A DEVELOPMENT STRATEGY

ONE: LAND USE MIX

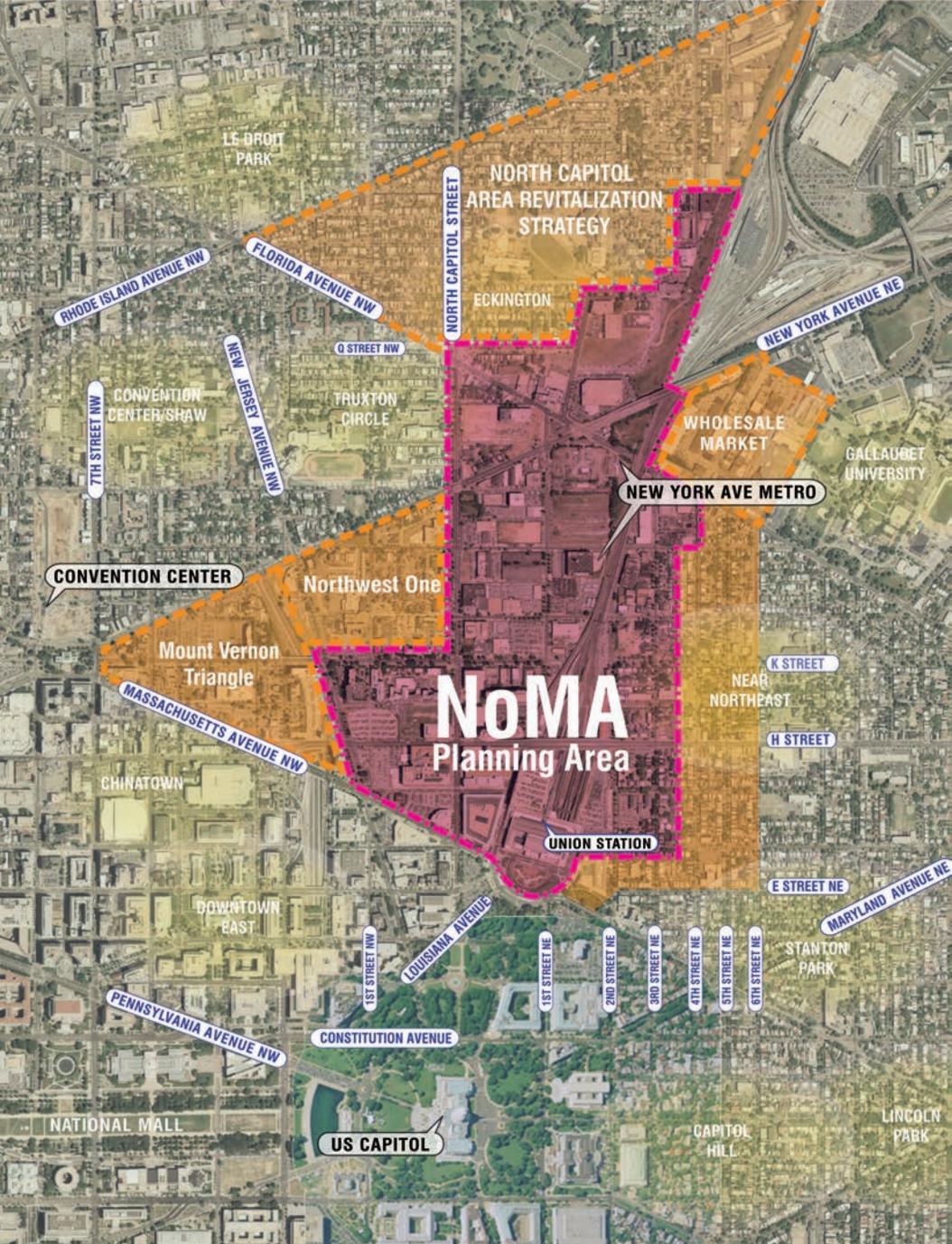
TWO: INFRASTRUCTURE & TRANSPORTATION

THREE: PUBLIC REALM & OPEN SPACE FOUR: IDENTITY & BUILDING DESIGN

FIVE: EXISTING NEIGHBORHOODS

SIX: ENVIRONMENT & SUSTAINABILITY

Noma Development Strategy



INTRODUCTION

The Development Strategy is a comprehensive set of recommendations based on the 6 planning fundamentals and place-making concepts of the Vision. The recommendations, while ning fundamentals and place-making concepts of the Vision. The recommendations, while organized into 6 Sub-Sections, are all highly interconnected and mutually reinforcing. Taken collectively, and capitalizing on real estate market forces, they have the potential to shape the NoMA neighborhood.

> The Development Strategy attempts to marry the concepts of the Vision with the realities of the current development scene, the real estate market, and physical conditions. Early phases in the planning process included an analysis of strengths, weaknesses opportunities, and threats, as summarized briefly on the following page. The analysis of current market conditions are covered in Chapter 4, that follows.

Context

Today, Central Washington is thriving with a dynamic mix of uses and vigorous development activity. As part of Central Washington, the NoMA neighborhood aims to extend that momentum by building on its significant strengths and opportunities.

NoMA is the location of several ambitious redevelopment projects, currently in varying stages of development, and it is poised to fill one of the few remaining 'voids' in the compact fabric of the Downtown area. Mount Vernon Triangle is moving forward rapidly, with significant elements of its Action Agenda already implemented and over 8 projects underway. The planning process for Northwest One has been completed, local dollars are committed and implementation activities are getting started. The North Capitol Area Revitalization area, including the Eckington neighborhood, is beginning its planning process and the Florida Avenue Market is slated for study as well. This gradual eastward march of new development, paired with sound planning and coordination, promises to awaken a vast, underutilized, strategically located area of the District.



Northwest One

In January 2005, the city, in collaboration with the Northwest One Council, initiated a public planning process to revitalize the Northwest One neighborhood. The project's goal was straightforward - to create a vibrant mixed-income community where residents have quality housing options, real economic opportunities and access to appropriate human services for adults and children. It grew from the need to address critical issues - a concentration of violent crime, poverty, and distressed housing conditions and strong development pressures.

With the Central Business District to its south, the historic Shaw neighborhood to its north and west and Mount Vernon Triangle to its west; Northwest One is set to become a key mixed-use downtown neighborhood. The master plan's concepts include:

- · New residentially-scaled blocks that are supportive of urban family living
- . The extension of K Street as a vibrant mixed-use main street for the neighborhood
- · Mixed-income apartment buildings along K and **North Capitol Streets**
- · A community center at the heart of the neighborhood, including a new school, recreation center, and recreation fields
- · The reintroduction of a grid pattern of streets
- Infill development along North Capitol Street and other sites to create significant amounts of new housing

North Capitol Area Revitalization Strategy

The North Capitol Area study area is generally bound by Rhode Island Avenue to the north, the rail lines to the east, Florida Avenue to the south connecting with Rhode Island Avenue to the west. Within its boundaries lie the historic rowhouse neighborhoods of Eckington, Edgewood, Truxton Circle, Bates Street and Bloomingdale. Zoning within the area ranges from low density residential to medium-bulk commercial and light manufacturing.

The community is in need of a strategy for revitalization of the commercial corridor along North Capitol Street and Florida Avenue, protection of affordable housing, and the enhancement of this attractive mixed-use community. This revitalization strategy will deal with the following issues:

- Land use, zoning, & development to achieve an increase in mixed-income housing and services
- Retail environment and the impact of new Metrorail Station on existing and potential retail
- Transportation addressing proximity to Metrorail, traffic and parking management, and a safe and accessible bicycle and pedestrian environment
- Urban design/public realm and pedestrian enhancement and the establishment of guidelines
- Cultural tourism & heritage development to promote the rich neighborhood history and resources, and to link this heritage development to economic development

Florida Avenue Market

Occupying over 40 acres, the Florida Avenue Market is located just north of NoMA, with New York Avenue to the north, Florida Avenue to the south and Gallaudet University to the east. Formally named the Union Market Terminal, the market was built between 1929-1932 to relocate businesses displaced from downtown sites due to government building expansions. It soon became a one-stop shop for the city, offering produce, meats, seeds, tobacco, paper bags, and ethnic specialties.

Today, the Market continues to evolve. The site has the potential for expanded retail around a food theme and an intensification of destination-type activity. Plans for the Florida Avenue Market must deal with issues that include:

- Land use, zoning, & development to encourage mixed-use growth and compatible new uses, while respecting the preservation of the historic buildings and the market functions
- The Market's economic role in the metropolitan area as a wholesale and distribution center and employer
- Retail environment expansion potential and the impact of potential development on NoMA, the Capitol Commerce Center and New York and Florida Avenues
- Transportation issues including congestion, parking, truck access, Metrorail proximity and establishing a safe, accessible bicycle environment
- Urban design/public realm and pedestrian issues to create a safe and pedestrian friendly environment
- Cultural tourism & heritage development that highlights the rich history and historic resources of the Florida Avenue Market















Current Development Scene

The Development Map on the facing page illustrates recent, planned, and potential development. (See Appendix A for a detailed breakdown of each numbered site.) Potential development sites are those which are currently on the market or have been the subject of preliminary development inquiries and/or conversations with the Office of Planning. The map does not indicate various "soft sites", or underutilized parcels that have a potential for redevelopment in the longer term.

Clearly, NoMA is in transition with a large number of major land transactions and several PUD applications occurring within the past year. This Development Strategy is an essential tool for guiding anticipated growth. Within the NoMA Planning area (see Development Map on p. 3.5 – *black* boundary), initial projections indicate the potential for a build-out in the range of 26 million square feet of development. Current proposed land uses vary based on location:

- West of the tracks, and south of New York Avenue ("Central NoMA"), completed projects and projects under construction are primarily office uses. Several developments propose a mix of residential and commercial, but residential uses are typically designated as a future phase.
- East of the tracks, with the exception of Station Place, adjacent to Union Station, planned projects are primarily residential.
- North of New York and Florida Avenues, currently planned and proposed projects are primarily residential.

Strengths, Weaknesses & Opportunities The Vision Plan and Development Strategy of the Vision Plan and Develop

The Vision Plan and Development Strategy were preceded by an initial assessment of the area, including an analysis of strengths, weaknesses, and opportunities in NoMA. The following is a brief summary of those findings:

STRENGTHS

Despite a negative image and a lack of neighborhood identity throughout significant portions of NoMA, there are a number of substantial assets for the area to build upon:

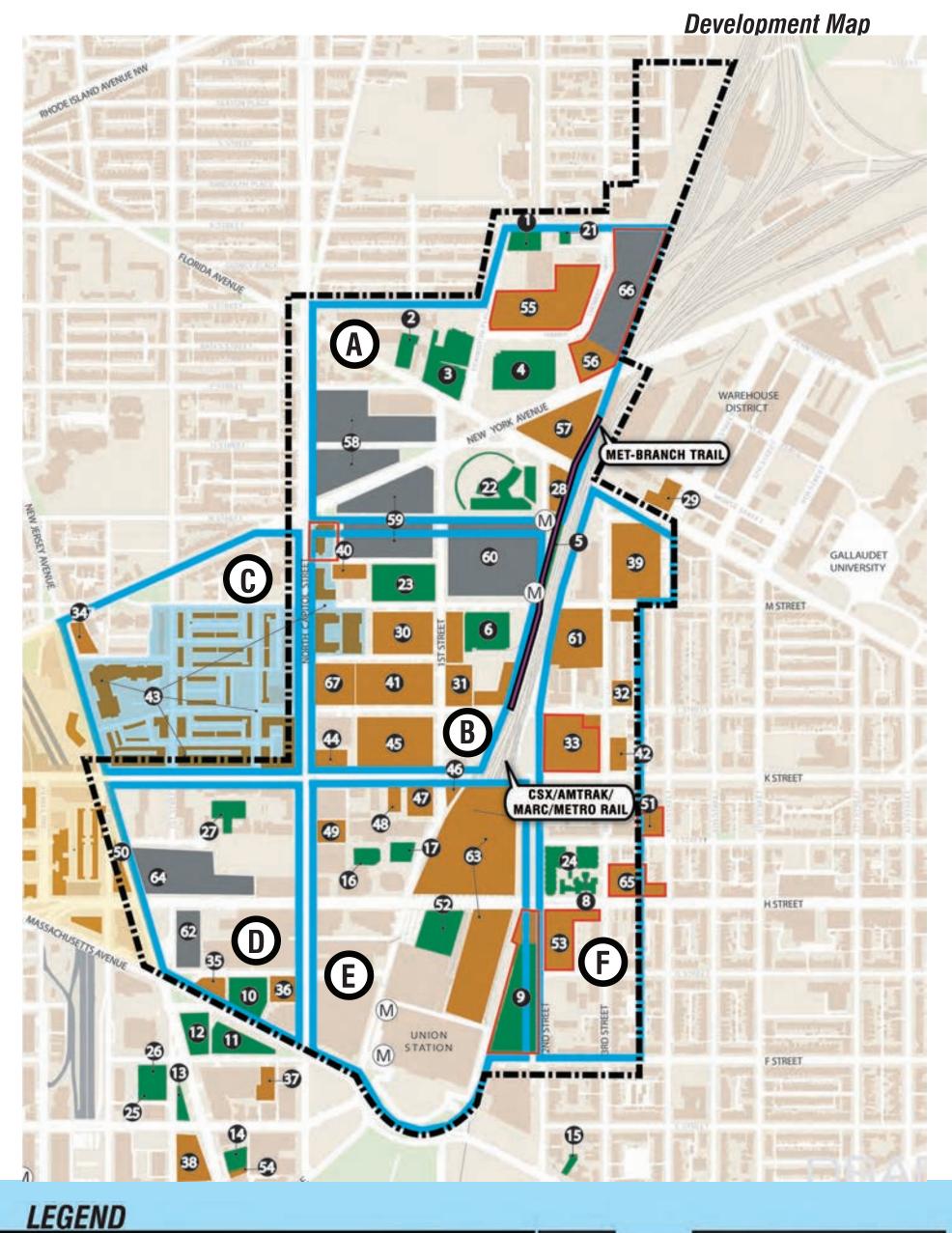
- Historic Resources: A detailed map of historic resources can be found on page 3.29 in the Development Strategy. All of these assets will contribute to NoMA's identity and historic richness; the most prominent of these include Union Station, the U.S. Government Printing Office buildings, Uline Arena (site of the first U.S. concert by the Beatles), One NoMA Station (the old Woodward & Lothrop Warehouse), the Florida Avenue Market; and the imposing, textured stone wall, stretching north from Union Station.
- Existing Nearby Neighborhoods: NoMA's potential as a vibrant, mixeduse neighborhood with a strong residential component is magnified by the presence of several well-established rowhouse neighborhoods, including Bates, Shaw, Eckington, Near Northeast, Stanton Park, Truxton Circl, and Northwest One; and also the emerging mixed-use neighborhood to the west, Mount Vernon Triangle, all within a 5-10 minute walk of NoMA.
- Proximity to the U.S. Capitol and Downtown: Straddling North Capitol Street, one of the city's most symbolic view corridors, and located within a portion of the historic L'Enfant plan, NoMA has tangible roots in the underlying plan structure of DC, and physical proximity to the heart of Central Washington. This proximity, combined with the number of available development sites, signals NoMA as the obvious location for the long-term expansion of Central Washington.
- Existing nearby institutions: Gallaudet University, Gonzaga High School, McKinley Technological High School, Georgetown Law Center, and several churches add to the rich diversity of NoMA's surroundings, both in terms of architectural excellence and diversity of population.
- Transit Access: Union Station is a regional multi-modal hub, the New York Avenue Metrorail Station is a recent addition to the city's subway system, and a Greyhound bus station is located just north of Union Sta-

- tion. In addition, several bus routes, including one of the new Circulator routes, pass along the edge of NoMA on Massachusetts Avenue.
- Metropolitan Branch Trail: The Trail, running alongside the tracks, is a major recreational and transportation link, connecting into a regional trail system and transit hubs.
- Proximity to Existing and Planned Retail Concentrations: The Florida Avenue Market (described in greater detail on page 3.3) is a wholesale and retail institution unique in the District, with a distinctive urban form and a tremendous potential for future improvements and synergy with NoMA. Union Station is a major anchor and regional retail draw. The H Street retail corridor to the east is in the midst of significant revitalization and it will eventually have improved connections to NoMA as part of the proposed air-rights development over the tracks.
- Industrial/Warehouse Identity: One NoMA Station, the XM Satellite Radio building, and other existing warehouse structures scattered throughout NoMA provide the beginning of a familiar identity rooted in the area's industrial past. The stripped down, simple aesthetic of utilitarian structures provides clues for the future architectural expression of NoMA.
- Branding Identity: The neighborhood name "NoMA" has already eased its way into the geographic lexicon of DC. The water tower labeled "One NoMA Station" has become a recognizable neighborhood landmark.
- Existing Street Trees: Portions of K, L, 1st, and 3rd Streets have mature, intact street trees with substantial canopies that offer a preview for more comprehensive 'greening' of NoMA's streets.

