

Mount Vernon Triangle Transportation and Public Realm Design Project

FINAL REPORT



District Department of Transportation



GOVERNMENT OF THE DISTRICT OF COLUMBIA
Office of Planning

Mount Vernon Triangle Transportation and Public Realm Design Project

FINAL REPORT

The Implementation Phase of *The Mount Vernon Triangle Action Agenda, 2003*



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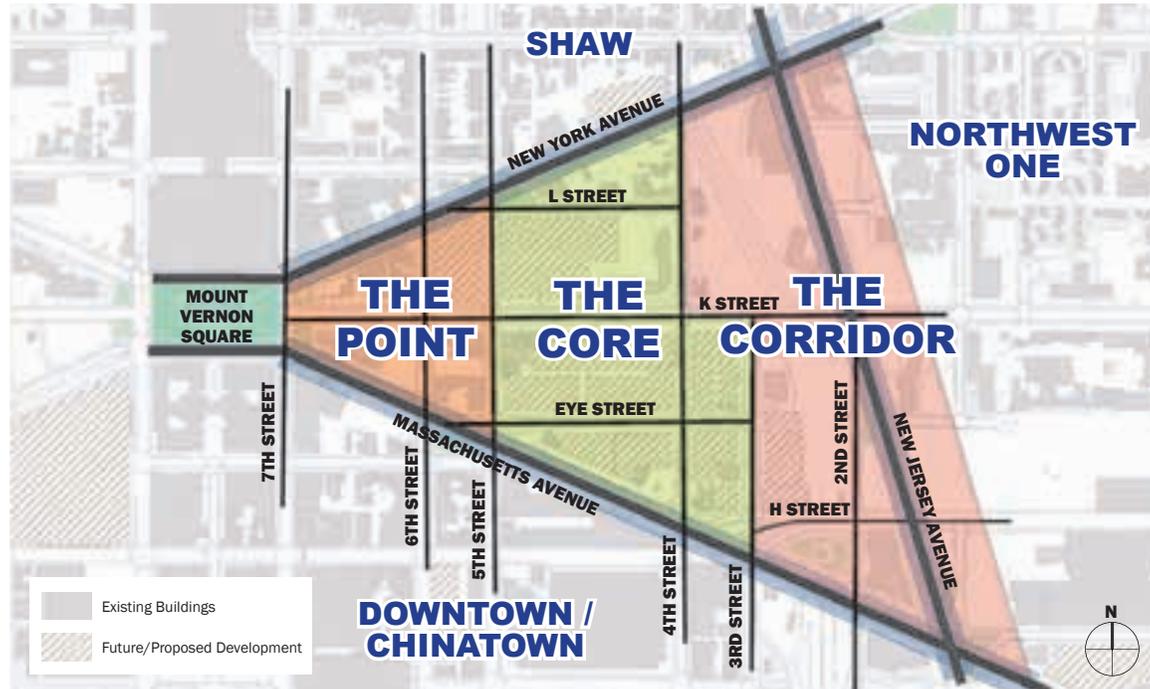
*Historic view of
former Reservation at
Massachusetts Avenue, 3rd,
and H Streets, NW, 1935*

Mount Vernon Triangle is located just over half a mile northwest of The Capitol, bounded by New Jersey Avenue to the east, Mount Vernon Square to the west, Massachusetts Avenue to the south, and New York Avenue to the north. The project area comprises 30 acres of underutilized land with a long history of physical and social diversity, vitality, and prosperity, followed by decades of neglect, abandonment, and decay.

Today, Mount Vernon Triangle is on the cusp of a major revitalization, with development projects underway on several significant sites. The many new residences and businesses will impact pedestrian, bicycle, and traffic conditions within and around the neighborhood. The large influx of residents and visitors will call for a comfortable, welcoming, and functional streetscape and public realm that supports a high quality of life.

This report is driven by a vision of Mount Vernon Triangle as one of Washington, DC's new great neighborhoods—a place that is vibrant, inclusive, and eminently livable. Based on thorough studies of existing and projected transportation conditions and new and proposed development, this report identifies key issues, proposes specific goals, and presents recommendations and design guidelines for effective transportation management and an inviting, dynamic streetscape and public realm.

Introduction & Summary Recommendations



Building on the framework plan developed in the Mount Vernon Triangle Action Agenda (2003), the Triangle can be conceived as a collection of precincts. Each of these areas has a distinct character and primary function yet remains connected to the others as part of a unified neighborhood.

The Point

Short blocks, the proximity to Mount Vernon Square, and a diversity of uses along 5th and 6th Streets create an intensified commercial and activity zone at the Triangle's western 'Point.'

The Core

The primarily residential 'Core' makes up the Triangle's interior sub-neighborhoods north and south of K Street.

The Corridor

Encompassing the eastern edge of the Triangle, the 'Corridor' restores local pedestrian activity to this underutilized zone and encourages connections between the Triangle and neighborhoods to the east.

Mount Vernon Triangle has been targeted for redevelopment since the mid-1980s. Over the past few years, new development has begun to appear along the Triangle's edges. A number of other projects, both residential and mixed-use, are in various stages of planning or construction for much of the Triangle's interior.

In the last few years, several planning studies have been undertaken to guide the neighborhood's growth, including The NoMa Development Strategy in 2001 and The Mount Vernon Triangle Action Agenda in 2003. In 2004, the District Department of Transportation and District Office of Planning launched an initiative to develop coordinated transportation improvements and streetscape/public realm design for the entire Triangle. This report is the result of that undertaking.

Background



Existing conditions, 2005

NEIGHBORHOOD TRANSPORTATION ISSUES

- Mix of low- and high-volume streets with different functions.
- Access to and from I-395 and resulting traffic.
- Barrier effect of the H Street/Massachusetts Avenue/2nd Street "Interchange."
- Access limitations resulting from one-way streets.
- Special events and downtown parking demands.
- Inadequate transit, pedestrian, and vehicular connections to adjacent neighborhoods.
- New demands associated with neighborhood development, including additional residential parking and better pedestrian connections.
- Need for coordination among new developments, including parking entrances, loading facilities, and pedestrian access.

PUBLIC REALM ISSUES

- Lack of basic physical comfort and safety for pedestrians.
- Mixed vocabulary and deteriorating quality of streetscape materials.
- Sparse and declining street tree population.
- Deterioration of historic Avenues and Reservations.
- Lack of access to nearby open space.
- Lack of neighborhood coherence and identity.
- Several major physical barriers separating site from adjacent neighborhoods, including I-395 and resulting intersection configurations at freeway entrances.

Key Issues

PROJECT GOALS

Livability & Vitality



- Promote a welcoming, cohesive, and enduring public realm
- Reflect the neighborhood's mixed-use character and history
- Protect and enhance open space
- Provide opportunities for experiencing nature within the neighborhood

Neighborhood Safety



- Enhance safety for users of all transportation modes
- Promote personal safety

Mobility & Accessibility



- Balance pedestrian, bicycle, transit, parking, automobile, and truck needs
- Improve neighborhood access through better pedestrian, transit, and vehicular connections to adjacent neighborhoods
- Preserve and enhance continuity and connectivity for all transportation modes

Sustainability



- Encourage community-based stewardship of open space
- Establish a green streetscape that promotes better air quality and stormwater management
- Utilize Low Impact Development technologies where possible and appropriate

REPORT OBJECTIVES

This report identifies goals, concepts, and specific recommendations and guidelines for transportation improvements and streetscape/public realm design. The document is intended primarily for the following groups:

- Community members who live or work within the project area and maintain an interest in the development of the neighborhood
- Developers and property owners proposing work within the project area, undertaking construction projects, and commissioning design development and construction documents
- Implementing public agencies, including the DC Office of Planning, the District Department of Transportation, and the Community Improvement District (CID) in order to inform budgetary decisions
- The Public Space Committee in reviewing requests for Public Space Permits
- The Historic Preservation Review Board (HPRB)
- PEPCO (Power Utility)

While this document provides sufficient detail to guide the coordinated improvement of transportation and the streetscape/public realm, the design recommendations should be further refined before implementation.

Project Goals & Report Objectives

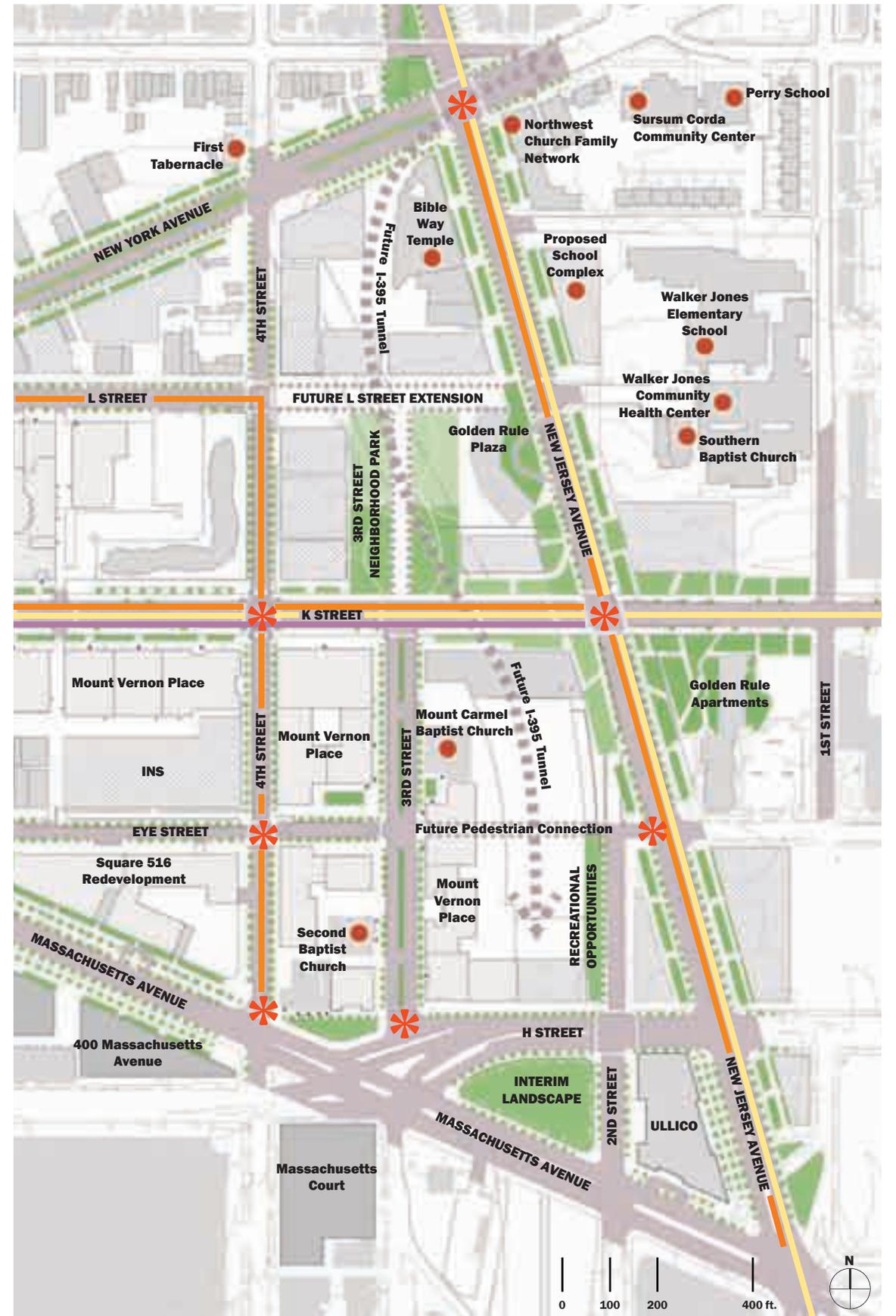
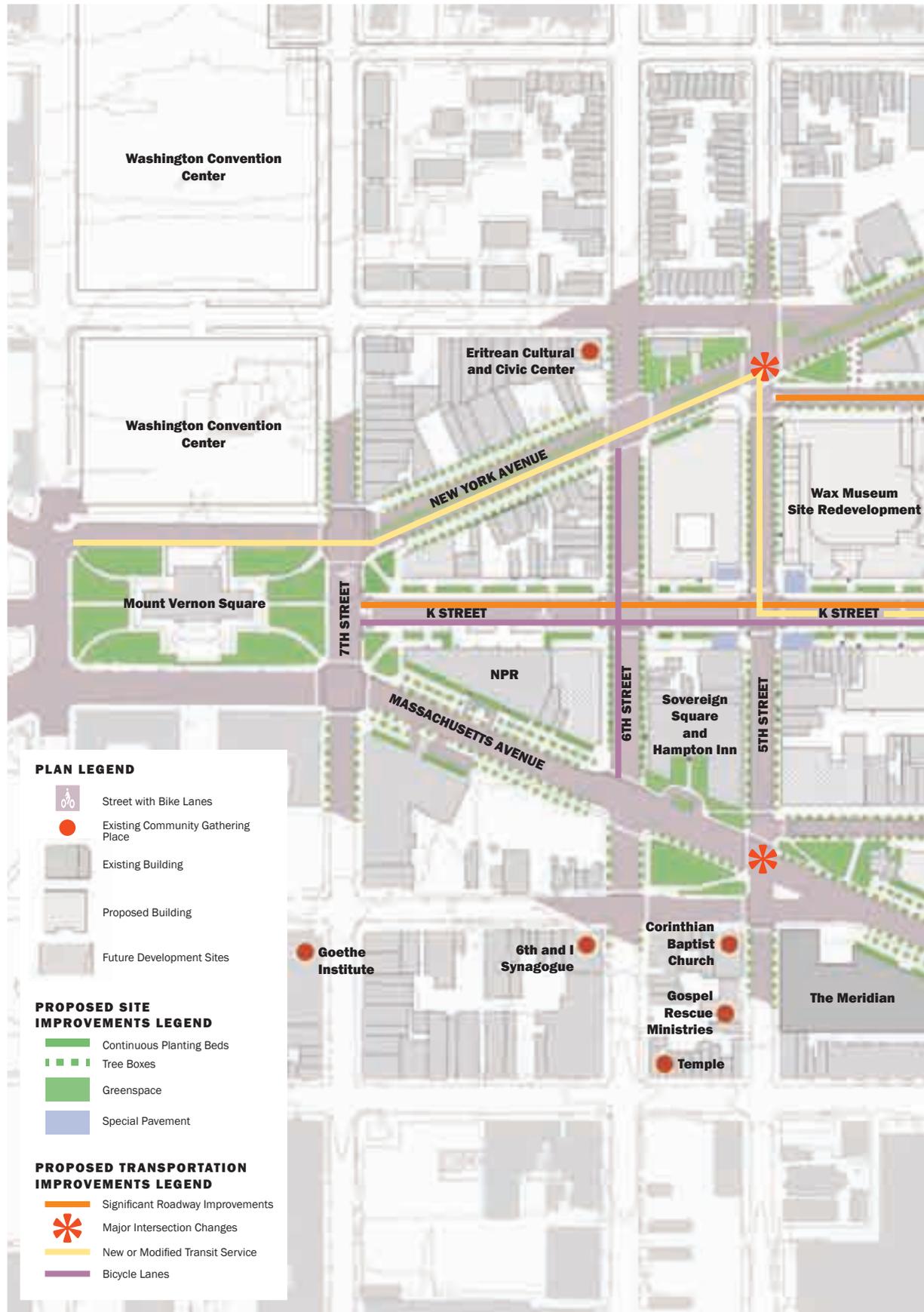


