livability PROGRAM

MID CITY EAST
Small Area Plan & Livability Study

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION

Mid City East Livability Study

October 2013


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Vincent C. Gray, Mayor
Terry Bellamy, Director

PREPARED FOR:
District of Columbia Department of Transportation
Gabriela Vega, Project Manager
55 M Street, SE
Washington, DC 20003

PREPARED BY:
Nelson\Nygaard Consulting Associates
920 U Street, NW
Washington, DC 20001

SUPPORTED BY:
Rhodeside & Harwell (Low Impact Design and Landscape Architecture)
Symmetra Design (Traffic Engineering)

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Gail Anderson-Holness, ANC Commissioner 1B11

Dianne Barnes, ANC Commissioner 5E09, ANC 5E Chair

Maybelle Bennett, Howard University Community Association

Geovani Bonilla, Bates Area Civic Association

Kevin Chapple, ANC Commissioner 6E02

Rashidi Christian, Edgewood Civic Association

Tim Clark, ANC Commissioner 5E03

Eric Fidler, LeDroit Park Civic Association

Wanda Foster, ANC Commissioner 5E07

Alvin Judd, ANC Commissioner 6E06

Alfreda Judd, ANC Commissioner 6E07

Phyllis Klein, Fab Lab DC

Sylvia Matthews, Hanover Civic Association

Marc Morgan, ANC 1B01, LeDroit Park Civic Association

Kim Mosley, Eckington Civic Association

Mark Mueller, ANC, Commissioner 5E08

Rachelle Nigro, ANC Commissioner 6E04, ANC 6E Chair

Tony Norman, ANC Commissioner 1B Chair

Sylvia Pinkney, ANC Commissioner 5E04

Teri Quinn, ANC Commissioner 5E06

Joyce Robinson-Paul, ANC Commissioner 5E05

Wanda Sherrod, Bloomingdale Civic Association

Stephanie Slewka, Common Good City Farm

Bradley Thomas, Bates Area Civic Association


MAY USE
FULL LANE

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MID CITY EAST

Small Area Plan & Livability Study

The Mid City East Livability Study seeks to improve physical connectivity among the neighborhoods of Mid City East and their connections to the opportunities and assets of the larger city.

Local transportation networks are envisioned as safe and comfortable for travelers of all ages and abilities,contributing to the health of the community and environment and celebrating local identity.


CITY CLEANER
ALTERATION
TAILORING

Executive Summary

Executive Summary

The neighborhoods of Mid City East – Bloomingdale, Eckington, eastern Shaw and LeDroit Park and the communities around the former Truxton Circle – enjoy a central location in the District of Columbia, proximity to the downtown and U.S. Capitol, a premier bicycling and recreational trail, and a general wealth of transportation choices. The neighborhoods have rich historic and cultural resources, attractive community parks and two of the city's finest educational campuses. New retail and entertainment offerings continue to arrive providing more choices and amenities to local residents making Mid City East a growing community of Washington, DC.

However, for all the amenities they enjoy, the neighborhoods are challenged by:

- heavily trafficked arterials that bisect their communities;
- dangerous pedestrian crossings to amenities and destinations;
- narrow and broken sidewalks;
- limited access to Metrorail and Metrobuses slowed by general congestion;
- missing or discontinuous bicycle pathways; and
- sewage backups and flooding during severe storm events.

The purpose of the Mid City East Livability Study was to address the day to day transportation challenges residents face in meeting their daily needs, enhance community access and circulation (e.g. walking and bicycling) for residents of all ages and abilities, protect local streets as the "home zone" of neighborhoods and communities; and provide opportunities in the public rights of way to celebrate community identity and place.

NEEDS AND OBJECTIVES

After consultation with local residents, community leaders, and agency partners, four primary objectives arose as the central foci of the livability study:

1. Link the communities across the major arterials.
2. Reconnect the communities to the larger city, particularly via complete bicycle networks and safe pedestrian access to transit.
3. Reclaim minor streets and corridors from commuters and restore them to community needs and character.
4. Increase resiliency to flooding and other climactic effects.

GENERAL FINDINGS

Local street network: Typically a "livability study" is focused primarily on protecting local neighborhood streets from commuter traffic and generally calming and taming traffic on the local street network. While speeding on local streets was a common complaint of residents, cut-through traffic was not noted as a widespread concern. Residents were generally (though not universally) satisfied with their local streets and felt they performed acceptably well as the "home zone" of their community.

Arterial streets: Residents were not, however, satisfied with the major streets. Stakeholders were nearly unanimous in their dissatisfaction with the major intersections and arterials that surround and bisect their neighborhoods. Residents reported that intersections are dangerous to get across, do not provide adequate time, give little protection from aggressive drivers frustrated with congestion, and are generally unattractive and uncomfortable as places for people. While resident frustrations where largely directed at the major arterials of New York Avenue, North Capitol Street, Florida Avenue and Rhode Island Avenue, many also voiced concerns about more minor streets including First Street NW, New Jersey Avenue NW, Lincoln Road NE, R Street NE, and Eckington Place NE reporting that these streets were more commonly used as commuter cut-throughs rather than respectful community collectors and connectors.

Pedestrian networks: The sidewalk network in the study area is generally complete, however maintenance and adequacy is a concern. Some areas of sidewalk had significant heaving associated with large tree roots, other areas of sidewalk are extremely narrow. Both present issues for accessibility, particularly for those requiring mobility assistance such as the disabled, seniors, or children in strollers.

Bicycle connections: Although close to the central business district and surrounded by four different Metrorail stations, the Mid City East neighborhoods are in most locations too far away to be a comfortable walk to subway or downtown. For this reason, bicycle access is a popular and well used option for these neighborhoods. Residents reported, however, a lack of safe and designated bicycle connections, particularly to and from the downtown to the south and west and a need for community bicycling corridors – those suitable for youths, families, and novice or cautious cyclists uncomfortable mixing with or adjacent to general traffic.

Bus transit: Given the distance to Metrorail, many residents favor Metrobus to meet their transit needs, however bus services along the more trafficked corridors – particularly North Capitol Street – are degraded by the congestion and lack of transit priority or queue jump facilities to navigate choke points. Bus stops are well used, but many lack amenities. Safety was commonly reported as an issue, particularly at the major bus transfer point at North Capitol and Florida Avenue.

Safety: Residents generally felt safe within their neighborhoods and on the local streets. Traffic safety issues, particularly for pedestrians, were a prominent concern at major intersections. Bicycle safety concerns largely revolved around the lack of designated and protected facilities and competition with high volume/high speed traffic. Personal safety issues were noted on the Metropolitan Branch Trail and at certain high volume bus stop locations.

KEY RECOMMENDATIONS

Community street network: The study recommends that in addition to the typical functional classification system assigned to roadways in the District, a character classification system also be applied to support the land use function of the streets in addition to the transportation function. These character classifications do not hinder or alter the street function within the citywide network, but rather identify segments and nodes where street design may be modified from the corridor typical to strengthen the existing or intended land use activities. The livability network recommends pedestrian priority streets to focus action on a limited number of corridors as the backbone of an overall walk network providing access to community amenities, schools, and regional transit services.

Major intersections: Specific design interventions are recommended for consideration at intersections prioritized for safety improvements. Given the need to examine these major arterials holistically, major intersection recommendations may require further study through corridor plans or system assessments. Near term actions to improve pedestrian safety and access are recommended pending further examination of significant intersection reconfigurations.

Minor corridors: Modifications to minor corridors including New Jersey Avenue, First Street NW, Lincoln Road, and Eckington Place are recommended to provide enhanced multimodal travel options in the area and strengthen the designated transportation function. A segment of one corridor – Lincoln Road – is recommended for a change in functional classification from a minor arterial to a collector function.

Place-making: The diverse communities of Mid City East have storied histories and unique contemporary destinations. At the same time, stormwater runoff is a concern throughout the area and most particularly in the Bloomingdale community. The plan identifies areas in the public realm that present opportunities to create unique places that are also functional landscapes providing some mitigation to the stormwater issue.

Adding Green Space: The community routinely requested additional green space for the neighborhoods of Mid City East. The requests came as recommendations for new parks, comments to replace missing street trees or add space for new trees, and removing pavement and replacing it with green stormwater management spaces. The plan includes many recommendations which will add green space, trees, and contemporary stormwater management solutions.

Figure ES-1 Desired Network

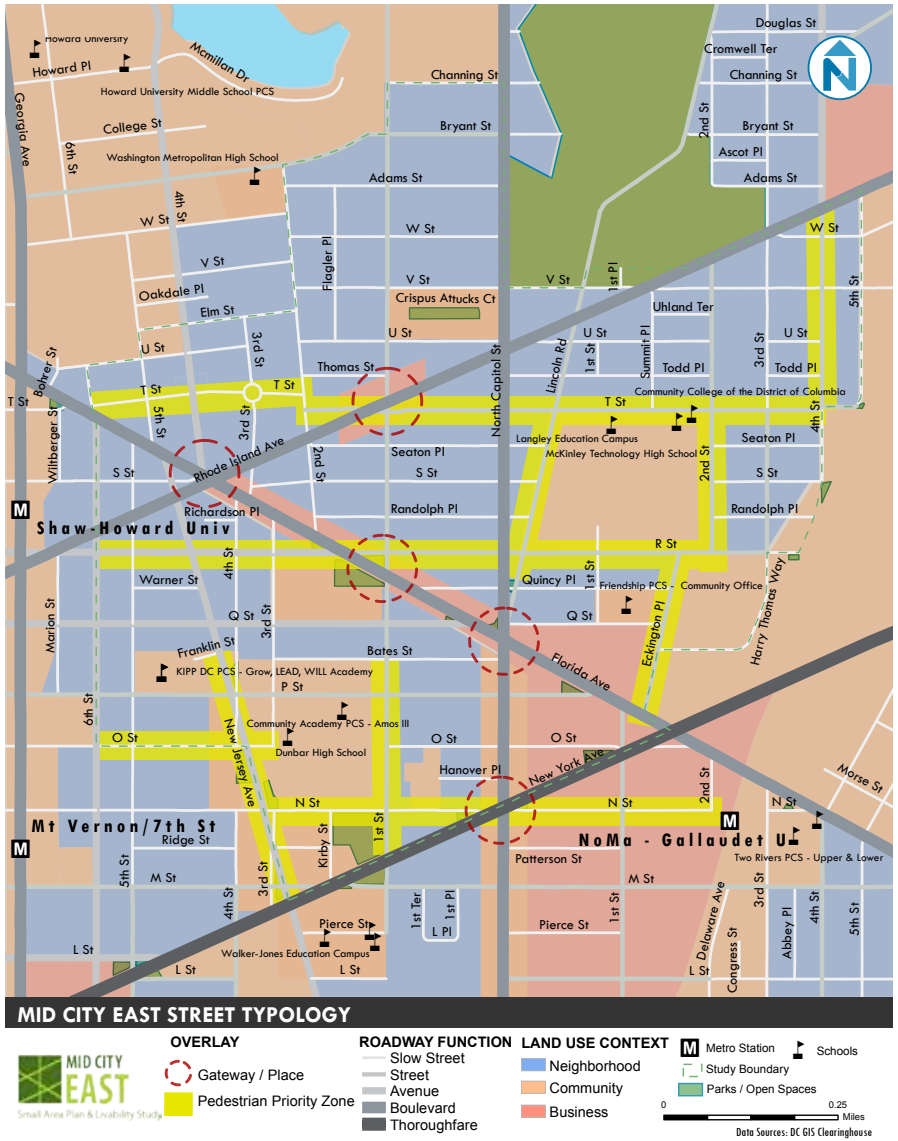
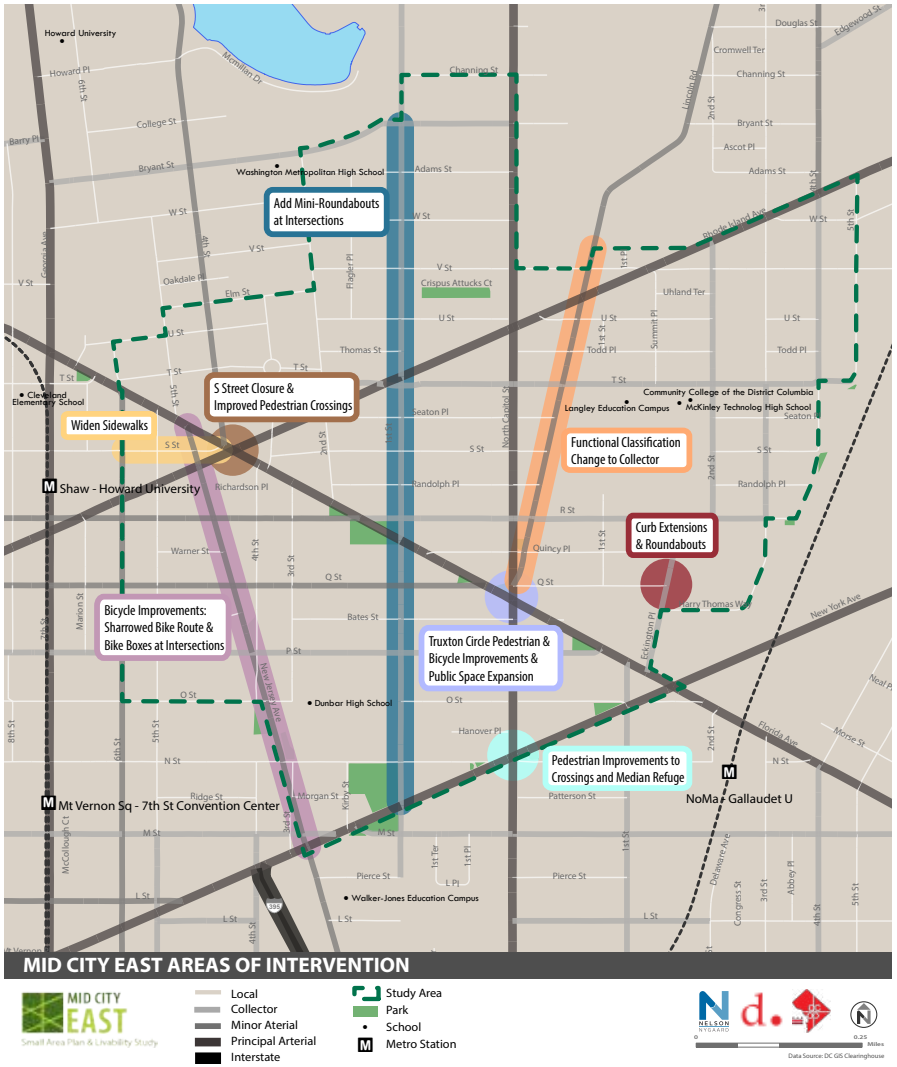


Figure ES-2 Areas of Intervention



1 Plan Overview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NEW
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1 Plan Overview

TRANSPORTATION LIVABILITY PROGRAM

In 2010 the District Department of Transportation launched its transportation livability program. "Livability" in this sense meant creating a transportation network that supports local life – walking to school, going for a family bike ride, safely getting to and from bus stops, and greeting neighbors across the street. "Livable" transportation supports community, individual, environmental and economic health. The transportation network and public rights of way convey the identity of a neighborhood, the access to opportunities for its residents and entrepreneurs, and the quality of its environment. "Livability" must provide for a complete community where all ages and abilities can move, thrive and grow in safety and pride.

The livability program is an action-oriented program aimed at making near term changes while highlighting longer term opportunities and concepts. Typical outcomes of the plans and program include improved pedestrian safety and connectivity, enhanced bicycle opportunities, improvements to bus stops, better access to transit, calmer traffic, and unique community places and landscapes.

MID CITY EAST SMALL AREA PLAN

The Mid City East Livability Study was unique in that it was developed in concert with the DC Office of Planning's Small Area Plan for Mid City East. A small area plan is a formal amendment to the city's Comprehensive Plan that specifies the vision, objective, and specific actions for a focused area of the city. Whereas the Livability Plan is intended for near term action, a Small Area Plan is a long range vision (which includes near and long term strategies and recommendations).

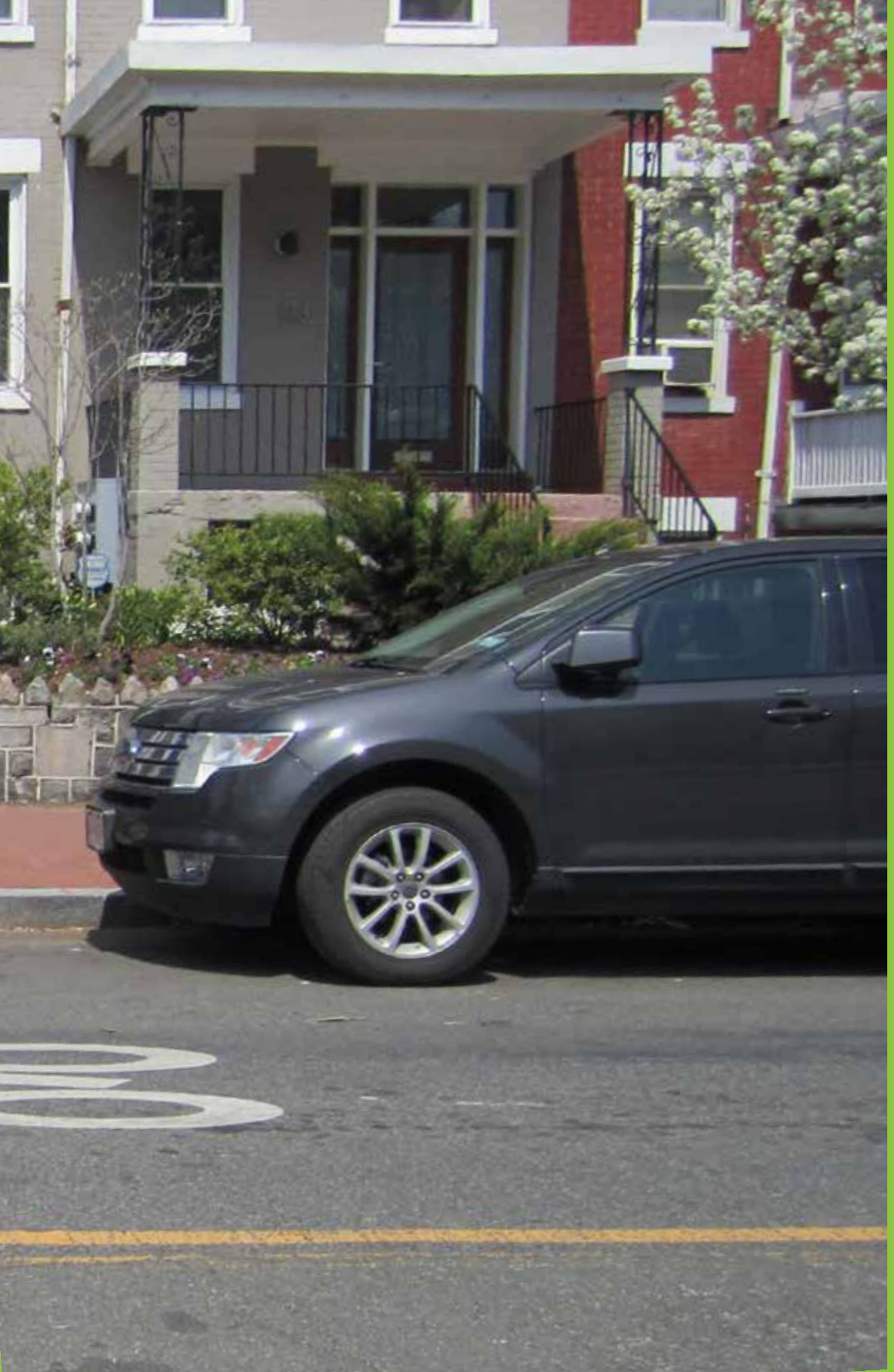
The majority of the Livability Plan will be incorporated as a near term action of the Small Area Plan, however the Small Area Plan will extend further in objectives and actions over time.

