. Owners often looked at Carnegie as the backside of their property while addressing either Euclid or Cedar Avenues as frontages. Front setbacks varied from those buildings that were built up to the right of way, to others that align more with where the old residential structures formerly sat. Others are pushed nearly a third of the way into the block to allow for deep parking lots along the Carnegie frontage.

Buildings themselves are largely made of masonry and stone. Stylistically, they reflect the eras in which they were built. Heights range from four- and five-story warehouses, like the Warner-Swasey building, to one- and two-story manufacturing facilities, garages, and food establishments.

Figure 11 Various Land Uses on E. 71st Street at Carnegie, Looking North



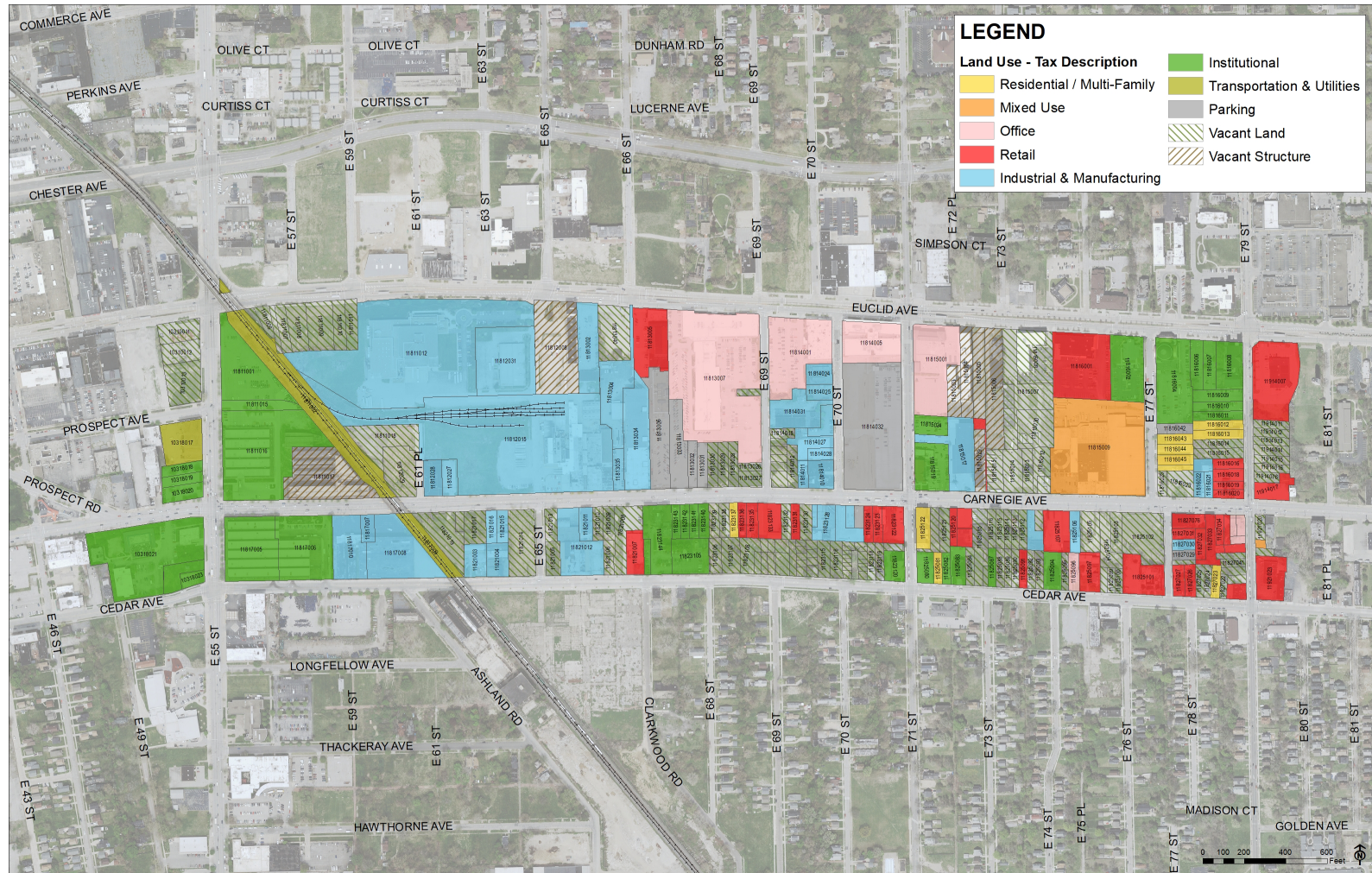
The existing land uses (see **Figure 12**) in the core focus area are largely a mix of industrial, commercial, and retail with a limited amount of residential. The juxtaposed uses on the map resemble a patchwork quilt – the random arrangement and sometimes incongruent adjacencies leave the corridor feeling disorganized. At times, users and visitors may feel as though they do not belong based on what they see next door or as they go down the street.

It is important to note that there is a significant amount of vacant and underutilized land along this section of Carnegie Avenue. By combining all types of vacant land, regardless of classified use, vacant land accounts for more than 29 acres of the focus area. This number does not include open space on larger parcels that contain buildings, parking lots or other active uses on one part of the property. Given that the total acreage of the focus area is about 140 acres, vacant land represents 21% of this core area of Carnegie Avenue.

Even though vacant land is typically viewed as a negative characteristic, it can be considered an opportunity to provide meaningful transformation such as green and other public open space. This could be the chance to change permitted uses of key properties so that they can be redeveloped as supportive or more compatible uses to their neighbors and begin to build in some transitions. Shorter or narrower parcels can be rebuilt with smaller-scale uses and businesses, harkening back to their past, to balance out some of the larger-scale ones that exist today. Land use could be the key to unlocking the redevelopment potential of this area.

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Figure 12 Existing Land Use



ZONING

A majority of the properties in the focus area are zoned one of the four Midtown Mixed Use District sub-areas. Those sub-areas are defined as follows:

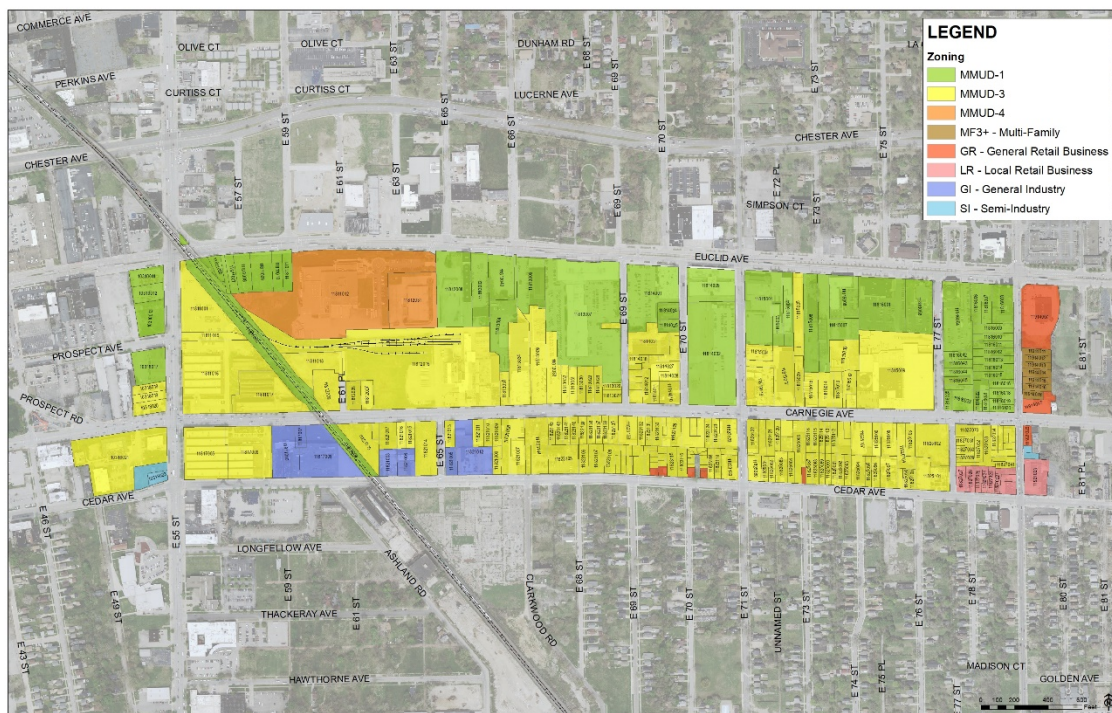
Euclid Corridor Development Sub-Area (MMUD-1): Provides for a mix of land uses to be built at higher densities; requiring the siting of buildings closer to the front property line and closer to each other; facilitating pedestrian access to the proposed transit stops and to buildings; and encouraging the location of retail shops, plazas and other pedestrian amenities at the ground level of buildings.

Chester Corridor Development Sub-Area (MMUD-2): Provides for a residential area of medium density adjacent to the existing residential areas on the north side that reinforces the landscaped character of Chester Avenue and permits expansion of the Euclid Corridor Development Area patterns when a mixed-use project extends to Chester Avenue from Euclid Avenue.

Carnegie Corridor Development Sub-Area (MMUD-3): Provides for a mix of uses that includes accommodating auto-oriented retail and light industrial uses in a manner that encourages placing buildings near the street with landscaping along the frontage.

Chester Corridor West Development Sub-Area (MMUD-4): Provides for light industrial uses in a manner that encourages placing buildings near the street with landscaping along the frontage.

Figure 13 Existing Zoning



Most of the properties that front the corridor are zoned MMUD-3, as would be expected. Two blocks carry the MMUD-1 classification through from Euclid to Carnegie, and a few parcels are

still zoned for General Industry or Retail Business. Since this portion of the Zoning Code was adopted in 2005, there are a number of existing uses along the corridor that are considered non-conforming today and have essentially been grandfathered in place.

According to input collected throughout the planning process, some setback and site development requirements of the MMUD-3 make it challenging for new development to take a more urban and pedestrian form. Despite a minimum front setback of as little as five feet, owners and developers along the corridor have the tendency to lean more towards the 30-foot maximum. The planning team has heard that neighborhood planners and community development organizations want to have more control over the design than they currently have under the existing framework.

The planning team had conversations with the City and with individuals who helped inform and develop the existing Midtown Mixed Use District zoning guidelines to obtain a better understanding of its intent. It was developed to encourage transit-oriented development and a mix of uses within the Midtown district, including retail, residential, offices, and light industrial. Further, it aimed to expand the available economic development options while strengthening those which already existed. Another goal was to encourage a pedestrian-friendly development pattern along Euclid Avenue to support the GCRTA's Euclid Corridor Transportation Project by increasing employment and residential densities in close proximity, and also relax some of the requirements on the alternate corridors to be inclusive of other uses that could not meet the stringent Euclid Corridor guidelines.

Development Trends & Projections

Over the past 10 years, the Midtown neighborhood has experienced more than \$300 million in investment and development (See **Figure 14**). The pace of development has accelerated in recent years, with roughly half of that total coming between 2015 – 2018. Much of the development has occurred along the Euclid Avenue Corridor, with projects like MidTown Tech, Dealer Tire, and Link59, but there have been additional signs of growth with new development to the north (Chester Avenue) like Dave's Market and south (Carnegie Avenue) like Food Hub/Central Kitchen.

Over the next 10 years, MidTown Cleveland, Inc. expects that much of the major development between E. 55th and E. 79th Streets will begin to span the north-south corridors of E. 55th and E. 66th Streets and their surrounding nodes. These developments will likely include innovation (tech, food, small business incubators, etc.) in commercial and industrial uses. In addition, they are working to balance the mix of uses by increasing the number of residential units in the neighborhood – particularly workforce and/or mixed-income housing. They also envision increasing the amount of mixed-use developments to include residential and/or office uses along the corridor.

Figure 14 Recent Planning Efforts & Development Projects



- | | |
|--|--|
| 1. Tru by Hilton Hotel (2019) | 11. One Midtown Townhomes (2017) |
| 2. Cleveland Foundation Future HQ (2022) | 12. Phoenix Building (2017) |
| 3. UH Rainbow Center (2018) | 13. Dealer Tire HQ (2016) |
| 4. Dave's Market (2018) | 14. Third District Police Station (2015) |
| 5. MidTown Tech Hive (2018) | 15. BBC Central Neighborhood Plan (2014) |
| 6. Dunkin' Donuts (2020) | 16. Fairfax Strategic Investment Plan (2014) |
| 7. Masonic Auditorium Restoration (2018) | 17. East 55 th & Euclid TLCI (2012) |
| 8. 3800 Euclid Renovation (2018) | 18. Cleveland Clinic Master Plan (2012) |
| 9. Central Kitchen / Food Hub (2019) | 19. League Park District TLCI (2012) |
| 10. Link59 (2017) | 20. MidTown Plan (2008) |

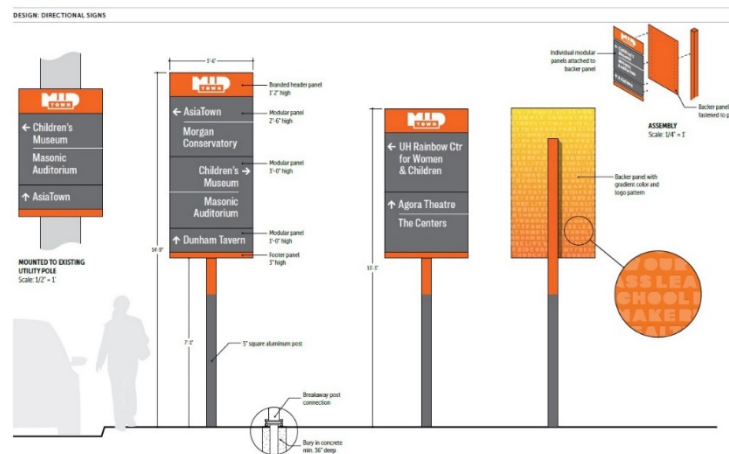
STREETSCAPE, WAYFINDING, & IDENTITY

The Carnegie Avenue corridor currently suffers from poor streetscape and wayfinding conditions and lacks a unifying identity. However, there are improvements on the horizon with the upcoming implementation of the MidTown Wayfinding Plan and installation of bright banners that help to identify the corridor as part of the Midtown neighborhood and highlight community assets.

Figure 15 Carnegie Avenue Streetscape Conditions



Figure 16 MidTown Wayfinding Sign Family



ENGAGEMENT PROCESS

The study featured three (3) rounds of community engagement, led by the project's Core Team and Steering Committee, in coordination with the Consulting Team. A full summary of the engagement effort is included in the "Community Engagement Summary," which is provided as an appendix to this report. The first round of engagement included a meeting with the Steering Committee, a Community Open House, and a Community Survey. More than 400 people contributed feedback during the initial outreach effort, providing insights on the corridor's strengths, weaknesses, opportunities, and threats (SWOT), setting the foundation for the evaluation of alternatives over the remainder of the planning process.

Figure 17 Open House1 – Community Feedback Map Outputs



The second round of community engagement included two meetings with the Steering Committee and another Community Open House. These meetings focused on sharing the evolution of draft concepts, strategies, and alternatives. Input was sought from the community on opportunities to improve mobility & connections, neighborhood & economic development, and identity, placemaking, and wayfinding. While mobility concepts and strategies were evaluated across the full study area, a sharper focus was developed around the focus areas in the core study area that evolved as a result of the first phase of work:

- E. 55th – E. 65th Streets
- E. 65th – E. 71st Streets
- E. 71st – E. 79th Streets

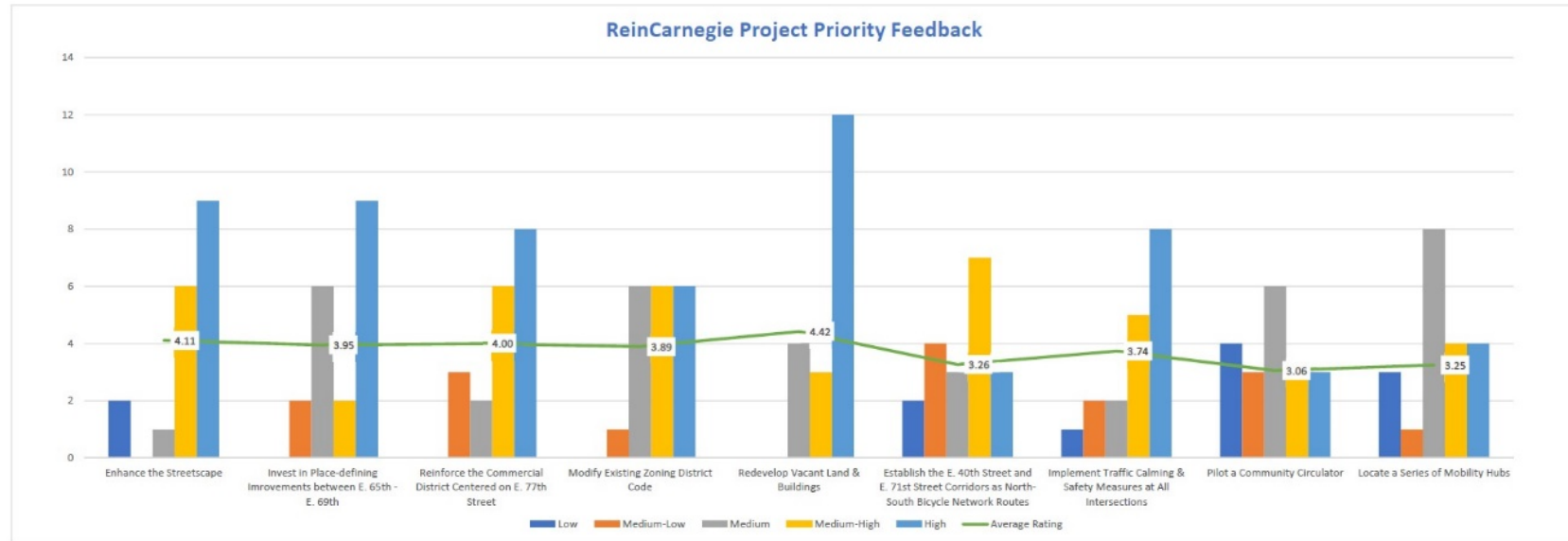
Figure 18 Open House2 – Focus Area Feedback Stations



The third round of community engagement included a final meeting with the Steering Committee to review key concepts and recommendations that would be included in the final plan. The focus of the final Community Open House was communicating these concepts and potential impacts, gathering feedback on how well the recommendations responded to the plan vision, and identifying which recommendations should be prioritized for implementation (see **Figure 19**).

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Figure 19 Open House3 – Project Priority Feedback Results



STRENGTHS, WEAKNESSES, OPPORTUNITIES, & THREATS

The analysis of the corridor's strengths, weaknesses, opportunities, and threats (SWOT) was completed during the first stage of community engagement. Additional details on this analysis are included in the Existing Conditions Report, but a summary of key findings is provided below.

Strengths

Carnegie Avenue's biggest strength, as heard from community stakeholders, is its role as a connector. It connects Cleveland and the broader region from east to west, as well as providing neighborhood access throughout the study area. It provides a link from I-90 to key destinations such as Downtown, University Circle, the Cleveland Clinic, University Hospitals, Cleveland State University, Case Western Reserve University, and other activity and job centers. This, coupled with the fact that the roadway is consistently five lanes wide, means that Carnegie has the ability to move a high volume of automobiles efficiently along its 3+ mile extent.

Community members also called attention to the need to preserve and promote the wealth of African American heritage associated with this area. Historic sites include the Leo's Casino site and the homes of Langston Hughes and Jesse Owens. African American businesses and places of worship have also long called the corridor home. The storied name of "Carnegie" also brings a number of historical ties.

Other strengths include the corridor's diversity of building types and wide range of uses.

Weaknesses

As strong as Carnegie Avenue is for automobiles, it lacks support for other modes. It is true that there is a generously wide sidewalk on both sides of the street for most of the corridor; however, it is a very unpleasant experience for pedestrians. There is little to no vegetation or softscape to break up the otherwise harsh, gray environment, no pedestrian scale lighting, and a lack of benches, trash cans, or other amenities to make a person traveling on foot feel welcome. Other than a staggered line of utility poles and the occasional row of tree pits, there is little refuge or buffer from the high volumes of traffic, leaving pedestrians and cyclists alike feeling vulnerable. Bicyclists tend to choose to ride on other adjacent corridors to limit their exposure to the high volume and speed of automobiles on Carnegie.

Access beyond the predominant east-west movement has challenges. Some participants explained that it is a challenge to get to important locations such as The City Mission, Ohio Guidestone, and Cityview Nursing and Rehab Center. Both the traffic study and the community feedback showed that north-south connections are an issue. The signalization timing at East 77th and East 79th Streets causes vehicles to back up on those two streets. Also, the north-south pedestrian connections are either inadequate, in poor condition, do not feel safe where they exist, or are non-existent at the western end of the focus area, causing individuals to walk a half-mile before they can cross at a signalized intersection.

As it stands today, there are relatively few destinations for pedestrians along this stretch of Carnegie Avenue. There are few restaurants, coffee shops, or other public gathering spaces. Most of the land uses and businesses are automobile-oriented and give little consideration for visitors arriving by any other means. The buildings tend to be set back from the right-of-way and have a

parking lot for their frontage; others may be set closer to the roadway, but the access is toward the rear of the facility. Some criticized that the code allowed for and contributed to an undesirable, less pedestrian-friendly environment. The large amount of vacant land and buildings were cited as another primary weakness of the corridor today.

Opportunities

Opportunities identified by stakeholders throughout the planning process focused on vacant property re-use, mixed-use development, new business development, improved local and regional bicycle and pedestrian connections, enhanced streetscape and greenspace, and opportunities for development of locally-owned convenience and entertainment businesses. Additional responses included:

- Technology, marketing, and design businesses & training centers
- Recreation and gathering spaces for kids & adults
- Parking opportunities for future development
- Treatment center
- Dinner theater, restaurants, gastropubs
- Multi-family housing
- Light industrial rentals - subsidized for small businesses
- Bring back of house production uses to the street frontage for greater visibility
- Ground floor live/work with residential above or behind
- Regional bikeway connection via dedicated/protected facility

Threats

The Steering Committee and community conversations produced a series of concerns over potential *threats* to achieving the project's goals and objectives. Responses included:

- Parking challenges as retailers build out at the Food Hub and other retail locations
- Current zoning allows for "undesirable" and less pedestrian friendly land uses and building form
- "Business as usual" car-dominated land use and businesses
- Lack of small businesses along the corridor to generate activity or identity
- Existing road design leads to safety concerns with high car volumes and speeds
- The condition of roadway itself
- Ensuring continued vehicular capacity to support commuters and businesses
- Gentrification (when the investment comes, who will benefit?)