Public meetings, fall 2005

An open and inclusive public process has been a vital part of this project from the outset. Building on the legacy of previous planning efforts in the Triangle, this project has encouraged public input primarily through a series of four public meetings. Outreach for these meetings included mailing announcements to over 800 local contacts; delivering 2,000 announcements to businesses, churches, organizations, and apartment homes in the Triangle; e-mailing reminders to contacts that provided e-mail addresses; and advertising meetings online on the DC Citywide Calendar. In addition, a web site developed for the project provided general information, announcements, maps, meeting minutes, and a contact address for information requests and feedback.

In addition to open public meetings, four meetings were held with an advisory committee made up of local organizations, public agencies, and individuals. Members of the committee included area property owners, the National Park Service (NPS), Washington Metropolitan Area Transit Authority (WMATA), Deputy Mayor for Planning and Economic Development, National Capital Planning Commission (NCPC), Mount Vernon Triangle Community Improvement District, and The National Capital Revitalization Corporation (NCRC). Representatives from the Advisory Neighborhood Commissions 6C and 2C also provided valuable input to the planning process.

Public Participation



Summary of Recommendations



The DC Circulator connects business, cultural, and entertainment destinations in the city's central core

The Mount Vernon Triangle area is undergoing significant change, with a number of large-scale commercial, retail, and residential developments underway. These new developments will undoubtedly have an impact on the existing and future transportation characteristics of the neighborhood and surrounding areas. In 2000, the neighborhood had just 620 households and 1,140 residents. Recently completed, planned, and proposed development within and immediately adjacent to the study area will add approximately 4,000 residential units, more than 1.6 million square feet of office space, over 100,000 square feet of retail space, and more than 5,000 parking spaces. This change will shift the transportation focus from an emphasis on serving automobile commuters into and out of surface parking facilities to one that balances the needs of transit users, pedestrians, bicyclists, and automobiles. A particular challenge is the lack of connectivity throughout the neighborhood for all modes of transportation.

The study area is defined by Mount Vernon Square on the west, New York Avenue on the north, Massachusetts Avenue on the south, and New Jersey Avenue on the east. This section summarizes transportation recommendations that focus on both low-cost and high-impact solutions that will address specific transportation issues identified. These recommendations seek to:

- Balance all modes of travel: traffic, transit, pedestrian and bicycle;
- Enhance safety for users of all transportation modes;
- Improve access within the neighborhood and to adjacent neighborhoods; and
- Support the transition of the Triangle into a residential neighborhood.

Transportation Recommendations

PEDESTRIAN RECOMMENDATIONS

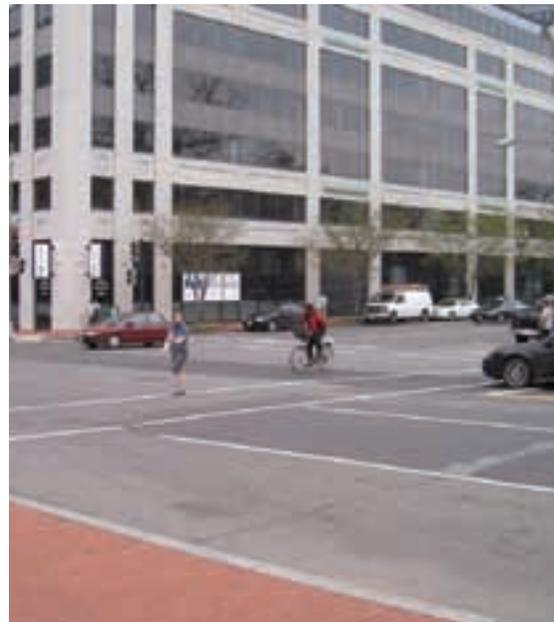
As Mount Vernon Triangle develops, the pedestrian environment will become a more significant part of the transportation system. Unfortunately, high volumes of traffic, particularly during peak hours, have created pedestrian safety issues at several locations. Mitigating these safety issues and creating a more comfortable walking environment is critical for access to the mixed uses planned for the area. The scale of roadways like Massachusetts and New York Avenues, coupled with the lack of streetscape, currently results in a relatively challenging environment for pedestrians. The sidewalks through the area are generally in fair condition, although pedestrian markings are not clearly visible in some locations. Most of the intersections on New York Avenue, Massachusetts Avenue, and K Street are equipped with pedestrian countdown signals, and plans are underway to install countdown signals at every signalized intersection in the District.

As new development takes shape in the neighborhood, there is an opportunity to create a more pedestrian-oriented environment by planning for pedestrian infrastructure and amenities that support residents and visitors. The recommendations within the public realm section of this report as well as those within the following transportation section contain elements that will enhance the overall pedestrian environment. Some examples of pedestrian improvements include the enhancement of streetscapes, the improvement of sidewalks, additional vegetation, and the installation of higher visibility crosswalks. A number of traffic improvements, such as making New Jersey Avenue two-way, will improve pedestrian safety by reducing the speed of vehicles through the neighborhood. Addressing these issues will facilitate pedestrian travel and reduce the level of automobile travel among area residents.

BICYCLE RECOMMENDATIONS

In April 2005, the District adopted the District of Columbia Master Bicycle Plan. The plan aggressively promotes bicycle travel with the designation of bike lanes and high-quality bicycle facilities. The anticipated high-density land use development pattern in the Triangle will support higher levels of bicycle transportation. Within Mount Vernon Triangle, there are no designated bicycle lanes or bicycle racks. A District-wide evaluation of biking conditions indicates that all of the roads within the study area rate as being either “fair” or “poor.”

After evaluating the potential for enhancing bicycle travel, the District Bicycle Plan has identified K Street, 6th Street, and 7th Street as locations for bicycle lanes. In Summer 2005, a shared bus and bicycle lane was added onto 7th Street south of Massachusetts Avenue. The recommendations (as shown in Figure 1) from this study support the addition of bicycle lanes and racks on K Street and 6th Street in the Triangle. Travel by bicycle can offer an alternative form of travel in urban areas, particularly for trips that are slightly beyond walking distance. Improving bicycle facilities can be an effective means of discouraging travel by automobile. New bicycle lanes will improve connections to adjacent neighborhoods.



Existing conditions

TRANSIT RECOMMENDATIONS

In general, transit services in the immediate study area are relatively limited. Four Metrorail stations and five bus routes serve the Mount Vernon Triangle area, but the stations are each more than one-quarter of a mile from most of Mount Vernon Triangle, while the bus routes, with one exception, traverse the edges of the study area.

The recommendations enhance the existing transit services with an emphasis on improving bus travel within the neighborhood. As shown in the figure, the major recommendations are to provide new bus service along K Street to modify WMATA Bus Route 96 to provide new southbound service on New Jersey Avenue. In addition, improvements to the public realm will enhance the pedestrian experience and encourage area residents to walk to bus stops and nearby Metrorail service.