PLANNING PROCESS

Both planning efforts proceeded in a unified process. The plans were informed by a diverse body of Advisors and public input gained through both face-to-face as well as electronic formats. Over 200 unique individuals provided input, advice, guidance, and review in the development of this Livability Plan. Residents and stakeholders represented a wide cross-section of the Mid City East community and many of them had never previously participated in such a plan before.

The phases of study included:

1. Review of past plans and developments
2. Analysis of existing conditions and resources
3. Identification of priorities and definition of desired outcomes
4. Analysis of network performance against priorities and outcomes
5. Development and assessment of alternatives
6. Refinement of selected project designs and improvements
7. Recommendations for implementation
8. Definition of performance evaluation metrics and process



2 Study Area

Figure 2-1 Mid City East Study Area

2 Study Area

For the purposes of this livability study, the collection of neighborhoods in central DC along the North Capitol spine between New York Avenue and Bryant Street are collectively referred to as "Mid City East". Although jointly studied, each neighborhood was unique with individual challenges, opportunities and desires.

Mid City is just one mile directly north of the U.S. Capitol building in the heart of Washington, DC. The study area is centrally located and accessible to a wide range of opportunities and destinations throughout the region. The central location also has consequences as several commuter arterials cross and divide the Mid City neighborhoods.

Mid City is surrounded by major destinations and developments, although few are actually within the confines of the Mid City area. Four Metro stations lie just beyond the boundaries of the study area along all four corners. Major employment areas and institutional campuses encircle Mid City including Washington Hospital Center just to the north, Catholic University and Trinity College to the northeast, the Brentwood Shopping Center and Gallaudet University to the east, NoMa to the southeast, downtown and the central business district to the south and southwest, and Howard University to the northwest. Major development is planned or underway to the west (Howard Town Center), north (McMillan Sand Filtration Site), and southwest (NoMa), and south (Sursum Corda). The communities of Bloomingdale and Eckington are separated by the imposing major arterials of North Capitol Street and Rhode Island Avenue.

The neighborhoods within Mid City are diverse in both context and character.

- **LeDroit Park** – located in the western portion of the study area, LeDroit Park is a designated historic district with a fine grained grid of narrow streets. The area has some well recognized and celebrated community places including Common Good Farm, Anna J. Cooper Circle, and the LeDroit Park gateway. The area is generally flat. The slightly askew and discontinuous grid of streets deters high volumes of cut through traffic.
- **Bloomingdale** – located in the central portion of the study area, Bloomingdale is an oblong neighborhood extending downhill from the McMillan Resevoir to Florida Avenue (the historic "boundary street"). The downhill topography has contributed to the significant sewage back ups the neighborhood has suffered in recent years during heavy rain events. The neighborhood has a regular grid of streets. Heavy traffic volumes are common along the north-south streets and particularly First Street NW. Past traffic calming interventions on the east-west streets have significantly reduced the opportunity for commuter traffic to divert onto these local streets.
- **Eckington** – The eastern neighborhood of Eckington has the most variable topography of any in the study area. The rolling hills undulate from Rhode Island Avenue down to New York Avenue and from the railroad tracks to North Capitol Street. The street grid is less regular here with the railroad corridor segregating the neighborhood on the east, the North Capitol Street trench cutting it off on the west, and the large campus of the McKinley Education Campus interrupting the grid in the middle. Present and former industrial properties frame the neighborhood on the south and east.
- **Bates, Hanover, eastern Shaw and Truxton Circle** – the southwest portion of the study area is a collection of neighborhoods south and west of the location of the former Truxton Circle (an early traffic circle and fountain demolished in the 1940s to create the street intersection that exists at Florida Avenue and North Capitol Street today). Located closest to the downtown, these neighborhoods are exposed to the greatest volume of traffic and bounded by the high volume arterials of New York Avenue, North Capitol Street and Florida Avenue. Past interventions have reduced cut through traffic, although peak hour congestion on the major streets still inspire residents and commuters alike to take to the neighborhood streets in search of alternative routes. These communities have a significant concentration of schools including the new Dunbar High School and several elementary schools.


MID CITY EAST
Small Area Plan & Livability Study
WHERE THE WILD THINGS ARE
ROOM TO IMPROVE

3 Community Input and Involvement

Figure 3-1 Graphic Vision for Mid City East

3 Community Input and Involvement

Community outreach for the Mid City East Livability Study included a range of programs from public meetings and focus groups to mobile workshops and online forums. The intent of the community engagement process was to reach as many members of the surrounding community to develop local solutions to create a more livable neighborhood and guide this study's recommendations. The community members throughout the neighborhoods of the Mid City East study area identified key issues for the community regarding transportation, public safety and neighborhood beautification.

Public and stakeholder input was gathered through various public events and online forums. The strategies used included:

- Walking tours of the neighborhoods in the Mid City East study area
- Public open house and meeting
- Mobile design workshops
- MidCityEast.com project website

WALKING TOURS

Throughout the outreach process, community members were asked to participate in a community mapping project to identify issues and opportunities regarding transportation, public safety and neighborhood livability. To begin the outreach process, six neighborhood walking tours were conducted on April 26th and April 27th, 2013. Approximately two dozen neighborhood residents participated on the tours sharing information about areas of concern and opportunity.

OPEN HOUSE AND VISIONING WORKSHOP

A public open house and meeting was held on April 27th. Over 60 residents and stakeholders representing a diversity of ages, races, and study area neighborhoods participated in the meeting. Of the meetings participants, some had lived in the neighborhoods for generations; others were relative new comers to the surrounding communities.

The meeting offered participants a hands on opportunity to learn about how low impact design features work at a science station; a traffic calming BINGO game to learn about the strategies and techniques to manage traffic in the area; opportunities and concerns boards to specify locations for consideration; and a mapping exercise to provide input on the routes and modes commonly used in the community.

A graphic facilitator captured the overarching vision participants articulated for their community encompassing all aspects of transportation and overall community planning.

MOBILE "DESIGN ON THE FLY"

To engage members of the community who were unable or may not attend walking tours and public meeting, mobile workshops and online forums for participation were created. The project team facilitated two mobile design workshop meetings on June 8th and June 12th, 2013 to directly engage the public in their neighborhoods. The mobile workshop consisted of a large panel truck with interactive maps and project information affixed to the side, and a pop-up canopy and tables for people to sit and work with project team members to understand the transportation issues that affect them on a daily basis. The maps on the side of the truck allowed individuals to place stickers on a map of the project area describing what particular interventions were needed at those locations. Over 120 people were engaged through these "Design on the Fly" events. Many were residents who just happened to be walking by and had previously never engaged in such a process before but were happy to point out the issues and concerns they experienced every day.

Critical to the outreach effort was a focused community mapping project to note key areas where walking is unsafe or can be improved. Connecting the community's identified needs to existing networks was crucial to understanding where targeted improvements can be made. Throughout public meetings and mobile workshops from May to July 2013 participants were asked to place markers on paper maps to identify key issues and opportunities for neighborhood improvements.

Figure 3-2 Mobile Design Workshop

DRAFT PLAN REVIEW PUBLIC MEETING

The Project team held a joint meeting on September 26th at McKinley Tech High School to share the draft Mid City East plan with the community and gather feedback. The centerpiece of this meeting were display boards showing the proposed changes for the entire project area down to the intersection and corridor scale. The boards were accompanied by a presentation and slideshow describing the process and how the project team arrived at the proposed changes. The material for the meeting was also posted online along with links to the MindMixer public engagement site so that individuals unable to attend the meeting in person could view the materials and comment on the draft plan.

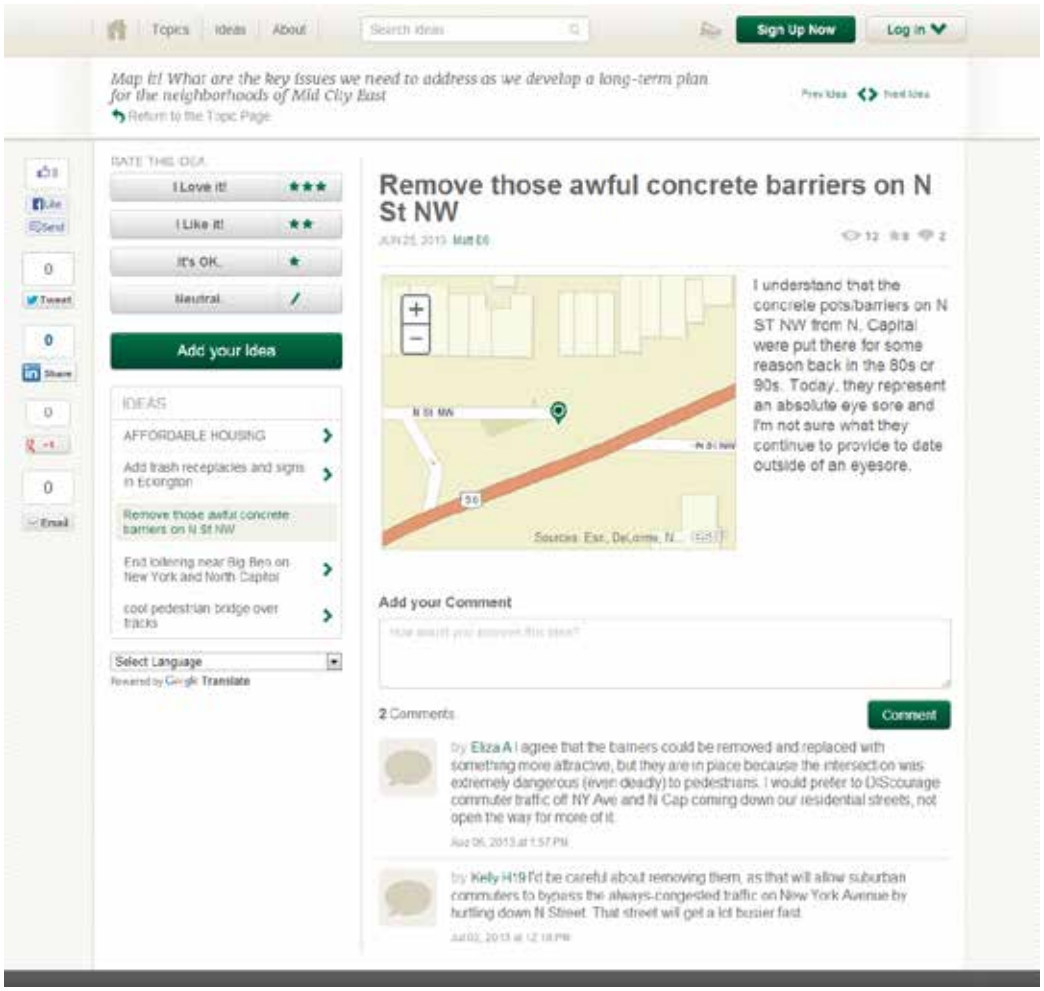
Based on specific feedback received at the public meeting and online, the draft plans were adjusted to take advantage of opportunities the public identified for specific intersections.

ONLINE RESOURCES AND ENGAGEMENT

Launched concurrently with the public open house and meeting, the project website MidCityEast.com announced upcoming public meetings, focus groups, workshops and direct contact information with DDOT program managers. A general project overview described the study area and the scope of the study and a calendar outlined upcoming events. Other features of the website included:

- A community mapping portal to note destinations for work, home and play and travel routes between destinations

Figure 3-3 Example of "Map it!" Online Exercise



- SeeClickFix to report locations to DC's 311 system for municipal repairs on streets and sidewalks
- Links to the projects active MindMixer public engagement site

Online discussions provided valuable input into pedestrian and traffic issues within the study area and allowed for a dialogue among stakeholders, continued update and engagement, and multiple ways to provide ideas.

COMMUNITY IDENTIFIED NEEDS AND PRIORITIES

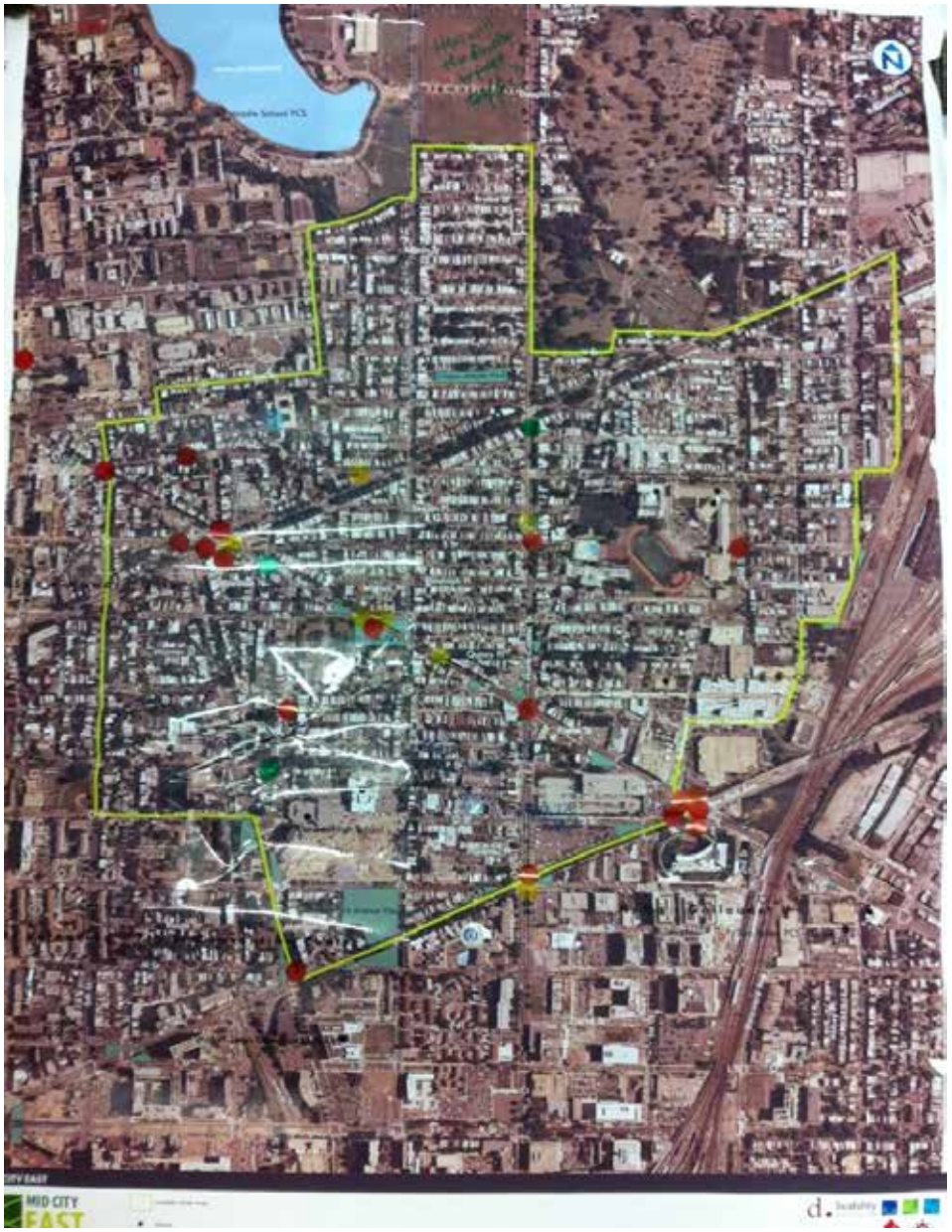
Public, partner, and stakeholder input defined the needs and priorities for the Mid City East Livability Study. Overall, stakeholders reported that the local street network performed reasonably well for the local neighborhoods. General recommendations for the local streets included reducing the quantity of pavement in the area, increasing tree coverage and softscape, and addressing non-compliance at 4-way stop signs.

Local residents and other area stakeholders did, however, cite a significant need to address pedestrian safety and connectivity issues associated with the major corridors and intersections in and through the study area. Community members cited several intersections as confusing, dangerous and frightening presenting obstacles to neighborhood cohesiveness and dangerous.

The neighborhoods also cited a need for more multimodal facilities and connectivity between neighborhoods and to the larger city. Mid City lacks good bicycling infrastructure (with the notable exception of the Metropolitan Branch Trail which was widely seen as a unique and valuable asset to the area); transit does not operate efficiently due to congestion in key segments, closely-spaced stops along routes, and sub-standard linkages to MetroRail; and inadequate or poorly maintained sidewalks in high pedestrian areas.

During the Mid City East mobile workshops, participants placed stickers on a map of the area indicating pedestrian, bicycle, traffic, and stormwater problem areas.