WEAKNESSES

NoMA is burdened by a number of significant weaknesses and challenges:

- Extremely Poor Public Image: Large vacant tracts of land, remaining industrial-type uses, and the lack of public spaces do not present a positive image to potential investors and tenants.
- Pedestrian Barriers: New York Avenue's heavy traffic flows create a barrier between northern and southern areas. The tracks divide NoMA, east from west, creating a physical and psychological barrier, with underpasses that feel unsafe.
- Block Structure: Currently, NoMA contains a number of extremely large blocks (superblocks) in what previously was a smaller, more accessible block configuration. (See page 2.5) This erosion over time of the fine-grained street system has led to blocks that are not pedestrianfriendly and contribute to traffic congestion.
- Zoning: Since a large portion of NoMA is designated as a "Transferable Development Rights Receiving Zone" (TDR), developers are able to utilize development rights purchased from other locations in the city.
- This allows development sites to maximize the zoning envelope with as-of-right development, limiting potential to use a floor-area bonus in cases where the City is looking to incentivize certain public benefits or amenities, including design review.
- Aging Utility Infrastructure: Initial findings indicate that the condition of sewer and water lines may be a more pressing issue than capacity. Further analysis will be needed to determine existing conditions, and capacity. Localized flooding in the NoMA area, however, seems to indicate an immediate need to deal with effective stormwater management.
- Lack of Public Spaces and Land in Public Ownership: Planning initiatives often have leverage for future implementation because of public ownership or control of key locations within a planning area. This is not the case with NoMA, where there is very little remaining public ownership that can be utilized for the creation of new open spaces or other catalytic projects.



Construction Complete/Near Complete

- 2 XM Satellite Radio 3 XM Satellite/Qwest
- 4 Federal Express
- 5 New York Avenue Metrorail Station
 6 One NoMA Station, Bristol Group
 7 Gonzaga College High School
 8 Landmark Lofts, ABDO Development
 7 Union Station Parking Garage Ext.
- 9 Station Place I-III, LDPG
- 10 Republic Square, Republic Properties 11 20 Massachusetts Avenue
- 12 601 New Jersey Avenue
- 13 National Association of Realtors
- 14 Holiday Inn on the Hill 15 208 Massachusetts Avenue
- 16 Union Center Plaza III
- 17 Union Center Plaza V 21 Capitol Overlook

- 22 ATF Headquarters, GSA
- 23 Capitol Plaza I, The Goldberg Co./Prudential
- 24 Senate Square, ABDO Dev.
- 25 Erik Hotung Int. Law Center

Planned/Site Cleared/Proposed

- 28 The Eckington, Trammel Crow 29 Washington Beef RFP
- 30 Capitol Plaza II-IV. The Goldberg Co. 31 NoMA Station, Bristol Group
- 32 The New Yorker, KL Associates
- 33 Union Place, Cohen Cos. 34 Augusta/Louisa Apartments
- 35 Gales School (Homeless Shelter)
 36 Republic Square Phase II, Republic Prop.
- 20 F Street

- 38 Hyatt Regency Washington 39 The Wilkes Company 40 Electronic Equipment Facility 41 First Place, *Tishman Speyer*
- 42 Greenbaum & Rose, Greenbaum & Rose 43 North West One & Mount Vernon Redev.
- 44 20 K Street

- 45 90 K, Greenebaum & Rose 46 101 K Street, J Street Development
- 47 Capitol City Plaza, Carter-Cafritz 48 65 K Street

1000

- 49 Union Square III, Akridge 50 Prevocational Schoool Site
- 51 318 Eye Street, The Broadway Group
- 53 Capital Place, Louis Dreyluss
- 54 415 New Jersey Avenue
- 55 Capital Commerce Center, Fairfield
- 56 Pepco
- 57 Washington Gateway, MRP 61 Uline Arena, Douglas Dev. 63 Bumham Place, Akridge
- 65 3rd & H Streets NE, Stewart 67 C & P Telephone Comp. Warehouse, J Street Development

Potential Development

- 58 Jemai's Gateway, Douglas Dev.
- 59 Capitol Square, Morgan Stanley/JBG 60 Constitution Square, Stonebridge Carras 62 G & New Jersey Avenue

- 64 801 New Jersey Avenue
- 66 PEPCO Disposition Site
- Development Totals by Section Northwest One (Hope VI)
- Mount Vernon Triangle Planned Unit Developments Underway
- Study Area Boundary

One: Land Use Mix

Provide a diverse mix of uses that creates a variety of options for living, working, shopping, recreation, and culture

A balanced land use mix is critical to the success of NoMA, and will contribute the following:

- Economic and environmental sustainability and synergies that combine individual elements into neighborhoods that are more than the sum of the parts
- Transportation efficiencies, effective use of infrastructure investment with two-way Metrorail usage by residents and workers, spreading the peaks, decreasing trips, and decreasing overall parking demand
- The mix and overlap of populations will add life on the streets 24/7 instead of 9 to 5, with increased safety and walkability
- Integration with surrounding neighborhoods
- Distinct sub-areas with uses that reinforce uniqueness

Though the current real estate market is inclined toward mixeduse development, there is still a need for guidance and direction, potentially including development incentives, to achieve the right mix of uses in the right locations. With no residential presence between North Capitol Street and the tracks south of New York Avenue; there is need for public sector intervention to encourage residential development until a critical mass develops. The financial return to the District from such incentives are substantial, making it a wise investment in the transformation of the area.









NoMA, with its proximity to Downtown and the U.S. Capitol, is a logical location for an expansion of the Downtown office market. However, NoMA can be much more than another typical office district, with empty, inactive streets after business hours. A balance of residential and commercial uses will help create a vibrant mix of residents, workers, and visitors, and will enhance safety at the Metrorail station, encourage its use and make the necessary transitions to surrounding residential neighborhoods.

Attracting developers interested in residential construction and potential residents eager to live in NoMA will be critical to achieve a mixed-use neighborhood. Landscaping and the creation of functional public open space are essential to the redevelopment plan, as most potential residents cannot envision living in an urban environment dominated by hardscape. A critical mass of residents will sustain retail, entertainment, recreational, and cultural uses, enlivening streets and contributing to a "24/7" neighborhood.











APPROPRIATE MIX OF COMMERCIAL/RESIDENTIAL

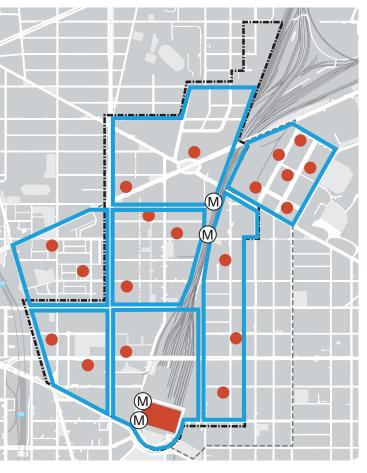
WEST OF THE TRACKS

Though current development proposals include or anticipate a residential/of-fice mix, current trends or slight shifts in the market could result in predominantly office uses. Currently, there is no guarantee that a critical amount of residential uses will be built to accomplish the goal of a near-equal mix of office and residential. Several of the multi-phase large-parcel development proposals are planning residential components as a later phase of development, however market incentives in place now, such as tax abatement, might ensure that this land-use mix actually occurs. In addition to critical residential mass and active streets, the ideal 50/50 mix also provides the maximum opportunity for innovative resource-sharing, such as energy-efficiency techniques and shared-parking strategies.

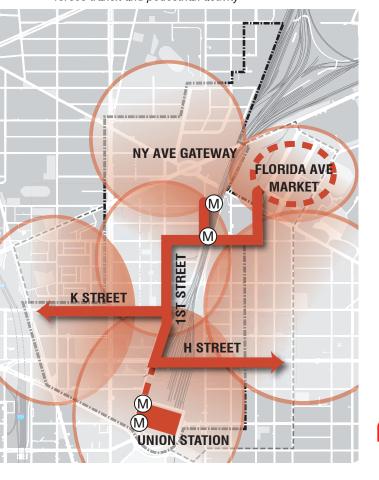
EAST OF THE TRACKS

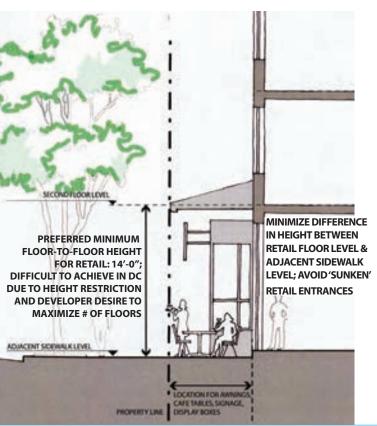
East of the tracks, there is an opportunity to reinforce the residential character of the nearby neighborhoods with a continuation of a primarily residential development, with neighborhood-serving retail, thus avoiding large scale office developments and destination retail that draws incompatible traffic onto quieter streets.

DISCOURAGED: Scattered or auto-oriented retail that dilutes potential for active, interconnected corridors and draws automobile traffic off principal and minor arterials and onto streets where it creates problems.



RECOMMENDED: Concentrated retail that builds upon, strengthens, and connects existing retail patterns and reinforces transit and pedestrian activity





VIBRANT MIX OF GROUND FLOOR RETAIL IN KEY LOCATIONS

Common problems faced by rapid neighborhood redevelopment include the combination of: a time lag for the market to materialize, developer specialization, and lack of a coherent larger plan for where retail should occur. These retail recommendations, combined with the "General Market Conditions" described in Chapter 4, provide a retail strategy for NoMA. A vibrant mix of ground floor retail in key locations should have generous ceiling heights, be as continuous as possible, and achieve the following:

STRENGTHEN EXISTING RETAIL

Union Station: Improve connections and build on its status as an retail anchor and "urban mall".

H Street: Extend planned H Street Corridor retail westward, with intermittent, neighborhood-serving retail.

North Capitol Street: Encourage improvements and infill empty storefronts between New York and Florida Avenues.

Florida Avenue Market: Provide opportunities for connections from NoMA into the Market area. Encourage detailed analysis and study of the Market to evaluate future opportunities and strategies for this unique destination.

EXTEND PLANNED K STREET RETAIL Planned neighborhood-serving retail concentrations along K Street within Mount Vernon Triangle and Northwest One can continue into NoMA.

INCLUDE A NEIGHBORHOOD GROCERY

ENCOURAGE A NEIGHBORHOOD-SERVING RETAIL SPINE ALONG 1ST STREET, NE

Retail here should consist of restaurants, drycleaners, hardware stores, and other smallerscale shops that serve residents and daytime workers. 1st Street retail could be more intermittent and less continuous than K Street retail, except at identified high-priority locations and should be based on demand. Though buildings along 1st Street may not contain retail spaces initially, they should be designed to preserve future retail opportunities. The1st and K Streets, and 1st and M Streets intersections are higher priority, with retail strongly encouraged early on in neighborhood development; the 1st&M Street intersection is a pivotal point for emphasizing the east-west connections along M Street towards Uline Arena and eventually to the Florida Avenue Market.

ENCOURAGE REGIONAL-SERVING RETAIL IN THE AIR-RIGHTS PROJECT OVER THE TRACKS BEHIND UNION STATION

There is significant development opportunity to achieve synergy between new air-rights retail and the concentrations of retail at Union Station, possibly including medium box to big box retail and enhancing the collective regional drawing power. The H Street viaduct can have multiple street-level entrances to build on the H street retail momentum; and the southeast corner of the intersection of K and 1st Streets should have vertical connections to the air-rights development.

ENCOURAGE TEMPORARY VENDOR RETAIL ALONG 1ST STREET, NE

Temporary vendor retail provide much needed services to the area in the short term, activating the expanse of the historic stone railway wall and taking advantage of the high level of existing pedestrian traffic in the area.

PURSUE OTHER RETAIL & CULTURAL OPPORTUNITIES

With the U.S. Government Printing Office's possible departure, the exceptional historic buildings provide a wide range of retail opportunities. In addition, there is potential for retail and hotel anchors framing New York Avenue between North Capitol Street and First Street NE, and tieing into proposed retail concentration along 1st Street.

CREATIVE INDUSTRIES & LIVE-WORK MIXED-USE DISTRICT AROUND ULINE ARENA (See location on map. p 3.9)

The area south of Florida Avenue, around and including the Uline Arena, bounded by 3rd and 4th Streets east of the Uline Arena block and including the sites between I and K Streets along the tracks, is an area that is ripe for transition from industrial/production uses and former railrelated uses to an exciting new mix. It is adjacent to the New York Avenue Metrorail Station, the Florida Avenue Market District, and residential blocks in the Near Northeast neighborhood. It can accommodate a broad mix of building types and uses that can serve as: a transition in scale between low density residential areas and potential higher density development closer to the Metrorail Station; a transition in use between the Market and neighborhood residential; and a transition in the pedestrian experience along the path from the residential neighborhood to the Metrorail Station.

