

DRAFT 2.0

06-21-2010



CRYSTAL CITY SECTOR PLAN



ARLINGTON
VIRGINIA

PROJECT ACKNOWLEDGEMENTS AND CREDITS

ARLINGTON COUNTY BOARD:

Jay Fissette, *Chairman*
Christopher Zimmerman, *Vice-Chairman*
Barbara Favola, *Member*
Mary Hynes, *Member*
J. Walter Tejada, *Member*

CRYSTAL CITY TASK FORCE:

Marty Almquist, *(Chair) Economic Development Commission*
Terry Savelle, *(Vice-Chair) Planning Commission*
Christer Ahl, *Resident Representative*
Paul Benda, *Transportation Commission*
Mitch Bonanno, *Major Property Owner/Developer*
Joel Cohen, *Business Tenant**
Sally Cooper, *Resident Representative**
Barbara Landes, *Business Tenant*
Jerry Norris, *Economic Development Commission*
Wendy Rahm, *Commission for the Arts**
Steve Rosenberg, *Commission for the Arts*
Daryl South, *Major Property Owner/Developer*
Ted Saks, *Aurora Highlands Civic Association*
Neal Sigmon, *Park and Recreation Commission*
Harmar Thompson, *Major Property Owner/Developer*
Maria Zimmerman, *Transportation Commission**

* Former Task Force Members

ARLINGTON COUNTY MANAGEMENT TEAM:

Michael Brown, *County Manager*
Ron Carlee, *Former County Manager*
Barbara Donnellan, *Deputy County Manager*
Gabriela Acurio, *Assistant County Manager*
Susan Bell, *Director, DCPHD*
Terry Holzheimer, *Director, AED*
Dinesh Tiwari, *Director, DPRCR*
Robert Brosnan, *Division Chief, DCPHD, Planning Division*
Dennis Leach, *Division Chief, DES, Transportation Division*
Stephen Del Giudice, *Bureau Chief, DES, Transit Bureau*
Lisa Grandle, *Division Chief, DPRCR, Park Development Division*
Claude Williamson, *Supervisor, DCPHD, Planning Division*

LONG RANGE PLANNING COMMITTEE PARTICIPANTS:

Rosemary Ciotti, *Planning Commission*
 Steve Cole, *Planning Commission*
 Peter Fallon, *Planning Commission*
 Brian Harner, *Planning Commission*
 Nancy Hunt, *Planning Commission*
 Inta Malis, *Planning Commission*
 Charles Monfort, *Planning Commission*
 Terry Savela, *Planning Commission*
 Terry Serie, *Planning Commission*
 Steve Sockwell, *Planning Commission*

Christer Ahl, *Crystal City Resident Representative*
 Paul Benda, *Transportation Commission*
 Mitch Bonanno, *Major Property Owner/Developer*
 Bruce Cameron, *Aurora Highlands Civic Association*
 Michael Dowell, *Aurora Highlands Civic Association (alternate)*
 Patty Joyce, *Arlington Ridge Civic Association (alternate)*
 Aaron Lien, *Environment and Energy Conservation Commission*
 Christopher Mailander, *Arlington Ridge Civic Association*
 Jerry Norris, *Economic Development Commission*
 Brooks Rainwater, *Environment and Energy Conservation Commission (alternate)*
 Neal Sigmon, *Park and Recreation Commission*
 Harmar Thompson, *Major Property Owner/Developer*
 Charles Walter, *Arlington Ridge Civic Association (alternate)*
 Larry Whithers, *Housing Commission*
 James Whittaker, *Crystal City Resident Representative*

ARLINGTON COUNTY PROJECT TEAM:

Anthony Fusarelli, *Project Coordinator, DCPHD, Planning Division*
 Justin Clarke**, Molly Just**, Margaret Tulloch Rhodes, & Robert Ruiz, *DCPHD, Planning Division*
 David Cristeal & Sarah Pizzo, *DCPHD, Housing Division*
 Richard Best & Bridget Obikoya, *DES*
 Carol Ann Perovshek** & Diane Probus, *DPRCR*
 Alexander Iams & Cynthia Richmond, *AED*

** Former Employees

This study was prepared under contract with Arlington County, Virginia, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of Arlington County and does not necessarily reflect the views of the Office of Economic Adjustment.

