

An aerial perspective of a city street, likely Pennsylvania Avenue in Washington D.C., showing a dense grid of white, three-dimensional building models. A central corridor of green trees runs down the middle of the street. The sky is a pale, hazy blue with a few small, dark silhouettes of birds or aircraft. The text 'PENNSYLVANIA AVENUE' and 'WEST OF THE WHITE HOUSE' is overlaid in the upper right corner.

PENNSYLVANIA AVENUE

WEST OF THE WHITE HOUSE



GOLDEN TRIANGLE

KGP design studio

DIRECTOR'S LETTER



Message to our Members and Partners,

On behalf of the Golden Triangle BID, and our numerous project partners, I am excited and honored to present this vision plan for Pennsylvania Avenue, West of the White House. The document that follows outlines a design concept that will transform this internationally-prominent but currently-underutilized corridor into a unique, sustainable, and functionally-balanced business, retail, and cultural destination.

The Golden Triangle BID has undertaken myriad public-realm projects in recent years. On Connecticut Avenue between Farragut Square and Dupont Circle we worked with DDOT and numerous other partners on a streetscape redesign, which includes our iconic median which accentuates the corridor with beautiful plantings and elegant lighting.

Similarly, we have worked with public and private partners to design and install five urban rain gardens which serve to capture and filter stormwater runoff while beautifying the neighborhood. We have also commissioned numerous pieces of public art ranging from the functional (artistic bike racks) to the ephemeral (elaborate chalk art). Our most recent addition - the creation of stunning light art projects in Murrow and Monroe Parks - serves as a first step towards enlivening Pennsylvania Avenue west of the White House.

The vision plan for Penn West builds upon the experience that we have gained with these projects and, in doing so, marries transportation, urban design, sustainability, and public art in a way that will create a one of the world's great urban boulevards.

We hope that you will join and support us in this journey.

Sincerely,

A handwritten signature in black ink that reads "Leona Agouridis". The script is fluid and cursive.

Leona Agouridis
Executive Director





GOLDEN TRIANGLE

KGP design studio

INDEX

INTRODUCTION

INTRODUCTION LETTER FROM THE GOLDEN TRIANGLE BID

INDEX

PROJECT TEAM

ACKNOWLEDGMENTS

EXECUTIVE SUMMARY

SECTION 01: EXISTING CONDITIONS ANALYSIS

HISTORICAL AND URBAN CONTEXT

STREETSCAPE AND PUBLIC REALM

TRANSPORTATION, ACCESS AND CIRCULATION

RESERVATIONS, PARKS, PLAZAS, AND DESTINATIONS

SUMMARY OF RECOMMENDATIONS

SECTION 02: DESIGN PROCESS

DESIGN COMPETITION

WINNING DESIGN CONCEPT

STAKEHOLDER COMMITTEE AND PUBLIC INVOLVEMENT

DESIGN DEVELOPMENT AND PROGRESSION

SECTION 03: DESIGN PROPOSAL

DESIGN APPROACH

CORE THEMES:

CREATE DESTINATIONS

FACILITATE NEW CONNECTIONS

PEDESTRIAN SCALE

HARNESS SUSTAINABILITY

BALANCE TRANSPORTATION MODES

ACTIVATE THE PARKS

CONCEPT AND DESIGN ELEMENTS SUMMARY

SECTION 04: IMPLEMENTATION PLAN

PROJECT FINANCING AND INVESTMENT

ORDER OF MAGNITUDE - CAPITOL COSTS

PROJECT IMPLEMENTATION AND PHASING

ACTION PLAN SUMMARY

CONTACT INFORMATION



GOLDEN TRIANGLE

KGP d e s i g n s t u d i o

PROJECT TEAM

DESIGN TEAM & STAKEHOLDER COMMITTEE

Golden Triangle BID (GT-BID) Client

Leona Agouridis
Ted Jutras
David Suls

Executive Director
Planning Manager
Director of Planning & Economic Development

KGP design studio, LLC

William Gallagher
Donald Paine
Seth Garland
Christopher Brown
Brandon Blount
Lindsey DeHenzel
Sadie Dempsey
Ryan Goodman
Katherine Luxner

Design Firm
Principal in charge
Principal
Associate Principal
Designer, Project Manager
Designer
Designer
Designer
Designer
Designer



Golden Triangle BID - Property Owner Reps

Lavon Butler
Sean Warfield
Jennifer Rappe
Ashley Clifton
Heather Greene

Akridge (AK)
Tishman Speyer (TS)
Eastbanc Inc (EB)
Lincoln Property Company (LPC)
Lincoln Property Company (LPC)

Commission of Fine Arts (CFA)

Frederick Lindstrom

Assistant Secretary, US Commission of Fine Arts

Federal City Council (FCC)

Emeka Moneme

Deputy Executive Director, Federal City Council

DC Government

Eric Shaw
Patricia Zingsheim
Andrea Limauro
Chris Shaheen
Sherri Kimbel
Jackson Carnes
Florence Harmon
Peter Sacco

Director, DC Office of Planning
Associate Director of Downtown Planning, DC Office of Planning
Ward 2 Neighborhood Planning Coordinator, DC Office of Planning
Public Space Planner - DC Office of Planning
Office of CM Jack Evans, Council of the District of Columbia
Advisory Neighborhood Commissioner 2A07 ANC
Advisory Neighborhood Commissioner 2A06 ANC
Advisory Neighborhood Commissioner 2A08 ANC

District Department of Transportation (DDOT)

Leif Dormsjo
Matthew Brown
Sam Zimbabwe
Shannon Hake
Jim Sebastian
Mike Goodno

Director
Acting Director
Associate Director, Policy, Planning & Sustainability Administration (PPSA)
Downtown Transportation Planner (PPSA)
Bicycle Programs Coordinator
Bicycle Programs Specialist

National Capital Planning Commission (NCPC)

Elizabeth Miller
Sarah Moulton

AICP, Director Physical Planning Division (PPD)
Community Planner, Policy and Research Division



GOLDEN TRIANGLE

KGP d e s i g n s t u d i o

ACKNOWLEDGMENTS

RELATED PROJECTS, STUDIES
AND OTHER REPORTS

Golden Triangle BID (GT-BID)

Golden Triangle Business Improvement District Map (2009)
Bicycling in the Golden Triangle (2012)
Golden Triangle Annual Report (2013)
Light-a-Sound Project Proposal by Duilio Passariello (2014)
Dine-Shop-Play-Stay: Golden Triangle Retail Guide (2014)

DC Office of Planning (DCOP)

CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space (2006)
Mount Vernon Triangle: Transportation and Public Realm Design Project (2006)
District of Columbia Comprehensive Plan for the National Capital (2011)

DC Government (DC GOV)

Downtown Streetscape Regulations by Department of Public Works (2000)
CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space
In Collaboration with: DCOP, DPR, DCPS, DDOT, DDOE (2006)
Center City Action Agenda: Toward a Vibrant, Global Washington DC (2008)
Sustainable DC Plan by District Department of the Environment (2011)

District Department of Transportation (DDOT)

Great Streets Framework Plan: Pennsylvania Avenue SE (2005)
Bicycle Master Plan (2005) + Appendix B.1 Update of Bicycle Master Plan (2013)
Standards and Guideline Drawings and Specifications (2009)
Action Agenda (2010)
Final Evaluation Report: LED Energy Efficient Streetlight Pilot Study (2010)
Bicycle Facility Evaluation (2012)
Environmental Manual (2012)
Streetlight Policy and Design Guidelines (2013)
moveDC: Multimodal Long-Range Transportation Plan (2014)

National Capital Planning Commission (NCPC)

Memorials and Museums Master Plan (2001)
Urban Design and Security Plan (2002)
CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space (2006)
2015-18 Strategic Plan (2014)
The Pennsylvania Avenue Initiative (2014)

National Parks Service (NPS)

CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space (2006)
National Mall Master Plan (2009)
Design for Maintenance: National Mall lessons for Public space Design (2010)

Commission of Fine Arts (CFA)

Urban Design and Security Plan (2002)
CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space (2006)

Casey Trees

Tree Space Design: Growing the Tree out of the Box (2008)
Annual Tree Report Card (2013)

George Washington University (GWU)

Campus Streetscape Plan (2003)
Foggy Bottom Campus Plan (2007)
Streetscape Guidelines (2010)



GOLDEN TRIANGLE

KGP d e s i g n s t u d i o

EXECUTIVE SUMMARY

Pennsylvania Avenue is an iconic name that evokes visions of monumental grandeur. It is home to presidents, the parade route for their inaugurations, and sometimes the site of their funeral processions. It is also the site of protests, majestic old hotels, monuments, museums, federal buildings, embassies and more. To the millions who visit DC every year, it truly manifests the name “America’s Main Street,” serving as both the physical and symbolic connecting fiber of the Federal City.

But to those of us who live and work in the District, Pennsylvania Avenue’s identity encompasses a diversity of conditions that transcend its symbolic presence. For us, Pennsylvania Avenue serves as more than just the connection between the White House and the Capitol Building - it represents instead a living connection between the ‘Federal City’ and ‘The District’ where we live, work and play every day.

In the federal core, Pennsylvania Avenue plays an iconic role with gracious sidewalks and a double row of trees framing national landmarks. On Capitol Hill, Pennsylvania Avenue takes on a more domestic role as a wide neighborhood boulevard, lined with local restaurants, pubs and shops that make the Hill one of the most popular residential neighborhoods in the city. Even further east, Pennsylvania Avenue serves as an important commuter connection across the river to Fairlawn, Penn Branch and the suburbs of Prince George’s County.

But to the west of the White house, Pennsylvania Avenue becomes something else altogether. Connecting the Federal City to two of the oldest (pre-District) neighborhoods, the Avenue bears the responsibility of

bridging the gap between the educational, institutional, government and commercial uses that have made DC one of the most vibrant cities in the country. It is no wonder that, saddled with these numerous roles and cut off from the rest of Pennsylvania Avenue at the White House, this portion of Pennsylvania Avenue has yet to find a clear identity or to live up to its potential as both a local and tourist center of activity.

The goal of the interventions proposed in this document is to create a unique identity and sense of place for this portion of Pennsylvania Avenue west of the White House, while respecting the Avenue’s role in the city and place in history. By targeting interventions that are both large in impact but recognizable as contextual to the city’s urban form, **PENN WEST** will weave together the uses and users that are already a captive audience to the Avenue while also creating a destination, a new quarter for the city, that will attract tourists from the federal city, students from the university, locals from the entire city, and entice the daytime office workers to stay for the evening. These interventions will:

- **Create Destinations**
- **Facilitate New Connections**
- **Introduce a Pedestrian Scale**
- **Harness Sustainability**
- **Balance Transportation Modes**
- **Activate the Parks**



Historical overlay collage at ‘Seven Buildings’

SECTION 01: EXISTING CONDITIONS ANALYSIS

HISTORICAL AND URBAN CONTEXT 14

STREETScape AND PUBLIC REALM 22

TRANSPORTATION, ACCESS AND CIRCULATION 26

RESERVATIONS, PARKS, PLAZAS, AND DESTINATIONS 28

SUMMARY OF CONCLUSIONS 30

In the wake of the attacks of September 11, 2001 the 1600 block of Pennsylvania Avenue NW was permanently closed to automobile traffic. The street in front of the White House (which had been closed on a temporary basis starting after the Oklahoma City bombings in 1995), would now be devoid of traffic and, seemingly, activity. What has developed in that space, however, has been a vibrant pedestrian mall and civic gathering place that serves to further enrich the sense of democracy that is at the heart of the District.

Pennsylvania Avenue is an iconic boulevard with local, national, and global significance. The address of the White House is something that many Americans can recite without hesitation. However, as an urban boulevard, Pennsylvania Avenue still fails to live up to its potential, especially west of the White House.

The vibrancy of the plaza outside the White House gates diminishes on the other side of 17th St. NW, and the stretch of road between 17th St NW and Washington Circle NW provides a disjointed experience that lacks identity.

Pennsylvania Avenue NW, between the White House and Washington Circle currently contains large amounts of underutilized public space that provide pedestrian, bicycle, and transit facilities that are uninviting and can be tricky to navigate.

EXISTING CONDITIONS

SITE DOCUMENTATION & ANALYSIS

EXISTING SITE CONDITIONS: STREETSCAPE AND PUBLIC REALM ANALYSIS









As part of the project study phase, the design team produced a graphical reference of the project site's existing conditions along with those of the immediate bordering areas. Survey data was compiled from the *District of Columbia's Geographic Information System (DC-GIS)* under the *Office of the Chief Technology Officer (OCTO)* along with tree inventory data from the *District Department of Transportation's (DDOT) Urban Forestry Administration* and *Casey Trees* to produce the base map.

The design team, in coordination with *Golden Triangle BID* staff, then completed an inventory of the project site through numerous site visits in order to verify the GIS data, and to gather additional information such as building entrances, bicycle parking, bus stops, traffic signals, emergency signage, street parking, public art locations, parking garage access points and types of storefront business.

A photographic catalogue was produced for the entirety of the Pennsylvania Avenue corridor concurrently with the diagrammatic site representation displayed in this document (see image, right). The illustration provides graphical information with numerous layers of information for the project area and its immediate surroundings.

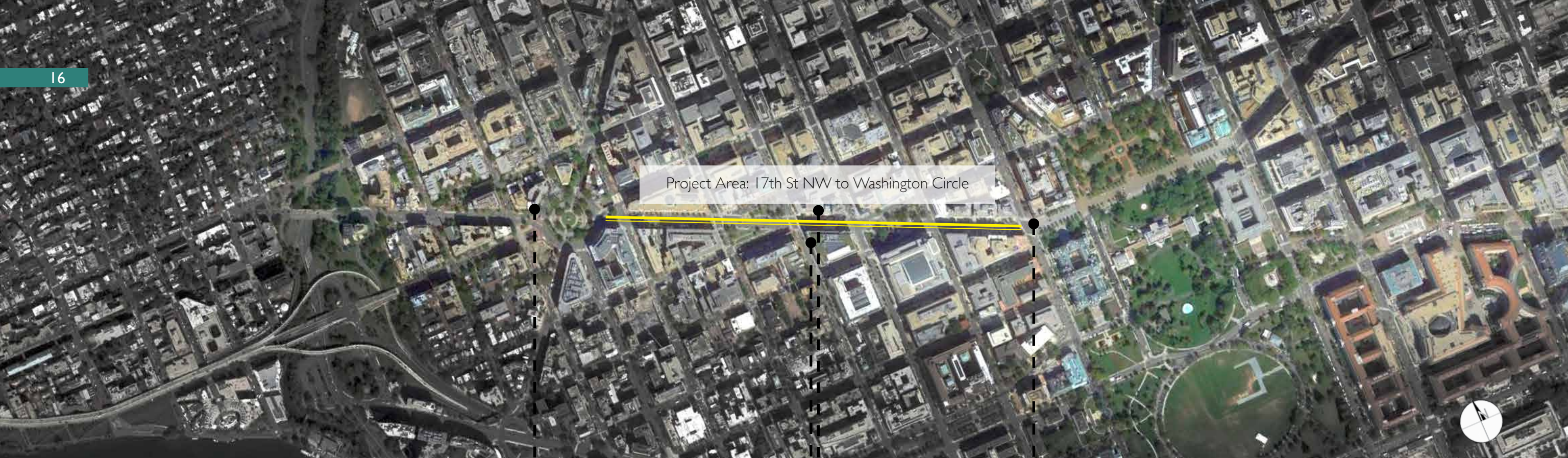




- | | | | |
|---|--------------------------------------|---|--|
|  | VEHICULAR ZONE
AND FLOW DIRECTION |  | BUILDING OR FACILITY ENTRANCE |
|  | CULTURAL FEATURE |  | PEDESTRIAN REALM
AND STREET CROSSINGS |
|  | TREE - SMALL, MEDIUM AND LARGE |  | SITE LIGHTING FEATURE |
|  | GREENSCAPE OR PLANTING FEATURE |  | STOREFRONT RETAIL, SHOPPING
AND / OR DINING |

PENNSYLVANIA AVENUE

STREETSCAPE ANALYSIS



IMAGE(S):
 (above) Satellite image of Pennsylvania Avenue from Capitol Hill to Georgetown (left) Washington Circle (middle-left) IMF Headquarters building (middle-right) Embassy of Mexico (right) Pennsylvania Avenue at President's Park

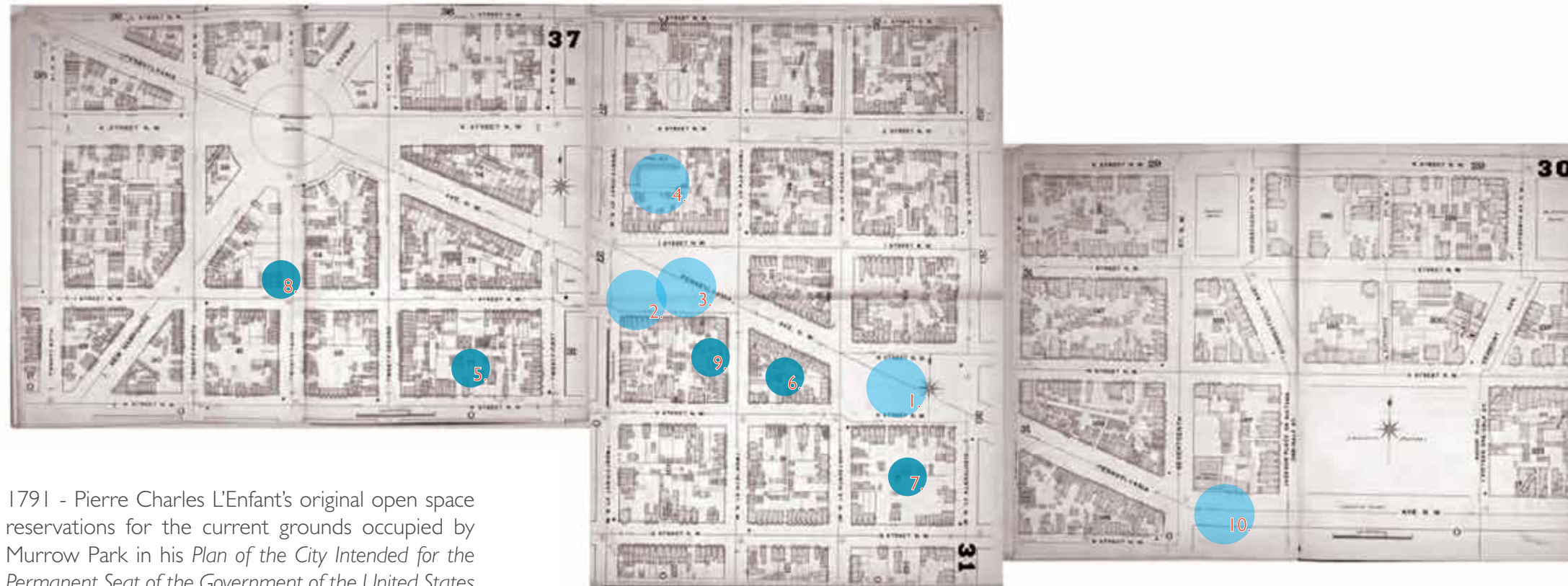


IMAGE(S):

(left) Federal Triangle redevelopment (middle) Pennsylvania Avenue along 'America's Main Street' with view of Capitol Building (right) Restaurants along Pennsylvania Avenue in Capitol Hill neighborhood, predominantly residential

PENNSYLVANIA AVENUE

HISTORICAL & URBAN CONTEXT



1. 1791 - Pierre Charles L'Enfant's original open space reservations for the current grounds occupied by Murrow Park in his *Plan of the City Intended for the Permanent Seat of the Government of the United States*
2. 1803-1856 - (Original) Western Market
3. 1862 - Streetcar Red Line, Horsecars (in 1888 Streetcars switched to electric operation)
4. 1856-1963 - Western Market relocated
5. 1873 - George Washington University campus moved to current site in Foggy Bottom neighborhood
6. 1958 - IMF Headquarters constructed
7. 1948 - World Bank constructed
8. 1977 - Foggy Bottom Metro opens to the public
9. 1982 - Shopping mall *Shops At 2000 Penn* opens to the public with restaurants and retail
10. 1996 - *Pennsylvania Avenue at President's Park* closed after Oklahoma City courthouse bombing (in 2001 a policy was enacted which made the closure permanent after the 9/11 terrorist attacks in New York, Washington and Pennsylvania)

IMAGE(S):

(above) Historic survey map, collaged and compiled from the Library of Congress maps archive: 1888 (top-right) Historic Western Market, artist depiction - Painting: 1803-56 (middle, above) Electric streetcar line, Red Line alignment centrally down Pennsylvania Avenue: 1888 (middle, below) World Bank Headquarters and related property ownership for WB & IMF along Penn Ave: 1948-58 (bottom-right) Michael Van Valkenburgh and Associates landscape and urban design winning competition for Pennsylvania Avenue at the White House and President's Park: 2003



CAPITOL CITY AND GREAT STREETS PRECEDENTS

As currently configured, Pennsylvania Avenue West of the White House focuses almost exclusively on the needs of automotive travel, to the detriment of the pedestrian and bicyclist realm. The proposed response is to reclaim this space by narrowing the roadway to a size appropriate to handle the level of traffic actually encountered. But this gesture, while positive in and of itself, only reaches its full potential when the reclaimed land can be used to enhance the public realm. The design team explored and discarded several contextual options while reviewing a catalogue of great city streets before arriving at a preferred solution. Varying typologies ranging from shared street concepts to high volume parkways were analyzed in context to evaluate the optimal approach.



the Symmetric Avenue



the Central Boulevard



the Symmetric-(A)symmetric Avenue



Benjamin Franklin Parkway - Philadelphia, PA



West Street - Annapolis, Maryland



Champs Elysees - Paris, France



Passieg de Gracia - Barcelona, Spain



Las Ramblas - Barcelona, Spain



Avenida Liberdade - Lisbon, Portugal



Paseo de la Reforma - Mexico City, Mexico

C3C

Permits matter-of-right development for major business and employment centers of medium/high density development, including office, retail, housing, and mixed uses to a maximum lot occupancy of 100%, a maximum FAR of 6.5 for residential and for other permitted uses, and a maximum height of ninety (90) feet. Rear yard requirements are twelve (12) feet; one family detached dwellings and one family semi-detached dwellings side yard requirements are eight (8) feet.

C4

The downtown core comprising the retail and office centers for the District of Columbia and the metropolitan area, and allows office, retail, housing and mixed uses to a maximum lot occupancy of 100%, a maximum FAR of 8.5 (or 10.0 if permitted height is in excess of one hundred-ten (110) feet, a maximum height of 110 feet and 130 on 110-foot adjoining streets. (Maximum height and FAR depend on width of adjoining streets.) Rear yard requirements are not less than twelve (12) feet; one family detached dwellings and one family semi-detached dwellings side yard requirements are eight (8) feet.

R-5-D (GWU)

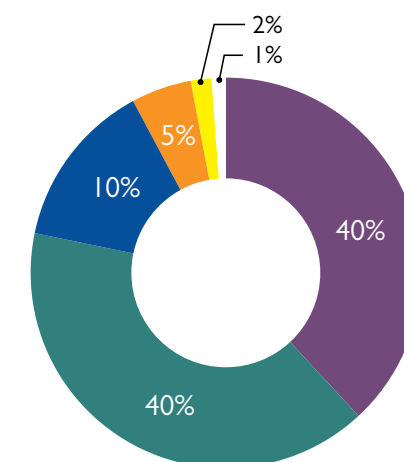
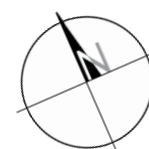
Permits matter-of-right medium/high density development of general residential uses, including single-family dwellings, flats, and apartment buildings, to a maximum lot occupancy of 75% (20% for public recreation and community centers), a maximum FAR of 3.5 and a maximum height of ninety (90) feet (45 feet for public recreation and community centers). Rear yard requirements are not less than fifteen (15) feet.

R-5-E

Permits matter-of-right high density development of general residential uses, including single-family dwellings, flats, and apartment buildings, to a maximum lot occupancy of 75% (20% for public recreation and community centers), a maximum FAR of 6.0 for apartment houses and hotels, and 5.0 for other structures, and a maximum height of ninety (90) feet (45 feet for public recreation and community centers). Rear yard requirements are not less than twelve (12) feet.

SP-2

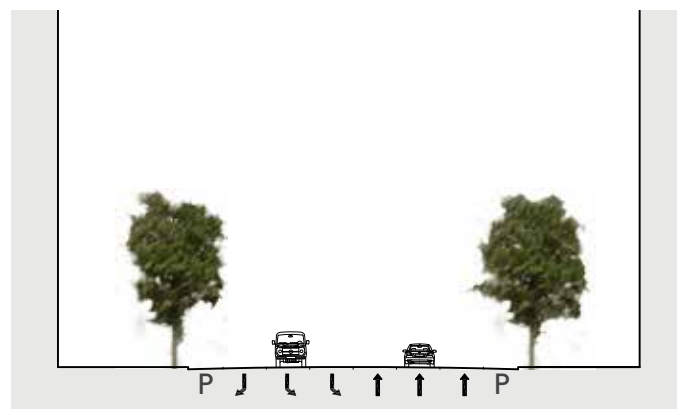
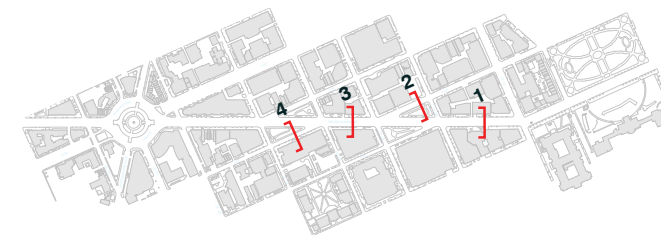
Permits matter-of-right medium/high density development including all kinds of residential uses, and limited offices for non-profit organizations, trade associations and professionals if approved as a special exception by the Board of Zoning Adjustment. Maximum lot occupancy of 80% for residential use except a hotel, 20% for public recreation and community centers and 40% with special exception approved from the BZA. Maximum FAR is 6.0 for residential and 3.5 for other permitted uses, and a maximum height of ninety (90) feet. Rear yard requirements are not less than twelve (12) feet, one-family detached dwellings and one-family semi-detached dwellings side yard requirements are eight (8) feet.



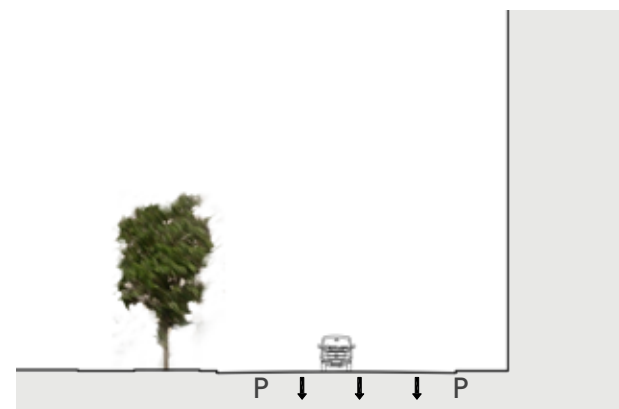


- SITE BOUNDARY
- ZONING DISTRICT
- TDRs
- PUDs
- C-3-C
- C-4
- R-5-D
- R-5-E
- SP-2
- HISTORIC LANDMARK

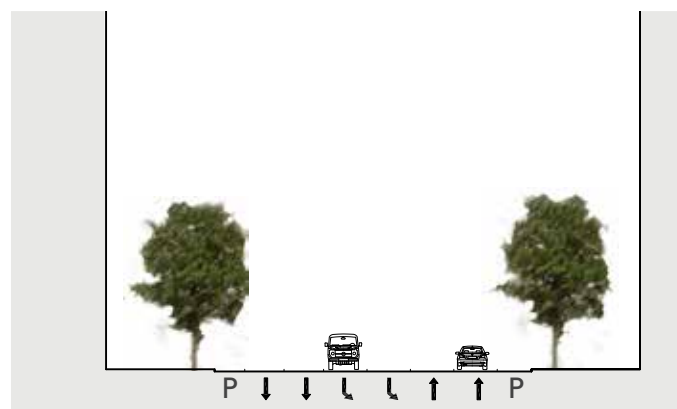
EXISTING LAND USE



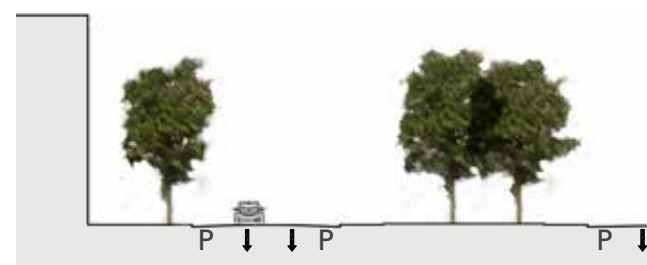
1. *Pennsylvania Avenue*
b/w 17th & 18th St NW



2. *H Street (North-Side)*
at Murrow Park



3. *Pennsylvania Avenue*
b/w 19th & 20th St NW



4. *I Street (South-Side)*
at Monroe Park

EXISTING CONDITIONS

The general cross-section of Pennsylvania Avenue through the study area is an expansive +/-130 feet from building face to building face, befitting its role and import in the city. However, there is an over-dedication of space to the automobile with an approximate 80 feet of roadway generally consisting of 2 travel/off-peak parking lanes and 6 traffic lanes, which grows at intersections to provide additional turn movements.