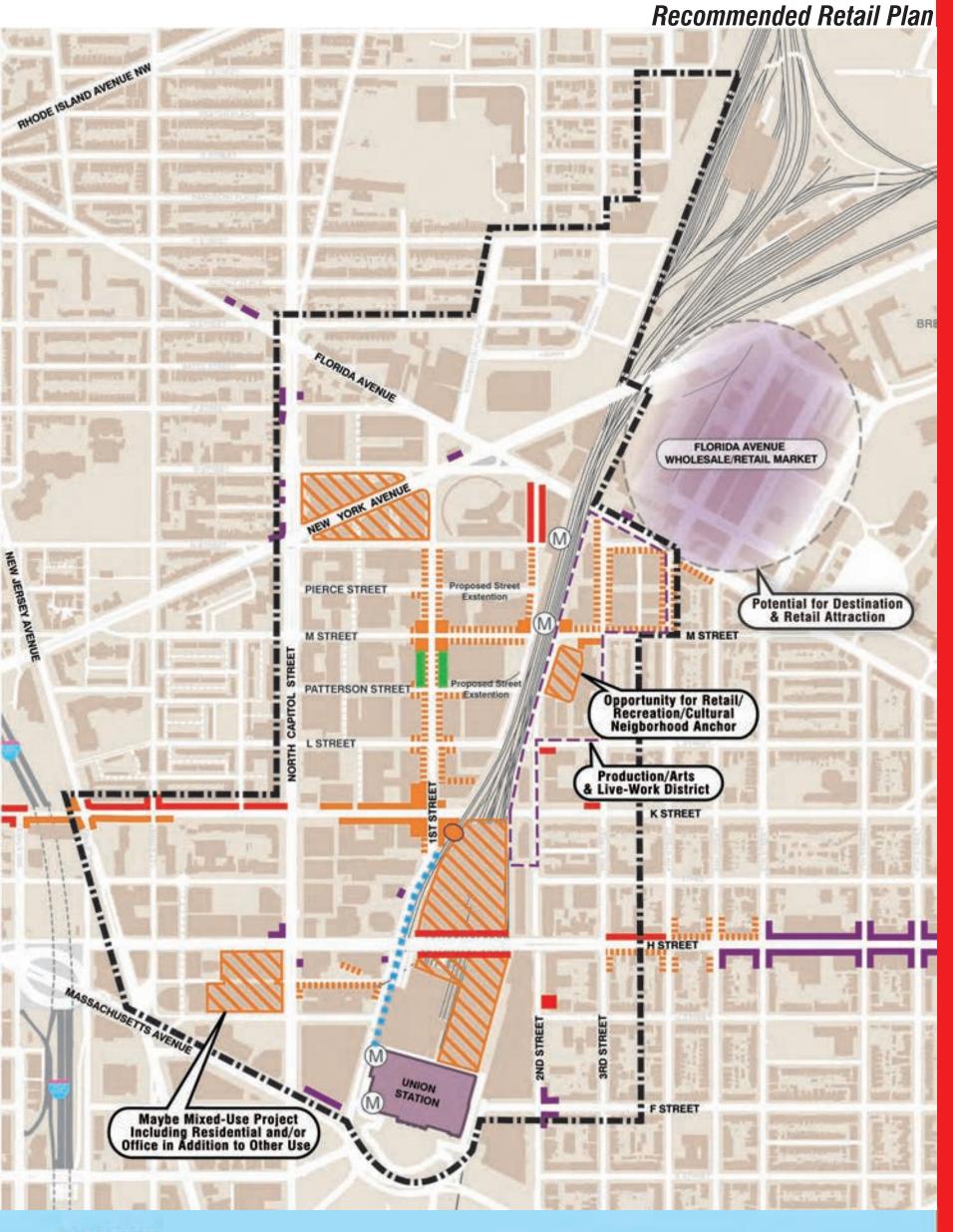
This district could consist of a mix of residential and non-residential uses, as the area shifts to more intense and diverse activities, including retail, galleries and studios, cultural and community facilities, and technology and of-

fice uses, with Uline Arena potentially serving as an indoor recreation or entertainment draw.

While office uses and hotel uses are appropriate on sites hard against the tracks and along Florida Avenue, other office uses are to be accommodated as much smaller components of mixed-use projects or as an accessory use to creative and design-related tenants. The retail, cultural, community, and arts uses will provide enough ground floor vitality to enhance and encourage pedestrian traffic from the Florida Avenue Market and the Near Northeast neighborhoods to the Metrorail Station.

In general, higher density and greater height is advocated closer to the tracks and the the Metrorail Station (to carry out smart growth strategies) and closer to Florida Avenue; with step-downs and residential uses closer to rowhouse neighborhood aeas.

3.8



LEGEND

- Existing Retail
- Proposed Retail in Existing Plans
- Recommended High-Priority Retail
- Recommended Intermittent Retail with Potential to Become Continuous
- Temporary/Vendor Retail
- Link From First Street and K Street to Air Rights Development
 - Opportunity for Major Proposed Retail/Cultural Anchors Including Hotel (Except for Uline Arena)
- Study Area Boundary
- First Street Park

SUMMARY OF RECOMMENDATIONS

- "High Priority Retail" indicates areas guided by potential Zoning Overlay. The development catalysts (described in "Ch. 5: Implementation, P 5.4) may be utilized to provide incentives for the development of priority ground-floor retail in these high-priority locations.
- "Recommended Intermittent Retail" indicates desired, but not required, retail locations that support a coordinated retail strategy, linking and reinforcing existing and planned retail patterns.

WELL-INTEGRATED OFFICE USES

Office uses should be distributed and designed in a way that contributes to desirable neighborhood character and active, mixed-use streets. Superblock developments, deep setbacks, suburban-style drop-offs, and repetitive architecture should be avoided in favor of more dynamic, marketable, and pedestrian-friendly configurations based on smaller building blocks separated by alleys, street extensions, or public pedestrian passageways.

Single use office buildings and security intensive uses will make it difficult to achieve the fine-grained, walkable, and successful neighborhood blocks that are the foundation of this plan for the NoMA neighborhood. Care should be taken to minimize the impacts of any future buildings with high-security requirements. Successful, fine-grained neighborhoods are damaged by inaccessible buildings and security requirements that disrupt the pedestrian flow.

6

HOTELS THAT TAKE ADVANTAGE OF TRANSIT & PROXIMITY TO DOWNTOWN

A hotel is planned directly adjacent to the New York Avenue Metrorail Station and opportunities for additional hotels in NoMA should be explored. NoMA has many desirable attributes for hotel location, including proximity to Metrorail, Union Station, Gallaudet University, and the federal government complex; and high visibility along New York and Florida Avenues and from the Marc and Amtrak trains.

Major opportunities for hotels exist as part of the air rights over the tracks on either side of H Street and along New York Avenue where a larger-scale hotel could provide a buffer between New York Avenue and the proposed residential streets of NoMA. The triangular site on the southeast corner of 1st and K Streets could be an interesting hotel site or office site given its frontage on K Street at the intersection with 1st Street and its potential pedestrian connections to Union Station and the proposed "Burnham Spine".

7

RESIDENTIAL DIVERSITY & STREET LEVEL CHARACTER

A DIVERSE MIX OF HOUSING

NoMA offers the opportunity for a mix of residential housing types, including rental apartments and condominiums, townhouses, townhouse/duplex units embedded in the bases of larger buildings, studio, and live-work units. A mixture of types accommodates various household sizes and configurations, a range of income levels, and makes it possible for residents to relocate within their own neighborhood when necessary, including elderly homeowners who want to downsize.

The unique character of NoMA can influence the potential housing types. As an "emerging" neighborhood, the first residents may be those who enjoy the proximity to Downtown, access to transit, and the 'edginess' of living on the fringe of established neighborhoods in an area with an industrial feeling and few pre-existing amenities. Anecdotal evidence indicates that there is an untapped market in the District for this type of place, where less conventional housing types might include live-work spaces, raw, unfinished lofts, and other types of flexible space.

Affordable and workforce housing is currently planned in the Northwest One neighborhood with approximately 520 units of deeply subsidized housing developed to replace existing units in the area. In addition, an additional 591 affordable units are planned ranging from low to highdensity arrangements. Additional affordable housing is also desirable in NoMA, however since much of NoMA is a Transferable Development Rights (TDR) receiving area, an affordable housing requirement can not be counterbalanced with density bonuses. Because this TDR designation allows, as-of-right, maximum building density, pending Inclusionary Zoning regulations will not apply to TDR recieving areas in NoMA. The TDR area boundary is illustrated on page B.1 in the Appendix.

STREET-LEVEL CHARACTER

To complement the long-term retail strategy, and to create a distinct hierarchy of street types that connects seamlessly into the surrounding neighborhoods, a general distribution for ground-floor residential elements is illustrated in the accompanying map to the right. East-west streets, with smaller rights-of-way, and direct connections into surrounding residential areas, should have ground floors with a primarily residential character. Entrances to large apartment buildings should be combined with repetitive entrances into individual units, and interspersed with semi-private gardens. While the overall scale in some areas may exceed that of traditional DC rowhouse neighborhoods, the rich texture of the lower floors will create the necessary scale transitions to create a human scaled environment that evokes the best of other DC neighborhoods.

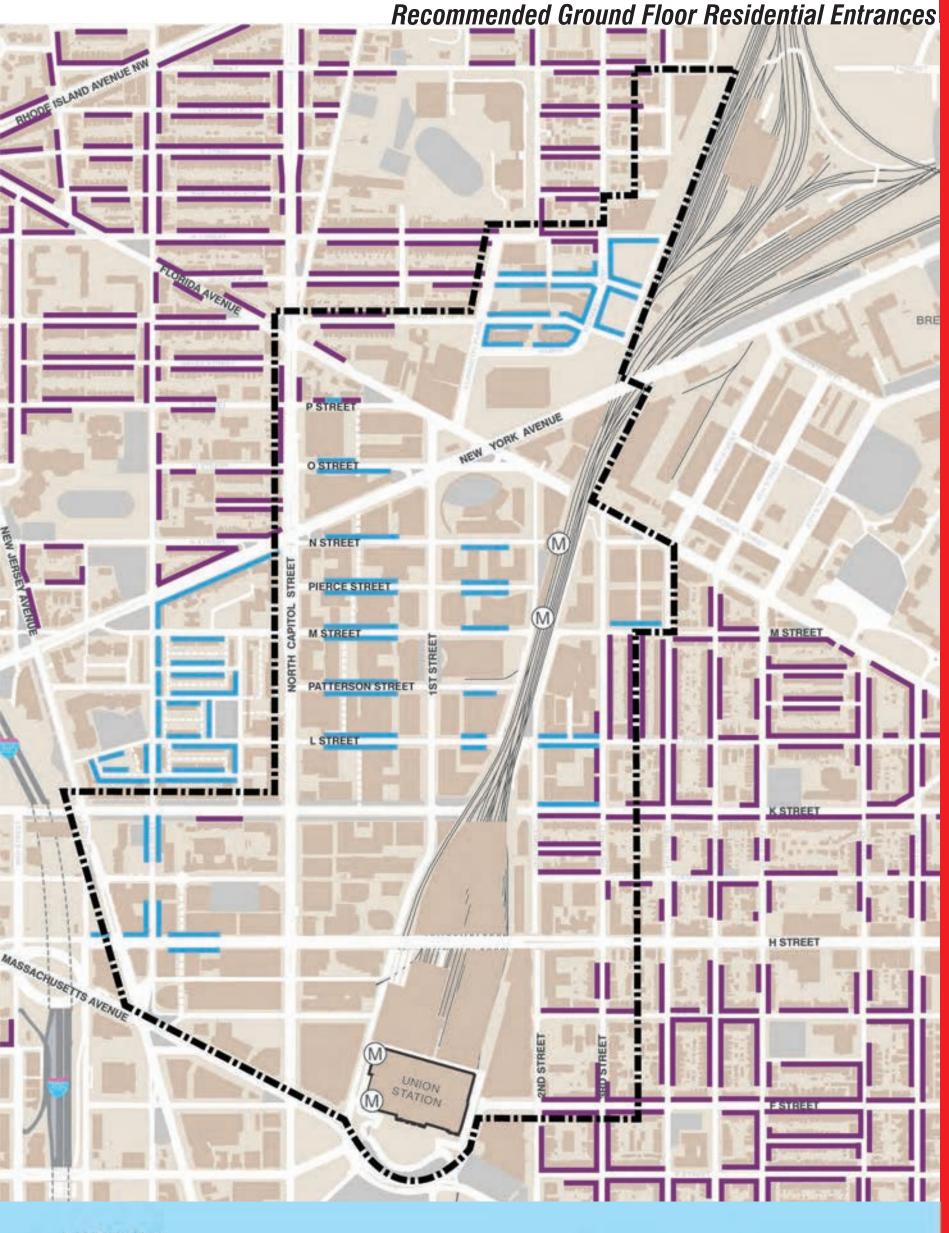








Ground Floor Residential Entrance Examples, Including "Embedded" Townhouses in Larger Residential Buildings



LEGEND

- Exisiting Ground Floor Residential with Multiple Entrances
 - Recommended Ground Floor Residential with Multiple Entrances
- Study Area Boundary

SUMMARY OF RECOMMENDATIONS

• "Recommended Ground Floor Residential Entrances Including Imbedded Townhouses" illustrates opportunities for the creation of a neighborhood-wide pattern that locates multiple, active residential entrances along east-west quieter streets (see photos on facing page). The recommended locations shown on the diagram indicate: entrances into multiple street-level residential units, potentially "embedded" in the base of larger buildings, or individual, stacked townhouses, along with residential lobby entrances of larger apartment buildings. The key goal is the creation of repetitive entrances, stoops, and locations for residents to actively engage the street, all contributing to a pedestrian-friendly environment.

Two: Infrastructure & Transportation

Pursue a balanced approach to transportation, creating a pedestrian friendly neighborhood with improved transit accessibility and vehicular circulation



The long-term future of NoMA is dependent on transportation and utility infrastructure demands keeping pace with proposed development. This plan signals the need for multi-agency coordination and a holistic approach to transportation and infrastructure investment that addresses future needs with the most sustainable environmental practices. Enhanced road networks, water and sewer lines, public transportation and other services are essential to adequately support the full development potential of NoMA. Upgrades and modifications offer opportunities to make walking, cycling, and transit use more appealing, and to improve connections between neighborhoods.

A NEIGHBORHOOD DESIGNED FOR MULTI-MODAL BALANCE INCREASING WALKING, BIKING AND TRANSIT USAGE

NoMA offers a mix of transportation options. Opportunities for improved transit access, biking, walking, and automobile movements can all be strengthened. Multi-modal access in NoMA should focus on improved connectivity to surrounding neighborhoods, overcoming barriers and providing more options for movement throughout the entire area.

NoMA's multi-modal layering should include the following: a well-connected street grid with appropriate traffic calming strategies in key locations; bike lanes linked to city-wide bike networks, including the Metropolitan Branch Trail; improved vehicular access to the existing Metrorail stations at New York Avenue and Union Station; local, city bus service with direct connections to rail transit; regional bus service with direct connections to rail transit; generous sidewalks and pedestrian-friendly streetscape designed for pedestrian movement; and local shuttle service connecting key destinations.

TRANSPORTATION IMPROVEMENTS FOR ACCESSIBILITY, FUNCTION AND SAFETY: CREATE A COORDINATED TRANSPORTATION MANAGEMENT PLAN FOR Noma and Surrounding Areas

Transportation infrastructure improvements, greater use of public transportation, and travel demand management programs are required to adequately accommodate additional traffic projections based on new development. Ongoing transportation and traffic calming studies and capital improvement schedules will require coordination to achieve the goals of the NoMA Plan in a logical development sequence. Preparation of a comprehensive transportation management plan for the larger NoMA area is of utmost importance to the area. Recommended street infrastructure improvements include: short- and long-range improvements to the New York Avenue corridor; to additional local streets, collector streets, and alleys; and changes to existing street operations, as described below.