Figure 3-4 Mid City East Public Participation Map Exercise



Pedestrian Needs

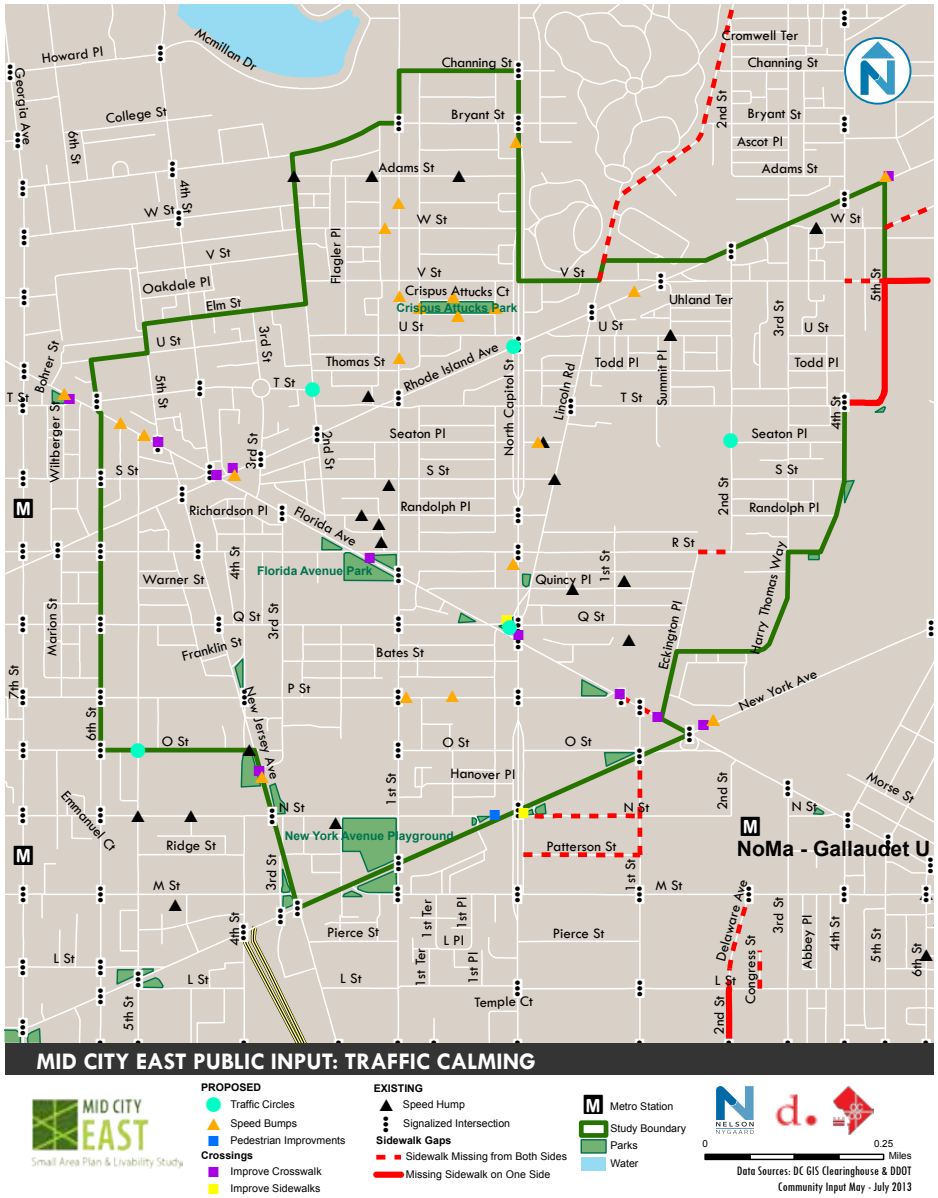
Local stakeholders emphasized key traffic calming improvements to create safer pedestrian crossings and walking conditions. Figure 4 shows existing pedestrian conditions and the issues identified by the community mapping effort to highlight specific locations for:

- Traffic circles at the intersections of local roads
- Speed bumps to slow traffic on neighborhood streets
- Improved crossings and crosswalks
- Sidewalk improvements

Key locations for traffic calming improvements were identified from the community mapping project. Intersections of particular concern to the community and reiterated by local stakeholders are:

- New York Avenue, North Capitol Street and N Street NW
- The intersection of Florida Avenue, North Capitol Street, Q Street NE/NW and Lincoln Road
- Florida Avenue, Rhode Island Avenue, S Street NE and 4th Street NW

Figure 3-5 Community Indentified Traffic Calming Needs and Existing Conditions



Bicycling Needs

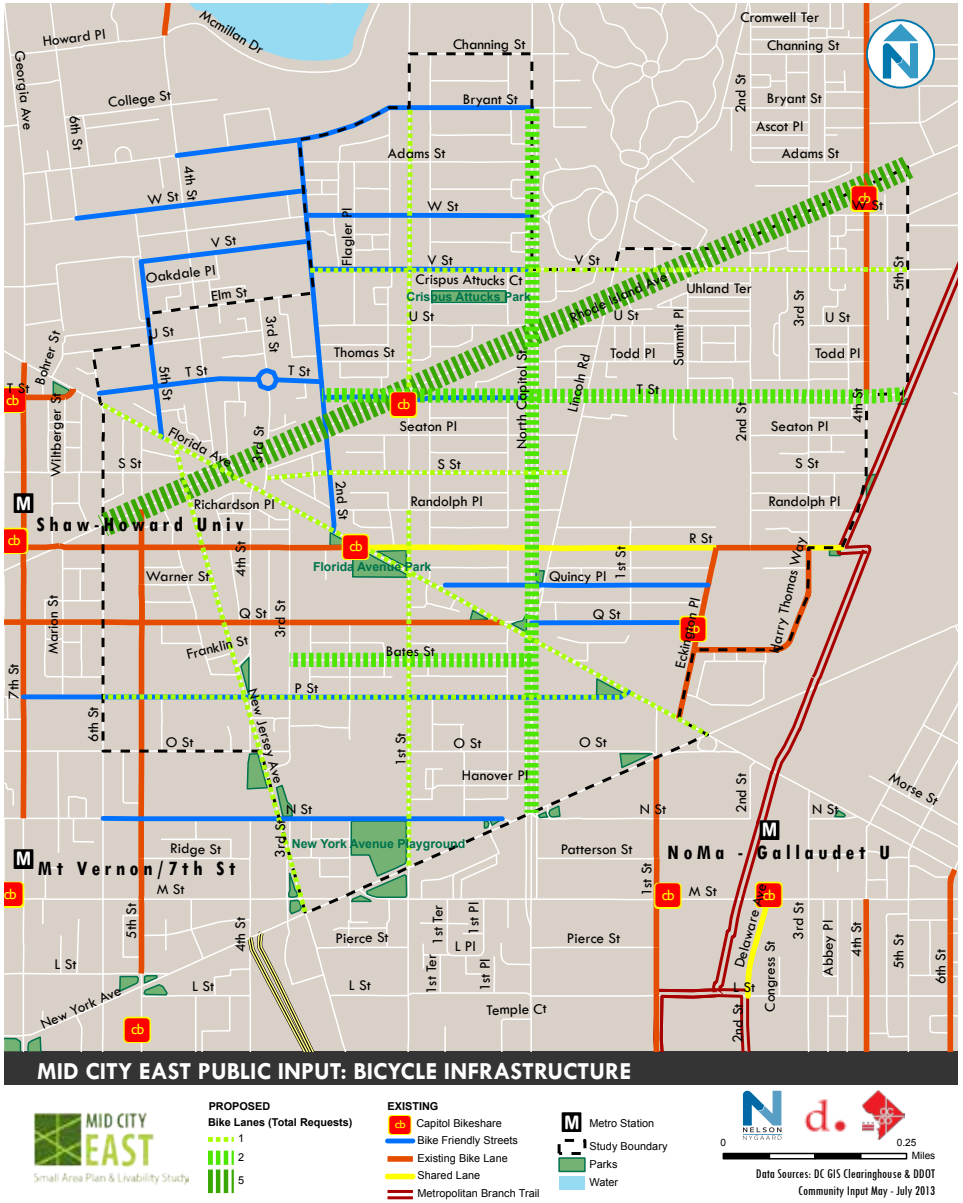
Stakeholders indicated a strong need for improved bicycle accommodation – both for confident cycling commuters as well as for community connections of more vulnerable riders. Community members identified a need for more east-west bike lanes suggesting:

- T Street from 2nd Street NW to Metropolitan Branch Trail
- Bates Street NW between 3rd Street NW and North Capitol Street
- V Street from 2nd Street NW to 5th Street NE
- S Street from 3rd Street NW to Lincoln Rd
- P Street from 6th Street NW to Florida Avenue
- Bryant Street from Georgia Avenue to North Capitol Street
- 5th Street NW from Rhode Island Avenue to Florida Avenue

Better north south bicycle connections are needed as few to none exist between 5th Street NW and the Metropolitan Branch Trail (at approximately 5th Street NE).

Community members and stakeholders traveling through the area expressed a strong preference and need for bicycle accommodation along the major diagonal avenues including Florida, Rhode Island and New Jersey Avenues.

Figure 3-6 Community Identified Bicycling Improvements and Existing Conditions




YOUR IDEAS
Redevelopment and Housing
ISSUES
OPPORTUNITIES
YOUR IDEAS
Parks, Open Space and Stormwater
ISSUES


MID CITY
EAST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EXXON

4 Previous Plans and Studies

Source: Unknown

4 Previous Plans and Studies

The Mid City East study area lies in a portion of the District of Columbia that is undergoing a period of dramatic change. Over the years, other transportation plans have been completed in the area. Major public and private investments have recently been completed or are anticipated within and around the study area. Additionally, concurrent with this neighborhood transportation effort, major corridor and intersection plans are also underway. Review and consideration of these past and ongoing plans and projects are essential in making recommendations for Mid City East today.

PAST AND CONCURRENT TRANSPORTATION PLANS

North Capitol Corridor Study (2005)[1]

In 2005 the District Department of Transportation completed a study of the North Capitol Street/First Street NW Corridor from Rhode Island Avenue south to G Street. The goals of the study were to address current (2005) and future (2014) traffic conditions, enhance safety and improve vehicular flow "while still meeting the needs of pedestrians." A key concern of stakeholders, the study also assessed the feasibility of reestablishing Truxton Circle, examining both at-grade and grade separated options.

The study recommended improvements to intersections within the Mid City East study area. Specifically:

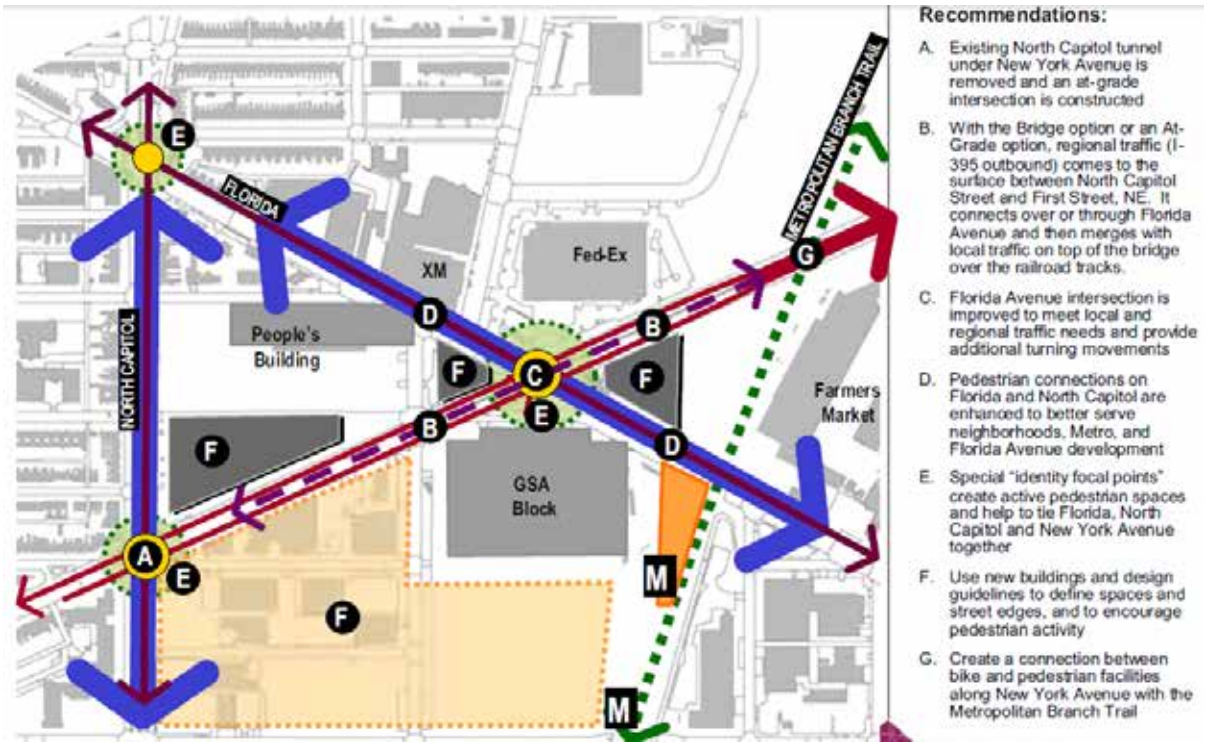
- **North Capitol Street and New York Avenue (including N Street)**: general maintenance improvements including pavement restriping, sidewalk and median repair, and street sign replacement; extension of the westbound left turn bay by 100 feet; pedestrian improvements including new pedestrian countdown signals, in-roadway warning lights; and ADA improvements to ensure all crossings are safe and accessible.
- **North Capitol Street and Florida Avenue (including Q Street and Lincoln Road)**: ADA ramp installation and repair; new bus shelter on northwest corner; flashing school zone beacons; improved directional signage; and pedestrian improvements including new countdown signals, crosswalk re-striping, extended pedestrian crossing time, and in-roadway warning lights.
- **North Capitol Street and Rhode Island Avenue**: Sign maintenance and replacement; and pedestrian improvements including widened sidewalk, pedestrian countdown signals, and restriped crosswalks.
- **First Street NW**: Improve pedestrian crossings with high visibility crosswalks, improved sidewalk ramps, improved sidewalks, and pedestrian countdown signals.

The study found that reconfiguring the signalized North Capitol and Florida Avenue intersection into a traffic circle ("Truxton Circle") was infeasible due to property impacts, severe degradation of traffic operations, and cost.

While many of the maintenance related improvements were made to the intersections, the study did not result in significant improvements to pedestrian safety or comfort, transit operations, or sense of community place.

1 "North Capitol Street Transportation Study – Draft Final Report", DDOT. November 2005. Accessed 8/12/2013. (https://comp.ddot.dc.gov/Documents/North%20Capitol%20Street%20Transportation%20Study%20-%20Draft%20Final%20Report.pdf#search=North%20Capitol%20Street%20Corridor%20Plan)

Figure 4-1 New York and Florida Long Term Improvements



Source: New York Avenue Corridor Plan (2006) Page 6-17

Figure 4-2 New York and Florida Long Term Improvements

Source: New York Avenue Corridor Study (2006) Page 6-16

New York Avenue Corridor Study (2006)[2]

From 2002 to 2006, DDOT studied the New York Avenue corridor between 7th Street NW and the District line partially in anticipation of the opening of the new New York Avenue MetroRail station and the planned redevelopment of the NoMa area.

The study identified New York Avenue as a high volume vehicle and freight (truck) corridor, but examined alternatives for improving its function and aesthetics as a multimodal corridor. The study broke the long corridor up into multiple zones. Zones 4 and 5 correspond to the segment of New York Avenue within the Mid City East planning area. This zone had, by far, the greatest concentration of crashes of any segment of the corridor (248 in this segment compared to 148 for the balance of the corridor).[3]

While earlier plans had recommended a grade-separated intersection at Florida and New York Avenue, the 2006 study found the size of such a traffic circle to be incompatible with the urban nature of the area and recommended investigation of a diamond interchange as an alternative, however, given the complexities of this intersection, no single recommendation for long-term improvement was advanced. The plan recommended near-term improvements to the then-existing intersection.

Long term plans for Zone 5 (New Jersey Avenue to North Capitol Street) called for keeping I-395 traffic in a tunnel under New York Avenue to segregate regional traffic from local traffic. Under this concept, New York Avenue could be restored as a pleasant multi-modal

2 "New York Avenue Corridor Study – Final Report", DDOT. November, 2006. Accessed on 8/22/2013. (https://comp.ddot.dc.gov/Documents/New%20York%20Avenue%20Corridor%20Study.pdf#search=north%20capitol%20corridor%20study)
3 Page 27. Data from 2001.

boulevard and North Capitol Street brought back to grade as a gateway intersection.

Subsequent to the study, interim improvements to the complex intersection of Florida Avenue, New York Avenue, and First Street NE were completed in2010 to reconfigure it into a "virtual circle." While this has improved many aspects of safety and pedestrian access to the MetroRail station, it has introduced concerns regarding driver confusion and traffic delay. DDOT is presently exploring modifications to this interim improvement. For this reason, the Florida and New York intersection was not examined in this Mid City East Livability study.

New York Avenue – Gallaudet University Station Access Improvement Study (2010)[4]

In 2010, WMATA completed a station access study for the New York Avenue metro station. The purpose of the study was to improve bicycle and pedestrian access to the station and connectivity and operations of buses and autos connecting at the station. Concerns identified included pedestrian connections along N Street NE where sidewalks are narrow or missing and pedestrian crossings are challenging. Bicycle access from the Mid City East area to the station was found to be limited with the notable exception of the Metropolitan Branch Trail. Area bicycle lanes and routes are discontinuous and do not connect to either station entrance. Wayfinding in general was found to be lacking.

Rhode Island Avenue Corridor Plan (ongoing)

Concurrent with the Mid City East Livability Study, DDOT initiated a public space plan for Rhode Island Avenue from 4th Street NE to the District Line which is examining existing corridor facilities, safety and operations for all modes as well as future opportunities for transit enhancements, including the potential for streetcar.

While this study area is generally beyond the limits of the Mid City East area, as a corridor plan, that effort is better suited to make comprehensive and integrated recommendations regarding the function and improvements of the Rhode Island Avenue corridor. Several recommendations from this neighborhood planning effort will be forwarded for consideration in that corridor planning effort.

Florida Avenue NE Safety Improvement Plan (ongoing)[5]

DDOT is likewise completing a corridor study for Florida Avenue NE from New York Avenue to H Street NE to address multiple safety concerns along the corridor and enhance multimodal transportation. While the character and distribution of Florida Avenue changes dramatically east and west of the intersection with North Capitol Street, that corridor study may provide the foundation for continuation of the corridor analysis through the northwest segment of the corridor and address many of the same multimodal concerns identified in this livability initiative.

New Jersey Avenue NW Two-Way Conversion (2013)

This project, currently planned for construction in 2013, would convert a portion of New Jersey Avenue NW between H Street and N Street from one-way operation to two-way operation, add pedestrian accommodations, and add bike lanes to the corridor. The proposal stems from the Office of Planning's 2003 Mount Vernon Triangle Action Agenda[6] recommendation to reconfigure this street to serve local community needs as a component of major land-use transformations. DDOT revisited this recommendation in August 2012 as a means to address several safety concerns in the corridor. The land use around the avenue is changing rapidly from industrial and parking lots to mixed-use residential, with the notable addition of a Wal-Mart and apartment housing at New Jersey and H Street coming online in 2014.