This alignment is reflective of the time when this section of Pennsylvania Avenue served as a major street for cars to traverse downtown. The closing of Pennsylvania in front of the White House makes this alignment outdated. As a baseline comparison, Massachusetts Avenue between 2nd and 4th Streets NE carries a similar level of traffic, but does so with only 2 full time travel lanes and 2 travel/off-peak parking lanes.

While Pennsylvania Avenue's cross-sections still allows for generous sidewalk widths in the 20 to 30 feet range, the pedestrian realm is under-utilized with little more than the occasional street tree to break up the concrete hardscape. The sidewalks are too wide to create an intimate relationship with the adjacent buildings, yet not quite wide enough to sponsor the lively uses suitable for grand, urban streets.

The Avenue divides the two federal parks, making them feel more like islands of refuge within a sea of concrete rather than coherent usable spaces in and of themselves. Considerations for improving access to the parks, programming streetscape spaces in addition to a comprehensive evaluation of reduction in vehicular travel lanes, should all be on the table in the design phase.

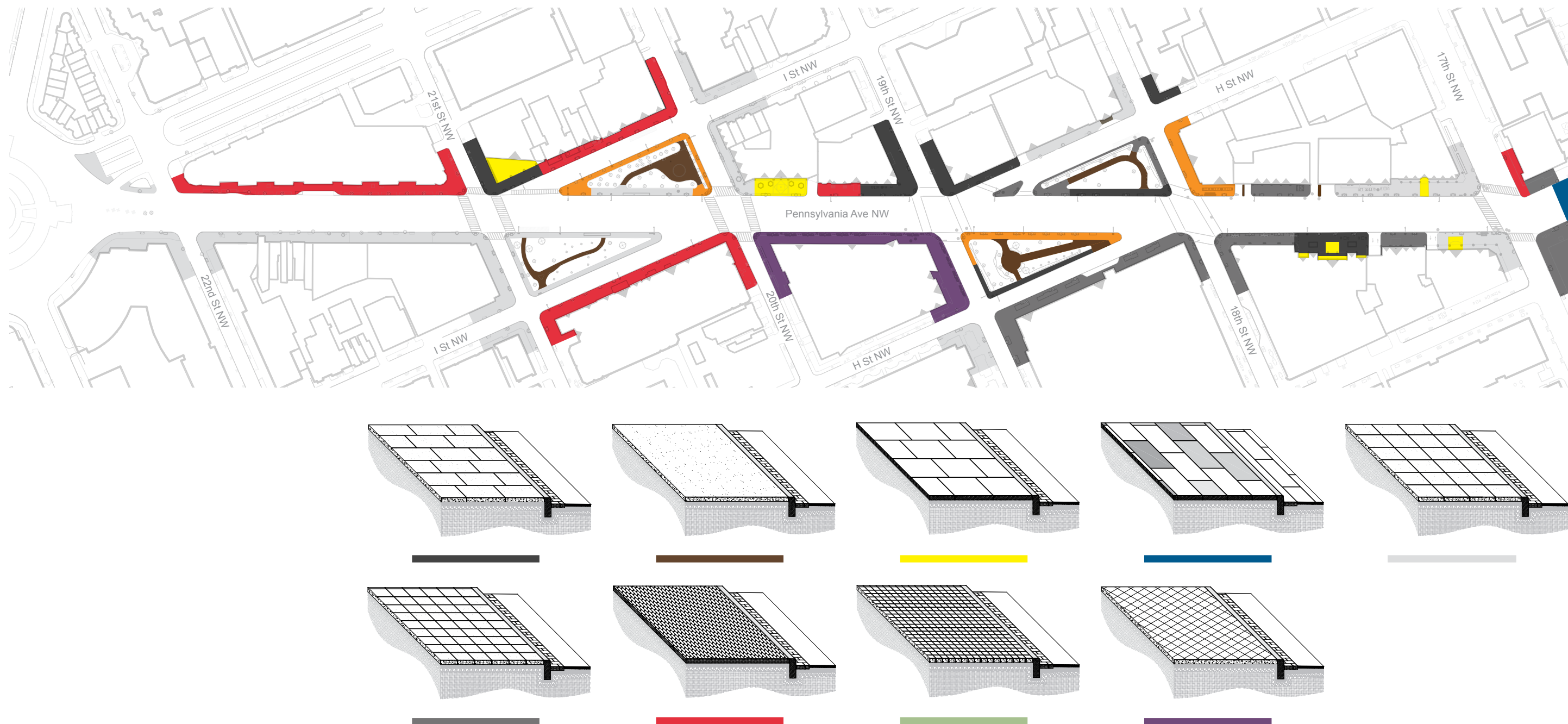
PENNSYLVANIA AVENUE

STREETSCAPE & PUBLIC REALM

PAVING CONDITIONS

The urban realm along Pennsylvania Avenue West of the White House is populated by a variety of building types ranging from high security international organization headquarters to remnants of some of the earliest residential dwellings in the city. As a result, there are currently various land ownership groups responsible for maintaining and establishing consistent

standards for the corridor which yields unexpected results throughout the public realm. The corridor's myriad of paving conditions perhaps best exemplify this trait, often catering to conflicting guidelines for the National Parks Service, the National Capital Planning Commission, and the District Department of Transportation.



STREET TREES AND PLANTING CONDITIONS

Trees along Pennsylvania Avenue are generally healthy, but are inconsistently distributed along large stretches of roadway. The Willow Oak is the dominant species with interspersed, but mostly related tree species defining the roadway. Tree boxes are also inconsistent and lack key design standards which could help to unify the corridor's streetscape aesthetic. Coordination, both in terms of plant selection and architectural treatment, would have a significant impact in developing a consistent streetscape aesthetic along the Avenue.



Willow Oak



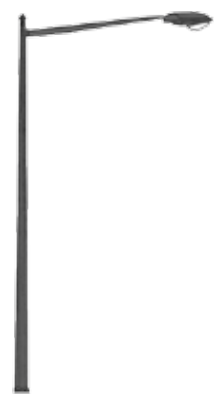
Red Oak



Little Leaf Linden



Red Maple



*Single Arm
Pendant Pole*



Fixture #16



Twin-20



*Decorative
Teardrop Pole*



Saratoga Lantern

ROADWAY AND PEDESTRIAN LIGHTING

A noticeable lack of lighting dedicated to the pedestrian scale characterizes this section of Pennsylvania Avenue West of the White House. Murrow Park is the only space utilizing a reduced scale fixture for the public realm with its historic Saratoga Lanterns. While consistent with current standards for the District Department of Transportation, the lighting does not achieve the design intentions of the McMillan Plan - establishing a gradient as you approach the federal core giving visual prominence to the federal city - instead opting for a strategy of uniform and relatively consistent roadway lighting.

PLANTER CONDITIONS, SITE FURNISHINGS, SITE EQUIPMENT AND SITE ACCESSORIES

Various site security and jurisdictional constraints have yielded a myriad of differing site furnishings to the tune of nearly 20 different bench types along a 4 block stretch of roadway. The net effect produces a streetscape which feels disjointed and disconnected from its immediate neighboring public realm. In contrast the stretch of Pennsylvania Avenue affectionately known as 'America's Main Street' only produces 8 to 10 different public benches along a stretch of roadway nearly triple the length of the area West of the White House. The aesthetic consistency between the 8 to 10 bench types makes it difficult to distinguish each individually and produces a highly cohesive public space despite its other aesthetic shortcomings. West of the White House the variation in otherwise consistent streetscape elements ranging from bus shelters to bollards is dizzying.

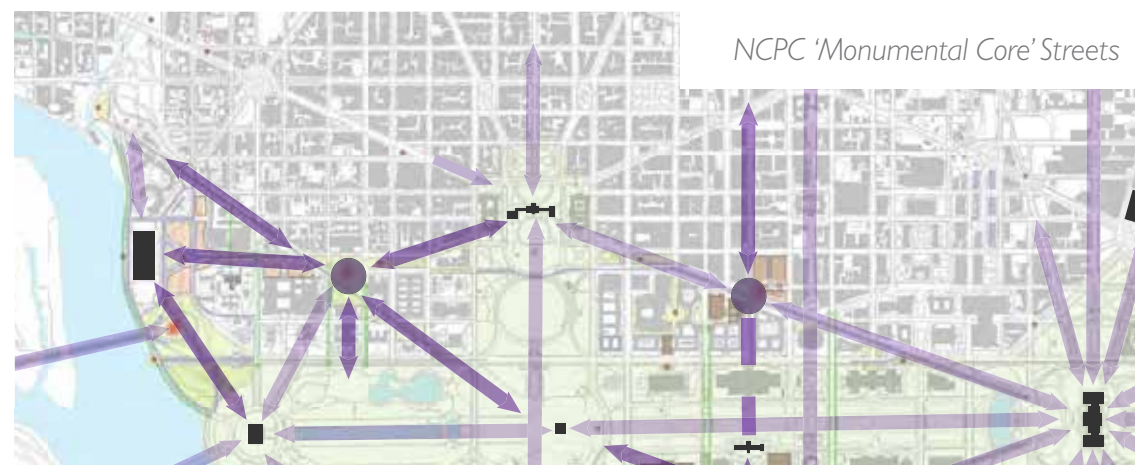
Every effort to establish some degree of uniformity across the myriad of site conditions must be made within the design proposal. One effective strategy could be to combine site furnishings with planter beds, similar to the strategies being utilized in the high security streetscape areas, across the entirety of the public realm. Introducing best-management-practices (BMPs) for stormwater treatment including raingarden planters and bioretention facilities could provide the opportunity to establish uniform standards for those street elements as well.



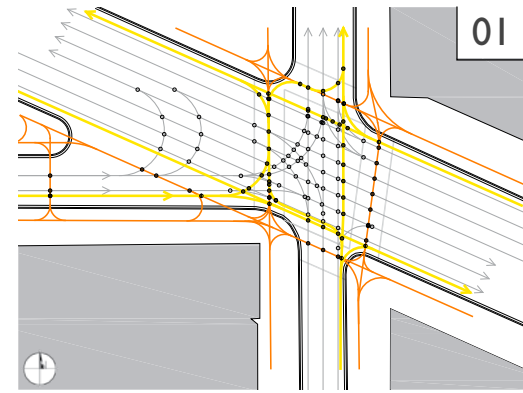
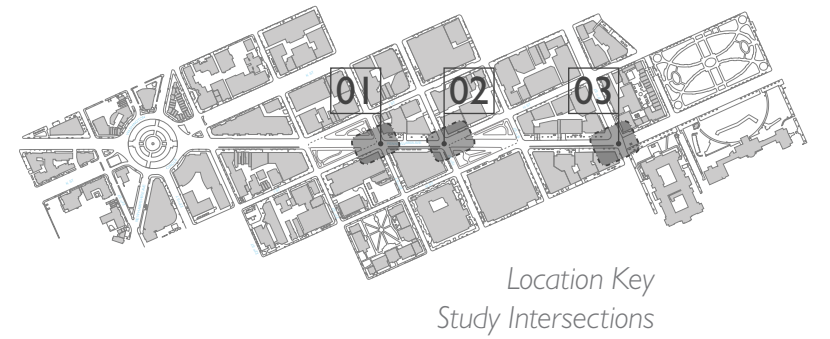
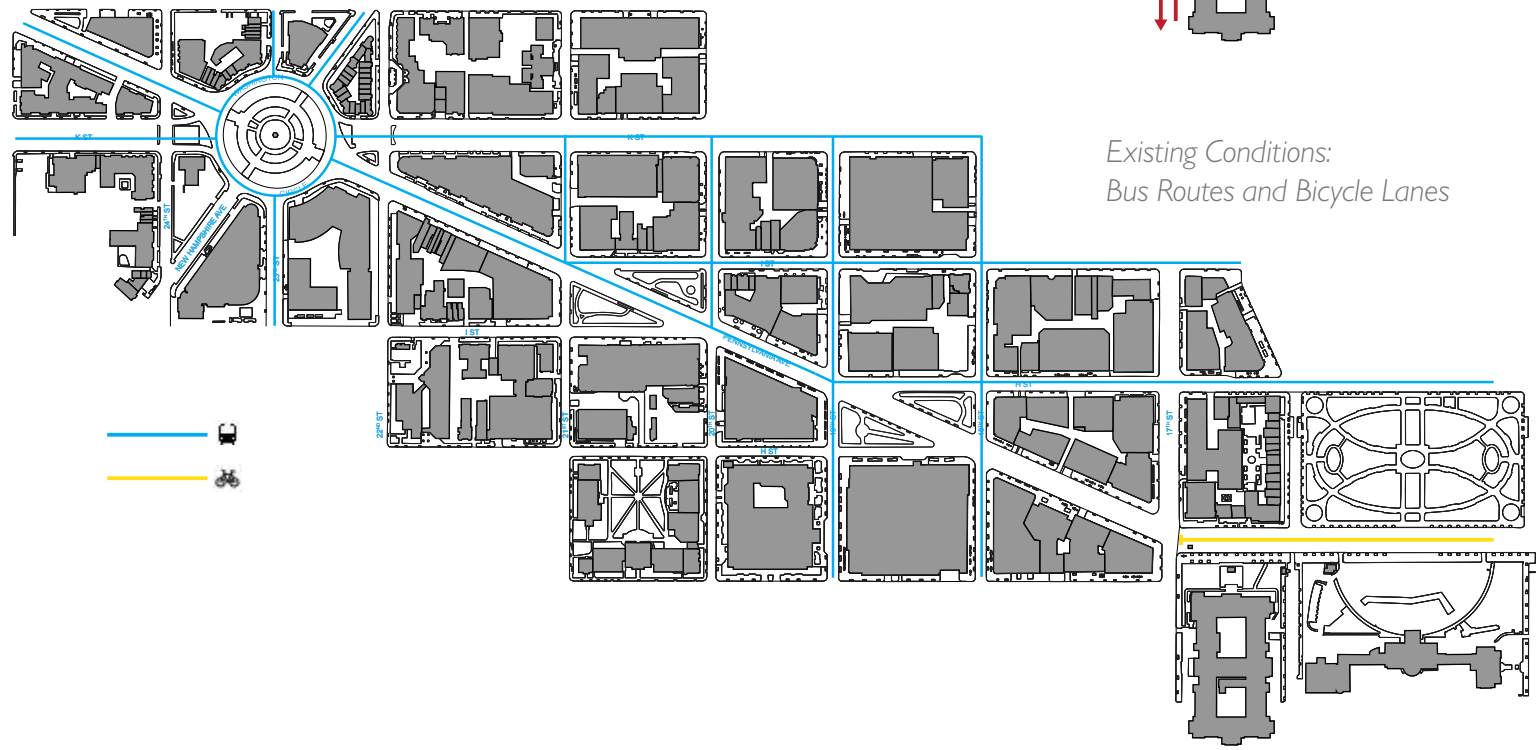
IMAGE(S):

(top-left) 17th & Penn Ave on the North-Side (top-middle) 19th & Penn Ave at IMF Headquarters (top-right) H St at World Bank Headquarters (bottom-left) 17th & Penn Ave on the South-Side (bottom-middle) 19th & Penn Ave on the North-Side (bottom-right) Monroe Park

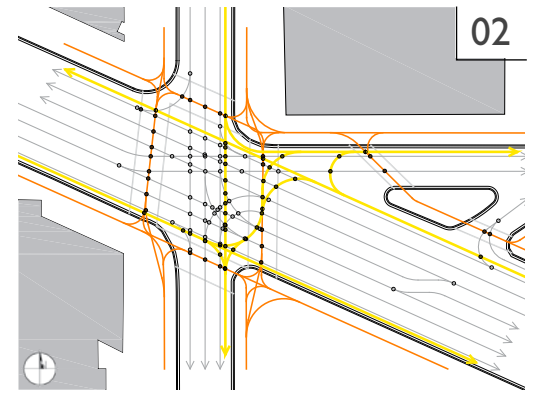
THE 'MONUMENTAL CORE' FRAMEWORK PLAN



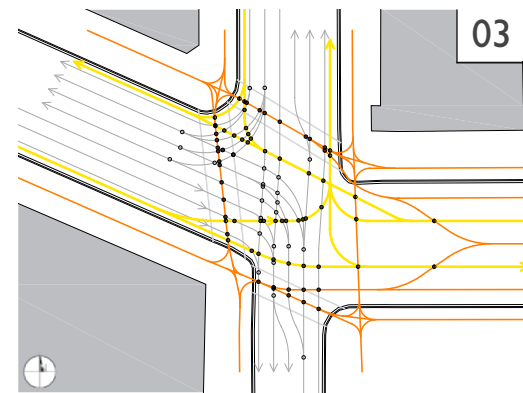
The National Capital Planning Commission's boundary for classifying the section of Pennsylvania Avenue West of the White House within its *Monumental Core Framework Plan* currently terminates at its 18th Street NW cross street. The resultant complications in establishing uniform and consistent aesthetic standards for the corridor detract from its identity. Further complications arise from the standards set forth in the planning commission's *Urban Design and Security Plan* which classifies and establishes streetscape design standards for high security buildings and areas. Bollards densely surrounding these areas in the scope of work area create an inhospitable public realm uninviting to both the casual passerby and tourist, two key market areas for making the corridor more active. Both of these documents could be revisited in order to ensure that recommendations are still appropriate for the corridor as it continues to evolve.



Penn Ave, 20th and I St NW -
Existing Condition



Penn Ave, 19th and H St NW -
Existing Condition



Penn Ave, 17th St NW -
Existing Condition

COLLISION POINTS (EXISTING)		01	02	03
Vehicular to Vehicular	○	57	48	26
Vehicle to Pedestrian and/or Bicyclist	●	57	55	58
Pedestrian to Bicyclist	◐	10	7	13



■ Excellent
■ Good
■ Fair
■ Poor



■ Interstate
■ Freeways
■ Principal Arterial
■ Minor Arterial
■ Collector

Pavement Condition - A District Department of Transportation (DDOT) assessment from 2013 indicates the poor condition of roadway paving on H St and I St NW adjacent to the parks. Both segments of roadway carry low to moderately low average daily traffic volumes.

Evacuation Routes and Emergency Preparedness - Pennsylvania Avenue is the North-South dividing line in the District of Columbia's Emergency Evacuation and Preparedness Plan. In the event of emergency an efficient mode of egress outside the city must be provided for all modes including public transit, vehicles, bicyclists as well as a pedestrian walk out due to a high commuting mode share.

FHWA Functional Roadway Classification - Pennsylvania Avenue is classified as a Principal Arterial under the FHWA roadway classification system. Typical capacity for this type of roadway is between 7,000 and 27,000 average annual daily traffic volume (AADT). It is characterized by high speed, long duration service with controlled or limited access. A strong emphasis is placed on mobility, not access (as is typical for a connector) and its capacity to handle large volumes of traffic. A number of these typical characteristics do not reflect the current state of the Pennsylvania Avenue's configuration.

Table 5.10: High Frequency Crash Corridors for 2010-2012

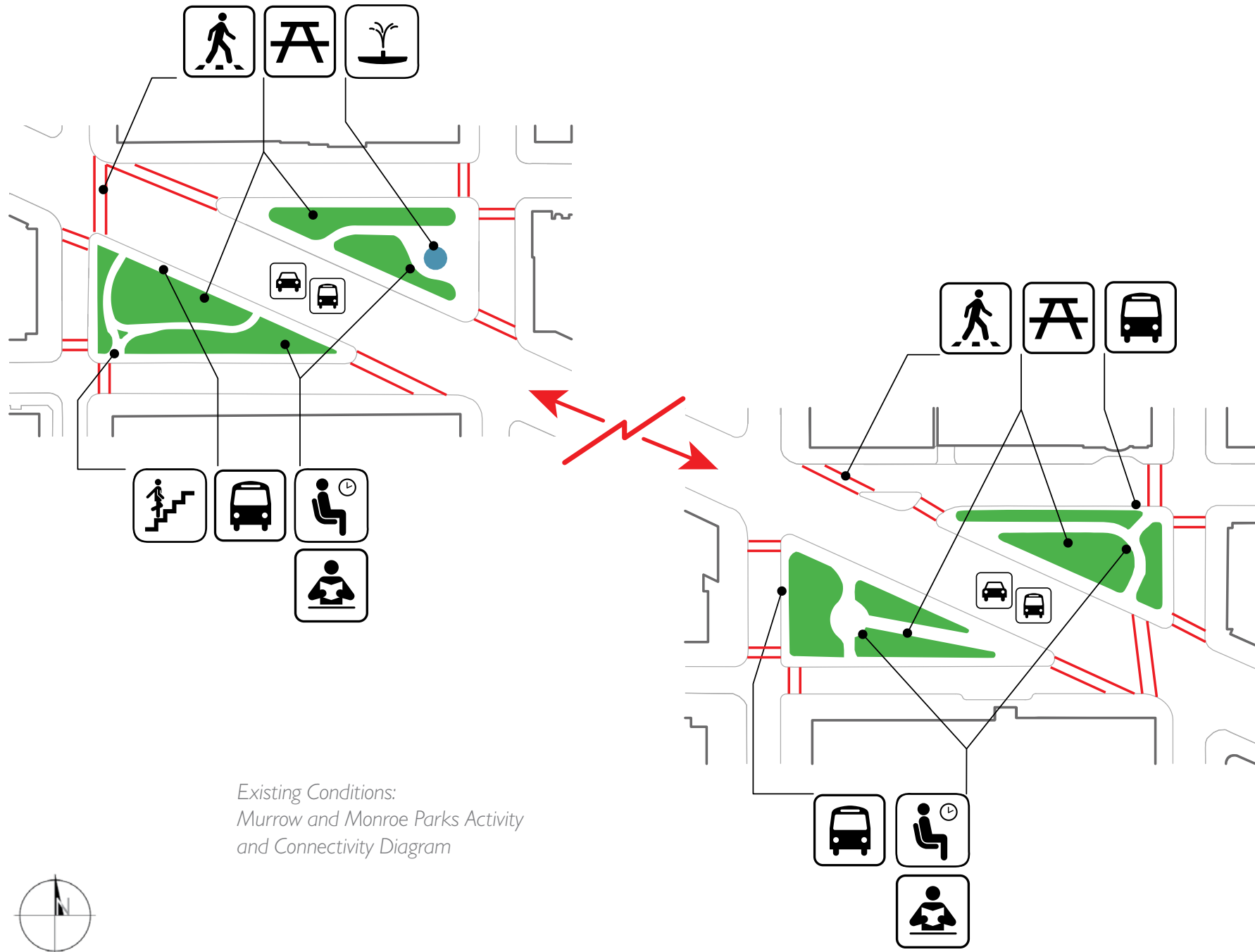
Corridor	2010			2011			2012			Total
	Collisions	Fatalities	Injuries	Collisions	Fatalities	Injuries	Collisions	Fatalities	Injuries	
PENNSYLVANIA AVE	723	0	271	730	0	270	784	0	310	2237
NEW YORK AVE	684	2	310	715	0	292	692	2	341	2091
GEORGIA AVE	560	0	261	568	0	236	622	0	280	1750
NORTH CAPITOL ST	519	1	257	559	1	268	530	0	233	1608
CONNECTICUT AVE	577	1	200	513	1	174	516	1	129	1606

TRAFFIC SAFETY FOR ALL MODES

A March 2014 report prepared by Howard University's Transportation Safety Data Center entitled *Traffic Safety Statistics Report for the District of Columbia* illustrates the wide ranging scope of the Avenue's traffic safety performance measurables in almost every category. Pennsylvania Avenue's performance in vehicle collisions from 2010-12 places it atop the District's High Frequency Crash Corridor list with diminishing performance in each measured year. The report highlight the 17th Street NW and Pennsylvania Avenue intersection as a problematic area for pedestrians, bicyclist and vehicular travelers while the H St and 19th Street NW intersection rates poorly for vehicular travelers as well. The intersection at 17th street functions as a critical gateway to the West of the White House segment and must emphasize pedestrian and bicyclist safety in order to draw meandering visitors into the corridor. Recent roadway crossing improvements such as the diagonal street crossing policy could be explored at the intersection to promote safety, enhance connectivity and simplify signal timing due to the unique nature of the intersections circulation patterns. Such improvements at a critical intersection could serve as a catalyst to implement equal safety measures and policies along the entire length of Pennsylvania Avenue including the segment from the White House to Washington Circle.

PENNSYLVANIA AVENUE

TRANSPORTATION, ACCESS & CIRCULATION

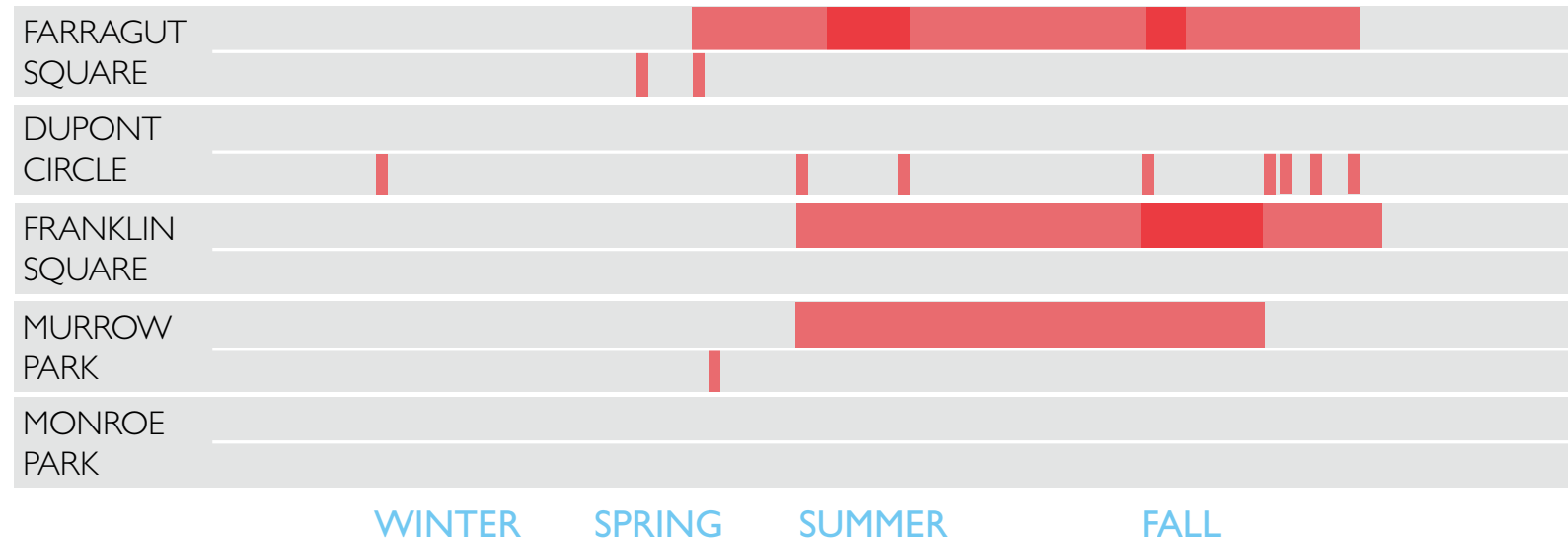


OPEN SPACE RESERVATIONS: ESTABLISHING A DESIGN CRITERIA

An assessment of existing National Park Service-managed open-space reservations from the original L'Enfant plan provided numerous key design criteria in establishing streetscape design and future planning initiatives. A physical connection to the federal city is embellished by defining the primary L'Enfant axial relationships to the city's urban plan. Federal monuments are the only frequent intrusion into this sacred space while passive spaces flank the main axis. Any kiosks or public facilities are placed offset from the primary axis, which is frequently lined by trees on each side to celebrate the federal city. Prior urban planning initiatives at Freedom Plaza provide precedent for connecting either of the Parks physically or visually.