Recommended bicycle rack

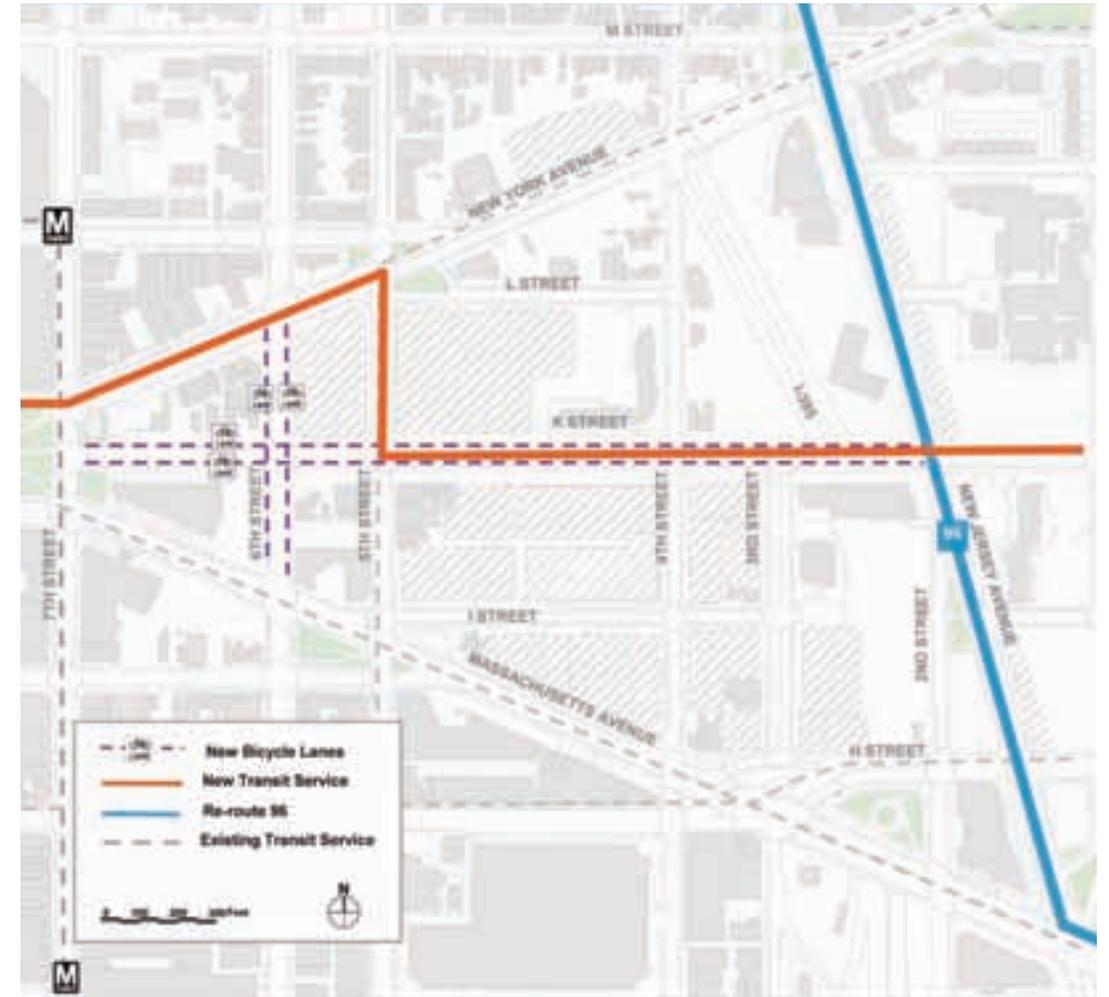


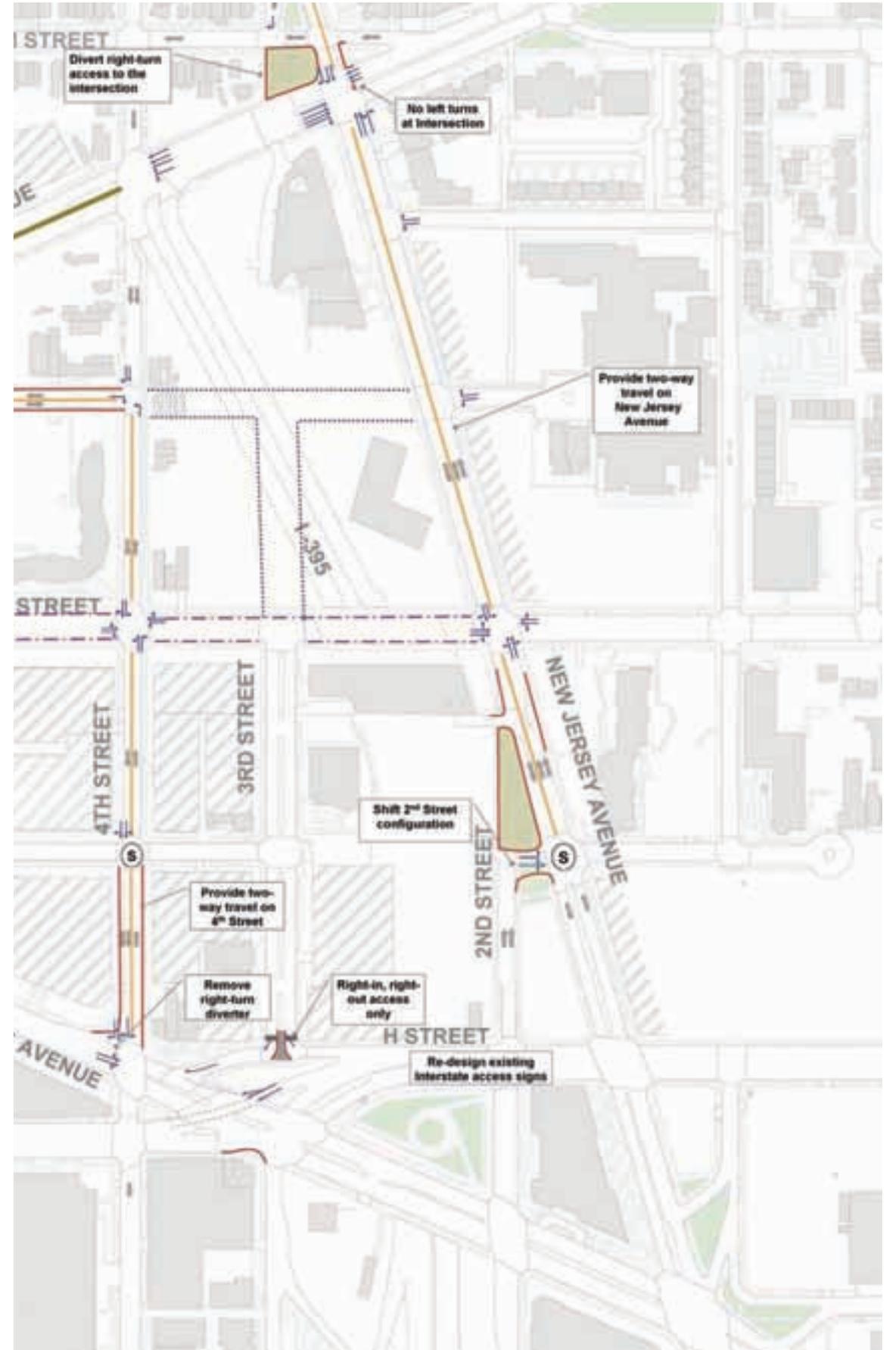
Figure 1



Existing crosswalk



Recommended high-visibility crosswalk



TRAFFIC RECOMMENDATIONS

Due to its proximity to downtown and to land use patterns that are dominated by surface parking lots, Mount Vernon Triangle’s street network primarily supports automobile movement into and out of area parking facilities. Further adding to the predominance of the automobile is the use of K and 4th Streets as a cut-through route to Interstate 395. The challenge is to accommodate regional traffic while improving the traffic conditions for the current and future residents and visitors. A number of traffic recommendations are intended to better balance pedestrian safety, traffic movement, and accessibility to adjacent neighborhoods.

Currently, L Street, 4th Street, 2nd Street, and New Jersey Avenue are restricted to one-way travel. This configuration reduces accessibility by restricting “around the block” circulation. The summary of recommendations (pages 16-17) shows the conversion of several one-way streets to two-way as well as intersection improvements. For example, at the intersection of New Jersey Avenue/2nd Street/I Street, the recommendation is to:

- Close off the current 2nd Street intersection and redirect 2nd Street traffic to a new eastbound approach to the current I Street / New Jersey Avenue intersection.
- Stripe the 2nd Street approach to this intersection with one left-turn only lane and one shared left-turn / through / right-turn lane.
- Create a new reservation in place of the old 2nd Street approach.
- Install traffic signals at this new intersection and synchronize timing with New Jersey / H Street and New Jersey / New York.

Another intersection that will experience a significant change as a result of two-way access on New Jersey Avenue will be at New York Avenue and New Jersey Avenue. This intersection is located one block east of I-395 and poses a particular challenge for congestion in the area. The recommendation is to:

- Close off the current southbound 3rd Street access onto New York Avenue and redirect traffic to the intersection at New York Avenue/New Jersey Avenue.
- Provide early signage for vehicles merging onto I-395.
- Restrict all left turns at this intersection.
- Install new traffic signals for southbound approach and synchronize timing.
- Restrict parking between New Jersey Avenue and I-395.



Intersection improvements - New Jersey Avenue and New York Avenue



Intersection improvements - 2nd Street, New Jersey Avenue, and I Street

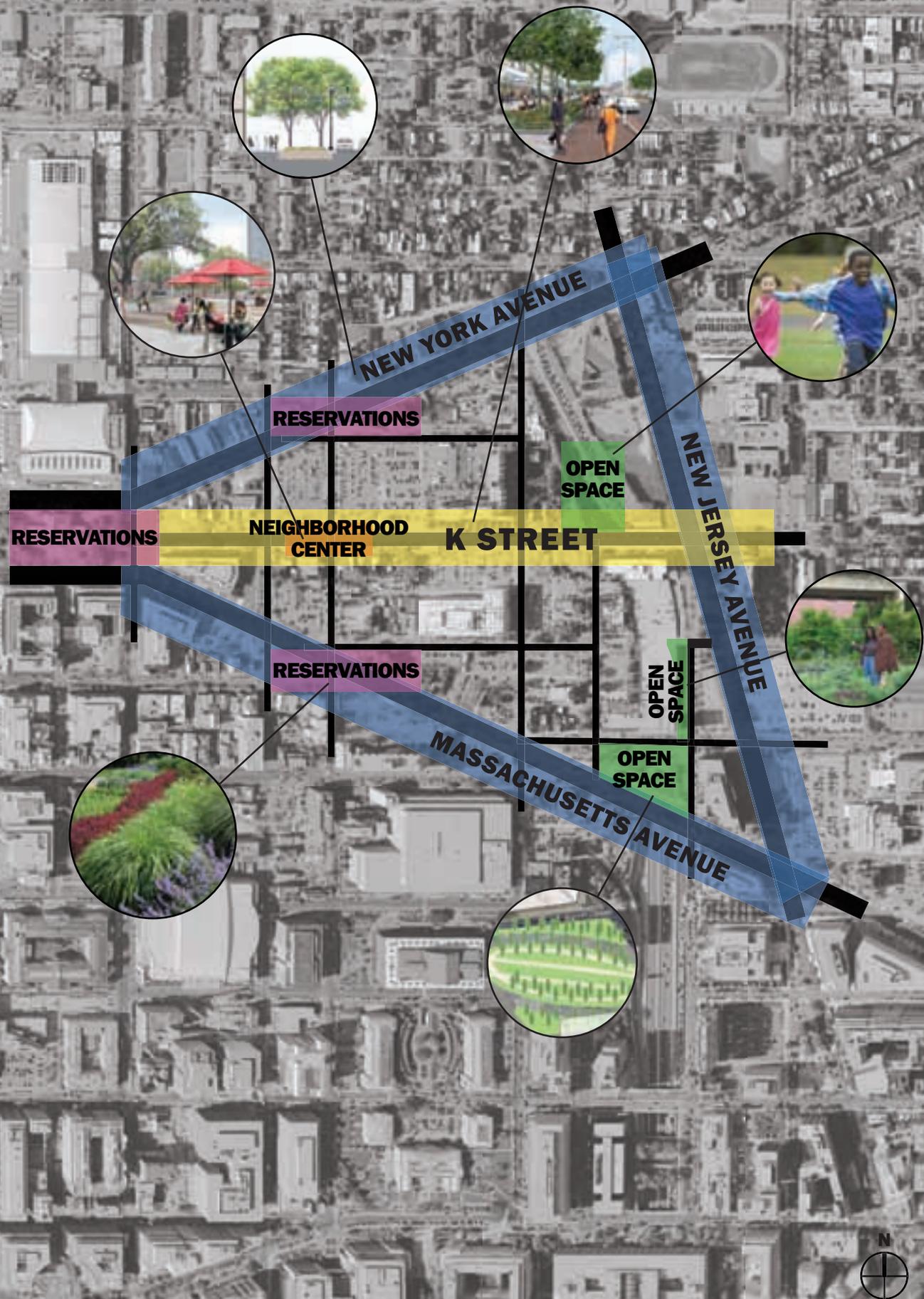
PARKING RECOMMENDATIONS

Currently, the Mount Vernon Triangle area has an abundance of on-street metered parking and off-street privately-owned public parking facilities. Many of the planned new developments will replace existing surface parking facilities (1,400 parking spaces). New projects will include parking facilities that will add more than 3,200 parking spaces to the area. There are more than 1,000 potential on-street parking spaces in the Triangle, yet only about 60 percent of those spaces are signed to allow parking. Residential parking is also limited, but given the large numbers of planned residential units, the demand for residential on-street parking is likely to increase.

Recommendations for parking improvements include increased on-street residential parking, better signage, “pay and display” parking for commercial areas, and potential shared parking strategies to ensure that the neighborhood will not be adversely affected by increased demand for parking. The shared parking strategies may offer options to local church-goers and visitors who utilize parking during off-peak business hours.



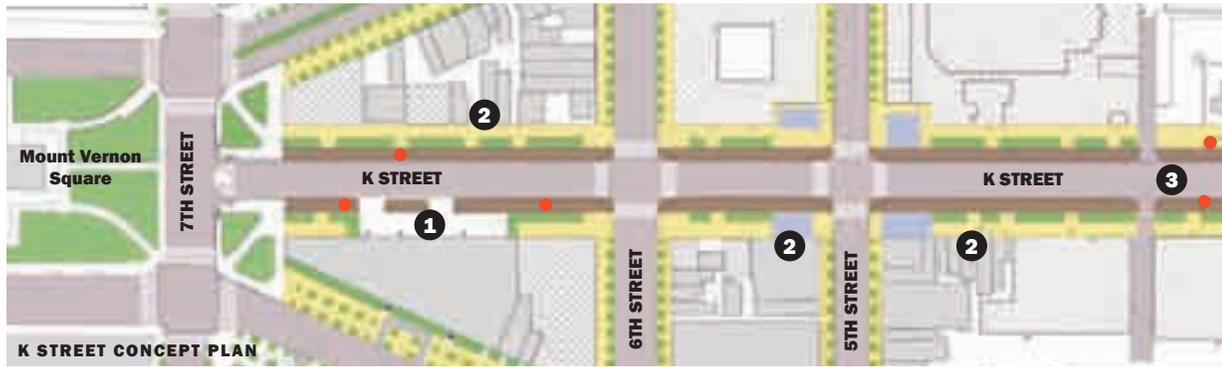
Pay and Display Parking Meter



The Public Realm Focus Areas of Mount Vernon Triangle: K Street, The Neighborhood Center, The Avenues, The Reservations, and Other Open Space Opportunities

The public realm focus areas provide a cohesive organizing framework to the Mount Vernon Triangle neighborhood. Together, these areas articulate the geographic logic of the site, defining the boundaries, the central spine, the core, and important interior and edge nodes of the neighborhood. They also express the Triangle's historic legacy, restoring prominence and dignity to critical remnants of L'Enfant's 1791 plan. On a more practical level, the public realm focus areas function as important destinations that serve the diverse daily needs of residents and visitors for shopping, dining, leisure, recreation, and movement. Finally, these areas set the tone for the quality of the streetscape as a whole, articulating a distinctive material palette that lends the neighborhood a unique character and identity.

Public Realm Focus Areas



PLAN LEGEND

- Existing Buildings
- Proposed Buildings
- Future Development Sites

PROPOSED SITE IMPROVEMENTS LEGEND

- Continuous Planting Beds (not to scale)
- Tree Boxes (not to scale)
- Greenspace
- Existing Tree to Remain
- Plaza Pavement
- Pressed Concrete Pavers
- K Street Unit Pavers

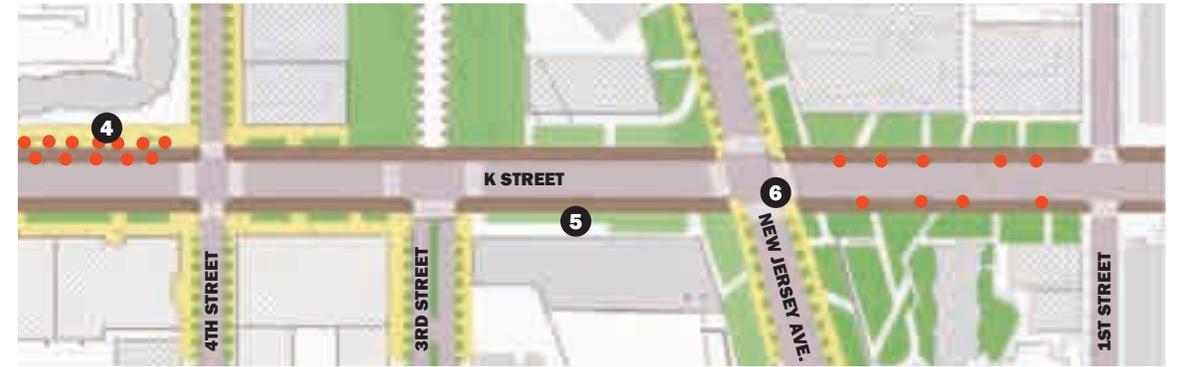


K Street Promenade
Adjacent to the street, the K Street Promenade is the pedestrian zone for faster movement, offering a direct, unimpeded route through the heart of the neighborhood. Walking, jogging, and rollerblading allow efficient pedestrian travel through the center of the neighborhood's busy commercial district.



K Street Meander
The K Street Meander is the wider pedestrian zone adjacent to the building fronts. Slower strolling, window shopping, outdoor dining, resting, and street performances are encouraged. Separated from the Promenade and vehicular traffic by a thick planting zone, the Meander offers a generous, flexible, semi-secluded, yet actively animated urban pedestrian environment.