This existing DDOT project is a major reason why New Jersey Avenue within the Mid City project was selected for corridor improvements – with the completion of the existing project and recommended changes from the Mid City East project, New Jersey Avenue will serve as an important cross-town north/south bicycle route through the area with enhanced pedestrian amenities connecting residents to vibrant new destinations.

MoveDC (ongoing)[7]

MoveDC is the long range, multimodal transportation vision plan for the District of Columbia. The plan will establish a modal priority network plan for the many major corridors of the city uniting the isolated

4 Gallaudet University Station Access Improvement Study", WMATA. 2010. Accessed 8/23/13. (http://www.wmata.com/pdfs/planning/NY%20Ave-FL%20Ave-Gall%20U%20Station%20Access%20Improvement%20Study%20Final%20Report.pdf)

5 "Florida Avenue NE Multimodal Transportation Study", DDOT. Accessed 9/3/2013. (www.floridaavesafety.org)

6 "Mount Vernon Triangle Action Agenda", DC Office of Planning. Oct 2003. Accessed 9/3/2013 (http://planning.dc.gov/DC/Planning/In+Your+Neighborhood/Wards/Ward+6/Small+Area+Plans+&+Studies/Mount+Vernon+Triangle+Action+Agenda+Document)

7 www.WeMoveDC.org

mode-specific plans completed in the past. The goal of the plan is to ensure that the city can meet the needs of freight, autos, transit, bicycles, and pedestrians to efficiently and attractively access the many destinations of the city and region, now and in the future, while maintaining the great urban design and linear parklike greenery that are characteristic of the streets of Washington, DC. MoveDC will be the framework to determine the modal priority and transportation objectives for major arterials such as New York Avenue, North Capitol Street, Florida Avenue, Rhode Island Avenue and New Jersey Avenue. The Mid City East Livability initiative may identify local concerns and priorities for key intersections along these corridors which will then inform holistic corridor approaches.

DC Streetcar Master Plan (2012)[8]

Starting in 1997, the District began exploring the concept of a streetcar network to serve additional transit needs for the city. In 2012, the city adopted a plan for a 27-mile streetcar network. Two lines transect the Mid City East area running on Florida Avenue NW/NE and Rhode Island Avenue NW/NE. The plan is broken into three phases to be built over the next twenty years. The Mid City lines are in Phase II with significant further planning and evaluation required before going to construction some years in the future.

Bicycle Master Plan (2005)[9]

The Bicycle Master Plan was the first plan in the District to identify a comprehensive network of bicycle routes, lanes and trails to improve bicycle mobility and safety in the city. Now ten years old, the plan is being updated through the MoveDC process.

Within the Mid City East area the plan recommended:

- Construction of the 8.5 mile long Metropolitan Branch Trail
- Construction of a bike trail along New York Avenue
- East-west bike lanes on portions of Q, R, T and U Streets and a cycle track on M Street NE/NW
- North-south bike lanes on Eckington Place NE, 2nd Street NE (R Street to T Street), 3rd Street NE (from R Street to T Street), 4th Street NE (T Street to Rhode Island Avenue), 4th Street NW (T Street to Bryant Street), and 6th Street NW.
- Diagonal facilities include bike lanes on Rhode Island Avenue NE/NW

While several of the facilities have been installed to date, many gaps remain in the bicycle network planned for Mid City East.

PUBLIC AGENCY INVESTMENTS AND INITIATIVES

Mid City East Small Area Plan (concurrent)

Concurrent with the Mid City East Transportation Livability Study, the DC Office of Planning is developing the Mid City East Small Area Plan. The plan, to be adopted as a regulatory component of the city's Comprehensive Plan, will address a broad range of planning concerns including housing, historic preservation, economic development, parks and open space, and public facilities. This Livability Plan will largely serve as the transportation component of the Small Area Plan with some additional long term recommendations that extend beyond the scope and horizon of this study.

DC Water Clean Rivers Project (2013)[10]

The centuries old combined sewer system has served the city admirably throughout its history, but increasing population, water use, impervious surface, and more intense storm events have lead to numerous combined sewer overflows contaminating the city's rivers. Homes in certain neighborhoods, including LeDroit Park and Bloomingdale, have been victim of such overflows.

DC Water, the city's sewer and water authority, has developed an aggressive plan to address the problem through major infrastructure upgrades and new projects throughout the District. In the Mid City East area, two stormwater projects have been accelerated to relieve issues in the area.

The First Street Tunnel is an 18 foot-diameter, 2,800 foot-long tunnel to be excavated roughly 80 to 160 feet under First Street NW. The project extends roughly from the McMillan Sand Filtration Site to Rhode Island Avenue NW. Construction is anticipated to begin in October 2013 and last through March 2016. Excavation of the tunnel and drop shafts will require full or partial closure of certain segments of First Street NW during this period, although sidewalks will remain open.

The northeast boundary tunnel project will expand the existing tunnel under Rhode Island Avenue to 23 feet in diameter, which would allow greater volumes of stormwater to be contained by the sewer system during major storm events. This portion of the project will be completed by a tunnel boring machine, but there will be surface construction to build drop-shafts and other

8 "DC Streetcar Proposed System Plan", DDOT Website. Accessed 8/22/13 (http://www.dc.gov/DC/DDOT/On+Your+Street/Mass+Transit+in+DC/DC+Streetcar/DC+Streetcar+Proposed+System+Plan)
9 "Bicycle Master Plan", DDOT. April 2005.
10 "Clean Rivers Project Division P – First Street Tunnel: Final Environmental Assesment." DC Water. July 2013. Accessed 8/22/13 (http://www.dcwater.com/FirstStreetTunnelEA)

infrastructure. This tunnel is scheduled to commence construction in 2016, with a completion date in 2022.

Dunbar High School

In Fall 2013 the District of Columbia Public Schools celebrated the grand opening of the new $122 million Dunbar High School. While Dunbar's traditional enrollment at the New Jersey and O Street location hovered around 500 students, the new school building is built to accommodate more than twice that (1,100). The state of the art campus reaches back to the past as well, restoring O Street as a local east-west connector and traditional element of the historic L'Enfant Plan. The location of the new school building at First and N Street NE places it equidistant from both the New York Avenue Metro station (Red line) and Shaw/Howard Metro station (green line). As students are drawn from across the city, safe routes to bus and subway lines are important to ensure access to this great educational campus.

McKinley Education Campus

The McKinley Education Campus lies northeast of Dunbar High at 151 T Street NE. This year (school year 2013-2014) the renowned technical high school is joined by a new middle school to its campus to serve 6th through 8th grade students resulting in an increase of several hundred students – many coming from beyond the immediate neighborhoods of Mid City East and utilizing the Metro stations and bus lines for access. When completed the public complex will be a magnet of activity for school aged students attending Langley Elementary School, McKinley Middle School or McKinley Technical High School in addition to drawing residents of all ages utilizing facilities and programs at the adjacent Harry Thomas Recreation Center (Lincoln and R Street NE).

ONGOING OR PLANNED MAJOR DEVELOPMENTS

NoMa

Just a decade or so ago, the area known as NoMa roughly located between North Capitol Street and the railroad tracks, Massachusetts and New York Avenues, was largely an underutilized warehouse and industrial district. The NoMa Vision Plan anticipates over 20 million square feet of mixed use development with significant new employment and retail, signature parks, and a substantial quantity of new housing (roughly 4,000 residential units). Over two-thirds of this development is completed or under construction.

Northwest One/Sursum Corda[11]

The Sursum Corda neighborhood lies just beyond the southern boundary of the Mid Cit East Livability study area. Developed as a 100% low income housing property, in recent years the city and community have developed a plan to transform the site into a vibrant mixed income community. The planned development will increase the number of housing units; expand community amenities including parks, a new library and school; and restore a traditional grid of streets to improve access and circulation for all modes. Presently, the Sursum Corda population includes a high proportion of children, seniors and disabled residents who rely on walking and transit as their primary mode of transportation to meet their daily needs.

11 "New Communities Citywide Initiative – Northwest One Draft Plan", Department of General Services, November 11, 2005. Accessed on 8/23/13. (http://dgs.dc.gov/sites/default/files/dc/sites/dgs/service_content/attachments/MasterPlan.pdf)

Figure 4-3 Sursum Corda Conceptual Development Plan

Source: New Communities Citywide Initiative / Northwest One Draft Report

Howard Town Center

Located along the west side of Georgia Avenue, the planned Howard Town Center is two blocks to the west of the Mid City East study area.

Presently a large, gated surface parking lot, the proposed town center project has changed several times over the years but is generally conceived to include significant new residential and retail space together with the potential for new academic or office space for the university.

Currently the site is a superblock between Barry Place and V Street NW that limit east-west connectivity to the site and through the greater Mid City area. While new east-west connections were proposed in earlier planning efforts, no through streets were provided in the most recent plan.

The development project is presently on hold for the foreseeable future with the cancellation of the latest development contract agreement.

965 Florida Avenue and Atlantic Plumbing Lots

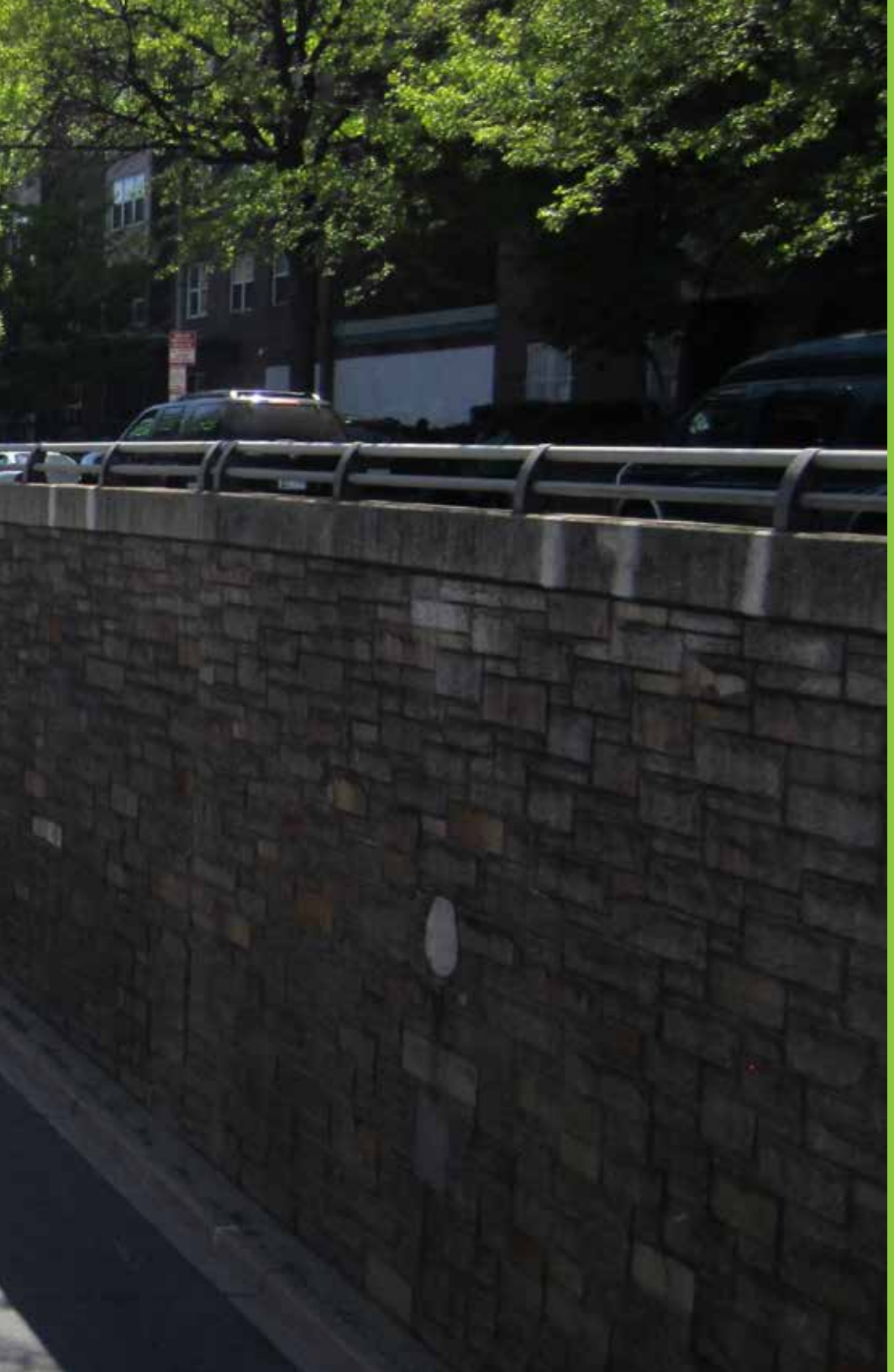
Several parcels in the vicinity of 8th Street, Florida Avenue, and V Street NW are slated for new developments beginning construction in 2013. The lots are currently vacant and cleared of structures, with several different ownership interests promising dense, mixed use structures, including approximately 49,000 square feet of ground floor retail, and 433 residential units of varying size.[12] The project developers have proposed filling a portion of the retail component with a grocer or market space.

McMillan Sand Filtration Site/ Vision McMillan

The McMillan Sand Filtration site is a 25 acre parcel just north of the study area between First Street NW and North Capitol Street. Plans for the site include mixed use development featuring new medical and research office buildings, housing, a community facility, open park space, and retail which may include a full service grocery store. Transportation improvements include a new multimodal hub at the north end of the site adjacent to Michigan Avenue and a grid of local and service streets breaking up the current superblock. The site is a significant distance from existing subway stations, but well served by east-west and north-south bus lines.

Figure 4-4 Vision McMillan Plan

12 Figures derived from project reports published by Michael Neibauer in Washington Business Journal on July 31, 2013 and October 2, 2013. Accessed on October 3, 2013 (http://www.bizjournals.com/washington/breaking_ground/2013/10/big-step-forward-for-jbgs-atlantic.html , http://www.bizjournals.com/washington/breaking_ground/2013/07/mrp-offered-millions-more-for.html)



5 Existing Conditions

5 Existing Conditions

TRANSPORTATION SAFETY

Crash data from 2010 to 2012 was analyzed for several selected intersections. Not unexpectedly, crashes were most common along the major arterials of Rhode Island Avenue, Florida Avenue and New York Avenue. Over the three year period, traffic crashes resulted in four fatalities within the study area. Concentrations of crashes occurred at or near:

- North Capitol and New York Avenue
- First Street NW and New York Avenue
- New Jersey Avenue NW and New York Avenue
- North Capitol and Florida Avenue
- North Capitol and Rhode Island Avenue

Figure 5-1 Crash Events including Injuries and Fatalities (2010 – 2013)

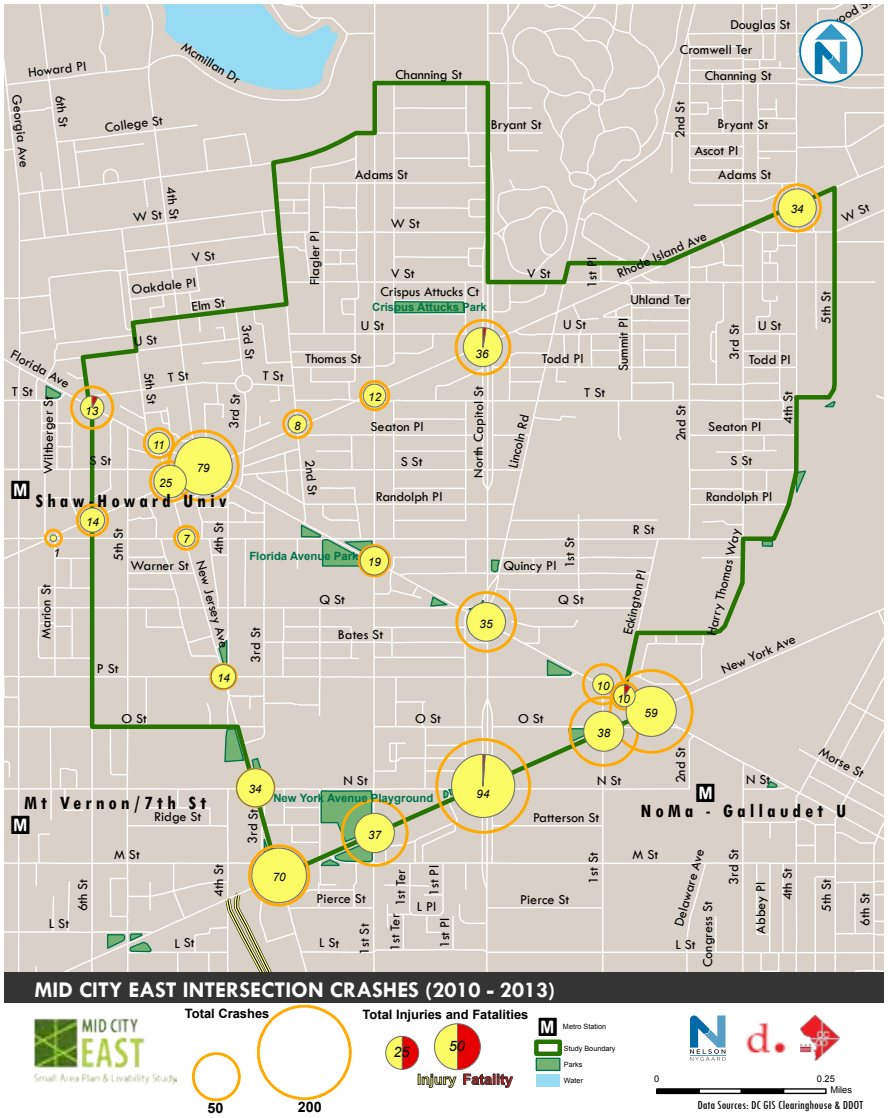
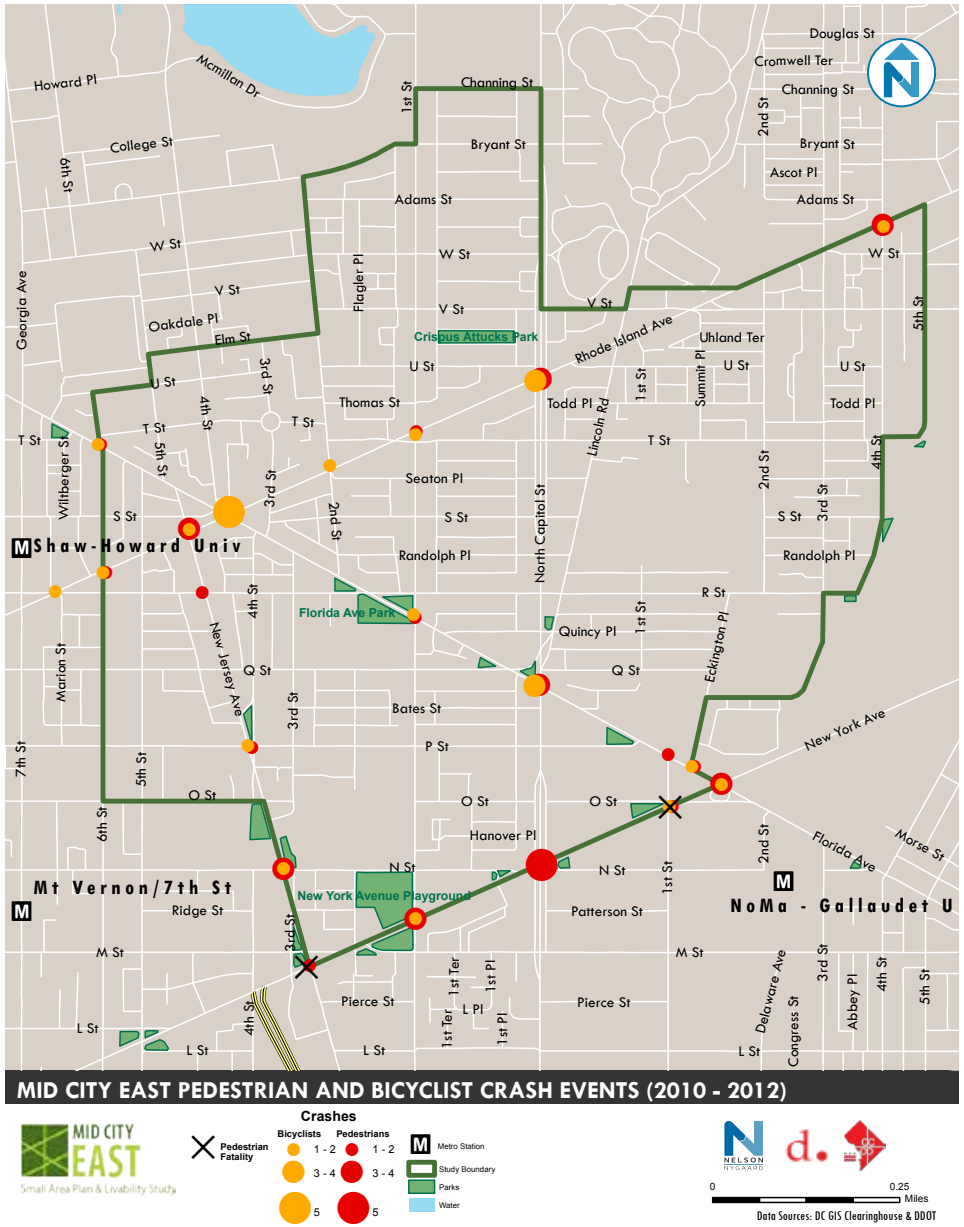