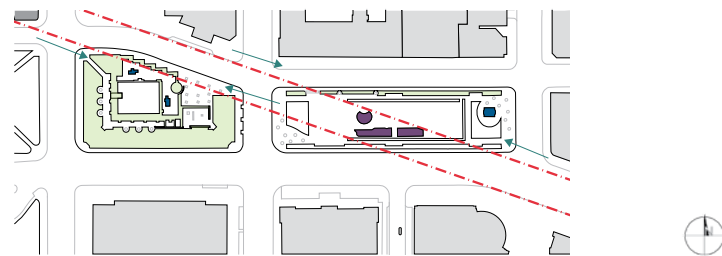
PENNSYLVANIA AVENUE

RESERVATIONS, PARKS, PLAZAS & DESTINATIONS

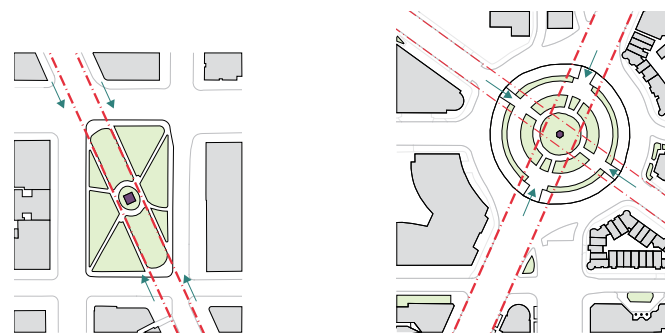


ALL SEASON EVENTS

The importance of opening up both Murrow and Monroe Park to a variety of activities can not be understated. As various successful public spaces within the District of Columbia have recently demonstrated it's not only the quality of recurring events but also the uniqueness and individuality of one-off events that great public space make a name for themselves. While the BID will inevitably act as a catalyst in this regard it is critical that other organizations have the opportunity to host events in the public spaces to ensure proper exposure to a variety of clientele. Design considerations for ultimate flexibility of event planning must accompany an aggressive public events program (civic, cultural, recreational, etc) in order to maximize its potential for success and utilization.

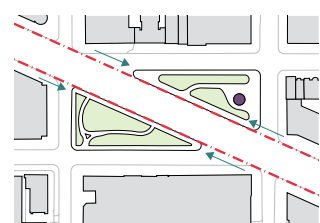


Pershing Park & Freedom Plaza

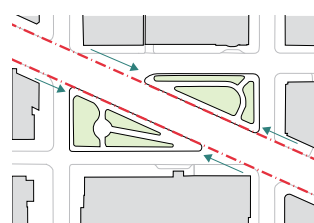


Farragut Square

Washington Circle



Monroe Park



Murrow Park



Sculpture Garden - Jazz in the Park



Memorial Gardens Competition



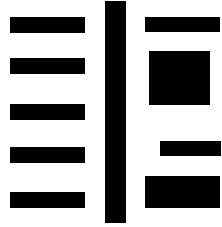
City Centre NW Plaza - Yoga in the Park



Canal Park - Winter

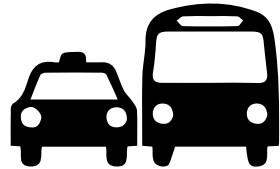


Canal Park - Summer



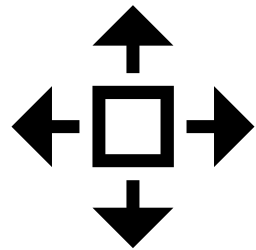
ESTABLISH CONTINUITY, PROMOTE DIVERSITY

Build corridor unity through the introduction of streetscape design standards robust enough to transform functional considerations for a wide variety of applications. Promote policies to encourage aesthetic diversity along building facades at the ground floor.



BALANCE TRANSPORTATION MODES

Improve the experience along the corridor for pedestrians, cyclists, and motorists alike in a way that takes into account current and anticipated needs of all users.



FACILITATE NEW CONNECTIONS

Create a defined corridor while still building logical connections to the surrounding street grid and acknowledging the variety of different uses in each direction.



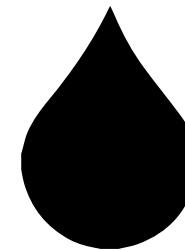
ACTIVATE THE PARKS

Parks and the surrounding public spaces should be designed to allow and encourage public art and events. The newly expanded pedestrian space around Murrow and Monroe Parks will help open up the parks and making them more friendly and inviting.



CREATE DESTINATIONS

Transform the corridor into an iconic destination that will draw people from all over the city, region, and world.



HARNESS SUSTAINABILITY

Create a corridor with an enhanced tree canopy and sustainable planting beds, and other features which will help to create an identity for the corridor as one that is both visually beautiful and technologically innovative.



HIDE AND ENHANCE SECURITY

Identify opportunities to improve existing sidewalk and building security through hidden measures and strategies which minimize any harsh effects on the public realm.

In its current state, Pennsylvania Avenue west of the White House suffers from a lack of programmatic diversity. Consequently, with the exception of its current workforce, the corridor struggles to draw significant crowds. This is partially due to the overwhelming dominance of office buildings whose strict security measures and limited retail spaces tend to attract a narrow user base. The pedestrian corridor in front of the White House, while successful on its own, lacks continuity with the western segment of Pennsylvania Avenue. Therefore, tourists who frequent that block are unlikely to continue west on Pennsylvania Avenue. Additionally, the street-scape elements of this corridor lack uniformity, thwarting any attempts to create a cohesive neighborhood. The layers of security barriers in front of high-security buildings present an unwelcoming front towards the street, while the excessive number of security bollards impede pedestrian traffic.

The most sought-after areas of the city tend to be in its more historic neighborhoods, while the western end of Pennsylvania Avenue is strongly characterized by mid century urban “revitalization”. However, it is not the modern nature of the area that precludes its success, but its scale. Many of the buildings on this portion of Pennsylvania Avenue stretch for most or all of a block. The current building stock mostly ignores the pedestrian realm, while the few retail spaces that do front the street are scaled to limit their uses to mostly small quick-service cafés. The majority of the street frontage of this segment of Pennsylvania Avenue is occupied by lobbies or monolithic stretches of empty concrete or glass facades. While the security measures of organizations like the International Monetary Foundation and the World Bank are certainly a necessary restriction

on active street frontage, the majority of the ground floor square footage of Pennsylvania Avenue’s office buildings is being underutilized. An increase of ground floor retail space would certainly enliven and diversify the corridor, while benefiting both building owners and business owners eager to capitalize off an address on one of the world’s most famous streets.

The avenue is scaled for cars, not pedestrians which, after the closure of the 1600 block, is not reflective of the current mode split. Considering its designation as an evacuation route, the generous width of the avenue would be better allocated towards pedestrians, with some right of way set aside for separated bicycle lanes. With a Pennsylvania Avenue scaled for pedestrians, new retail ventures could capitalize on both the existing workforce and the increased sidewalk volume to establish a destination corridor, rather than and underutilized throughway..

CONCLUSIONS & RECOMMENDATIONS

SECTION 02: DESIGN PROCESS

DESIGN COMPETITION	33
WINNING DESIGN CONCEPT	34
STAKEHOLDER COMMITTEE AND PUBLIC INVOLVEMENT	36
DESIGN DEVELOPMENT AND PROGRESSION	37

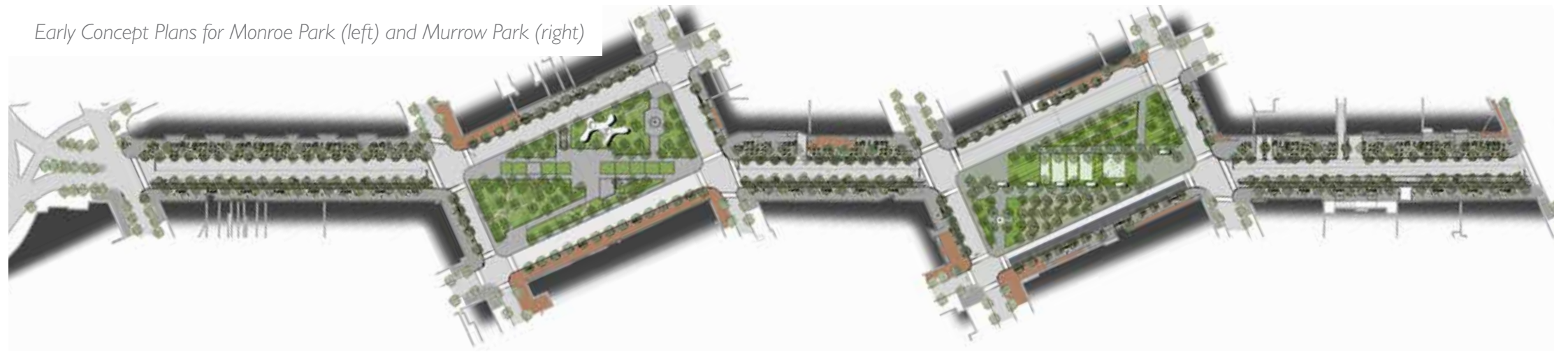
In late spring of 2014 the Golden Triangle BID held a design competition to create a vision for the future of Pennsylvania Avenue west of the White House. Simultaneously, the Golden Triangle brought together a broad stakeholder group made up of local and federal government agencies, with interest in or jurisdiction over the corridor, as well as property owners along the avenue.

In August 2014 KGP Design Studio of Washington, DC was selected as the winner of the competition and was brought on board to move its initial vision into a more detailed concept plan for the corridor. This document is the result of that process, which has involved a comprehensive assessment of current public realm conditions, extensive interaction with public and private stakeholders, and the formulation of a comprehensive set of design recommendations.

The process is a familiar one for the Golden Triangle which successfully took the same approach to design overhaul of Connecticut Avenue between Farragut Park and Dupont Circle. By engaging stakeholders early and gaining their input and support from the start, the design team hopes to accomplish equally-impressive results at the southern edge of the neighborhood.

DESIGN PROCESS

Early Concept Plans for Monroe Park (left) and Murrow Park (right)



A GRAND, UNIFIED AVENUE

A consistent tree canopy frames the views down Pennsylvania Avenue and passes through both Murrow and Monroe parks. The parks have been restored to the originally planned rectangular parcels. In the parks, Pennsylvania Avenue becomes a pedestrian allée, while maintaining sufficient passage for emergency vehicles in the case an evacuation of downtown becomes necessary.

VIEW CORRIDOR CONSIDERATIONS

Several street sections were considered with the goal of creating a more even distribution of transportation modes. Symmetrical options with protected bikes lanes or a center median were considered, but an asymmetrical approach was chosen. It allows for a more efficient two-way cycle track on the south side of the street and an expanded pedestrian zone on the north side, all while maintaining a symmetrical tree distribution that frames the views towards the White House and Washington Circle.

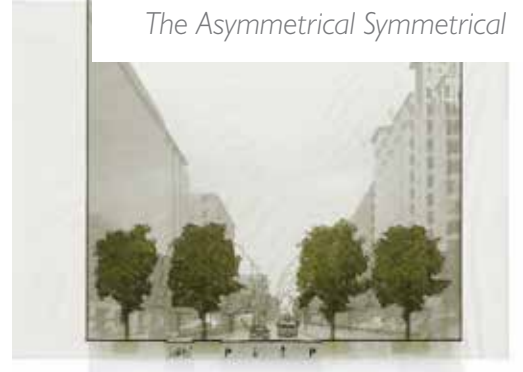
The "K St NW"



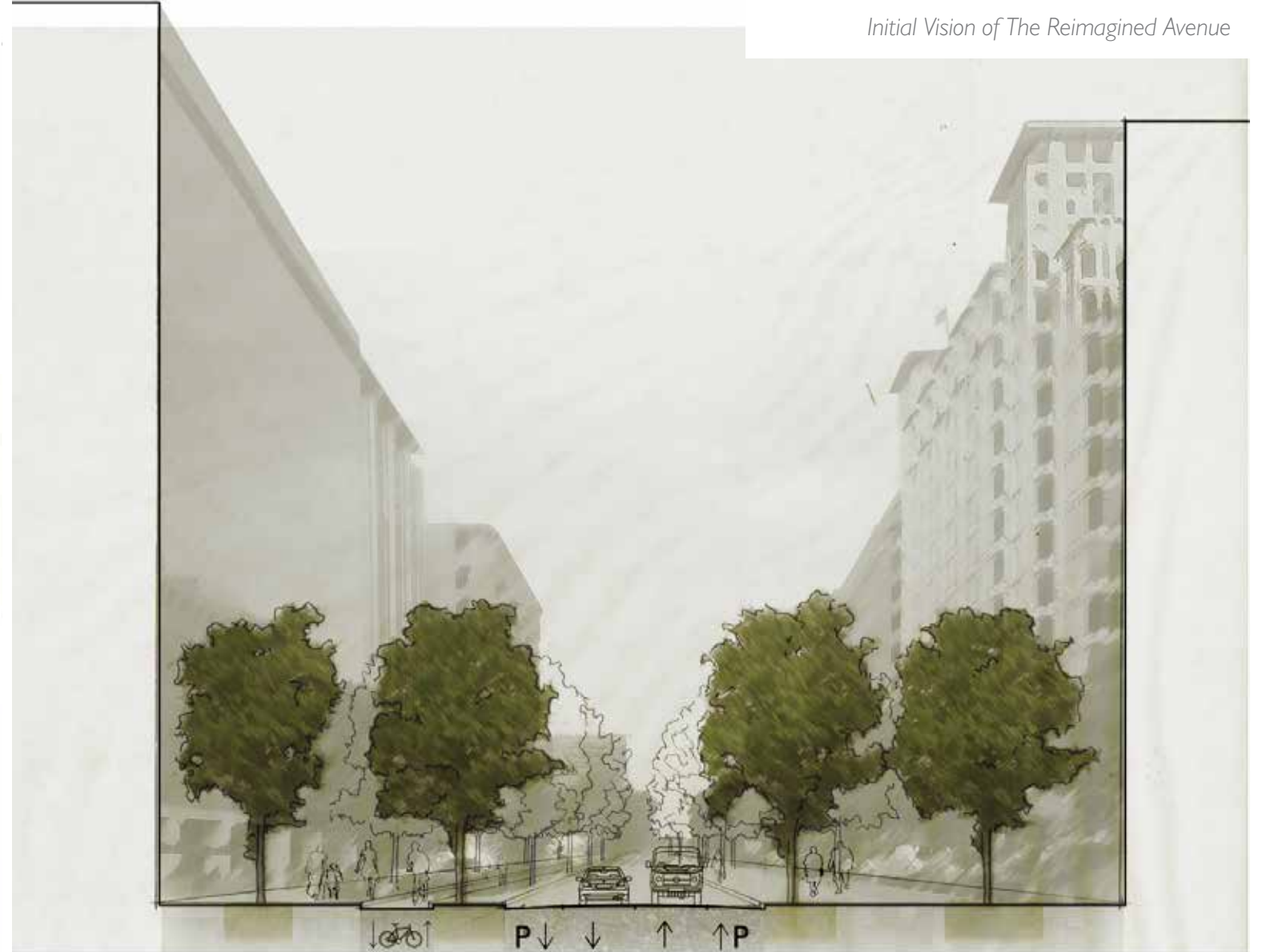
The "Commonwealth Ave"



The Asymmetrical Symmetrical



Initial Vision of The Reimagined Avenue





CONNECTING THE PARKS

The design teams initially considered connecting the Murrow and Monroe triangle parks across Pennsylvania Avenue in order to create two rectangular parks along the corridor. The goal of this approach was to make these valuable public spaces more active and less isolated. The connected approach would create new gathering spaces, and expand the pedestrian realm thus allowing for more events, and public art. Since the corridor is currently lacking a cultural destination, this approach would have created a fresh canvas to work with in designing new attractions with which to draw visitors and businesses to Pennsylvania Avenue.

Through consultation with numerous partners it became clear that this approach is not realistic at this time. As a result, the strategy turned towards finding a way to better connect these parks without closing the flow of traffic between them. The new design seeks to accomplish the same goals of creating a cultural destination, while maintaining the current rights of way for vehicular traffic.

The design team proposed a “linear park” concept on the

sidewalks lining both sides of the Avenue. This approach combined with wider sidewalks and a reduced street width will help to visually connect the parks across the Avenue and along the duration of the corridor. Creating active and passive activity zones in the sidewalk portion of the public realm will also make the parks feel larger and expand their potential uses.

Among those potential uses is the opportunity to bring special weekend events, which usually take place on the other side of the White House, to the parks. The design team has planned for bollards to be used to block the street between the triangle parks in order to create rectangle parks for special weekend events when the corridor is sparsely used. The resulting plazas will be designed to feel cohesive and connected in spite of their temporary nature.



Monroe Park



Approach to Monroe Park



Monroe Park

THE 'COMPLETE STREETS' DESIGN FRAMEWORK

"Complete Streets" refers to a comprehensive approach to planning the public right of way in order to properly accommodate all users in a sustainable way.

Transportation - The design team explored the safety of various traffic alignments and street sections to make the street more balanced between pedestrian, bicycle and automobile traffic.

Pedestrian - Considering the diverse organizations and people that visit the neighborhood, the design team looked for opportunities to activate the parks and sidewalks while providing connections to nearby destinations.

Sustainability - Opportunities for reducing runoff and providing a consistent tree canopy led to a design for an overall green corridor throughout the seasons.

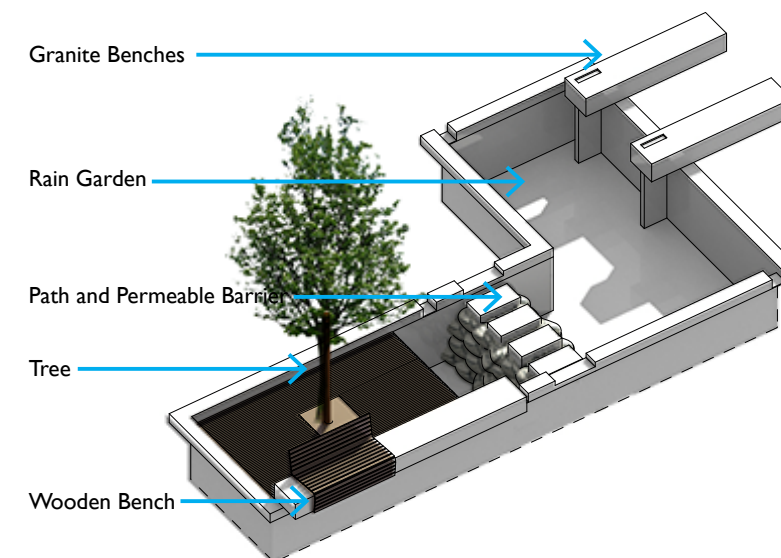


STAKEHOLDER COMMITTEE AND PUBLIC INVOLVEMENT PROCESS

Throughout the process the design team solicited and incorporated feedback from the various stakeholders involved in the project.

Design Development and Progression - Feedback from the various stakeholders of the project encouraged development that would benefit the existing building owners and tenants of the corridor.

A welcoming green streetscape was an integral part of this process, but the project was also developed through considering the diverse needs of the various people who live, work, drive, walk or bike along the avenue.



SIMPLIFYING THE CORE PROJECT THEMES

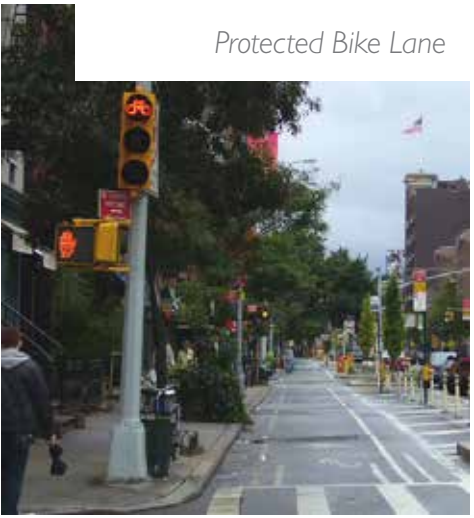
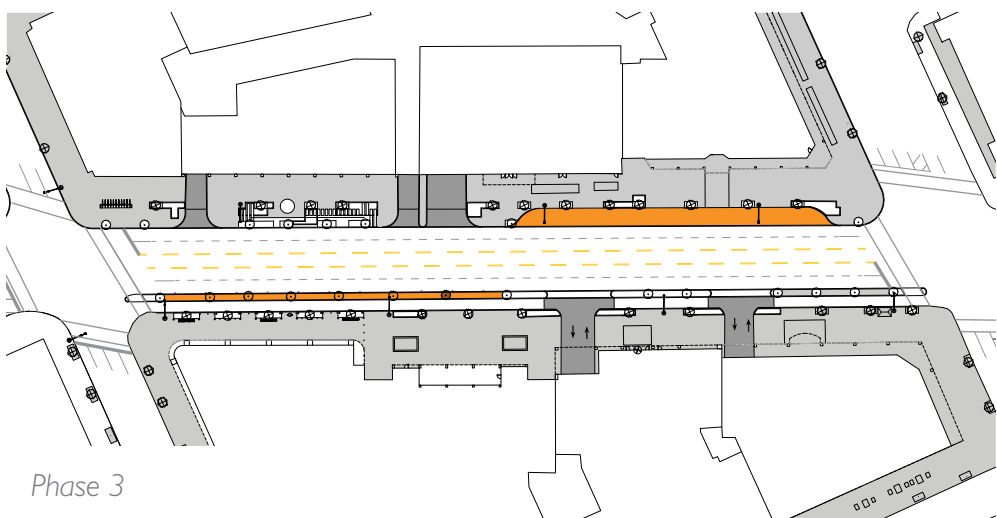
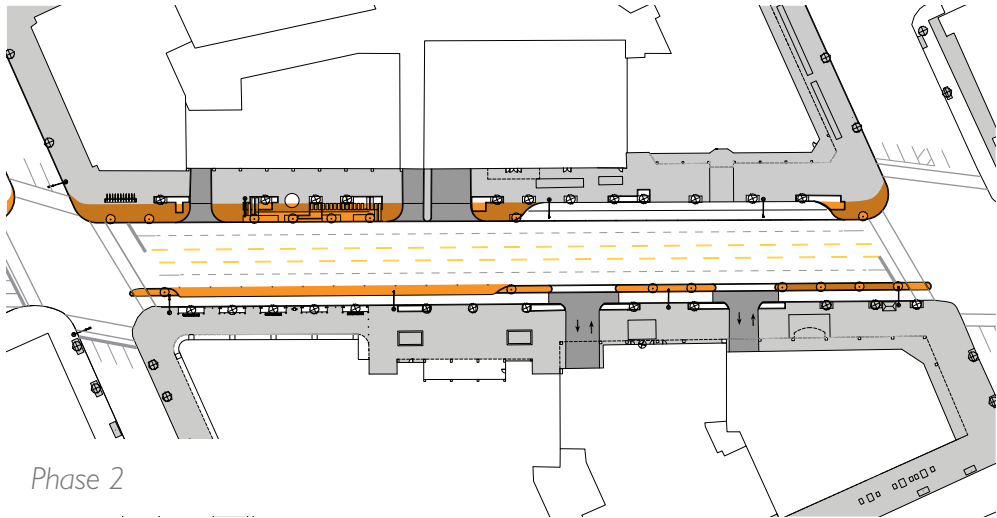
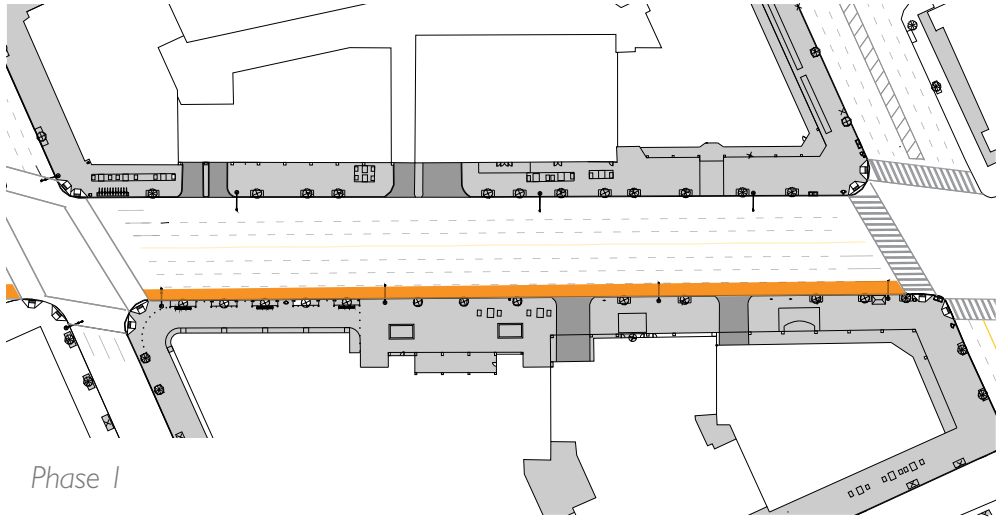
Creating a sense of place that is unique, but respects the unique historical tradition of Washington’s urban design can be difficult. To ensure that these goals were incorporated, the team focused the design considerations on three realms: the public realm, the sustainable realm and the cultural realm.

TEMPORARY INTERVENTIONS, PHASING AND IMPLEMENTATION STRATEGIES

The design was developed to be implemented in three phases. Traffic patterns and construction methods were carefully considered while developing the phasing plans with a focus on creating a smooth transition from eight lanes to five.

CONNECTED PARKS SHIFTED TO LATER PHASE

After several discussions with the stakeholders, the design team found it best to remove the extensive park alterations from the scope of work. The alterations could be considered as part of a future phase of development, but are not considered in the final product of this document.



SECTION 03: DESIGN PROPOSAL

DESIGN APPROACH 40

CORE THEMES:

 CREATE DESTINATIONS 42

 FACILITATE NEW CONNECTIONS 50

 PEDESTRIAN SCALE 56

 HARNESS SUSTAINABILITY 62

 BALANCE TRANSPORTATION MODES 68

 ACTIVATE THE PARKS 74

CONCEPT AND DESIGN ELEMENTS SUMMARY 80

While recent major efforts have been made throughout the Washington, DC Metropolitan region in rebranding, revitalizing and renewing neighborhoods and communities there has been decidedly less attention dedicated to the places in which people work within the District. The known commodity that is K Street has been supplemented with smaller, less dense enterprise zones including the H Street Corridor, Adams Morgan and Anacostia communities along with larger, burgeoning districts like the Capitol Riverfront, Mount Vernon Triangle and NoMA areas. The downtown central business district area, encompassed by the Downtown DC and Golden Triangle Business Improvement Districts, remains the preeminent neighborhoods for businesses and corporations thanks in large part to efforts undertaken by the BIDs in marketing the areas, aiding in the growth of local businesses and facilitating investments to maintain and improve surrounding public spaces.

The *Pennsylvania Avenue - West of the White House Public Realm Plan* presented in the pages that follow seeks to build off these key public space improvements in order to restore the area's promise and future growth as a nationally-recognized address and place for doing business while also introducing new opportunities for growth as a equally prominent cultural corridor. The study area encompasses the public realm between 17th and 21st Street's to the immediate west of the White House including two underutilized parks, Murrow Park and Monroe Park, and serves as a distinct convergence point between institutional tenants (educational, government, nonprofits) to the South and predominantly commercial tenants to the North as the area abuts K Street NW.