PROJECT CONSULTANTS:

Torti Gallas and Partners

John Torti, President
 Paul Mortensen, Associate Principal
 Robert Goodill, Principal
 Chaiwat Pilanun, Principal
 Maurice Walters, Principal
 Mike Nicolaus, Principal
 Laurence Brady, Associate
 Elena Romero-Bostan
 Lindsay Ringwelski
 Timothy Zork
 Raquel Raimundez-Spellacy
 Brian Tomaino
 Kalinda Brown
 Greyson Goon
 Abdul Muzikir
 Chase Eatherly

Kimley-Horn and Associates
 DMJM Harris | AECOM
 EDAW
 Economics Research Associates
 Nelson\Nygaard Consulting Associates
 Robert Charles Lesser & Company
 Vladislav Yeliseyev, Architectural Illustrations

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
OVERVIEW	7
SUMMARY	8
1. UNDERSTANDING EXISTING CONDITIONS	10
1.1 BACKGROUND	11
1.1.1 The History of Crystal City	11
1.2 THE IMPACT OF REGIONAL GROWTH	12
1.2.1 Crystal City Planning Area and Vicinity	14
1.2.2 The Crystal City Planning Area	18
1.2.3 Existing General Land Use Plan	20
1.2.4 Existing Zoning	21
1.3 THE PLANNING PROCESS	22
1.3.1 Background and Purpose	22
1.3.2 About this Document	23
2. POLICY FRAMEWORK	24
2.1 VISION STATEMENT	25
2.2 GOALS AND OBJECTIVES	26
2.3 POLICY DIRECTIVES	28
3. CRYSTAL CITY MASTER PLAN	30
3.1 INTRODUCTION	31
3.2 THE ILLUSTRATIVE CONCEPT PLAN	32
3.3 DISTRICT OVERVIEWS	34
3.3.1 Northeast Gateway	34
3.3.2 Central Business District	36
3.3.3 The Entertainment District	38
3.3.4 South End	40
3.3.5 Northwest Gateway	41
3.3.6 West Side	42
3.4 SUSTAINABLE DESIGN	44
3.5 BLOCK STRUCTURE	46
3.6 TRANSPORTATION	48
3.6.1 Overview and Recommendations	48
3.6.2 Street Network and Circulation Patterns	49
3.6.3 Street Typology	50
3.6.4 Pedestrian and Bicycle Accommodation	52
3.6.5 Existing and Proposed Transit Conditions	54
3.6.6 Proposed TransitWay	56
3.6.7 Proposed Multi-Modal Transfer Facility	58
3.6.8 Street Configuration and Network	60
3.6.9 Street-by-Street Recommendations	60
3.6.10 Parking and TDM Measures	72
3.6.11 Transportation Demand Management (TDM)	73

3.7 PUBLIC REALM	74
3.7.1 Overview	74
3.7.3 Urban Forest Canopy Coverage	75
3.7.4 Public Open Space	75
3.7.5 Public Art	88
3.7.6 Public Realm and the Underground	89
3.8 DENSITY AND BUILT FORM	90
3.8.1 Overview	90
3.8.2 Density Distribution and Massing	92
3.8.3 High/Low Density Zones	92
3.8.4 Density Yield	92
3.8.5 Allowable Building Heights and Tapering Strategies	94
3.8.6 Tower Coverage and Building Envelopes	98
3.8.7 Designing the Skyline	100
3.9 LAND USE AND USE MIX	102
3.9.1 Housing	102
3.9.2 Retail Uses	104
3.9.3 Preferred Retail Locations	106
3.9.4 Cultural Resources	108
3.9.5 Community Services	109
3.9.6 Parking	110
3.9.7 Service and Loading	110
3.10 SANITARY AND STORMWATER INFRASTRUCTURE	112
3.11 DESIGN GUIDELINES	114
3.11.1 Building Massing	114
3.11.2 Building Setback Profiles	116
3.11.3 Architectural Features	118
3.11.4 Building Frontage	120
3.11.5 Public Sidewalk Frontage	122
3.11.6 Public Space Landscaping	126
4. IMPLEMENTATION	130
4.1 INTRODUCTION	131
4.2 IMPLEMENTATION STEPS	132
4.2.1 Plan Adoption	132
4.2.2 Land Use and Zoning	132
4.2.3 Affordable Housing	134
4.2.4 Transportation	136
4.2.5 Public Open Space	139
4.2.6 Community Building	140
4.2.6 Economic Development	141
4.3 IMPLEMENTATION MATRIX	144
APPENDIX AND GLOSSARY	146
APPENDICES	148
A.1 FAA Feasibility Review of Building Heights	148
GLOSSARY	152



EXECUTIVE SUMMARY



THE CRYSTAL CITY SECTOR PLAN REPRESENTS THE RESULTS OF A COMMUNITY PLANNING EFFORT TO DEVELOP A PREFERRED VISION FOR THE NEXT GENERATION OF DEVELOPMENT IN CRYSTAL CITY.