CURRENTLY PROPOSED IMPROVEMENTS

The New York/Florida Avenue Interchange: The redesign of this major approach route to NoMA includes at-grade improvements that allow westbound traffic to access the heart of NoMA by turning right onto Florida Avenue, left onto 1st Street, NE, and then crossing New York Avenue. (See Appendix C) Approximately \$500,000 is programmed by DDOT for the design of at-grade improvements to the New YorkAvenue/FloridaAvenue intersection and this work is programmed to begin in fall 2006, with construction in fall 2007, assuming funds are available. Preliminary construction costs are estimated at \$5,000,000 and Federal Highway Administration (FHWA) safety funds will be sought. The NoMA Vision Plan supports this solution; emphasizing the importance of the design of roadway edges and medians for enhanced landscape and improved pedestrian crossing. Public art/sculptural features will create a true gateway to NoMA and Downtown DC; and longer-term improvements should be considered to enhance the visual impact of the intersection.

Rebuilding of 1st Street: The City should adjust the design of 1st Street to reflect its importance as the "main street" of NoMA prior to its proposed reconstruction in 2007. (more fully described in the "Public Realm" section, beginning on P 3.18)

ADDITIONAL RECOMMENDED IMPROVEMENTS

Creation of a finer-grained, connected street and alley network: Such a network offers the following advantages: Increased access/egress opportunities to NoMA; more direct access to individual blocks and land parcels; easier around-the-block circulation within NoMA; increased visibility that promotes way-finding, safety, and security; multiple travel route choices for point-to-point travel within NoMA; the dispersal of traffic over a wide network rather than

concentrated on a few streets, increasing network capacity; opportunities to develop a rational hierarchy of principle arterial, minor arterial, collector, and local streets and alleys; and better transit circulation and access to the New York Avenue/Florida Avenue/Gallaudet University Metrorail Station. In addition, alleys and minor streets can provide access to loading berths and underground parking garages, eliminating the need for driveways that may interrupt traffic flow and continuous street-front retail.

Rights-of-way are required to build any new street connections as public streets. Though the benefit of these links may be clear from a traffic point of view the cost implications may make them prohibitive in some cases. District government should seek voluntary opportunities through the development review and approval processes to obtain such rights-of-way, or consider purchasing them. It is recommended that 1st Street and 2nd Street Extended be classified as collector streets, consistent with DDOT's functional classification of area roadways. Most of the other recommended new streets should be classified as local streets. The recommended NoMA two-way street changes detailed at right, include converting 4th Street NE from a one-way southbound to two-way operation in the context of an overall circulation plan for the predominantly residential neighborhood east of the rail tracks.

Improved around-the-block circulation. Conversion of one-way streets to two-way streets provides additional direct access and promotes improved circulation and capacity within NoMA by increasing both clockwise and counter-clockwise around-the-block circulation (See diagram in Appendix C.1) Taken collectively, the proposed new streets, two-way street operations, make clockwise circulation possible around 35 blocks, or 13 more blocks than at present. Counter-clockwise circulation would be

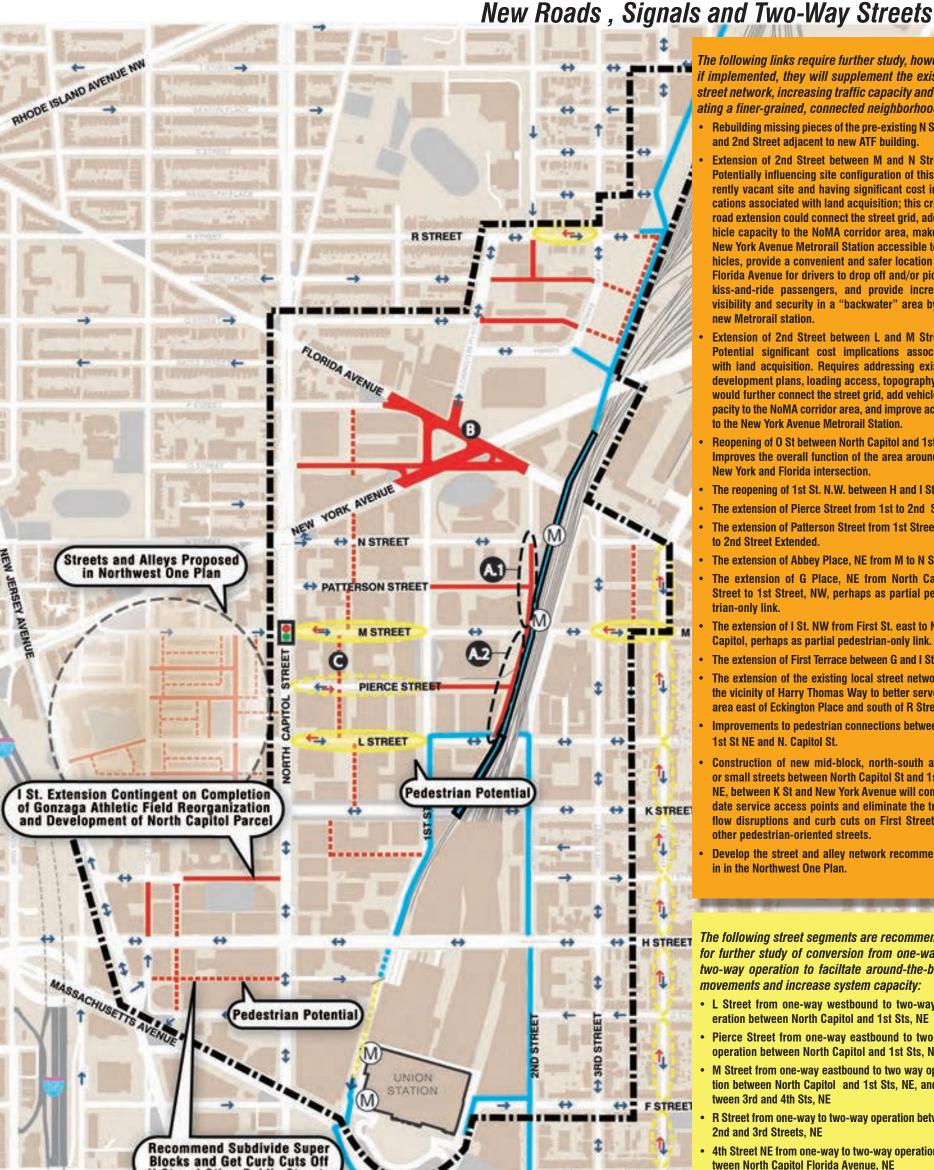
possible around 24 blocks, or nine more blocks than at present. Both clockwise and counter-clockwise circulation would be possible around 19 blocks (more than double the number today), increasing clockwise circulation by 59 percent and counter-clockwise circulation by 60 percent.

Further, consideration should be given to converting 1st Street, NE from one-way southbound to two way operation between Massachusetts Avenue/Columbus Circle and G Street. Though a relatively narrow street with high pedestrian volumes, two-way operation would make 1st Street, NoMA's "main street", accessible from Massachusetts avenue, for transit in particular.

Additional traffic signals. A new traffic signal is needed at 2nd & Florida Avenue to permit motorists to turn right and left onto and off of North Capitol Street at M Street. That new signal would be coordinated with the existing signals along North Capitol Street. Sight distances at the intersections any new streets may be limited by adjacent railroad overpass bridge abutments and columns, however this may be mitigated by the installation of new traffic signals on sides of the overpass. Both sides of M Street, at the overpass are currently controlled by traffic signals.

Safety Improvements. Safety improvements should include a variety of techniques that are mutually reinforcing. On-street parking provides a physical and psychological barrier between pedestrians and vehicular traffic and contributes to traffic calming. An off-street bike trail, such as the Metropolitan Branch Trail provides a safe route removed from vehicular traffic for both walkers and bicyclists. An improved and connected street grid will help divert truck traffic away from residentially-scaled neighborhood streets, and improved crosswalk timing increases pedestrian safety.

3.12



The following links require further study, however, if implemented, they will supplement the existing street network, increasing traffic capacity and creating a finer-grained, connected neighborhood:

- Rebuilding missing pieces of the pre-existing N Street and 2nd Street adjacent to new ATF building.
- Extension of 2nd Street between M and N Streets. Potentially influencing site configuration of this currently vacant site and having significant cost implications associated with land acquisition; this critical road extension could connect the street grid, add vehicle capacity to the NoMA corridor area, make the New York Avenue Metrorail Station accessible to vehicles, provide a convenient and safer location than Florida Avenue for drivers to drop off and/or pick up kiss-and-ride passengers, and provide increased visibility and security in a "backwater" area by the new Metrorail station.
- Extension of 2nd Street between L and M Streets. Potential significant cost implications associated with land acquisition. Requires addressing existing development plans, loading access, topography, but would further connect the street grid, add vehicle capacity to the NoMA corridor area, and improve access to the New York Avenue Metrorail Station.
- Reopening of O St between North Capitol and 1st Sts. Improves the overall function of the area around the New York and Florida intersection.
- The reopening of 1st St. N.W. between H and I Sts.
- The extension of Pierce Street from 1st to 2nd Sts.
- The extension of Patterson Street from 1st Street, NE to 2nd Street Extended.
- The extension of Abbey Place, NE from M to N Sts.
- The extension of G Place, NE from North Capitol Street to 1st Street, NW, perhaps as partial pedes-
- The extension of I St. NW from First St. east to North Capitol, perhaps as partial pedestrian-only link.
- The extension of First Terrace between G and I Sts.
- The extension of the existing local street network in the vicinity of Harry Thomas Way to better serve the area east of Eckington Place and south of R Street.
- Improvements to pedestrian connections between 1st St NE and N. Capitol St.
- Construction of new mid-block, north-south alleys or small streets between North Capitol St and 1st St, NE, between K St and New York Avenue will consolidate service access points and eliminate the traffic flow disruptions and curb cuts on First Street and other pedestrian-oriented streets.
- Develop the street and alley network recommended in in the Northwest One Plan.

The following street segments are recommended for further study of conversion from one-way to two-way operation to faciltate around-the-block movements and increase system capacity:

- L Street from one-way westbound to two-way operation between North Capitol and 1st Sts, NE
- Pierce Street from one-way eastbound to two-way operation between North Capitol and 1st Sts, NE
- M Street from one-way eastbound to two way operation between North Capitol and 1st Sts, NE, and between 3rd and 4th Sts, NE
- R Street from one-way to two-way operation between 2nd and 3rd Streets, NE
- 4th Street NE from one-way to two-way operation between North Capitol Florida Avenue, NE
- First Street, NE from Massachusetts Avenue to G Place, NE

LEGEND

Potential New Road

Potential New Minor Road or Alley



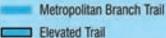
Recommended 2-Way Street



Potential 2-Way Street One-Way Street



Two-Way Street







Study Area Boundary



Recommended New Traffic Signal

STUDY NOTES:



2nd Street Extension: Critical street network improvement for transportation, service access, urban design quality, and transit (Metrorail Station) accessibility. A.1 is the extension of 2nd St from N-M Streets. A.2 is the extension of 2nd St from



NY-Florida Avenue Intersection Improvements (See Appendix C.4): Critical street network improvement for transportation safety and pedestrian access to Metro



New mid-block, north-south alleys between North Capitol and 1st Streets, NE, from K Street to New York Avenue: A significant opportunity to coordinate new north-south service access (not necessarily aligned from block to block). Specific alignment to be developed on a case by case basis as development projects move forward. Eliminate existing curb cuts on First Street and K Street, where possible and restrict future curb cuts.

DC WASA

Summary of Proposed Water Capital Improvement Program (CIP) Projects within NoMA

Large Valve Replacements

- 6th Street and K Street, NE Contract 6 (Aug. 2006 to Feb. 2009)
- 4th Street and L Street, NE Contract 2 (Ongoing to Dec. 2005)
- 2nd Street and E Street, NE Contract 5 (Ongoing to Mar 2007)
- K Street and New Jersey Avenue, NW Contract 2 (Ongoing to Dec. 2005)
- L Street and New Jersey Avenue, NW Contract 4 (Ongoing to May 2006)
- M Street and New York Avenue, NW contract 3 (Ongoing to Jan. 2006)

Small Valve Replacements

Three Locations – Contract 4 (Ongoing to May 2006)

Dead End Eliminations

- Florida Avenue and P Street, NE Contract 3 (Ongoing to April 2007)
- 5th Street and Florida Avenue, NE Contract 4 (Ongoing to Oct. 2007)

Small Diameter Water Main Replacements

Two Locations – Ongoing to (Dec. 2006)

Numerous Lead Service Replacements

- Florida Avenue, NE 2005-4 (Ongoing to Nov. 2006)
- Other By Block Locations Contract 8 (Ongoing to Feb. 2007)

HIGHLIGHT METROPOLITAN BRANCH TRAIL AS A MAJOR TRANSPORTATION AMENITY

The Metropolitan Branch Trail, a significant open space amenity for the city and region, passes through NoMA, connecting the heart of DC to Maryland and Virginia, and tying into a regional bike and trail network. This recreational attraction is also a major transportation spine that will encourage both walking and bicycling to work and play.

With connections to the New York Avenue Metrorail Station and potential future connections to Union Station; the trail can serve as a vital artery for pedestrian and bike commuters to transit access points and employment centers. It also eases the difficult north-south connections between neighborhoods to the north, including Eckington, crossing under New York Avenue, and over Florida Avenue, providing an alternate to the Metrorail station and future NoMA neighborhood amenities.

All future development adjacent to the trail should provide for trail-access points wherever possible at both elevated and at-grade locations and accommodate bike storage and bike functions to strengthen the trail's function as a transportation amenity.

District Department of Transportation (DDOT)

Summary of Investments in the Greater NoMA Area

Transportation Studies:

North Capitol Street/Truxton Circle Transportation Study

Study Limits: North Capitol Street and First Street NW from Bryant Street to G Street NE

Study Purpose: To identify transportation issues and develop alternative improvement options with regards to vehicular operations, transit service and pedestrian safety; and to analyze the feasibility of converting the intersection of North Capitol Street, Florida Avenue, Q Street, and Lincoln Road from a signalized intersection to a traffic circle.

Time frame: September 2004 through January 2006

Eckington Place, NE

Study Limits: First Street NE, Eckington Place, R Street, Q Street, Quincy Place and Lincoln Road NE

Study Purpose: To develop traffic calming enhancements, which maintain the livability and environmental quality of the neighborhoods while also ensuring the safe, efficient and economical movement of persons and goods.

Time frame: October 2003 through October 2004

KLM Small Area Traffic Study

Study Limits: K Street from First through Second Street, L Street from First through Second Street, and M Street from First through 6th Street (all NE)

Study Purpose: To assess existing and future traffic conditions in the study area and make recommendations to reduce traffic congestion at intersections, promote pedestrian safety, reduce truck traffic in residential neighborhoods and improve bicyclist mobility.