Figure 5-2 Crashes Involving Pedestrians and Bicyclists (2010 – 2012)



The study area has a number of dangerous or challenging pedestrian crossings at major intersections. The angled intersections created by the state streets result in very wide pedestrian crossings in some locations while the tremendous vehicle volumes of New York Avenue and North Capitol Street, in particular, make crossings dangerous and intimidating to even the most agile pedestrian. Crash analysis found a higher concentration of pedestrian crashes at:

- New York Avenue, North Capitol Street and N Street
- North Capitol Street and Florida Avenue
- North Capitol and Rhode Island Avenue
- Rhode Island and 4th Street NE
- Rhode Island and New Jersey Avenue NW
- New Jersey Avenue and N Street NW
- First Street NW and New York Avenue NW

The high volumes and speeds of traffic along the major arterials can make cycling on or across them intimidating and dangerous even for the more experienced cyclist let alone younger students or more novice/occasional cyclists. Crashes involving bicyclists were most frequent along Rhode Island Avenue indicating a significant presence of bicyclists and a potential lack of adequate accommodation for them (Figure 12). The highest incidences of crashes involving bicyclists, for those intersections queried, occurred at:

- Rhode Island and Florida Avenues NW
- Rhode Island and North Capitol Street
- North Capitol Street and Florida Avenue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FOR
WITHIN
CROSSWALK

PEDESTRIAN NETWORKS

The several neighborhoods of Mid City East enjoy a generally complete sidewalk network. Sidewalks are present along both sides of nearly all streets, with limited exceptions in the industrialized areas along the eastern edge of the study area (Figure 14) – these are, however, enroute to the New York Avenue and Rhode Island metro stations and Metropolitan Branch Trail. Sidewalk ramps have been installed at nearly all intersections, however many do not reflect more modern alignments with crosswalks and will need to be replaced over time.

While sidewalks are present, this does not mean they are adequate. Sidewalk segments along North Capitol Street and Rhode Island Avenue become severely pinched at certain points making them insufficient to meet ADA guidelines for mobility. Large street trees provide welcome shade and majesty along the street edge, but in some instances, particularly along Rhode Island Avenue, tree roots further aggravate accessibility by causing significant sidewalk heaving and challenging grade changes.

Florida Avenue has a relatively high level of pedestrian activity, but lacking on-street parking, pedestrians are thrust directly next to rapidly moving traffic with limited buffer or protection on comparatively narrow sidewalks (Figure 14).

Figure 5-3 Sidewalk Gap Analysis

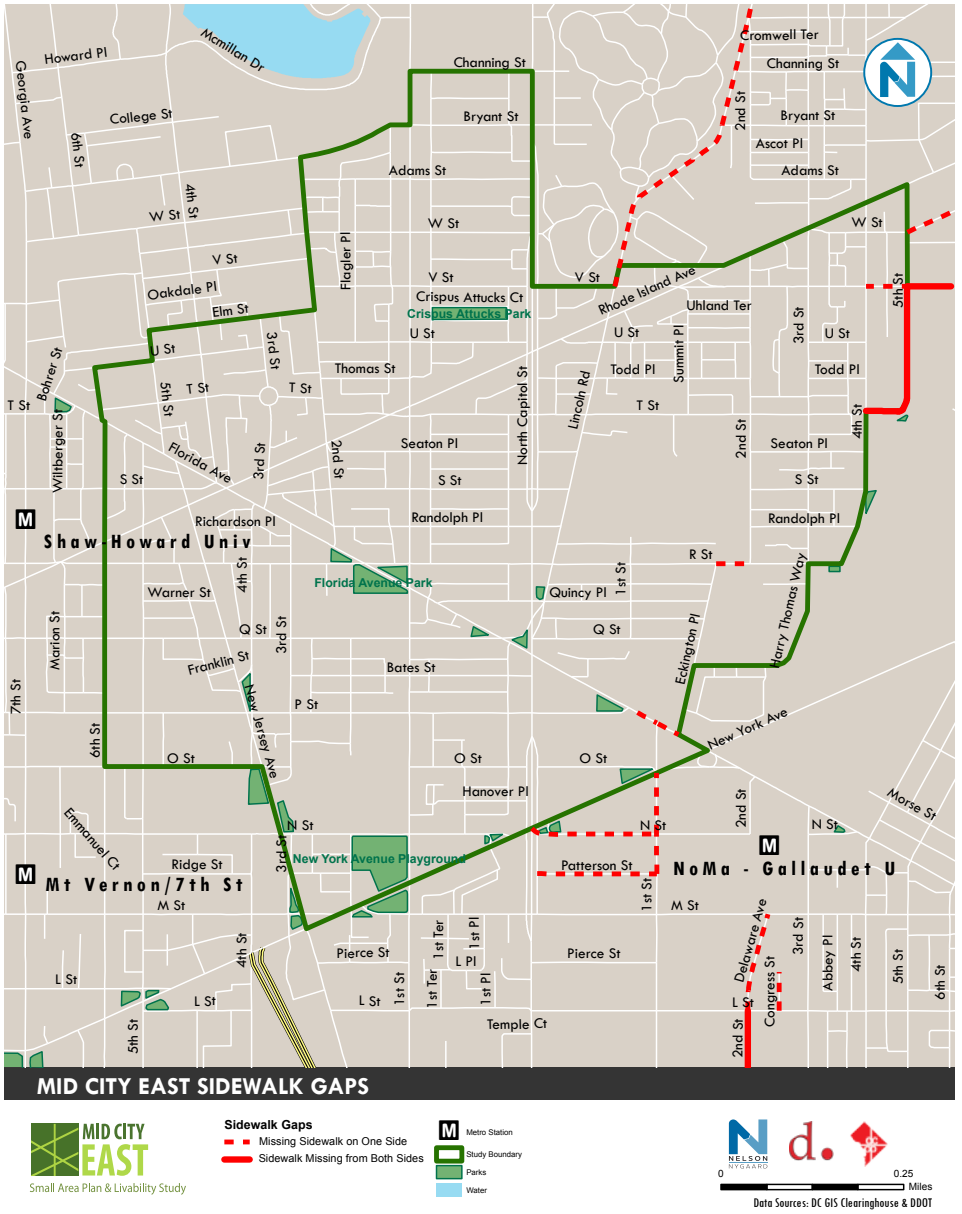


Figure 5-4 High Pedestrian Activity/High Roadway Deficiencies

Source:
District Department of Transportation Pedestrian Master Plan, 2008

BICYCLE NETWORKS

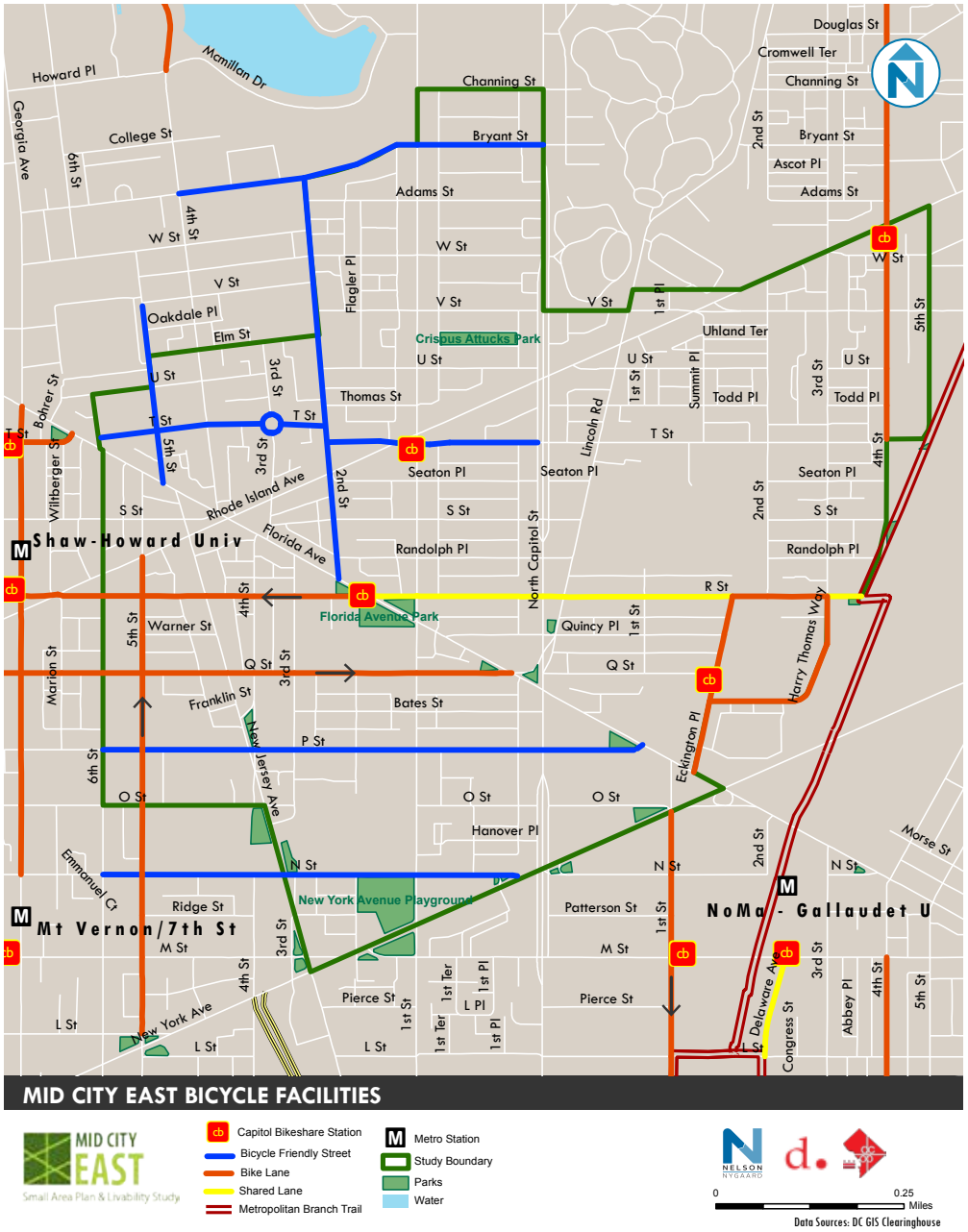
The Mid City East study area is fortunate to have one of the premier bicycling facilities in the region running alongside it – the Metropolitan Branch Trail. When completed, the trail will give uninterrupted, high quality access from Union Station to Takoma and on into the trail network of Prince Georges County, MD. While this trail is a truly unique asset, the connections from the trail to penetrate into and through the study area and city at large remain underdeveloped. Land uses abutting the trail are largely industrial in nature exposing bicyclists to potential conflicts with large motor vehicles unaccustomed to their presence.

Q and R Streets NE/NW provide a significant east-west couplet for bicycle travel between the trail, study area and destinations west.

Within the neighborhoods, bike lanes have been installed on short segments of T Street NE, 2nd, 3rd and 4th Streets NE, and Eckington Place NE. Aside from these designated facilities, there is limited additional bicycle accommodation. Many interior neighborhood streets, however, have low enough volumes and speeds to enable comfortable bicycling for intra-neighborhood trip segments.

The topography of the area changes from neighborhood to neighborhood. LeDroit Park, the Bates/ Hanover/Truxton Circle area, and southern portion of Eckington are quite flat and inviting for cycling while Bloomingdale and northern half of Eckington, around McKinnley education campus, can have some significant hills.

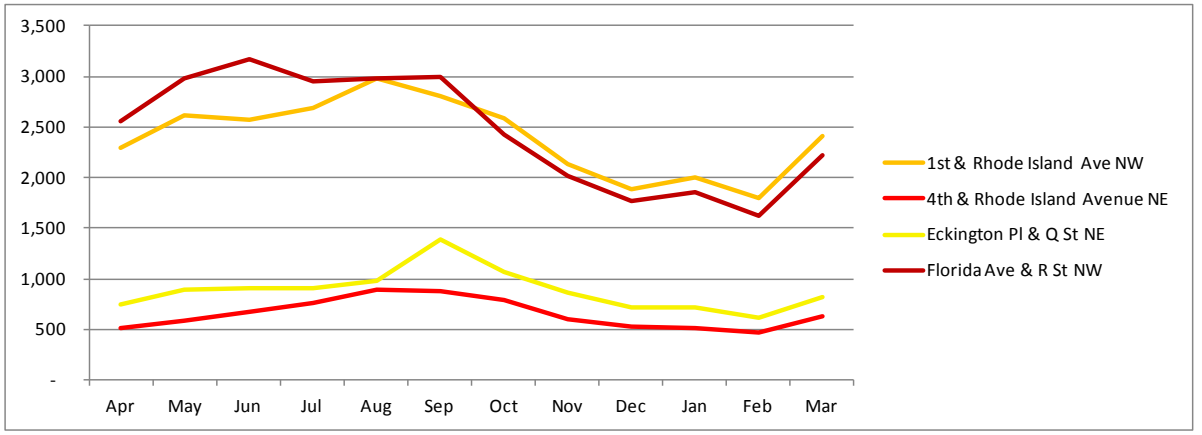
Figure 5-5 Mid City East Bicycle Facilities



There are five bike stations in the area – four have been in place for more than two years while the fifth at New Jersey and R NW was installed more recently. The stations are generally well used, with heaviest use occurring at the stations located at Florida and R Street NW (near the Florida Avenue playground and Big Bear Café), and First and Rhode Island Avenue NW (near the small retail node) (Figure 16).

As is typical, bike share activity (a good indicator of bicycle activity overall) was higher in the spring, summer and fall months with a modest decline in the winter months. Bicycle arrivals and departure averaged around 3,000 per month or roughly 100 bicycle exchanges each day at the more actively used stations.

Figure 5-6 Bike Share Utilization (Arrival + Departure) by Month (2012 – 2013)



Source: Capital Bikeshare

TRANSIT NETWORKS

The Mid City East neighborhoods are generally well served by transit with four Metro stations within a half mile of the study area boundary and several bus routes cutting through it, however the high volume roadways often present obstacles to conveniently accessing the bus and rail stops while congestion on the major arterials can lead to inefficient and unpredictable bus travel times

While bounded on the east and west by the red and green/yellow MetroRail lines respectively, no MetroRail stations are located within the study area itself. The Rhode Island Avenue station (Red Line) is located to the northeast of the study area while the New York Avenue station (Red Line) is to the southeast. The Mt. Vernon Square station (Green and Yellow Lines) is southwest of the area while the Shaw Metro Station (Green and Yellow Line) is due west. For most residents, students or visitors of Mid City East, getting to or from these MetroRail stations requires crossing one of the high traffic corridors.

Major bus service is provided on North Capitol Street (Route 80) and Florida Avenue (Route 90/92). Local bus service runs on New Jersey Avenue (Route 96), Rhode Island Avenue (Route G8), 4th to 3rd to P Streets NW (Route G2), and the P6 which meanders southwest to north east roughly between the Mt. Vernon Square station and Rhode Island Avenue station.

Major bus transfer activities occur at the intersection of North Capitol Street and Florida Avenue, North Capitol and Rhode Island Avenue, and the convergence of Rhode Island Avenue, New Jersey Avenue and Florida Avenue NW, often requiring one or more street crossings to complete.