OVERVIEW

The Crystal City Sector Plan represents the results of a community planning effort to develop a preferred vision for the next generation of development in Crystal City throughout the next 40 years. This document sets forth this vision, through a statement of community aspirations, a policy framework to guide future actions, and a conceptual master plan. It also includes analysis of Crystal City's regional context, urban form, existing and future transportation requirements, demographic and market forecasts, and the consequences of Base Realignment and Closure (BRAC) legislation. Other neighborhood planning strategies, such as increasing the quality and quantity of public open space, provision of affordable housing, and recommendations for building a sustainable future are also included.

“CITIES ARE PERPETUALLY UNFINISHED SERIAL CREATIONS... THE FORM OF THE CITY DEVELOPS THROUGH A CONTINUOUS REWORKING OVER THE TRACES OF WHAT CAME BEFORE. THIS NONSTOP EVOLUTION OF USE AND FORM IS BOTH INEVITABLE AND DESIRABLE”.

KEN GREENBERG
ARCHITECT AND URBAN DESIGNER

SUMMARY

CRYSTAL CITY TODAY

Just across the Potomac River from Washington, D.C. and adjacent to Reagan National Airport, Crystal City has become one of Arlington's largest concentrations of density and jobs. Its adjacency to the Pentagon and Pentagon City (rounding out the Jefferson Davis Corridor) has directly influenced Crystal City's growth and development. Today, the Jefferson Davis and Rosslyn-Ballston corridors comprise Arlington's two designated high-density, mixed-use corridors where development is focused around existing Metrorail stations. In recent years, new development has been limited in Crystal City, primarily due to near full build-out conditions under existing land use guidelines. Until recently, with the build-out of nearby development sites, the potential for Crystal City's second generation of redevelopment has largely remained unexplored, until now.

In 2005, Arlington faced the recommendations of the Base Realignment and Closure Commission (BRAC), which became federal law. This law calls for the U.S. Department of Defense (DoD) to relocate 17,000 jobs from Arlington to nearby military bases. These relocations would vacate almost 4.2 million square feet of office space in the County. In response, the Arlington County Board quickly appointed a BRAC Transition Task Force to assess the full impact of these requirements and develop recommendations for remediation, especially within Crystal City. Among other proposals, the Task Force recommended a formal planning process for Crystal City to create a vision for its revitalization.

This planning initiative was launched in early 2006 when the County Board appointed the Crystal City Planning Task Force, comprised of a diverse group of community stakeholders. The County Board charged the Task Force with identifying planning issues for the future development of Crystal City, reviewing a policy framework and concept plan generated by County staff and consultants, and advising the Board on the final staff recommendations. Over two years, through a series of public meetings, site visits, and a community design charrette, a wide range of goals, plan ideas, transportation proposals, and density and program assessments have been considered and discussed at length. This document is the culmination of these collaborative efforts to chart a preferred vision for the future of Crystal City. Furthermore, at the time of the writing of this Sector Plan, Crystal City was being considered as a high priority area by the community-wide Community Energy and Sustainability Task Force, which could result in future recommended actions that align with but may go beyond those specifically recommended in this Plan.

Chapter One of this document provides background on Crystal City and the planning process. It includes analyses of Crystal City's position in the region, contextual conditions in and around the planning area, and a summary description of the community process to develop this plan.

A POLICY FRAMEWORK FOR CRYSTAL CITY

Chapter Two presents the Policy Framework. This framework includes a Vision Statement that creates a mental image of Crystal City's

desired overall characteristics in the future. The Vision Statement is supported by a series of Goals and Objectives that outline the principal aspirations of the plan along with specific steps directed at achieving each goal. These elements are embodied within the Policy Directives, which outline the major recommendations and guidance for action on all future redevelopment in Crystal City.