Low-Impact Development Opportunity
All stormwater from the building side of the streetscape will drain into the planted beds at the edge of the Meander.



RECOMMENDATIONS

1 Enhancements at Square #484W

Modifications to the typical K Street streetscape configuration are needed to both accommodate the existing service area and integrate it into the K Street landscape. Any future development should be encouraged to have ground floor retail on K Street.

2 Revitalization of Historic Buildings

Small-scale commercial uses should be reinforced in existing historic buildings along K Street. Funding for historic façade improvements should be pursued.

3 Consolidate Alley and Parking Lot Curb Cuts

The parking lot curb cuts and the alley between 4th and 5th Streets are combined to preserve the continuity of the streetscape. Future curb cuts should be kept to a minimum. A new pedestrian crossing is added to compensate for the unusually long distance between existing crossings.

4 Existing Trees

The typical K Street streetscape is modified to accommodate the existing double row of street trees. Existing pavement is

replaced and existing trees underplanted with groundcovers. Greater visibility of existing ground-level community uses through facade improvements is encouraged.

5 Existing Planters and Paving

Current property owners are encouraged to re-plant existing planters with species from the K Street plant palette. Existing concrete pavement is replaced with the K Street palette.

6 K Street/New Jersey Avenue Intersection

In general, the K Street streetscape should be continued across intersections at all cross streets. At the intersection with New Jersey Avenue, however, the New Jersey Avenue streetscape should interrupt the K Street scheme.

7 Utility Structures

All utility structures, including grill-covered area ways, should be located in alleys or on private property, not in the sidewalk or in public space areas.

8 Public Art

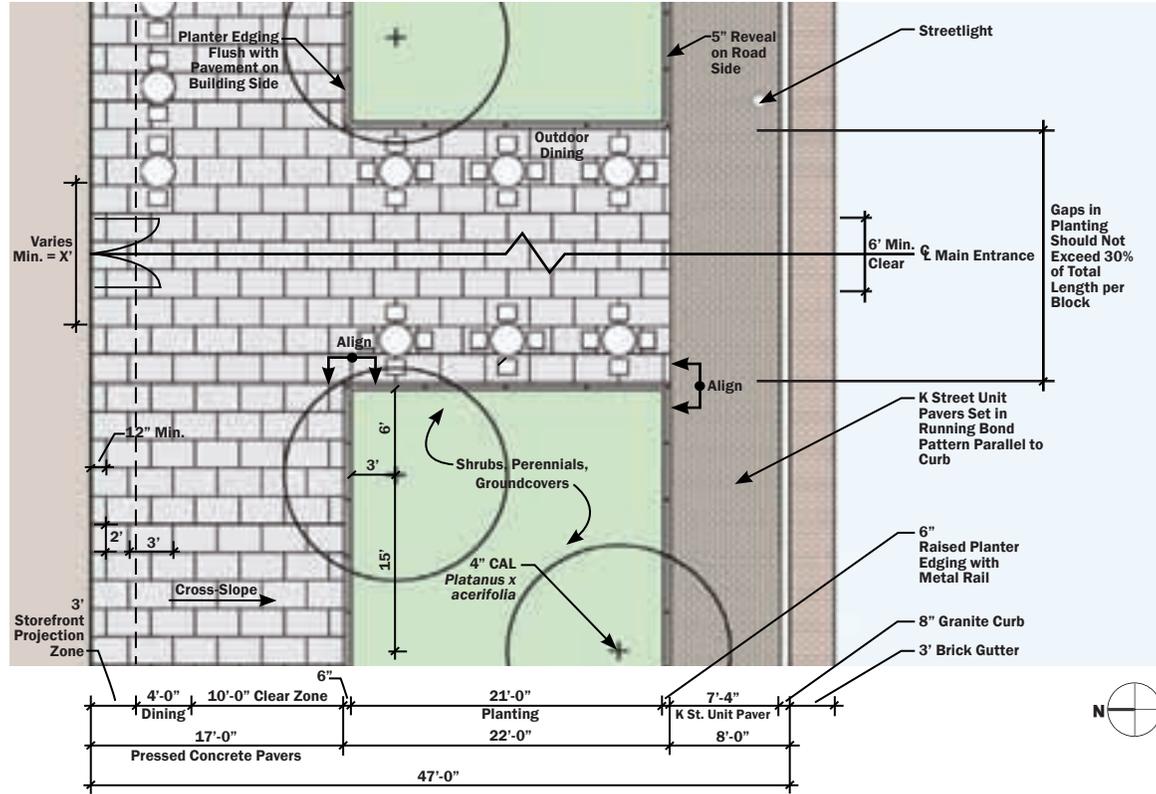
At every opportunity, public art should be integrated into the K Street streetscape in a manner appropriate to an active commercial corridor and a residential neighborhood.

Running east-west through the center of the Triangle, K Street is the neighborhood's major commercial and activity corridor. Verdant in character, K Street also functions as shared urban green space connecting the northern and southern halves of the Triangle. The generous proportions of the street allow for large public gatherings and events, while the development of ground-floor commerce reinforces the street's function as a neighborhood economic artery. The variability of architectural form and function along the street is addressed by a consistent, unifying streetscape that is still flexible enough to respond to unique conditions.

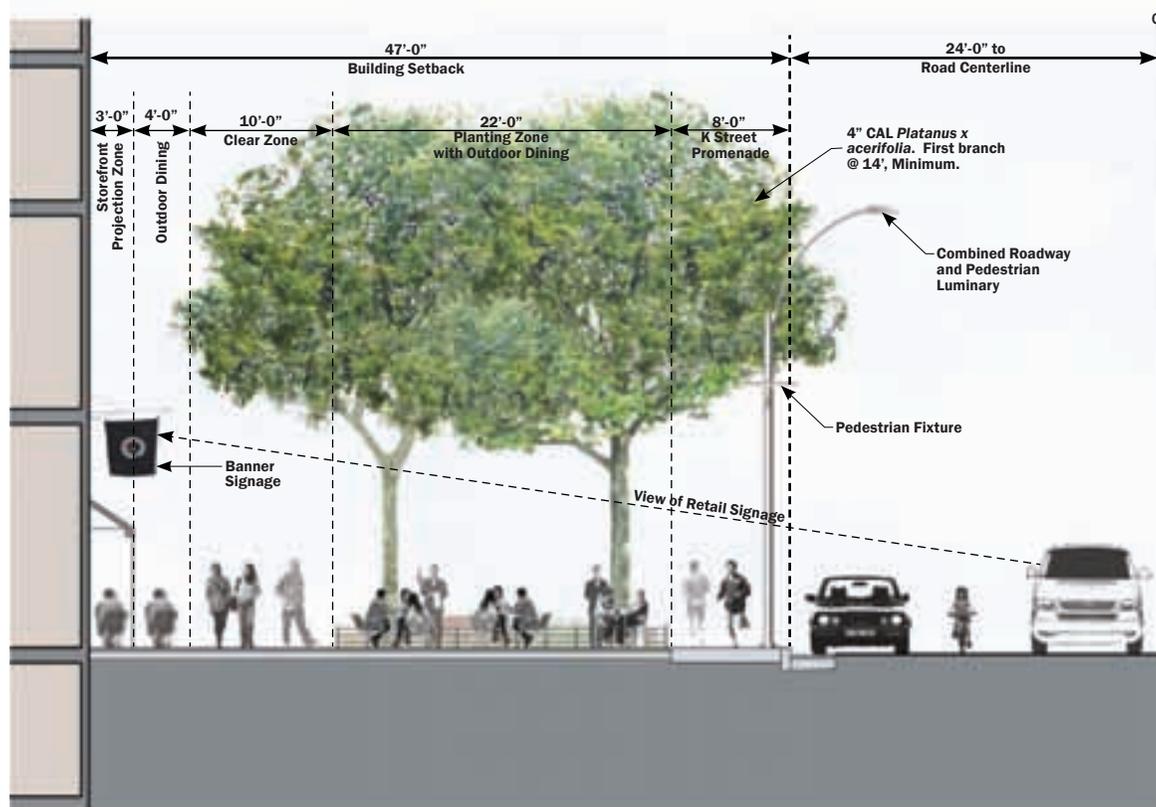
The spatial configuration, material palette, and programming of the K Street landscape accommodate both commerce and daily neighborhood life. Along most of its length, the wide building setback is divided into three zones: a "promenade" sidewalk zone adjacent to the street, a wider "meander" sidewalk zone adjacent to the buildings, and a substantial "median" in between with canopy trees and lush understory planting. Distinct paving differentiates the two pedestrian zones, while a palette of contemporary streetlights, benches, and trash receptacles unifies the entire street and distinguishes it from most other streets within the Triangle.



K STREET - TYPICAL CONDITION

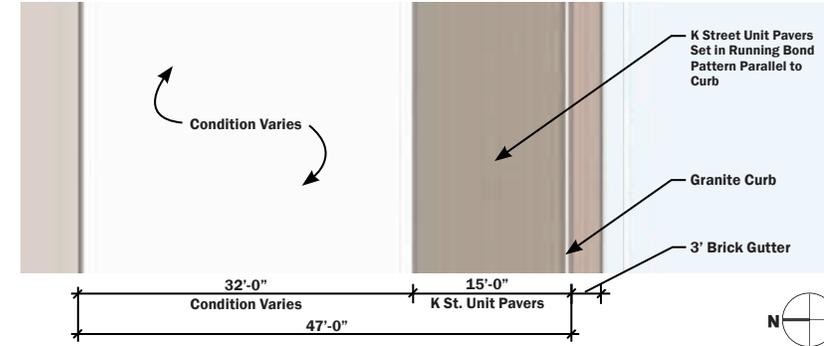


K Street detail plan - typical condition*

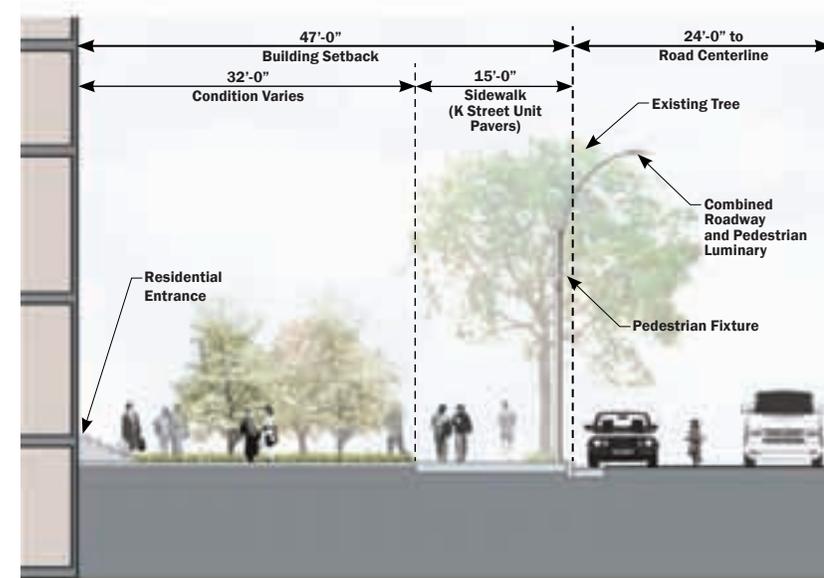


Section through K Street - typical condition*

K STREET - EAST OF NEW JERSEY AVENUE



K Street detail plan - east of New Jersey Avenue*



Section through K Street - east of New Jersey Avenue*

Key elements of the K Street landscape concept are intended to continue beyond New Jersey Avenue in order to provide continuity between the Triangle and adjacent neighborhoods to the east. The K Street unit pavers, the wide brick gutter, and the Combined Roadway and Pedestrian Luminaries should extend beyond New Jersey Avenue. East of this border, however, the streetscape should accommodate the existing variety of uses and urban form, such as the historic rowhouses between 1st and North Capitol Streets and the numerous healthy street trees. Future retail areas further east could adopt the proposed K Street typical condition where appropriate.

*Specific dimensions of cross sections may vary according to District direction in order to accommodate potential transit.

PLANTING GUIDELINES

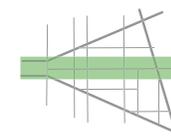
Planting Concept

The K Street planting beds may vary in length, but should contain a minimum of four trees, spaced according to the plan above left. The double row of London Planetrees will be underplanted with large sweeps of medium-sized evergreen and flowering shrubs, flowering perennials, and attractive groundcovers in one of the following combinations:

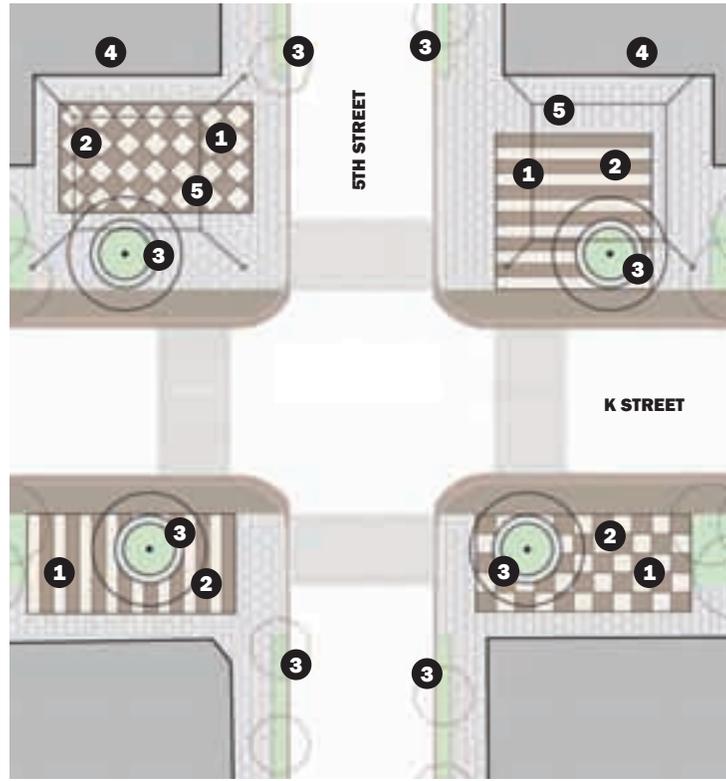
1. *Cornus alba* 'Elegantissima'
Buxus
Berberis 'Aurea'
Hosta
Juniper 'Blue Star'
Geranium 'Rozanne'
2. *Prunus laurocerasus* 'Otto Luyken'
Spiraea 'Ogon'
Anemone 'Honorine Jobert'
Heuchera 'Plum Pudding'
Salvia 'Blue Hill'
Hydrangea 'Nikko Blue'



Understory planting concept



K Street



Neighborhood Center concept plan

RECOMMENDATIONS

1 Plaza Configuration

A four-plaza configuration unifies the intersection while also responding to the unique conditions of each corner. Building entryways with abrupt changes in elevation, such as ramps and steps, should be prohibited in order to maintain the openness and flexibility of the plazas.