SWOT SUMMARY

The following summaries represent the synthesis of the SWOT Analysis, relative to each of the project's three primary topics: transportation, land use & development, and streetscape, wayfinding & identity.

Transportation

Vehicular access and traffic flow are both primary strengths and weaknesses, but do not need to be sacrificed in order to improve the corridor for all users.

- Current vehicular level of service (LOS) suggests that adjustments to better accommodate non-vehicular modes and improve north-south connections could be made, but community concerns about the “spillover” effects of reducing capacity on Carnegie outweigh the desire for “road diets” and other more progressive traffic calming strategies.
- Opportunity Corridor projections show low reduction in volume along Carnegie, but significant reduction on several north-south streets.
- Opportunities for pedestrian enhancements are readily apparent within the study area, but bicycle and transit improvements will be more challenging to achieve.

Land Use & Development

Building and property vacancies have been a weakness along the length of the corridor, but they provide a tremendous opportunity for meaningful transformation.

- Existing zoning has not encouraged / supported desired development outcomes and can be brought in line with the vision developed through this planning process.
- The rich mix of land uses and parcel sizes presents challenges, but also brings flexibility into redevelopment strategies.
- Focused development around key nodes can help to establish identity and strengthen north-south connections.
- Commercial opportunities should be created to benefit, serve, and capitalize upon local assets, community members, and entrepreneurs.

Streetscape, Wayfinding & Identity

Carnegie’s bleak public realm creates an opportunity for real, visible change.

- Streetscape and sidewalk conditions vary; a simple set of unifying elements (lighting, landscaping, frontage standards, street trees, and medians) can make a dramatic difference greatly improve the feel of the corridor for all users.
- Incorporating streetscape details that support safer movement along and across Carnegie will be critical to supporting mobility and development objectives.
- Art, signage, and wayfinding can be used to establish a corridor identity, including incorporation of the historic “Carnegie” name neighborhood heritage.

These findings informed the development of a plan “vision” and the evolution of strategies to achieve the plan’s goals and objectives.

3 PLAN VISION & STRATEGIES

THE RE-INCARNEGIE VISION

During the first phase of community engagement, the Core Team developed a brand for the plan that highlighted the themes of “rebirth” by reconnecting, rethinking, and reinvesting in the corridor. The “Re-inCarnegie” Vision was developed by the Core Team based on Steering Committee and community feedback.

Figure 20 Re-inCarnegie Logo & Vision



The Vision:

Carnegie Avenue is a safe, accessible, and vibrant corridor that serves as a “connective tissue” between a unique mix of people, businesses, community assets, and neighborhoods.

TRANSPORTATION

This vision translates to a series of transportation strategies designed to improve pedestrian mobility along the corridor and multimodal neighborhood connections. Broadly stated, these include:

Improve key locations along the corridor where enhancing mobility, land use, and streetscapes will set the tone for future growth of a vibrant, multimodal corridor.

Create stronger / safer connections to Midtown and the surrounding neighborhoods for people of all ages and abilities.

Emphasize the movement of people by prioritizing development of infrastructure, public realm amenities, and infill development that puts pedestrians first.

More specifically, the following measures should be pursued to achieve the plan’s objectives:

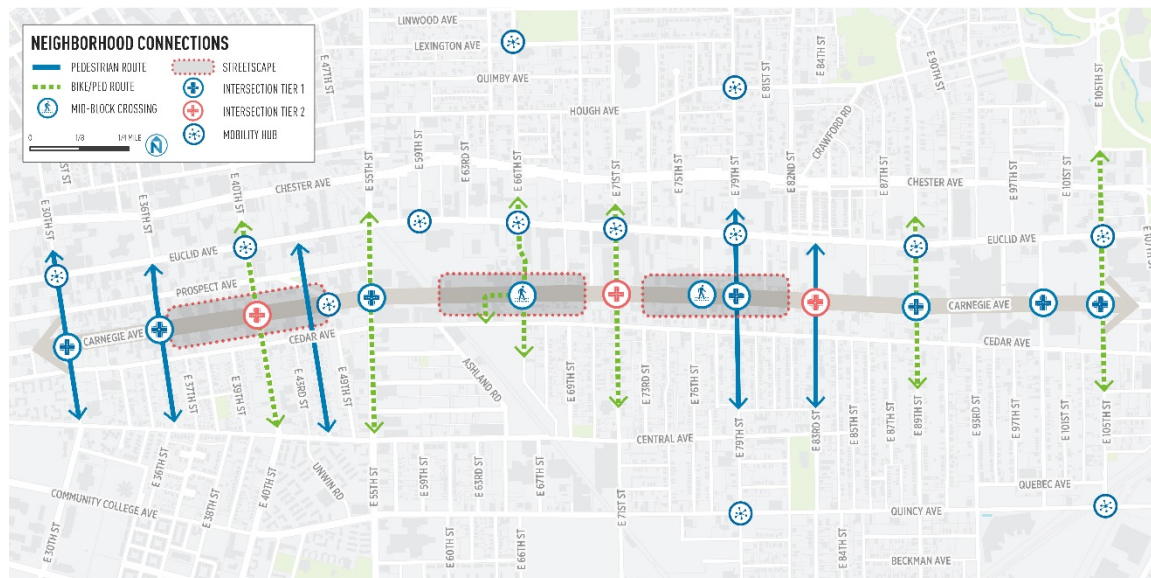
- Install a series of intersection improvements and streetscape enhancements that calm traffic and improve pedestrian safety and circulation.
- Install mid-block crossings and/or new signals in areas where crossings are already occurring or where significant gaps exist.
- Identify north-south bikeway routes and facility types to encourage healthy, active transportation.
- Install on-street parking zones to support local businesses and calm traffic in key areas.

- Pursue other strategic opportunities, including shared micromobility (bikes, scooters, etc.), transit waiting enhancements, and transportation demand management.

Nighborhood Connections & Transportation Alternatives

As outlined in the previous section, Carnegie Avenue both contributes to and serves as a barrier to neighborhood connections. Through a series of strategies outlined in this section, the project partners can begin to facilitate better connections throughout the community and, in particular, along the north-south corridors that cross Carnegie and stitch together the Midtown, Campus District, Central, Fairfax, and Hough neighborhoods. **Figure 21** provides an overview of the neighborhood connection opportunities throughout the corridor, again emphasizing opportunities to improve conditions for people traveling by foot or bicycle, while not compromising Carnegie's role as a commuter arterial for automobiles. (See **Figure 23** and **Figure 24** for descriptions of "Tier 1" and "Tier 2" intersection opportunities.)

Figure 21 Neighborhood Connections



Throughout the project, community stakeholders made clear that Carnegie Avenue is not currently a comfortable place to walk or bicycle and that improvements should be made to facilitate safety, convenience, and attractiveness of these travel modes. However, they also made clear that shifting automobile traffic volume to adjacent corridors like Euclid Avenue and Cedar Avenue was not desired. The consulting team considered a series of alternatives that would improve pedestrian and bicycle facilities and evaluated impacts on the corridor's vehicular traffic.

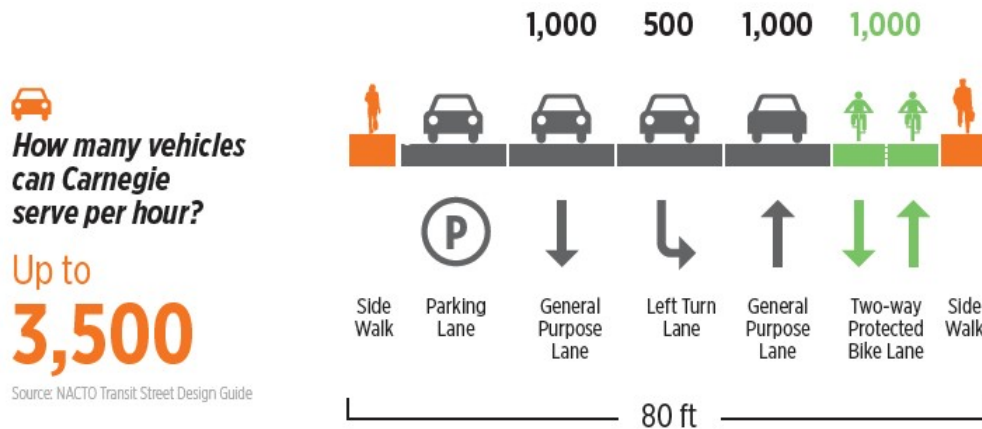
The following options were examined and tabled for future consideration:

- **Install curb extensions at intersections** to slow traffic, shorten crossing distances, and create "gateway" opportunities.
- **Put Carnegie Avenue on a "road diet,"** removing two through lanes and retaining one through lane in each direction, plus one continuous center turn lane.

- **Develop a protected east-west bicycle facility** to facilitate regional bicycle connections that are not currently provided by existing or planned facilities.

Each of these alternatives was considered as an evolution of the traffic model developed during the Existing Conditions Analysis. **Figure 22** shows the change in capacity if two travel lanes are removed and repurposed, for example, as a protected bikeway and a parking lane.

Figure 22 Carnegie Avenue Vehicular Capacity with Lane Changes



While these numbers are in line with the current peak travel periods on Carnegie (as illustrated in the 24-hour counts during the Existing Conditions Analysis) they do not adequately account for the unique conditions at individual intersections, including signal timing, north-south travel, and turn movements, for example. The Synchro traffic model, which does account for these factors, found that the reduction in lane capacity would lead to an unacceptable increase in travel delays for vehicles moving both east-west and north-south throughout the corridor. The PM peak was the most problematic, with LOS "F" at E. 55th, E. 71st, E. 79th, and E. 105th.

With current travel patterns dominated by drive-alone commutes, a significant amount of traffic would need to shift to adjacent corridors like Euclid and Cedar. These measures are, therefore, not recommended under current conditions, but there are future scenarios that may make them more feasible. For example, if the completion of the Opportunity Corridor leads to greater shifts in travel away from Carnegie or if regional travel behaviors shift significantly away from drive-alone trips, reducing automobile capacity on Carnegie could become a more viable, community supported option.

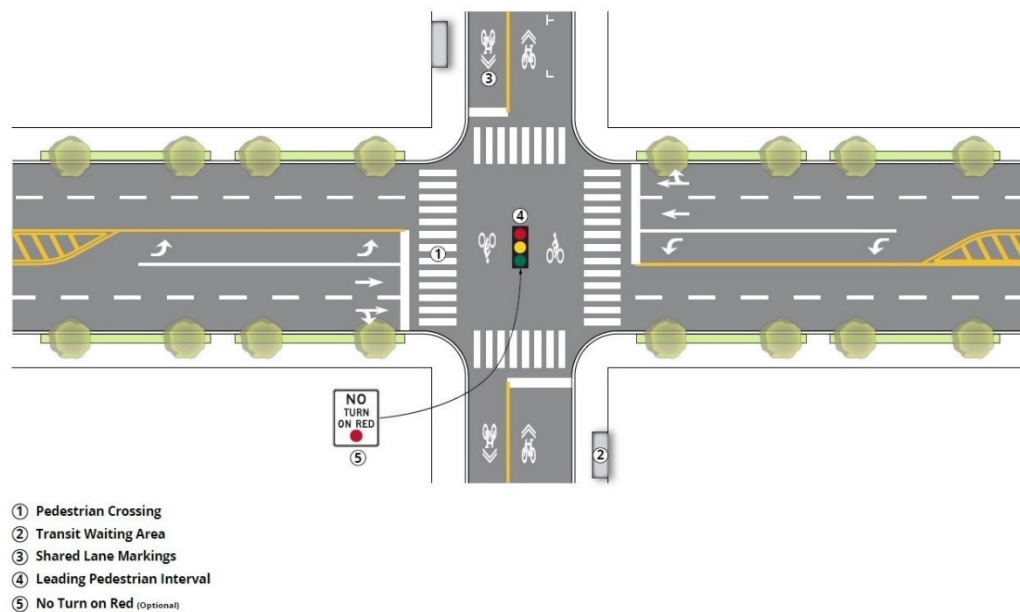
Mobility Strategies

While dramatic changes to Carnegie Avenue's vehicular function are not recommended in the short-term, there are several measures that can be implemented throughout the corridor to make progress toward the plan's vision over the next several years. This section summarizes a series of mobility strategies that could be pursued by project partners. They also inform the final plan recommendations in the next section of this report.

Install a series of intersection improvements and streetscape enhancements that calm traffic and improve pedestrian safety and circulation.

Signalized intersections along the corridor share a fairly consistent context and layout, with the exception of E. 55th Street, E. 89th Street and E. 105th Street. At the remaining intersections, a series of improvements can be made to facilitate safe crossings and improved connectivity, while not sacrificing significant (if any) automobile capacity. **Figure 23** shows “Tier 1” options, which include high-visibility crosswalks, transit waiting enhancements (bus shelters, benches, waste receptacles, etc.), shared lane markings for bicycles, and potential modifications to traffic signalization to facilitate safe crossing.

Figure 23 Intersection Improvement Options – Tier 1



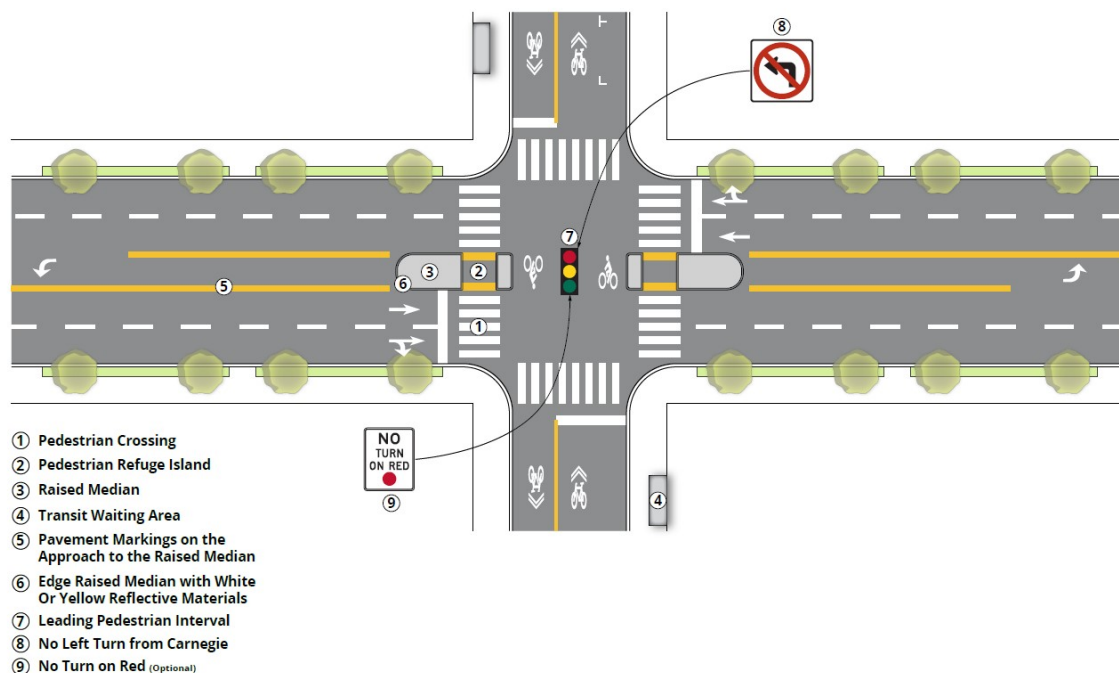
The “Tier 2” measures illustrated in **Figure 24** include the addition of raised curbs and other vertical elements to increase traffic calming impacts and further enhance pedestrian crossing safety. Pedestrian refuge islands can be provided at the intersection, while the medians can extend further east and west to accommodate plantings, wayfinding, and placemaking features.

Design Guidance: Crossing Signals

- Configure signals for a walking speed of 2.5 feet per second on streets wider than 40’.
- Leading pedestrian intervals (LPIs) provide between 3-7 seconds of advance crossing time (WALK phase) for pedestrians before the GREEN phase.
- LPIs can be “responsive,” “proactive,” or “opportunistic” and can be actuated or programmed (24 hours or by time of day).
- Pedestrian signals should be automatic, rather than push-button controlled.
- WALK signals should be audible to assist pedestrians with visual impairments.

At locations where these measures are desired, left turns would be prohibited in order to reduce incidence of collisions between left turning traffic or between vehicles turning left and vehicles continuing through in the same lane. In these locations, left turns would be accommodated at the next intersection. For example, at a location with very light existing left turn volume, such as E. 71st Street (25 AM peak hour left turns and 52 PM peak hour left turns), vehicles could continue eastbound to E. 79th Street and westbound to E. 65th Street for the next available left turn. Preliminary traffic analysis found that this change in traffic patterns would still yield acceptable levels of service (LOS C or better) at these intersections and elsewhere along the corridor, due to the light volume of left turns. Additional analysis, in collaboration with the City's Division of Traffic Engineering, would be required to determine final feasibility at each location.

Figure 24 Intersection Improvement Options – Tier 2



Identify locations for mid-block crossings in areas where crossings are already occurring or where significant gaps exist.

There are multiple locations along the corridor where marked crossings are either situated poorly or not present at all. Between E. 55th Street and E. 71st Street, for example, there is a span of nearly 2/3 mile without a marked crossing. In another example, the existing signalized pedestrian crossings between E. 77th Street and E. 79th Street are very close to each other (250 feet) and could be more ideally situated to respond to the evolving destinations and circulation patterns in the area. Mid-block crossings in these locations could facilitate better connectivity for pedestrians and cyclists, while also supporting commercial development and streetscape enhancement objectives.

Design Guidance: Crosswalks & Medians

- Crosswalks should be at least 10' wide and utilize colors and materials that promote visibility and durability during all seasons, weather, and light conditions.
- Vehicle stop bars should be set back at least 5' from the crosswalk.
- ADA-compliant curb ramps should be installed at all crossing locations.
- Medians that include pedestrian refuge should be a minimum of 6' wide, but ideally as close to 10' as possible.
- Median curbs should include vertical bollards, signage, and reflective materials to further protect pedestrians and alert vehicles to their presence.
- Medians at mid-block crossing locations should include additional signage, such as Rectangular Rapid Flashing Beacons or Pedestrian Hybrid Beacon signals.

Figure 25 Mid-block Crossing – Lorain Road, west of Rocky River Drive, Kamm's Corners



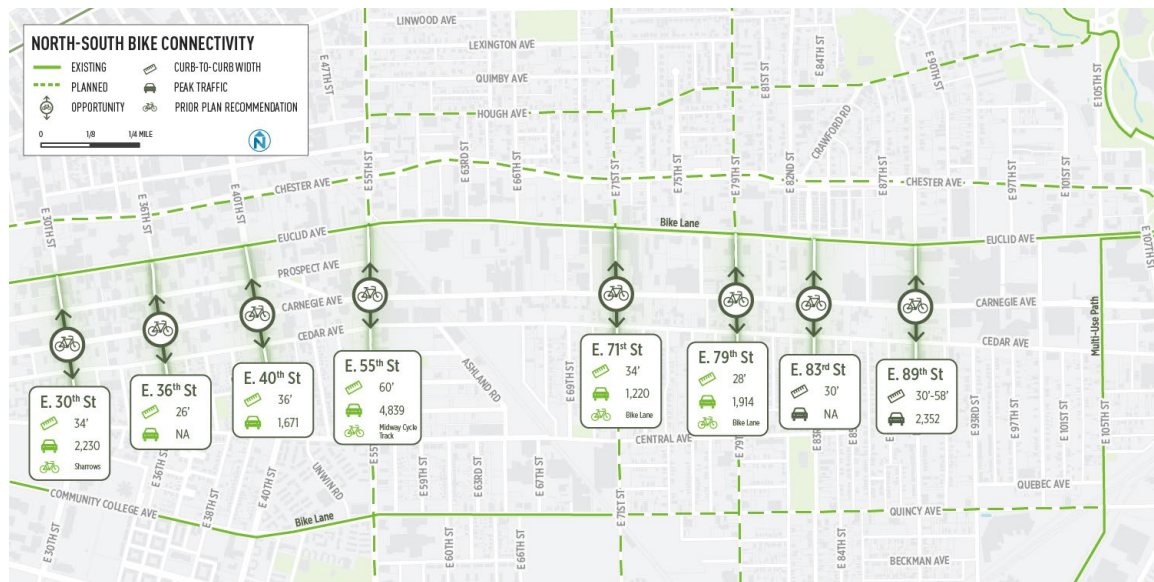
Figure 26 Mid-block Crossing – Euclid Avenue, east of Mayfield Road, Uptown



Identify north-south bikeway routes and facility types to encourage healthy, active transportation for users of all ages and abilities.

Throughout the planning process, stakeholders expressed a desire to improve north-south bicycle connectivity across Carnegie Avenue. While recent progress has been made along the eastern edge of the study area with the installation of the Opportunity Corridor multi-use trail and west of the study area, along E. 22nd Street, there are no dedicated facilities for bicycles in the three miles in between. E. 55th Street has been identified as a priority corridor for the implementation of a significant regional bikeway connection, such as the Midway cycle track, but implementation is still several years away. Recognizing that opportunities exist to inform capital projects over the next few years and that the City's Bikeway Master Plan is due for an update, this plan evaluated multiple routes within the study area for suitable options to be considered in the near-term.

Figure 27 North-South Bicycle Network Opportunities



Alternatives considered a range of factors, including curb-to-curb width, right-of-way width, traffic counts, neighborhood destinations, and prior plan recommendations, as well as what facility types would fit within these parameters on each of the north-south corridors within the study area. Depending on street characteristics, such as vehicular speeds and volumes, a range of facility types may be needed to provide a complete, low-stress network for all ages and abilities. See **Figure 28** for more detail.