Through the process, a desired vision was identified and supported with primary goals to achieve as part of the future Crystal City. Issues related to land use, public streets and open spaces, architecture and built form, transportation, environmental and economic sustainability and transitions to adjacent neighborhoods were all identified as areas of interest. Ultimately, seven goals were established to outline the key aspirations for the revitalization of Crystal City:

- Create a high quality public realm that strengthens the sense of place
- Provide a mix of uses balancing office, residential, retail, cultural, and civic uses among several defined neighborhood centers
- Relate architectural and urban design to the human scale
- Enhance multimodal access and connectivity
- Incorporate sustainable and green building principles into all urban and architectural design
- Preserve the integrity of the single-family neighborhood to the west
- Ensure Crystal City's long-term economic sustainability

Each of these goals is supported by a set of specific objectives that help direct and gauge progress in achieving the stated goals. Many of the objectives are also addressed in the Policy Directives, the Master Plan, or implementation recommendations. The major recommendations for guidance on all future redevelopment proposals in Crystal City embodied in the Policy Directives are organized among eight categories:

- Land Use and Complete Community
- Building Form and Heights
- Density
- Public Open Spaces
- Sustainable Design and Development
- Transportation
- Housing Mix and Affordability
- Improvement Implementation

THE CRYSTAL CITY MASTER PLAN

Chapter Three presents the Crystal City Master Plan, a comprehensive framework for guiding future growth and development within the planning area. Its several components include:

- The Illustrative Concept Plan
- Policy Directives (from Chapter Two) and Corresponding Policy Maps
- Density and Building Form Proposals
- Use and Program Mix Proposals
- Street Configuration Guidelines

- Transit Proposals and Recommendations
- Park and Open Space Proposals
- Retail and Commercial Development Strategies
- Sustainability Strategies and Guidelines
- Cultural Resource Guidelines
- Community Service Guidelines
- Parking, Service, and Loading Strategies
- Architectural and Frontage Design Guidelines

The Illustrative Concept Plan has been the primary means to develop and test ideas for growth and improvement in Crystal City. Multiple iterations of the Illustrative Concept Plan were developed, including four schemes from the Community Charrette that were subsequently united into an earlier draft plan (the 1.5 Alternative). Through Task Force meetings, community fora, County Board work sessions, and a variety of agency and stakeholder meetings, the elements of the 1.5 Alternative were tested, vetted and developed to produce the Illustrative Concept Plan presented in Chapter Three. The plan includes a reconfigured street network, enhancements to existing public open spaces, proposals

for new public open space, sites for either new development and/or redevelopment, and many other urban design components. The Illustrative Concept Plan is not a specific development plan for sites in Crystal City but a tool for understanding a shared vision of Crystal City's future form, as well as for gauging how future development proposals fit within and conform to this overall vision .

The Policy Directives in Chapter Two and Policy Maps in Chapter Three communicate the intent of the Master Plan, and help inform future implementation efforts. In December of 2008, the County Board adopted the Illustrative Concept Plan and Policy Framework (Vision Statement, Goals and Objective, Policy Directives, and corresponding Policy Maps) to guide future development . After adoption of these elements, the Long Range Planning Committee of the Planning Commission initiated a special process to conduct a technical review of the first full draft of the plan. Now fully integrated into the Crystal City Sector Plan, the Policy Directives provide guidance on decisions about density and land use, transportation infrastructure, parks and open space, and many other issues effecting the future of Crystal City.

A variety of Design Guidelines are provided throughout Chapter Three, addressing street and frontage configuration, building massing, height, tapering, and architectural design. These guidelines incorporate common best practices, as well as standards typically applied in Arlington County. These guidelines also provide recommendations for future design proposals so that they might best conform to the spirit of the plan.