2 Special Paving

Special paving highlights the distinctiveness of the intersection and the uniqueness of each corner, while providing an attractive, versatile surface for outdoor dining, markets, and events. Unique and distinctive stone, such as marble or quartzite, in contrasting hues is recommended.

3 Planting and Soils

Street planting should be held back from the 5th and K intersection to emphasize the openness of the plazas. In each corner, a large, spreading specimen tree planted at 8" CAL in a raised stone planter will provide shade and fixed seating. Tree species should be easy to transplant at large size and should complement the London Planetrees. Adequate soil volume is critical.

4 Architecture

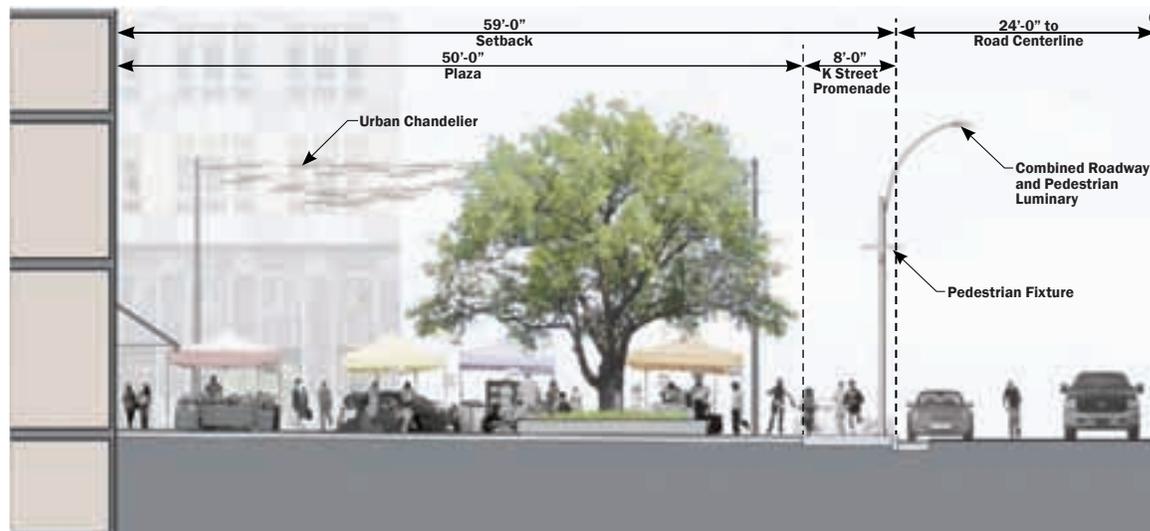
The new architecture surrounding the Neighborhood Center should emphasize plaza-level activity and contribute an attractive, inviting frame to the space. At ground level, buildings should feature arcades or awnings, high ceilings, and warm, bright lighting. Multi-story retail would encourage activity at the intersection and animate the building facades.

5 Lighting

Special hanging "Urban Chandeliers" offer an opportunity to integrate art into the environment, while preserving the flexibility of each space. It is recommended that an artist be commissioned to design the hanging lighting over the two plazas on the north side of K Street. With an unobtrusive yet attractive presence during the daytime, the lighting should create an animated, festive ambience in the evening and at night. The lighting should be bright enough to illuminate nighttime activities in the plazas, such as outdoor dining, performances, and other public gatherings.

6 Utility Structures

Utility structures should not be located within the four corners of the Neighborhood Center.



Section through the Plaza

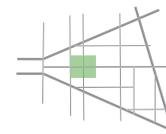


The Neighborhood Center, daytime view

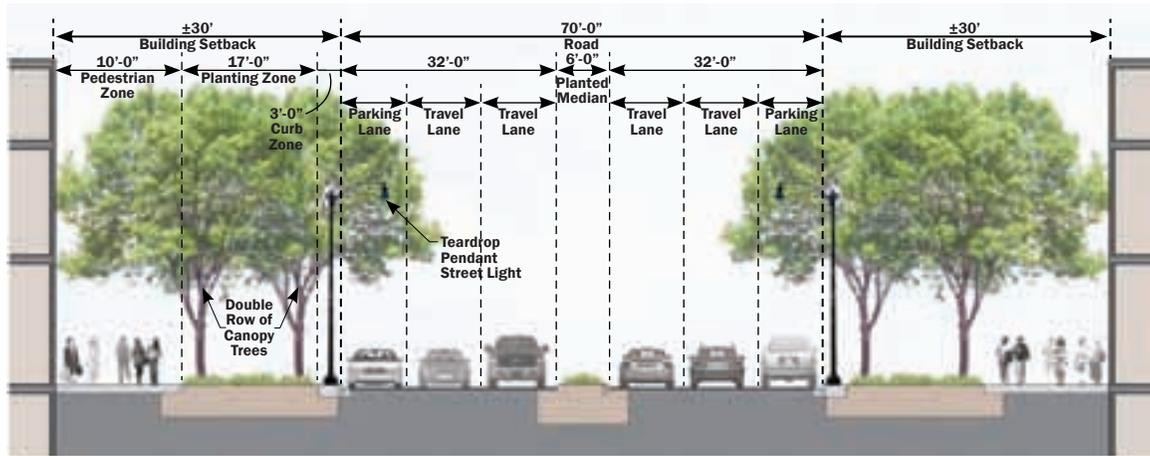


The Neighborhood Center, nighttime view

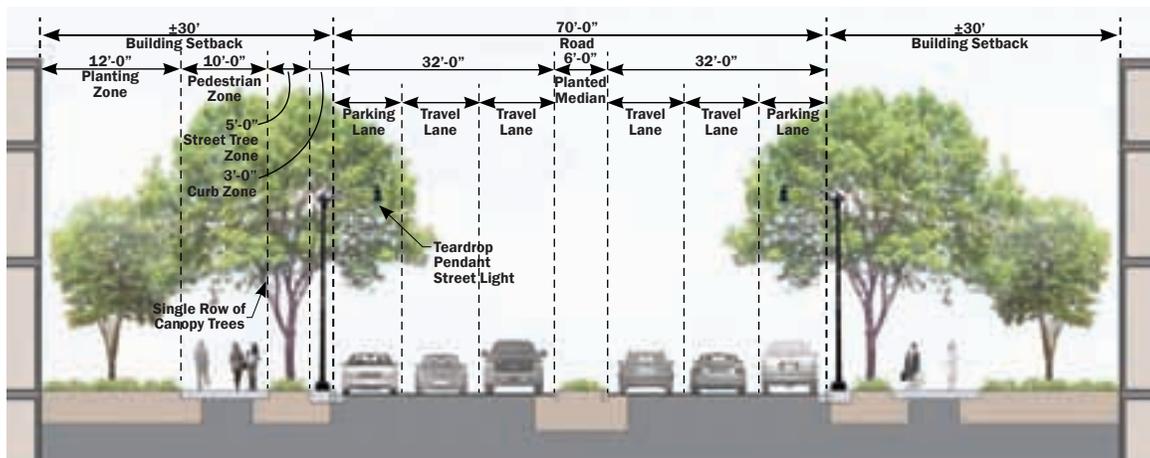
The intersection of 5th and K Streets is the major public gathering place for leisure, recreation, and outdoor events in the Triangle. Encompassing all four corners of the intersection, this key neighborhood destination is defined by distinctive paving, planting, and lighting. Generous open plazas allow a wide variety of activities and uses, including outdoor markets, fairs, performances, dining, and informal mingling and resting.



The Neighborhood Center



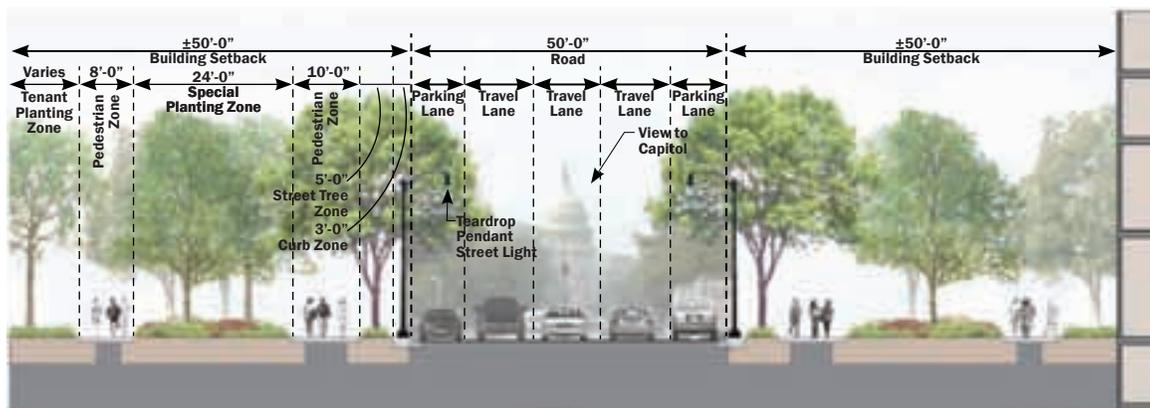
Section through New York Avenue (between 6th and 7th Streets)



Section through New York Avenue (between 6th Street and New Jersey Avenue)

NEW YORK AVENUE

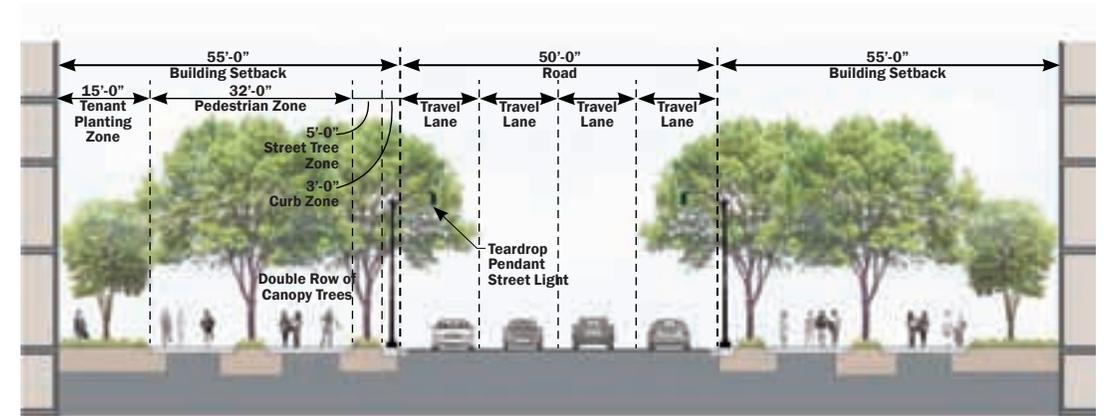
New York Avenue is both a regional connector and the border between the Triangle and the historic Shaw neighborhood to the north. Different streetscape configurations address the distinct requirements of the more commercial segment of New York Avenue (between 6th and 7th Streets) and the more residential portion (between 6th Street and New Jersey Avenue). These segments are tied together by a row of large, single-species street trees with low understory planting, traditional lighting and site furniture, and pressed concrete pavers. Healthy existing trees should be protected and maintained.



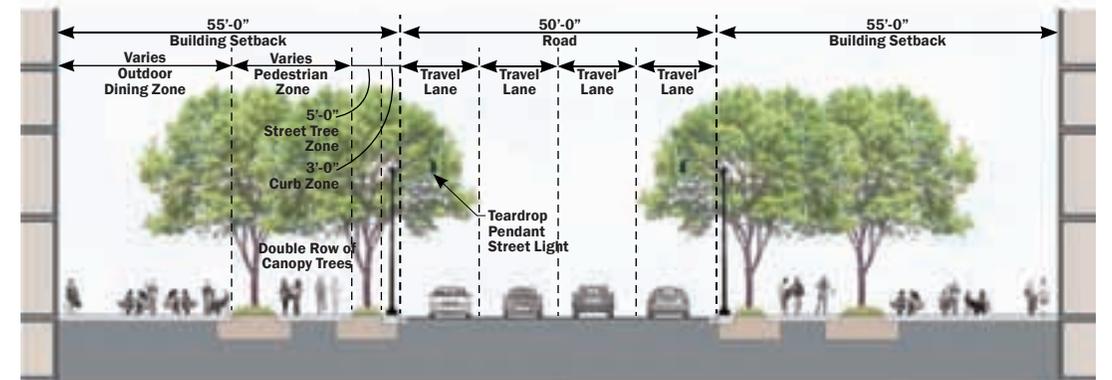
Section through New Jersey Avenue

NEW JERSEY AVENUE

As a Capitol-centric street, New Jersey Avenue has special local and national prominence. The wide setbacks along both sides of the avenue allow for a lush, park-like streetscape. The streetscape features a single row of street trees adjacent to the street with additional, mixed-species tree and understory planting zones beyond. Views to the Capitol, particularly between New York Avenue and L Street, are maintained by selecting more upright street trees. New Jersey Avenue also contains a significant number of existing healthy street trees that should be protected and maintained. Park areas along New Jersey Avenue south of Massachusetts Avenue and new open spaces proposed in this document (see page 31) can become part of the string of Federal Reservation parks that continue south toward the Capitol.