The design proposal seeks to bring those groups together along the Penn Ave corridor by creating a more active, cohesive, and pedestrian-friendly environment which draws visitors through the creation of cultural destinations, and better balances the various public realm uses.

DESIGN PROPOSAL



GOLDEN TRIANGLE

KGP design studio

DESIGN APPROACH

ISSUES

- Monolithic facades.
- Imposing high security streetscape design elements.
- Splintering of parks.
- Internalized building programming.
- Lack of continuity for bicycle infrastructure and facilities.
- Awkward pedestrian accessibility and circulation.
- Inconsistent tree canopy.
- Width of roadway.
- Unclear identity.
- On-street parking has limited appeal and confusing legal restrictions.
- Disconnected.
- Inconsistent street-wall.
- Eroding sidewalk edge with recurring garage entrance and loading dock areas.
- Insufficient activity nodes and programming.
- Lack of visual continuity.
- Over-scaled urbanism.
- No distinct gateway or visual identity.
- Abrupt breaks in storefront activity for long stretches of the corridor.
- East-West connectivity to existing street grid is severely limited due to closing of Pennsylvania Avenue at the White House.

CHALLENGES

- Federal security streetscape design considerations.
- FHWA classification of an 'Emergency Evacuation Route' and the capacity and traffic considerations.
- Building logical connections for all circulation modes including vehicular.
- Reducing both the actual and perceived scale within the context of the existing urban fabric and the constraints it imposes.
- Historical preservation of the 1791 L'Enfant 'Plan of the City of Washington.'
- NCPC 'Monumental Core Street' boundary extension only a single block into corridor.
- Confusing jurisdictional controls and regulatory framework for implementing and adhering to streetscape design standards.
- Establishing a brand and building a strong identity for the corridor.
- FHWA road classification as a 'Principal Arterial,' despite its limited connectivity to urban fabric.
- Maintenance and upkeep of park programming and activities for Murrow and Monroe Parks.
- Property rights, easements, right-of-way's and land ownership responsibilities of critical corridor elements.
- Integrating short and long-range public transportation planning initiatives within the plan framework.
- Meeting the needs of various large scale national and global events while also encouraging civic vitality and core principals of being a 'complete street.'
- Bringing together disparate user groups to activate underutilized public spaces.
- Discouraging vandals, vagrants, loitering and suspicious behavior in areas of critical national importance.
- Attracting and sustaining visitors from the non-captive audience such as local residents, students, federal government workers and tourists.

CORE THEMES / OBJECTIVES

CREATE DESTINATIONS

FACILITATE NEW CONNECTIONS

PEDESTRIAN SCALE

HARNESS SUSTAINABILITY

BALANCE TRANSPORTATION

ACTIVATE THE PARKS

ACTION PLAN / IMPROVEMENT CATEGORIES

1

Temporary Urbanism

2

Streetscape / Public Realm Enhancements

3

Transportation Re-Balancing and Open Spaces

4

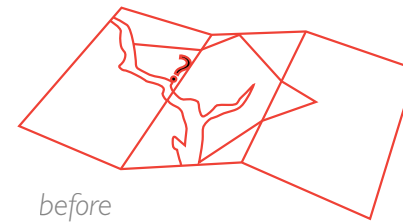
Extending, Connecting and Incentivizing

5

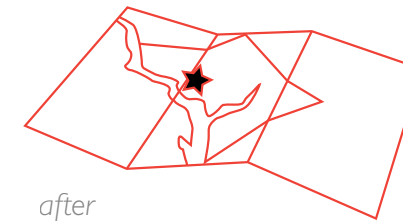
Future Considerations



Transform the corridor into an iconic destination that will draw people from all over the city, region, and world.



before



after

As one of the nation's most famous streets, Pennsylvania Avenue is recognizable as the seat of the federal government. From the Capitol Building to the White House, government workers mix with tourists flocking to see the renowned museums, monuments and memorials nearby. However, west of the White House, Pennsylvania Avenue loses this identity as a grand avenue. Lacking a defining anchor, the western part of the corridor has taken on a "typical" office street character that belies its historic and locational importance.

The public realm design creates a framework for establishing both a regional cultural corridor and an internationally recognized green avenue to build upon the area's prominent role as an existing premier daytime dining destination. By creating anchors and incentives to draw people to western Pennsylvania Avenue, it can reclaim its status as a great street and reconnect to its more recognizable eastern half.

- **Identity and Continuity:** A unique, but consistent streetscape will create a positive sense of place.
- **Memorials & Public Art:** The addition of cultural features on the sidewalks and in the parks along Pennsylvania Avenue will draw people to Penn West.
- **Neighborhood Branding:** Creating an identity for the neighborhood through Metro access and as a gateway to downtown
- **Enliven Pedestrian Activity:** Streetscape improvements will work in unison with existing businesses to energize the street and increase retail activity

IMAGE(S):
(opposite) 17th & Pennsylvania
Avenue daytime perspective
(above) Illustrative diagram

CREATE DESTINATIONS

THE GRAND URBAN BOULEVARD: A PLACE TO SEE AND BE SEEN

With its many law firms, international organizations and civic leaders, *Penn West* has the potential to expand upon its burgeoning role as a premier daytime business dining destination for politicians, organizations and prominent local professionals.

The unique international character that comes from such close proximity to the White House, numerous embassies, the World Bank and IMF, an internationally-respected university, and countless globally-focused non-profits, is a strong foundation on which to build. Finding a way to build off of this international flare while ensuring that the corridor has a distinctly “D.C.” feel to it is both a challenge and a great opportunity.

Developing a cultural identity for the corridor around the global and local can be accomplished through arts and events, and will create a sophisticated neighborhood that will serve as destination for people from all over the world.

THE MONUMENTAL CORE

The National Capital Planning Commission's boundary for classifying the section of Pennsylvania Avenue West of the White House within its *Monumental Core Framework Plan* currently terminates at its 18th Street NW cross street. The resultant complications in establishing uniform and consistent aesthetic standards for the corridor detract from its identity. Strong consideration should be given to either extending the boundary, classifying it as a *Monumental Core Street*, or terminating the boundary at the White House grounds. Such actions would enable *Penn West* to establish a cohesive public space and augment the connection to both Georgetown and Rock Creek Park.



DULLES AIRPORT



METRO SILVER LINE



STATION RE-BRANDING



NEW GATEWAY TO DOWNTOWN



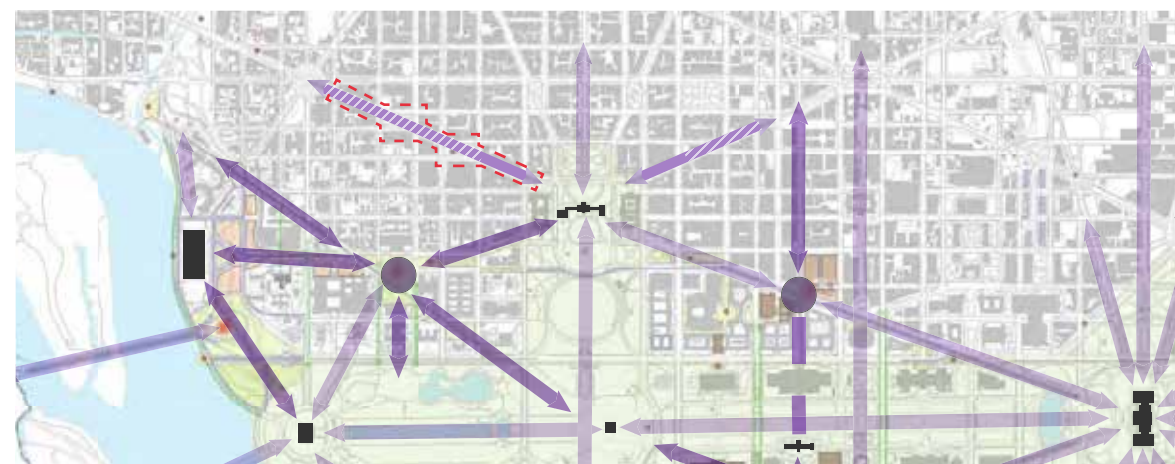
Enhancing brand through site furnishings -
Central Park Conservancy



Wayfinding and directional signage by
Pentagram for New York City



Historical information panels and wayfinding iconography for
Washington, DC by the National Parks Service



IMAGE(S):

(left) Overlay diagram extracted from NCPC's Monumental Core Framework Plan identifying the Monumental Core Streets (top)
Metro diagram identifying branding opportunities offered by the Metro Silver Line extension



CASE STUDY: RUE DU VIEUX MARCHÉ AUX POISSONS - STRASBOURG, FRANCE

Rue Du Vieux Marche Aux Poissons, along with numerous other arterial streets in the city of Strasbourg, exemplifies a seamless blend of integrated transportation and historic character. The roadway creates an inviting atmosphere for vehicular traffic, parking, bicyclists, pedestrians along with a centrally aligned light rail system. Safety measures, both physical and behavioral, are built into the fabric of the roadways design to such a degree where they disappear as distinctive design elements. The overall effect of the design is similar to that of a shared street but unique in its execution.

Buffers between the various modes of circulation are discreetly defined not by changes in vertical alignment (via a traditional curb) instead choosing to be identified by subtle variations in the texture of ground surfaces. Higher speed circulation areas, for modes such as bicyclists and vehicles, are traditional asphaltic concrete. A well defined edge effectively buffers the two modes with a row of street trees interwoven with on-street parking while the pedestrian realm is defined by a slower travel surface paving. The transitway is variably defined by strips of grass along its uninhibited travel areas while stations are demarcated with a rougher cobblestone paver defining it as part of the pedestrian realm.



CASE STUDY: GEORGIA STREET - INDIANAPOLIS, IN

Downtown Indianapolis' dead-end Georgia Street acts as a destination all its own surrounded on all sides by a varied mix of other attractive cultural destinations. Within the three block stretch, open to vehicular traffic, the street features open, movable public seating, numerous public art installations and sustainable features making it one of the 'greenest' streets in America. The street's design establishes a framework for hosting a wide range of events, retail, and dining by accentuating its locational assets over its otherwise limited stock of attractive features to the public realm. The public realm is actively programmed similar in many ways to Barcelona's famous Las Ramblas.





Washington Circle
CULTURE



GWU Campus Center Plaza
ECOLOGY



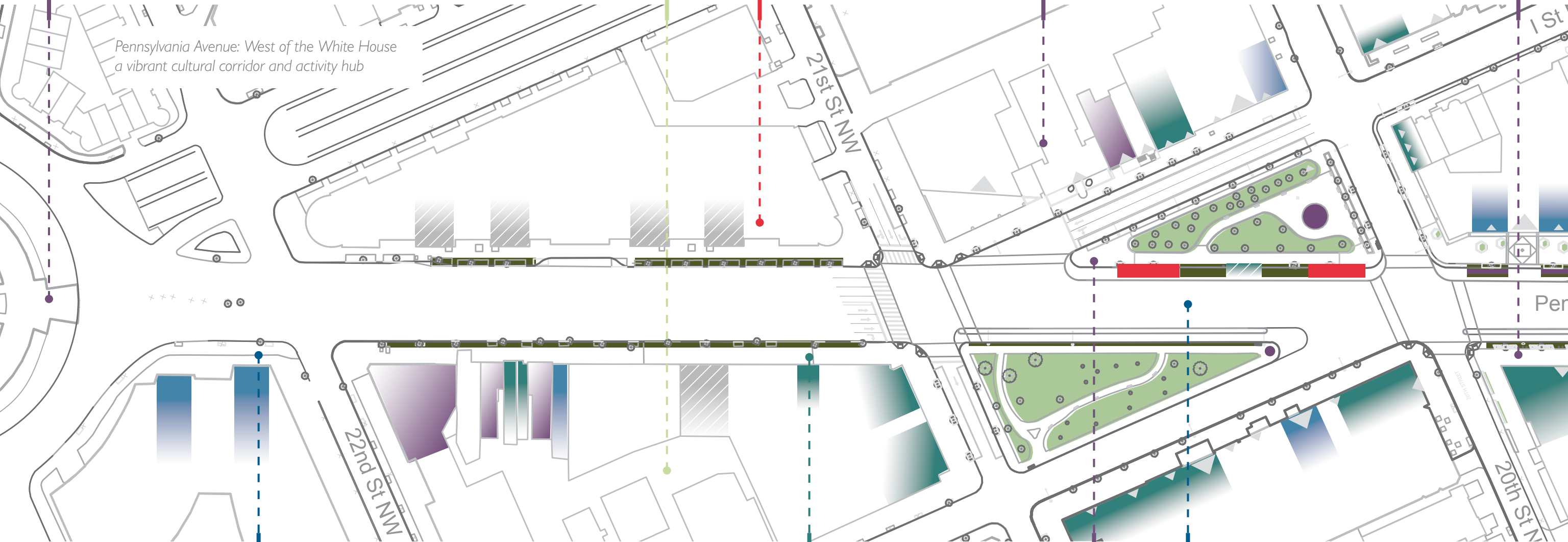
IMF Childrens Play Center
RECREATION



Washington Arts Club
CULTURE



IMF Water Fountains
CULTURE



Pennsylvania Avenue: West of the White House
a vibrant cultural corridor and activity hub



14th St NW Retail Corridor
RETAIL



Bethesda Row Outdoor Dining
DINING



Monroe Park - Tricorne Fountain
CULTURE



Dupont Circle Weekend Market
LANDMARK

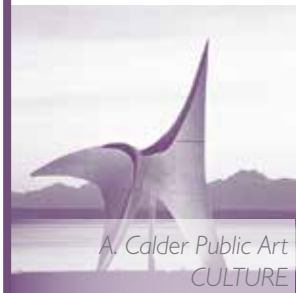
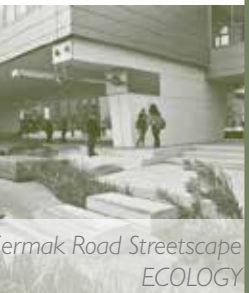
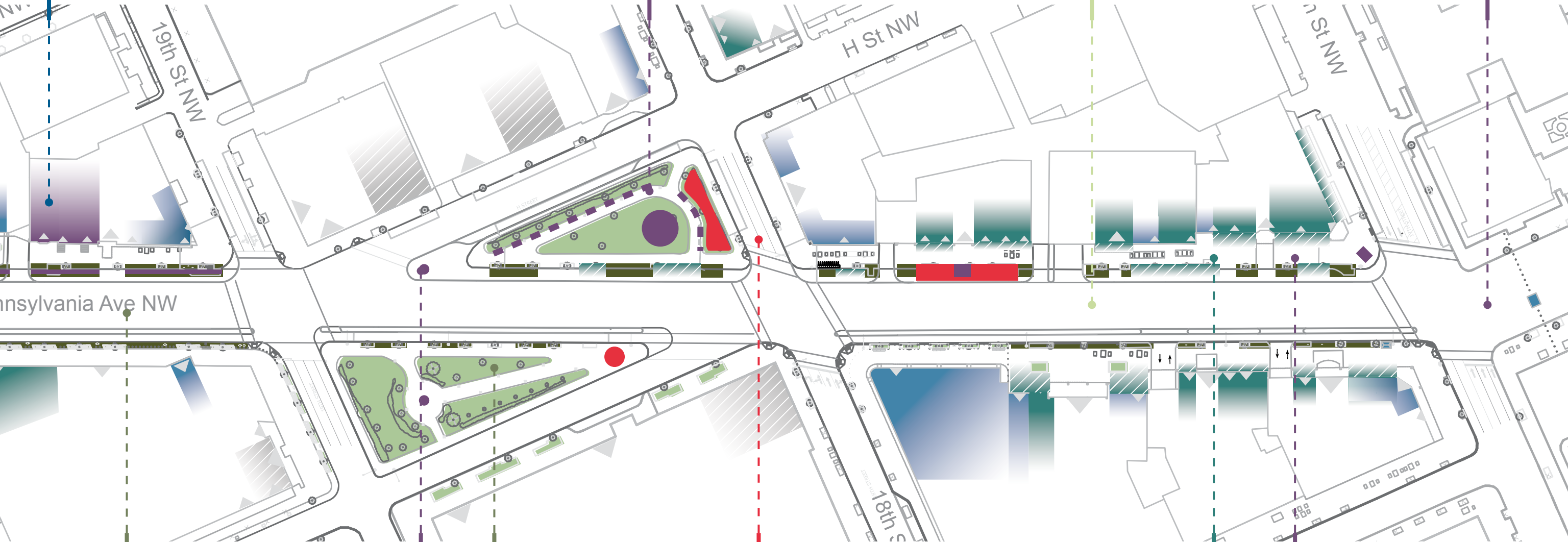


C





EXISTING

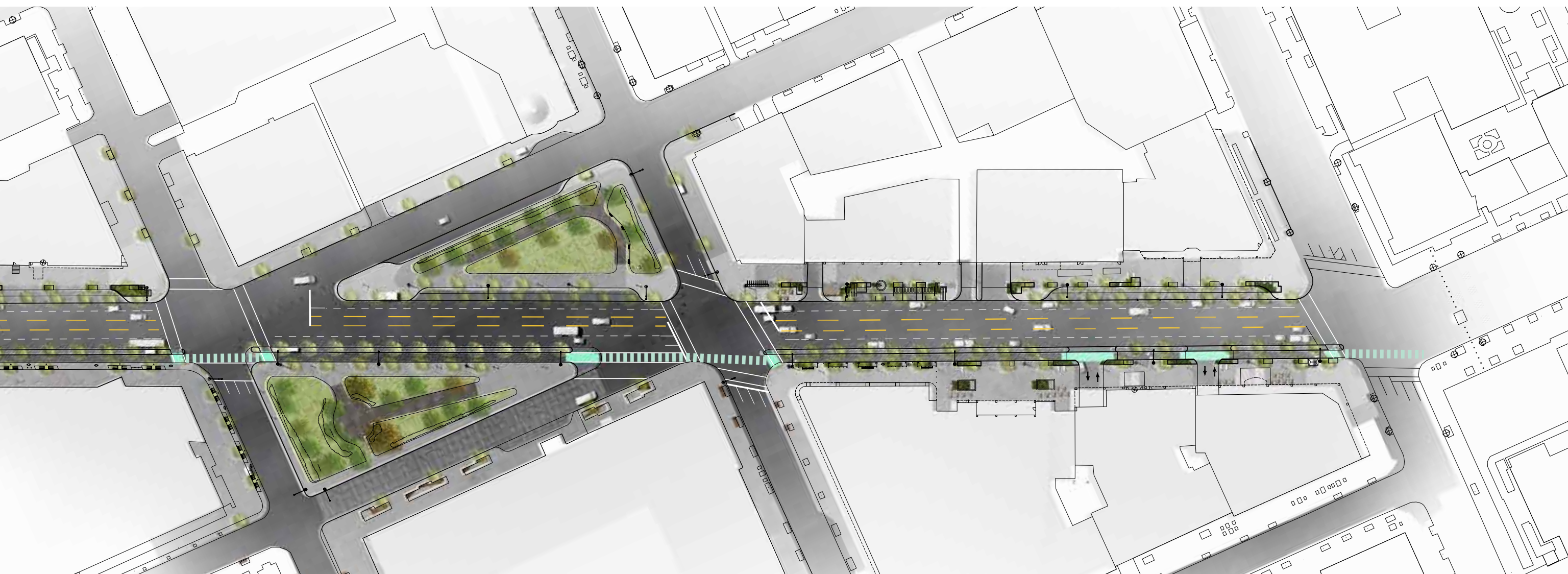


PROPOSED



A Framework for New, Active Uses - Although current market conditions limit the retail potential along stretches of the corridor, new investments in the public realm have the ability to introduce active spaces along the sidewalk. The short term introduction of programmatic elements like food trucks or park-lets could pave the way to long term growth and prosperity for local business owners.

Diverse and Eclectic Storefronts - The healthy building stock along the corridor features a mixture of historic and modern facades. All efforts should be made to enable the easy conversion of lobby spaces and ground floor facades occupied by commercial program into vibrant, active storefronts when market conditions permit. Signage, awnings and colorful storefront displays should all be encouraged as they enliven the streetscape at a pedestrian level.



Monuments, Memorials and Public Art - In order to continue the momentum built up from the 'Tricorne' and 'Murrow's Microphones' public art installations the BID should continue working with key stakeholders, including NPS and NCPC to identify and target locations for additional cultural installations which further enliven its pedestrian realm. With all connecting streets leading to both Murrow and

Monroe Parks these areas offer prime real estate for one of the numerous planned monuments from the NCPC's *Monuments and Memorials Master Plan*. Murrow Park's North or South lawn provides an ideal opportunity to enhance the connection to the Federal Core and attract tourists with its immediate visibility to the White House grounds at President's Park.

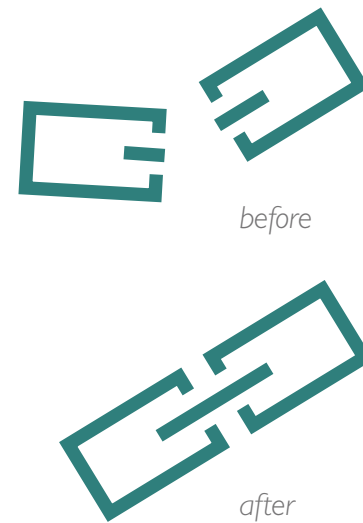




Create a defined corridor, but one that builds logical connections to the surrounding street grid and acknowledges the variety of different uses in each direction.

Penn West sits along the southern edge of the Golden Triangle, surrounded by some of the most active, yet disparate parts of the city. Most of the activity along Pennsylvania Avenue occurs to the east of this corridor and terminates in front of the White House, where a closed portion of the street serves as a vibrant pedestrian mall.

Currently, Pennsylvania Avenue west of the White House mainly serves as a direct route for commuters driving into the downtown area from Georgetown and northern Virginia. By improving the streetscape elements and bicycle infrastructure, Penn West can connect Georgetown and downtown, while simultaneously serving as a green connection between Rock Creek Park and the Mall. By encouraging Pennsylvania Avenue as a pedestrian route, greater activity will come to the corridor which will have a positive effect for local businesses.



IMAGE(S):
 (opposite) Aerial corridor
 perspective looking West from
 above White House (above)
 Illustrative diagram

- **Nodes & Priority Access Corridors:** Improves connectivity between adjacent open space reservations within the L'Enfant Plan and for east-west vehicular travelers
- **Continuation of Bicycle Infrastructure:** Provides safer commutes for cyclists while decreasing potential conflicts with motorists and pedestrians
- **Green Extension:** Creates a parklike and more pleasant connection along the street to connect Rock Creek Park and the Mall
- **Wayfinding & Intersection Simplification:** Reinforces the traditional street grid and develops pathways for all modes of transportation

FACILITATE NEW CONNECTIONS



Local and regional connectivity to the surrounding street grid

A REGIONAL, CULTURAL CORRIDOR

The public realm design establishes both a cultural corridor and an cutting-edge green avenue which builds upon the area's already-prominent role as an institutional and commercial hub.

Pedestrian connectivity between the parks is accentuated through the vast, open sidewalk spaces. The missing link between the Federal downtown core and Georgetown is infilled by extending existing bicycle infrastructure along Pennsylvania Avenue up to and beyond Washington Circle. Another key logical connection for East-West travel is created without adversely affecting the historic L'Enfant street grid.

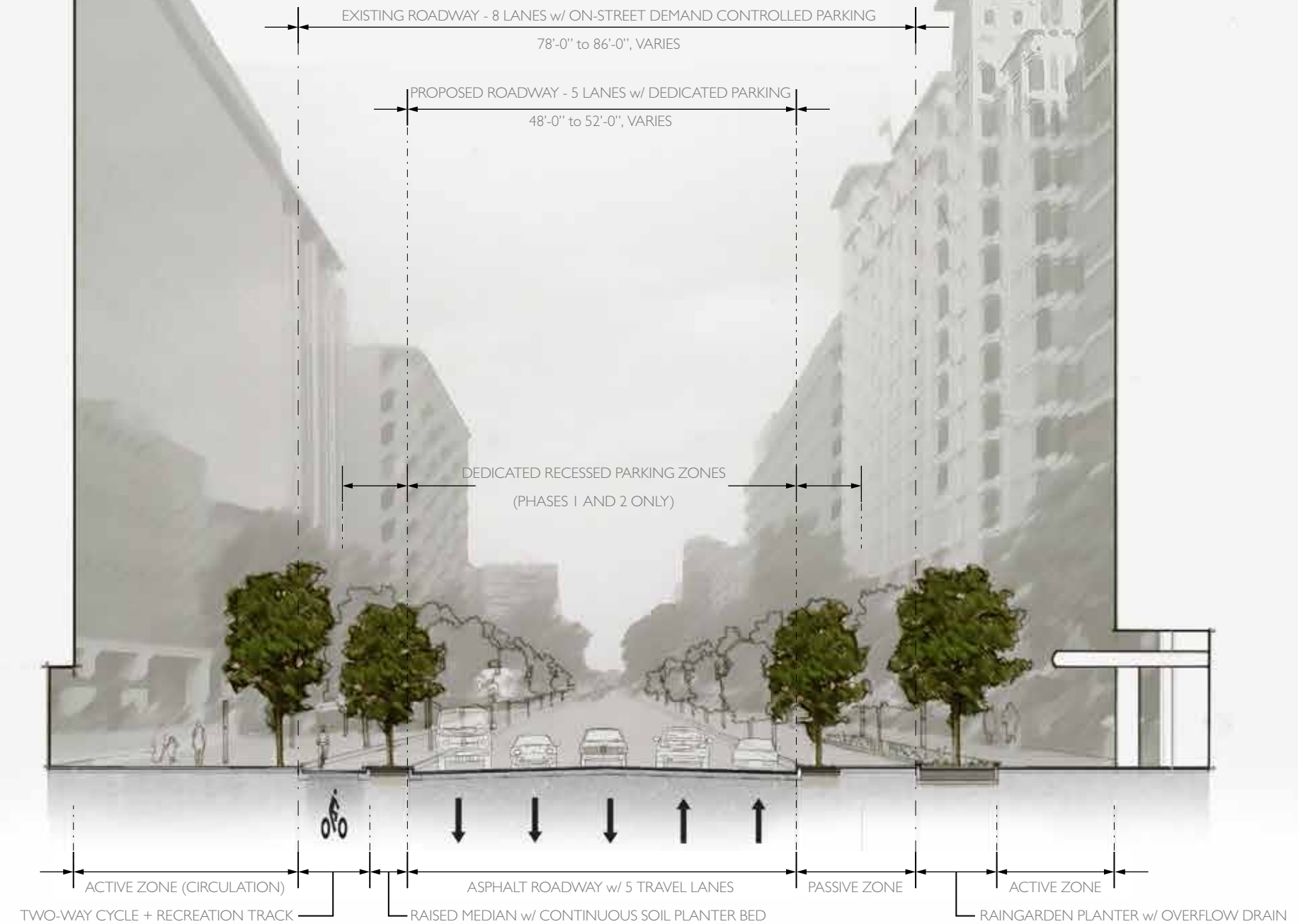
The strenthened pedestrian and vehicular corridor features strategic connection points at high-visibility areas providing an opportunity to draw visitors in, breathing new life into retail, dining and shopping along the corridor. As the connections to all surrounding streets, strengthening Murrow and Monroe Park's presence along the corridor is essential.



Pennsylvania Avenue sidewalks along 'America's Main Street'



A connected, well defined green corridor to establish identity



PUBLIC REALM IMPROVEMENTS

The design calls for simplified intersections, emphasizing safety for all modes and creating an inviting atmosphere and forming a unified public realm. The design creates defined active and passive zones for the sidewalk spaces which will extend this increased activity into the existing street right-of-way, thereby creating a more vibrant pedestrian corridor.

A logical hierarchy is established for the streetscape design which distinctly identifies East-West from North-South streets while celebrating the symbolic importance of the diagonal Avenue's cutting through the Federal Core.

PROXIMITY TO TRANSIT & TOURIST DESTINATIONS

Proximity to the metro and nearby cultural destinations will encourage tourists and visitors to utilize the corridor's existing network of retail, dining and shopping experiences. Public transit accessibility continues to be a hallmark of almost all highly successful public spaces within Washington, DC and provides yet another leverage point to enhance the corridor's brand.