Time frame: April 2005 through January 2006

New York Avenue Corridor Study

Study Limits: Mount Vernon Square to Maryland state line, a few blocks on either side of the corridor

Study Purpose: To resolve safety and congestion issues along the corridor

Time frame: Draft report issued June 2005; final report due winter 2006

Note: Study has recommended \$1.2 billion of improvements, but funding has yet to be identified

Planned Infrastructure Improvements

First Street, NE Reconstruction

Description: DDOT will rebuild curbs, gutters, and sidewalks, upgrade the roadway foundation and resurface the street.

Limits of Work: New York Avenue to K Street

Time frame: Fiscal year 2007

Cost: \$4 Million

K, L, and M Streets Resurfacing

Description: DDOT will upgrade roadway surface, sidewalks, and street lighting.

Limits of Work: First to Second Street NE, below and

around the CSX underpasses Time frame: Fiscal year 2006/2007

Cost: \$3 Million

Second Street, NE Reconstruction

Description: DDOT will rebuild curbs, gutters, and sidewalks, upgrade the roadway foundation and resurface the street.

Limits of Work: Massachusetts Avenue to M Street

Time frame: Spring 2006

Cost: \$3 Million

Metropolitan Branch Bike Trail

Description: DDOT is in the process of constructing a multi-use trail running primarily along the west side of the red line Metrorail tracks.

Limits of Work: National Mall to Silver Spring Time frame: Ongoing

Cost (Example Segments): L Street to New York Avenue = \$6 million; New York Avenue to Franklin Street = \$2 million

Florida Avenue Resurfacing

Limits of Work: Third to H Streets NE Time frame: Spring/Summer 2006

North Capitol Street Resurfacing

Limits of Work: Bryant Street to M Street

Time frame: Ongoing Cost: \$500,000

New York Avenue – Florida Avenue Improvements

Description: DDOT plans to design and build a new traffic movement at the intersection of New York Avenue and Florida Avenue in order to create a "loop" that relieves traffic congestion at this intersection Limits of Work: Intersection and immediate surrounding area

Time frame: Design fiscal year 2006; Construction fiscal year 2008

Cost: \$2 Million

Columbus Plaza Reconstruction

Description: DDOT will modify traffic channelization, improve pedestrian safety, and enhance landscaping throughout the plaza.

Limits of Work: Columbus plaza Time frame: Fiscal year 2007

Cost: \$6 Million

H Street Corridor Reconstruction

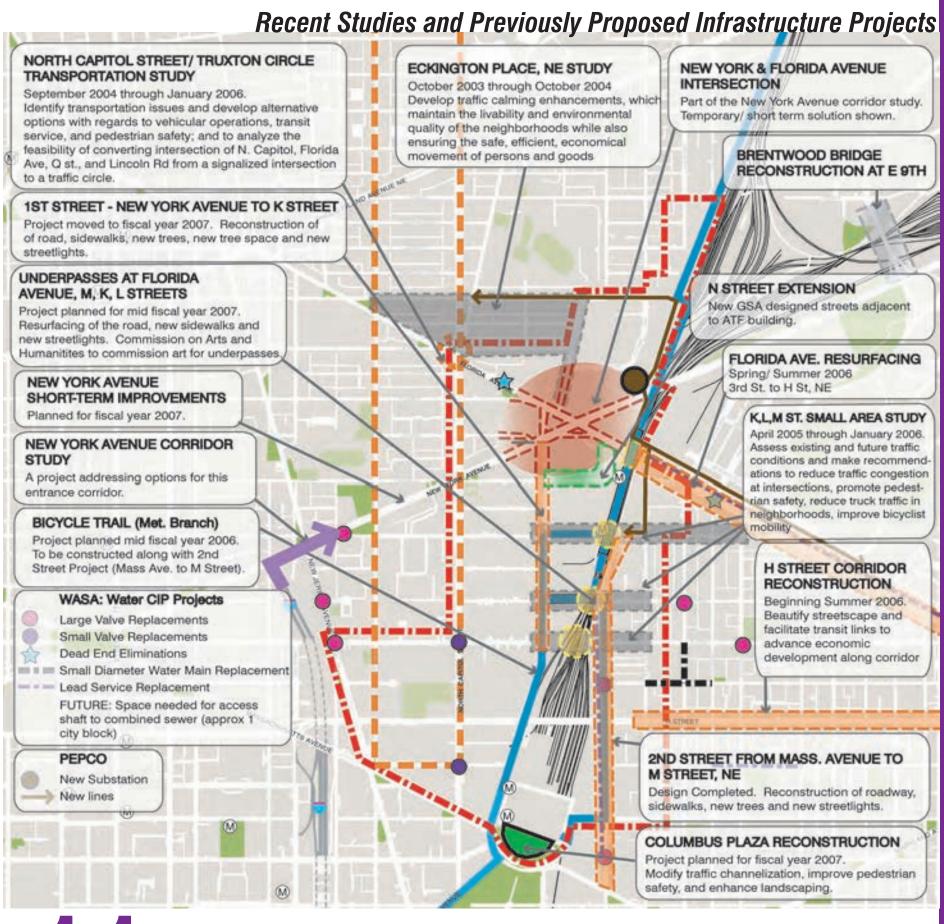
Description: DDOT will beautify the streetscape and facilitate transit links to advance economic development along the corridor

Limits of Work: Third to Fourteenth Streets NE Time frame: Beginning Summer 2006

Cost: \$20 Million

*PLEASE NOTE THAT FINANCIAL NUMBERS AND TARGET DATES REPRESENT ESTIMATES AND ARE SUBJECT TO CHANGE.

3.14



IMPROVE SAFETY, CONNECTIONS, AND ACCESSIBILITY TO NEW YORK AVENUE METRORAIL STATION

Enhanced pedestrian, bus, and auto access is required to achieve the full potential of the New York Avenue/Florida Avenue/Gallaudet University Metrorail station. Current community concerns include: insufficient signage; lack of crosswalks in some areas; lack of direct access from current Metrobus routes and stops; a sense of isolation due to currently undeveloped adjacent sites, minimal retail frontage along public roadways; and a perception of danger and inadequate safety measures.

The extension of 2nd Street between L and N Streets, if determined feasible, would significantly increase pedestrian, bus, and auto access to the station. Currently it is difficult for pedestrians to safely and comfortably cross New York and Florida Avenues due to their width and heavy traffic volumes. At-grade improvements to these principal arterials that increase vehicle-carrying capacity may make it even more difficult for pedestrians to cross these streets and improvements that balance the needs of local motorists and pedestrians over regional by-pass traffic are recomended.

RECOMMENDED SHORT-TERM IMPROVEMENTS

- Improved crosswalks with traffic-timing aimed at ease of pedestrian crossing
- Increased security presence
- New traffic signal at 2nd Street and Florida Avenue in conjunction with the new development proposed for the north side of Florida Avenue
- Improved lighting and signage when approaching station from all directions
- Improve appearance of M Street station entrance

LONG-TERM IMPROVEMENTS

- More direct Metrobus-to-Metrorail transfers by altering nearby Metrobus routes as ridership and demand increases with gradual neighborhood build-out
- Security-conscious planning at adjacent development sites, creating 'eyes-on-the-street'
- An increase in publicly-accessible vehicular access to the station, with more direct frontage for drop-offs, and an overall increased vehicular presence.

UNION STATION AND FUTURE DEVELOPMENT OVER THE TRACKS: MULTI-MODAL HUB

Union Station contains Amtrak, regional train and local Metrorail service; local Metrobus service connects in Columbus Plaza, on the south side of the station; and public car parking and limited tour bus parking is housed in the parking garage north of the station. The proximity of Amtrak, regional bus service, New York Avenue and Union Station Metrorail, and large amounts of structured parking are mutually reinforcing, and offer the opportunity for a true multi-modal experience, similar to South Station in Boston. This can be extended with the new proposed air rights development over the rail tracks and the integration of bike facilities there abd at Union Station to take

full advantage of proximity to the Metropolitan Branch Trail and to encourage ridership from surrounding communities. Union Station does not take full advantage of its status as a multi-modal hub since regional bus service (Greyhound and Trailways), important means of travel into and out of the city, are located three blocks north of Union Station. The distance is far enough away to preclude easy connections to Union Station, and signage and way-finding are inadequate creating confusion for those arriving in the city and not familiar with the area. Though within walking distance, the walk feels dangerous, particularly at nighttime, and is difficult with heavy baggage.

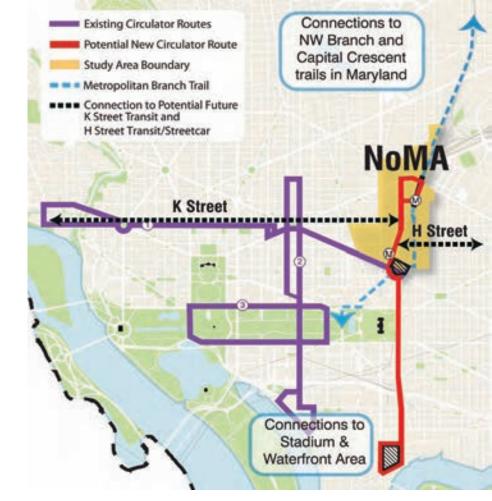
STRENGTHEN CITY-WIDE TRANSIT CONNECTIONS

In addition to NoMA's Metrorail stations, Greyhound Station and Amtrack, additional longer-term, transit service should be explored. Ongoing planning for a future transit way along K Street NW between Mount Vernon Square and Washington Circle should be expanded to include study of transit way extension east of Mount Vernon Square, through Mount Vernon Triangle, Northwest One and NoMA. Designated transit lanes on K Street and H Street NE -- either bus, street car or light-rail in the center of a redesigned K Street cross section -would connect activity centers, alleviating capacity constraints on the Red Line Metrorail within the downtown core. Connections are recommended between the proposed H Street NE street car Metrorail stops in NoMA, the Metropolitan Branch Trail, The Circulator, Union Station etc.

The addition of another 'Circulator' bus route that runs in a north-south loop connecting NoMA and New York Avenue Metrorail Station to the Anacostia waterfront and the new baseball stadium will be another important link once there is development activity to justify it. This new line could be routed on 1st Street NE in the heart of NoMa. The northern terminus of the route could loop around from 1st Street to N Street, to 2nd Street if extended, and on to M Street, thus providing the direct feeder bus service to the New York Avenue/ Florida Avenue/Gallaudet University Metro station that is impossible today. The study, justification and funding of this is supported by WMATA and DDOT. If 2nd Street cannot be extended, feeder buses could loop from 1st Street to New York Avenue/O Street, to 2nd Street (adjacent to the new ATF Headquarters Building and The Eckington), and gain some access to the New York Avenue Metrorail Station by way of N Street. This new north-south circulator line would cross the existing east-west Circulator line at Massachusetts Avenue/Columbus Circle and 1st Street, NE, and potentially the future K Street Transitway. The service could operate at five- to 10-minute headways, every day, between 7 AM and 9 PM.

DETERMINE UTILITY CAPACITIES FOR FULL BUILD-OUT

Long-term sustainability in NoMA is dependent upon coordination among the various agencies that oversee water, sewer, electric and other utility capacity. A coordinated effort must: 1) determine existing capacities; 2) determine strategies for handling potential future build-out; 3) encourage innovation and efficiency in addressing future capacity requirements; and 4) develop a strategy for funding necessary improvements. While city agencies must often, by necessity, react to current and imminent development capacity issues, action needs to be taken now to determine future needs and schedule investments to support development momentum and ease uncertainty



WALKING DISTANCE TO METRORAIL



Transportation Summary of Existing Conditions

TRANSPORTATION NETWORK

NoMA is served by a multi-modal transportation system that consists of:

- 1. A connected network of streets and highways,
- 2. Public transportation facilities and services, including Metrorail, Metrobus, commuter rail, AMTRAK, Greyhound, and other shuttle buses
- 4. Sidewalks, and
- 5. Bike paths and trails.

FUNCTIONAL CLASSIFICATION

These facilities serve many functions, including:

- 1. Accommodation of regional through traffic,
- 2. Connection of NoMA to other parts of the city,
- 3. Circulation within NoMA, and
- 4. Direct access to properties within NoMA.

The District Department of Transportation (DDOT) designates each street within NoMA according to a hierarchical functional classification system, as follows:

PRINCIPAL ARTERIALS: Sections of North Capitol Street, New York Avenue, and Florida Avenue.

MINOR ARTERIALS: Sections of New Jersey Avenue, H Street, and K Street.

COLLECTORS: Sections of 1st Street, NE; 1st, 2nd, 3rd, and 4th Streets, NE; F, L, M, P, Q, and T Streets; and Eckington Place.

LOCAL STREETS: All other streets within NoMA.

The higher functional classes primarily are intended to carry large volumes of high-speed traffic through NoMA; they provide little or no direct access to adjacent land parcels. Local streets, on the other hand, are intended to carry relatively small volumes of low-speed traffic and provide direct access to adjacent land parcels. Local streets are not intended to carry longer-distance trips.

CIRCULATION

Existing street directions and around-the-block circulation patterns within NoMA are shown on Figures C.1 and C.2 in the Appendix . Clockwise circulation currently is possible around 22 blocks within NoMa; counter-clockwise circulation is possible around 15 blocks. Both clockwise and counter-clockwise circulation is possible around only eight blocks.

EXISTING TRAFFIC COUNTS

The arterial roadways that carry regional traffic to and through NoMA are heavily traveled. Local and collector streets within NoMa are relatively lightly traveled and underutilized.

According to the New York Avenue Corridor Study, New York Avenue, west of Florida Avenue presently carries 63,300 vehicles per day (vpd). Florida Avenue, south of New York Avenue, carries 31,000 vpd. North Capitol Street carries 29,100 vpd.

H Street carries 24,200 vpd and K Street carries 14,300 vpd, according to DDOT. Collector streets, such as 1st, 2nd, 4th, and M Streets, carry only about 5,000 to 6,100 vpd, according to DDOT.

EXISTING LEVELS OF SERVICE

The New York Avenue/Florida Avenue intersection presently operates at capacity at level of service (LOS) "F" during both the AM and PM peak hours. Motorists experience long delays passing through this intersection. Long queues of standing vehicles block traffic at upstream intersections on both New York and Florida Avenues.

The intersections of the North Capitol Street service roads with New York Avenue operate at capacity at LOS "F" during the PM peak hour.

Most local and collector street intersections that are unaffected by such back-ups operate at acceptable peak hour levels of service.



LEGEND

Bus Stop Close to New York Avenue Metro

Potential Future Bus Stop

Potential Bus Route Alteration for Better Access to Metrorail Station

Study Area Boundary

IIIIIIII Existing Bus Routes

*Note: H Street east of the rail tracks is classified as a "Great Street" and is proposed for reconstruction, economic development, and the addition of a street car line.

Three: Public Realm & Open Space

Create a vibrant, highly walkable environment with landscaped, attractive streets and open spaces, active ground floor uses, and strong pedestrian links

North Capitol Street, Before



All public land ownership in NoMA is within the street right-of-way, making the creation of a significant open space network one of the area's greatests challenges. A three-pronged approach for a high quality public realm includes: major streetscape enhancements, coordination of privatly-owned open spaces, and expansion of existing and potential recreation ammenities like the Metropolitan Branch Trail.