Figure 5-7 Transit Services in Mid City East


P6
OPEN
EH 2785

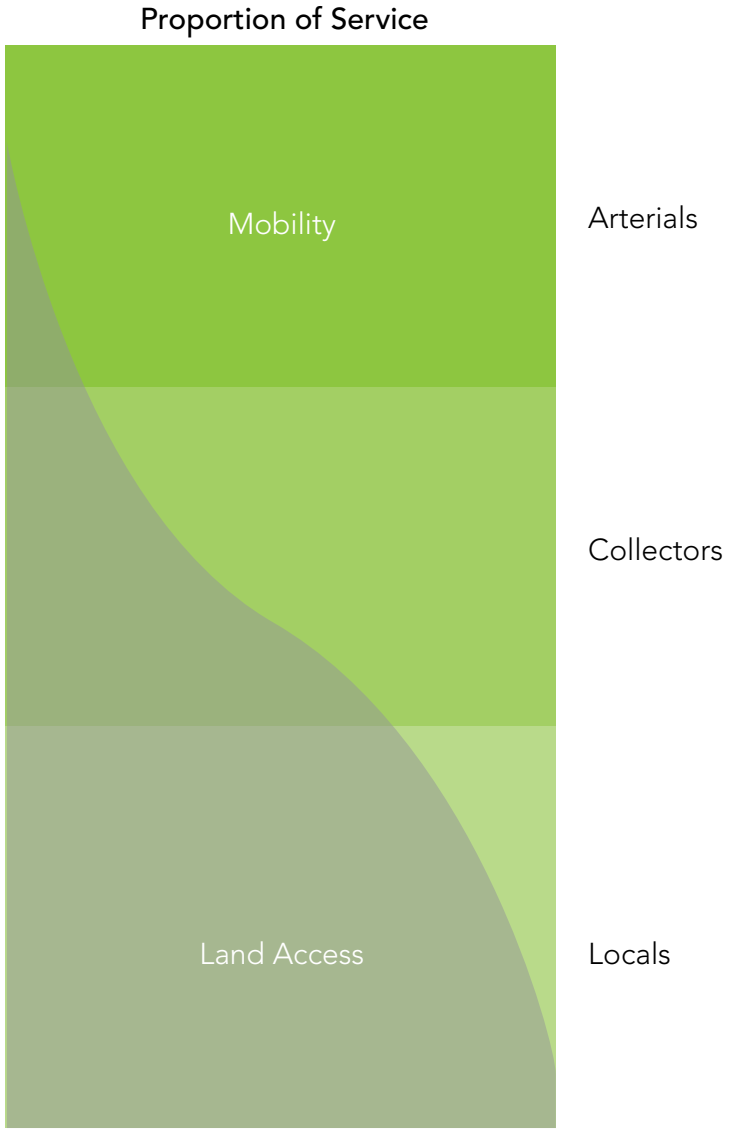
STREET NETWORK

Functional Classification

The functional classification system is a system planning tool utilized by the Federal Highway Administration and many state and municipal Departments of Transportation to categorize streets for use to serve regional, area, or hyper-local needs. It is a hierarchical system in which higher order streets (major and minor arterials) are prioritized for higher traffic volumes and longer distance trips – referred to as "mobility" - while lower order streets (collectors and local streets) are designed for lower volumes and shorter intra-neighborhood connections – referred to as "access" (see Figure 18).

Arterials streets serve commuter, truck, and regional transit traffic. Collectors distribute traffic between local streets to arterial routes and often host neighborhood circulator transit. Local streets are intended as community places. Per the city's Complete Streets policy, bicycles and pedestrians are required to be safely accommodated on all streets.

Figure 5-8 Relationship of Functionally Classified Systems in Serving Traffic Mobility and Land Access



Source: FHWA Functional Classification Guidelines; Section II - Concepts, Definitions, and System Characteristics. Revised 1989.

Figure 5-9 Street Network Functional Classification in Mid City East

While most streets in the Mid City area perform functions and carry volumes appropriate to their assigned functional classification (Figure 20), some streets exhibit deviations from the norm:

- **Major Arterials** – The major thoroughfares of New York Avenue, North Capitol Street, Florida Avenue and Rhode Island Avenue are all classified as major arterials and reflect design and performance appropriate to this classification.
- **Minor Arterials** – New Jersey Avenue NW and 4th Street NW are minor arterials that carry volumes predictable for such a classification. The paired one-way streets of Q and R Streets NW carry fairly low volumes but, provide critical east-west connection across the city. Lincoln Road NE is a short residential street with traffic volumes and connections more indicative of a collector.
- **Collector Streets** – P, R and T Streets NW/NE, Eckington Place, 2nd Street NE, and 4th Street NE are all collectors and perform accordingly with low volumes flowing into higher order streets. First Street NW, while designated a collector, is called on to perform more like a minor arterial. It should be reviewed to adjust either volumes or functional class.

Intersection Counts

Multimodal transportation counts were completed at 10 intersections (Figure 21 and Appendix).

The counts revealed some interesting findings, among them:

- Vehicles, as a proportion of all traffic at surveyed intersections, accounted for between 65% (New Jersey at R Street NW – PM peak) and 89% (New Jersey at New York – PM peak) of all traffic, meaning that 10-35% of travelers utilized non-auto modes.
- Surprisingly, one-third of morning traffic at North Capitol and New York Avenue were in buses (18%) or pedestrians (14%).
- Five of the ten intersections counted had pedestrian volumes of 200 or more in the AM peak hour (with slightly less in the PM peak hour). These were (in rank order):
  1. North Capitol at New York Avenue (New York Avenue Metro area)
  2. Rhode Island at R Street NW (Shaw Metro area)
  3. New Jersey at New York Avenue NW (Dunbar High area)
  4. Florida Avenue at 6th Street NW (Howard University area)
  5. North Capitol at Florida Avenue (significant bus transfer location)
- Five of the ten intersections counted had bicycle volumes of 100 or more in the AM and PM peak hour (with slightly more in the PM peak hour). These were (in PM rank order):
  1. New Jersey at R Street NW (over 300 bicyclists in PM peak hour!)
  2. New Jersey at Rhode Island (157)
  3. Rhode Island at R Street NW (150)
  4. New Jersey at New York Avenue NW (114)
  5. Rhode Island at 2nd Street NW (104)
- The volumes of non-motorized travelers (bicyclists and pedestrians combined) equaled or exceeded vehicle volumes on most of the lettered streets (N Q, R, T and Seaton Place) at intersections counted. R Street NW stands out in particular as having extremely high non-motorized travel demands.

Figure 5-10 Average Daily Traffic (ADT) Volume by Street at Highest Volume Point Within Study Area

Street	@ Cross Street	Functional Class	Volume
North Capitol Street	P Street	Major Arterial	40,200
Rhode Island Avenue	3rd Street NW	Major Arterial	41,500
Florida Avenue	P Street NE	Major Arterial	24,800
New York Avenue	Florida Avenue NE	Major Arterial	57,000
New Jersey Avenue NW	R Street NW	Minor Arterial	17,400
4th Street NW	W Street NW	Minor Arterial	9,900
Q Street NW	First Street NW	Minor Arterial	2,000
R Street NW	First Street NW	Minor Arterial	2,500
Lincoln Road NE	S Street NE	Minor Arterial	5,700 (2009)
P Street	5th Street NW	Collector	2,300
R Street	First Street NE	Collector	6,900
T Street	Lincoln Road NE	Collector	1,500
First Street NW	V Street NE	Collector	7,400
2nd Street NE	U Street NE	Collector	3,600
4th Street NE	V Street NE	Collector	5,100
Eckington Place NE	Florida Avenue NE	Collector	8,600

Source: DDOT Traffic Volume Map (2010 unless otherwise noted in parenthesis)

Figure 5-11 Multimodal Transportation Counts (May, 2013)

	TOTAL AM					TOTAL PM				
Intersection	Vehicles	Bus Riders	Bikers	Pedestrians	All Trips	Vehicles	Bus Riders	Bikers	Pedestrians	All trips
North Capitol @ New York	1926	522	41	390	2879	4758	522	52	356	5688
North Capitol @ Florida	4622	831	48	200	5701	4755	831	79	270	5935
New Jersey @ New York	4103	342	82	247	4774	4734	342	114	115	5305
New Jersey @ P Street NW	1546	320	104	107	2077	1605	320	83	58	2066
New Jersey @ R Street NW	1198	168	217	93	1676	1103	168	310	128	1709
New Jersey @ Florida Avenue	1943	614	53	15	2625	1879	614	76	76	2645
New Jersey @ Rhode Island	3043	491	138	102	3774	3329	491	157	128	4105
Florida Ave @ 6th Street	1642	464	81	213	2400	1598	464	73	136	2271
Rhode Island @ 2nd Street NW	2337	308	72	81	2798	2926	308	104	111	3449
Rhode Island @ R Street NW	1994	341	161	277	2773	2119	341	150	229	2839

Figure 5-12 Streets with Non-Motorized Volumes Exceeding Vehicular Volumes

		Vehicles		Non-Motorized			Vehicles		Non-Motorized			Vehicles		Non-Motorized	
Intersection	Street 1	AM Peak	PM Peak	AM Peak	PM Peak	Street 2	AM Peak	PM Peak	AM Peak	PM Peak	Street 3	AM Peak	PM Peak	AM Peak	PM Peak
North Capitol @ New York	North Capitol	261	768	101	106	New York Avenue	1665	3990	105	63	N Street	15	36	**19**	34
North Capitol @ Florida	North Capitol	3365	3114	150	187	Florida Avenue	1257	1641	63	128	Q Street	28	45	44	51
New Jersey @ New York	New Jersey	756	819	244	110	New York Avenue	3347	3915	113	149	M Street NW	69	69	32	35
New Jersey @ P Street NW	New Jersey	1084	1218	77	71	P Street NW	462	387	134	70					
New Jersey @ R Street NW	New Jersey	950	962	73	189	R Street NW	248	139	237	249					
New Jersey @ Florida Avenue	New Jersey	446	346	12	26	Florida Avenue	1497	1533	56	126					
New Jersey @ Rhode Island	New Jersey	939	878	68	58	Rhode Island Avenue NW	2104	2451	172	227					
Florida Ave @ 6th Street	6th Street NW	113	136	166	121	Florida Avenue	1529	1462	88	67	T Street	23	25	66	43
Rhode Island @ 2nd Street NW	2nd Street	156	205	32	32	Rhode Island Avenue NW	2181	2721	100	146	Seaton	19	35	35	65
Rhode Island @ R Street NW	R Street NW	176	226	177	188	Rhode Island Avenue NW	1818	1893	261	191					


SPEED
LIMIT
25

6 Purpose and Need


Geniuses Wanted
STOP
ALL WAY

6 Purpose and Need

Assessment of public input and concerns and evaluation of existing conditions confirmed the central purpose and need of improvements in the Mid City East Area.

PROVIDE FOR PEOPLE 8 TO 80

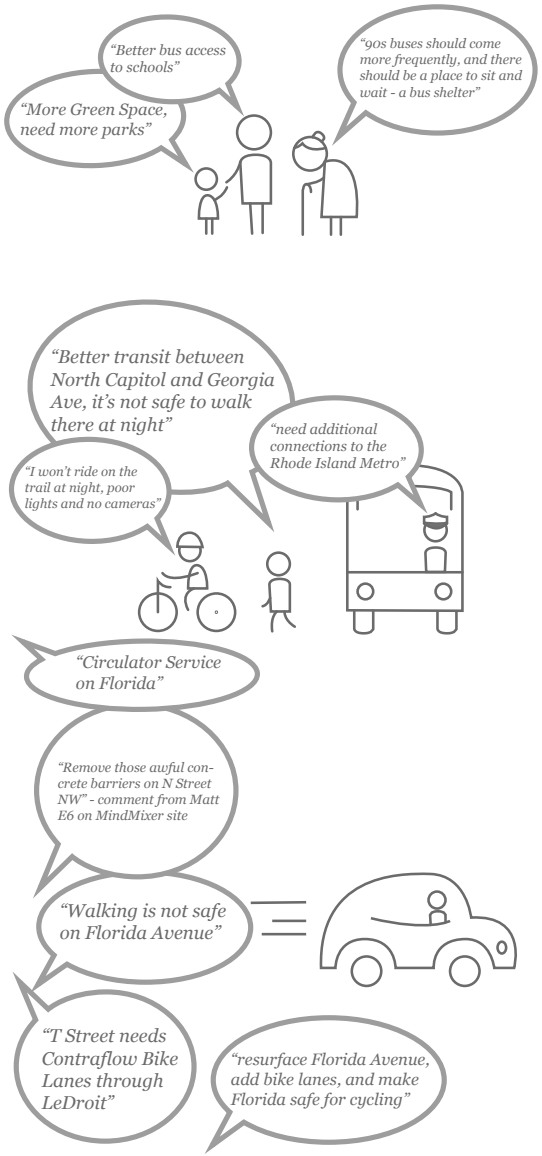
Residents throughout the public process advocated strongly for a transportation network in which all residents of the community – from the very young to the very old – could safely move about and access to many destinations, services and amenities of the Mid City area. With the significant number of schools in the area, the generationally diverse population, and the range of traveler needs and abilities, a transportation system capable of accommodating the independent travel needs of both the very old and the very young would support all residents and travelers.

IMPROVE TRANSPORTATION CHOICES

Public feedback also called for improvements to transportation choices in the neighborhood. In particular, participants highlighted the need for better bicycle connections to the city at large, improved pedestrian corridors to schools, transit and parks, and improvements to bus transit services – such as recommendations for an extension of the Circulator network to serve this portion of the city. A constant perception in the study area was that too much space, attention, and priority was devoted to automobile travel, and that these choices had long passed a point of diminishing returns. Residents preferred many options which would slow vehicles traveling within the neighborhoods, and allow for better transit, bicycle, and pedestrian accommodation on corridors connecting neighborhoods.

TAME THE ARTERIAL CROSSINGS

The study area is literally carved up by the four major arterials. These streets present significant barriers between neighborhoods and limit resident accessibility to commercial and public amenities in other parts of the study area. While residents strongly desire that these corridors function efficiently and continue to serve the significant travel demands they carry, these corridors should be humanized to respect the neighborhoods through which they traverse. As this study deals primarily with the minor street network, recommendations for adjustments to these major streets will be focused on urban design and safety treatments to improve character and enhance crossing for non-auto modes in particular.




MARKET
WINE. BEER. GROCERIES
FRESH FRUITS. MILK. GROCERIES
WINDOWS
Cafe

7 Intersection and Corridor Alternatives Considered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ANACOSTIA STATION
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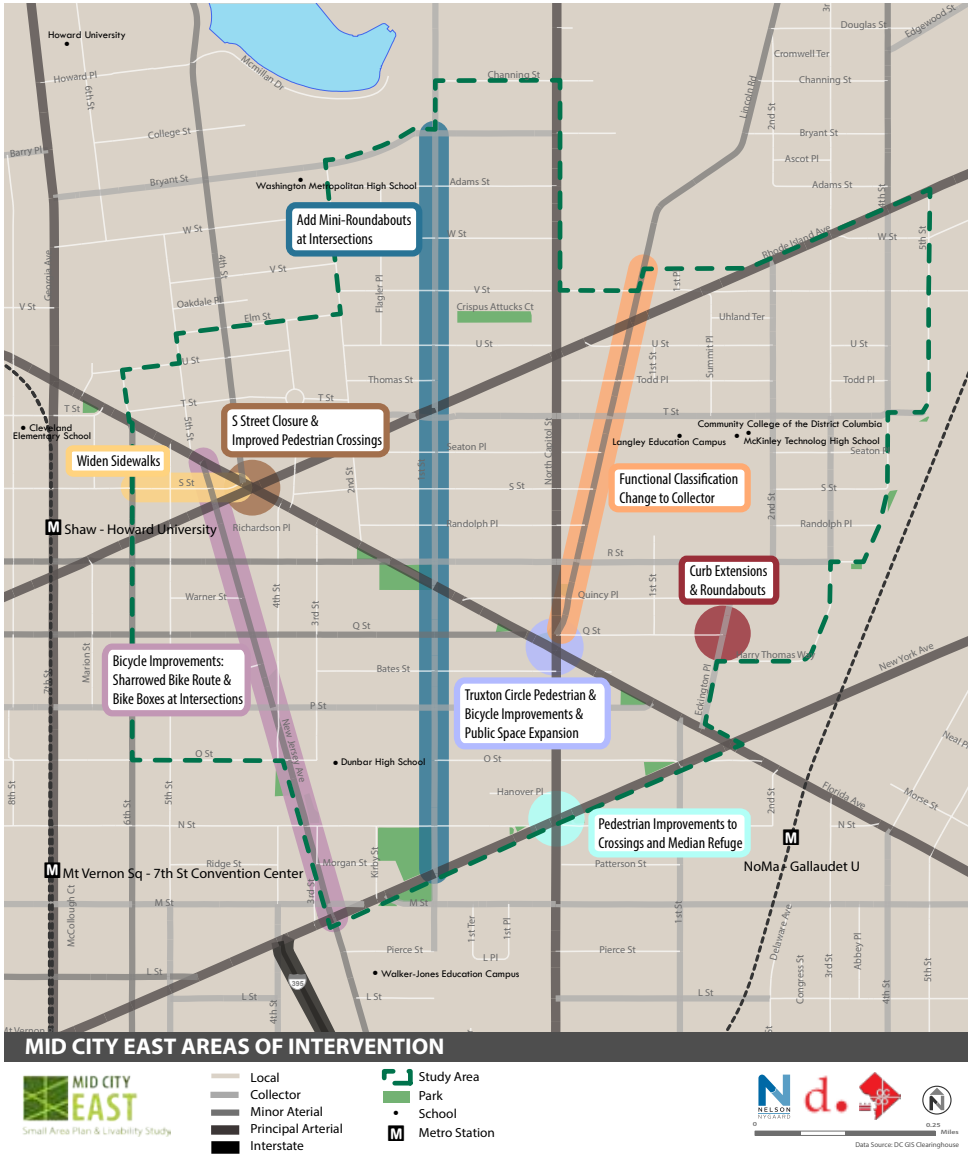
7 Intersection and Corridor Alternatives Considered

The existing conditions indicated that there was a need to provide safety, operational, and multimodal improvements and enhancements at several primary intersections and along certain corridors (Figure 7-1). Several alternative approaches were considered and evaluated for each area. Developing the recommended changes was an iterative process. Several alternative configurations, traffic movements, and signal changes for most intersections and corridors were analyzed. The results of this analysis contributed to development of recommended designs.