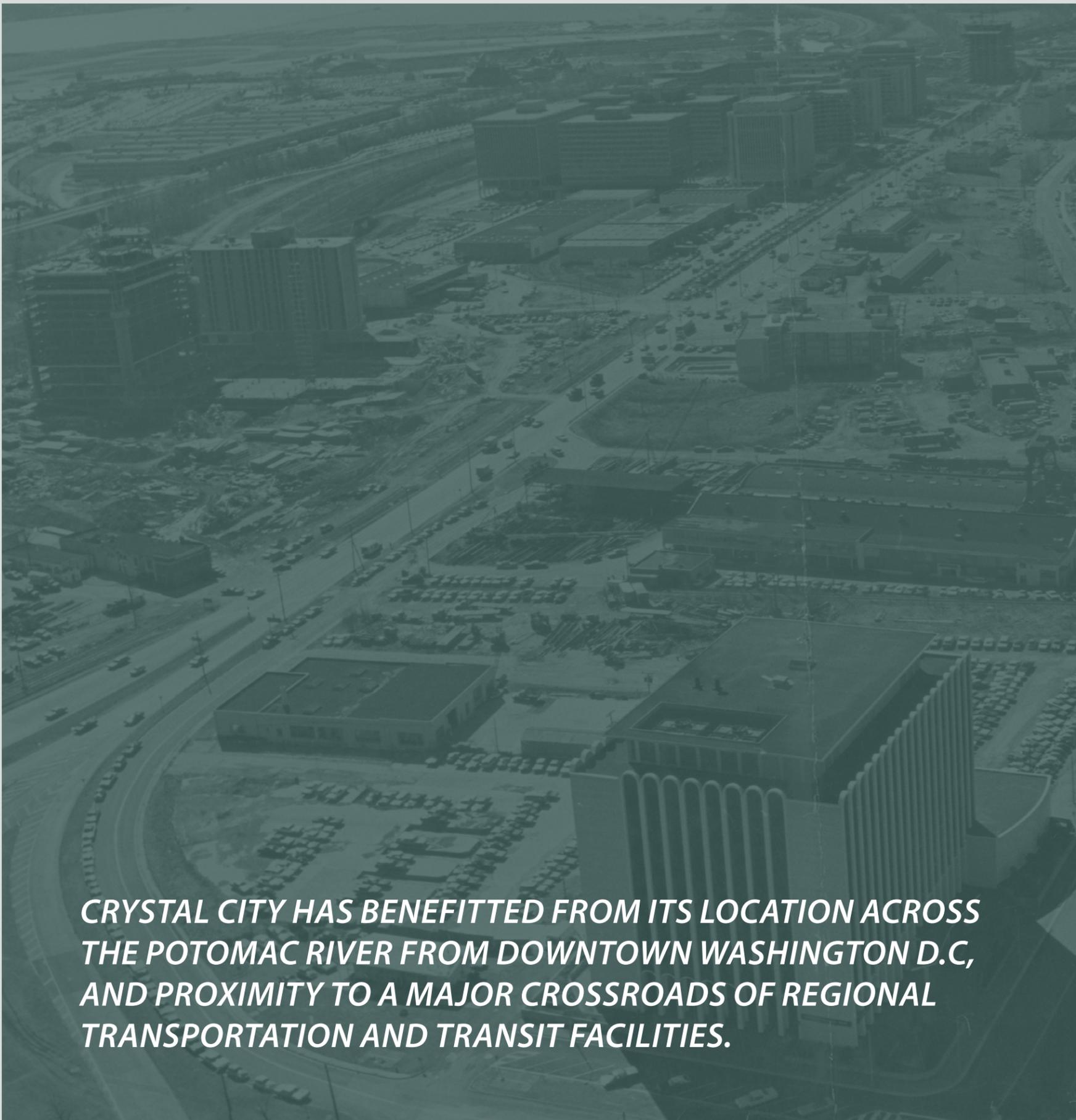
TAKING THE NEXT STEPS

The Crystal City Sector Plan offers more than a simple remedy for the pressing circumstances arising from BRAC and an aging stock of office buildings. Rather, this Plan offers a comprehensive vision for the future of Crystal City, with an emphasis on improving the quality of the public realm. Opportunities to responsibly increase density, advance sustainability, provide energy security, increase residential offerings, enhance and expand a multi-faceted transportation system, increase the quality and quantity of public open space, and promote high-quality urban design have all been explored and incorporated into this document.



Historic Aerial View of Crystal City - 1976

1. UNDERSTANDING EXISTING CONDITIONS



CRYSTAL CITY HAS BENEFITTED FROM ITS LOCATION ACROSS THE POTOMAC RIVER FROM DOWNTOWN WASHINGTON D.C, AND PROXIMITY TO A MAJOR CROSSROADS OF REGIONAL TRANSPORTATION AND TRANSIT FACILITIES.