Section through Massachusetts Avenue - residential or institutional ground floor use



Section through Massachusetts Avenue - select areas with retail

MASSACHUSETTS AVENUE

Massachusetts Avenue allows two different streetscape configurations to accommodate the varying uses along its length. Where ground floor uses are residential or institutional, a tenant planting zone flanks the building. There is a generous outdoor dining zone adjacent to each building where a retail establishment or restaurant occupies the ground floor. The full length of the avenue is unified by a double row of large street trees with low understory plantings, and traditional lighting and site furniture express the avenue's historic stature. Massachusetts Avenue also contains a significant number of existing healthy street trees that should be protected and maintained.

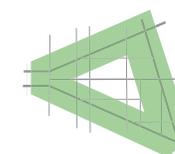


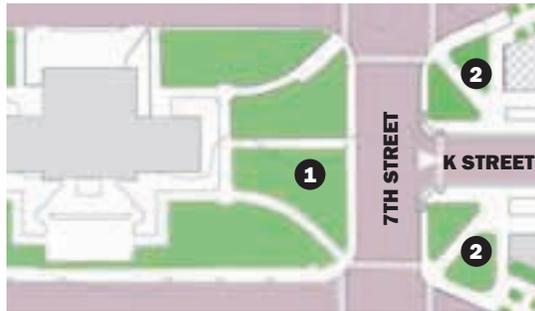
Drop-Off at the Institute for International Economics

Drop-Offs

While vehicular drop-offs are at times necessary along the Avenues for convenient access to residences and institutions, their frequency should be kept to a minimum. New drop-offs should be tight and discrete in order to maintain the continuity of the pedestrian streetscape, as well as the larger urban gesture that defines the Avenues.

New York, New Jersey, and Massachusetts Avenues make up the Triangle's outer frame, bounding the neighborhood's interior spaces, while connecting them to the larger city and region beyond. As part of L'Enfant's 1791 plan, the Avenues are a critical component of the City's historic open space network. Historic status and human-scale activity are restored to the Avenues through unified paving and lighting and a generous sidewalk configuration that encourages pedestrian use. Continuous, multi-row street tree plantings modulate the scale of the Avenues, hold the edge, and create a comfortable and inviting pedestrian environment.





1 MOUNT VERNON SQUARE

The connection between Mount Vernon Square and the neighborhood should be improved to invite more local use. The existing configuration, plantings, and pedestrian amenities should be studied, and new design recommendations should be proposed. Additional emphasis on plantings would better define open spaces.

2 7TH STREET/K STREET RESERVATIONS

The reservations at 7th and K Streets create important thresholds in two directions. Planting and design strategies should acknowledge that these are experienced in concert with Mount Vernon Square, and some elements, including trees, plantings, and other landscape features, should be shared between them. In addition, as an important threshold to K Street, their design should share aspects of the K Street streetscape. Walkways should be reconfigured to create direct connections to the crosswalks at 7th Street, and new plantings should be robust and cover the remaining area.

3 L STREET/NEW YORK AVENUE RESERVATIONS

Reconfiguration of the police parking lot and removal of the existing 'slip ramp' allows for the reclamation of two large reservations along New York Avenue. Large enough to function as a mini-park, the southern reservation should include robust planting as well as small lawn areas with seating. The existing mature oak tree should be protected, and after care, including pruning, fertilizing, and soil aeration should be provided. As an alternative, a small car-only connection between L Street and New York Avenue could be included.

4 EYE STREET/MASSACHUSETTS AVENUE RESERVATIONS



The paths, benches, and planting at the reservation at Eye Street and Massachusetts Avenue should be reconfigured to consolidate the reservation and encourage pedestrian use. The entry and yard at the adjacent House of Ruth should be maintained. Benches should face east for a long view of the green. On the opposite side of the street, the corner at 5th Street and Massachusetts Avenue should be realigned to improve traffic flow and facilitate pedestrian crossing. New plantings should be installed according to the guidelines below.

DESIGN GUIDELINES FOR RESERVATION LANDSCAPE

General Recommendations

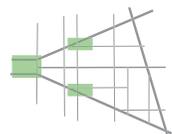
- Smaller reservations should be planted richly with trees, shrubs, perennials, and groundcovers
- Larger reservations should have these elements as well as offering some lawn areas and public access
- A mix of large mature trees and smaller ornamental trees should be used
- Retain existing mature trees

Recommended Planting Combinations

- | | |
|---|---|
| <p>1. <i>Cornus florida</i>
Shrub roses
<i>Geranium 'Rozanne'</i></p> <p>2. <i>Magnolia soulangiana</i>
<i>Hydrangea 'Endless Summer'</i>
<i>Alchemilla mollis</i></p> <p>3. For very small areas:
<i>Rosa 'Flower Carpet'</i>
<i>Liriope border</i></p> | <p>4. <i>Lagerstroemia 'Natchez'</i>
<i>Berberis 'Crimson Pygmy'</i>
<i>Alchemilla mollis</i>
<i>Imperata cylindrica</i></p> <p>5. <i>Vitex agnus-castus</i>
<i>Spiraea 'Ogon'</i>
Underplanted with
<i>Euonymus 'Coloratus'</i>
<i>Liriope</i></p> |
|---|---|

Together with the Avenues, the Reservations represent important pieces of L'Enfant's historic open space network. Located at key crossroads along the perimeter of the Triangle, the Reservations serve as thresholds to the neighborhood. With colorful infusions of diverse plantings, the smaller Reservations should primarily serve as moments of dramatic display. With simple but strategic enhancements, the larger Reservations can become miniature parks that invite spontaneous socializing, relaxation, and an experience of nature. The Reservations also offer opportunities to incorporate public art. The recommendations above are intended to provide a platform for further design development in the future.

Reservations



3 3RD STREET NEIGHBORHOOD PARK

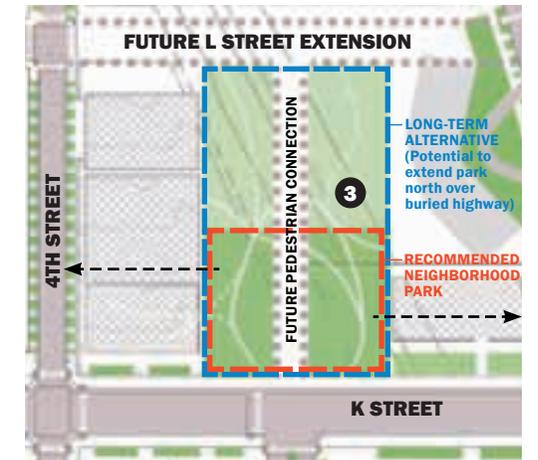
A neighborhood park is proposed on the north side of K Street across from 3rd Street. The park would offer open space for a variety of activities, such as basketball, chess, and children's play. The park could be extended west to 4th Street if a land swap agreement could be made with the owners of this parcel. A long-term vision extends the park north over the future I-395 tunnel, providing a pedestrian link between K and L Streets. This proposed Mount Vernon Triangle neighborhood park should be coordinated with proposed future parks and recreation amenities in the Northwest One neighborhood so that they have complementary functions, amenities, and designs.

1 RECREATIONAL OPPORTUNITIES

The linear strip along the west side of 2nd Street provides short-term opportunities for community gardening and other forms of outdoor recreation. The design and program of this site may change in the future to accommodate the potential redevelopment of the adjacent parcel.

2 INTERIM LANDSCAPE

The vacant parcel bounded by H Street, 2nd Street, and Massachusetts Avenue offers short-term opportunities for inexpensive seasonal planting and a possible temporary art installation that registers movement or sound.

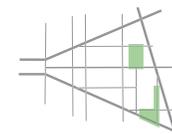


H STREET & MASSACHUSETTS AVENUE OVAL

The H Street/Massachusetts Avenue/2nd Street intersection occupies an important point at the eastern edge of the Triangle. A reevaluation of long-term possibilities for this intersection should be a priority in the near future. Consideration should be given to bold options for reorganizing this space, such as a grand oval at the scale of other great moments in L'Enfant's historic plan. Surrounding development should include retail.

At the Triangle's western edge, two underutilized parcels and a portion of the I-395 air rights become accessible, programmed parks for residents of the Triangle and adjacent neighborhoods. Diverse in form, function, and experiential quality, these parks enhance the range of recreational and leisure opportunities available to residents, providing experiences of nature, space for active play, and places to garden, walk a dog, picnic, or relax.

Other Open Space Opportunities





View of proposed commercial activity on K Street (top)

Historic view of New York Avenue west of Mount Vernon Square (bottom left)

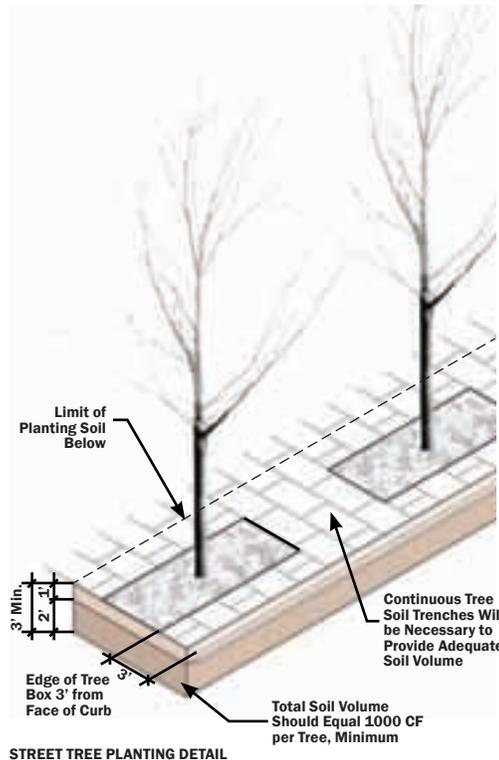
View of typical DC residential street (bottom right)



The design guidelines define a detailed palette of materials to be used throughout the Mount Vernon Triangle's streetscape and public realm. As a whole, this palette articulates a distinctive identity that unifies the new neighborhood while allowing sufficient flexibility to accommodate unique circumstances. The palette is made up of contextually appropriate, durable materials that support basic comfort, livability, sustainability, and an elegant, enduring aesthetic.

The material palette visibly expresses the functional hierarchy within the neighborhood. As regional connectors, the Avenues are the most prominent components of the Triangle. K Street, the neighborhood's central commercial corridor, is second in status. The Triangle's other streets, reservations, and parks constitute the third tier in the neighborhood hierarchy.

The design guidelines include selections of street trees, street tree surface treatments, other plantings, lighting, site furniture, and paving. For each element, brief descriptions are accompanied by a chart specifying the element type to be used on each street within the Triangle. The guidelines are fully compatible with DDOT standards. It is suggested that other reports, such as the AWI Transportation Architecture Design Standards and the Downtown Standards, be consulted for additional information.



STREET TREE PLANTING DETAIL

SPACING

Street trees are spaced approximately 30'-40' on center except for on New York Avenue, where tighter spacing of approximately 25'-30' on center allows for a more continuous street edge.

SIZE

Street trees are planted at 2.5"-3" caliper (CAL) unless otherwise noted. On K Street, the London Planetrees are 4" CAL and the specimen trees at 5th and K are 8" CAL.

STAKING

Street trees on K Street are supported using a subsurface earth anchoring system. Staking of street trees on all other streets is discouraged.

SOILS

Total soil volume per street tree should equal 1000 cubic feet (CF), minimum, at 3' depth. On K Street, where large trees are planted amongst shrubs and groundcovers, 1500 CF per tree at 4' depth is needed. Continuous tree trenches are recommended (see diagram above). Specifications for planting soils may vary depending on existing conditions and proposed planting.

SPECIES

Single species are specified for prominent streets and avenues as a unified gesture that provides special definition and character to the street. On all other streets, mixed species from the listed palette enable individual choice to determine a diverse urban canopy.

EXISTING TREES

On all streets and avenues, existing trees are to be assessed for health and vigor. Those in good or excellent condition are preserved and incorporated into the palette specified for that street. A preliminary reference for assessing tree health is the Casey Trees Tree Map, which can be accessed online at www.caseytrees.org. During construction, every effort should be made to protect existing healthy trees from damage.