North Capitol Street, After



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STREETSCAPES AS OPEN SPACES

The streetscape is the primary open space available in NoMA. A detailed Public Open Space Plan that focuses on the design of streets and sidewalks and includes guidelines for the development of the public space that is built as part of private development is one of the most important implementation actions that will result from his plan. The goal is to fully utilize the streets and sidewalks as open space amenities and places for neighborhood life. Because of its importance as public open space, all vaults and above ground utilities should be located in alleys. Existing vaults should be incorporated into the design of the landscape and streetscape.

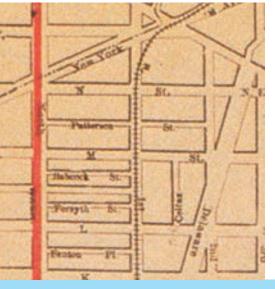
LANDSCAPING

Distinctive landscape design should be included to unify the public street and establish its distinctive character. These could include clusters of under-story trees and gardens along K Street, retail and public art along 1st Street, and seasonal plantings in triangles and medians. Landscape design should be coordinated with other transportation and infrastructure planning from the beginning to maximize space for trees and planting areas.

SIDEWALK RETAIL

In addition to park and landscape elements, sidewalks with sufficient width have the potential for specialized retail functions, such as outdoor cafe seating, sidewalk selling with merchandise in front of opened-up storefronts, and vendor retail. Vending should be located at intersections where there are larger areas of paving, leaving the center of blocks open for retail and and informal gathering in keeping with its "mainstreet" character.

Map of Washington, D.C., 1900



3.18

STRONGLY DEFINED MAJOR CORRIDORS

NoMA's streets and sidewalks will be the network of public spaces that reconnects the area's neighborhoods with streets and open spaces that define them. Each street will be defined by its visual qualities, as well as by the uses that line it, be it residential, retail, or office.

NORTH CAPITOL STREET: "GRAND, SYMBOLIC BOULEVARD"

North Capitol is the front door for NoMA and Northwest One, where residents a visitors in over 30,000 vehicle trips a day get their impression of the area. Its character is formal and ceremonial, and one of a handful of streets in the District with a direct site-line to the capitol dome. For pedestrians, the street should connect the NoMA and Northwest One neighborhoods. Ground floor retail should be secondary to other land uses on the corridor.

K STREET: "NEIGHBORHOOD LINEAR PARK"

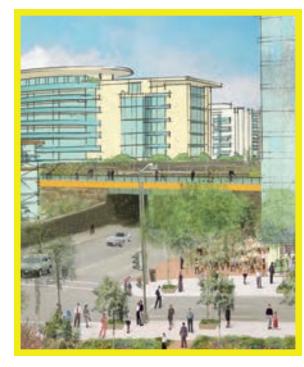
The unusually wide right-of-way on K Street creates a deep setback for retail and ample space for landscaping and outdoor seating. The sidewalk and planting areas should follow the streetscape design being implemented in Mount Vernon Triangle, including two pedestrian sidewalks, generous planting areas, and double rows of street trees.

1ST STREET: "NoMA'S MAIN STREET"

As the north-south street crossing through the center of NoMA, 1st Street is an important corridor that will become a "main street" lined with neighborhood-serving retail and places to meet neighbors and co-workers. It is tree-lined and has a more intimate, garden-like quality, created with seasonal plantings and public art.

H STREET: "THE EAST-WEST CONNECTOR"

This street is defined by its diverse character and its historic buildings. It serves multiple neighborhoods as a shopping street, providing strong neighborhood connections, east-west. There is an opportunity to expand its character and role with future connections into air-rights development over the tracks; and with a larger-scale brick-architecture and enhanced character west of North Capitol Street.



First Street, NE, Before



First Street, NE, After



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A FINE-GRAINED STREET GRID WITH ACTIVE MINOR STREETS

REINTRODUCE STREETS/ALLEYS

The grid of streets and alleys that developed as part of the original street design of DC should be restored and provide the framework for the introduction of new streets and alleys in the NoMA neighborhood.

The consolidation of multiple smaller properties into large development blocks included some street closings and a loss of a tight-knit urban pattern that makes for well-scaled and walkable neighborhoods. Closed streets should be reintroduced to create a more intimate neighborhood with an urban scale distinct to this area. Development on smaller blocks will result in a built environment with greater architectural diversity and additional street frontage for commercial, retail, and residential uses.

Reopening eliminated streets - like sections of O Street, P Street, Q Street, Patterson Street, and Pierce Street - will increase vehicular mobility through the NoMA area, providing additional connections and resulting in an increase in area traffic capacity. This will also alleviate congestion caused by

limited options for getting in and out of the neighborhood.

Side streets extending off of K, 1st, and North Capital Streets are narrower and should be a smaller scale in character.

POTENTIAL ADDITIONS TO THE STREET NETWORK RECOM-MENDED FOR FURTHER STUDY INCLUDE:

- Extension of 2nd Street from N south to M Street.
- \bullet Extension of 2nd Street from M south to L Street.
- Re-opening of O Street between North Capitol and 1st Streets.
- Re-designed street and alley system in the Northwest One redevelopment project.
- Extension of Q Street NW, east of Eckington Place, as part of the new Fairfield development.
- Coordinate service/parking access on multiple blocks from K Street to New York Avenue, between North Capitol Street and 1st Street.

EXISTING LACK OF OPEN SPACE



PUBLIC OPEN SPACE AND RECREATION SPACE

OPEN SPACE

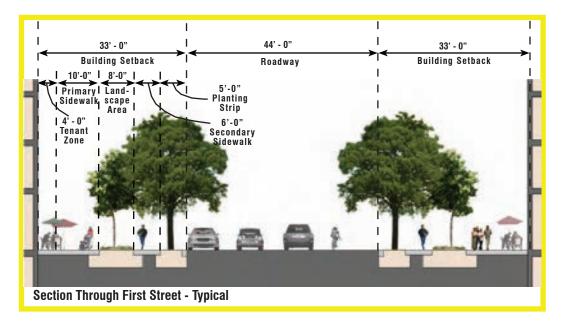
This plan anticipates a long-term need for one or more small to medium size open spaces that can function as the symbolic heart of the NoMA neighborhood. Given the difficulty of anticipating long-term market conditions and the cost of acquiring property, short-term recommendations for parks are limited to areas within extrawide street rights-of-way and under public control. The most sigficant open spaces and amenities should relate to K and 1st Streets, two streets that cross the NoMA area from one end to the other and that intersect in a central location.

- "K Street Linear Park": A continuation of the K Street design currently underway in Mount Vernon Triangle, to the west, is extended to NoMA. Its wide right-ofway should be landscaped and follow the MVT public realm guidelines.
- "1st Street and 1st Street Park": Its generous rightof-way allows for a continuous planting strip at the
 curb and a second landscaped area for seasonal
 plantings and public art. Paved areas at intersections should emphasize building entrances and provide sites for sidewalk vending. Between Pierce and
 M Streets, a larger planting area in the heart of NoMA
 and on both sides of the street, create a park.
- "Burnham Park": A neighborhood park is proposed in public space at the intersection of 1st and K Streets, and the "Burnham Spine". This park will allow for active and programmed events and be more urban in character. This location is both prominent and highly accessible to residents east of the tracks and could be expanded as the neighborhood population grows.
- Miscellaneous open space opportunities: Take advantage of small, potentially unbuildable parcels, especially along the tracks, to tie into the Metropolitan Branch Trail and to incorporate sculpture.

RECREATION SPACE

With the potential for a significant increase in NoMA's residential and daytime populations, adequate public recreation space will be important to neighborhood life. With a lack of public land to develop into traditional public open space, both passive and active recreational uses, creative options need to be found. This plan recommends additions to the Metropolitan Branch Trail and two additional potential locations for future recreational uses:

- Uline Arena: Nestled between the railroad tracks and residential blocks to the east, and close to the New York Avenue Metrorail station, the old Uline Arena is an ideal location for recreational uses. Its unique architectural form, history of public use, flexible spatial characteristics, and outstanding location all contribute to its desirability. The main hall and adjacent development parcels could easily accommodate a mix of recreational uses with other neighborhood-friendly uses, such as commercial, retail and residential. Indoor activities could include playing fields/courts, and other smaller-scaled recreational activities, and may be compatible with satellite sports-facility needs of nearby educational institutions, like Gallaudet, Gonzaga, or McKinley Technology High School.
- Air-rights development over the tracks: The 2-3 million potential square footage of the air-rights development to the north of Union Station would allow ample space for the integration of a recreation component into the program. This could include open air facilities that are local and regional amenities. As with Uline Arena, proximity to transit, location between NoMA and Near Northeast neighborhoods, and adjacency to the Metropolitan Branch Trail, all contribute to the viability of these uses.



Landscape Guidelines (More detailed design work will be undertaken as part of proposed NoMA Public Realm Design Project)

- Sidewalk shall be warm-toned concrete with aggregate, scored 3'x3', with special paving insets at key locations to be determined as part of public space review process.
- Landscape area shall include a row of trees, seasonal plantings, and public art.in key locaions
- Planting strip at curb shall include street trees.
- 4' paved area between secondary sidewalk and curb every 20' is required where there is on-street parking.
- 6-14' walkways can connect the primary and secondary sidewalks at 20' intervals and can be used for outdoor seating and cafes.
- All plants and shrubs shall be no higher then 24".
- Mature flowering and shade trees shall be limbed-up 8'.
- Evergreen trees are not allowed.
- · Vaults and above ground utilities are not allowed.

Note: See Appendix F.I for additional street designs showing sidewalks and open space.

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PRIVATELY OWNED PUBLIC SPACES

Given the lack of publicly-owned land for a public park, privately-owned and planned open spaces have a heightened importance wherever it is feasible to keep them accessible to the public. With such a large amount of new development being planned simultaneously, there is the opportunity to coordinate the design and placement of open spaces within adjacent developments for the maximum impact. Where possible, these spaces should be coordinated so they facilitate movement throughout the neighborhood for pedestrians and bicyclists; make better use of small, isolated spaces through potential consolidation; create midblock connections; and result in a variety of hardscape and planted environments.

In addition the opportunity exists to use currently vacant, privately-owned spaces, for temporary installations of sculpture and other artworks. This would bring identity and activity to the area and make it more marketable in the short term.









LEGEND

Paved Public Open Space for Pedestrian Traffic

Recommended Unpaved Public Open Space

Existing/Improved Public Open Space

Existing Semi-Public Open Space

Metropolitan Branch Trail

Elevated Trail

---- Street Trees

Recommended Elevated Trail Access Point

Recommended Extension of Elevated Trail

Recommended community/Recreational Use (Structured)

Recommended Trail Connections

Study Area Boundary

SUMMARY OF RECOMMENDATIONS

- "K Street Linear Park", "Burnham Park" and "1st Street Park" are recommended open spaces that occupy areas under public control by taking advantage of wide public rights-of-way in key locations. (See 1st Street example on facing page).
- An area of opportunity for central NoMA park has been shown above, indicating a desirable location for a more ambitious future public open space, that may become necessary as NoMA's population grows.
- Hypothetical interior-block pedestrian connections have been shown above to
 illustrate a significant opportunity to coordinate privately-owned spaces into a
 cohesive, publically accessible network. Specific alignments will be determined
 on a case-by-case basis and would most likely not be feasible on sites with
 residential development.

IMPORTANT PEDESTRIAN CONNECTIONS

CONNECTIONS TO UNION STATION & AIR-RIGHTS DEVELOPMENT: Union Station faces south toward the Capitol building, with its monumental facade and main entry visible along Massachusetts Avenue. Inadequate connections to the north present a significant urban design challenge for the emergence of NoMA as a residential neighborhood and an exciting workplace. The anticipated new residents, workers and visitors will benefit from improved connections to Union Station, and to the mixeduse air-rights development proposed above the railroad tracks. In addition to a neighborhood-wide strategy of improved streetscapes and interconnected public realm; specific actions can also be taken to improve vertical pedestrian connections to the upper level, including the elevated segments of the "Burnham Spine":

- Improve the existing Metrorail entrance through the stone wall along 1st Street, NE. Greater visibility, achieved with improved lighting, signage and weather protection could upgrade the image and significance of this connection to the Metrorail system and to the escalator that leads up and in to Union Station.
- Provide for a significant pedestrian connection between the future air-rights development over the tracks and the development site at the southeast corner of K and 1st Streets.

- An appropriately grand, highly visible and publically accessible connection, may require projection into public space.
- Activate the existing H Street viaduct over the tracks with entrances from the public sidewalk to the future air-rights development. Continuous building frontage, multiple building-access points, and sufficient architectural and visual interest, can transform this section of H Street into a continuation of the "Great Street" design and tramway, improving continuity east to west, and west to east.

IMPROVED PEDESTRIAN LINKS TO SURROUNDING NEIGHBORHOODS: As discussed in the Transportation section of this Development Strategy, the streets and sidewalks of NoMA do not support pedestrian access and flow north-south or east-west. Barriers separating the central NoMA area from surrounding residential neighborhoods include New York and Florida Avenues, North Capitol Street and the elevated railway tracks. Pedestrian links east-west, under the elevated railway tracks, occur at the underpasses, which are in poor condition and poorly lit. Pedestrian-oriented public realm improvements at all underpasses should include: corrections to drainage problems, structural and surface upgrades, new sidewalks, improved lighting, the incorporation of artwork, and consideration of active uses (such as Metrobus dropoffs, bike facilities, etc).





View looking east towards the tracks from a typical NoMA residential street. Streetscape continuity and Public Art at the railway underpasses will help with better pedestrian connections between east and west sides of the tracks

METROPOLITAN BRANCH TRAIL: THE "BURNHAM SPINE"

In addition to the Metropolitan Branch Trail's role as a major transportation amenity, it is also a major open space and recreational amenity. Five aspects of the Trail should be developed to maximize its accessibility, function, identity, and image:

- Elevated trail extension: Extend the existing elevated portion southward for eventual connections into airrights development over the tracks, to elevated H Street, and on into Union Station. Currently, the elevated portion of the trail terminates between L & M Streets. If the trail were continued southward alongside the railroad tracks it could become a major entry point into Union Station, accessed directly from the NoMA neighborhood. This would give Union Station a new 21st century, north-facing entrance.
- Vertical transition elements: Vertical transitions between the trail and the ground should be encouraged at frequent intervals, and should provide exuberant architectural 'markers', or 'tower' elements that become symbolic gateways to this transportation and recreation system. Vertical transitions may combine ramps, stairs, elevators -- either attached or freestanding -- such as the existing elevator tower at the New York Avenue Metrorail Station.
- Guidelines for private development abutting trail: Future adjacent development should be designed to enhance the function and quality of the Metropolitan Branch Trail, taking into consideration overall circulation patterns and access between the trail and the new buildings and sites. The incorporation of vertical circulation elements, direct connections, lighting, planting, artwork, and other bike-related amenities will take advantage of this unique neighborhood feature.
- Connections to the Eckington neighborhood: Trail visibility and points of access to and from the Eckington neighborhood should be maximized, providing a much-needed safe pedestrian connection for residents north of the Florida-New York Avenues intersection.
- Connections to National Mall points north and south: Current trail plans end the dedicated section at L Street on the south, transferring to designated on-street lanes. Trail extensions into neighboring states and the convenience and utility of the system, need to be made in order to expand the trail's role as both transportation amenity and a recreation feature of NoMA.