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Figure 28 North-South Bikeway Corridor Evaluation

Carnegie Avenue TICI Bikeway Corridor Evaluation

Corridor	Curb-to-Curb		Right of Way		Peak North-South Traffic	Peak Hour Bike Count	Ex. Bikeway Plan Recommendation	Options	Pros	Cons
	North of Carnegie	South of Carnegie	North of Carnegie	South of Carnegie						
E. 30th Street	34'	34'	50'	50'	2,230 (33% turns)	6	Sharrows	Sharrows, Bike Lanes	Connectivity through multiple neighborhoods	Heavy traffic and TMCs; turn lanes; proximity to E. 22nd Street facility
E. 36th Street	26'	26'	40'	40'			None	Bike Boulevard, Sharrows	Light traffic; no on-street parking	Narrow roadway, non-contiguous
E. 40th Street	36'	36'	100'	100'	1,671 (25% turns)	2	None	Bike lanes, advisory bike lanes, cycle track, off-road trail	Light traffic; wide roadway and ROW; good connectivity through multiple neighborhoods; resurfacing in 2021 CIP	Left turns at Carnegie; many driveways; road narrows to 28' at Cedar
E. 55th Street	60'	60'	100'	100'	4,839 (23% turns)	5	Midway Cycle Track	Protected bike lanes, cycle track,	Connectivity through multiple neighborhoods; wide roadway and ROW	Heavy traffic and TMCs; turn lanes
E. 65th Street	NA	26'	NA	50'			None	Sharrows, off-road trail	Little traffic; ROW width and vacant land for off-street connection	Poor connectivity; proximity to planned E. 55th facility
E. 71st Street	34'	34'	58'	58'	1,220 (27% turns)	0	Bike Lane	Bike lanes, advisory bike lanes, bike boulevard	Light traffic; wide roadway; good connectivity through multiple neighborhoods; resurfacing in 2021 CIP	Parking lane south of Carnegie; 71st ends at Quincy
E. 79th Street	28'	28'	48'	48'	1,914 (17% turns)	1	Bike Lane	Sharrows, advisory bike lanes	Connectivity through multiple neighborhoods; relatively low traffic and TMCs; resurfacing in 2021 CIP	Bus route; narrow roadway
E. 83rd Street	30'	30'	60'	60'			None	Bike lanes	Connectivity and relatively low traffic south of Carnegie; no on-street parking	83rd ends at Euclid and traffic is heavier north of Carnegie
E. 89th Street	58'	30'	80'	80'	2,352 (41% turns)	1	None	Bike lanes (south of Carnegie)	Connectivity through multiple neighborhoods	CCF traffic and turn lanes north of Carnegie; parking lane south of Carnegie

Note: Traffic counts were collected during the existing conditions analysis at each street's the north-south intersections with Carnegie Avenue. See **Figure 29** for guidance from NACTO on selecting the appropriate facility based on the roadway context.

Figure 29 Guidance for Selecting All Ages & Abilities Bikeways

Contextual Guidance for Selecting All Ages & Abilities Bikeways				
Roadway Context				All Ages & Abilities Bicycle Facility
Target Motor Vehicle Speed	Target Max. Motor Vehicle Volume (ADT)	Motor Vehicle Lanes	Key Operational Considerations	
Any		Any	Any of the following: high curbside activity, frequent buses, motor vehicle congestion, or turning conflicts [†]	Protected Bicycle Lane
< 10 mph	Less relevant	No centerline, or single lane one-way	Pedestrians share the roadway	Shared Street
≤ 20 mph	≤ 1,000 – 2,000		< 50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard
≤ 25 mph	≤ 500 – 1,500			
	≤ 1,500 – 3,000	Single lane each direction, or single lane one-way	Low curbside activity, or low congestion pressure	Conventional or Buffered Bicycle Lane, or Protected Bicycle Lane
	≤ 3,000 – 6,000			Buffered or Protected Bicycle Lane
	Greater than 6,000			
	Any	Multiple lanes per direction		Protected Bicycle Lane
Greater than 26 mph [†]	≤ 6,000	Single lane each direction	Low curbside activity, or low congestion pressure	Protected Bicycle Lane, or Reduce Speed
		Multiple lanes per direction		Protected Bicycle Lane, or Reduce to Single Lane & Reduce Speed
	Greater than 6,000	Any	Any	Protected Bicycle Lane, or Bicycle Path
High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts		Any	High pedestrian volume	Bike Path with Separate Walkway or Protected Bicycle Lane
			Low pedestrian volume	Shared-Use Path or Protected Bicycle Lane

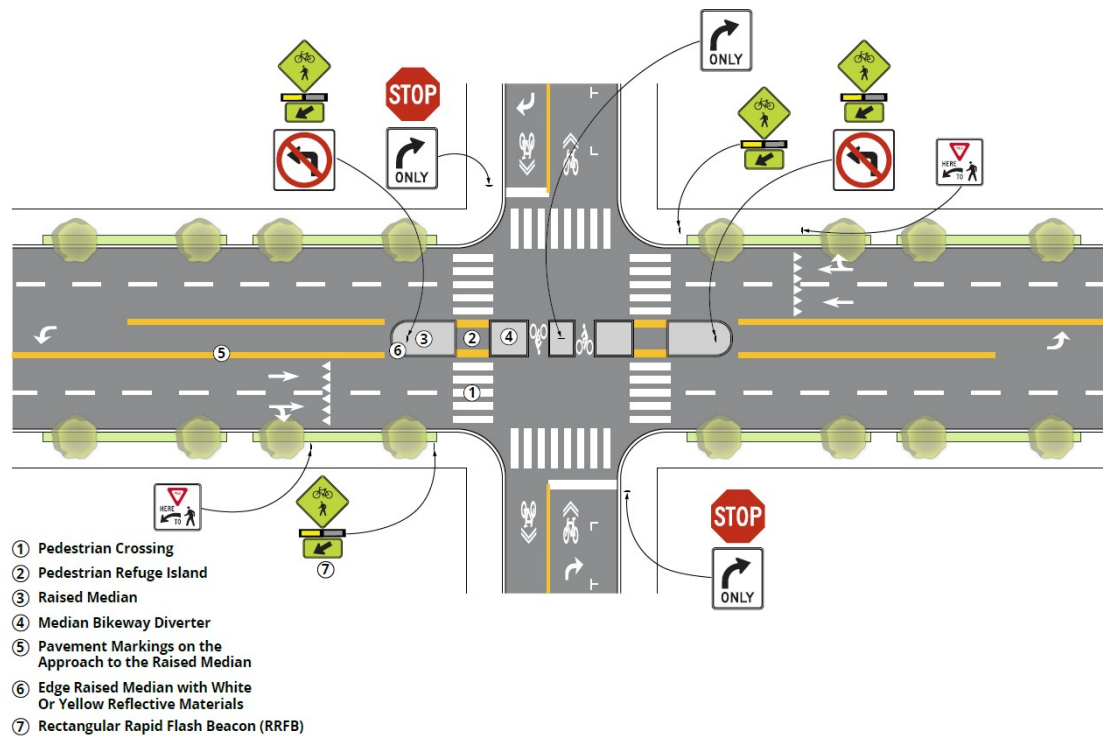
Source: NACTO

Design Guidance: Bicycle Facilities

- **Grade-separated bikeways**, like the Opportunity Corridor multi-use path, are facilities that are physical separated from the roadway and feature dedicated signage and/or signalization at roadway intersections to facilitate safe crossings.
- **Protected bikeways** are typically provided within the cartway of the road and are physically separated by raised curbs, bollards, or other features that provide cyclists with protection from automobile traffic.
- **Conventional bike lanes**, like those on Euclid Avenue, are dedicated facilities delineated by striping, signage, and other pavement markings, and are typically adjacent to automobile travel lanes. Bike lanes should be at least 5' wide and can be "buffered" by additional striping of 3'-4' to provide additional capacity and comfort.
- **Bicycle boulevards** use signage and pavement markings, coupled with traffic calming strategies like speed humps and curb extensions depending on context, to prioritize bicycle traffic over motor vehicle traffic on low-volume, "low-stress," neighborhood streets.
- **Signed routes** and "**sharrows**" can be used to fill gaps in a network of dedicated facilities, but should not be considered a sufficient replacement for these facilities.

Figure 30 represents a potential “Tier 3” intersection concept to support the continuation of a bicycle boulevard through an intersection with Carnegie Avenue, tabled for further discussion. Adding traffic diverters at select intersections not only provides addition protection for crossing cyclists and traffic calming through intersections, but it can also help respond to neighborhood concerns about speeding and cut-through on residential streets. In cases where this measure is being considered, more careful consideration about local destinations and alternative routes should be evaluated to ensure that access is preserved and additional turn movements and vehicle miles traveled are minimized.

Figure 30 Bicycle Boulevard Intersection Improvement Alternative



Install on-street parking zones to support local businesses and calm traffic in key areas.

Strategically located parking along the corridor can be used to both support local businesses and calm traffic during off-peak hours. The only location where on-street parking is currently allowed is on the south side of Carnegie, between E. 77th and E. 79th, during off-peak hours (9 AM – 4 PM). Extending the allowed parking zone in this area west of E. 77th, on both the north and south side of Carnegie, would provide additional short-term capacity for visitors to the growing number of businesses in this area. It would also provide a “buffer” between vehicular traffic on Carnegie and pedestrians on the sidewalk. Other areas where businesses have limited off-street parking supply and foot traffic is either more common or desired should also be considered for this treatment to calm traffic during off-peak hours when Carnegie has excess capacity and speeding can be more common.

In addition to on-street parking, shared off-street options can also be identified to support the growth of core area business districts and provide convenient access for drivers wishing to

patronize local businesses. Pursuing a shared parking approach with strategically located vacant parcels as an interim use strategy can forestall the proliferation of single-use parking lots along the corridor and reduce the need for frequent driveway access and curb cuts on Carnegie. These assets can be held as a “land bank” for future development, once markets develop.

Figure 31 Shared District Parking – W. 65th Street and Detroit Avenue, Gordon Square



Source: Google

Other Strategic Opportunities

Shared Micromobility

Shared micromobility refers to a range of services – including bike and scooter share programs – that provide fleets of vehicles available to the public for short-term hire. Cleveland has recently expanded its micromobility offerings by implementing the UHBikes system throughout multiple neighborhoods and beginning a permitting program that allows for dockless vehicles like e-scooters and e-bikes throughout the City. Efforts to expand these programs regionally are under way in coordination with a variety of community partners and public agencies and they will be monitored closely to ensure that these emerging mobility options are safe, accessible, and beneficial to all potential users. The project partners can take a proactive approach to expanding shared micromobility networks in the study area by ensuring these vehicles are available to users and establishing permitted parking or docking areas throughout the corridor.

Figure 32 UHBikes and Docking Location – Euclid Avenue and E. 59th Street, Midtown



Figure 33 Bird Scooters – Detroit Avenue and W. 67th Street, Gordon Square



Transit Waiting Enhancements

While Carnegie Avenue itself carries no transit lines, there are several RTA routes that cross the corridor or provide service along adjacent corridors. Improving walking and bicycling conditions to and from the most heavily used stations – in particular, HealthLine stations along Euclid Avenue – will be an important outcome of the above strategies. Further, there multiple locations along the corridor where bus stops are provided at intersections with north-south bus routes, including the #16 (E. 55th Street) and #2 (E. 79th Street). The transit waiting environments in these locations can be improved with additional lighting, signage, and amenities, including seating, shelters, bike racks, waste receptacles, and street trees. Steps should be taken to ensure universal accessibility, including paved station pads with clear paths to boarding areas and use of raised/tactile cues.

Figure 34 Bus Stop with Transit Waiting Enhancements – Detroit Avenue and W. 77th Street, Cleveland



Transportation Demand Management

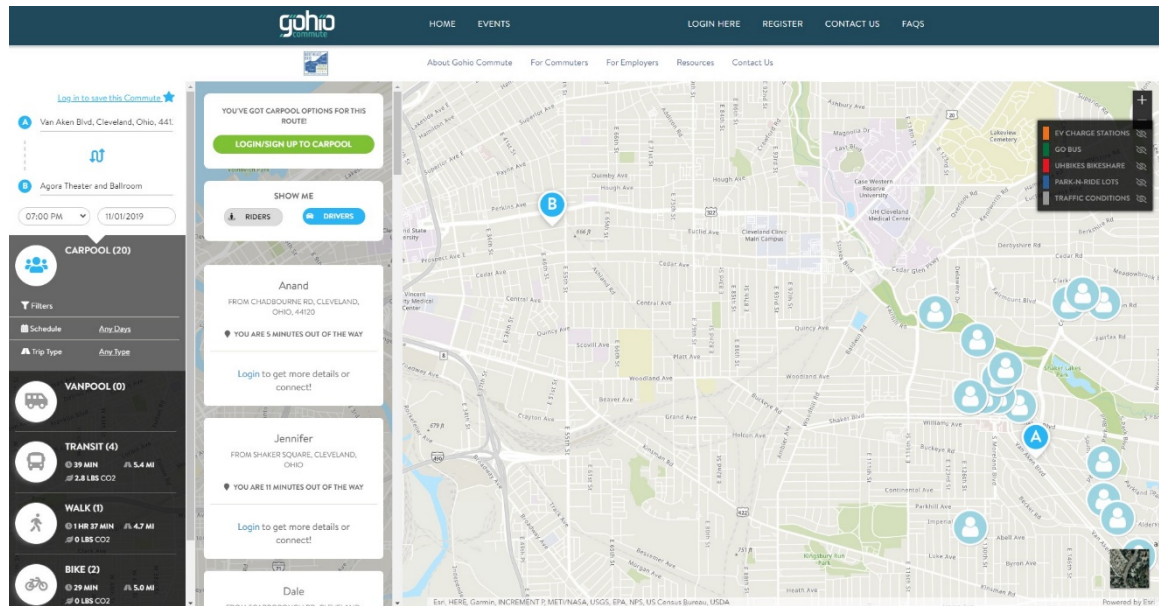
While Carnegie Avenue today offers excellent access for automobiles and the businesses that rely on them, this comes at the expense of access, comfort, and safety for people traveling on foot, bicycle, or via transit. In future years, changes to land use and circulation patterns may warrant a shift in travel behaviors that allow for greater use of active travel modes and less reliance on private automobiles. For instance, as development occurs and land uses along Carnegie Avenue change, the community may choose to pursue development at greater densities and with a greater mixture of uses and may not want broad expanses of surface parking to support them.

Transportation demand management (TDM) refers to a host of programs and services that promote alternatives to drive-alone trips, increasing the efficiency of travel and the effectiveness of local infrastructure. Effective TDM strategies can promote equitable mobility options for all travelers by providing economic incentives for non-drivers and supporting existing programs and services like public transit, carpool, vanpool, and others that are more universally accessible.

CARNEGIE AVENUE MASTER PLAN | FINAL PLAN
MidTown Cleveland Inc. | Cleveland City Planning Commission | NOACA

Several Cleveland employers have TDM programs in place to encourage non-drive-alone trips among their employees. This list includes the Northeast Ohio Regional Sewer District and University Hospitals, both of whom have locations in Midtown, plus Cuyahoga County and University Circle Inc. NOACA offers a valuable tool to support these efforts through Gohio Commute, a free ridesharing, trip planning, and tracking resource, to Northeast Ohio travelers.

Figure 35 NOACA's Gohio Commute Interactive Platform



Program Guidance: TDM

- **Transit discounts:** Collaborate with RTA and local employers to offer direct pre-tax benefits and other subsidies to make transit a more attractive option.
- **Carpool/Vanpool:** Where transit networks cannot provide the flexibility or service range to meet all needs, carpool and vanpool can help extend the network. *Gohio Commute* offers free rideshare matching services to Northeast Ohio commuters.
- **Charge for parking:** Existing parking in the corridor is abundant and cheap (free); charging for parking is a critical step in properly valuing the true cost of driving and storing private vehicles.
- **Marketing & Information:** MidTown Cleveland and its members can partner to cross-promote a series of transportation assets and incentives to increase awareness and adoption of non-drive-alone options.

² Gohio Commute. 7 Nov. 2019, <https://gohiocommute.com>.

LAND USE, ZONING, & DEVELOPMENT

The second tenet of this TLCI plan is to cultivate neighborhood and economic development. Through the planning process, these organizing strategies were identified as a way to guide future development and growth along the corridor:

Use infill development opportunities to fill gaps in the urban fabric and make Carnegie a desirable place to be.

Create a balance between smaller-scale, neighborhood-centered commercial development and larger-scale, auto-oriented development, encouraging and supporting establishment and success of locally owned businesses.

Celebrate the corridor as a place for creative entrepreneurship through new business models.

More specifically, the following measures should be pursued to achieve the plan's objectives:

- Encourage businesses to incorporate small retail storefronts into their facilities, especially the food production and packaging uses.
- Balance the mix of neighborhood-oriented retail, industrial spaces, and community uses to create an active 24/7 corridor that feels safe and lively.
- Support existing companies with marketing, expansion, and other needs to sustain anchors and growth.
- Modernize vacant industrial buildings and warehouses to attract and accommodate makers, creatives, and small- to mid-size production companies.
- Consider new industrial models that accommodate flexible, short-term uses.
- Utilize zoning tools to meet plan objectives, in particular at key nodes where redevelopment is expected soon.

Some of these actions can be done prior to development occurring in order to best position MidTown Cleveland and the City of Cleveland to attract and receive new business owners and developers alike. Others will take time to develop, evolve, and implement, but will help to cultivate the type of development that the community desires. The following considerations also factored into the develop of plan recommendations, which will be highlighted in Chapter 4 of this report.

Integration with Adjacent & Concurrent Community Plans

The Mayor's Office of Capital Projects has slated East 71st Street, East 79th Street, and East 69th Street north of Carnegie to be repaved (per the City of Cleveland's 2017-2021 Capital Improvement Plan). Depending on what year those streets are rehabbed, there is an opportunity to integrate intersection and pedestrian improvements in those areas at the same time.

Burten, Bell, Carr Development, Inc. (BBC) is the community development organization immediately south of Midtown. As such, they have continually developed plans for their neighborhood. A relatively recent master plan for the Central and Kinsman neighborhoods was published in 2016. It indicates the intention to infill vacant properties and underutilized parcels with residential and retail uses along Cedar Avenue. This is of particular note, given its adjacency to the focus area of this TLCI plan. It is important to understand where and how these

developments are to occur, so that anything proposed in this plan is compatible with neighboring land uses.

One of the other plans that BBC has been studying is an extension of East 69th Street between Carnegie Avenue and Cedar Avenue. Throughout history, the road has never connected through this block. It has always been either residential, or later, commercial businesses. Today, the northern part of this block at this location is occupied by an automotive business, but the southern portion is vacant. Conceptually, this would promote connectivity between the neighborhoods, but remains only an idea unless the land frees up in the future.

On the eastern end of the Carnegie Avenue corridor, the Fairfax neighborhood has been building a lot of momentum. The Cleveland Clinic is a major stakeholder, landholder, and destination. They have a master plan, which they have been working to realize and are continually bringing a new wealth of knowledge, facilities, and employees to the area. Fairfax itself has been making strides to bring its own master plan concepts to reality. Among other neighborhood residential projects, the Innovation Square plan is a planned mixed-income, mixed-use neighborhood with a variety of housing types that will stabilize the edge along Opportunity Corridor as well as infill some of the residential streets with the missing homes. The New Economy neighborhood plan calls for a mixed-use technology research district to gradually emerge on the other side of Opportunity Corridor.

The Opportunity Corridor transportation project touches the eastern terminus of this project's study area and is intended to support job growth, community improvement, the mobility of people and goods, improved quality of life, and the local environment. The goal of this \$330M, 3.6-mile investment is to repurpose fallow land and bring new redevelopment options to Cleveland's east side neighborhoods that have been passed over by other investments. The land use vision for the corridor will support urban agriculture and large footprint businesses (multiple acres) that will shape it into a key employment generator. The first and second phases of construction are already complete. Construction on the third and final phase broke ground this year and is anticipated to be complete in 2021. With all of this new opportunity aligning in the near future, it is important to ensure that these two plans complement one another.

Redevelopment Opportunities

Given the traffic and activity around East 55th Street and Carnegie Avenue, there is a lot of potential that could be unlocked if some of the land were redeveloped. The City of Cleveland owns the properties at both the northwest and northeast corners of this intersection. The northeast corner currently functions as a vehicle storage garage and parking lot and contains the old Warner & Swasey Company building. This entire 7.8-acre site has been slated for potential redevelopment, and the City has been working with a developer to determine the future of both the building and balance of the property. The northwest corner is currently a parking lot, but the parcel could be reimagined with a higher and better use that would be attractive to and accessible by the volumes of traffic on both corridors as well as the transit line that runs on East 55th Street.

There are multiple vacant sites between 1.0 and 3.5 acres on the western portion of the focus area that would lend themselves well to light industrial uses (see **Figure 48** in the Recommendations section). Most of the existing facilities in that area are industrial or manufacturing types and some of the properties abut the elevated railroad tracks, so there are limited land use types that would be appropriate for these locations.

There are more options towards the center of the focus area. Vacant properties are located next to a mix of office, manufacturing, institutional, retail and even residential uses, which means that the underutilized parcels could be redeveloped as almost any combination of those. However, some of the sites are only one or two small parcels wide, limiting the potential. These smaller properties are best kept by one of the local land bank organizations until other adjacent parcels become available to be combined for a larger development project, or sold to neighboring businesses as an expansion opportunity that would allow them to remain in their location.

At the eastern end of the focus area, potential redevelopment sites vary in size and potential. Given the nearby uses in the immediate area, future proposed uses include residential (likely multi-family buildings), office, or residential-oriented retail. Most of the parcels in this area are smaller, and it gives this part of the corridor a slightly more residential feel, particularly on the south side near Cedar Avenue.

Community Needs

The typical approach for evaluating redevelopment potential and future land use is to study the nearby locations where there is already momentum or change taking place, and to suggest ways in which that momentum can be built upon and pulled into the desired area. In particular, the building and renovations taking place along both sides of Euclid Avenue in the area known as the Health-Tech Corridor can serve as this model development. As those areas fill in, it is natural to begin to look at nearby sites on which to expand and continue progress in the area. This approach certainly has merit and potential to affect the sites between Euclid and Carnegie Avenues.