RECOMMENDED STREET TREES

Latin Name	Cultivar/Variety	Common Name
SMALL		
<i>Acer buergerianum</i>	Streetwise	Trident Maple
<i>Crataegus crusgalli inermis</i>	Crusader	Cockspur Hawthorn
<i>Crataegus phaenopyrum</i>	Princeton Sentry	Washington Hawthorn
<i>Maackia amurensis</i>	Starburst	Amur Maackia
MEDIUM		
<i>Koelreuteria paniculata</i>	September	Golden Raintree
<i>Tilia cordata</i>	Greenspire	Littleleaf Linden
<i>Zelkova serrata</i>		Zelkova
LARGE		
<i>Celtis occidentalis</i>	Magnifica	Hackberry
<i>Ginkgo biloba</i>	Autumn Gold, Princeton Sentry (male cultivars)	Ginkgo
<i>Gymnocladus dioica</i>	(male cultivars)	Kentucky Coffeetree
<i>Metasequoia glyptostroboides</i>		Dawn Redwood
<i>Quercus phellos</i>		Willow Oak
<i>Quercus bicolor</i>		Swamp White Oak
<i>Platanus xacerifolia</i>	Yarwood, Bloodgood	London Planetree
<i>Styphnolobium japonicum</i>	Regent	Japanese Scholar Tree
<i>Ulmus parvifolia</i>	Emer I (Athena), Emer II (Allee)	Lacebark Elm

MATRIX OF STREETS AND RECOMMENDED STREET TREES

Street	SMALL	MEDIUM	LARGE	ORNAMENTAL	MIXED SPECIES	QUERCUS BICOLOR	GYMNOCLADUS DIOICA	CELTIS OCCIDENTALIS
Massachusetts Avenue	SEE ALSO PAGES 28 - 29							
Curb-side row								
Center row								
Building-front row								
New York Avenue	SEE ALSO PAGES 28 - 29							
Curb-side row								
Double row								
Building-front row								
New Jersey Avenue	SEE ALSO PAGES 28 - 29							
Curb-side row								
Center row								
Building-front row								
H Street								
Eye Street								
K Street	SEE PAGES 22 - 25							
L Street								
7th Street	NONE							
6th Street								
5th Street								
4th Street								
3rd Street								
2nd Street								

Street Trees



Planter edging



Unit pavers



K Street metal railing precedent

MATRIX OF STREETS AND RECOMMENDED STREET TREE SURFACE TREATMENTS

Street	PLANTER EDGING	RAISED PLANTER EDGING WITH METAL RAILING	GROUNDCOVER	UNIT PAVERS
Massachusetts Avenue				
Curb-side row				
Center row				
Building-front row				
New York Avenue				
Curb-side row				
Double row				
Building-front row				
New Jersey Avenue				
Curb-side row				
Center row				
Building-front row				
H Street				
Eye Street				
K Street				
L Street				
7th Street				
6th Street				
5th Street				
4th Street				
3rd Street				
2nd Street				

PLANTER EDGING

For all streets except K Street, all tree boxes are edged with hoop-type metal edging on all four sides to protect tree roots and groundcover planting from foot traffic. Tree grates are strongly discouraged.

RAISED PLANTER EDGING WITH METAL RAILING

A raised granite edging and metal rail surround the planting beds on K Street. The edge is raised on three sides and flush on the building side to allow water to drain into the planting beds. The metal rail should be approximately 18" high and contemporary in style. An example of a similar rail is shown above.

GROUNDCOVER

For newly planted trees and existing trees under 6" CAL, annuals that won't compete with the tree for water are planted in the tree boxes. For established trees, a combination of groundcovers and perennials can be used for lasting effect. The following plants are suggested:

- Bulbs** - *Chionodoxa forbesii*, *Scilla siberica*, *Narcissus spp.*, *Crocus spp.*, *Leucojum spp.*
- Annuals** - *Impatiens*, *Coleus*, *Ipomoea*, *Lantana*, *Melampodium*, *Scaevola*, *Lobularia maritimum*
- Perennials** - *Liriope muscari*, *Parthenocissus quinquefolia*, *Pachysandra terminalis*, *Geranium 'Rozanne'*, *Alchemilla mollis*, *Euphorbia var. robbiae*

UNIT PAVERS - LOW-IMPACT DEVELOPMENT OPPORTUNITY

Permeable unit pavers or unit pavers with wide joints set in a permeable setting bed are recommended between curb-side tree boxes along the Avenues to maximize the amount of water available to tree roots in this particularly harsh growing environment, as well as allowing for reduced runoff and increased groundwater recharge.

Street Trees - Surface Treatment

GENERAL RECOMMENDATIONS

Other planted areas in the Triangle, such as neighborhood parks and private gardens, should be handled in the spirit of the broader goals driving the design of the streetscape and public realm as a whole. Before the design process begins, the condition of existing plants should be assessed. Future maintenance and irrigation options should be considered as design proceeds. Soils should be tested and amended accordingly. In general, plantings should incorporate trees, shrubs, and perennials that offer multi-season interest. Large numbers of each plant should be used for a bold effect (e.g. 5-7 of each shrub, 20-30 of each perennial, and 100-150 of a groundcover).

RECOMMENDED PLANT LIST

Latin Name Cultivar/Variety Common Name

Street Trees - see page 34

Ornamental Trees

<i>Acer palmatum</i>	Bloodgood	Japanese Maple
<i>Betula nigra</i>	Heritage	River Birch
<i>Cercis canadensis</i>	Forest Pansy	Eastern Redbud
<i>Chionanthus virginicus</i>		Fringe Tree
<i>Cornus florida</i>		Flowering Dogwood
<i>Crataegus viridis</i>	Winter King	Winter King Hawthorn
<i>Fagus grandifolia</i>		American Beech
<i>Halesia carolina</i>		Carolina Silverbell
<i>Ilex opaca</i>		American Holly
<i>Lagerstroemia</i>	Natchez, Acoma	Crape Myrtle
<i>Magnolia xsoulangiana</i>		Saucer Magnolia
<i>Oxydendrum arboreum</i>		Sourwood
<i>Prunus serrulata</i>	Kwansan	Kwansan Cherry

Shrubs

<i>Berberis thunbergii</i>	Crimson Pygmy, Aurea	Barberry cultivars
	Rosy glow	
<i>Buxus</i>	Green Velvet,	Boxwood
	Green Gem	Camellia
<i>Camellia</i>	Polar Ice, Snow Flurry,	
	and other varieties	
<i>Cornus alba</i>	Elegantissima	Red Stem Dogwood
<i>Cornus sericea</i>	Silver and Gold	Yellow Stem Dogwood
<i>Cotoneaster horizontalis</i>		Rockspray
<i>Hibiscus syriacus</i>	Bluebird, Diana, etc.	Rose of Sharon
<i>Hydrangea macrophylla</i>	Nikko Blue, Variegata,	Hydrangea cultivars
	Endless Summer	

<i>Hydrangea quercifolia</i>		Oak Leaf Hydrangea
<i>Ilex verticillata</i>	Winter Red	Winter Berry
<i>Ilex xmeserveae</i>	Blue Princess, Blue Prince	Blue Holly
<i>Jasminum nudiflorum</i>		Winter Jasmine
<i>Juniperus squamata</i>	Blue Star	Blue Star Juniper
<i>Loropetalum chinense</i>	Burgundy	Chinese Fringe Flower
<i>Pieris japonica</i>	Dorothy Wyckoff	Andromeda
<i>Picea pungens</i>	R.H. Montgomery	
<i>Pinus mugo</i>	Pumilo	Dwarf Mugo Pine
<i>Prunus xcistena</i>		Purple Sand Cherry
<i>Prunus laurocerasus</i>	Otto Luykens	Cherry Laurel
<i>Rhododendron</i>	Allure, Balsaminiflorum,	Hybrid Evergreen
	and other varieties	Azaleas
<i>Rosa</i>	Carefree Wonder	Roses
	and other varieties	

<i>Sarcococca hookerana</i>		Himalayan Sarcococca
<i>Skimmia japonica</i>		Japanese Skimmia
<i>Spiraea thunbergii</i>	Ogon/Agon	Agon Spiraea
<i>Stephanandra incisa</i>	Crispa	Cut Leaf Stephanandra
<i>Thuja occidentalis</i>	Emerald Green	
<i>Vitex agnus-castus</i>		Chaste Tree
<i>Yucca filamentosa</i>	Gold Sword, Bright Edge	Variegated Adam's Needle

Perennials

<i>Alchemilla mollis</i>		Lady's Mantle
<i>Amsonia hubrichtii</i>		Bluestar

Latin Name Cultivar/Variety Common Name

<i>Anemone tomentosa</i>	Robustissima	Japanese Anemone
<i>Anemone japonica</i>	Honorine Jobert	Japanese Anemone
<i>Astilbe chinensis var. tacquetii</i>	Superba	Astilbe
<i>Brunnera macrophylla</i>		Siberian Bugloss
<i>Carex elata</i>	Aurea	Variegated Sedge
<i>Echinacea purpurea</i>	Magnus	Purple Coneflower
<i>Geranium</i>	Rozanne	
<i>Geranium macrorrhizum</i>		Bigroot Geranium
<i>Hakonechloa macra</i>	Aureola	Variegated Hakone
<i>Helleborus xhybridus</i>		Lenten Rose
<i>Helleborus foetidus</i>		Stinking Hellebore
<i>Hemerocallis</i>	Happy Returns	Daylily
<i>Heuchera</i>	Plum Pudding	Coral Bells
<i>Hibiscus moscheutos</i>	Lord Baltimore, Lady Baltimore	Rose Mallow
<i>Hosta plantaginea</i>	Aphrodite	August Lily
<i>Hosta sieboldiana</i>	Elegans	
<i>Nepeta</i>	Walker's Low	Catmint
<i>Polygonatum odoratum</i>	Variegatum	Var. Solomon's Seal
<i>Salvia officinalis</i>	Berggarten	Sage
<i>Salvia</i>	Blue Hill	Meadow Sage
<i>Sedum</i>	Autumn Joy, Matrona	Stonecrop

Ferns

<i>Adiantum pedatum</i>		Maidenhair fern
<i>Athyrium nipponicum</i>	Pictum	Japanese painted fern
<i>Athyrium felix-femina</i>		Lady fern
<i>Matteuccia struthiopteris</i>		Ostrich fern

Grasses

<i>Hakonechloa macra</i>		Hakone Grass
<i>Imperata cylindrica</i>	var. rubra	Japanese Blood Grass
<i>Miscanthus sinensis</i>	Gracillimus	Eulalia, Silver Grass
<i>Panicum virgatum</i>	Haense Hermes	Switch Grass
<i>Pennisetum alopecuroides</i>	Moodry	

Groundcovers

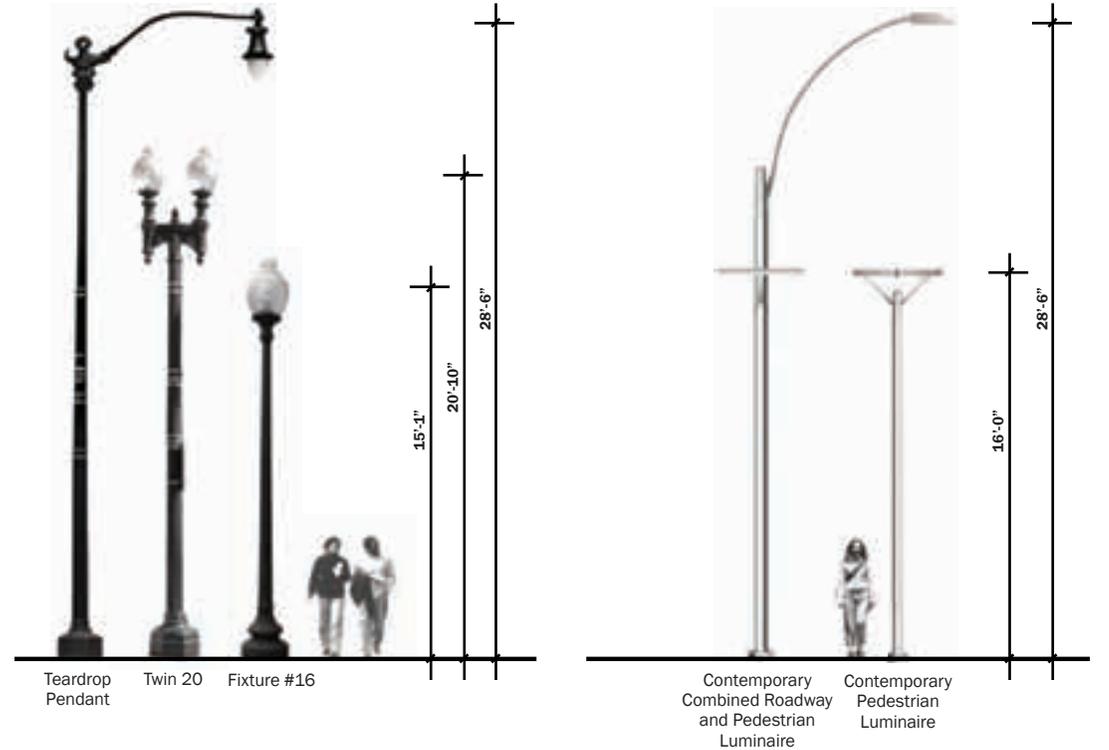
<i>Euonymus fortunei</i>	Coloratus	Wintercreeper
<i>Euphorbia amygdaloides</i>	var. robbaie	Wood Spurge
<i>Liriope muscari</i>	Big Blue, Silvery	Lilyturf
<i>Lonicera pileata</i>		Boxleaf Honeysuckle
<i>Pachysandra terminalis</i>	Green Sheen	Pachysandra
<i>Vinca minor</i>		Periwinkle

Annuals

<i>Ageratum</i>	Blue Horizon	
<i>Coleus</i>	Compact Red	Coleus
<i>Ipomoea batatas</i>	Marguerite, Blackie	Sweet Potato Vine
<i>Melampodium paludosum</i>	Lemon Delight	Melampodium
<i>Salvia guaranitica</i>		
<i>Salvia</i>	Blue Chiquita, Indigo	
	Spire	

Vines

<i>Campsis radicans</i>		Trumpet Creeper
<i>Hydrangea anomola</i>	var. petiolaris	Climbing Hydrangea
<i>Parthenocissus quinquefolia</i>		Virginia Creeper



TRADITIONAL PALETTE

Lighting for streets and sidewalks throughout most of the Triangle should follow the traditional palette typical of other DC neighborhoods and boulevards. On the Avenues, a combination of the Teardrop Pendant street light and the single-globe pedestrian light is recommended. For the neighborhood streets, the pedestrian light alone is sufficient. Pole color, mounting height, and bulb type should conform to DDOT standards and be consistent throughout the Triangle.