1.1 BACKGROUND

Crystal City's urban form has been shaped largely through decades of private sector development, without a guiding long-range community plan for the area. Nearby, ongoing development in Pentagon City and Potomac Yards is creating a more seamless pattern of high-density, mixed-use development, blurring the boundaries between these neighborhoods. Nevertheless, Crystal City remains the largest high density mixed-use neighborhood in south Arlington, and one of Arlington's primary "economic engines". Almost four decades after its first high-rise building was built, Crystal City is approaching full build-out within the scope of existing land use plans. Looking forward, any potential for additional growth will need to balance competing priorities, while improving the quality of life within Crystal City.

The 2005 BRAC recommendations have had an immediate impact on Arlington, since it is a well established center for DoD and related contractor occupancies. BRAC expressly targeted these uses for relocation to sites outside of Arlington and Crystal City. In response, Arlington established a BRAC Transition Task Force that developed 34 recommendations to transform the potential negative impacts into real opportunities. One of their specific recommendations included "the initiation of a planning process that develops and advocates a vision, analyzes fiscal and economic impacts, and provides a framework for the physical redevelopment of Crystal City." As a result, this Sector Plan embodies the community's aspirations for addressing the impacts from BRAC by guiding future reinvestment in Crystal City to achieve their desired, shared vision.

1.1.1 THE HISTORY OF CRYSTAL CITY

Crystal City has benefitted from its location across the Potomac River from Downtown Washington D.C, and proximity to a major crossroads of regional transportation and transit facilities. Since the founding of the Federal City, waterways, railroads, bridges, highways, and airports have provided easy access to and from this location, shaping its evolution and making Crystal City a prime location for commercial and residential growth.

Before 1960, much of Crystal City was devoted to low intensity industrial uses such as brickyards, warehouses, and other construction-related activities. Auto-oriented and rail-associated uses such as motels, storage yards, iron fabricating factories, junk yards, and a drive-in theater prevailed along with many vacant and underutilized tracts. However, the corridor's proximity to Reagan National Airport, the Pentagon, and Washington D.C. soon stimulated major redevelopment

initiatives for the area. In the mid-1960s, a growing demand for office space outside of the Washington, D.C., central business district made Arlington locations more attractive and led to Crystal City's early development into an urban center. Crystal City's first generation of planned development comprised mixed-use development of office, apartment, and hotel buildings, with an internal retail spine located east of Jefferson Davis Highway. The name "Crystal City" was taken from one of the early apartment buildings, the Crystal House (1900 S. Eads Street), and the large crystal chandelier that graced its lobby.

As development continued, new apartment and hotel buildings were constructed west of Jefferson Davis Highway. Meanwhile, the federal government's decision in the late 1960s to locate the U.S. Patent Office and the Institute of Defense Analysis in Crystal City stimulated more construction of office and residential buildings supporting federal government uses. With the July 1977 opening of the Crystal City Metro Station, and the Virginia Railway Express (VRE) station a few years later, Crystal City's market reach was greatly expanded, positioning it as a major regional employment center. Millions of square feet of mixed-use development have been built to date, leading to Crystal City's status as one of the region's primary activity centers.

“ THIS SETS THE CHIEF MISSION FOR THE CITY OF THE FUTURE: THAT OF CREATING A VISIBLE REGIONAL AND CIVIC STRUCTURE, DESIGNED TO MAKE MAN AT HOME WITH HIS DEEPER SELF AND HIS LARGER WORLD...”

LEWIS MUMFORD
20TH CENTURY AMERICAN HISTORIAN

1.2 THE IMPACT OF REGIONAL GROWTH

REGIONAL GROWTH TRENDS

Development pressure on Crystal City is part of a larger trend observed throughout the Washington Metropolitan Area. Recent forecasts anticipate rapid growth throughout the region over the next two decades. The most recent Metropolitan Washington Council of Governments (COG) report on regional growth projects that by 2030, the region will gain 1.2 million new jobs and 1.6 million new residents ¹.