Through several community meetings and conversations with residents at other events about their concerns and needs, the planning team began to focus on bringing the energy of the Euclid Corridor to Carnegie. However, there was a sense that much of this development catered to commuters or visitors, but not to the immediate community. Participants in the planning process expressed a desire to see the needs of the residents living in the neighborhoods south of the corridor be a significant component of future land use and commercial development.

Throughout the public engagement process, the planning team met with area residents and discussed with them the needs and concerns they have in their community. A series of common ideas emerged through conversations, the online survey, and feedback sheets. In particular, residents expressed the need for healthier options when it comes to all aspects of their lives. They are looking for:

- Locally-owned, quality, dine-in restaurants with healthier food options that cater to the community, not just the passersby;
- Local retail stores and small businesses that provide goods and services for the residents, including bicycle store and repair shop;
- A fitness, exercise, and training facility;
- A pharmacy;
- Social support services – Residents need places that can help them with resume and application help, job and skills training, business startup and loan information;
- Safe, reliable, expanded childcare options that operate to meet the needs of all shifts of workers;
- Quality, reasonably priced hotel, motel, or hostel for out-of-town family members to stay when visiting;

- Indoor and outdoor gathering spaces for people of all ages – children, teens, adults, seniors – including both passive and active recreation options.

Rezoning

Zoning is a key technical tool that helps guide and control development location and form.

Since most of the study area falls under its own special zoning area of Midtown Mixed Used District-3 (MMUD-3), it does not make sense to spot or wholesale re-zone properties in this area. Having the area zoned the same should, in theory, provide some consistency along the corridor. However, some consideration should be given to rewording or refining some of the language to bring the code into alignment with the goals and desired outcomes of this TLCI Plan.

When the MMUD was written, it was done so with a purpose which was outlined as a series of regulatory intentions designed to encourage specific uses and levels of density appropriate for an urban area. What was repeated throughout the process is that some of the districts are meeting these goals, while the Carnegie District (MMUD-3) is not checking all of the boxes. In particular, many feel that it is falling short of the following goals:

- Encourages a pedestrian-oriented mix of uses including retail, residential, offices and light industrial;
- Expands the available economic development options while strengthening the existing uses found in the Midtown district;
- Establishes design criteria for new development or redevelopment to ensure that an aesthetically pleasing and pedestrian friendly environment is provided.

Furthermore, the existing site and setback requirements make it challenging to encourage new, walkable development. Nearly everything along the Carnegie corridor is automobile-oriented (both from a use and form standpoint), making it unpleasant and potentially unsafe for other users who take Carnegie as a part of their trip. Recommendations found later in this report will suggest revisions and amendments to the current MMUD-3 district that will encourage the types of development desired for this area.

Creative Approaches

In order to encourage development in the Carnegie Corridor, MidTown Cleveland, the City of Cleveland, and potential developers will need to explore creative approaches. This requires innovative thinking. Instead of the typical large manufacturing facility walled off from its surroundings, these businesses should be encouraged, even incentivized, to provide small retail storefronts at the front of their buildings. This puts more eyes on the street to increase safety, while also showcasing to commuters and other passersby what is happening inside, encouraging them to stop. Food production and other packaging-type operations could potentially benefit and take advantage of this the most. Existing zoning can make this challenging, but the changes proposed within this plan, along with the support of the City and MidTown Cleveland, should improve the process and make this possible.

Some of the remaining vacant industrial buildings can be adaptively reused and provide new opportunities for non-traditional business types. Property upgrades, modernization, and restorations could house a variety of makers, creatives, and small- to mid-sized production companies that usually struggle to find spaces that work for them. Not unlike the Health-Tech

Corridor immediately to the north of Carnegie, there is an opportunity to re-brand Carnegie as a “creator” corridor.

Along those lines, Creative Manufacturing for a Modern Industrial District as a concept has already started to be explored in Cleveland. Local planners and City departments penned an article exploring this trend. Its vision is to “create a modern industrial zone by repurposing large warehouses/industrial space to attract makers, creatives, and small-mid scale production workers that incorporates small creatives businesses, urban manufacturing, urban amenities & retail.” Carnegie Avenue is a great location to pilot this concept as it already has a number of the key components, including existing vacant industrial buildings, land bank lots ripe for redevelopment, transportation access, all within the existing urban fabric of Midtown.

STREETSCAPE, WAYFINDING, & IDENTITY

The plan’s vision for a *thriving corridor that serves as a “connective tissue”* will hinge heavily upon the establishment of a cohesive streetscape and public realm amenities that can create and reinforce Carnegie’s identity and sense of place. Organizing strategies that were confirmed throughout the stakeholder engagement process include:

Maintain the quirky mixture and character of the street.

Beautify the public realm through art, streetscape, and storefront improvements.

Reinforce Carnegie as the “connective tissue” between people, businesses, and neighborhoods.

More specifically, the following measures should be pursued to achieve the plan’s objectives:

- Create/enhance amenity and buffer zones to add visual appeal and street furnishings, while creating separation between pedestrian and automobile.
- Add street trees to increase tree canopy, add visual appeal, promote walkability, and calm traffic.
- Improve lighting for pedestrians and at intersections.
- Look for opportunities to consolidate driveways for to improve pedestrian realm and traffic safety.
- Install wayfinding to assist travelers and increase awareness of neighborhood identity & destinations.
- Continue to curate public art throughout the district.
- Identify opportunities for small parks or gathering spaces to create usable space and facilitate both social and mobility connections.

Opportunities

Wayfinding

The MidTown Wayfinding Plan should be implemented along Carnegie Avenue, recognizing that opportunities may arise to update sign locations and messaging to reflect new destinations and to support pedestrian and bicycle circulation. Embellishments can also be added that further identify Carnegie Avenue or specific nodes within the corridor in the form of medallions or header graphics.

The signage and wayfinding program should also look for opportunities to integrate with adjacent community efforts in pursuit of cohesive and mutually supportive messaging, nomenclature, etc. The sign program developed for Midtown utilizes simple construction and formatting with the intention that it may provide a template for development of future sign programs in neighboring communities (such as Fairfax). The design may be adopted and customized to fit the neighborhood brand while keeping consistent layout and nomenclature as visitors move from neighborhood to neighborhood within Cleveland.

Public Art

MidTown Cleveland has taken steps to advance public art and placemaking efforts in recent years, including a banner program, murals, bridge painting, and other efforts. Across Cleveland, blank walls and vacant land have been transformed into pockets of surprise and delight that brighten dark corners and communicate neighborhood identity. An extensive public art program can be pursued on Carnegie that helps to bridge the divide from one end of the corridor to the other, as well as between the neighborhoods that border the avenue to the north and south. Opportunities can be uncovered that convey history, African American heritage, and the unique mixture of people and enterprises within the community, each of which was cited as a priority among stakeholders.

Figure 36 Public Art Mural Program – Church Avenue and W 29th Street, Cleveland



Green Streets

Carnegie's generous sidewalk and amenity zones along much of the corridor offer opportunities to improve pedestrian comfort and ecosystem function through the installation of trees and stormwater features. Tree canopy along Carnegie is insufficient to support pedestrian comfort, "frame" the roadway for traffic calming objectives, and reduce heat island effect. In coordination with the Cleveland Tree Plan, project partners can pursue opportunities to add trees to existing tree pits and planters in the public right-of-way, in new medians as they are developed, as well as on private property where space allows. Partnerships with the City of Cleveland, Northeast Ohio Regional Sewer District, local watershed organizations, and private property owners can be

pursued to identify opportunities for stormwater capture, whether in the public right-of-way or on private property.

Driveway Consolidation

The size and frequency of curb cuts and driveways along the corridor creates another layer of discomfort for pedestrians and contributes to the unpleasant streetscape environment. There are more than 110 curb cuts along the 2.7-mile corridor. More than half of these are in the core of study area, between E. 65th Street and E. 83rd Street, at a pace of one driveway every 75', which is approximately twice the frequency typically recommended along an urban street.

As opportunities arise – in particular, alongside the assembly and redevelopment of vacant parcels – driveways and their curb cuts should be removed or consolidated to reduce the number of conflict points in the pedestrian realm. Driveways that are excessively wide should be narrowed to the minimum required width and efforts should be made to use vertical and visual indicators in areas with higher pedestrian traffic to communicate pedestrian priority space and let drivers know that they are crossing through a mixed-use zone.

Figure 37 Fast Food Driveway Near E. 71st Street & Carnegie Avenue



4 PLAN RECOMMENDATIONS

The strategies outlined in the previous section can be applied throughout the study area to achieve the plan's vision. This section focuses on nine (9) key concepts and actions that can be implemented in stages over time, beginning with small steps that can set the stage for more dramatic improvements as momentum builds. The study's two primary focus areas are examined in greater detail at the end of this section. These are areas where conditions are ripe for the types of interventions that can help usher in more dramatic transformation of the Carnegie Avenue corridor in the years to come.

KEY CONCEPTS & ACTIONS

1. **Enhance the streetscape** to stitch together & beautify the corridor's fabric, promote walkability, calm traffic, and create opportunities for unique "pockets" of activity and expression.
2. **Invest in place defining improvements between E. 65th and E. 69th** that build upon the success of MidTown Tech and create transformative mobility and development opportunities
3. **Reinforce the commercial district centered on E. 77th Street**, establishing a pedestrian-oriented commercial core for the Corridor
4. **Modify existing zoning district code** to align with the new vision for desired development patterns, smart economic growth, and enhanced mobility options.
5. **Redevelop vacant land and buildings** using a combination of existing tools and new models / strategies to meet the current and future needs of the business and residential markets.
6. **Establish the E. 40th and E. 71st Street corridors as north-south bicycle routes**, enhance them through upcoming capital projects and integrate them into the City's Bike Plan update.
7. **Implement traffic calming & safety measures at all intersections** to reduce crashes, establish gateways, and facilitate safe crossings for all travelers.
8. **Pilot a community circulator** that complements RTA service and connects residents to vital assets within the Midtown, Hough, Central, and Fairfax neighborhoods.
9. **Locate a series of "mobility hubs"** along the corridor to enhance connections to the broader community.

Figure 38 Key Concepts & Actions – Community Meeting 3 Poster



1. Enhance the streetscape to stitch together & beautify the corridor's fabric, promote walkability, calm traffic, and create opportunities for unique "pockets" of activity and expression.

2. Invest in place defining improvements between E. 65th and E. 69th, such as public art & wayfinding, that build upon the success of MidTown Tech and create transformative mobility and development opportunities.

3. Reinforce the commercial district centered on E. 77th Street, establishing a pedestrian-oriented commercial core that encourages local businesses along the Corridor.

4. Modify existing zoning district code so that it aligns with the new vision for desired development patterns, smart economic growth, and enhanced mobility options.

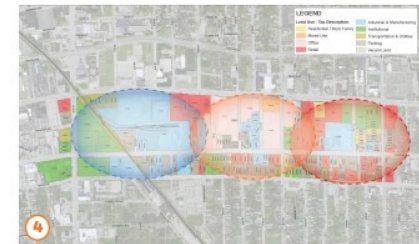
5. Redevelop vacant land and buildings using a combination of existing tools and new models strategies to meet the current and future needs of the business and residential markets.

6. Establish the E. 40th and E. 71st Street corridors as north-south bicycle network routes, enhance them through upcoming capital projects and integrate them into the City's Bike Plan update.

7. Implement traffic calming & safety measures at all intersections to reduce crashes, establish gateways, and facilitate safe crossings for all travelers.

8. Pilot a community circulator that complements RTA service and connects residents to vital assets within the MidTown, Hough, Central, and Fairfax neighborhoods.

9. Locate a series of "mobility hubs" along the corridor to enhance connections to the broader community.



1. Enhance the Streetscape

The streetscape needs to serve as the connective tissue and unifying element of Carnegie's transformation – bridging the gap between property development and the roadway. Even though land uses, building types, and site layouts may vary greatly from one end of Carnegie to the other, the streetscape needs to present a cohesive image and assets to corridor users. The existing condition of the streetscape is lacking many of these assets and the experience for pedestrians, cyclists, and drivers is, therefore, poor. Improving this experience and appearance through the following efforts will encourage investment and enhance the connections within and throughout the corridor.

Figure 39 **Typical Streetscape– E. 65th & Carnegie**



Short-Term Enhancements & Safety Initiatives

- Paint high visibility striping at all existing and proposed crosswalks.
- Install countdown pedestrian signals at intersections and Rectangular Rapid Flashing Beacons (RRFB) or Pedestrian Hybrid Beacon (PHB) signals at key midblock crossing locations.
- Clean up and repair sidewalks, curbs and roadway.
- Support retail development with on-street parking during off-peak hours.
- Clean, repair, illuminate, and decorate the railroad bridge overpass as gateway element and public art opportunity.
- Plant new trees along the corridor in existing tree pits and planters, softening the hardscape, narrowing the view corridor (to slow speeding traffic), and creating a continuous treatment along Carnegie's length.
- Update fencing and parking lot screening to enhance pedestrian experience and improve aesthetics along the corridor.
- Install and expand upon the cohesive package of signage, wayfinding, and banners with additional features, murals, and public art.

- Develop frontage standards within the core area (E. 55th – E. 79th) to be integrated into zoning code updates.

Form a Business Improvement District (BID) for the length of Carnegie Avenue as more development and businesses move into the area, pursuing opportunities to share costs and efforts for maintenance, landscaping, snow removal, district marketing, mobility improvements, etc.

Long-Term Recommendations

- Construct landscaped medians where turning movements are not required to induce traffic calming, increase beautification, and create pedestrian refuge islands where crossings are present.
- Install new tree pits and planters with landscaping at sidewalks to create a buffer between pedestrians and traffic, frame the roadway, and increase tree canopy.
- Install pedestrian and cyclist amenities - furniture, enhanced lighting, bike racks, refuse containers - to improve experience, unify image, and support both existing and new development.
- Pursue strategic opportunities to bury overhead utilities and consolidate poles as roadway, sidewalk, and utility work is being completed, aligning with new development projects as opportunities arise.
- Install complete streetscape incorporating landscaping, enhanced crosswalks, special paving, public art, and lighting.
- Consolidate driveways and create cross-easements where possible to reduce curb cuts along the roadway and promote a more unified and comfortable pedestrian experience and amenity space.

Figure 40 Midtown Wayfinding and Public Art



2. Invest in place-defining improvements from E. 65th - E. 69th

The first of the study's two primary focus areas extends along Carnegie from E. 65th to E. 69th Street. It boasts a significant amount of vacant land and buildings that is poised for redevelopment. Tying together land use, mobility, and streetscape improvements in this area will help spur additional development and connectivity, both within this focus area and beyond.

Transportation

The E. 66th Street corridor was identified as an important pathway that connects the Midtown and Hough communities. Though it terminates at Carnegie, there is evidence that pedestrians use the vacated E. 66th Street right of way (adjacent to Schaffer Partners and MidTown Tech) to pass from Carnegie to Euclid, often crossing at the unmarked location where this route meets Carnegie. The following recommendations should be pursued to enhance these connections and improve access to the immediate area from the surrounding communities. They are further detailed in **Figure 56** and **Figure 57**, which follow this section.

- **Install a mid-block crossing where E. 66th Street meets Carnegie Avenue.** Provide a median pedestrian refuge, high-visibility crosswalk markings, and rectangular rapid flashing beacons (RRFBs) to increase visibility and comfort at this location. The crossing should be marked for both pedestrians and bicyclists.
- **Transition the vacated E. 66th Street to a “shared” street or alley.** The 30' of former right-of-way is ample space to accommodate multiple travel modes at slow speeds, maintaining service access to the adjacent buildings, while also facilitating better connections for people traveling on foot or bicycle.
- **Pursue development of a multi-use trail extending south along E. 65th.** With no clear opportunity for a grade-separated bicycle facility in core of the study area, this route could utilize vacant land and low volume streets to build a neighborhood trail between Midtown, Central, and Fairfax, akin to the Morgana Run Trail in Slavic Village. The trail could continue east along the south side of Carnegie to the new crossing at E. 66th, where it would then travel north along the shared street / alley.

Figure 41 Multi-use Trails & Shared Streets in Detroit, MI and Seattle, WA



Sources: Nelson\Nygaard (left) and Google (right)

In support of these approaches, it is recommended that either both driveways on Carnegie that provide access to the MidTown Tech office park remain open or that access to the site be shifted toward E. 69th street, with potential redevelopment at that node warranting additional wayfinding and access points. As development continues, a signal warrant analysis at the E. 69th Street intersection should be considered, along with potential for additional pedestrian enhancements.

It should be further noted that planning work in the Central neighborhood has emphasized the future potential for E. 69th Street as a connecting corridor, which could significantly magnify the importance of connections in this location.

Development

Transportation improvements and enhancements to the public realm can help attract redevelopment initiatives and future commercial activity and job centers. Recommended land-uses for this area include light industry (to continue expansion of Midtown as a job center), commercial developments, and mixed-use sites to encourage density (later phases of development) and facilitate a transition into the next focus area (east of E. 71st Street). Light industrial investments can take advantage of Carnegie Avenue's direct access to highways, railroad, and outlying neighborhoods and create synergies with neighboring properties.

Figure 42 Land Use Example – Light Industrial / Office Space– Midtown, Cleveland



Future development should be focused on the current vacant lots on the north side of the street between the vacated East 66th Street alley area and East 69th Street, the northeast corner of East 69th Street, and scattered along the south side of the street as far west as the railroad bridge. This development represents an opportunity to create new uses along the corridor, offering new options and destination for all corridor users. If well-designed and sited according to the strategies in this report, new development can also buffer large parking lots and contribute to the cohesion of Carnegie Avenue. See **Figure 59** for additional detail on these opportunities.

Future investments may include activating ground floor storefront spaces in existing buildings. The building along the western edge of the E. 66th Street alley, for example, would be in a great

position to support ground floor retail, office, or commercial space. Opening this façade and giving the building a ground level presence would contribute to safety, visibility, vibrancy, and success of the alley as a commercial corridor and destination within this focus area.

Streetscape & Placemaking

The E. 66th Street alley and E. 69th Street already connect a host of destinations between Carnegie and Chester Avenues. These include Dave’s Market, Link59, UH Rainbow Center for Women & Children, the Dunham Tavern Museum and grounds, the HealthLine, a childcare center, and Cityview Healthcare and Rehabilitation. Access conditions are constrained and disjointed in this geography and can be improved through a variety of measures.

At a basic level, improvements would only require paint and posted signs to indicate the operational changes (see *Transportation* section above). Beyond the striping, signs, and turn restrictions in the short term, a pedestrian and bicycle pathway should be incorporated along the alley through the use of either a raised curb or zero-curb change in materials configuration to further enhance the north-south connection. The success of this passage should be measured in terms of creating a safe connection for all users, regardless of chosen mode.

Longer term adjustments include rebuilding/curbing the MidTown Tech driveway and a full traffic signal at East 69th Street to facilitate left turns in and out of the developments and businesses in this area. These will require support, coordination, and minor educational efforts on the part of MidTown Cleveland, the City, and property owners. Safe crossings can be established with signage, flashing beacons, and medians / islands to emphasize pedestrian crossing of Carnegie. New crosswalks, landscaping, signage and other elements can be used to slow down vehicular traffic along the corridor. Medians on Carnegie will better direct traffic and create “pause places” for people crossing the street.

Figure 43 E. 66th & Carnegie – Streetscape & Crossing Improvements



Wayfinding should be expanded in this area to communicate the presence of new destinations and preferred routes for different modes. Public art opportunities exist at gateway points, on the blank facades of large buildings, and as an interim use on vacant parcels. See **Figure 58** for additional illustrations of where these opportunities can be pursued.

3. Reinforce the commercial district centered on E. 77th Street

The second focus area extends along Carnegie Avenue from the Central Kitchen/Food Hub (7501 Carnegie Avenue) to E. 79th Street. While this area also boasts a significant amount of vacant land, this set of blocks already has some of the foundational elements of a walkable commercial district. Storefronts open onto the street and on-street parking during off-peak hours provides convenience for visitors and visual cues for those passing through that this is a slower-speed area.

Transportation

The existing crosswalk and signal that sits just 250 feet west of E. 79th Street is poorly situated, both because of its proximity to E. 79th Street, but also because the focus of pedestrian activity in this area has shifted westward. In this area, there is also growing demand for convenient, short-term parking to support the growing number of commercial businesses west of E. 79th Street. The following recommendations include opportunities to address these issues:

- **Provide a protected mid-block crossing at E. 77th Street & Carnegie.** Provide a median pedestrian refuge, high-visibility crosswalk markings, and rectangular rapid flashing beacons (RRFBs) to increase visibility and comfort at this location.
- **Allow on-street parking.** Permit short-term, on street parking during off-peak hours (on the north and south sides of Carnegie), between E. 74th and E. 79th Streets, increasing the amount of convenient parking options for visitors and creating a buffer between pedestrians and fast-moving vehicular traffic. Stalls can also be marked out on E. 77th Street, north and south of Carnegie, to clearly communicate where parking is allowed.
- **Add temporary off-street parking.** On the former Lancer Restaurant site, at the northeast corner of Carnegie Avenue and E. 77th Street, an interim shared parking lot can be installed to support the growing number of retailers in the district, while banking the land for future development as the market evolves.

The idea of aligning E. 77th Street from north to south was considered as an option for future examination as part of the study, but no detailed engineering analysis was performed to determine feasibility.

These recommendations are further detailed in **Figure 60**, which follows this section.

Figure 44 Mid-block Crossing with Refuge



Development

Recent private investments in this focus area have brought new activity, attracted new businesses, and create new employment opportunities. Additional efforts should be pursued to draw additional shopping, dining, entertainment, and service-based businesses that residents have emphasized. Current vacant land (predominantly along the south side of corridor) can be repositioned as complementary development to the Central Kitchen, where SouperMarket, The Cleveland Bagel Company, and other businesses operate.

Figure 45 Traditional Pedestrian-Oriented Retail, Carnegie Avenue and E 77th Street



In the short-term, vacant land across East 77th Street from the Central Kitchen is being used for parking to support its retail storefronts. Completing a more formal shared/district parking lot in this location (a City Land Bank parcel) would add convenient, off-street options for the public and further support the expansion of businesses on either side of Carnegie Avenue. In the long-term, this corner, including the current Lancer Motel property, would be fully developed and parking would be relegated to rear lots with access off E. 77th Street. (See **Figure 62** for additional detail on these opportunities.)