Figure 7-1 Recommended Improvement Areas



North Capitol Street / New York Avenue / N Street

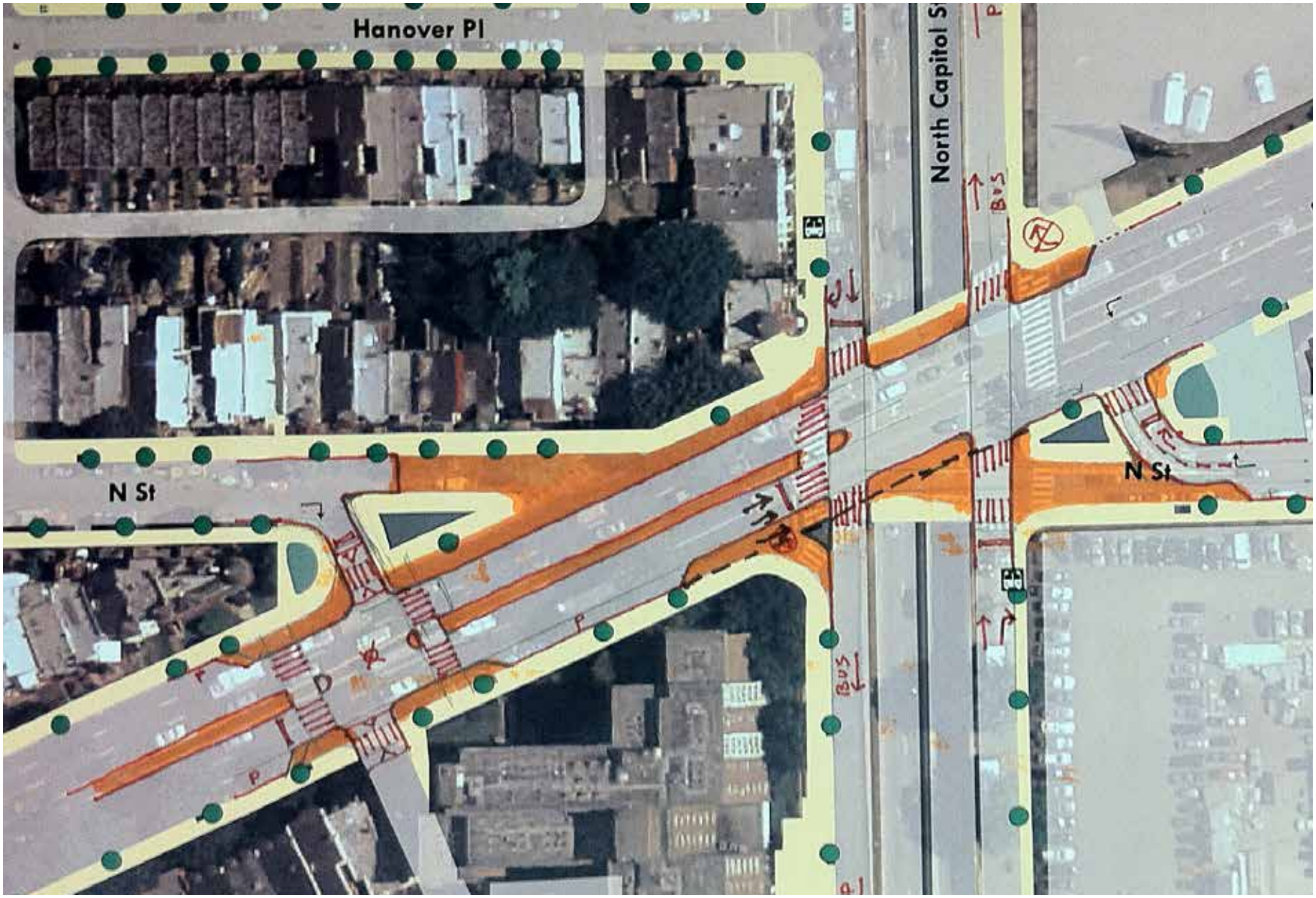
The intersection of North Capitol Street, New York Avenue and N Street is a complicated intersection. The main line of North Capitol Street is grade separated at this location with ramps joining New York Avenue at a paired signalized intersections. Access to westbound N Street is blocked with planters. Egress from N Street NW onto inbound New York Avenue is permitted through a channelized lane. Eastbound access to N Street NE is provided directly from the New York/North Capitol Street intersection which increases the overall width of the intersection. Egress from N Street NE is permitted only onto outbound New York Avenue again through a channelized lane.

This intersection is the highest crash location in the study area and among the highest crash locations in the District. Despite sizable pedestrian volumes, pedestrian crossing across New York Avenue is difficult. Permitted pedestrian crossing times are constrained, especially on the eastern leg of the intersection. Given its location connecting the Metro to both schools and the affordable housing at Sursum Corda, there are a high proportion of senior, disabled, and children among the pedestrians. The primary objective for intersection improvement was to improve pedestrian safety and connectivity while respecting vehicular flow on New York Avenue.

Several alternatives were considered for this location to improve pedestrian safety and accommodation:

1. Roadway narrowing to shorten pedestrian crossing distance. This alternative was rejected as likely producing unacceptable traffic impacts.
2. Median expansion and extension to provide pedestrian refuge. This alternative was adopted in part – medians should be extended past the crosswalks to provide some protection to the crosswalk, however the medians are too narrow on the corridor to serve as safe refuges for pedestrians to cross the street in two phases, nor is this recommended practice in a highly urbanized area.
3. Reopening westbound N Street NW to permit right-in, right-out access only. This was rejected as being counter to the objectives of improved pedestrian safety and reducing traffic impacts on local neighborhood streets.
4. New intersection or mid-block crosswalk from N Street NW across New York Avenue. Both options of a full and Hawk signal were considered and ultimately rejected. Additional counts conducted at this intersection found 49 pedestrians crossing New York Avenue at this uncontrolled location in the PM peak hour. While this meets the warrants for a Hawk signal, the team believed such a signal would introduce driver confusion and potentially negatively affect progression along the New York Avenue corridor. The location did not meet the warrants for a full signal.
5. Modify the intersection to better organize movements and consolidate space for better pedestrian accommodation. This option was ultimately advanced as the preferred alternative.

Figure 7-2 North Capital and New York Avenue Preliminary Concept Alternative



North Capitol Street / Florida Avenue / Q Street / Lincoln Road

The intersection of North Capitol Street, Florida Avenue, Q Street and Lincoln Road NE is an exceptionally wide intersection. Once the location of Truxton Circle, the intersection has a myriad of vehicular, pedestrian, transit and bicycle movements converging on this location. A bike lane is provided on Q Street NW but presently ends abruptly at the intersection. The intersection is a major bus transfer location with bus stops on all four legs of the primary arterials.

The primary intersection is a skewed angle with North Capitol Street oriented north-south and Florida Avenue crossing northwest to south east. Lincoln Road joins at an acute angle to/from the north-northesast and Q Street cutting east and west. Northbound Lincoln Road diverges at a very generous angle with no reduction of speed for this turn. Southbound Lincoln Road introduces an additional signal between Quincy Street and Florida Avenue providing approximately 100' between signals. A free right slip lane is provided from southbound North Capitol Street onto westbound Florida Avenue. Pedestrians must cross this slip lane to access the major bus stop located on Truxton Circle Park.

The challenge at this intersection was again to improve pedestrian connectivity across the intersection, extend the bicycle connectivity to DDOT's planned bike lane on Q Street NE, and create a sense of place and arrival for the several neighborhoods immediately abutting this intersection (Bloomingdale, Eckington, Hanover and Bates).

The alternatives considered included:

1. Modifying the slip lane from southbound North Capitol Street to Florida Avenue NW to provide a squared intersection with Florida Avenue rather than the existing free right. While this created a somewhat safer pedestrian crossing by requiring a stop prior to the right turn, the alternative was ultimately rejected as the squared orientation could potentially permit vehicles to attempt to turn left from the lane to proceed eastbound on Florida Avenue – a movement currently prohibited at the intersection, but accommodated further south at P Street NE. Furthermore, the acute angle of the turning lane with Florida Avenue presented difficulty for tractor trailers turning right onto Florida Avenue NW.
2. Providing a crosswalk/bicycle crossing from Truxton Circle Park to Q Street NE perpendicular to North Capitol Street. This concept shortened the pedestrian crossing distance across North Capitol Street but could not provide sufficient pedestrians to bicycles and pedestrians. The crosswalk was too far from the intersection to be protected by the existing signal(s) and yet too close to safely provide a unique signal.
3. Sharrows on Florida Avenue from Q Street to North Capitol. Sharrows would signal to drivers to expect cyclists making the connect between the existing and planned bike lanes on Q Street, however due to the high volume of traffic on Florida Avenue, the team concluded that this was not a safe nor recommended application. Traffic volumes on Florida Avenue average between 22,000 and 25,000 vehicles. The recommended standard for roadways with a shared lane is fewer than 15,000 average daily vehicles.
4. Add bicycle crossing to existing unsignalized crosswalk at Q Street NW and Florida Avenue NW. This alternative would provide accommodation for bicyclists to cross as pedestrians do now at an unsignalized location, however given the proximity of the crosswalk to the existing free right merge and the general volumes of Florida Avenue at this location the team concurred that the crossing should be signalized to provide adequate protection for pedestrians and bicyclists.
5. Implement a HAWK signal at Q Street and Florida Avenue. A Hawk signal would provide better protection to the unsignalized location, however existing Hawk signals are difficult for cyclists to actuate. Hawks at present are actuated through push button. Bicyclist detection is an area of ongoing study by DDOT. Furthermore, because eastbound Q Street traffic is also merging at this location, a standard signal is more appropriate.
6. Close one block of Lincoln Road (from Q Street to Quincy). This recommendation would reduce the number of movements occurring immediately in the former Truxton Circle, allow the removal of one closely-spaced traffic signal on North Capitol Street, and create a larger gateway green space on the east side of North Capitol Street. This alternative was modeled and accepted. All desired movement to and from Lincoln Road could be accommodated through a quick job on Quincy Place NE. This micro block segment has no private land uses on it that would be negatively affected. Signal timing adjustments are necessary at Lincoln and Quincy Place to coordinate with the signal at Quincy Place and North Capitol Street.
7. Close the southbound North Capitol Street slip lane. This recommendation would remove the uncontrolled pedestrian crossings across the slip

Figure 7-3 North Capital and Florida Avenue Preliminary Concept Alternative

lane and again provide a gateway green space opportunity. With the pending development of the parcel on the northwest corner of the intersection, this could also provide greater stewardship over this park parcel and dissuade some of the negative social activity that is a major community concern at this location. This alternative would require a more generous turn radii at the acute intersection of Florida and North Capitol Street to permit the turning of larger vehicles. Restricting turns to right on red only would permit larger vehicles to utilize both lanes of Florida Avenue for their turning movement.

8. Provide a full signal at Q Street NW. This alternative would allow safe crossing of both Q Street and Florida Avenue to permit bicyclists to cross at this location in order to continue on to the bike lane on Q Street NE.

Alternatives 6, 7, and 8 were advanced and further developed as the preferred alternative.

Rhode Island Avenue / Florida Avenue / New Jersey Avenue / Fourth Street / S Street

Five streets converge in or near the intersection of Rhode Island Avenue NW and Florida Avenue NW. In total there are five distinctly controlled signalized intersections in this tight area:

- Florida Avenue NW and Rhode Island NW
- Florida Avenue NW and 4th Street/S Street NW
- Florida Avenue NW and New Jersey Avenue NW
- S Street NW and New Jersey Avenue NW
- Rhode Island Avenue and New Jersey Avenue NW

Although S Street NW is functionally classified as a local street, it has been reconfigured to serve as the connection between New Jersey Avenue and 4th Street NW, both minor arterials.

Community concerns are multiple at this location. Pedestrian accommodation is scattered and confusing. Multiple intersections provide crosswalks on only one side of the intersection. A bus stop is isolated on a narrow spit of land squashed between southbound Rhode Island Avenue and S Street NW with traffic on either side. The multiple intersections, each with various restricted movements, are difficult and confusing for drivers unfamiliar with the area to navigate.

This was, by far, the most challenging intersection the study team wrestled with and multiple alternatives were considered. While a recommended alternative was advanced for further consideration, it should be noted that substantially more study and evaluation is necessary and a focused study of this intersection(s) is recommended.

1. Maintain existing conditions. While vehicle functions are reasonably acceptable (although far from ideal!) in this location, pedestrian and bicycle functions are not. This complex of intersections, when combined, experienced 115 crashes over the past three years, several of which involved bicycles and/or pedestrians making it the highest crash location (when taken as a complex) in the study area. Maintaining conditions as they are, therefore, was concluded to be unacceptable.
2. Close the segment of S Street from New Jersey to Florida Avenue without additional operational changes at other intersections. While this alternative reduced some pedestrian conflicts and simplified some of the movements around the intersections, leaving S Street open from 5th Street to New Jersey Avenue introduced the possibility of confusion at S and New Jersey Avenue and maintained those traffic volumes entering the intersection(s) from the local street. Maintaining the restrictions including a no left turn from Florida Avenue onto northbound 4th Street and from westbound Florida onto southbound New Jersey Avenue did not provide the necessary connectivity.
3. Close S Street between New Jersey and 4th Street NW but accommodate all traffic movements with signalization changes. This approach was dismissed when preliminary analysis indicated that there was neither the time available in the signal cycle to make these movements in other ways, nor was there a plausible scenario where the queuing space needed to facilitate ne w movements would be available on the roadway during peak and mid-day periods.
4. Close S Street between New Jersey Avenue and 4th Street NW, close S Street at New Jersey Avenue, introduce new connections directly to Rhode Island Avenue, allow all other movements to dissipate into the grid. This alternative was developed at the suggestion of DDOT Traffic Operations Administration and advanced for further analysis as the leading alternative at present.

Figure 7-4 Rhode Island/Florida/New Jersey/4th & S Street Preliminary Concept Alternative

First Street NW

First Street NW is a collector road which, at present, operates more like a minor arterial in both volumes and function. The street is primarily residential with several major schools and parks along it.

Community desires were to restore and protect First Street as a collector street and dissuade its use as a long cut-through from Michigan Avenue to New York Avenue. As the only non-arterial continuous north-south street through this large portion of the District, community members desired that the street be prioritized for multi-neighborhood pedestrian and bicycle access while the parallel North Capitol Street be prioritized for efficient transit and vehicular movement and support retail land uses there.

Many intersections along First Street NW are stop controlled with either two-way or four-way stop signs. Community reports and observational evidence suggested that drivers routinely roll through these stop signs in order to "catch the light" at the major arterial crossings of New York Avenue, Florida Avenue, Rhode Island Avenue or Michigan Avenue (beyond the study area).

The challenge to be solved was to deter traffic more appropriately accommodated on the major arterial while maintaining the network function as a collector street and neighborhood distributor and provide a safe and quality bicycle connection through these neighborhoods west of North Capitol Street that would be appropriate for bike commuters as well as the many school age students and their families accessing the schools and parks.

1. Traffic diverters at arterial streets. The team considered various techniques for forcing traffic to divert from First Street onto arterial cross streets, however this alternative was rapidly rejected as no workable design solution could be identified and community advisors voiced concern about local neighborhood traffic needing to cross these arterials for local trips.
2. Speed humps, speed tables, neck downs and other traditional traffic calming measures. The team considered the use of familiar traffic calming measures on the corridor however given the presence of the Washington Hospital Center to the north of the study area and the occasional need for ambulances to utilize First Street NW, speed humps, speed tables, and other raised pavement solutions were less desirable. Neck downs and curb extensions were considered, however the street is already fairly narrow with parking allowed only on one side.
3. Mini roundabouts. Mini roundabouts were analyzed as a tool to visually interrupt the long sight lines down the corridor (and therefore minimize the opportunity to speed through intersections to catch the light), slow speeds between blocks to improve the safety for bicycles to mix with vehicles in the general use lanes, and improve the progression of travelers of all modes down the corridor with greater safety. This alternative was advanced as the preferred alternative for further development and analysis.

Rhode Island Avenue NW/NE

Rhode Island Avenue NE and NW is a major arterial that carries three lanes of traffic in each direction during peak hours and provides two lanes plus curbside parking in the off-peak periods. The corridor has a planted median that provides protected left turn pockets throughout the study area.

Although Rhode Island is a heavily trafficked corridor, a number of cyclists also utilize the corridor to commute from upper northeast into the downtown. Analysis found that a number of the crashes involving bicyclists occurred along this corridor.

The primary challenge the community indicated was how to safely accommodate bicycle travel along the corridor particularly in the peak hour. Alternatives considered included:

1. Bike lane buffered by on street parking. This alternative provided good protection to cyclists but resulted in reduced vehicle capacity on Rhode Island Avenue. Modeling the impacts of this on the whole of the regional corridor was beyond the scope and intent of this livability study.
2. Peak hour shared bus/bike only lane. This alternative advantaged both bicyclists and transit riders in the more congested peak hour while retaining on-street parking to support local retail during off peak periods. This alternative also potentially introduced regional traffic impacts that were beyond the scope of this study.
3. Floating bike lane. A floating bike lane would move from a curbside location during the peak hour to a location adjacent to parked cars in the non-peak periods. Conversely, a floating lane could be marked to move from outside parked cars to within a shared bus/bike lane in the peak hour. Upon analysis, the team did not believe there were adequate widths, without realigning curbs and/or median to provide a floating bike lane.

No preferred alternative for Rhode Island Avenue was advanced in this study. The study team concluded that any determination of the use and function of Rhode Island Avenue was beyond the scope of this localized study and better addressed in the citywide MoveDC process and/or a subsequent corridor study.

New Jersey Avenue NW

New Jersey Avenue is a designated minor arterial. The corridor presently has four general purpose lanes. On street parking is permitted in the first lane during non-rush periods, however parking is restricted during rush hour in the peak rush direction.

The corridor is not as heavily trafficked as other minor arterials in the network and existing and planned traffic volumes could be accommodated in a reduced lane configuration.

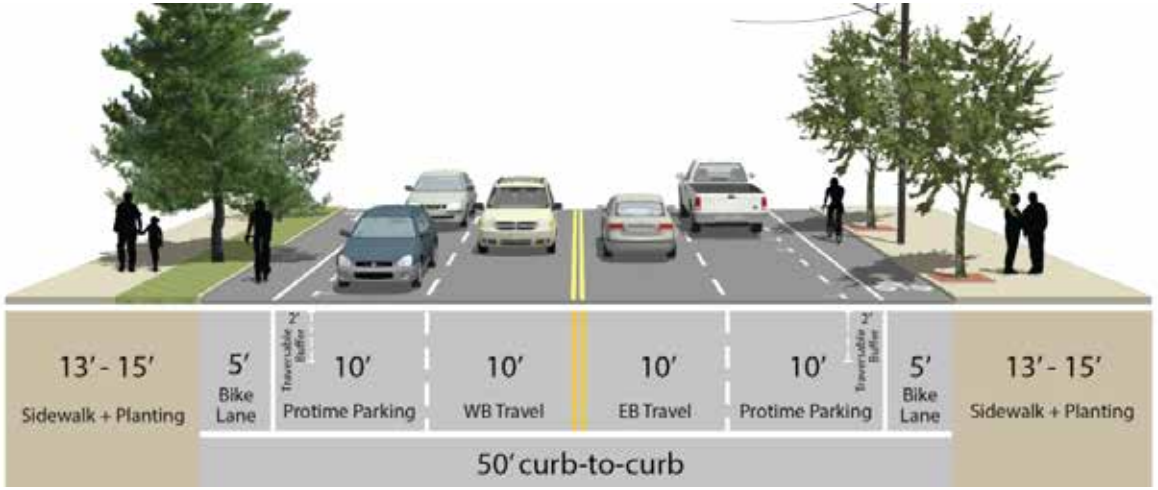
Community concerns for the corridor were to improve pedestrian crossings across New Jersey Avenue and provide comfortable accommodation for cycling along it.