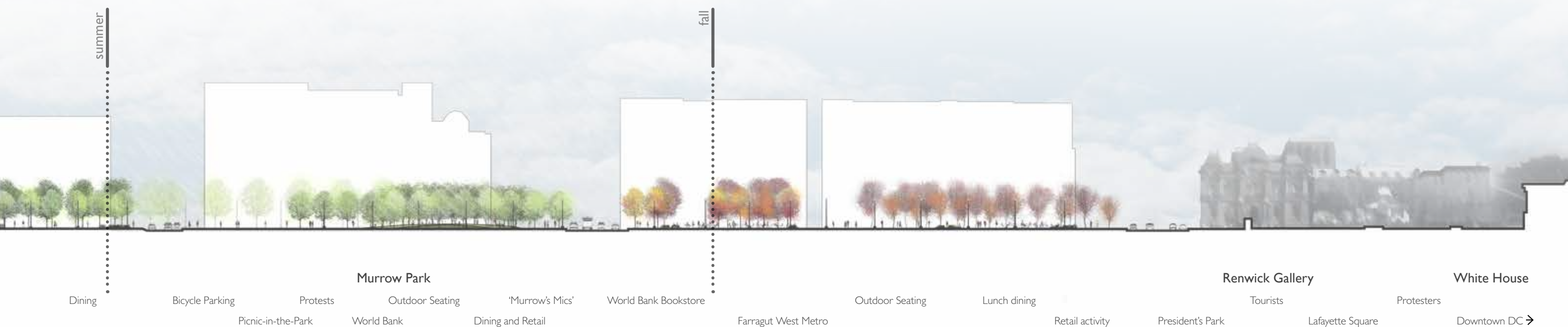
The introduction of public art and recreation areas will further advance the Avenue's mission to become a destination all its own.



THE 'GATEWAY' TO DOWNTOWN

The opening of the WMATA Silver Line, Phase I in 2014 created a great opportunity for the neighborhood since, for more and more people, Farragut West station - one block north of Murrow Park - will serve as the gateway to downtown DC. Future extensions of the Silver Line to Dulles Airport will bring an influx of new visitors to the corridor further cementing the neighborhood's 'gateway' role for public transportation users. Partnerships with WMATA in acknowledging this heightened role by taking measures to brand Farragut West Metro station as this new gateway could benefit both parties by offering minor congestion relief to the downtown Metro stations and creating new market opportunities for local businesses West of the White House along the Penn West corridor.

The Francis Scott Key, Theodore Roosevelt Memorial and Arlington Memorial Bridges all function as key vehicular gateways to Downtown DC areas. Although differing in mode, these bridges all offer similar characteristics to the Penn West area which enables them to prosper in their respective functions as gateways. Each provides cultural attractions at one or both ends and visual connectivity to important federal monuments, a shared characteristic for Pennsylvania Avenue and hallmark feature of its original design intent.

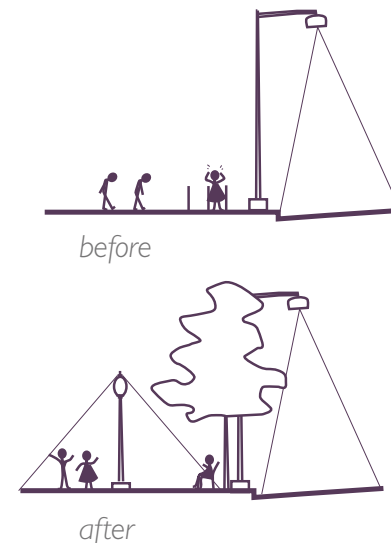




Create a pedestrian scale streetscape with subtly defined areas for travel and recreation, public art and café seating, improved street crossings and human-scaled design elements.

With few exceptions, every visitor to the neighborhood ends up experiencing the area as a pedestrian, regardless of what mode they use to reach the neighborhood. The current scale of Pennsylvania Avenue west of the White House is not conducive to maximizing pedestrian use. With eight lanes of traffic and confusing intersections, it can be a daunting place to walk. Furthermore, the sparse tree canopy, sporadic and uncoordinated site furnishings and abundance of high-security elements interfere with the pedestrian experience.

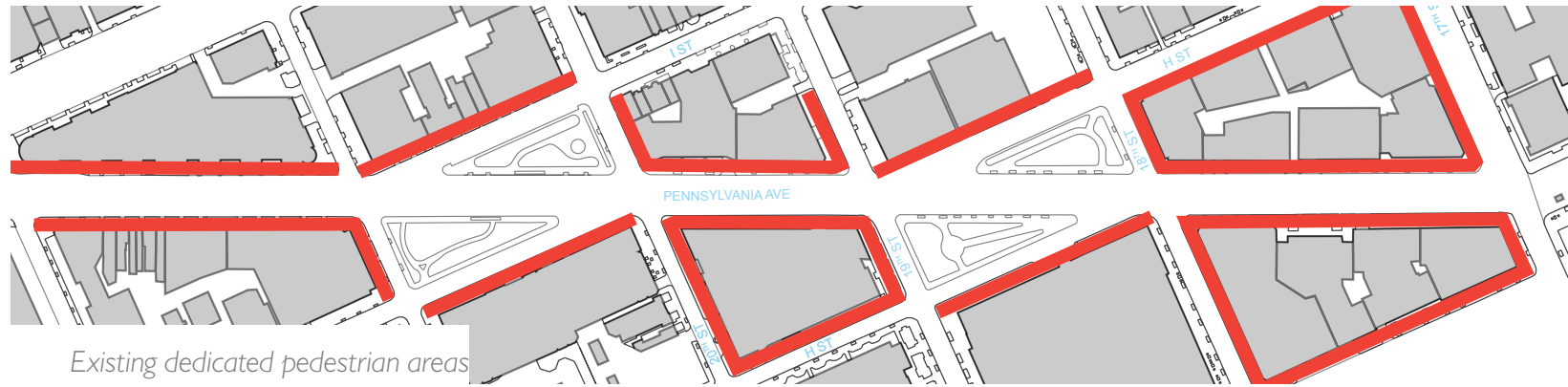
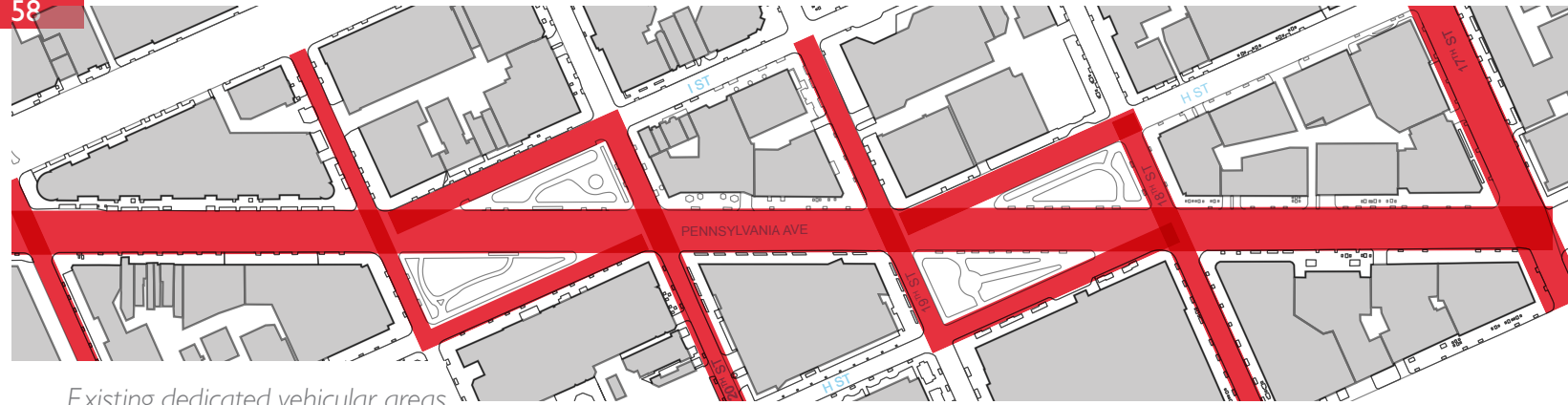
The gracious sidewalks within the design plan offer zones for active and passive pedestrian activities defined by pedestrian scaled site features offering appropriate streetscape lighting, visual interest and various short-term outdoor seating areas. A double row of canopy trees buffers pedestrians from the active roadway and provides shaded refuge in the warm summer months. The addition of rain gardens and a consistent tree canopy will add both to the comfort and aesthetic value of the street. Furthermore, streetscape improvements will focus on adding elements that cater to both the pedestrian passing through and those who would like to linger- whether on a bench or at a sidewalk café.



IMAGE(S):
(opposite) Murrow Park
streetscape perspective with
Peace Corps Memorial beyond
(above) Illustrative diagram

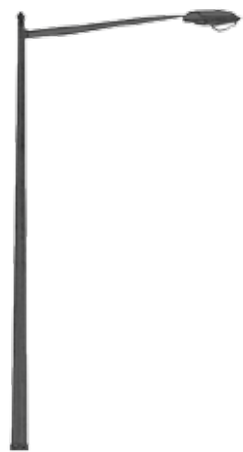
- **Active & Passive Space:** Create active and passive zones for people walking by or lingering at a bench or café
- **Pedestrian Lighting:** Improve nighttime visibility focusing on sidewalk traffic, not just road traffic
- **Retail Visibility/Sightlines:** Heighten connections between storefronts and sidewalks and invite movement from one side of the street to the other
- **Street Furnishings:** Define a cohesive and coherent pedestrian

PEDESTRIAN SCALE



The gracious sidewalks within the design plan offer zones for active and passive pedestrian activities defined by pedestrian scaled site features offering appropriate streetscape lighting, visual interest and various short-term outdoor seating areas. The creation of a double row of canopy trees buffers pedestrians from the active roadway and provides shaded refuge in the warm summer months.

- Operate as a symbolic linkage from the nation (federal government) to the city (local urban vitality), an extension of democratic governing principles into everyday life
- Create opportunity to connect isolated communities, facilitate civic engagement and enhance federal identity by activating Monroe & Murrow parks
- Enhance association between local metro stops and local destinations.



Single Arm
Pendant Pole



Decorative
Teardrop Pole



Fixture #16



Twin-20



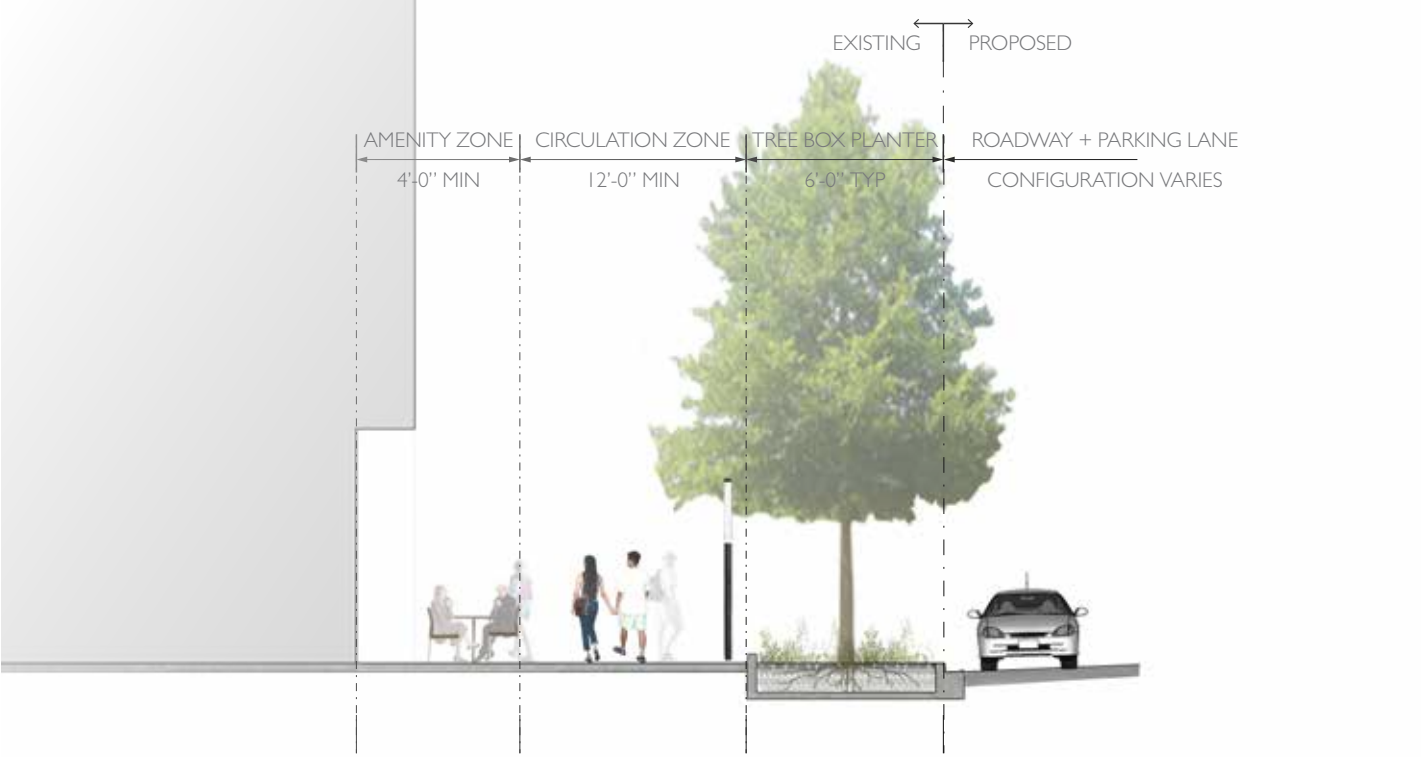
Pedestrian Light
Column



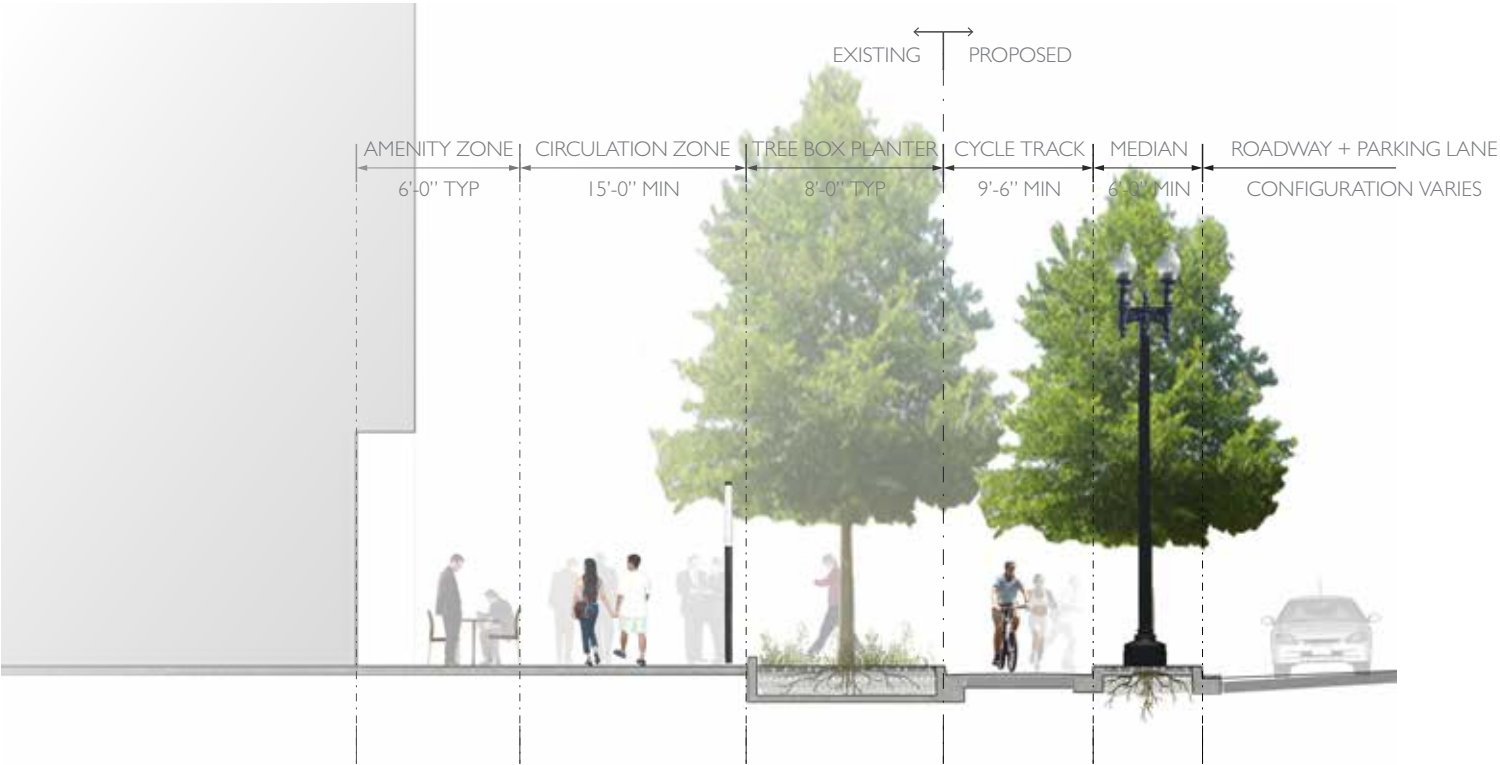
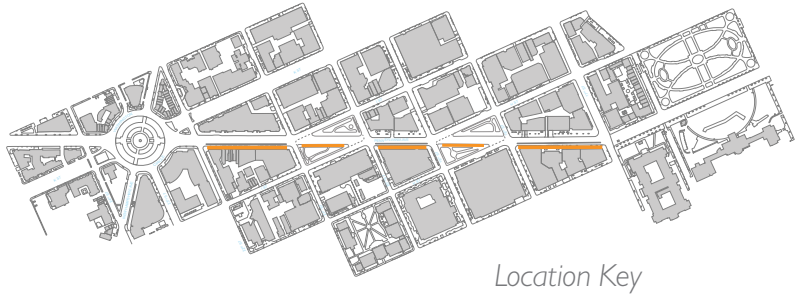
Saratoga Lantern

				TYPICAL STREETSCAPE ISOMETRIC
<p>17th, 18th, 19th, 20th and 21st St NW Typical North-South Road Streetscape</p>	<p>Pennsylvania Avenue NW Typical South Side Streetscape</p>	<p>H St & I St NW Typical East-West Road Streetscape</p>	<p>Pennsylvania Avenue NW Typical North Side Streetscape</p>	
				TYPICAL STREETSCAPE PLAN

17th, 18th, 19th, 20th and 21st St NW
Typical North-South Road Streetscape

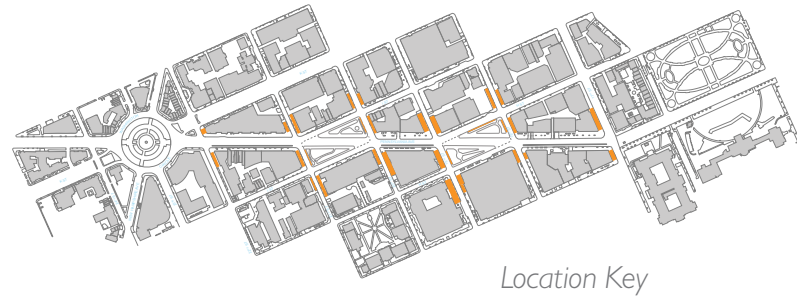


Pennsylvania Avenue NW
Typical South Side Streetscape

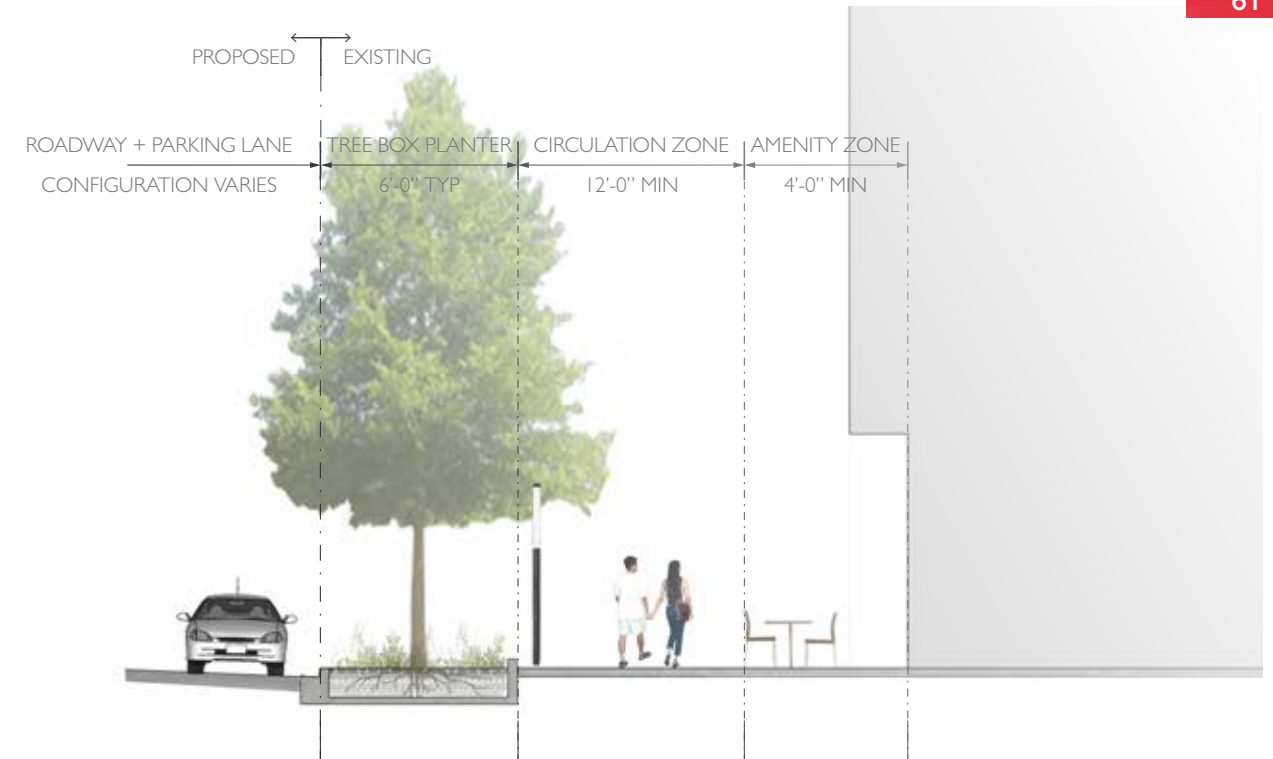


H St & I St NW

Typical East-West Road Streetscape



Location Key

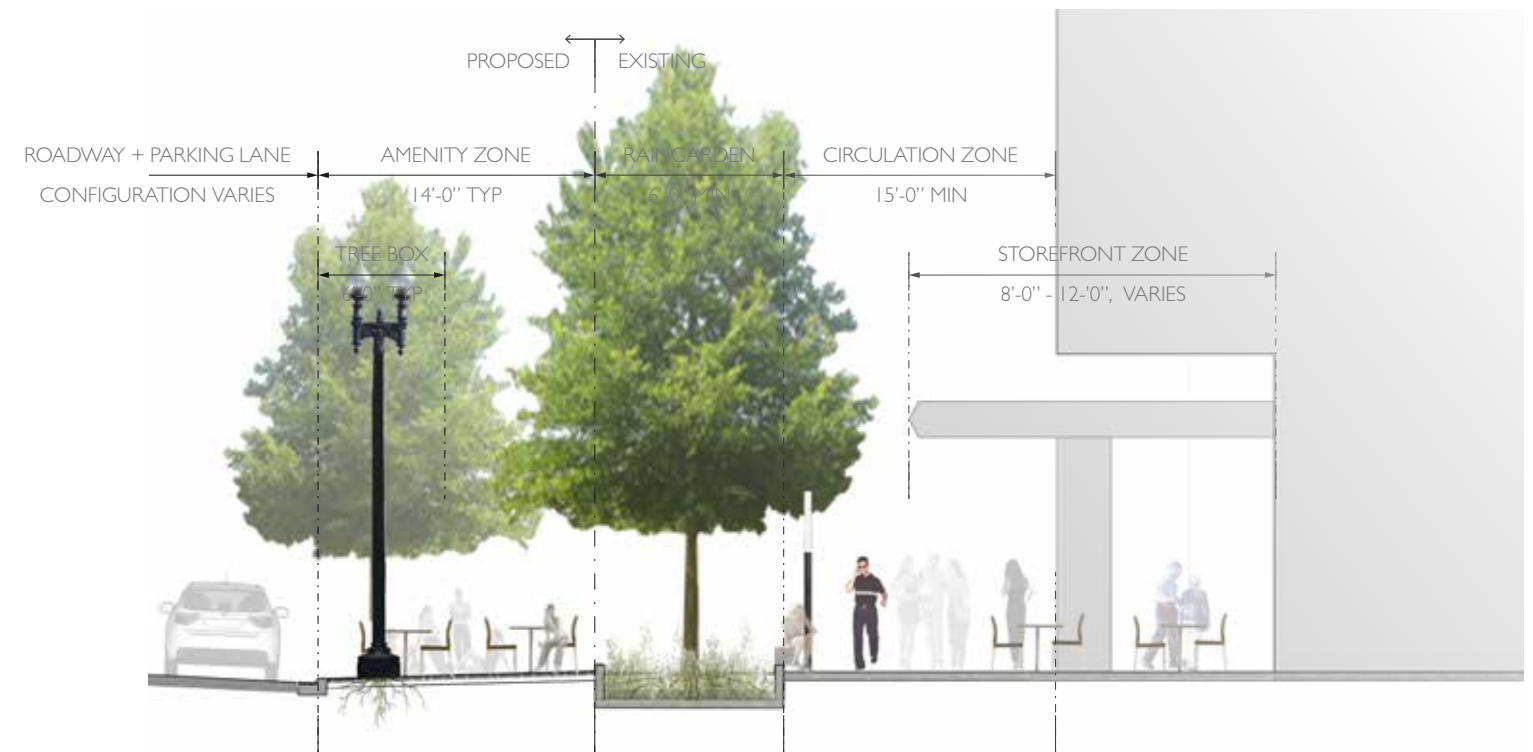


Pennsylvania Avenue NW

Typical North Side Streetscape

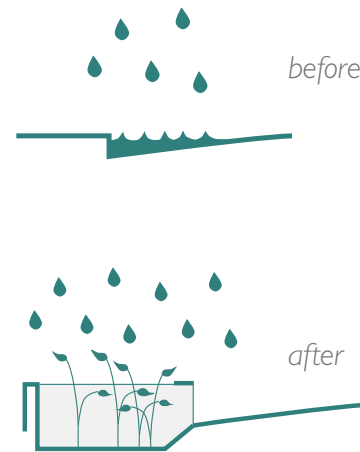


Location Key





Create a corridor with an enhanced tree canopy and sustainable planting beds, and other features which will help to create an identity for the corridor as one that is both visually beautiful and technologically innovative.