Representing the edge between the Mixed-Use Transition Zone and the Residential Support Zone (see **Figure 49**), there is a wide range of potential that has yet to be realized in this focus area. Vacant parcels on both sides of Carnegie, extending west toward E. 71st Street, should be developed in a manner that aligns with the building form, site layout, and frontage standards set forth in this plan. This includes potential for new retail infill (in both existing buildings and on vacant parcels), as well as for more considerable mixed-use buildings as the market develops.

Figure 46 **Mixed-Use Office Over Retail, Midtown, Euclid Avenue between E. 36th and E. 40th Streets**



Source: Google

Streetscape & Placemaking

Streetscape enhancements should be used to strengthen the identity of this commercial node, attract visitors & customers, and encourage investment and development. The addition of on-street parking, enhanced crosswalks, landscaped medians, new street trees, and other elements will help to rebalance the public spaces where new activity is starting to take shape. Making access easier and safer with parking and crosswalk enhancements should be coupled with additional amenities, such as bike racks, trash receptacles, and benches. New public gathering places can also be established in this focus area to reinforce that this is a place for people to stop, visit, interact, and patronize businesses.

Wayfinding should also be expanded in this area to communicate the presence of new destinations and preferred routes for different modes. Public art and placemaking opportunities exist at gateway points (like E. 77th and E. 79th streets), where traffic slows and vacant land or building setbacks offer space for unique interventions. The billboards that proliferate in this area should either be removed at the next opportunity or repurposed as public art and/or placemaking elements. See **Figure 61** for additional illustrations of where these opportunities can be pursued.

Figure 47 E. 77th & Carnegie – Future Development & Streetscape Perspective



4. Modify existing zoning code

Revisions to the existing zoning code will enable MidTown Cleveland and the City of Cleveland to encourage and enforce specific permitted uses, site form, and development types and standards. The existing Midtown Mixed Use District (MMUD) for Carnegie Avenue provides a solid foundation from which to start. However, in practice, it is falling short of the development goals it was designed to meet. The following modifications are proposed to remedy those shortcomings and set the corridor up for future success.

MMUD Recommended Modifications

- Key Permitted Uses
 - “Gasoline Service Stations, Automotive Services and Automotive Repair Garages” to remain as not permitted. It is important to note that any existing uses of this type are grandfathered in place as “non-conforming” uses.
 - “Parking Garages and Off-Street Parking” are only permitted as Accessory uses, subordinate to a main land use or building.
 - “Automotive Sales and Related” and “Outdoor Storage” are already Conditional uses;
- “Drive-Thru Facilities” should be made a Conditional Use to align with the aforementioned similar uses.
 - This way it has to go through an extra level of review with City Planning Commission, rather than permitting it by right. This will help to ensure that any proposed developments of this type conform to a specific set of criteria and are in keeping with the form, setbacks, site layout, and other standards being set for this district.
- Allow “Residential above First Floor Retail” as a permitted use
 - Encourages mixed-use development in parts of the corridor that are seen as more transitional.
 - Increases the walkability and density of the area by allowing more compact development, adds variety and character to the neighborhood.

- Particularly applicable to specific zones within the focus area and will be important to support additional recommendations later in this report.
- **Building and Parking Setback Requirements**
 - Reduce maximum building setback allowed to 10 feet.
 - Minimum 5-foot setback and a maximum of 30 feet allowed currently.
 - Buildings planning to have outdoor dining patios or other physical activation of exterior frontage, as approved by local Design Review and City Planning Commission, may set back that portion of the building up to 20 feet.
 - Pushes developers to adopt a more urban, walkable form that they are trending away from with the current zoning allowance.
 - Add requirement to parking setback to be equal to that of (at least part of) the building setback
 - Current parking setback is minimum 10 feet from the Right of Way; this allows room for a generous buffer / screening – do not want to see cars parked immediately against the sidewalk.
 - Parking should never be in front of building setback; this is also remedied through the above building setback change.
 - Remove the footnote that allows properties that extend the full block depth between Euclid and Carnegie to only apply the Euclid setbacks.
 - This allowance as it stands allows developments to turn their back on Carnegie, further contributing to the irregularity and unattractiveness of the corridor.
 - Development should address both streets appropriately and be held to the same level as adjacent properties and be responsible for meeting the frontage and setback requirements of both corridors.
- **Building Width Requirements**
 - Increase the minimum building width from 50% of frontage to 65% or 70%
 - For reference, current requirement for properties on Euclid Avenue is 80% minimum building width at frontage.
 - Creates a building-first hierarchy over parking or other accessory land uses on the property, which contributes to the desired district form.
- **Building Height Requirements**
 - Provide incentives for new construction to increase density and go above the minimum 1-story (presently allowed up to 60 ft), particularly in the mixed-use zone.
 - Must be sensitive to the residential uses to the south – step down into the neighborhood.
 - Balance height with frontage width requirements and streetscape elements to ensure comfortable pedestrian experience.
- **Off-Street Parking and Loading**
 - Reduce maximum parking so that it does not exceed 100% of code requirements.
 - Retail uses currently allowed up to 120% of requirements specified in Chapter 349 of the zoning code.
 - Set a parking maximum or allowed range up to 100% of requirements specified in chapter 349.

- Don't require applicants to need a variance for less parking.
- Site Development Standards
 - Enforce landscape, screening, fencing, and lighting standards

These changes, in combination with the landscaping and frontage requirements as described in section 344.09 and other referenced sections of the code, will contribute to a more walkable pedestrian feeling along the sidewalk as is desired.

Overlay Districts

Another recommended zoning change is to incorporate zoning overlay districts in select areas surrounding the corridor. This would help to reinforce the form, density, walkability, and physical cohesion that is desired and was identified by the project goals and objectives.

A Pedestrian Retail Overlay District should be established on the eastern end of the focus area. This zone was identified as a future residential support area through the land use analysis in the Plan Vision chapter. Per the Cleveland Code of Ordinances section 343.23: "The Pedestrian Retail Overlay (PRO) District is established to maintain the economic viability of older neighborhood shopping districts by preserving the pedestrian-oriented character of those districts and to protect public safety by minimizing conflicts between vehicles and pedestrians in neighborhood shopping districts." This is well-suited to support the vision and recommended uses for this part of the corridor.

An Urban Form (UF) Overlay District should be established over the mixed-use transition zone that was also identified through the above-mentioned land use studies and recommendations. The intent of this overlay is to "foster a high level of walkability and design quality for Cleveland's urban streets. The UF will do this by requiring pedestrian-oriented building features, preserving and enhancing the architectural character of new and existing buildings and protecting public safety by minimizing conflicts between vehicles and pedestrians." The key features of this overlay work to enforce the shape of new buildings and street frontage that the proposed MMUD-3 zoning updates aim to achieve, but raise the standard level of care in this critical area.

Alternative Recommendation

The MMUD was created for a very specific purpose at a time when little development or had been occurring in the Midtown area, but when considerable new investment was about to take place. Since the MMUD was put in place, the GCRTA's HealthLine BRT was built and hundreds of millions of dollars of investment have followed along and around what has become the "Health-Tech Corridor." Some of the success of the development in this area can be attributed to the zoning that was put into place to coincide with the substantial public investment in transit and streetscape infrastructure. While the MMUD zoning has served its purpose along Euclid Avenue, it may now be time for a different approach to guide the next chapter in Midtown's future.

The above series of specific and itemized zoning changes were developed based on a series of steering committee meetings and core team discussions. They have been deliberated, modified, reviewed, and agreed upon as the preferred form the zoning regulations in this area of Carnegie Avenue should take. All that considered, not only is the process to adopt and enact them this way tedious and time-intensive, but the final language could present challenges for property owners and developers to use moving forward.

A more favorable approach could be removal of the MMUD, replacing it with the base zoning types of Limited Retail District or Semi-Industry, as appropriate, and creating a new overlay district that encompasses the boundary of the former MMUD area. This new overlay would be

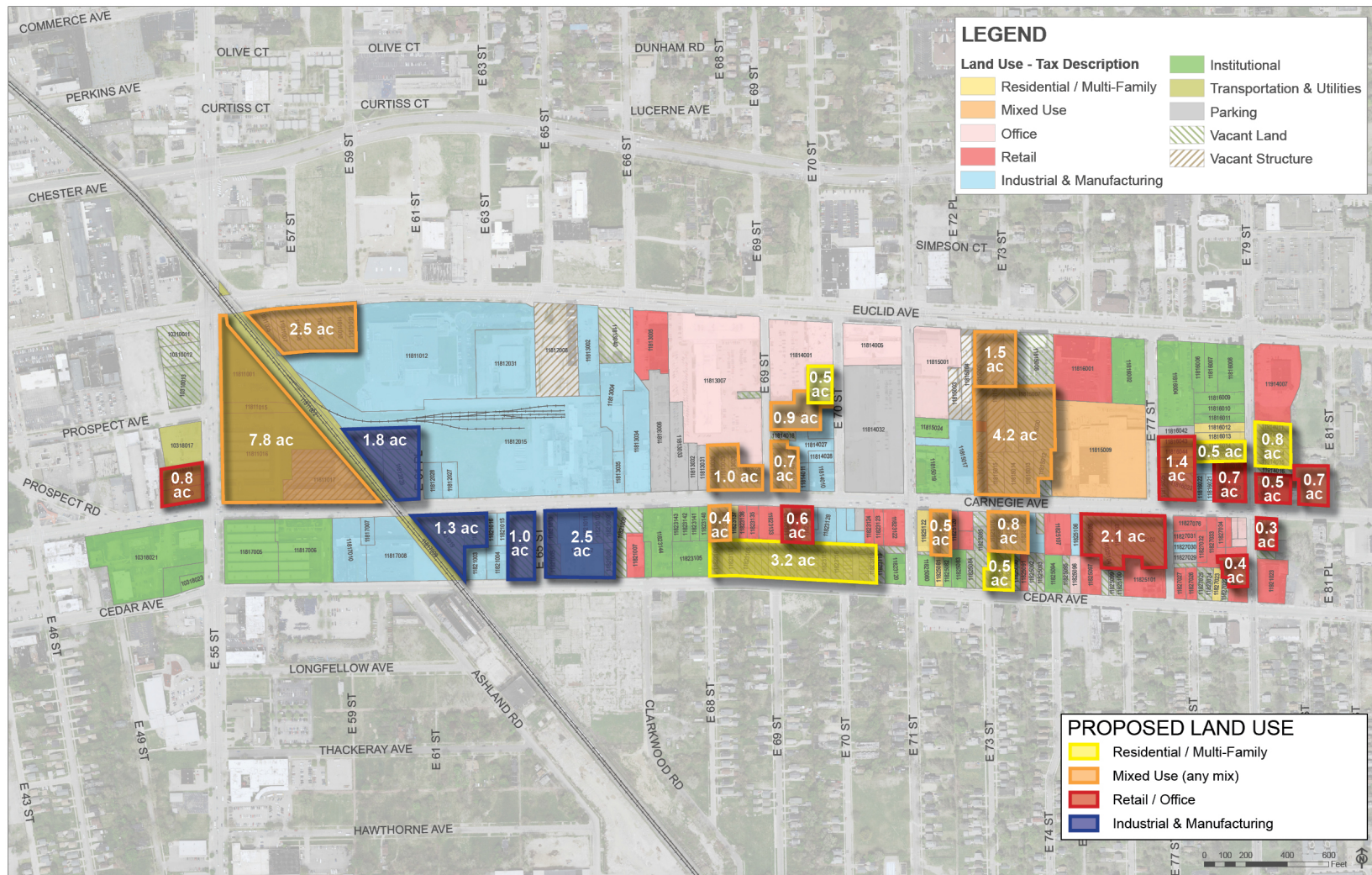
similar to that of the existing Urban Form Overlay District described above. Further discussion between MidTown Cleveland and Cleveland City Planning is recommended to determine whether the new overlay should be Urban Form Overlay, specifically, or if a new, form-based overlay should be created that is customized to the Midtown area. This overlay could start with the Urban Form Overlay as a baseline, but adjust percentages, setbacks, heights, and other criteria to be more reflective of the “MMUD Modifications” recommendations that were developed as a part of this planning process. While it would still take significant time to write and enact this type of zoning, the result could be language and regulations that are more suited to the desired outcomes, easier to understand, and with a permit application process that is more efficient for all parties.

5. Redevelop vacant land and buildings

The considerable amount of vacant and underutilized land along Carnegie Avenue presents a substantial opportunity to redevelop more than 29 acres of land in the focus area (see **Figure 48**). In addition, there is a collection of large, medium, and small buildings that are either underutilized or sit vacant. This recommendation was, by far, the highest priority of the nine shared with the public at the final open house, receiving an average score of 4.42 (with 5 representing the highest score). While this vacant land is currently viewed as a primary weakness along the corridor, it was also frequently cited as the largest opportunity to provide meaningful transformation. In line with the zoning recommendations from the previous section, this represents a chance to redevelop significant stretches of Carnegie with supportive or more compatible uses that reflect the aspirations of the community.

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Figure 48 Vacant Land and Future Land Use



Brownfield Sites

Some of the identified redevelopment parcels are former industrial sites and, as such, are considered brownfield land that will need environmental study and remediation before they can be adapted to a new use. Any of the parcels identified in this study area should be considered brownfields by definition, as they were previously developed and contained uses that could require remediation as part of a redevelopment strategy.

It is important to note that not all brownfield sites are contaminated. In order to identify a contaminated brownfield site that is in need of remediation, the owner (or prospective buyer) would have to perform a Phase I environmental site assessment to determine if contamination is present. The type of information collected during this research includes identifying any nearby contaminated sites, physical site characteristics, historic and current uses of the property and adjacent properties, interviews of current and previous owners and occupants of the property in question and adjacent properties and other historical, health, and environmental data records. The gathered information is compiled and analyzed to determine whether there are any recognized environmental conditions and if a Phase II assessment and site samples are needed.

It is important to identify contaminated brownfield sites in need of clean up due to the potential health risks they pose. While this can sometimes be costly, there are resources and financial grants available to assist with clean up. It is always in best practice to redevelop these sites prior to building on greenfield sites because it preserves undeveloped land and existing habitats, removes blighted and abandoned properties, eliminates potential health and environmental hazards in already occupied neighborhoods, and increases the potential employment and tax base of a community, in addition to improving the overall appearance of the area.

Proposed Land Uses

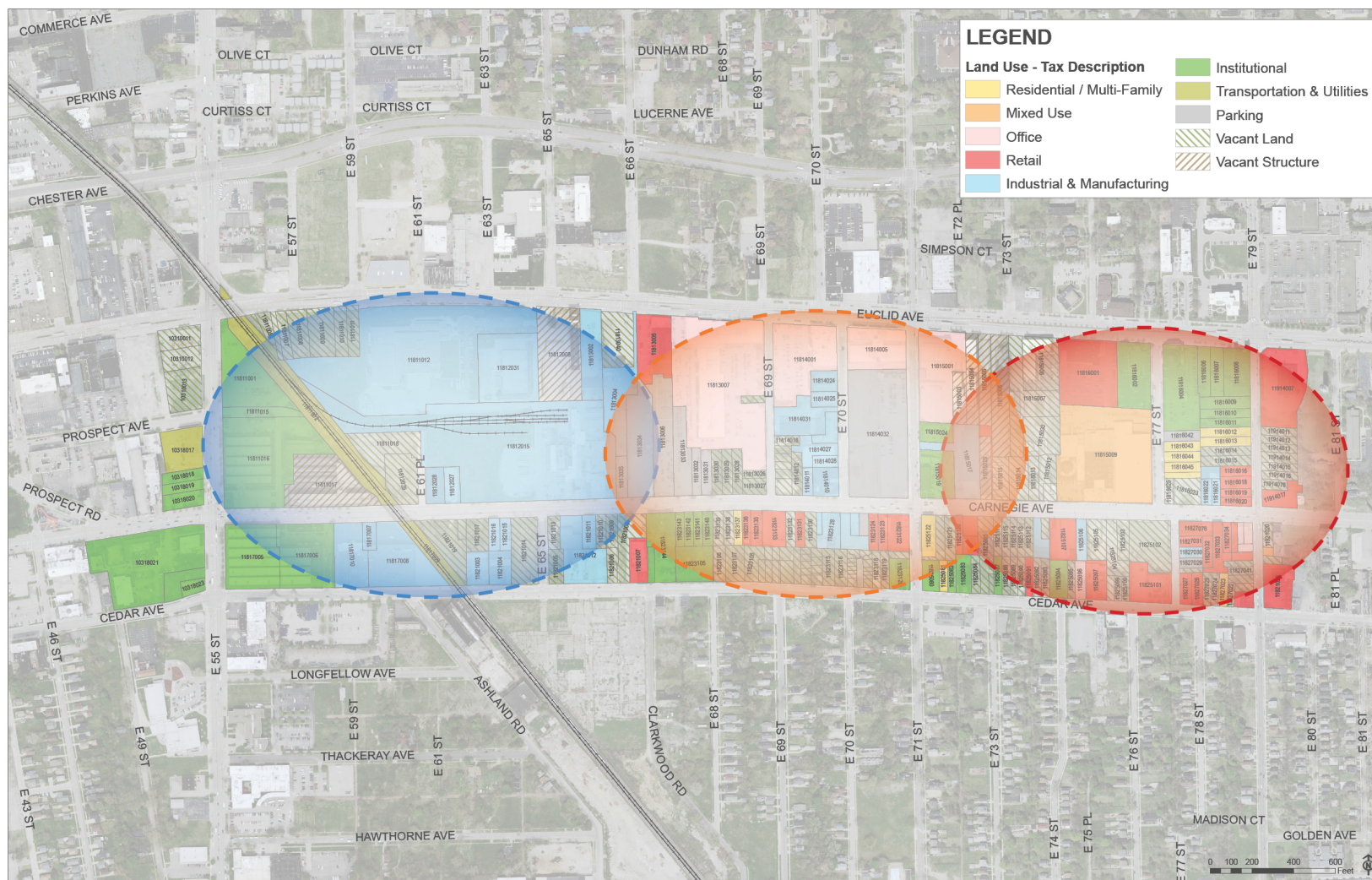
During the analysis of existing land uses within the focus area, some small cluster of like uses were identified, but overall, the corridor presented a widely diverse and mixed corridor. The planning team focused on the potential hidden within the abundance of vacant and under-utilized land. The team and project partners looked at the neighborhood context on the surrounding blocks just outside of the focus area. Patterns began to emerge from these land use studies. Further adjustments and refinements were made to the suggested new uses and three main types of areas emerged – Industrial, Mixed-Use, and Residential Support (see **Figure 49**). The identification of these zones has guided the proposed zoning changes, overlays, setbacks, forms, and so forth, as identified in other areas of this report.

It was clear throughout the study that the western portion of the focus area needed to maintain an industrial focus. The large parcel size, adjacency to the railroad tracks, and the existing businesses and structures are very much of an industrial nature, and it is logical to fill in the gaps with like uses. Any sort of manufacturing, light industrial, corporate office, business incubator space, warehouse, enclosed storage, or automotive uses / services that are permitted by the proposed revised zoning should occur in this portion of the corridor.

The eastern portion of the focus area presented itself as a retail area with a focus on supporting nearby residents. The parcels in this area are smaller, although there are contiguous clusters of vacant ones. Several small apartment buildings already exist on or adjacent to the corridor and in the surrounding blocks, along with a few retail establishments. Based on these and the surrounding residential neighborhood, any new businesses that want to locate or build in this area should provide services and amenities that meet the needs and desires of the community around it.

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Figure 49 Recommended Land Use Zones



Some of the suggested uses heard from the public and that would make sense in this area are: retail, commercial, office, dine-in restaurants (specifically those which are locally-owned and operated and offer healthy food options), apartments, educational opportunities, and job training, laundry or dry cleaning services, entertainment, market / grocery / convenience store, and fitness and recreation facilities.

Finally, to bridge the gap between these two fundamentally different sectors, a mixed-use transition zone is proposed. This mixing of uses is suggested to encompass more than the traditionally thought of residential over retail pairing. It can and should include a variety of types, both stacked and neighboring, including combinations of office, residential (multi-family), retail, hotel, live / work, educational, and fitness / recreation.

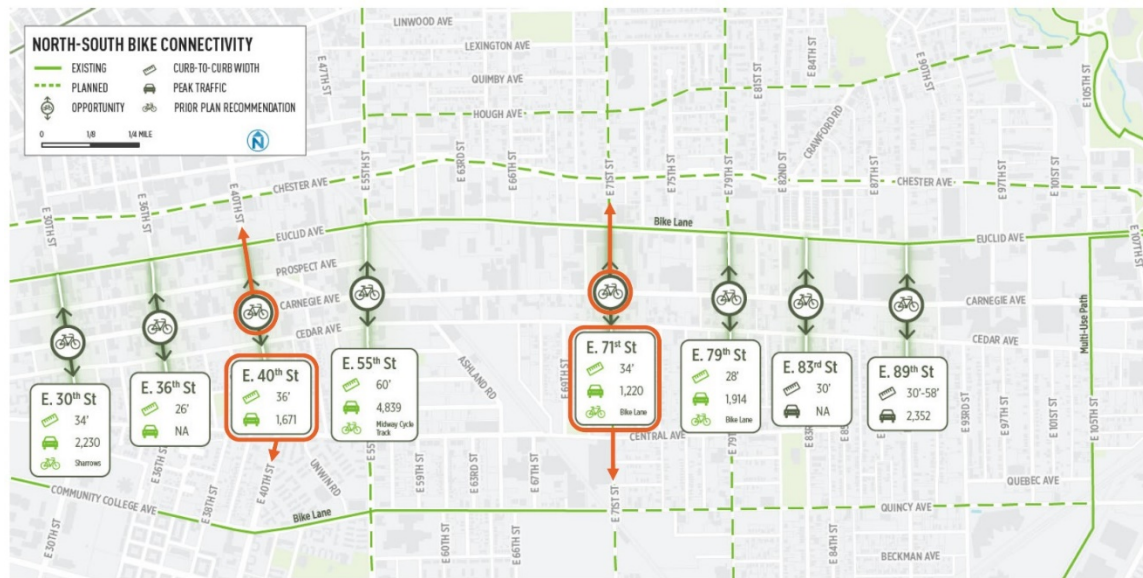
As a part of the planning process, a series of potential development sites were identified, along with suggested land use categories, as illustrated in Figure 48. Parcels or adjacent groupings of parcels that combined for a total lot area of one half-acre or greater were called out as potential redevelopment sites if they were also vacant of tenant or building and/or were not already associated with a current development plan. Larger parcels or parcel assemblages greater than one acre provide a better chance for business autonomy, redevelopment options for a variety of uses, and are more attractive to developers. Potential site layouts were created during the process to demonstrate future possible configurations in the context of the two aforementioned focus areas, as illustrated in Figure 60 and Figure 63.