Improvements to the Metropolitan Branch Trail create a new NoMA feature, the Burnham Spine, with multiple vertical connections to street-level and future air-rights development over the tracks and a green buffer between the trail and tracks

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OPEN SPACE AT FLORIDA & NEW YORK AVENUE INTERSECTION REDESIGN

The Florida and New York Avenue intersection is one of the District's most troublesome intersections. It is congested, confusing, and dangerous for both motorists and pedestrians and has high number of accidents each year. Traffic flow and pedestrian safety are currently being addressed by DDOT's redesign, and proposed reconstruction utilizing the concept of a "virtual circle" redirecting traffic flows in a counter clockwise direction, on existing streets, while maintaining existing property lines.

However, the intersection's spatial definition and potential aesthetic impact as a major 'gateway' moment when entering central DC from the east is far from realized. This intersection should become a symbolic entrance to

both NoMA and the entire downtown historic area (as defined by the L'Enfant Plan).

When a detailed public realm design plan is undertaken for the NoMA neighborhood, as recommended in this plan, the design of this important place will be one of its major tasks. By shaping the 'virtual circle' with surrounding architecture and landscape design features, a major entry space and visual landmark can be created.

Four: Identity & Building Design

Design to a new standard of urban design, architecture, and high-quality materials that create a lasting, competitive identity

The character, image, and marketability of NoMA will be shaped by its architecture. The opportunity to establish an identity exists now while the earliest projects are being designed, hopefully avoiding what some of Washington's more dissappointing districts are being criticized for: sameness and lifelessness. Employing the best of contemporary design and the latest environmentally sustainable building technologies; highlighting NoMA's historic resources; emphasizing pedestrian experience, detail, and the design and maintenance of public space; this approach will produce a humane, memorable, and lasting place.











CREATE IDENT CONTEMPORA

CREATE IDENTITY & MARKET STRENGTH THROUGH INNOVATIVE, CONTEMPORARY ARCHITECTURE

Architecture is a means for crafting a strong competitive identity for a district, a district with qualities and characteristics that do not exist elsewhere in the regional marketplace. Design decisions made with "neighborhood-building" in mind suggest a kind of architecture that goes beyond incremental block-by-block developments to carry out multi-block concepts, such as high-performance building design, green roofs, and many other concepts laid out in this vision and development strategy.

The varied urban settings that feel so authentic successfully combine an area's inspiring, indigenous buildings and infrastructure with quality, new design by both local and nationally-renowned architects. In NoMA, diverse new architecture can strive for a lively urbanity, with expressive features, sculptural forms, color, and dynamic roofscapes - perhaps achieved by using traditional materials in unconventional ways or unconventional materials in traditional ways. Special focus on design emphasis, and/or architectural detail at the lowest 3 levels of buildings will intensify the pedestrian experience. Though NoMA is considered "downtown" by many, the inclination to provide formulaic "West End", downtown and K Street office buildings may prove counter-productive to marketing the NoMA neighborhood and giving the metropolitan area something it currently does not have.





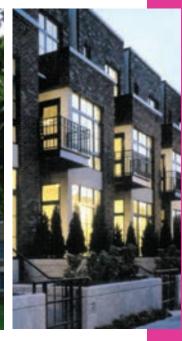




ARCHITECTURAL RESPONSE TO WAREHOUSE/ INDUSTRIAL PAST

NoMA has a rich history, influenced by the location of the rail lines, the Union Terminal Market, Gonzaga, Union Station, the main Post Office, the Government Printing Office complex, and other landmarks we still treasure. The unique Florida Avenue Market, beautiful historic rowhouse neighborhoods, ordinary warehouse buildings and back-alley buildings, and large and iconic historic architectural resources comprise the 'raw material' of NoMA. By utilizing these unique historic buildings and landmarks as neighborhood anchors and destinations, the NoMA neighborhood can shape original places, as has already occurred with the XM Radio Headquarters building and One NoMA Station. Contemporary architecture that integrates existing historic buildings can compliment them and address the smaller scale of rowhouse streets.















TAKE FULL ADVANTAGE OF HISTORIC RESOURCES

Existing buildings should be considered an asset to NoMA and a source of inspiration, be it based on their work-horse character or their formal and symbolic importance. A couple of NoMA's warehouse buildings have already become landmarks within the neighborhood; One NoMA Station and the XM Radio Corporate headquarters each illustrate how existing architecture can be starting points for innovative reuse. Their strong character, tall ceilings and large open spaces were highly-desirable for office space, but could have accommocated cultural uses or residential studio lofts. Other buildings remain underutilized and stand out as having great adaptive reuse potential, such as Uline Arena, the National Capital Press Printing Plant, the Smithsonian Warehouse, and the three US Government Printing Office buildings. Some more ordinary buildings might be incorporated into compositions with contemporary infill construction to give them a dramatic new life.

In addition, the wall along 1st Street that supports the rail lines is built of massive stone blocks, and though not a building, it is part of the neighborhood's historic infrastructure and merits dramatic lighting. And the L'Enfant Plan, a National Landmark, should be emphasized with street defining buildings and framed view corridors.



Existing ice house and Uline Arena



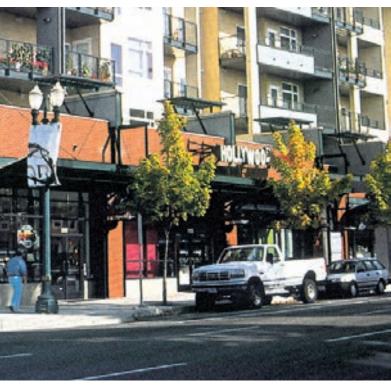
Existing buildings in NoMA

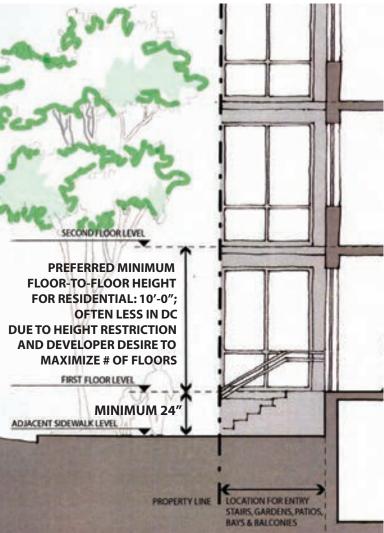


Sawtooth Monitor building









GROUND FLOOR DESIGN EXCELLENCE

Excellent ground floor design will contribute to NoMA's success in attracting sustainable concentrations of retail and neighborhood services and realizing the safe, walkable streets that will attract office and residential tenants. Maximizing the street presence and viability of retail will allow NoMA to attract local and national retailers. This is particularly important at key intersections along First Street and along K Street where a concentration is called for in the Plan in order to create neighborhood centers in the short term with intermittant retail filling in over time as the market dictates. (See page 3.9.)

Minimum main level heights, such as 14', are recommended in "high priority" locations at a minimum. Sunken entries are highly discouraged, with no difference, or a minimum difference, in floor level from interior to exterior sidewalk. Main levels should be designed to make successful future conversion to retail possible, even when designed for some other interim use.

Residential buildings with multiple entrances add visual interest and activity to the streets. Ground floor residential should be located several feet above the street level to allow for privacy.

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INNOVATIVE SECURITY DESIGN TECHNIQUES

Single-use office buildings and security installations in the public space have repeatedly proven to be detrimental to a vibrant public space environment. They lead, in many cases, to poorly-defined, inconsistent street walls and dead, inactive blocks by limiting the possibility of successful retail environments. As a result, the security requirements of some Federal facilities and tenants may be incompatible with the goals of active, pedestrian-friendly ground floors. In addition, the policy of the District's Public Space Committee is to deny perimeter security in public space. Projects that have security requirements should do the following:

- Design for a mix of uses, including potential ground floor retail.
- Require any perimeter security and fortification to occur at the building wall and not in the public space.
- Avoid setbacks (including the 50' setback for level-5 buildings).
- When proceeding with projects with security requirements, utilize the National Capital Planning Commission's "National Capital Urban Design and Security Plan", and "Objectives and Policies" and other ongoing security-design work as key references for achieving quality building and street design. These policies offer a range of techniques for mitigating the negative urban design impacts of many security installations seen around the District. (See Appendix E.1-3).







Five: Existing Neighborhoods

Preserve and enhance surrounding neighborhoods and their historic landmarks. Guide redevelopment to address unmet community needs NoMA is surrounded by established neighborhoods that are a great legacy of the District and home to many. Change occuring at the edges of these areas can be managed in a way that improves conditions for residents and brings additional vitality and adequate services. Achieving the right fit between new developments and this existing context requires transitions in scale, respect for identity and distinctions, appropriate connections and traffic management.

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SCALE TRANSITIONS

New development in and around existing adjacent rowhouse neighborhoods should exhibit sensitivity to the existing context and ensure that a compatible scale is achieved. When low-scale rowhouse fabric abuts areas planned for transition to higher-density development, good architectural design can achieve a harmonious transition, adding value. Abrupt changes in scale can create infringements on perceived neighborhood boundaries, adversely impact light and views, and alter the pedestrian experience. Or they can be well designed assets, bringing additional residents that provide the market for new services and amenities.

Achieving a compatible scale relationship requires the consideration of lot size, bulk, height and architectural quality. In cases where the site is large, it may be most important to design multiple, smaller, and less bulky buildings on sites closest to the finer-grained rowhouse buildings. The sub-division process is handled by administrative procedure. Evaluation of this process is recommended in order to understand the impact it is having on the compatibility of new development in R-4 row house areas.

Successful resolution of scale transitions can also be acheived through facade articulation, mitigating the desired higher-density development with good architecture, including quality materials and attention to details.

Street trees, understory plantings, gardens and garden walls, grade changes, steps, rails, and other elements of pedestrian-oriented streetscape, can address scale and create a lovely environment even with buildings that may be considered tall by some. These design techniques can create visual transition and help maintain an appropriate neighborhood scale, as well as giving the appearance of narrower streets and calming traffic.

Building scale has been addressed along the H Street corridior through the recently adopted H Street Overlay. It calls for taller infill development along H Street to emphasize the importance of this retail corridor, stepping down to adjacent low-scale residential areas.



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CONSERVATION OF ROWHOUSE NEIGHBORHOODS

Washington DC's many rowhouse neighborhoods, with their variety of styles, are a feature and defining element of the city. While the individual buildings in a row may not all be architectural gems, the agglomeration and configuration of blocks, their gardens, sidewalks, and streets confer a great collective value within the community. Current land and construction costs in and around the downtown make it difficult to construct new rowhouses, however existing rowhouse neighborhoods continue to provide much of DC's family housing and great places to live.

- Proposed new development within rowhouse areas will be required to follow existing zoning designations and will typically not be given positive recommendations. Tear-downs of existing rowhouse fabric are strongly discouraged.
- Destination retail uses should reinforce existing retail concentrations, such as the H Street retail corridor, and will be discouraged on the quieter residential streets, avoiding unnecessary amounts of automobile traffic.
- Office uses will be limited in the transition areas adjacent to row-house areas east of the rail tracks and in some areas north of New York Avenue. The intent is to largely consolidate office uses in areas west of the tracks, and to avoid uses that are incompatible with existing rowhouse neighborhoods.

NEIGHBORHOODS ADJACENT TO NoMA







BALANCING SCALE/DENSITY WITH POTENTIAL FOR INCREASED NEIGHBORHOOD AMENITIES

Increased density both within established neighborhoods and at their fringes requires a balanced view of the potential trade-offs. Approvals of zoning requests that do not fit within the matter-of-right zoning, should be considered only when 1) they are part of a PUD application, 2) the project furthers Comprehensive Plan objectives without negatively impacting the surrounding neighborhoods and, 3) the proposed project exhibits design excellence and the proffered amenities are a clear benefit to the public. In proposing a project, the developer should consult regularly with local community and neighborhood organizations and allow them to weigh in on the discussion. The Zoning Commission hears and decides requests for approval of PUDs and is required by statute to give "great weight" to the recommendations of the Office of Planning and the affected Advisory Neighborhood Commissions (ANCs).

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HISTORIC PRESERVATION

Historic preservation plays an important role in creating and maintaining authentic neighborhoods, maintaining a visible record of how they developed. A number of buildings in NoMA have, or are pending, historic designation. In addition, the Office of Historic Preservation has identified other buildings that may be considered elegible for listing on the National Register of Historic Places and given local landmark designation, including a potential historic districts in Near Northeast, Truxton Circle and Eckington. Any development involving these buildings should apply the accepted standards for preservation, renovation and adaptive re-use. (See map of both existing and potentially eligible landmark designations on adjacent page, 3.29.) An critical step for each neighborhood to determine whether this is something they want to consider, and if so, to undertake survey work, possibly working with DC Preservation League.

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CONTINUED COMMUNITY INVOLVEMENT

Including the residents within the emerging NoMA neighborhood and from adjacent neighborhoods in the planning process and in the implementation of individual public and private sector projects will be invaluable to the development of NoMA. An ongoing dialogue with residents and community organizations, with continued updates on development activity, will ensure periodic community feedback for what is likely to be an extended period of construction activity.

Periods of heavy construction can be disruptive for residents and cooperation and sensitivity to the potentially negative impacts and inconveniences are necessary to minimize the impact. Construction staging areas for private development projects should generally be limited to private property to accommodate pedestrians and avoid disruptions to the public sidewalk. Construction areas sometimes spill over into the public realm, making the use of sidewalks difficult and limiting access to the Metrorail station. Monitoring and enforcement should occur.

The impacts of construction truck traffic on quieter residential streets should also be minimized by establishing routes on a project-by-project basis that direct trucks to the most efficient access and egress, avoiding small-scale residential streets. Both the Near Northeast and Eckington neighborhoods are currently disrupted by truck traffic associated with the Florida Avenue Market and FedEx. New Streets and alleys, recommended for further study in this Plan would provide alternate routes to the major arterials.

Walking is considered an important means of transportation and pedestrian safety is a high priority in the District, including the NoMA area. A multi-pronged approach to pedestrian safety should be advocated as part of the short, mid, and long-term actions recommended in this Plan. Basic infrastructure, including adequate sidewalks, safe street crossings, lighting, interim security lighting and safety measures for undeveloped areas, project programs that contribute to active sidewalks and 'eyes on the street', and quality designs for the street and sidewalk will all help make NoMA a safer place to walk.