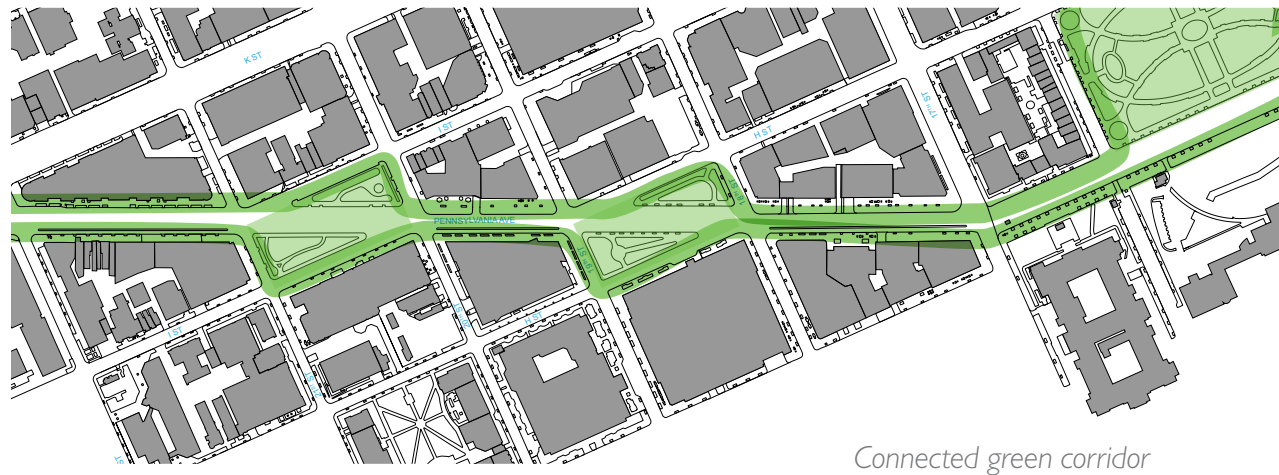
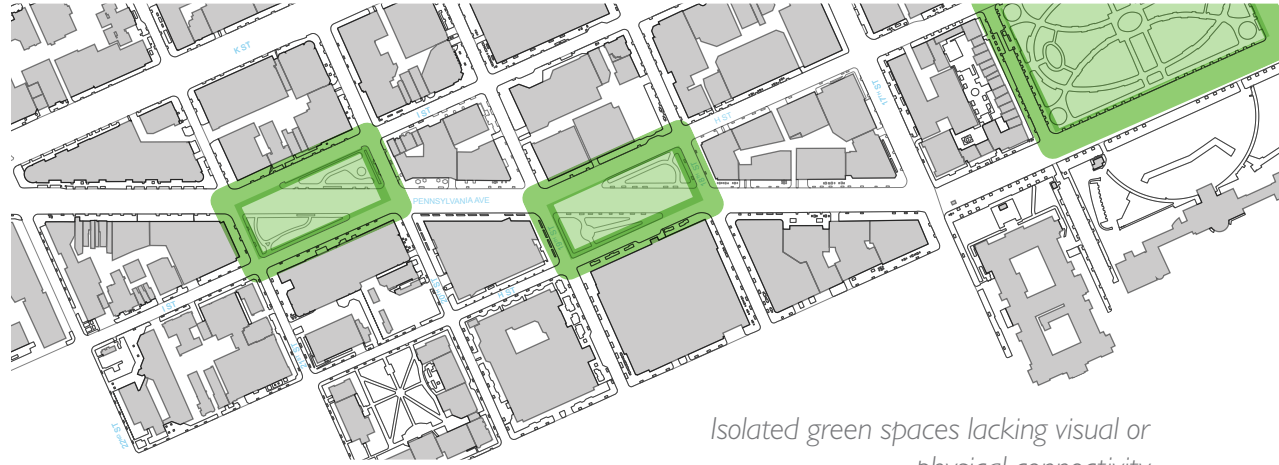
The current streetscape is almost entirely made of impervious surfaces, which encourage harmful runoff and stress the city's water and sewer infrastructure. With numerous controlling agencies along a limited stretch of streetscape and no central oversight of design standards, the corridor lacks consistent aesthetic standards for site amenities and stormwater treatment. Sustainability is envisioned as both a critical aesthetic glue for the corridor and an important branding opportunity for property owners to market the corridor.

The addition of permeable pavers and raingardens will be a boon to the District's environmental infrastructure, helping to manage stormwater runoff. A simple yet robust kit-of-parts, capable of adapting to the multitude of site conditions, was developed for the streetscape amenities and planters so that everything from hardened street furnishings to tree planter boxes aid in the crafting of a distinctive identity for Penn West. Multi-seasonal plantings are specified to provide year round visual interest.

IMAGE(S):
(opposite) Aerial perspective of proposed standard LID raingarden planter (above) Illustrative diagram

- **Low-Impact Development & Raingarden Planters:** Passive stormwater treatment options lessen demand on active stormwater infrastructure and balance environmental impacts
- **Improved Tree Canopy:** Combats the urban heat island effect, making the street more inviting to pedestrians during hot summer months
- **Permeable Pavers at Parking/Shared Space:** Decreases stormwater runoff and softens visual impact of hardscape finishes
- **Native Species:** Increases success of plantings when exposed to seasonal weather variations such as drought and snow, providing a more consistent appearance
- **Perennials Planting Concept:** Plantings are chosen that allow for year-round variations in texture and color, enlivening the visual experience

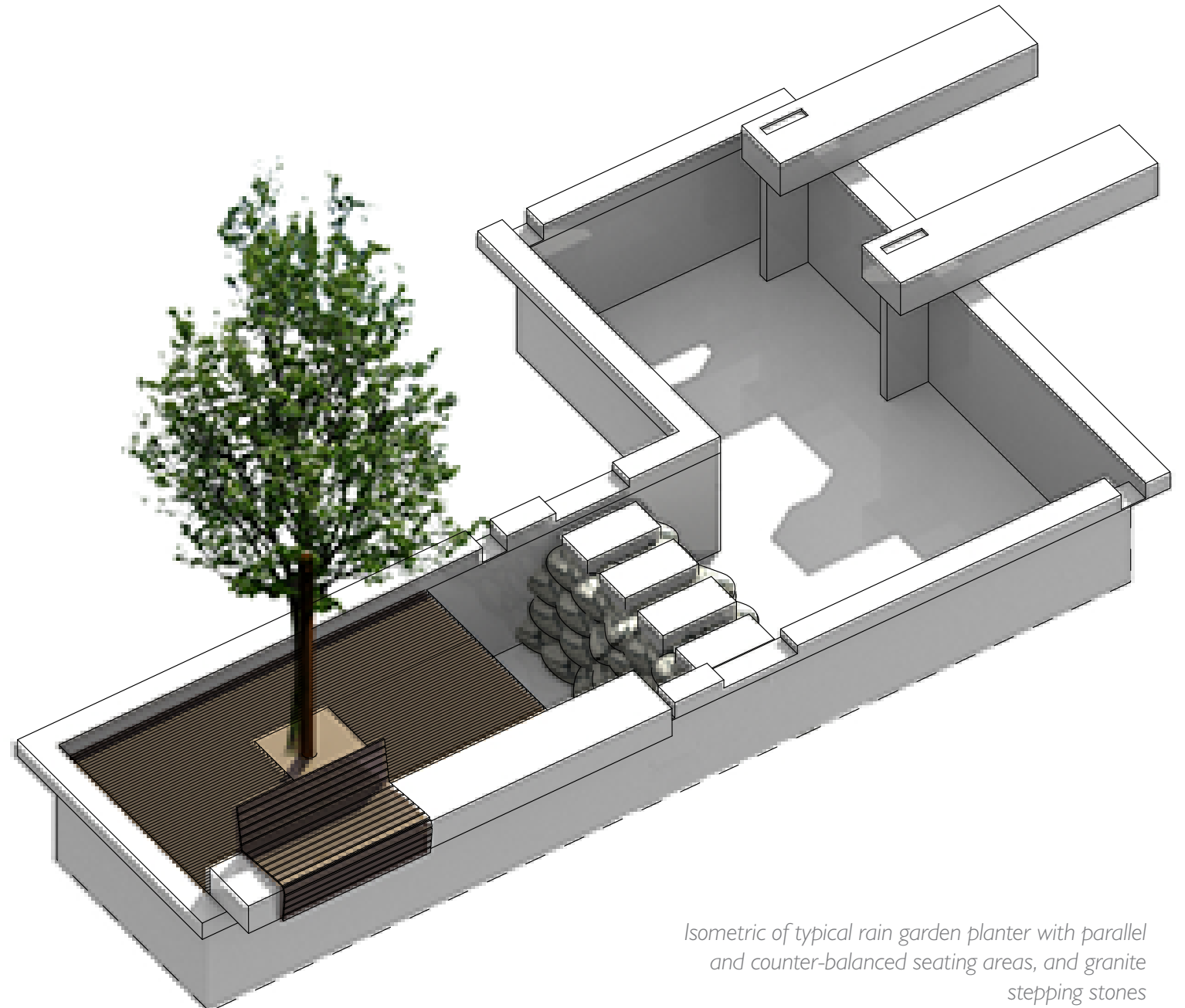
HARNESS SUSTAINABILITY

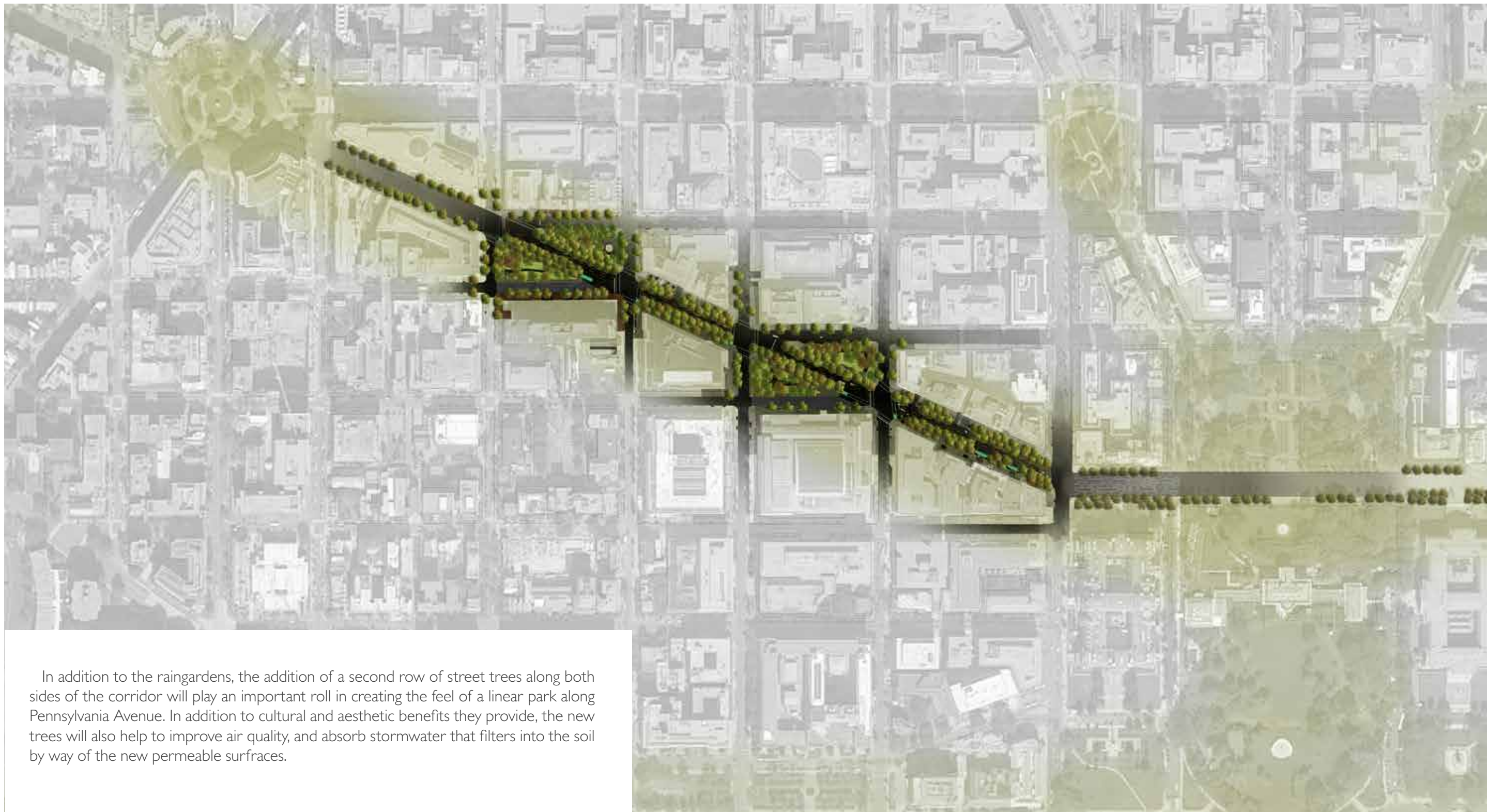


The current streetscape uses almost entirely impermeable hardscape elements. Adding larger planted spaces, raingardens and permeable pavers will help reduce runoff while making for a more attractive and welcoming streetscape.

PLANTER VARIATION

A simple yet robust kit-of-parts, capable of adapting to the multitude of site conditions, was developed for the streetscape amenities and planters so that everything from hardened street furnishings to tree planter boxes aid in the crafting of a distinctive identity for Penn West. Multi-seasonal plantings are specified to provide year-round visual interest.





In addition to the raingardens, the addition of a second row of street trees along both sides of the corridor will play an important roll in creating the feel of a linear park along Pennsylvania Avenue. In addition to cultural and aesthetic benefits they provide, the new trees will also help to improve air quality, and absorb stormwater that filters into the soil by way of the new permeable surfaces.

PLANTER KIT-OF-PARTS

In order to create a more unified avenue, the planters were designed as a kit-of-parts with adaptable elements for the varying landscape conditions in which they will be implemented along Pennsylvania Avenue.

PRESERVATION OF HEALTHY TREES

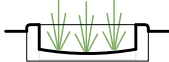








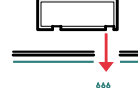


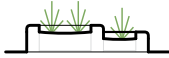

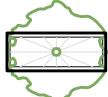
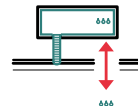


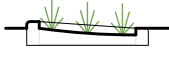
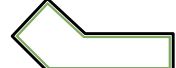
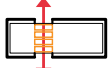



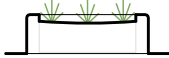

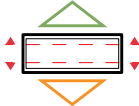








Pennsylvania Avenue does have a number of healthy trees which will be preserved and integrated into the new streetscape. All trees within the work area should be assessed for health and incorporated into the design palette, if in good health, when possible. Additional trees should be added to fill in the gaps between the existing trees where the spacing exceeds 40'-0" on center between calipers.

CONTINUOUS, PERMEABLE UNDERPLANTED TREE TRENCH W/ STRUCTURAL SOIL

The addition of a second row of trees to each side of the street will define the passive spaces and shared-use two way cycle track, respectively. In order to maintain a dense, healthy urban tree canopy along the public realm space previously occupied by the roadway a continuous underplanted tree trench will likely be required. Permeable paving set on a bed of structural soil (or utilizing modular soil cell supports) between tree plantings spaced at a minimum dimension of 30'-0" on center between calipers will provide adequate soil volume for the newly planted canopy trees to prosper. A minimum of 1,000 cubic feet of soil volume is required at 3'-0" depth; 1,500 cubic feet and 4'-0" depth is recommended where practically feasible.


















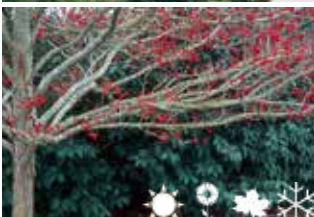


PLANTER GROUPING ADAPTABILITY

The planter types have been designed to adapt to the variety of uses and conditions along Pennsylvania Avenue. They can be adapted for high security streetscape, to include seating, passage and various types of plantings. The variety of types will help to fit plantings to their unique surroundings and neighboring uses while avoiding an overly repetitive application of the same type. At the same time, the uniformity of materials and overall aesthetic will help ensure that the corridor has a cohesive feel.

	VERTICAL ALIGNMENT	FORM		PERFORMANCE		POROSITY		BOUNDARY CONDITION		STRUCTURAL PERFORMANCE	
SUNKEN		LINEAL		PLANTER		INLET		OPEN-FACE		DECKED	
FLUSH		STEPPED		GROUND COVER		OUTLET		WRAPPING		FLOATED	
TERRACED		WRAPPED		TREE BOX		TRENCH DRAIN		BISECTING		THICKENED	
SLOPED		PINCHED		PASSAGE		FILTRATION		PARALLEL		COUNTER BALANCED	
RAISED		TEED		BUFFER		RETENTION		CAPPED		INSET	
		ARCHED		SECURITY/ HARDENED				SLICED			
		BULGED		SITE FURNISHING							

SEASONAL VARIATION



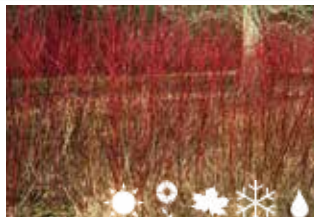









The selection of undercanopy plantings and groundcover will be designed in a way that ensures flourishing plant life during every season. Pennsylvania Avenue's plant diversity should showcase the potential for urban landscaping to introduce green all year round, not just in the warmer months. Visual interest all year round will showcase colorful barks, leaves and groundcovers as well as traditional perennials and flowering shrubs..

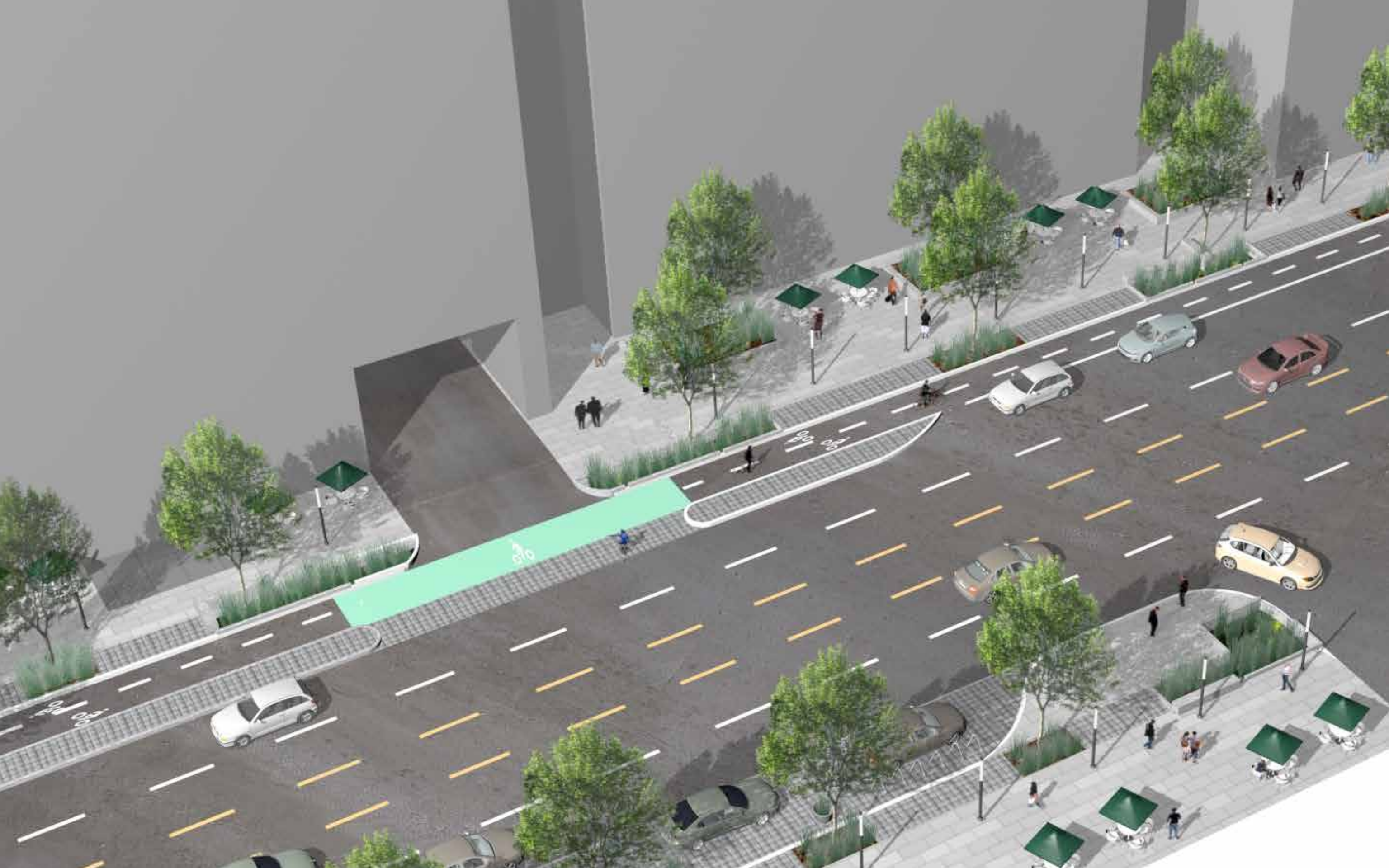
STREET TREES		ORNAMENTAL TREES		GROUNDCOVER		GRASSES	
WILLOW OAK		RIVER BIRCH		RED FESCUE		CORDGRASS	
PIN OAK		JAPANESE ELM		ASIATIC JASMINE		PURPLE MILLET	
BLACK GUM		GINKGO BILBOA		PACHYSANDRA		BLUESTEM GRASS	
GOLDEN ELM		CRAPE MYRTLE		WINTER CREEPER		VIRGINIA WILD RYE	
LONDON PLANE TREE		WINTER HAWTHORN		BOXLEAF HINYSUCKLE		SWITCHGRASS	

NATIVE PLANTINGS

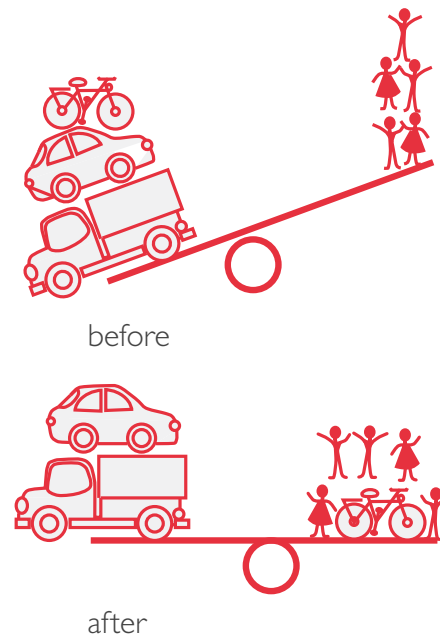
The use of native plants will significantly decrease the need for landscaping maintenance. Native plants require less irrigation, because they are naturally adapted to the local climate. Because of this, they also require less fertilizer and pest control and are less prone to developing diseases.

The images on this page show the diversity of trees, groundcover, grasses, shrubs and perennials native to the Washington area that could potentially be used for the raingardens and planters along Pennsylvania Avenue.

SHRUBS and PERENNIALS							
HAKONE GRASS		EARLY AMETHYST		DOGWOOD SHRUB		WHITE TURTLEHEAD	
BROOMSEDGE		OAK LEAF HYDRANGEA		MEADOW PHLOX		CARDINAL FLOWER	
BLUE FESCUE		WINTER JASMINE		WITCH HAZEL		VIRGINIA BLUEBELLS	



Improve the experience along the corridor for pedestrians, cyclists, and motorists alike in a way that takes into account current and anticipated needs of all users.



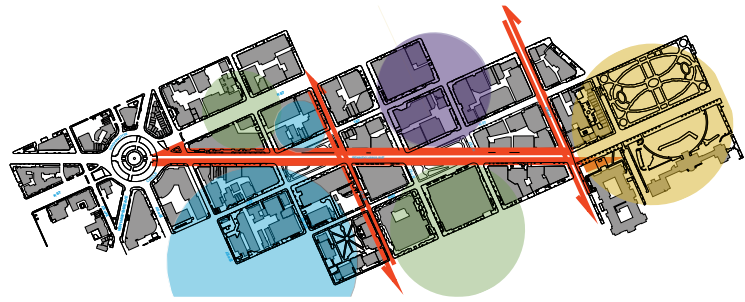
IMAGE(S):
(opposite) Perspective at 1700
block of Pennsylvania Ave,
South side streetscape (above)
Illustrative diagram

The current state of Pennsylvania Avenue is heavily focused on automobile circulation. Frequent garage entrances and loading areas, while convenient for building access, create a challenging environment for pedestrians and cyclists. The eight lane road cross-section discourages street crossings and is unwelcoming to bicycle use.

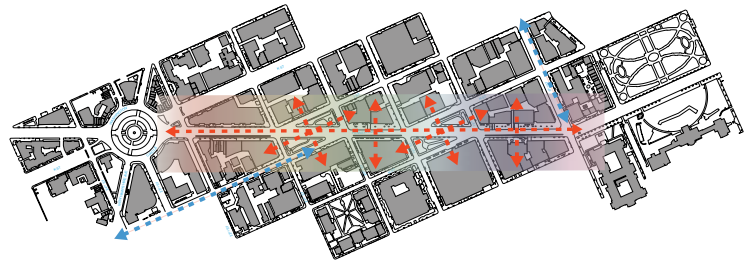
A re-balancing of transportation and modes of access was undertaken to connect with existing bicycle infrastructure along Pennsylvania Ave east of the White House, optimize existing traffic circulation, maintain access and visibility to heavily used garage entrances and loading areas, and enhance awareness of the proximity to existing public transit infrastructure. The addition of protected cycle tracks will buffer both cyclists and pedestrians from automotive traffic. The buffer median created by this will add space for additional landscaping and tree cover, while also adding a protected area for pedestrians to wait to cross the street or to exit a parked car. The redistribution of transportation modes will ultimately optimize the circulation of automobiles, creating more straightforward traffic patterns.

- **Garage Entrances & Loading Areas:** Deeper sidewalks allow for cars to pull out of the traffic lane while maintaining a clear path for pedestrians
- **Public Transportation Accessibility:** Signage, intersection and crosswalk simplification, and streetscape improvements create an environment that favors walkability, improving access to and from all forms of transportation
- **Bicycle Lane Alternatives:** Either separate one-way lanes or a two-way cycle track can be implemented within the design framework, allowing flexibility of response while maintaining the enhance environment

BALANCE TRANSPORTATION



Pennsylvania Avenue as the dividing line between different user groups

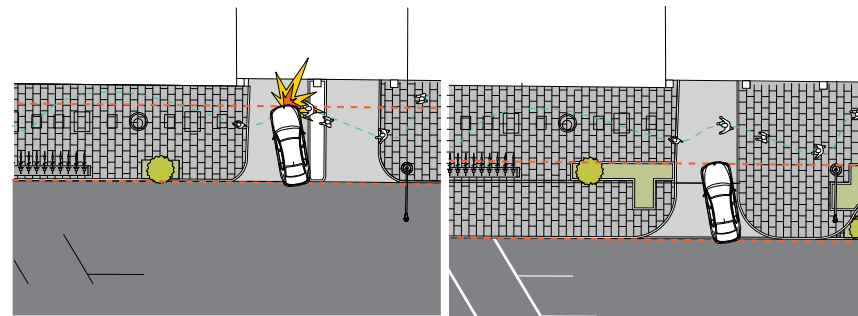


Pennsylvania Avenue as the connective tissue between different communities

TRAFFIC SAFETY FOR ALL USERS

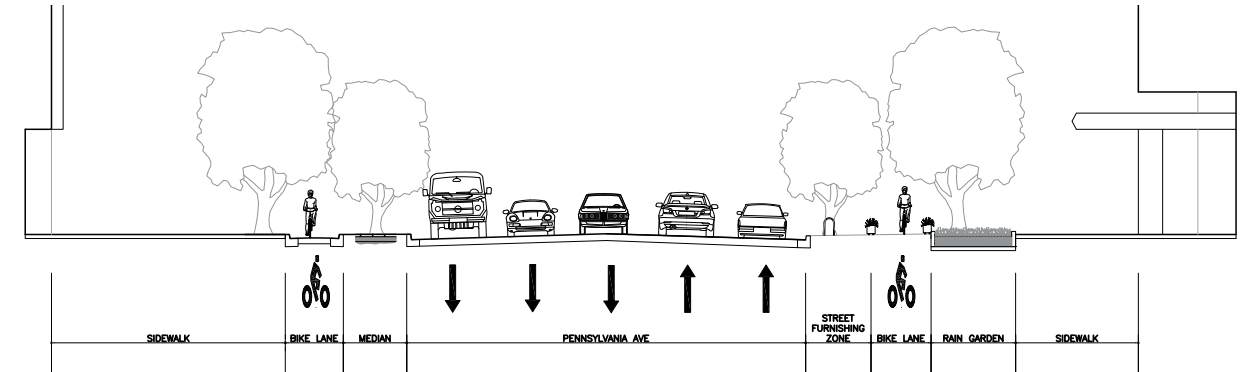
Pennsylvania Avenue ranks annually as one of the District's top vehicular crash frequency corridors, ranking atop the list from 2010-12 in collisions and placing runner-up to New York Ave in injuries during that same tenure. Pedestrian accidents and bicycle collisions are equally problematic along the stretch spanning from the White House to Washington Circle while not matching near the density of traffic, cyclists and pedestrians as other prominent corridors. An aggressive, coordinated, and thoughtful approach to safety for the everyday user is central to the aims of this *Public Realm Plan*.