Sites in the one-half to one-acre range allow for a standalone, outparcel, drive-through / fast food types of establishment. Some examples of this are seen on the existing Popeye's property at E. 71st and Carnegie or the new Dunkin' Donuts site at E. 83rd and Carnegie. These demonstrate some possible site layouts and building footprints that can fit on a property of that size. However, community feedback provided during the planning process made it clear that this type of use is not wanted in the core of the study area where more pedestrian activity could be promoted. Further, they voiced a preference for locally-owned, health-focused businesses. Any sites smaller than a half-acre should be "land banked" by either the City or MidTown Cleveland, if possible, to support expansion of existing businesses or until a time when adjacent parcels are available and can be consolidated.

6. Establish the East 40th & East 71st Street corridors as key bicycle routes

In response to stakeholder desire for improved north-south bicycle connectivity across Carnegie Avenue this plan recommends advancing E. 40th Street and E. 71st Street as priority bikeway corridors. Bikeway improvements should be implemented on these two streets, at a minimum, as capital projects are designed and completed over the next few years, as both are included in the most recent 3-year Capital Improvement Plan. The City's Bikeway Master Plan should also acknowledge and emphasize them in its upcoming update.

Figure 50 Bike Network Recommendations



Due to a variety of factors, these corridors present unique opportunities that informed the recommendation, with a goal of creating a range of facility types that contribute to a complete network for all ages and abilities.

E. 40th Street

East 40th Street, north and south of Carnegie, presents an opportunity to install a “low-stress” bicycle facility that connects a variety of destinations. The street features 36’ of curb-to-curb width, both north and south of Carnegie, but narrows to less than 30’ at Cedar Avenue. The right-of-way, however, is equal to that of E. 55th Street at 100’ in either direction. Destinations along the corridor include multiple schools, workplaces, multi-family residential buildings, a Health Line station, and public agencies like Cuyahoga County’s Jane Edna Hunter Social Services building and the Northeast Ohio Regional Sewer District headquarters.

With low traffic volumes and turn movement counts, it is conceivable that a low-stress facility could be established in a shared lane context, provided that the appropriate signage, pavement markings, and visual cues are provided to signal to drivers that this is a priority bicycle corridor. These include shared lane markings and signage, plus design features that establish advisory bike lanes or a bicycle boulevard. These can be installed at intersections and along the stretches of roadway between avenues to slow traffic and increase the visibility of the bicyclist.

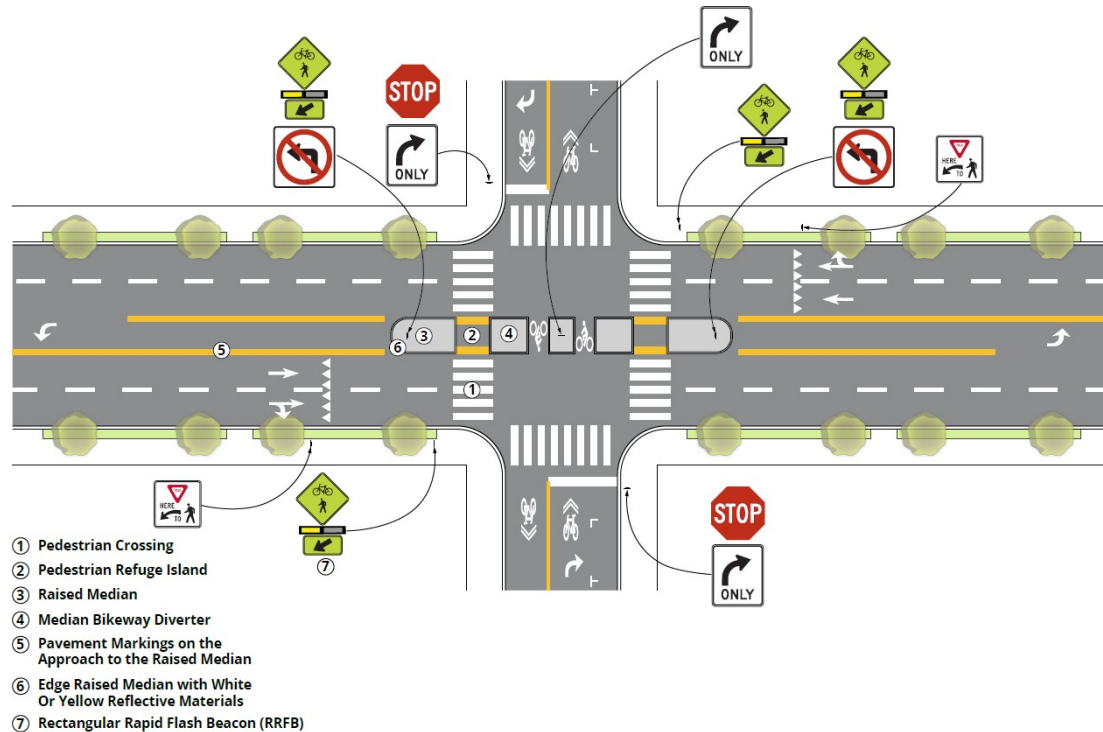
With 36’ of curb-to-curb width, if retention of center turn lanes and on-street parking is a priority, shared use options (such as the above advisory bike lane) could be considered. If those uses can be modified and/or removed, the option to install dedicated 5’ bike lanes or a 10’ wide, two-way cycle track (which would involve much more significant design and infrastructure measures to ensure safety and proper function) could be considered. A longer-term option could be the installation of a side path, making use of the generous right-of-way width and generous setbacks, in particular to the south.

Intersection treatments could include striping or other pavement markings to clarify bicycle routing, as well as loop detectors and diverters that facilitate safe and efficient bicycle travel.

Figure 51 illustrates one approach to prioritizing bicycle traffic through an intersection in line

with a bicycle boulevard approach. Additional examples can be found in NACTO's Urban Bikeway Design Guide.³

Figure 51 Intersection Improvements to Support Bicycle Connections



It should be noted that there are a large number of commercial/industrial driveways along E. 40th north of Perkins Avenue and that the curb-to-curb width narrows to 28' south of Cedar Avenue. These transitions should be noted when deciding what facility type and countermeasures may be most appropriate to continue the bikeway in these geographies.

E. 71st Street

E. 71st Street, presents another opportunity to install a “low-stress” bicycle facility. The street is slightly narrower, with 34' of curb-to-curb width, both north and south of Carnegie and a right-of-way width of 58' in either direction. Destinations along the corridor include multiple schools, workplaces, places of worship, multi-family residential buildings, and a Health Line station.

E. 71st Street, again, features several of the characteristics that would enable a low-stress facility to be established in a shared lane context. The current Bikeway Plan recommendation is for dedicated bike lanes, which can be accommodated if on-street parking is removed. It should be noted that E. 71st Street terminates at Quincy, but planned east-west bike lanes at that location can connect bicyclists from E. 71st Street to planned facilities on E. 79th Street and points beyond.

³ <https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/volume-management/>

7. Implement traffic calming & safety measures at all intersections

While a “road diet” or curb extensions were not deemed feasible in the near-term, there are measures that can be implemented at each intersection along the corridor to make improvements for pedestrians, bicyclists, and transit riders, while not compromising Carnegie’s primary function as a significant automobile arterial. The “Tier 1” and “Tier 2” intersection improvement strategies from the previous section of the report provide a list of “low hanging fruit” that can be applied throughout the corridor.

Based on existing turn movement counts and other access considerations, the following recommendations are made for the intersections from E. 30th Street to E. 105th Street:

- **E. 30th Street: Tier 1**, including high-visibility crosswalks
- **E. 36th Street: Tier 1**, including high-visibility crosswalks
- **E. 40th Street: Tier 2**, including high-visibility crosswalks, pedestrian refuge island, and measures to support implementation of low-stress bicycle network connections.
- **E. 55th Street: Tier 1**, including high-visibility crosswalks, no right on red, transit waiting enhancements, and leading pedestrian interval (LPI)
- **E. 71st Street: Tier 2**, including high-visibility crosswalks, pedestrian refuge island, and measures to support implementation of low-stress bicycle network connections.
- **E. 79th Street: Tier 1**, including high-visibility crosswalks, no right on red, transit waiting enhancements, and leading pedestrian interval
- **E. 83rd Street: Tier 2**, including high-visibility crosswalks and pedestrian refuge island
- **E. 89th Street: Tier 1**, including high-visibility crosswalks, no right on red, and LPI
- **E. 105th Street: Tier 1**, including high-visibility crosswalks, no right on red, transit waiting enhancements, and LPI (already present)

Figure 52 Intersection Improvement Options – Tier 1

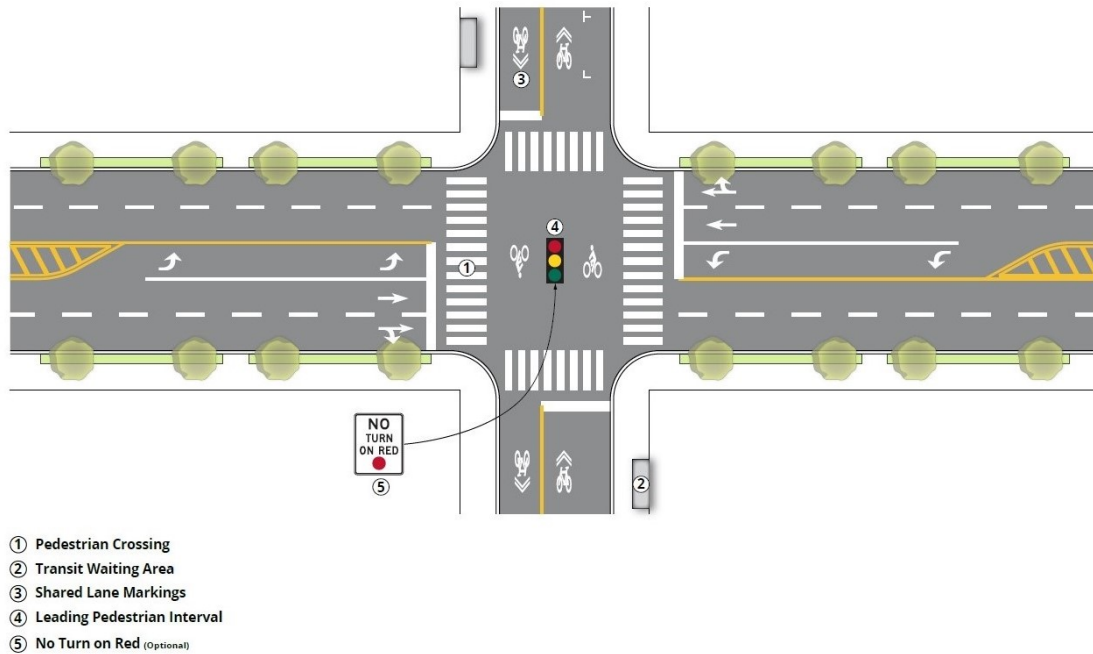
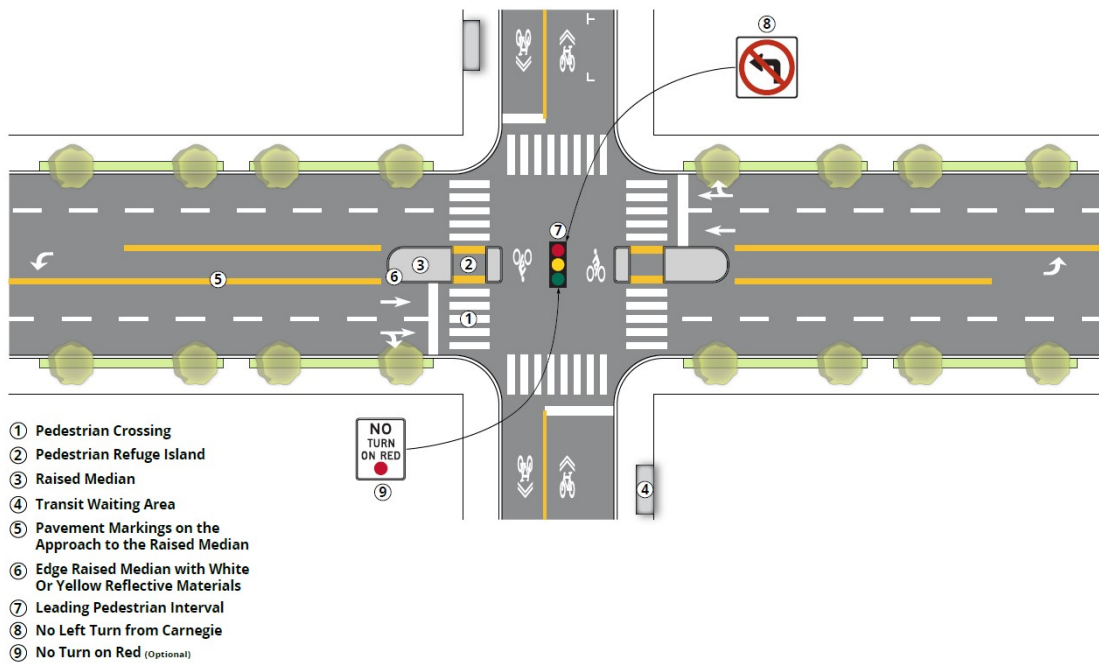


Figure 53 Intersection Improvement Options – Tier 2

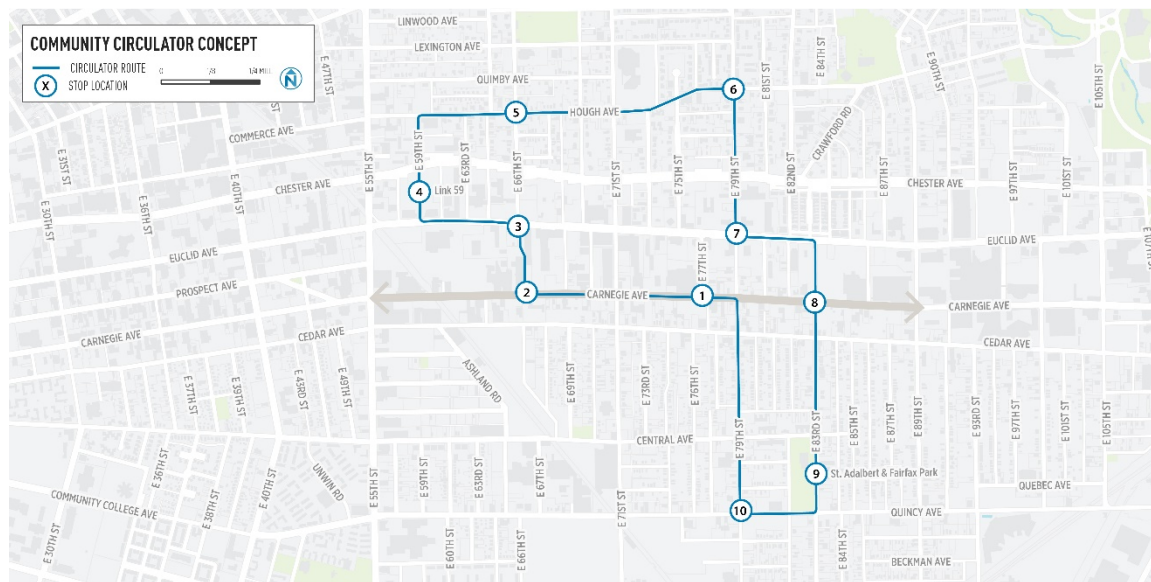


8. Pilot a community circulator

Carnegie Avenue carries no transit lines and there were no recommendations from the community or RTA to incorporate transit service on Carnegie itself. Routes provided on adjacent and crossing corridors were deemed sufficient and appropriate for regional connections. However, connections to these routes and connections *within* the community were cited as deficient in several ways. The previous sections speak to the opportunities to better connect people to regional transit routes through a series of pedestrian and bicycle network improvements. However, there could still be an opportunity to facilitate better transit network connections within the community through the implementation of a community circulator.

While this recommendation scored relatively low (3.06 out of 5) during the final community open house, there was interest expressed among Steering Committee members from neighboring community development corporations, some of whom have had some success in implementing circulators in the past. Options including first mile / last mile connectors like the CircleLink⁴ in University Circle and services for seniors or other riders with special needs like the Dublin Senior Circulator⁵ in suburban Columbus. Columbus will be launching an autonomous shuttle in the Linden neighborhood in late 2019⁶, with a focus on connecting residents to health care and community facilities and regional transit hubs.

Figure 54 Community Circulator Concept



The project partners can explore resources through NOACA, including 5310 funding in support of enhanced mobility options for seniors and people with disabilities, or local sources like the “Paradox Prize,” which is being facilitated by the Fund for Our Economic Future to increase connectivity between jobs and workforce.

⁴ <https://www.universitycircle.org/visit/circlelink-shuttle>

⁵ <https://ridewithshare.com/dublin/>

⁶ <https://smart.columbus.gov/news/smart-columbus-selects-easymile-to-operate-self-driving-shuttles-in-linden-neighborhood>

9. Locate a series of “mobility hubs” throughout the corridor

“Mobility hubs” are places where multiple modes of transportation come together, offering convenient transitions and connections from one to another. The concept has proven broadly useful in efforts to call attention to points of intersection between two or more travel modes, and to reduce barriers to their regular use. As emerging mobility options increasingly diversify travel options in more places and as technology makes it increasingly easier to find immediate information on and access to these options, informal hubs are emerging in many communities.

Mobility hubs can include a variety of multimodal infrastructure components, customized for their location within the transportation network. For the purposes of this plan, they can include any intentional co-location of two or more publicly accessible travel modes within a public space or facility. These locations can be located on or adjacent to Carnegie to begin to facilitate the types of multimodal connections that the community will need to support its transformation.

Figure 55 Mobility Hub Concept



Suitable locations could include the intersections of E. 55th and E. 79th where RTA routes 16 and 2 intersect with Carnegie, as well as activity nodes like MidTown Tech and PNC Fairfax Connection. Mobility hubs in these contexts could include of a series of elements, including:

- Bus Stop: 200 SF of sheltered waiting area, minimum
- Circulator Stop: 200 SF of sheltered waiting area, minimum
- Bike and/or Bikeshare Parking: 100 SF of secure and/or sheltered space for racks, minimum
- Carshare Parking: 200 SF of adjacent curbspace, per dedicated parking space
- Mobility/Wayfinding Kiosk: 15-20 SF of sheltered space

FOCUS AREAS

Two focus areas were identified over the course of the planning process where significant private investments are already being made. The strategies and recommendations highlighted in the previous sections can be implemented here in the near term to help usher in more dramatic transformation of the Carnegie Avenue corridor in the years to come. These focus areas will set the tone and stage for future development, “proving the concept” that Carnegie can be more than just a non-descript, drive through corridor.

Focus Area 1: E. 65th – E. 69th

The first area extends from the intersection of E. 65th and Carnegie, where a significant vacant land redevelopment opportunity exists on the south side of the street, to E. 69th, where additional vacant land stands poised for investment. The transportation, development, and streetscape recommendations from the previous section are further detailed in the illustrations on the following pages:

- **Figure 56** provides an overview of transportation enhancements, including pedestrian, bikeway, and vehicular connections that will support the redevelopment of the area and facilitate a safer, more convenient, and more comfortable environment for all users. It includes the closure of MidTown Tech’s eastern driveway, which was less popular than option two, below.
- **Figure 57** represents a slight variation on the first option, leaving MidTown Tech’s eastern driveway open, but limiting access to *right turn in* and *left turn out*. The western driveway would be for *left turn in* and *right turn out* only. These modifications will clarify the ingress / egress conditions for drivers accessing this site, but there should be a tandem focus to shift additional vehicular access to E. 69th Street, where an additional driveway exists, and future development may warrant installation of a new traffic signal.
- **Figure 58** illustrates a series of wayfinding and placemaking improvements that can be implemented in this focus area to support the transportation and development objectives. Opportunities include wall murals, gateway markers, wayfinding, etc.
- **Figure 59** illustrates the redevelopment potential in the focus area, which could include as much as 300,000 SF of additional leasable space as development of vacant parcels takes place. This could include expansion of existing businesses, repurposing ground floor and other uses, and new construction of light industrial, commercial, and mixed-use sites.

Focus Area 2: E. 74th – E. 99th

The second area extends from the west of the Central Kitchen/Food Hub property (7501 Carnegie Avenue), to E. 79th and Carnegie. Visible investments have taken root in this area in recent years and additional improvements to vacant properties, existing buildings, sidewalks & pedestrian networks, and streetscapes can help Midtown capture this momentum and accelerate it to help the commercial district reach its potential. The transportation, development, and streetscape recommendations from the previous section are further detailed in the illustrations on the following pages:

- **Figure 60** provides an overview of transportation enhancements, including pedestrian and vehicular connections that will support the redevelopment of the area and facilitate a

safer, more convenient, and more comfortable environment for all users. It includes the addition of on-street parking, a temporary public parking lot, and a relocated pedestrian crossing that aligns with E. 77th Street.