This projected growth, however, is not expected to occur uniformly throughout the region². Figure 1.2.1 identifies the COG region’s major nodes of employment and density, referred to as “activity centers” and based on COG’s Round 7.0 Forecasts (Table 1.2.1). These activity centers are becoming increasingly dispersed, often along major transportation corridors. The central jurisdictions, composed of Washington, D.C., Arlington County, and the City of Alexandria, are projected to account for only 20% of employment growth and 13% of population growth in the region, but will remain the largest concentration of employment in region. By comparison, the inner suburbs³ are projected to account for about one-half of regional employment growth and 41% of population growth. The outer suburbs⁴ account for 28% of projected regional employment growth, and nearly one-half of projected population growth. Total job growth in Northern Virginia is forecast to expand by 61%, which will far exceed the projected growth for the Maryland suburbs (38%) and the District of Columbia (18%)⁵. Collectively, these numbers suggest that the Northern Virginia jurisdictions within the Washington Metropolitan Area will experience the largest share of projected regional growth, and that the greatest development pressure will occur in the outer jurisdictions of Northern Virginia.

REGIONAL DEVELOPMENT PATTERNS

The likely consequence of this projected pattern of growth is sprawl. The negative consequences of sprawl are well documented and understood⁶. Increased traffic congestion, loss of farmland and wilderness areas, costly and inefficient expansion of infrastructure, and unsustainable consumption of fuel and other natural resources are just a few of the associated negative consequences. To counter the adverse impacts that stem from dispersed growth, regional governments are increasingly adopting Smart Growth policies as an integral component of their planning efforts. Building upon Arlington’s past experience with Smart Growth planning, the Crystal City Sector Plan is an opportunity to demonstrate Arlington’s continued commitment to these practices.