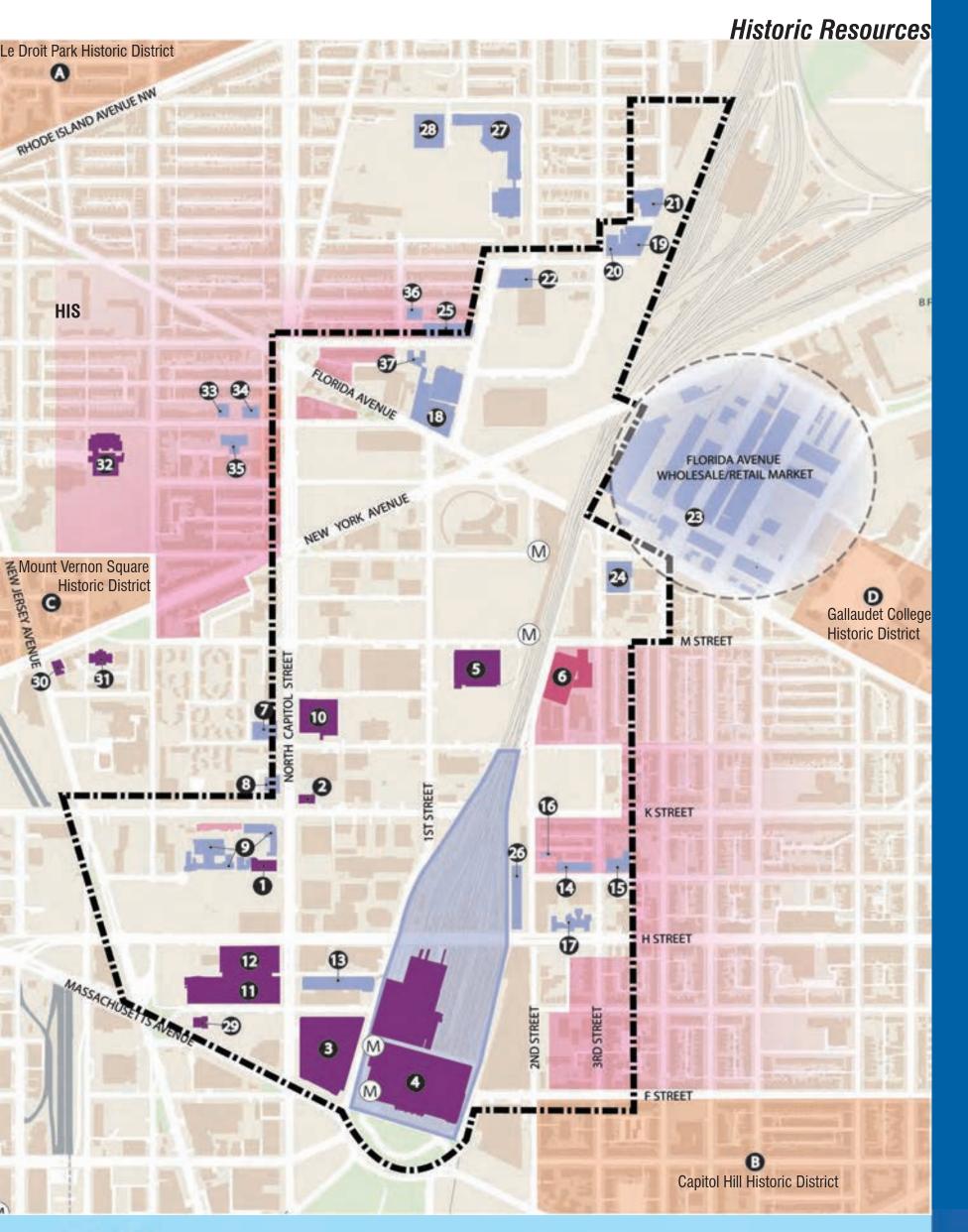
33

PARKING

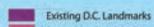
Future large-scale development in NoMA will inevitably lead to an increased demand for parking. Even with NoMA's extraordinary access to both city-wide and regional transit, peak parking demands are likely to have a spillover effect in surrounding neighborhoods. Innovative parking strategies for the entire NoMA area, such as shared parking, group meters, and car sharing, should be combined with enforcement and monitoring of illegal parking on adjacent neighborhood streets. Recommended parking strategies could include non-striped parallel parking, allowing more cars to squeeze into a given length of parking along curbs. Group parking meters, like those used on M Street in Georgetown, generate more revenue than standard meters and, if price adjusted,

ensure that spaces will be available at most times. Shared parking arrangements are particularly useful in mixed-use areas where the range of uses have alternating peak parking demands, such as office buildings that have large amounts of parking available for retail, cultural, entertainment, and recreation uses with peak usage during non-working hours.

Surface parking lots are discouraged along any sidewalk, and should have permeable surfaces, defined boundaries, trees and other landscape elements to provide stormwater control, shade and a visual buffer.



LEGEND



Properties Pending Designation Potentially Eligible Properties

Registered D.C. Historic District Potential Residential Historic Districts

■ I ■ Study Area Boundary

Existing D.C. Landmarks

- Saint Aloysius Catholic Church, 1858-59
 Saint Phillip's Church, 1891
 City Post Office, 1915

- 4 Union Station, 1903
- 5 Woodward & Lothrop Service Warehouse, 1938
- 10 Chesapeake and Potomac Telephone Company Warehouse, 1925
- 11 U.S. Government Printing Office Building #1 & #2, 1899, 1926 12 U.S. Government Printing Office Building #3, 1940
- 29 Gales School, 1881
- 30 Augusta and Louisa Apartment Buildings

- 31 M Street School, 1890
- 32 Armstrong High Schoo; 1902

Properties Pending Designation
6 Uline Arena (1941) and Ice Manufacturing Plant (1931)

Eligible Properties

- 7 Mt. Airy Baptist Church, 1926
- 8 The Academy of Notre Dame, 1920 9 Gonzaga College High School, 1911
- 13 U.S. Government Printing Office Building #4, 1939
- 14 Tophams Building Corporation Factory, 1928
- 15 Vogue Dry Cleaning Company Building, 1926 16 Walters Milk Depot, 1913
- 17 St. Joseph's Home and Convert of the Little Sister of the Poor, 1881 18 Judd & Detweiler Printing Company, 1913, 1920, 1922, 1937, 1947
- 19 August Orhlein Bottling Plant, 1908 20 National Geographic Society Warehouse, 1924
- 21 Miller Bakery Warehouse, 1907 22 Sanitary Grocery Company Warehouse, 1930

23 Union Market Terminal

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- 24 National Capital Press Plant, 1931
- 25 Q Street, NE Warehouses, 1900, 1916, 1908
- 26 Railway Express Building, 1908 27 McKinley Tech High School, 1928
- 28 Langley Junior High School, 1922 33 Slater School, 1891
- 34 Langston School, 1902
- 35 John F Cook School, 1925
- 36 Eckington School, 1898 37 McDowell Warehouse, 1909

Registered D.C. Historic Districts

- A Le Droit Park Historic District
- Capitol Hill Historic District
- Mount Vernon Square Historic District D Gallaudet College Historic District

Environment & Sustainability

Address sustainability with high performance design and environmentally friendly planning and construction methods

NoMA can become a model of sustainability in its planning, infrastructure, and building design. There is an opportunity to introduce a range of environmentally-sustainable best practices to the large amount of proposed new development. Neighborhood-wide measures are beyond the capability of individual developments and require a high level of coordination between private property owners, the public sector, utility and cable companies.

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"Noma Grande": A Larger Development area Characterized by Responsible, Sustainable Development

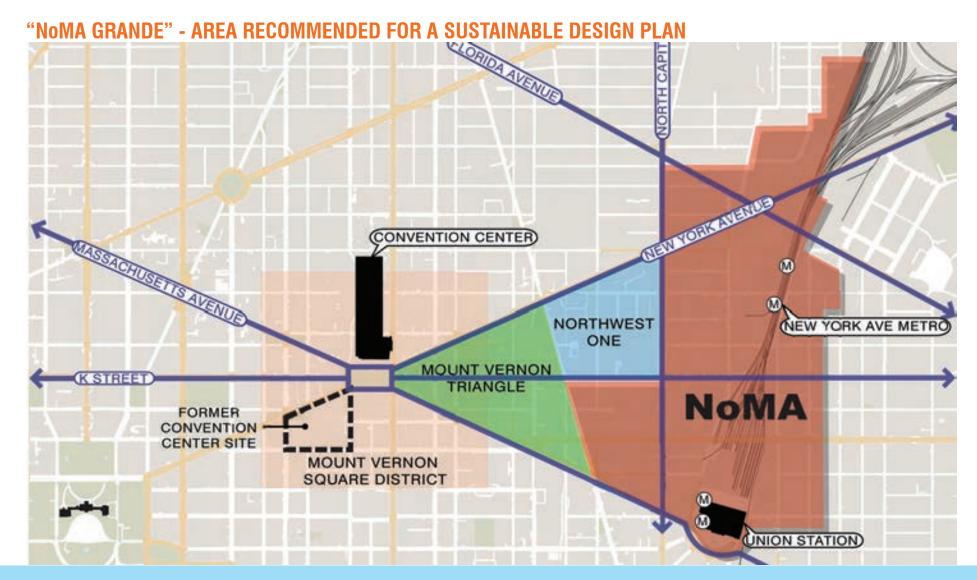
NoMA is part of a much larger area experiencing rapid, high-density development that includes the former convention center site, Mount Vernon Triangle and Northwest One. Intense development of underutilized land in this area in a relatively short period of time means considerable environmental impacts. However, there are opportunities to ensure that new development includes 'green design' strategies. When employed on a wide scale, this will mitigate the impact of stormwater on sewer systems, improve air quality, reduce energy use, and reduce the impact of the built environment on outdoor temperatures in the immediate area.

With potential build-out over the next 10-20 years, the larger NoMA area can improve the environement by relying on market-based and strategic actions that have been used successfully elsewhere. It will be a model for responsible and sustainable development in the District. Undertaking a coordinated sustainability study of this area is one of the top priorities identified in the Action Agenda (P 1.4) of this Plan. This can include identifying resources and other targeted incentives that can be used to ensure NoMA becomes a "Green Zone".

Mayor Anthony Williams created a cabinet-level Department of the Environment and is working to improve the environment by focusing on natural resources and buildings. The larger NoMA area offers an opportunity to acheive success through economies of scale and responsible approaches to building construction that focuses on materials, waste reduction, clean air, energy efficiency, health and quality of life.

According to a recent PNC economic outlook survey, the rising price of energy is the new number one concern for small and medium-sized businesses. A 2003 study in California showed that though initial costs of 'green' projects were about two percent higher, and that any additional expenses were earned back through utility bill savings within six years. Other experts suggest that 'green' buildings can be built at no additional cost, and that they can reduce operating costs by up to twenty percent.

Storm and waste water management are also primary NoMA concerns. Increased development will lead to increased impervious surface areas that place added pressure on an already overburdened sewer system, ultimately increasing business and consumer costs. Pervious paving, filter-strips, bio-swales, rain gardens, native landscaping, green roofs, and other innovative techniques - collectively called Low Impact Development (LID) methods - combine to reduce and slow runoff, filter sediments and other pollutants, and replenish the groundwater recharge.



INNOVATIVE PLANNING AND COORDINATION

An area-wide systems approach optimizes the application of innovative sustainability techniques, both in terms of design solutions and funding. A "Resource Management Association" would implement, coordinate, and manage the effort between the District, utility companies, and individual building owners. This management entity would work closely with District's infrastructure agencies: Water and Sewer Authority (WASA), Department of Health (DOH), District Department of Transportation (DDOT), PEPCO, and cable companies. Infrastructure projects that are coordinated with development trends minimize disruption and environmental impacts, as well as having economic benefits. A combination of publicly-maintained/financed and developer-maintained/financed techniques will be necessary.

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HIGH PERFORMANCE BUILDING DESIGN

Designing for sustainable development, reduced energy costs, and healthier environments is increasingly important in the real estate development and construction industries. The US Green Building Council's Leadership in Energy and Environmental Design rating system (LEED) provides a nationally recognized tool for development industry professionals that are building healthier indoor and outdoor evnironments. Several developers in the District have committed to building all projects to a LEED standard.

Central to successfully developing a high performance building, is the integrated or whole building design process. It is a collaborative process with different specialties -- including architecture, heating and cooling, lighting and electrical, interior design, and landscape design -- coming together early in the total design of a building. Through integrated coordination at critical points, design solutions are found that result in greater efficeincies between the building's systems. This provides economic returns for the tenants and owners.

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BUILDING A SUSTAINABLE NEIGHBORHOOD

Of particular relevance to the NoMA neighborhood, given its lack of parks, open space and planted areas, is the reduction of the "heat island" effect caused by solar build-up in urban areas and the reduction of excessive stormwater runoff. Such approaches work best when several buildings in an area use similar techniques, creating an combined benefit for the neighborhood.

ENERGY EFFICIENCY

Energy efficiency lowers dependency on fossil fuel resource consumption through the use of mechanical, electrical, wind and solar energy systems, optimizing building performance, reducing costs, and minimizing environmental impacts. Energy-sharing systems, such as geo-thermal loops, can take excess heat generation from one use (office) and harness it for another use (residential) where it is needed. These systems within multi-building projects can achieve significant cost-savings. Other strategies include:

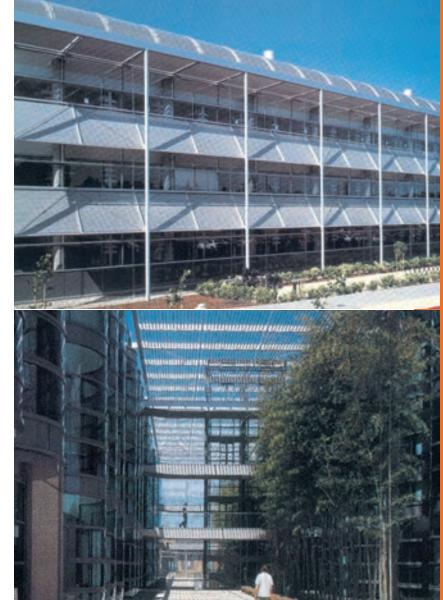
- Use Energy Star rated products and Energy Star rated systems.
- Design buildings to take advantage of cross ventilation and daylight so that HVAC systems operate less.
- · Implement a rigorous energy monitoring and verification system
- Using renewable energy.
- Locate buildings to benefit from golar energy, with residential to the south and west and commercial to the north and east.

STORMWATER MANAGEMENT

The management and treatment of stormwater and its runoff by replicating pre-development watershed conditions, replenishing groundwater, filtering pollutants, and reducing and slowing runoff could reduce flooding in the area. A wide range of innovative techniques can lessen the demand on traditional structured "pipe" techniques.

Strategies may include:

- "Green Roofs" to lower energy costs and reduce impervious surface water runoff.
- "Cisterns" to capture and reuse water on site for nonpotable uses and landscape irragation
- Permeable paving surfaces where water can be redirected to planting areas or swales.
- "Rain Barrel" to capture runoff and redirect it to lawns, gardens and courtyards for irrigation and landscape watering.



Environmentally responsive architectural techniques



Newly planted 'green' roof at American Society of Landscape Architects offices in Washington DC

• Natural or re-graded topography to collect and use storm water. IMPROVED AIR QUALITY

Walking, bicycling, and mass transit use, as alternatives to automobile use, reduce the adverse effects of toxic emissions to the atmosphere. Further, buildings in the US and the corrorlary construction processes account for 65% of electricity consumption, 30% of greenhouse gas emmissions, 12% of potable water usage and 136 tons of construction and demolition waste annually.

Strategies may include:

- Using eco-friendly furnishings that do not emit toxic chemicals into the air.
- Using eco-friendly and less-toxic building materials, paint, cleaners, and products.
- Using renewable resources and energy.
- Employing a coordinated and shared approach to construction waste management.
- Set higher air quality standards than found in the Clean Air Act and local regulations.