Several different cross sections were considered:

1. Full-time bike lane with a floating buffer and parking allowed during off-peak times. This plan was rejected because the buffer, at only two feet wide, was too narrow to meet DDOT's guidelines, and the project team felt the complexity of this configuration would not be intuitive to drivers parking in the corridor.
2. Road diet with a full time travel lane in each direction, a center turn lane, and bike lanes in either direction. This plan was rejected because it would remove the existing parking from the corridor.
3. Road diet with a full time shared travel lane in either direction, a center turn lane, and full-time parking on either side of the road. This concept was dismissed because traffic counts did not show significant turning demand, and the shared travel lane would not provide much better service to cyclists than existing conditions.

Figure 7-5 Rhode Island Bus/Bike Lane Concept Alternative

Figure 7-6 New Jersey Avenue Floating Bike Lane Concept Alternative



4. Four travel lanes, with the outer lane serving as a wide shared travel lane with off-peak parking. This alternative improves accommodation for cyclists in both peak and non-peak periods while retaining parking for local access. This alternative was advanced as the preferred option for further analysis.

Eckington Street NE

Eckington Street NE is a roughly three block long collector street in the east of the study area. The corridor connects from New York Avenue to R Street NE. The corridor was previously the location of the city's first streetcar line and the very wide right of way of the corridor is evidence of its former life.

Today the corridor is lined by new, higher density residential, traditional DC rowhouses, and a small collection of light industrial uses, including the Washington Flower Center, a self storage facility and a Fed Ex distribution center. The latter produces the highest volume of truck trips, most of which are concentrated between Harry Thomas Way and New York Avenue.

Primary challenges identified along this corridor were the overly wide street section which appears to lead to higher vehicle speeds and the four-way stop controlled intersection at Q Street NE and Eckington Place which appears to surprise many drivers and field studies observed relatively low compliance at this location.

Two improvements to the corridor were considered:

1. Introduce a wide planted median in the middle of the street between Harry Thomas Way and R Street NE. The median would visually narrow lanes to lower speeds and remove some of the surplus impervious surface on the corridor. This option was rejected as creating relatively unusable and unremarkable space on the corridor and with no clear maintenance strategy to keep the median looking good.
2. Extend the curblines from Harry Thomas Way to R Street NE. This alternative also narrowed the street to tame traffic speeds and remove excess pavement. Community members voiced greater support for this alternative as one that creates more usable space and common maintenance as occurs along most street edges in the District.
3. Generous mini roundabout in place of the 4-way stop at Q Street NE. A planted roundabout at this location would truncate sight lines to reduce speeding along the corridor, would create an identifiable place for the emerging neighborhood, and improve compliance and safety at the intersection. Mountable curbs could be provided at the edge of the circle to accommodate the larger industrial vehicles that do need to progress beyond Harry Thomas Way.

Concepts 2 and 3 were advanced as the preferred alternative for further refinement and development.

Figure 7-7 Eckington Place NE Initial Concept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8 Network and System Recommendations

8 Network and System Recommendations

STREET TYPOLOGY

The existing street typology for managing the streets of MidCity East, and throughout the District, is the standard functional highway classification system. This typology is valuable in describing the street's transportation function in a citywide network, but it is generally aligned around vehicular access functions than multimodal travel services and has very limited response to adjacent land uses or community context.

A context sensitive street typology was developed for the MidCity East study area to provide a framework for managing streets not only to fulfill automobile and freight access and circulation functions, but also multimodal services, land use support, and community character and place.

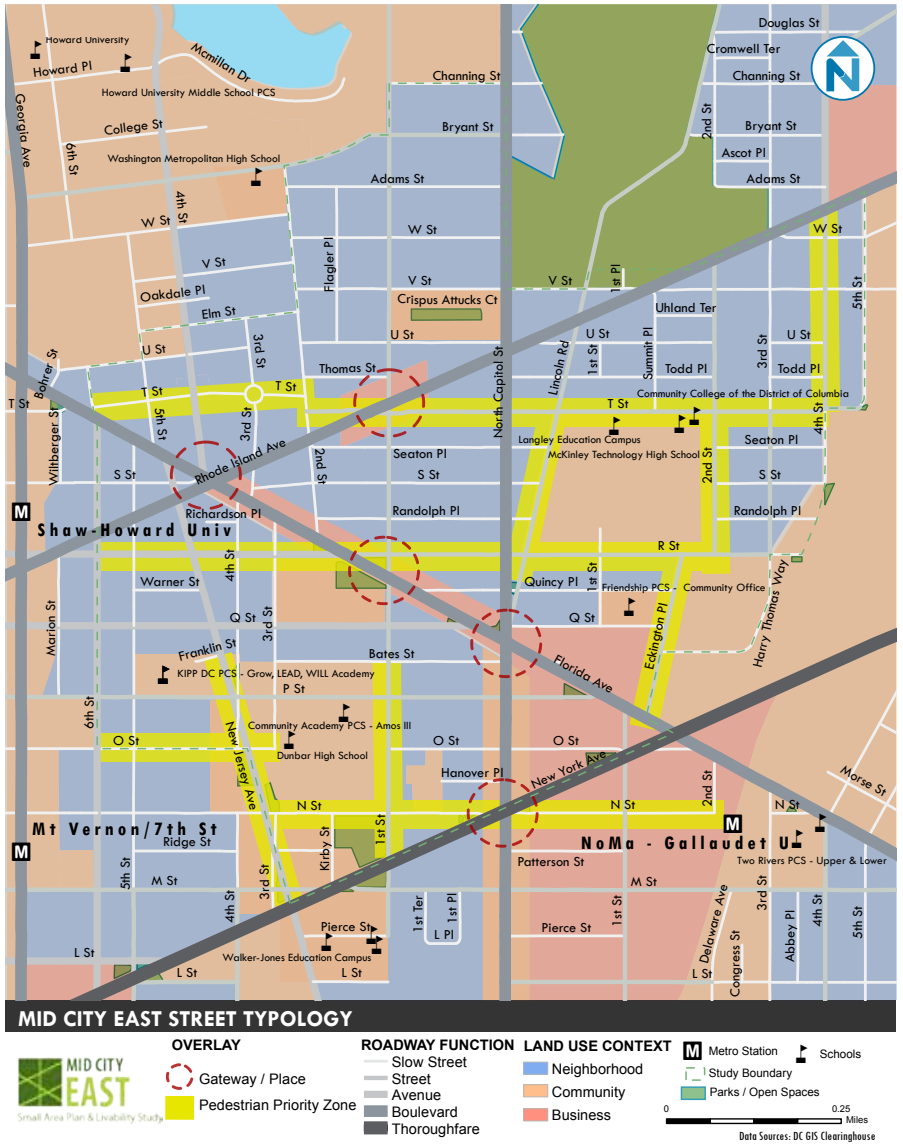
The recommended street typology was developed and defined based on analysis and understanding of Mid City East's existing streets functions and deficiencies, crashes, transit services, bicycle needs, and pedestrian patterns and incorporating them with land use vision plans to develop a street classification system that serves both land use and transportation needs. The defined street types provide guidance on appropriate design elements needed to meet goals of both.

Building from the existing functional classifications, Mid City East's primary roadway functions can be classified as Streets, Avenues, Boulevards and Thoroughfares. The land use context includes Neighborhood (primarily residential areas), Community (parks and recreation, education, and neighborhood-serving mixed uses), and Business (multi-neighborhood serving commercial, retail, and mixed use destinations).

Each roadway function and land use context can be combined to create a street type that blends form and function.

Based on the existing land uses and roadway functions within Mid City East, Figure 8-1 outlines the proposed street typologies.

Figure 8-1 Map of Mid City East Street Typologies



Gateways and Places

Within the street typology framework, most of MidCity East's major arterials begin to emerge as Boulevards, alternating between being throughway segments and destination nodes. Destination nodes host a variety of land use and transportation activity. Pedestrian volumes are concentrated here. Transit stops are frequently present. Demands to cross major streets are increased as is the need to accommodate these demands.

Street design should provide environmental cues to drivers to expect a change in land use activity and an increased possibility of pedestrian cross traffic. Such changes may be subtle such as a slight narrowing of lanes, increased pedestrian lighting, more densely planted street trees, the introduction of parklets, or more richly planted landscaping.

Because nodes are distinct and identifiable places, these locations are also opportunities to reflect local character in the public space and street design.

Pedestrian Priority Zones

The majority of streets in the Mid City East area serve neighborhood and community uses. These local roads need to be calmed to provide greater pedestrian safety through traffic calming devices. Corridors adjacent to schools and parks should be pedestrian priority zones and connect to walking routes from schools to nearby transit.

Design Elements

Using the Mid City East typologies there are various design elements that can be applied to each street type to improve safety, increase accessibility and pedestrian comfort. The following chart outlines the recommended design elements by street type and standard dimensions by incorporating the guidelines of the DDOT's Public Realm Design Manual.

In addition to these core design elements, bicycle, transit and low impact development infrastructure should be integrated where it is appropriate. For example, a bike friendly street design with shared route is scalable to Neighborhood Streets, while bike lanes should be implemented along Streets and Avenues. Existing transit corridors along Community and Business Thoroughfares can be enhanced by improving the pedestrian realm and bus bulb outs on corridors with on-street parking. Strategies for appropriate bicycle and transit improvements are described in detail for each of the Mid City East street types.

Figure 8-2 Street Typologies of Mid City East

Adjacent Land Uses	Form & Function	Street	Avenue	Boulevard	Thoroughfare
Residential	Neighborhood	Neighborhood Street			
Institutional Mixed use Parks	Community	Community Street	Community Avenue	Community Boulevard	
Commercial	Business			Business Boulevard	Business Thoroughfare

Figure 8-3 Mid City East Recommended Design Elements

Street Type	Roadway Edge/ Tree Box Area (width)	Sidewalk Area (width)	Pedestrian Clear Zone (width)	Median Refuge (width)
Neighborhood Street	4 ft. min/ 6 ft. preferred	6 ft. min	6 ft. min	
Community Street	4 ft. min/ 6 ft. preferred	6 ft. min	6 ft. min	
Community Avenue	6 ft. min	8 ft. min	6 ft. min	
Community Boulevard	6 ft. min	8 ft. min	10 ft.	6 ft. min/ 8 ft. preferred
Business Boulevard	6 ft. min	10 ft. min	10 ft.	8 ft. min/ 10 ft. preferred
Business Thoroughfare	6 ft. min	10 ft. min	10 ft.	8 ft. min/ 10 ft. preferred

Figure 8-4 Mid City East Streets by Type

Adjacent Land Uses	Form & Function	Street	Avenue	Boulevard	Thoroughfare
Residential	Neighborhood	Neighborhood Street Most designated local streets			
Institutional Mixed Use Parks	Community	Community Street 4th Street NE First Street NW 6th Street NW N Street NE/NW P Street NE/NW Q Street NE/NW R Street NE/NW T Street NE/NW Lincoln Road NE	Community Avenue New Jersey Avenue NW Eckington Place	Community Boulevard North Capitol Street (north of Q Street) Rhode Island Ave (except nodes)	
Commercial	Business			Business Boulevard Florida Avenue North Capitol Street (south of Q Street)	Business Thoroughfare New York Avenue
	Gateways and Nodes			Rhode Island Ave at First Street NW Rhode Island Ave at Florida Avenue Florida Avenue at First Street NW Florida Avenue at North Capitol St. New York Avenue at North Capitol St.	
	Priority Pedestrian Streets	4th Street NE 2nd Street NE First Street NW Lincoln Road NE T Street NE/NW R Street NE/NW O Street NW N Street NE/NW			

APPLICATION OF TYPOLOGY IN MID CITY EAST

Within the Mid City East street network the overlay of land use context and roadway function generates a unique set of street typologies for the area (Figure 33).

STREET TYPOLOGY DESIGN EXAMPLES

The recommended design elements expand upon the existing roadway cross sections and propose enhanced features to implement for greater transportation livability. The examples here are based on national best practices and local stakeholder and community members input.

These design elements can be implemented throughout the Mid City East area but priority intervention should be given to nodes, gateways and Pedestrian Priority Zones.

Neighborhood Street

Many of Mid City East's streets are small, quiet roads with residential uses set back from the street edge. Neighborhood streets are also commonly referred to as "home zone" streets. A Woonurf is a uniquely designed neighborhood street that deliberately mixes transportation modes and community uses in the public space of the street in order to calm all modes of traffic to speeds appropriate to the slowest user.

Neighborhood Streets have reduced speeds with on-street parking, landscaping, dynamic street activity and narrower roadway widths. Traffic speeds are slowed primarily through environmental design features rather than traffic calming devices. Central travelways are generally 20' to 35' wide and roadway space is not designated between vehicles and cyclists or distinctly marked direction of travel (for example, there is no center lane to divide opposing traffic). Curb radii are tight to encourage slow turning movements. Street trees are large, aligned at the street edge, and closely spaced. On-street parking is permitted on both sides of the street where possible. Long sight lines are terminated to deter drivers from focusing on a distant horizon in favor of greater awareness of their peripheral vision. All modes are permitted to mix in the street, together with other neighborhood uses such as learning to ride a bike, throwing a football, or visiting with neighbors.

Community Street

Community streets may be the destination of home residences, but area also serve the local network to knits the immediate community together. Local connecting trips by shorter distance modes - particularly bicycle connections, school drop-off and neighborhood circulator transit – are common on these streets. Management strategies for community streets seek to keep traffic speeds and volumes relatively low (1,000 to 3,000 AADT).

Other cities refer to community streets as neighborhood greenways (Portland, OR) or bicycle friendly streets. Bicycle accommodation, while not typically delineated by a bike lane or cycle track, is comfortable for community cyclists (novice riders, children and seniors) given the low speeds and relatively infrequent vehicles.

Block party on Capitol Hill

School drop off on T Street NE

Community Avenues

Community Avenues are important connecting streets that primarily have a residential context potentially interspersed with local retail or commercial uses. Pedestrian activity is higher here, and encouraged through design features that favor pedestrian access, movement, and safety. Bicycles are common on these streets and often accommodated through designated shared lanes (sharrows) or bike lanes.

Bike lanes along Eckington Place

Community Boulevard

Community boulevards are serve both "to" and "through" functions. These streets must serve dual demands as a significant multimodal corridor in the larger citywide network while at the same time supporting nodes of community destinations and activities. Rhode Island Avenue is an example of a Community Boulevard.

Community Boulevards can move traffic while at the same time celebrating local destinations through strategic urban design treatments. At community nodes, changes in paving pattern or material signal to drivers to expect a higher level of pedestrian activity. Uniquely designed and animated triangle parks or playgrounds are highly visible to drivers. Planting trees closer together or reducing distances between light poles give the sensation of speed causing drivers to inadvertently slow. Curb extensions visually narrow the street while maintaining capacity. Public art – particularly vertical art – adds interest and intrigue again slowing drivers. Landscaped medians narrow the channel of vision and improve peripheral attention. Treatments such as these at key nodes distinguish these centers of activity from the whole of the corridor. Consistent treatments along the entire boulevard may desensitize drivers to areas of higher expected activity.

Sidewalk cafes along Community Avenues provide opportunities for communities to gather and patronize local businesses all while encouraging greater pedestrian activity. At corner cafes, pedestrian safety can be improved through curb extensions to provide more pedestrian space where people gather.

"Outdoor dining has been a really important factor for reinvigorating urban areas elsewhere in DC and other cities as it creates an atmosphere for new visitors and pedestrians where they feel both safe because of everyone outside, and energized because they can see activity."

– Lily, engage.midcityeast.com

Big Bear Café's outdoor seating

Business Boulevards

Business Boulevards may alternate in segments between functioning as throughways and destinations. Although residents may now perceive major thoroughfares like North Capitol Street as "a noisy, pollution creating chasm that divides our neighborhoods" (according to George, a community member on engage.midcityeast.com) they can be transformed into Business Boulevards that carry a large volume of traffic linking longer distance destinations, but creating an environment that is pleasant at the street edge and encourages respectful speeds and driving behavior from the drivers.

Design strategies include medians, high visibility pavement treatments, enhanced lighting, public art and gateways, and pedestrian refuges. Medians can provide pedestrians a respite from bustling traffic with seating and shade through landscaping. By widening the median and increasing tree canopy along Boulevards at key Places driver's are provided visual cues to adjust their speed as they encounter greater numbers of pedestrians and cyclists.

Business Thoroughfares

New York Avenue is a unique arterial within the Mid City East area, as a business corridor it has significant retail and commercial uses, in addition to being a heavily trafficked link from the District's core to communities in Maryland. Business Thoroughfares recognize the need to move significant volumes of autos and trucks, however pedestrian crossings should still be safe and dignified. At key intersections with Boulevards and Pedestrian Priority Zones, design elements similar to the place making approaches outlined for Business Boulevards can be applied.

"North Capitol Street is the Gateway to the Capitol…the corridor should be bedecked with magnificent floral and treescape... shops along the corridor should invite motorists to stop and they should be amenable to the residents, as well. Make it a walking neighborhood… This is an area steeped in history... it should be acknowledged and celebrated along this corridor."

– Mary Ann, engage.midcityeast.com

Pedestrian Refuge in San Francisco, CA. Source: SF Better Streets, http://sfbetterstreets2.sfplanning.org/

Nodes and Gateways

As previously articulated, design treatments at nodes and gateway should provide environmental cues to drivers and others to expect higher activity, and potentially more conflicts and less predictability. These are vibrant areas where modes must be able to safely mix. The primary purpose of nodes is to support and strengthen local economic activity while gateways emphasize community identity and place.

Public art provides a great opportunity for communities to express their cultural heritage and neighborhood histories while promoting local artists. By placing public art along Community Avenues, neighborhood identity is openly expressed and helps to create a sense of place along bustling corridors.

"As some of you know, DC's Art on Call was an effort to transform DC's old, abandoned police and fire call boxes into artistic icons. It would be nice if this could be extended to the call boxes in MidCityEast."

– Robert, engage.midcityeast.com

"This is beautiful! I'd love to see a similar arch at NY Ave and N Sts… welcoming to Truxton Circle."

– Eliza, engage.midcityeast.com

Street Art in Hanover Allley

Proposed wrought iron signage for North Capitol Street and Lincoln Road contributed by Community Member Kimberly.

Bloomington mural


TACO DEL MAR