An ongoing traffic assessment for the planning of bicycle infrastructure, conducted through the District Department of Transportation, will serve as the catalyst for more robust, permanent safety improvements in later phases. A comprehensive traffic plan and assessment of existing conditions is not part of this study however it is recommended that all of the following efforts be undertaken in conjunction with the development of this project: signal and turning regulation revisions, parking policy refinements, bicycle infrastructure safety improvements, additional signals for all phases including pedestrians and cyclists, simplified intersections, high visibility crosswalks and lighting upgrades to ensure the safety and functionality of all modes.

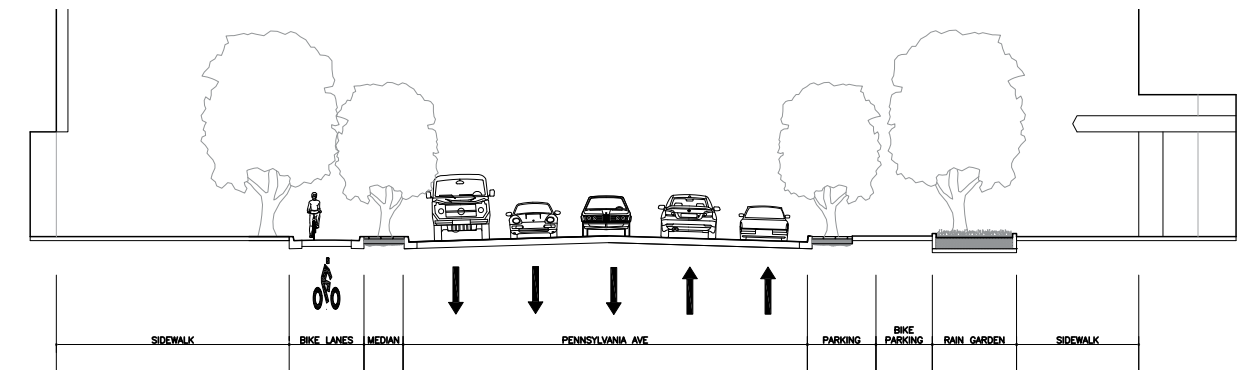


Before: Garage turn-ins create conflicts with pedestrian foot traffic

After: Planters create buffer zones for turning cars to queue for pedestrian safety



(Alternative) One way bicycle lanes along both sides of Pennsylvania Avenue



Proposed bi-directional cycle track on south side of Pennsylvania Avenue

BICYCLE INFRASTRUCTURE ALIGNMENT ALTERNATIVES

In deference to ongoing DDOT bicycle lane planning, two bicycle lane alignment alternatives were investigated for compatibility with the recommendations within the *Public Realm Plan*. Both alternatives maintain the same core design elements (double row of street trees, active and passive sidewalk zones, etc) which serve as the backbone of the *Public Realm Plan* design proposal. The alternative alignment utilizes two separate one-way travel lanes, both protected by a second row of trees. The proposed alignment indicates a two-way, median buffered cycle track running along the south side of the Avenue.

PAVEMENT CONDITION, FUNCTIONAL CLASSIFICATION AND EMERGENCY EVACUATIONS

Pavement Condition - Strong consideration should be given to upgrading paving with specialty stamped asphalt concrete at H St and I St NW on the South end of those respective roadways to facilitate better pedestrian access, safety and functional connectivity to the corresponding open spaces at both Murrow and Monroe Parks.

Functional Classification - Consideration should be given to reclassify this segment of Pennsylvania Avenue where the functional classification isn't indicative of its current or projected use. A more suitable classification as a *Minor Arterial* or *Collector* better reflects its regional travel distance, current and projected traffic volume and travel speeds.

Emergency Evacuation Routes - As the North-South dividing line in the *District of Columbia's Emergency Evacuation Preparedness Plan*, Pennsylvania Avenue West of the White House must function to divert all modes of circulation to their correct respective evacuation routes. Accommodations for efficient access to emergency infrastructure should prioritize pedestrians due to the proximity to the Virginia state border and congestion issues currently plaguing the Washington Circle traffic junction.



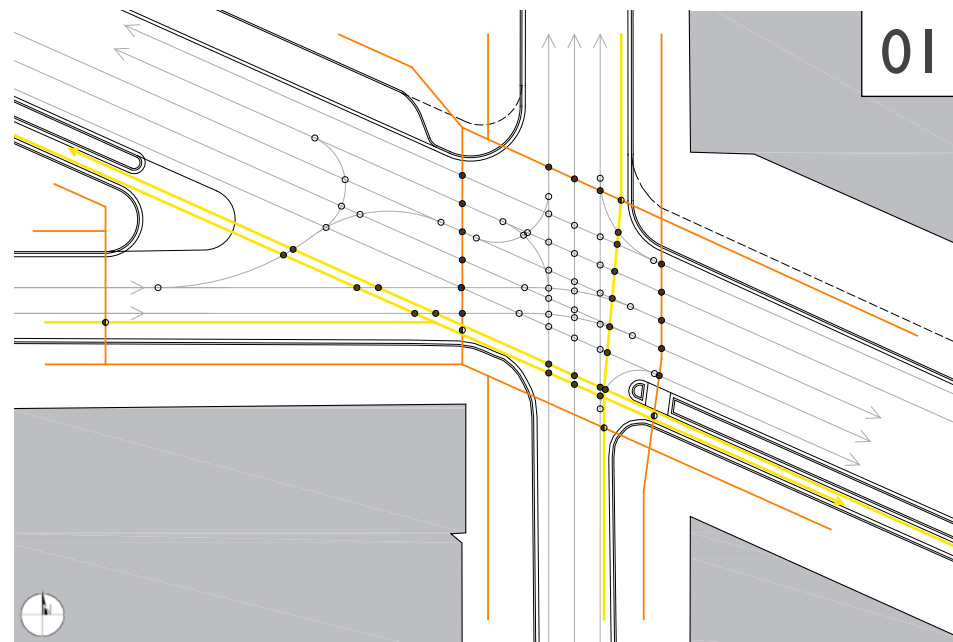
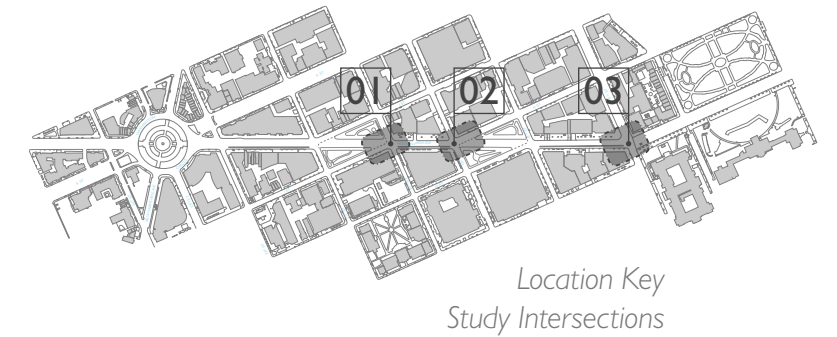
(Alternative) Aerial perspective of one way bicycle lanes along both sides of Pennsylvania Avenue



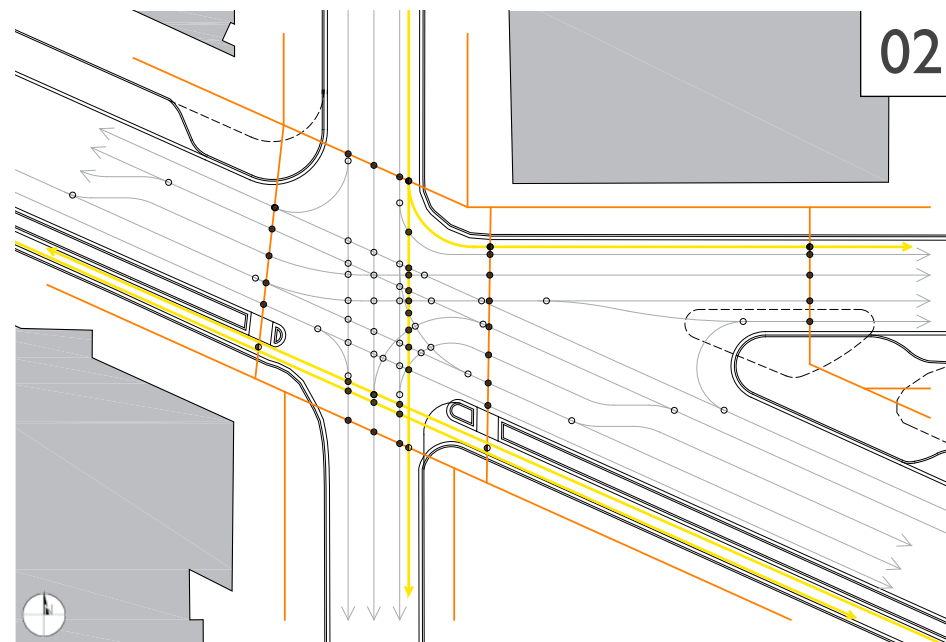
Aerial perspective of proposed bi-directional cycle track on south side of Pennsylvania Avenue

COLLISION POINTS (PROPOSED)

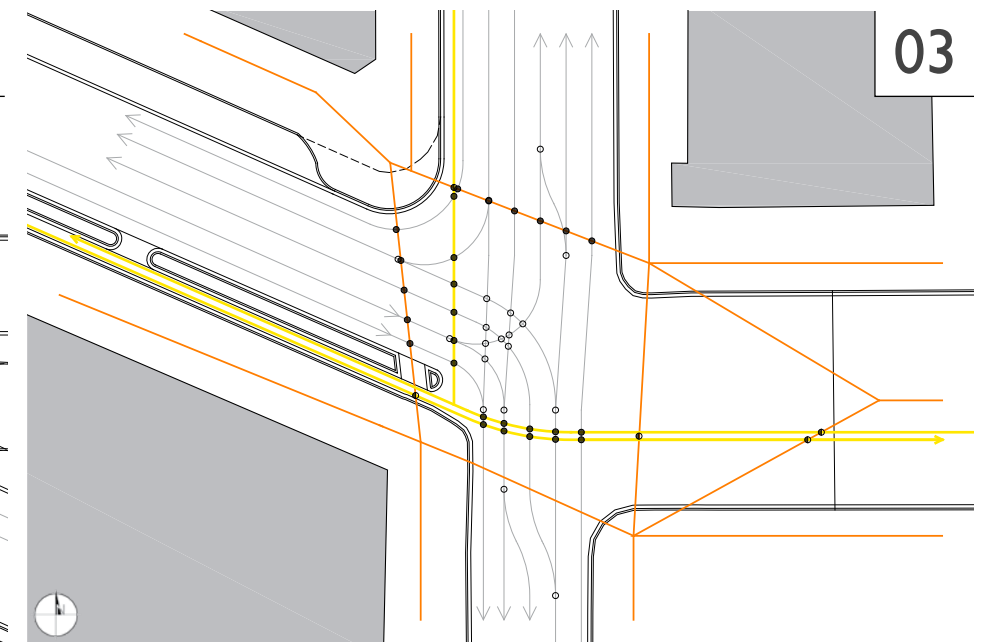
		01	02	03
<i>Vehicular to Vehicular</i>	○	40	40	19
<i>Vehicle to Pedestrian and/or Bicyclist</i>	●	33	40	27
<i>Pedestrian to Bicyclist</i>	◐	5	6	5



*Penn Ave, 20th and I St NW -
Proposed Condition*



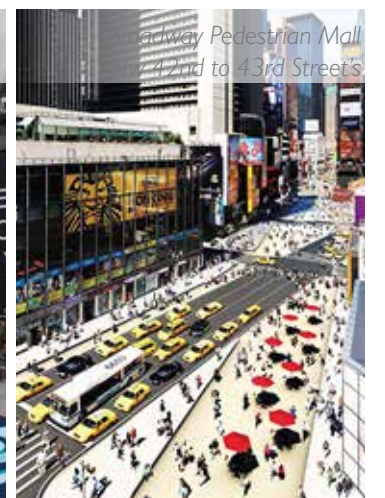
*Penn Ave, I 9th and H St NW -
Proposed Condition*



*Penn Ave and I 7th St NW -
Proposed Condition*

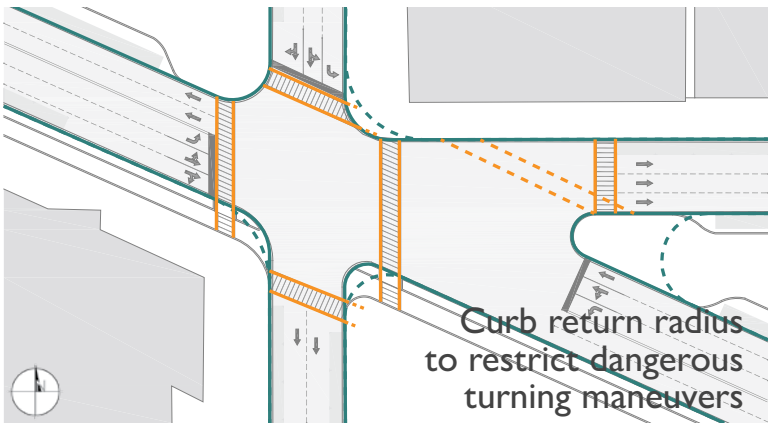
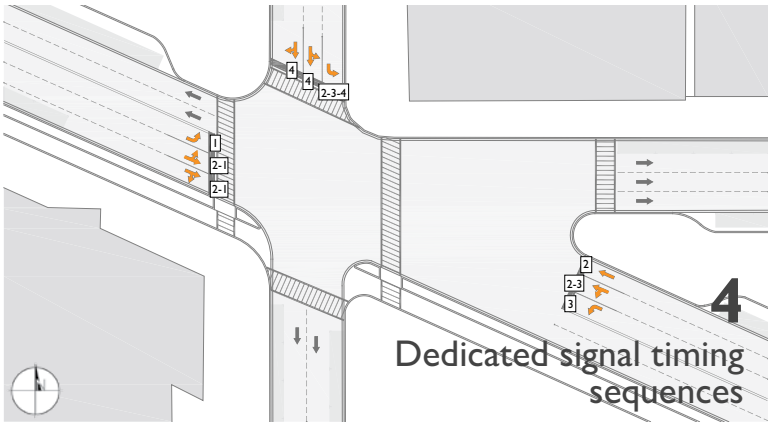
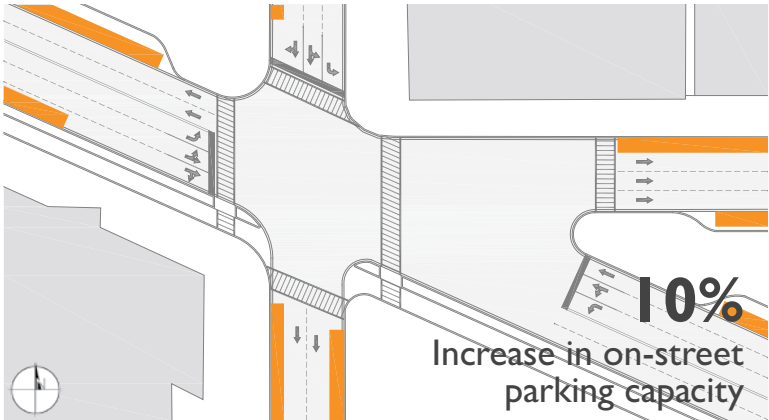
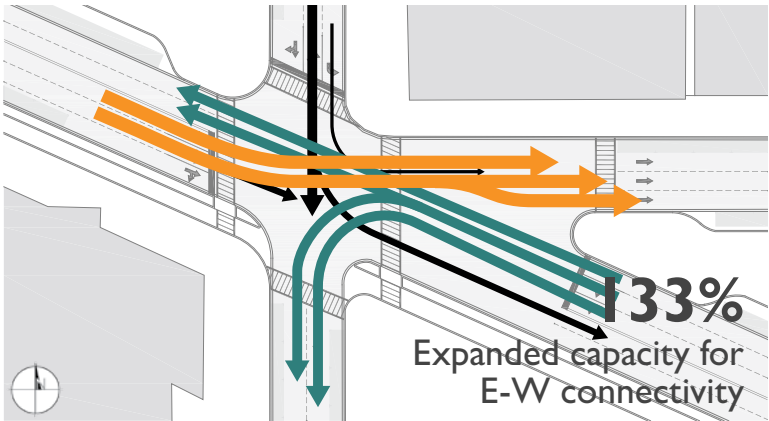
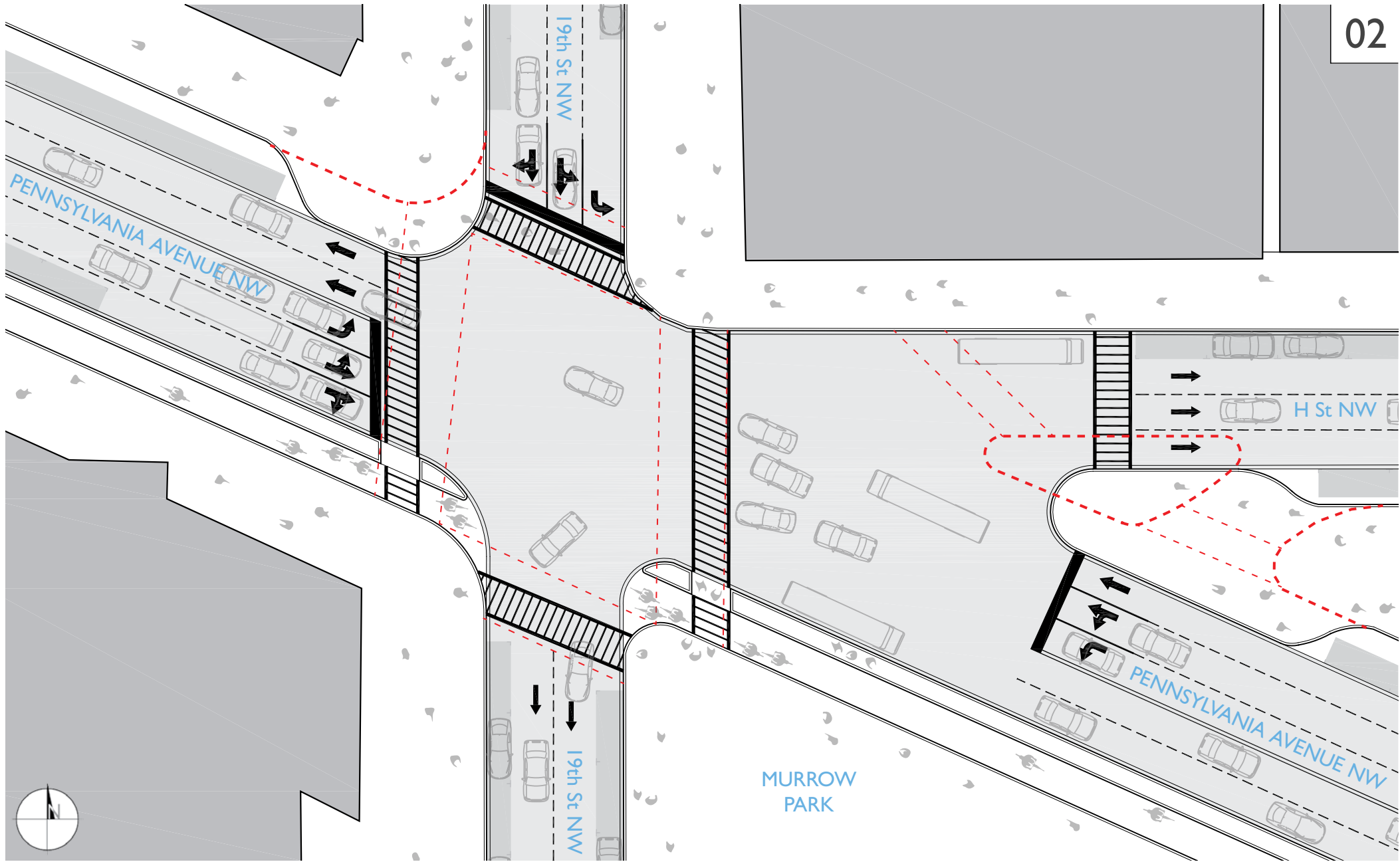
CASE STUDY: BROADWAY AVENUE - NEW YORK CITY, NY

The resoundingly successful study and eventual implementation of the balanced transportation design approach along Broadway Ave, a critical North-West roadway connection in midtown Manhattan, serves as an important baseline model for further study. Beginning as a 'temporary' experiment in May, 2009 to enhance spaces for pedestrians and bicyclists the city's Department of Transportation determined the project to be such a wide ranging success the changes were made permanent just 8 months later. Broadway Avenue's transformation shares many characteristics with Pennsylvania Avenue's less deliberate transformation over time in its prominent location, closure to through traffic and its intersection with numerous cultural destinations. Key features of the design such as the protected bicycle lanes, pedestrian plaza spaces demarcated with specialty paving, street furnishings and phased implementation have been carried into the *Pennsylvania Avenue West of the White House Public Realm Plan*.



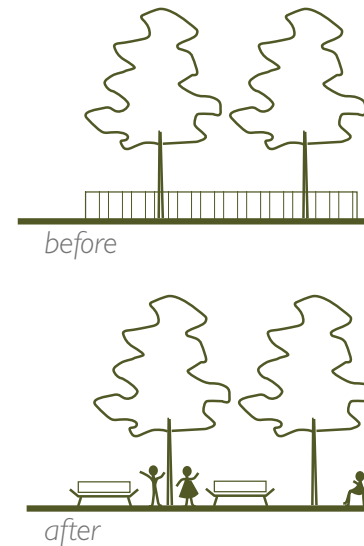
TRAFFIC SAFETY IMPROVEMENTS

In the three study intersections an analysis of traffic safety implications through the collision point method demonstrates a **25%** improvement in *vehicular to vehicular collision potential*, a hugely significant **41%** improvement in *vehicular to pedestrian and/or bicyclist collision potential* and an expected **47%** improvement in *pedestrian to bicyclist collision potential*. A small percentage (approx.12 to15%) of these safety improvements can be attributed to the reduced lane capacity along Pennsylvania Avenue.





Parks and the surrounding public spaces should be designed to allow and encourage public art and events. The newly expanded pedestrian spaces adjacent Murrow and Monroe Parks will help open up the parks and making them more friendly and inviting.



IMAGE(S):
(opposite) Perspective at outdoor seating area with dense tree canopy coverage at Murrow Park
(above) Illustrative diagram

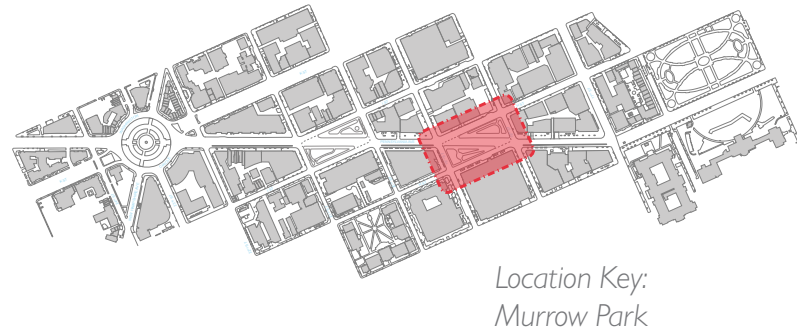
The existing Murrow and Monroe Parks do not live up to their large potential to add activity to Pennsylvania Avenue. They serve as important nodes on the path between the Lafayette Square and Washington Circle. A memorial at Murrow Park has the potential to draw activity up from the Mall and provide a linking feature between the White House and George Washington University. Public Art features such as the Tricorne fountain installation at Murrow Park will also draw people to visit the parks. Amenities such as a public playground will cater to the nearby residential communities in Foggy Bottom.

Partnerships with adjacent institutions, city-wide events, and weekend activities all offer unique opportunities to increase the vitality of park usage. Drawing activity to the parks will have a positive economic impact on local businesses, giving them a larger customer base. Visitors to Murrow and Monroe Parks will be encouraged to explore the surrounding corridor and experience its many offerings.

- **Peace Corps Memorial at Murrow Park:** Introduces a new destination to draw visitors from the Mall and White House
- **Public Playground Features:** Provides a missing active use to the parks that welcomes families, whether local or visiting
- **Light Installations:** Art features could provide a theme for the corridor, inviting nighttime use of zones that currently favor daytime use
- **Sponsored Events:** Opportunities to provide additional amenities to existing building users as well as draw residents and visitors from all around the city and region

ACTIVATE THE PARKS





CASE STUDY: POST OFFICE SQUARE - BOSTON, MA

In the heart of Boston's financial district lies a lush, green oasis set above what was previously a decrepit and unsightly parking structure. The similar nature of the site to both Murrow and Monroe Parks makes it an ideal model for successful urban planning and design. Seating is provided in abundance and specifically designed to accommodate all comfort ranges from those looking to take a mid-day nap to office workers breaking for a group lunch. Crucially, a large portion of the seating is also mobile to allow users to arrange in whatever fashion is deemed most suitable for their personal use.

The park features a raised Great Lawn for weekday picnics and casual outdoor gathering flanked on its long edge by a long, formal garden trellis. A central Grand Fountain anchors the park while providing an acoustic scrambler for the garage traffic entering below and adjacent vehicular traffic which surrounds the park on all sides. One of its most successful design features is its wrought-iron and glass pavilion housing the *Milk Street Cafe* providing the necessary gastronomical anchor to the public space.

MURROW PARK

Murrow Park's proximity to President's Park at the White House makes it the ideal node to attract tourist groups and meandering sightseers during the weekend. In the weekday time periods its immediate accessibility to large workforce groups makes it suitable for an area for outdoor seating and eating during lunchtime break hours.

Key design features include - Future Monument or Memorial, Murrow's Mics public art installation, Playscape, Pedestrian Mall, Bicycle Parking Shelter, Open Lawn Public Seating and Tree Grove Area



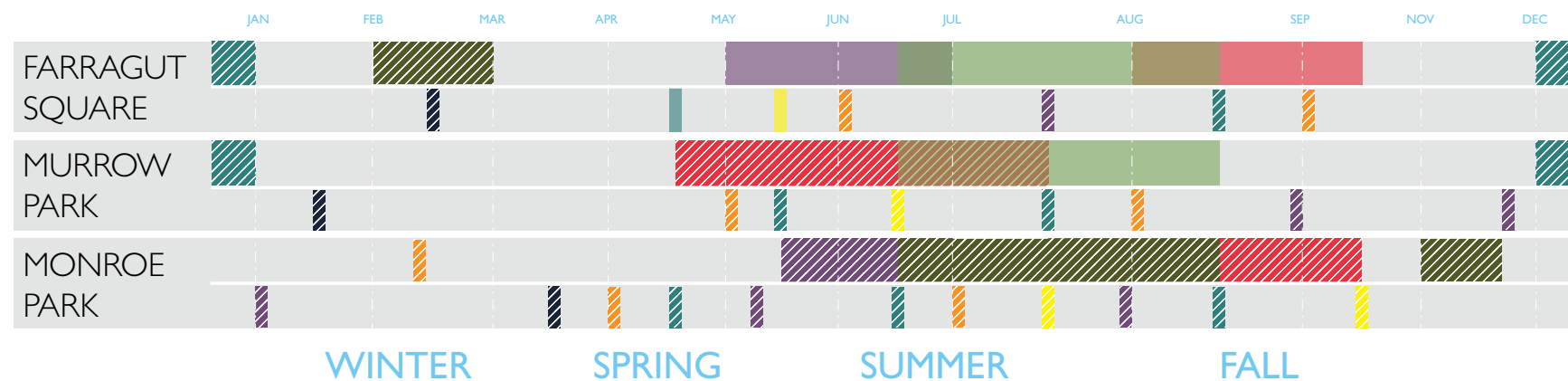
Aerial view of Norman B. Leventhal Park



Jazz band at Great Lawn



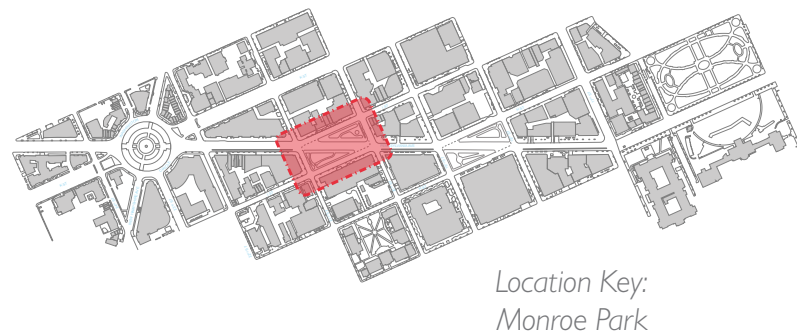
Milk Street Cafe Pavilion



ACTIVATING WITH EVENTS

Successful parks, plazas and open spaces in Washington, DC tend to have a varied event calendar spanning the seasons. Some of these events are weekly or monthly series, such as Picnic in the Park, while the majority are one-time or annual festivals. An example event calendar for programming Murrow and Monroe Parks with a diverse variety of events is provided to the left and will serve to attract new users who may not otherwise visit these parks. Events should have a wide variety of sponsors to limit the burden on any single organization.