MATRIX OF STREETS AND RECOMMENDED LIGHTING

Massachusetts Avenue	■	■			
New York Avenue	■	■			
New Jersey Avenue	■	■			
H Street			■		
Eye Street			■		
K Street				■	■
L Street			■		
7th Street			■		
6th Street			■		
5th Street					■
4th Street			■		
3rd Street			■		
2nd Street			■		
	TEARDROP PENDANT	TWIN 20	FIXTURE #16	CONTEMPORARY COMBINED	CONTEMPORARY PEDESTRIAN

CONTEMPORARY PALETTE

For 5th Street and K Street, a more contemporary palette of street and pedestrian lighting complements the unique architecture and streetscape and reinforces the special status of these streets as primary retail corridors. On K Street, the Combined Roadway and Pedestrian Luminaire is alternated with the Pedestrian Luminaire. On 5th Street, the Pedestrian Luminaire alone is sufficient. Pole color, mounting height, and bulb type should conform to DDOT standards and should be consistent throughout the Triangle.

SPACING

Street lights along K Street should be positioned opposite each other across the street, in accordance with DDOT standards. This pattern will help define the edge of the street and emphasize the significance of this major retail corridor. Spacing should also conform to DDOT standards. On all other streets and avenues, street lights should be positioned and spaced according to DDOT standards.

GENERAL CONCEPT

Benches, trash receptacles, and bicycle racks are intended for retail areas, parks, bus stops, and other public areas. In general, site furniture should not be used along residential streets.

TRADITIONAL METAL BENCH

The traditional metal bench is located in the Reservations and at regular intervals along New Jersey Avenue, with concentrations at bus stops, public parks, and important intersections. The six-foot-long bench is steel, coated with a rust inhibitor and painted black. The bench has end arms and a center arm. Placement and installation conform to DDOT standards.



Traditional metal bench

CONTEMPORARY METAL BENCH

The contemporary metal bench is located at regular intervals along K, 5th, and 6th Streets. The six-foot-long bench has aluminum castings and a perforated steel seat and back. The bench has end arms and a seat divider. Placement and installation conform to DDOT standards.



Contemporary (left) and traditional (right) trash receptacles

CUSTOM METAL BENCH

Custom metal benches are located in the Reservations. The design should be in keeping with historical precedent and approved by DDOT and NPS.

TRADITIONAL TRASH RECEPTACLE

Placed at street intersections, adjacent to bus shelters and seating, in front of retail establishments, and in other public areas, these are used in conjunction with the traditional metal benches.

CONTEMPORARY TRASH RECEPTACLE

Placed in front of restaurants and retail establishments, at street intersections, adjacent to seating, and in other public areas, these are used in conjunction with the contemporary metal benches.

BICYCLE RACKS

Placed at bus stops, shopping areas, plazas, parks, and other public facilities in clearly visible locations, the DC standard metal hoop-type bicycle rack is recommended. Place and install according to DC standards.

MATRIX OF STREETS AND RECOMMENDED SITE FURNITURE

Massachusetts Avenue									
New York Avenue									
New Jersey Avenue									
H Street									
Eye Street									
K Street									
L Street									
7th Street									
6th Street									
5th Street									
4th Street									
3rd Street									
2nd Street									
Reservations									
Plaza									

Legend:

- TRADITIONAL METAL BENCH
- CONTEMPORARY METAL BENCH
- CUSTOM METAL BENCH
- TRADITIONAL TRASH RECEPTACLE
- CONTEMPORARY TRASH RECEPTACLE



Pressed concrete pavers



K Street unit pavers (shown for color and texture only)

PRESSED CONCRETE PAVERS

Pressed concrete pavers are recommended for all of the Triangle's avenues and for H, 7th, 6th, 5th, and 2nd Streets and the interior sidewalk zone of K Street. These pavers should be gray in color and should be set on a 4" concrete base.

K STREET UNIT PAVERS

Along K Street, a special unit paver is recommended for the sidewalk zone adjacent to the street. The material should be clay brick with a warm brown color.

EXPOSED AGGREGATE CONCRETE PAVEMENT

Exposed aggregate concrete pavement with a fine texture is recommended for the Reservations, as this resembles the material that was originally envisioned in the 1902 design of the Monumental Core.

PLAZA PAVEMENT

For the plazas at the intersection of 5th and K Streets, quartzite, marble, or similar material pavers in contrasting brown and buff colors are recommended.

BRICK

Brick pavers, consistent with DDOT standards, are recommended for Eye, L, 3rd, and 4th Streets.

GRANITE CURB

A 7"H x 8"W x 6'-0"L granite curb, consistent with DDOT standards, is recommended for all streets within the neighborhood.

STANDARD BRICK GUTTER

A standard, 12" wide brick gutter, consistent with DDOT standards, is recommended for all streets within the neighborhood except K Street.

3' BRICK GUTTER

The brick gutters along K Street should be widened to 3' along the entire length of the street to help mark the special significance of the street as well as enable a more gradual break in the cross-slope.

CROSSWALKS

The DDOT standard "Piano"/"Ladder" bar type thermo-plastic markings are recommended for all crosswalks.

UNIT PAVERS

See page 35.

LOW-IMPACT DEVELOPMENT OPPORTUNITY

Paved areas should be graded to ensure that stormwater runoff is directed to planting strips and tree boxes.



MATRIX OF STREETS AND RECOMMENDED PAVING AND CURBS

Massachusetts Avenue										
New York Avenue										
New Jersey Avenue										
H Street										
Eye Street										
K Street										
L Street										
7th Street										
6th Street										
5th Street										
4th Street										
3rd Street										
2nd Street										
Reservations										

Legend:

- PRESSED CONCRETE PAVERS
- K STREET UNIT PAVERS
- EXPOSED AGGREGATE CONC.
- BRICK
- GRANITE CURB
- STANDARD BRICK GUTTER
- 3' BRICK GUTTER



Community members and other stakeholders participating in a public meeting during the design process

The Mount Vernon Triangle Transportation and Public Realm project has identified a substantial number of changes and improvements within the Triangle to support and enhance the lives of its current and future residents and visitors. The recommendations are broad in scope. Projects range from simple enhancements that improve traffic flow to wholesale renovation of entire city blocks. The overall strategy for implementing these projects is to clearly outline and prioritize actions, costs, timeline, and key parties responsible for the realization of the new Triangle.

The implementation plan is consistent with the priorities set forth in the Mount Vernon Triangle Action Agenda. The public realm recommendations for the design and construction of the Neighborhood Center, the K Street public realm, and improvements to the Reservations are all high priorities that span the short-term and mid-term phases. In addition, synergies between roadway and public space and sidewalk improvements have also informed the proposed phasing of improvements. The widening of L Street to allow for two-way traffic should coincide with the detailed design of the L Street public realm. Finally, the creation of new development sites linked to new open space will also play a role in how the recommendations are implemented, particularly the construction of the 3rd Street Neighborhood Park over I-395.

Implementation

The implementation of recommendations are designated as short-term, mid-term, and long-term subject to the availability of financial resources and the development timeline of projects within the Triangle. The funding, particularly for public space and sidewalk projects, is contingent upon developer contributions.

The following tables and figures summarize the activities expected to occur within the short-term, mid-term, and long-term. Each section lists both roadway and public space and sidewalk activities and the total costs anticipated for each phase. Short-term improvements are those that can be completed within the 2006 calendar year. The mid-term phase is the most significant in that most of the recommendations occur between years 2007 and 2010. This phase includes significant public space and sidewalk improvements like the construction of the Neighborhood Center and K Street public realm. The long-term improvements are those that carry significant cost, right-of-way impacts, require other agency approval, and are likely to occur beyond 2011.

The estimated cost for all roadway and public space and sidewalk improvements in the short-term and mid-term is approximately \$30 million. These costs do not include design, construction management, and contingencies. It is also likely that existing utilities will either need to be repaired, upgraded, and/or relocated in order to implement the recommendations. However, the cost for this work cannot be accurately predicted at this time and is therefore not included.

TARGETED PHASING/COSTS FOR ROADWAY IMPROVEMENTS

Roadway Improvement Areas	Investment*	Lead Role
SHORT-TERM, 2006**		
Implement Roadway Recommendations Convert New Jersey Avenue to two-way, install bike lanes on K Street and 6th Street, re-route bus to serve northbound and southbound New Jersey Avenue	\$499,000	DDOT
MID-TERM, 2007-2010**		
Implement Roadway Recommendations Construct and repave L Street, K Street, H Street, Eye Street, New York Avenue, Massachusetts Avenue, 5th Street, 4th Street, 3rd Street Convert 4th Street and L Street to two-way operations	\$4,388,000	DDOT
LONG-TERM, 2011 AND BEYOND**		
Implement Roadway Recommendations Repave and add median on New York Avenue, repave 6th Street, New Jersey Avenue, and 2nd Street	\$1,844,000	DDOT
Study/Design Connecting L Street and 3rd Street, support New York Avenue Study recommendations, 3rd Street/Massachusetts Avenue/H Street	TBD	Developer/OP/ DDOT
TOTAL COST - ROADWAY IMPROVEMENTS	\$6,731,000	

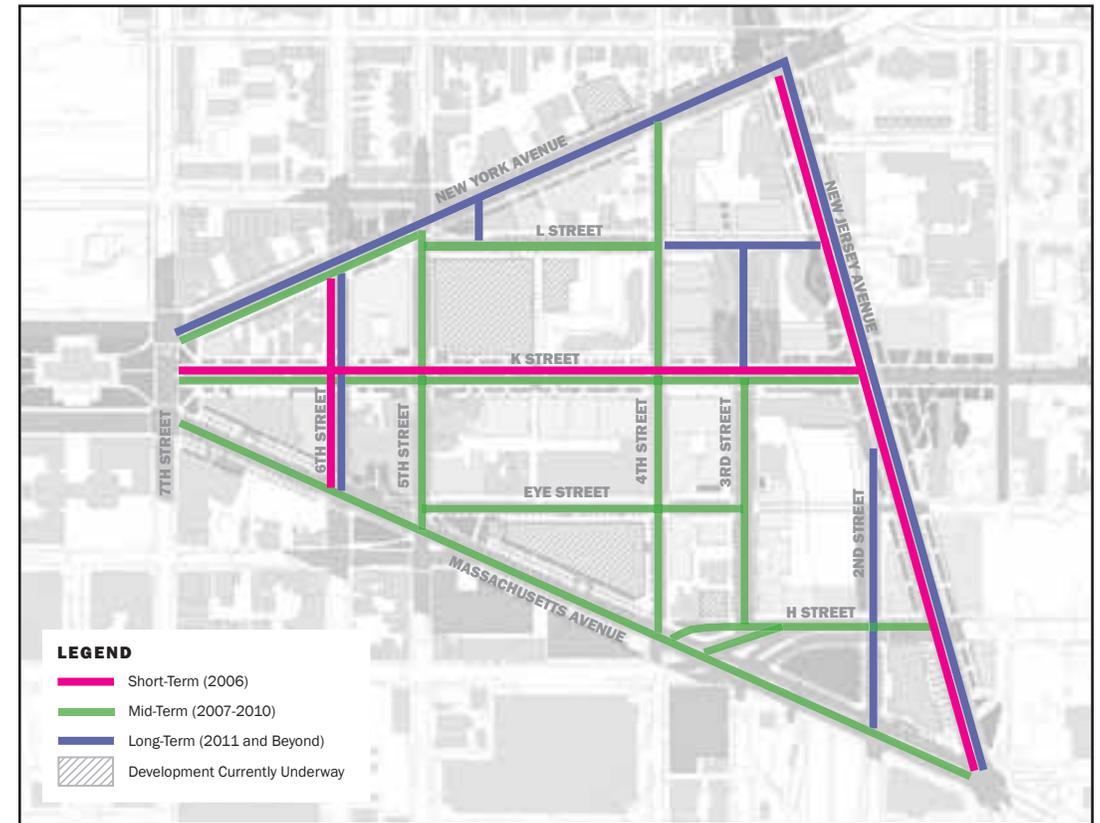
TARGETED PHASING/COSTS FOR PUBLIC SPACE AND SIDEWALK IMPROVEMENTS

Public Space and Sidewalk Improvement Areas	Investment*	Lead Role
SHORT-TERM, 2006**		
Design and Construction Documents for Public Space and Sidewalks Neighborhood Center, K Street, L Street	TBD	Developer/OP/ DDOT
MID-TERM, 2007-2010**		
Construct Public Space and Sidewalks K Street Neighborhood Center Reservations 3rd Street Neighborhood Park Interim Landscape at Massachusetts Avenue/3rd Street/H Street Intersection Massachusetts Avenue 3rd, 4th, 5th, H, Eye, L Streets <i>Subtotal Mid-Term - Public Space and Sidewalk</i>	\$8,305,000 \$1,060,000 \$2,998,000 \$2,173,000 \$397,000 \$3,453,000 \$7,276,000 \$25,662,000	Developer/OP/ DDOT
LONG-TERM, 2011 AND BEYOND**		
Construct Public Space and Sidewalks New York Avenue New Jersey Avenue 2nd, 6th Streets <i>Subtotal Long-Term - Public Space and Sidewalk</i>	\$5,486,000 \$4,719,000 \$2,078,000 \$12,283,000	Developer/OP/ DDOT
Study/Design Connecting L Street and 3rd Street, support New York Avenue Study recommendations, 3rd Street/Massachusetts Avenue/H Street	TBD	Developer/OP/ DDOT
TOTAL COST - PUBLIC SPACE AND SIDEWALK IMPROVEMENTS	\$37,945,000	

*Design, utility relocation costs, and other contingencies are not included. All costs are in 2006 dollars and are subject to change due to escalation.

**Refers to the calendar year

ROADWAY: PROPOSED PHASING PLAN



PUBLIC SPACE AND SIDEWALK: PROPOSED PHASING PLAN