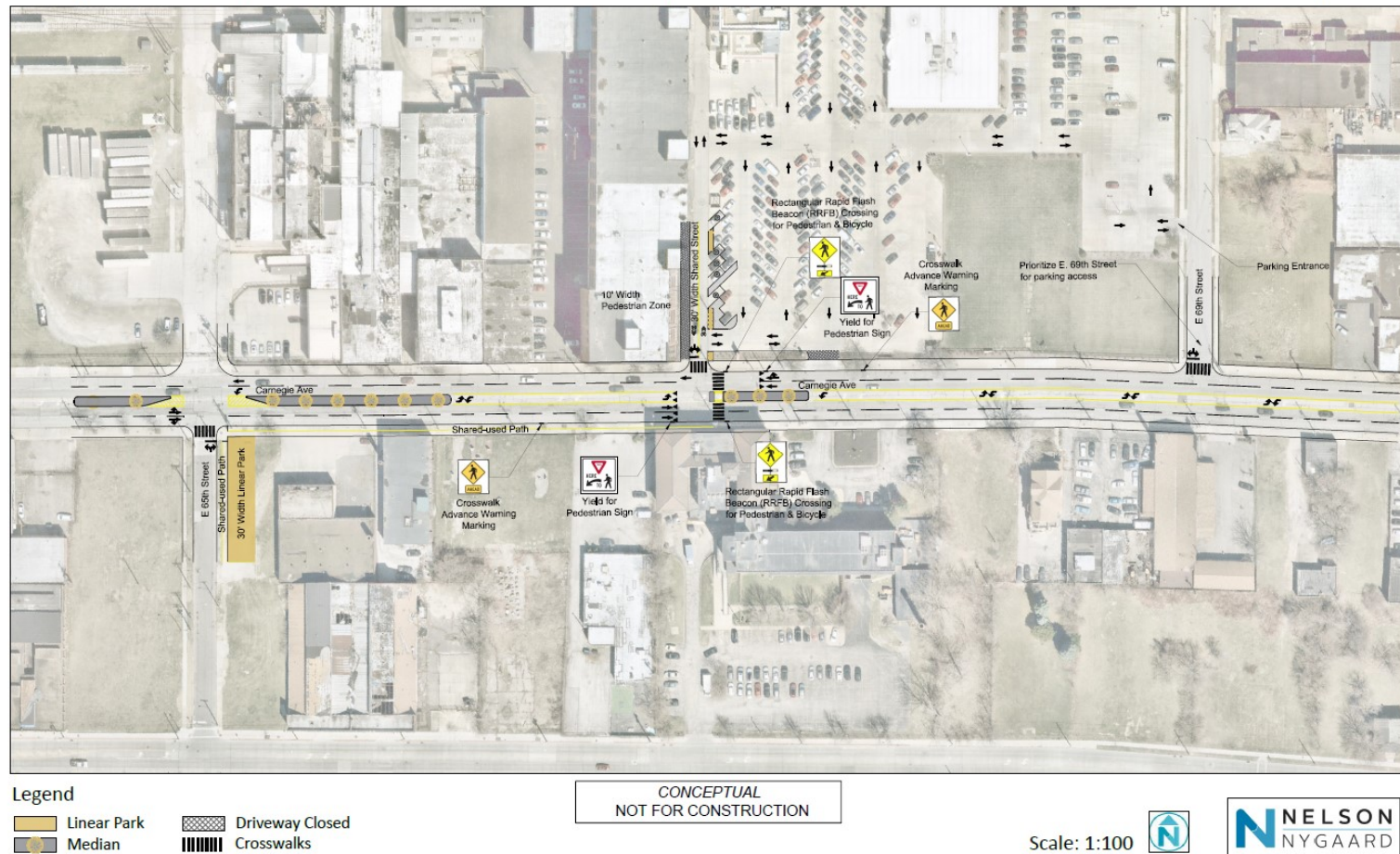
- **Figure 61** illustrates a series of wayfinding and placemaking improvements that can be implemented in this focus area to support the transportation and development objectives. Opportunities include gateway markers, wayfinding, and tree-lined medians that can help identify this as a distinct place, direct people to their destinations, beautify the street, and calm traffic.
- **Figure 62** illustrates the redevelopment potential in the focus area, which could include as up to 200,000 SF of additional leasable space as development of vacant parcels takes place. This could include expansion of existing businesses and development of a variety of mixed-use commercial, retail, and residential buildings that extend both north and south of Carnegie. Driveways should be consolidated to the extent possible and parking supply should be located in the rear of the properties, accesses off of E. 77th Street.

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Figure 56 E. 65th – E. 69th Focus Area Transportation Enhancements– Option 1

Carnegie Ave Concept Plan - E. 65th Street - E. 69th Street Transportation Enhancements

Option 1



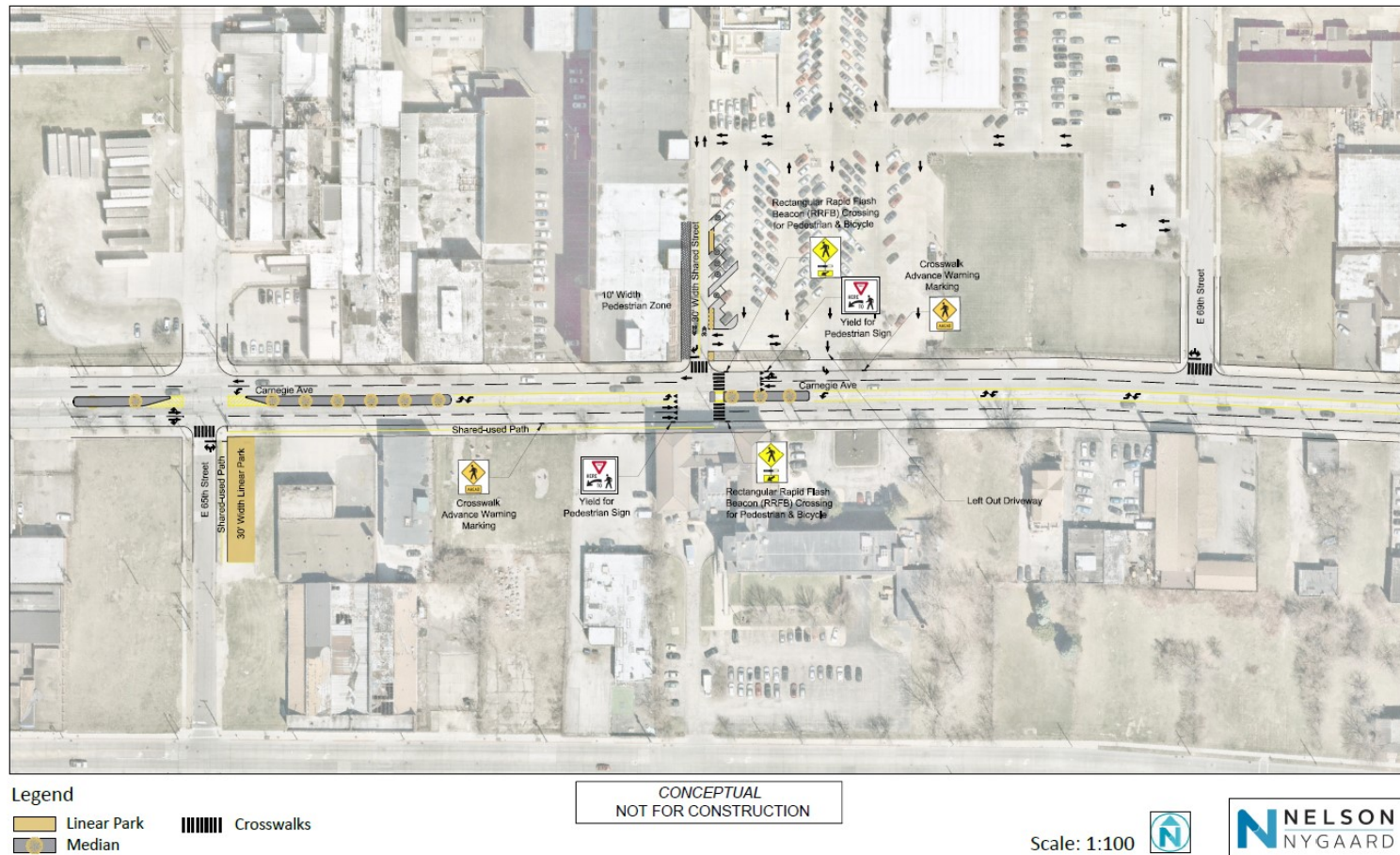
Option 1 includes the removal of the eastern MidTown Tech driveway on Carnegie Avenue

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Figure 57 E. 65th – E. 69th Focus Area Transportation Enhancements– Option 2

Carnegie Ave Concept Plan - E. 65th Street - E. 69th Street Transportation Enhancements

Option 2



Option 2 retains the eastern MidTown Tech driveway on Carnegie Avenue, but restricts access to right turns in and left turns out.

Figure 58 E. 65th – E. 69th Focus Area Wayfinding & Placemaking Enhancements

Carnegie Ave Concept Plan - E. 65th Street - E. 69th Street Pedestrian Wayfinding & Placemaking Enhancements

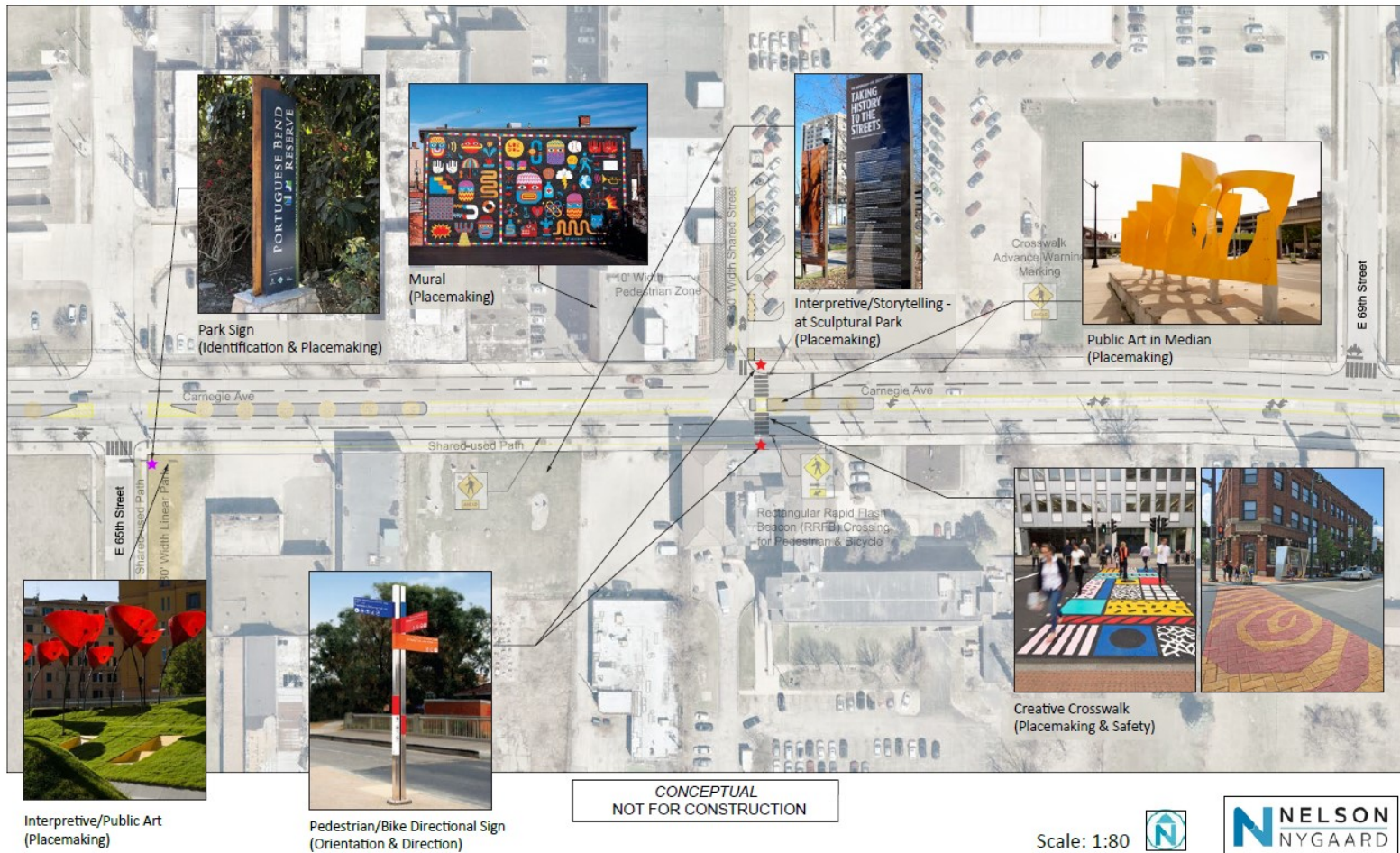


Figure 59 **E. 65th – E. 69th Focus Area Redevelopment Plan**



Figure 60 E. 74th – E. 79th Focus Area Transportation Enhancements

Carnegie Ave Concept Plan - E. 74th Street - E. 79th Street Transportation Enhancements

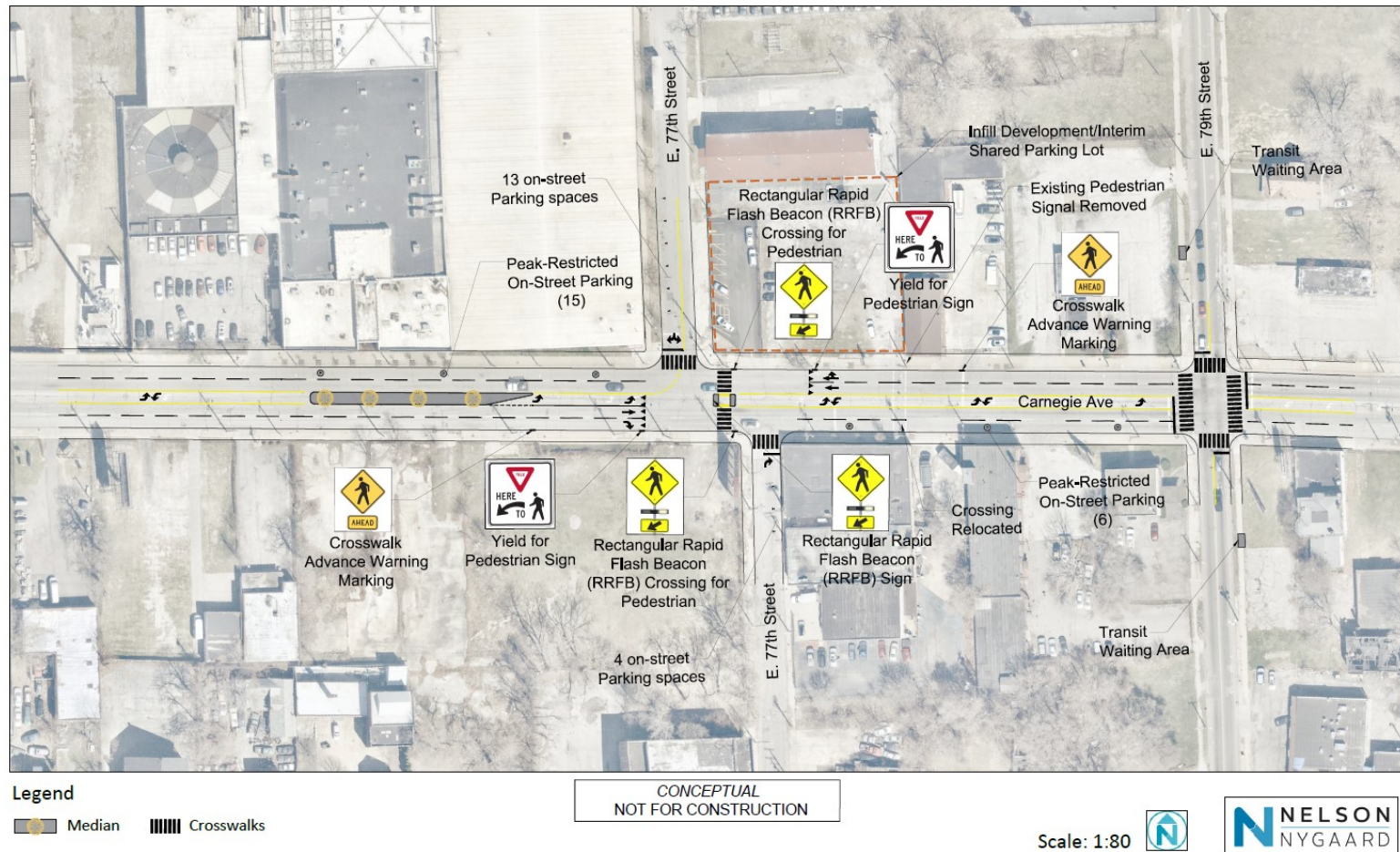
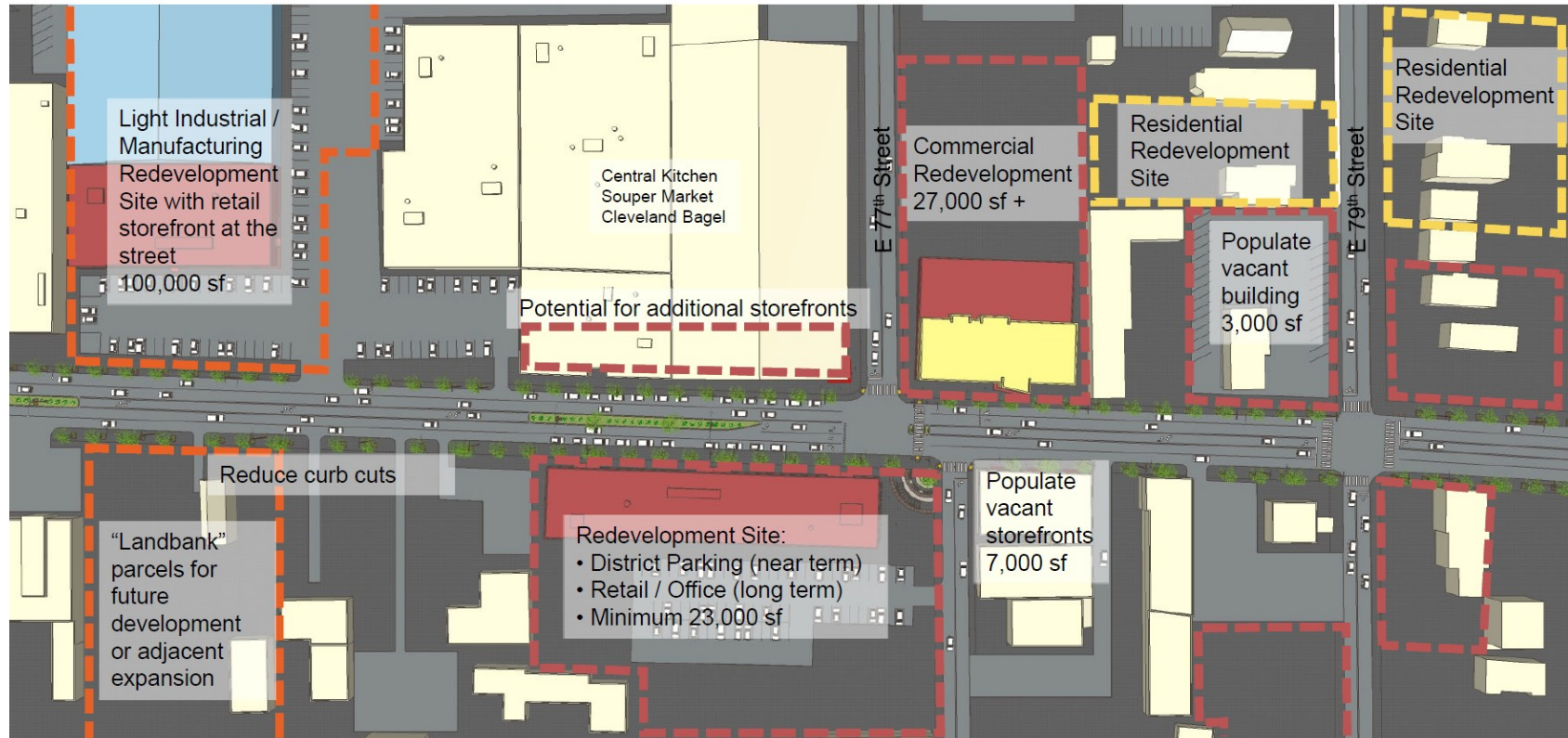


Figure 61 E. 74th – E. 79th Focus Area Wayfinding & Placemaking Enhancements

Carnegie Ave Concept Plan - E. 74th Street - E. 79th Street Wayfinding & Placemaking Enhancements



Figure 62 E. 74th – E. 79th Focus Area Redevelopment Plan



5 IMPLEMENTATION PLAN

The Re-inCarnegie Master Plan presents a vision for what the community wants the Carnegie Avenue corridor to become over time. The changes needed to realize this vision will take several years to accomplish. Progress can and should be made in the near-term (1-3 years) to set the stage for future development and to build momentum toward the medium and long-term transformation of the corridor. This section outlines action steps for short-term implementation, while also queuing up medium to long-term steps. The Implementation Plan Matrix at the end of this section provides a summary of the near-term actions, along with an overview of the resources needed to complete them.

Enhance the Streetscape

Near-Term Actions

Install neighborhood identity signage, railroad bridge treatments, and public art projects

These elements can take shape incrementally throughout the corridor as community partners and opportunities arise, with the intention of eventually stitching together Carnegie's disparate nodes.

- Install and expand upon the cohesive package of signage, wayfinding, and banners.
- Work with adjacent communities to identify opportunities for collaborative banner design that highlights transitions between neighborhoods and points of interest.
- Clean up the railroad bridge adjacent to the Warner & Swasey Building, as well as its underpass and sidewalks extending east and west.
- Work with community partners to develop a public art plan, including public art projects at the bridge and elsewhere throughout the core area that reflect community identity and values and establish additional "pockets" of interest, surprise, and delight.

Install street furnishings, amenities

These measures can be concentrated in the plan's two focus areas, as a start, and will help increase comfort and convenience for pedestrians, while also improving the overall aesthetic and visual appeal of the corridor.

- Plant street trees and add benches, waste receptacles, bike racks, and shared mobility parking zones.
- Update fencing and parking lot screening to enhance pedestrian experience and improve aesthetics along the corridor.
- Develop frontage standards within the core area (E. 55th – E. 79th) to be integrated into zoning code updates.

Facilitate sidewalk repair & enforcement

Sidewalk safety and accessibility should be a priority for the City and property owners.