Location Key:
Monroe Park

MONROE PARK

Monroe Park's proximity to the student center and adjacent campus at George Washington University makes it an ideal reprieve from the daily grind for local students looking to spend some time outdoors. Additionally, residents within Foggy Bottom lack access to a publicly accessible open space reservation for interaction and socializing making it an attractive proposition for the local residents as well. The recommendations within this *Public Realm Plan* identify Monroe Park as destinations catering more towards the student and local resident population.

Immediately to the North of the open space reservation lies the *Arts Club of Washington* building, a historic row home which host Friday Noon concerts, Jazz Pianists, monthly Gallery Exhibitions and a wide variety of private events including weddings, receptions and office parties. An agreement with the *Golden Triangle BID* to allow it to extend events into the open lawn could be greatly beneficial to all parties, in particular to the public.

Key design features include - Tricorne public art fountain, Pedestrian Mall, Open Lawn, Public Seating, Public Art, Seasonal stage, Summer Pavilion, Tree Grove Area and Outdoor Lawn Seating for local restaurant businesses

CASE STUDY: MOMA PSI GALLERY YAP PROGRAM - BROOKLYN, NY

MoMA PSI is a contemporary art institution located in Queens, New York. It has developed a reputation for its site-specific installations which often encourage bold political statements hidden beneath their playful facades. Every year, tens of thousands of visitors are drawn to see the result of the annual Young Architects Program, a competition whose winning design is built in the PSI courtyard. The installation serves as a backdrop to the annual concert series which kicks-off the new collections and galleries held within the MoMA PSI Gallery.



Party Wall (2013)
by CODA

Pole Dance (2010)
by Solid Objectives - Idenburg Liu

A CONTINUOUS CULTURAL ANCHOR

Cultural additions to Murrow and Monroe Park will serve as nodes to attract visitors into the parks, providing ambiance and background to the event stage. Some of these features are already in place, such as the historic fountain in Monroe Park, and only require a much needed maintenance upgrade in order to extract its fullest potential. There is great opportunity to add to and supplement these existing features by capitalizing on current planning activities.

Public art (temporary or permanent) could be incorporated

CASE STUDY: SERPENTINE PAVILION - LONDON, UK

Every summer for the past fifteen years, the Serpentine Galleries in London's Kensington Gardens have hosted a temporary pavilion designed by a renowned artist and/or architect including Zaha Hadid, Sou Fujimoto, Ai Weiwei, Herzog & De Mueron, Rem Koolhaas, Frank Gehry and Toyo Ito.












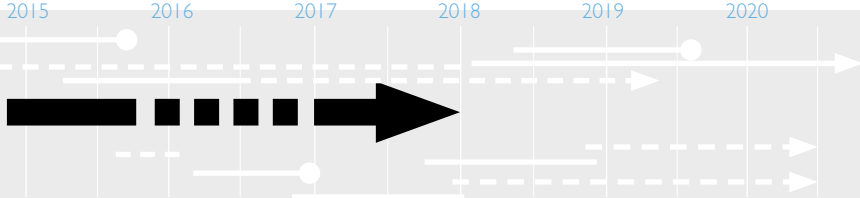
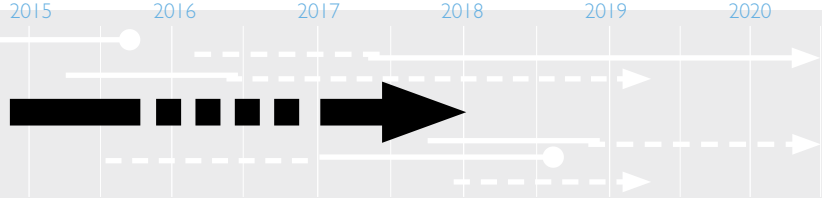
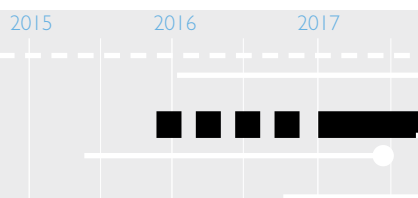
The Serpentine Pavilion has become so popular that it is now one of the ten most visited architectural and design exhibitions in the world.



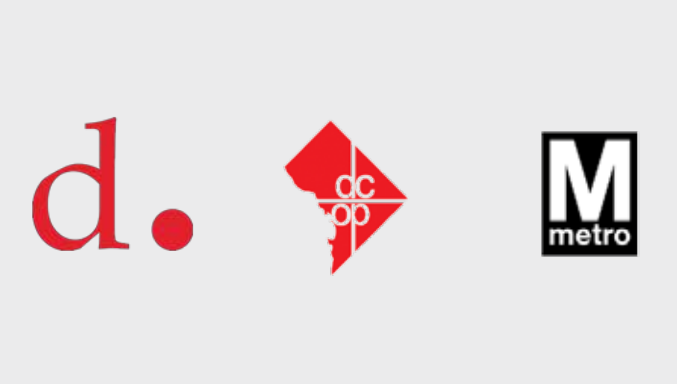

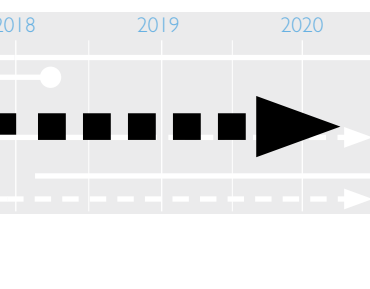
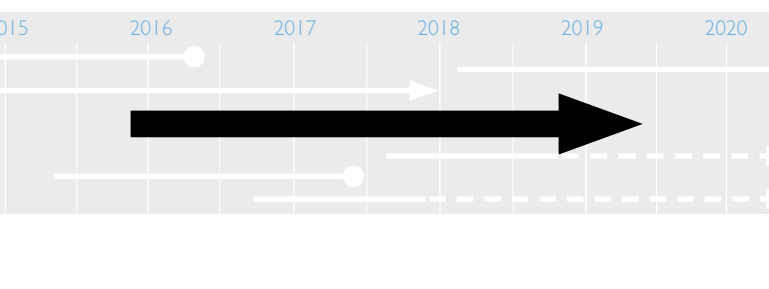
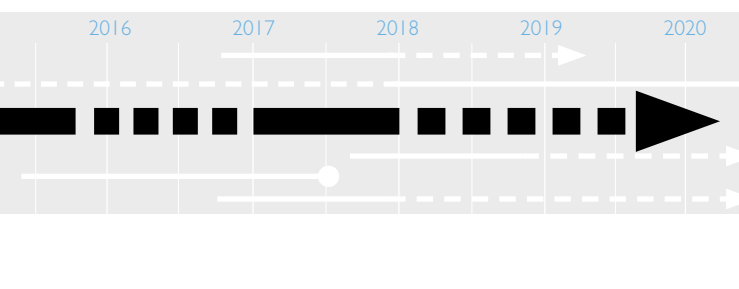
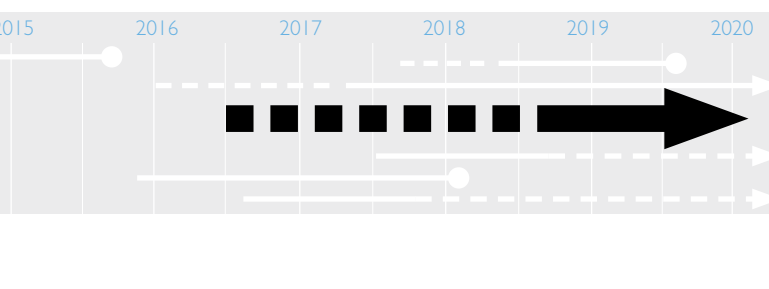


Serpentine Pavilion (2012)
by Sou Fujimoto

Serpentine Pavilion (2012)
by Ai Weiwei -H & DM Arch

into both parks. With George Washington University and the Arts Club of Washington so close, Monroe Park would be a logical place to exhibit sculptures or even for a temporary summer pavilion such as those annually exhibited within the two case study programs noted above.

CORE THEME	CREATE DESTINATIONS	FACILITATE NEW CONNECTIONS	PEDESTRIAN
OVERVIEW	<p>Transform the corridor into an iconic destination that will draw people from all over the city, region, and world.</p> <ul style="list-style-type: none">• Design creates cultural destinations• Ensures a cohesive identity for the corridor• Design allows for future programming in order to draw special events to the neighborhood	<p>Create a defined corridor, but one that builds logical connections to the surrounding street grid and acknowledges the variety of different uses in each direction.</p> <ul style="list-style-type: none">• Design creates a sense of visual continuity with surrounding area• Visual cues draw people from the edges of the neighborhood onto the corridor• Design leverages the proximity to transit, and key tourist destinations	<p>Create a pedestrian scale street for travel and recreation, public spaces, street crossings and human-scale</p> <ul style="list-style-type: none">• Lighting elements are geared towards creating a safe environment for pedestrians• Reduce conflict points to facilitate movement through the corridor on foot
LEAD ROLE + KEY STAKEHOLDERS	<div> GOLDEN TRIANGLE</div> <div></div> <div></div> <div></div>	<div></div> <div></div> <div></div> <div></div> <div> GOLDEN TRIANGLE</div>	<div></div> <div> GOLDEN TRIANGLE</div>
OTHER PROJECTS	<div>Murrow and Monroe Park Light Art</div> <div>WMATA Momentum Strategic Plan</div> <div>CapitalSpace Master Plan</div> <div>Murrow Park Playground</div> <div>DCOP Comprehensive Plan</div> <div>National Peace Corps Memorial</div> <div>moveDC Long Range Transportation Plan</div>	<div>Murrow and Monroe Park Light Art</div> <div>National Mall Master Plan</div> <div>CapitalSpace Master Plan</div> <div>Foggy Bottom-GWU Metro 2nd Entrance</div> <div>The Pennsylvania Avenue Initiative</div> <div>moveDC Long Range Transportation Plan</div>	<div>NCPC Urban Design and Security Plan</div> <div>DC Center City Action Plan</div> <div>WMATA Momentum Strategic Plan</div> <div>GWU Campus Streetscape Master Plan</div> <div>DCOP Comprehensive Plan</div>
IMPLEMENTATION SCHEDULE			

<h1>Human Scale</h1>	<h1>Harness Sustainability</h1>	<h1>Balance Transportation</h1>	<h1>Activate the Parks</h1>
<p>Streetscape with subtly defined areas for public art and café seating, improved paved design elements.</p> <p>Additional street furniture are creating a comfortable environment for pedestrians.</p> <p>Streets with vehicular traffic through the neighborhood.</p>	<p>Create a corridor with an enhanced tree canopy and sustainable planting beds, and other features which will help to create an identity for the corridor as one that is both visually beautiful and technologically innovative.</p> <ul style="list-style-type: none"> • Rain gardens and other permeable surfaces capture and naturally filter stormwater • Expanded tree canopy to assist in stormwater capture and improving air quality 	<p>Improve the experience along the corridor for pedestrians, cyclists, and motorists alike in a way that takes into account current and anticipated needs of all users.</p> <ul style="list-style-type: none"> • Underutilized automobile lanes are removed • Traffic pattern is simplified to reduce congestion • Protected bicycle lane connects cycle infrastructure on either side of the neighborhood • Expanded pedestrian zone creates safer environment 	<p>Parks and the surrounding public spaces should be designed to allow and encourage public art and events.</p> <ul style="list-style-type: none"> • Expand ongoing public art initiatives • Create and utilize District-owned park space of the expanded sidewalk zones in order to increase flexibility of programming • Connect the parks across Penn Ave for special events on weekends.
			
<p>Sustainable DC Master Plan Agenda</p> <p>moveDC Long Range Transportation Plan</p> <p>Master Plan</p> <p>Comprehensive Plan</p>	<p>NCPC Urban Design and Security Plan</p> <p>Sustainable DC Master Plan</p> <p>DDOT Environmental Guidelines</p> <p>moveDC Long Range Transportation Plan</p> <p>GWU Campus Streetscape Master Plan</p> <p>DCOP Comprehensive Plan</p>	<p>The Pennsylvania Avenue Initiative</p> <p>WMATA Momentum Strategic Plan</p> <p>DDOT Bicycle Master Plan</p> <p>moveDC Long Range Transportation Plan</p> <p>Foggy Bottom-GWU Metro 2nd Entrance</p> <p>DCOP Comprehensive Plan</p>	<p>Murrow and Monroe Park Light Art</p> <p>National Peace Corps Memorial</p> <p>Monroe Park Summer Pavilion Series</p> <p>moveDC Long Range Transportation Plan</p> <p>DC Center City Action Agenda</p> <p>DCOP Comprehensive Plan</p>
			

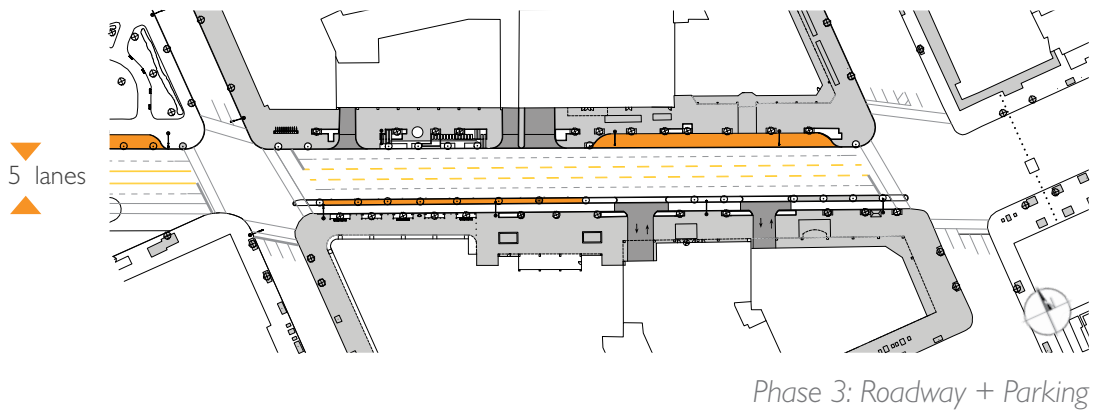
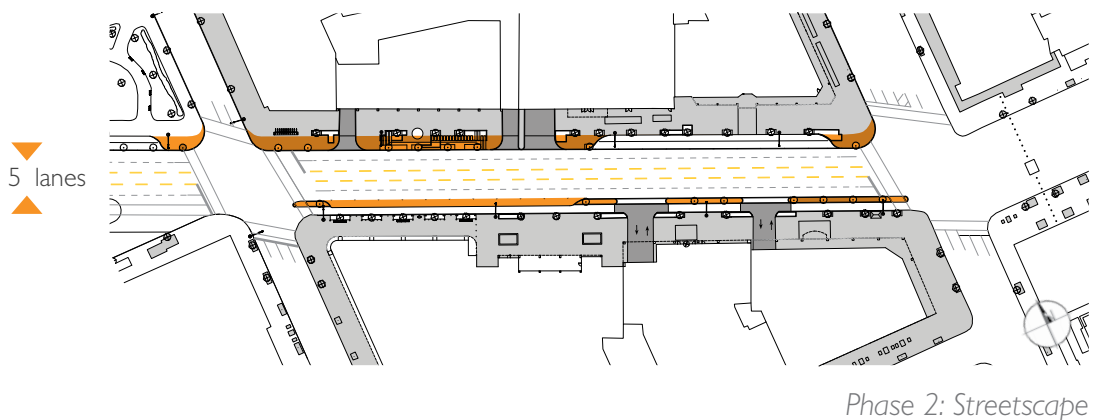
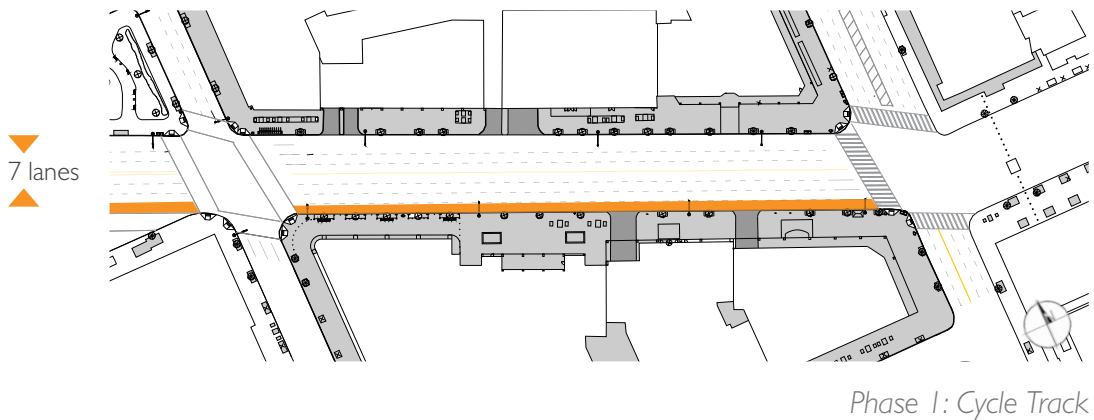
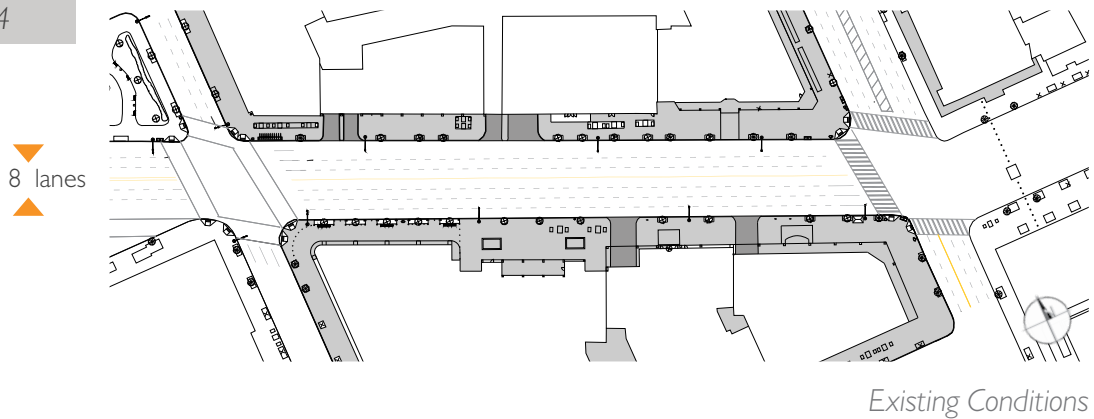
SECTION 04: IMPLEMENTATION PLAN

PROJECT FINANCING AND INVESTMENT	83
ORDER OF MAGNITUDE - CAPITOL COSTS	84
PROJECT IMPLEMENTATION AND PHASING	85
ACTION PLAN SUMMARY	86

The *Pennsylvania Avenue Public Realm Plan* has identified a variety of key improvements covering a broad range of streetscape, transportation, pedestrian safety, bicyclist accessibility and sustainability enhancements. The overall strategy for implementing these recommendations is to clearly organize task items and priorities by key parties involved in order to utilize variable funding resources and fast track early implementation items. Concurrent to the implementation of such temporary interventions a fully developed *Public Realm Master Plan* shall be developed for construction funding through a capital improvements campaign under the *District Department of Transportation (DDOT)*, the primary stakeholder for land in the public right-of-way.

The implementation and action plan shall be developed in such a way as to be internally consistent with the priorities set forth within the *Design Proposal*. All creative efforts to reduce redundancy and repetitive capital improvements within the construction phasing and sequencing development shall be made in order to minimize the overall fiscal impact to District residents and provide a model for public agency coordination.

IMPLEMENTATION PLAN



PROJECTED CAPITAL COSTS

The implementation as currently configured assumes two mobilizations for the planned *DDOT* bicycle lane followed by the proposed corridor streetscape design recommendations within the *Public Realm Plan*. The availability of financial resources, traffic assessment and design development timeline of prominent features within the corridor will dictate the exact phasing and implementation moving forward. The funding, particularly for public space and streetscape improvements, is heavily contingent upon local businesses, adjacent property managers and key public stakeholders support.

The following tables and figures summarize the action items expected to occur within the immediate-term, short-term, and mid-term phases (denoted as Phase's 1,2 and 3 respectively). Each phase lists improvement categories in addition to the total capitol costs anticipated for each phase. Long-term improvements (Phase's 4 and beyond) are those that carry significant further study, right-of-way impacts, restoration of the historic 1791 L'Enfant Plan, transportation improvements and require other public agency funding. These items are included within the *Public Realm Plan* for reference and are likely to occur beyond 2018.

The estimated cost for all roadway and public space and sidewalk improvements in the immediate, short and mid-term improvements is approximately **\$11.28 million**. These costs do not include design, construction management, and contingencies. It is highly likely that existing utilities will either need to be repaired, upgraded, and/or relocated in order to implement the recommendations within the *Public Realm Plan*. Because the cost for this work cannot be accurately predicted at this time it is therefore not included.

	*COST
PHASE 1:	\$35
Transportation, access and roadway improvements	\$5
Bicycle infrastructure and facilities	\$28
Streetscape and sidewalk improvements	\$2
Sustainability and landscaping features	\$0
PHASE 2:	\$5,102
Transportation, access and roadway improvements	\$1,735.9
Bicycle infrastructure and facilities	\$14.5
Streetscape and sidewalk improvements	\$1503.5
Sustainability and landscaping features	\$848.1
PHASE 3:	\$5,145.5
Transportation, access and roadway improvements	\$1,765.2
Bicycle infrastructure and facilities	\$225.8
Streetscape and sidewalk improvements	\$2,909.5
Sustainability and landscaping features	\$1,245
CATEGORY TOTALS:	\$10,282.5

* All costs in \$1,000s

85

-

SUMMER 2015	FALL 2015	WINTER 2016	SPRING 2016	SUMMER 2016	FALL 2016	WINTER 2017	SPRING 2017	SUMMER 2017	FALL 2017	2018 & BEYOND
-------------	-----------	-------------	-------------	-------------	-----------	-------------	-------------	-------------	-----------	---------------



Potential sources of additional funding for public realm improvements linking with existing grants and initiatives:





	22nd Street NW	2100 block Penn Ave NW	21st Street NW	2000 block Penn Ave + 1st NW	20th Street NW
CYCLE	Provide access to cycle track infrastructure from Washington Circle and add lane markings to ensure bicyclist safety from vehicular traffic.	Two-way cycle track added to south side of Pennsylvania Avenue.	Add shared lane markings at intersection and directional signage along West side of 21st Street NW.	Two-way protected cycle track added to south side of Pennsylvania Avenue.	Add shared lane markings along South side of 1st Street NW and restrict turning movements to 20th Street NW.
TRANSIT	Introduce turning regulation policy changes to protect pedestrians and bicyclists access to Penn West corridor.	Extend access to existing parking garage entrances and ensure effects to loading docks are kept to a minimum.	Introduce turning regulation policy changes to protect pedestrians and bicyclists.	Replace asphalt paving on South side with specialty stamped asphalt to provide better access to park.	Dedicated signal timing and turning regulation policy changes to protect pedestrians and bicyclists.
PEDESTRIAN	Simplifying intersections, re-striping all crossing as high visibility crosswalks, reconfiguring crosswalk alignment and signal timing sequence.	Extended sidewalk creates active zone and passive zone with additional seating and human scale lighting.	Simplifying intersections, re-striping all crossing as high visibility crosswalks, reconfiguring crosswalk alignment and signal timing sequence.	Extended sidewalk creates active zone and passive zone with additional seating and human scale lighting.	Reconfiguring crosswalk alignment and modifying signal timing sequence.
GREEN	Coordinate existing raised planter beds with proposed corridor aesthetic standards.	Increased tree canopy shades sidewalks and reduces heat-island effect.	New raingarden planters from North-South prototypical street configuration surrounding Monroe Park and beyond all existing intersections.	New planters, raingardens and permeable pavers reduce runoff. Increased tree canopy shades sidewalks and reduces heat-island effect.	New raingarden planters surrounding Monroe Park and beyond all existing intersections.



<i>1900 block Penn Ave NW</i>	<i>19th Street NW</i>	<i>1800 block Penn Ave + H St NW</i>	<i>18th Street NW</i>	<i>1700 block Penn Ave NW</i>	<i>17th Street + Penn Ave NW</i>
Two-way protected cycle track added to south side of Pennsylvania Avenue.	Add shared lane markings at intersection and directional signage along East side of 19th Street NW.	Two-way protected cycle track added to south side of Pennsylvania Avenue.	Add shared lane markings at intersection and directional signage along East side of 18th Street NW.	Two-way protected cycle track added to south side of Pennsylvania Avenue.	Add restrictive signage to prevent bicyclists from turning onto 17th Street.
Extend access to existing parking garage entrances with landscaping buffers for safety.	Dedicated signal timing and turning regulation policy changes for access to H Street NW.	Replace asphalt paving on South side with specialty stamped asphalt to provide better access to park.	Introduce turning regulation policy changes to protect pedestrians and bicyclists.	Extend access to existing parking garage entrances with landscaping buffer for pedestrian and bicyclist safety.	Dedicated signal timing for access and egress to/from Pennsylvania Avenue NW.
Extended sidewalk with active zone and passive zone flanked by pedestrian lighting.	Simplifying intersections, re-striping all crossing as high visibility crosswalks, reconfiguring crosswalk alignment and signal timing sequence.	Extended sidewalk creates active zone and passive zone with additional seating and human scale lighting.	Simplifying intersections, re-striping all crossing as high visibility crosswalks, reconfiguring crosswalk alignment and signal timing sequence.	Extended sidewalk creates active zone and passive zone with additional seating and human scale lighting.	Add weekend-only diagonal crossing sequence timing with specialty paving delineation at intersection.
New planters, raingardens and permeable pavers. Improve and infill street tree canopy.	New raingarden planters from North-South prototypical street configuration surrounding Murrow Park and beyond all existing intersections.	New planters, raingardens and permeable pavers reduce runoff. Increased tree canopy shades sidewalks and reduce heat-island effect.	New raingarden planters from North-South prototypical street configuration surrounding Murrow Park and beyond all intersections.	New planters, raingardens and permeable pavers reduce runoff. Increased tree canopy shades sidewalks and reduce heat-island effect.	Coordinate existing raised planter beds with proposed corridor aesthetic standards.

Report produced by:

KGP Design Studio, LLC
1099 14th Street NW, Suite 101L
Washington, DC 20005

(web) <http://www.kgpds.com>
(phone) 202 . 822 . 2102
(fax) 202 . 822 . 2104

Report produced for:

Golden Triangle Business Improvement District
1120 Connecticut Avenue NW, Suite 260
Washington, DC 20036

(web) <http://www.goldentriangledc.com/>
(phone) 202.463.3400

CONTACT INFORMATION



GOLDEN TRIANGLE

KGP design studio