- Work with the City's Bureau of Sidewalks and property owners to audit and repair sidewalks on both Carnegie and its north-south connections.
- Establish a regular survey and enforcement program to ensure compliance.
- Ensure that sidewalks connect via ADA compliant curb ramps and clearly marked crosswalks.

Medium to Long-Term Actions

- Install street furnishings and amenities beyond the two focus areas to improve experience, unify image, and support both existing and new development.
- Install new tree pits and planters with landscaping at sidewalks to create a buffer between pedestrians and traffic, frame the roadway, and increase tree canopy.
- Construct landscaped medians where turning movements are not required to induce traffic calming, increase beautification, and create pedestrian refuge islands where crossings are present.
- Consolidate private driveways and create cross-easements where possible to reduce curb cuts along the roadway and promote a more unified and comfortable pedestrian experience and amenity space.
- Pursue strategic opportunities to bury overhead utilities, consolidate poles, and install pedestrian scale lighting as roadway, sidewalk, and utility work is being completed and aligning with new development projects as opportunities arise.
- Form a Business Improvement District (BID) as more development and businesses move into the area, pursuing opportunities to share costs and efforts for maintenance, landscaping, snow removal, district marketing, mobility improvements, etc.

Invest in improvements between E. 65th – E. 69th

Near-Term Actions

Install a new street crossing for pedestrians

With no marked crosswalks between E. 55th and E. 71st, installing a new crossing in this area should be a top priority, facilitating safe connectivity between Midtown, Central, and Fairfax.

- Confirm location of new crossing at either E. 66th Street or E. 69th Street.
- Refine design for a pedestrian crossing refuge, including a raised median, high-visibility crosswalk markings, signage, and a Rectangular Rapid Flashing Beacon (RRFB).
- Secure funding through City, NOACA, or ODOT programs that can be accessed in the near-term.

Clarify access points for MidTown Tech

As the new street crossing is examined and redevelopment of vacant parcels continues, access needs for MidTown Tech will evolve and can be improved to create clearer, safer, lower conflict ingress and egress.

- Encourage access via E. 69th Street to reduce demand on Carnegie driveways.
- Re-align Carnegie Avenue driveways to allow for “left in” / “right out” at the western driveway and “right in” / “left out” from the eastern driveway.
- Examine future opportunities to remove one of the Carnegie driveways, based on the evolving needs and circulation patterns in this area.

Add streetscape enhancements

The streetscape elements from the previous section should be prioritized in this focus area to establish place, create new pockets of interest/activity, and enhance pedestrian experience.

Establish redevelopment strategies

Recommended land uses for this area include light industry, commercial, and mixed-use development to generate new activity, encourage density and fill gaps between focus areas.

In the short-term, vacant land across East 77th Street from the Central Kitchen is being used for parking to support its retail storefronts. Completing a more formal shared/district parking lot in this location (a City Land Bank parcel) would add convenient, off-street options for the public and further support the expansion of businesses on either side of Carnegie. Long-term this corner, including the current Lancer Motel property, would be fully developed and parking would be relegated to rear lots with access off E. 77th Street. See Figure 62 for additional detail on these opportunities.

Representing the edge between the Mixed-Use Transition Zone and the Residential Support Zone, there is a wide range of potential that has yet to be realized in this focus area. Vacant parcels on both sides of Carnegie, extending west toward E. 71st Street, should be developed in a manner that aligns with the building form, site layout, and frontage standards set forth in this plan. This includes potential for new retail infill (in both existing buildings and on vacant parcels), as well as for more considerable mixed-use buildings as the market develops.

Medium to Long-Term Actions

- Evaluate installation of a full traffic signal at East 69th Street to support new development and improve access to MidTown Tech and adjacent properties.
- Transition E. 66th Street to a “shared” street or alley, improving pedestrian and bicycle connections, maintaining service access to the adjacent buildings, and supporting improvements to adjacent properties.
- Evaluate potential for a neighborhood multi-use trail extending south along E. 65th Street into Central and Fairfax and connecting east-west along the south side of Carnegie to the new E. 66th Street crossing.
- Pursue opportunities to activate ground floor spaces in existing buildings, including the Carnegie and E. 66th Street frontages of the Schaffer Partners building.

Reinforce the commercial district between E. 74th – E. 79th

Near-Term Actions

Install a new street crossing for pedestrians

Installing a new pedestrian crossing at E. 77th Street should be a top priority in this area, in support of pedestrian oriented businesses on either side of Carnegie.

- Confirm location of the new crossing at E. 77th Street.
- Refine design for a pedestrian crossing refuge, including a raised median, high-visibility crosswalk markings, signage, and a Rectangular Rapid Flashing Beacon (RRFB).
- Secure funding through City, NOACA, or ODOT programs that can be accessed in the near-term.

Add parking assets to support the growing business district

As the new street crossing is examined and redevelopment of vacant parcels continues, access needs for MidTown Tech will evolve and can be improved to create clearer, safer, lower conflict ingress and egress.

- Modify curbside regulations on Carnegie to allow for short-term, off-peak, on-street parking.
- Mark on-street spaces for short to medium-term parking along E. 77th Street, north and south of Carnegie.
- Expand and sign the interim use parking lot on the northeast corner of Carnegie & E. 77th to serve as a shared public parking resource for the growing commercial district

Add streetscape enhancements

Streetscape enhancements should be used to strengthen the identity of this commercial node, attract visitors & customers, and encourage investment and development.

- Install and expand wayfinding and banner programs to reflect the evolving district and surrounding areas.
- Prioritize public art and placemaking opportunities as part of a cohesive public art plan and explore opportunities to repurpose or remove existing billboards.
- Examine opportunities for new gathering places within existing, underutilized spaces.
- Enhance transit waiting environments on E. 79th Street to include seating, shelter, improved accessibility, and other amenities.

Establish redevelopment strategies

Redevelopment efforts in this area should focus on attracting additional shopping, dining, entertainment, and service-based businesses.

- Support ongoing reinvestment in properties east of 77th Street, on both sides of Carnegie.
- Position vacant or underutilized land west of the Central Kitchen to complement existing business development in this node, extending between Carnegie and Euclid.
- Redevelop land on the south side of Carnegie, extending west toward E. 71st Street, with pedestrian oriented building form, site layout, and frontage standards.

Medium to Long-Term Actions

- Pursue larger, mixed-use redevelopment of the former Lancer Motel property, replacing the interim parking lot with shared parking assets accessed off of E. 77th.
- Examine potential alignment of E. 77th Street, north and south of Carnegie.
- Monitor parking and traffic patterns for opportunities to implement more significant traffic calming and “road diet” measures at E. 79th Street, extending in both directions.
- Expand redevelopment opportunities east and west of the focus area to connect nodes west of E. 71st and east of 79th.
- Pursue opportunities for a “mobility hub” in this focus area to support connections between pedestrians, bicyclists, transit riders, and shared micromobility users.

Modify existing zoning code

Near-Term Actions

Start the zoning code update process

This can be a lengthy process that takes time and effort, but instituting these changes will be critical to setting the stage for new / future development.

- Drill down on plan recommendations for zoning changes, including revisions to the MMUD-3 provisions, potential overlay districts, and outright zoning changes.
- Work with Cleveland City Planning to frame the revision/rezoning process and engage with local Council representatives and impacted community members.

Redevelop vacant land and buildings

Near-Term Actions

With this representing one of the Plan's highest priorities, MidTown Cleveland and its partners should work to capitalize on the following vacant land redevelopment strategies to help build momentum toward medium to long-term development potential.

- Confirm near-term vacant land assembly and redevelopment priorities, focusing on the plan's two focus areas and alignment with existing City and community plans.
- Pursue opportunities to program or install temporary uses on strategically located vacant parcels, including gathering spaces, commercial uses, and temporary parking resources.
- Identify opportunities for brownfield redevelopment and funding sources for assessment and requisite remediation and redevelopment funds.
- Perform a market study to understand what uses, businesses, housing types and quantities the market can potentially support in the next 5-10 years.

Medium to Long-Term Actions

In the medium to long-term, MidTown Cleveland and its partners should continue to assemble and pursue funding and developers to rehabilitate or redevelop vacant properties in support of the corridor's land use goals and vision.

Establish bikeway facilities on E. 40th and E. 71st streets

Near-Term Actions

The near-term priority should focus on formalizing plans for these corridors ahead of the 2021 construction season, when both streets are slated for resurfacing.

- Partner with Cleveland's City Planning, Traffic Engineering, and Capital Projects staff to integrate bikeway recommendations into upcoming roadway resurfacing projects.
- Examine opportunity for dedicated bike lanes or "bicycle boulevard" treatments on these corridors, weighing the potential need to remove on-street parking in select areas.
- Pursue a Street Supplies temporary transportation project with the City of Cleveland and NOACA to examine potential bikeway alternatives.

- Implement capital improvements, including striping, signage, and traffic calming measures in line with City roadway projects.
- Engage corridor residents around bicycle facility alternatives and benefits to inform street design.

Medium to Long-Term Actions

In the medium to long-term, these corridors should be monitored and examined for more substantial bicycle facilities as part of a cohesive bicycle master plan that connects the City facilitates an “all ages and abilities” bicycle network.

- Conduct regular multimodal traffic counts along these corridors
- Monitor safety indicators and survey users to determine level of comfort/stress
- Consider function and potential enhancements to these corridors within the broader network as it is planned and implemented.

Implement traffic calming & safety measures at all intersections

Near-Term Actions

Each intersection along Carnegie should receive basic improvements to improve safety for all travelers. Beginning with “Tier 1” improvements, MidTown Cleveland and the City of Cleveland can pursue additional opportunities for “Tier 2” and “Tier 3” recommendations to further enhance safety for pedestrians and bicyclists.

Install “Tier 1” improvements at all intersections along the corridor

Paint is a very easy, low-cost way to make changes within the roadway. It also allows the opportunity to verify that recommendations are going to produce the desired effect on traffic and adjustments to be made ahead of more permanent installations.

- Paint high-visibility crosswalk and median markings, preferably with thermoplastic or another bright, durable, reflective material.
- Paint “shared lane” markings leading up to and through intersections that coincide with the bike plan recommendations in the previous section.
- Program “leading pedestrian intervals” at strategic locations where high pedestrian crossings and turn volumes exist.

Implement “Tier 2” intersection improvements at key intersections

Additional enhancements should be prioritized at locations with higher incidence of traffic collisions, especially where pedestrian and bicyclist collisions are documented, and where strategic multimodal improvements are recommended.

- Monitor traffic and turn movements at these locations to minimize negative impacts for vehicular access, while enabling more substantial improvements for other modes.
- Install median pedestrian crossing refuges at the intersections of E. 40th Street, E. 71st Street, and E. 83rd Street, accompanied by requisite signage, striping, and markings.
- Update vehicular wayfinding to efficiently direct drivers to their destinations and account for left-turn restrictions at the above intersections.

Medium to Long-Term Actions

The project partners should continue to work together to determine whether additional intersection improvements can be pursued in the medium to long-term, in line with future development projects and changing traffic patterns. These include curb extensions, and “Tier 3” measures that can further calm traffic and create placemaking opportunities at key locations.

Pilot a community circulator

Medium to Long-Term Actions

The appetite for this service varied within the community and among potential partners, but the interest expressed within the Steering Committee warrants further examination of opportunities for implementation in the medium to long-term.

- Work with community partners to identify target rider markets and needs, confirm operating objectives, and issue a request for information (RFI) to potential vendors.
- Identify sources of operating support for a pilot period of at least 12 months, including FTA 5307 and 5310 funding, the Paradox Prize, community partner matching funds, and private sponsorships.
- Identify an operator and execute the pilot with proactive marketing, careful monitoring of key performance indicators, and ample opportunities for adjustment and community feedback.

Locate a series of “mobility hubs” throughout the corridor

Medium to Long-Term Actions

Mobility hubs can include a wide variety of amenities to improve connectivity for travelers of all modes. The opportunity to establish a network of hubs throughout the study area presents several “low hanging” options that can bring new options and enhanced accessibility to the Carnegie Avenue corridor.

- Work with community partners – in particular through the Midtown Master Plan process – to identify “hub” locations and a hierarchy of features to be included at each, paying special attention to the rollout of Cleveland’s dockless micromobility pilot.
- Identify funding sources, including community sponsors, to procure, install, and maintain the hubs.
- Work with the City of Cleveland and private property owners to site and permit hubs and amenities in the public right-of-way or on private property.
- Monitor usage and consider modifications to locations and features to best serve travelers in Midtown and beyond.

IMPLEMENTATION PLAN MATRIX

Recommendation	Near-Term Actions	Key Players	Timeline	Cost Range*
Enhance the Streetscape	Increase crosswalk visibility by repainting them in the continental style; install RRFB and crosswalk signage at key, non-intersection crossing points	MidTown, Traffic Engineering, City Planning, Streetscape Committee, Capital Projects, adjacent property owners	2020	\$ - \$\$
	Perform deferred maintenance: Plant new trees in existing tree pits where missing; clean up trash and overgrown landscaping; repair heaved or broken sidewalks	MidTown, Traffic Engineering, City Planning, Streetscape Committee, Dept of Public Works, Urban Forestry, MidTown SID, Cleveland Tree Coalition	2020 - 2021	\$ - \$\$
	Install signage, banners (and hardware on existing poles), public art, bike racks and other street furniture	MidTown, Streetscape Committee, Traffic Engineering, City Planning, LAND studio	2020 - 2021	\$ - \$\$
Invest in place defining improvements between E. 65th - E. 69th	Confirm location of new crossing at either E. 66th or E. 69th Street	MidTown, City Planning, Traffic Engineering, adjacent property owners	2020	No Capital Cost
	Establish redevelopment strategies on either side of E. 69th Street	MidTown, City Planning, BBC, City Council Ward 5	2020	No Capital Cost
	Apply for TLCI Implementation grant to install new crossing and other traffic calming features	MidTown, City Planning, NOACA, Traffic Engineering	Fall 2020	No Capital Cost
	Install new street crossing and other traffic calming features	City Planning, Traffic Engineering, Capital Projects	2021	\$\$
	Add streetscape enhancements, including street trees, bike racks, and wayfinding signage	MidTown, Traffic Engineering, City Planning, Streetscape Committee, Dept of Public Works, Urban Forestry	2021	\$\$

\$ = < \$50,000 \$\$ = \$50,000 - \$150,000 \$\$\$ = \$150,000+

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Recommendation	Near-Term Actions	Key Players	Timeline	Cost Range*
Reinforce the commercial district centered on E. 77th Street	Modify curbside regulations to allow for off-peak, on-street parking	City Planning, Traffic Engineering	Winter-Spring 2020	No Capital Cost
	Establish redevelopment strategies on either side of E. 77th Street	MidTown, City Planning, Economic Development, BBC, FRDC, City Council Wards 5 & 6	2020	No Capital Cost
	Apply for TLCI Implementation grant to install new crossing and other traffic calming features	MidTown, City Planning, NOACA, Traffic Engineering	Fall 2020	No Capital Cost
	Install new street crossing and other traffic calming features	City Planning, Traffic Engineering, Capital Projects	2021	\$\$
	Add streetscape enhancements, including street trees, bike racks, and wayfinding signage	MidTown, Traffic Engineering, City Planning, Streetscape Committee, Dept of Public Works - Urban Forestry	2021	\$\$
Modify existing zoning code	Finalize plan recommendations for zoning changes	City Planning, City Council, MidTown	2020	No Capital Cost
	Work with Cleveland City Planning to frame the revision/rezoning process	City Planning, MidTown	2020	No Capital Cost
	Engage with local Council representatives and impacted community members.	City Planning, MidTown, City Council, Community Stakeholders	2020	No Capital Cost
Redevelop vacant land and buildings	Confirm near-term vacant land assembly priorities	MidTown Staff & Board	2020	No Capital Cost
	Identify opportunities for Brownfield Redevelopment funds	MidTown, Economic Development	2020	No Capital Cost
	Perform comprehensive market analysis for 5-10 years of growth and investment	MidTown staff, consultant TBD	2020-20201	No Capital Cost

\$ = < \$50,000 \$\$ = \$50,000 - \$150,000 \$\$\$ = \$150,000+

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Recommendation	Near-Term Actions	Key Players	Timeline	Cost Range*
Establish bikeway facilities on E. 40th and E. 71st streets	Confirm routes with City and community partners	MidTown, City Planning, NOACA	Winter-Spring 2020	No Capital Cost
	Partner with City and NOACA to examine opportunities for Street Supplies TTP	MidTown, City Planning, Traffic Engineering, NOACA	Winter-Spring 2020	No Capital Cost
	Execute Street Supplies Temporary Transportation Project	MidTown, City Planning, Traffic Engineering, NOACA	Summer-Fall 2020	\$
	Identify facility type to be integrated into 2021 CIP projects	MidTown, City Planning, Traffic Engineering, NOACA	Spring 2020	No Capital Cost
	Install bicycle facilities on priority bikeway corridors	MidTown, City Planning, Traffic Engineering, Capital Projects, NOACA	2021	\$\$
Implement traffic calming & safety measures at all intersections	Work with Traffic Engineering to confirm intersection enhancements	MidTown, Traffic Engineering, City Planning	2020	No Capital Cost
	Implement striping, signage and signal modifications at "Tier 1" intersections	MidTown, Traffic Engineering, City Planning, Streetscape Committee, Dept of Public Works - Urban Forestry	2020	\$
	Apply for TLCI Implementation funds to complete "Tier 2" improvements	MidTown, Traffic Engineering, City Planning, NOACA	2020	No Capital Cost
	Install "Tier 2" intersection improvements	MidTown, Traffic Engineering, City Planning	2021	\$\$\$

\$ = < \$50,000 \$\$ = \$50,000 - \$150,000 \$\$\$ = \$150,000+

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Recommendation	Near-Term Actions	Key Players	Timeline	Cost Range*
Pilot a community circulator	Identify target rider markets, origins, destinations	NOACA, CWRU, Cleveland Clinic, UH, RTA, MidTown, City Planning	2022-2023	No Capital Cost
	Confirm service & operating objectives	NOACA, CWRU, Cleveland Clinic, UH, RTA, MidTown, City Planning		No Capital Cost
	Issue RFI to potential vendor/operators	MidTown, City Planning, NOACA		No Capital Cost
	Develop business plan and apply for pilot funding	NOACA, RTA, MidTown		No Capital Cost
	Operate 1-year pilot service	MidTown, RTA		\$\$\$
Locate a series of “mobility hubs” throughout the corridor	Confirm locations and hierarchy of "hub" features	MidTown, City Planning, NOACA	2022	No Capital Cost
	Identify sponsors and funding to procure and install hubs	MidTown Staff & Board		No Capital Cost
	Install hubs at priority locations	MidTown contractor(s), NOACA		\$ - \$\$

\$ = < \$50,000 \$\$ = \$50,000 - \$150,000 \$\$\$ = \$150,000+

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Carnegie Avenue Implementation Plan - Conceptual Cost Estimates					
Focus Area	Recommendation	Unit	Unit Cost	Cost Range	Total Cost Range
Enhance the Streetscape	Install neighborhood signage, bridge treatments & public art projects	Wayfinding signage	\$2,500	TBD	TBD
		Placemaking signage	\$5,000	TBD	
		Bridge Treatments	TBD	TBD	
		Public Art	TBD	TBD	
	Install street furnishings & amenities	Tree pits	\$1,900	\$76,000	~\$150,000 per 1/2 mile
		Planters	\$850	\$8,500	
		Street trees	\$850	\$34,000	
		Benches	\$1,350	\$13,500	
		Bike racks	\$900	\$9,000	
		Waste receptacles	\$1,350	\$13,500	
	Repair sidewalks	Square Foot	\$10	TBD	TBD

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Focus Area	Recommendation	Unit	Unit Cost	Cost Range	Total Cost Range
Invest in place defining improvements between E. 65th - E. 69th	Install new street crossing	Crosswalk, stop bars (linear foot)	\$10	\$3,100	\$65,300
		Advance crossing signage	\$200	\$1,200	
		Pedestrian refuge island	\$40,000	\$40,000	
		Rectangular rapid flashing beacon	\$7,000	\$21,000	
	Add streetscape enhancements	Street trees	\$850	\$42,500	\$64,200
		Benches	\$1,350	\$8,100	
		Bike racks	\$900	\$3,600	
		Wayfinding signage	\$2,500	\$10,000	
Reinforce the commercial district centered on E. 77th Street	Install new street crossing	Crosswalk, stop bars	\$10	\$8,000	\$70,200
		Advance crossing signage	\$200	\$1,200	
		Pedestrian refuge island	\$40,000	\$40,000	
		Rectangular rapid flashing beacon	\$7,000	\$21,000	
	Add streetscape enhancements	Street trees	\$850	\$51,000	\$77,200
		Benches	\$1,350	\$10,800	
		Bike racks	\$900	\$5,400	
		Wayfinding signage	\$2,500	\$10,000	

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Focus Area	Recommendation	Unit	Unit Cost	Cost Range	Total Cost Range
Establish bikeway facilities on E. 40th and E. 71st streets	Sharrows	Pavement markings & signage	\$10,000	\$10,000 - \$21,200 per mile	
	Bike Lane	Pavement markings & signage	\$21,200		
	Bicycle Boulevard	Pavement markings & signage	\$12,000		
Implement traffic calming & safety measures at all intersections	"Tier 1" Intersections	Enhanced crosswalks	\$1,500 - \$3,000	\$10,000	~\$20,000 per intersection
		Intersection bike markings	\$300	\$1,800	
		Transit waiting areas	\$8,700	\$8,700	
	"Tier 2" Intersections	"Tier 1" Costs	NA	~\$20,000 per intersection	~\$100,000 per intersection
		Pedestrian refuge island	\$40,000	\$80,000	
Pilot a community circulator	Circulator Pilot (12 months)	Marketing & Administration		\$25,000	\$200,520
		Operations (cost per hour)	\$80	\$155,520	
		Monitoring & Evaluation		\$20,000	
Locate a series of "mobility hubs" throughout the corridor	Mobility hub features	Bike rack	\$900	\$2,700	\$10,000 - \$20,000 per hub
		Bench	\$1,350	\$1,350	
		Bus shelter	\$6,000	\$6,000	
		Signage	\$2,500	\$2,500	