TABLE 1.2.1 - REGIONAL ACTIVITY CENTER

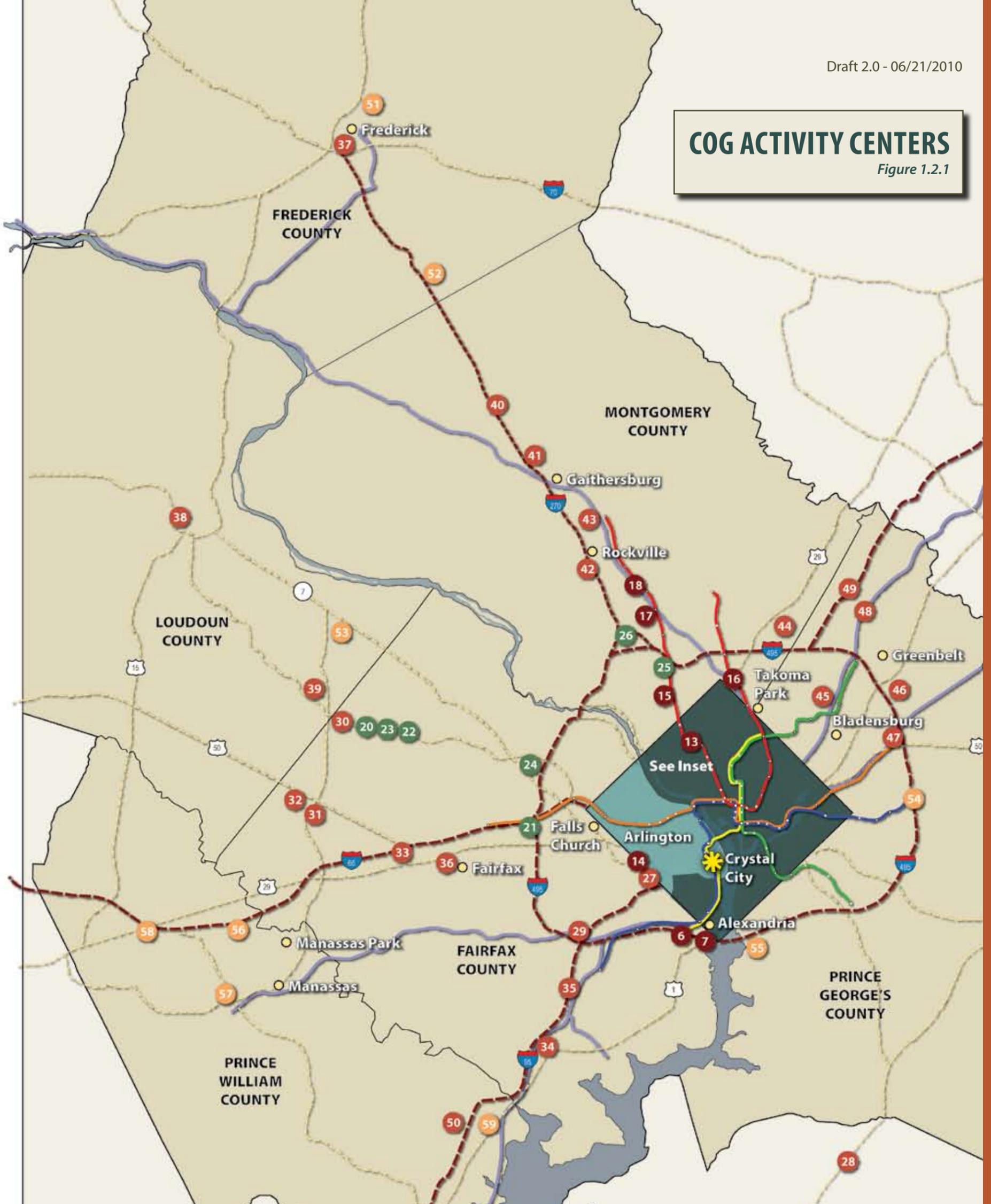
1	DOWNTOWN WASHINGTON	31	DULLES EAST
2	FEDERAL CENTER/SOUTHWEST/NAVY YARD	32	DULLES WEST
3	GEORGETOWN	33	FAIRFAX CENTER
4	MONUMENTAL CORE	34	I-95 CORRIDOR/ENGINEER PROVING GROUND
5	NEW YORK AVENUE	35	SPRINGFIELD
6	EISENHOWER AVENUE	36	CITY OF FAIRFAX - GEORGE MASON UNIVERSITY
7	DOWNTOWN ALEXANDRIA	37	MD. 85/355 EVERGREEN POINT
8	BALLSTON/VIRGINIA SQUARE	38	DOWNTOWN LEESBURG
9	CLARENDON/COURT HOUSE	39	CORPORATE DULLES
10	CRYSTAL CITY	40	GERMANTOWN
11	PENTAGON CITY	41	NORTH FREDERICK AVENUE
12	ROSSLYN	42	ROCKVILLE TOWN CENTER
13	FRIENDSHIP HEIGHTS	43	SHADY GROVE/KING FARM/LIFE SCIENCES CENTER
14	BAILEY’S CROSSROADS/SKYLINE	44	WHITE OAK
15	BETHESDA CBD	45	US 1 GREEN LINE
16	SILVER SPRING CBD	46	GREENBELT
17	WHITE FLINT	47	NEW CARROLLTON
18	TWINBROOK	48	ROUTE 1
19	THE PENTAGON	49	KONTERRA*
20	HERNDON	50	POTOMAC MILLS
21	MERRIFIELD/DUNN LORING	51	AIRPORT/MONOCACY BOULEVARD
22	RESTON EAST	52	URBANA
23	RESTON WEST	53	ROUTE 28 NORTH
24	TYSONS CORNER	54	LARGO CENTER
25	NATIONAL INSTITUTES OF HEALTH	55	NATIONAL HARBOR
26	ROCK SPRING PARK	56	BULL RUN - SUDLEY AREA
27	BEAUREGARD STREET	57	INNOVATION
28	WALDORF COMMERCIAL	58	GAINESVILLE*
29	BELTWAY SOUTH	59	WOODBIDGE*
30	DULLES CORNER		

*NEW ACTIVITY CENTER. CBD = CENTRAL BUSINESS DISTRICT

1 Metropolitan Washington Council of Governments (COG), Pub. No. 20078315, “Growth Trends to 2030: Cooperative Forecasting in the Washington Region”, Fall 2007, p. 3. (Figures are based on COG’s Round 7.1 Forecasts)
2 The region in these reports is comprised of jurisdiction included in the federal definition of the Metropolitan Statistical Area that includes COG member jurisdictions and three additional counties, Stafford in Virginia, and Calvert and Charles in Maryland. See Growth Trends to 2030 for a full list.
3 Counties immediately adjacent to (bordering) the central jurisdictions.
4 The balance of the MSA at its periphery.
5 Ibid.
6 For a concise and very readable exposition on the issue of sprawl and suggested remedies, see Suburban Nation: The Rise of Sprawl and the Decline of the American Dream, Duany, Plater-Zybert, and Speck, 2000.

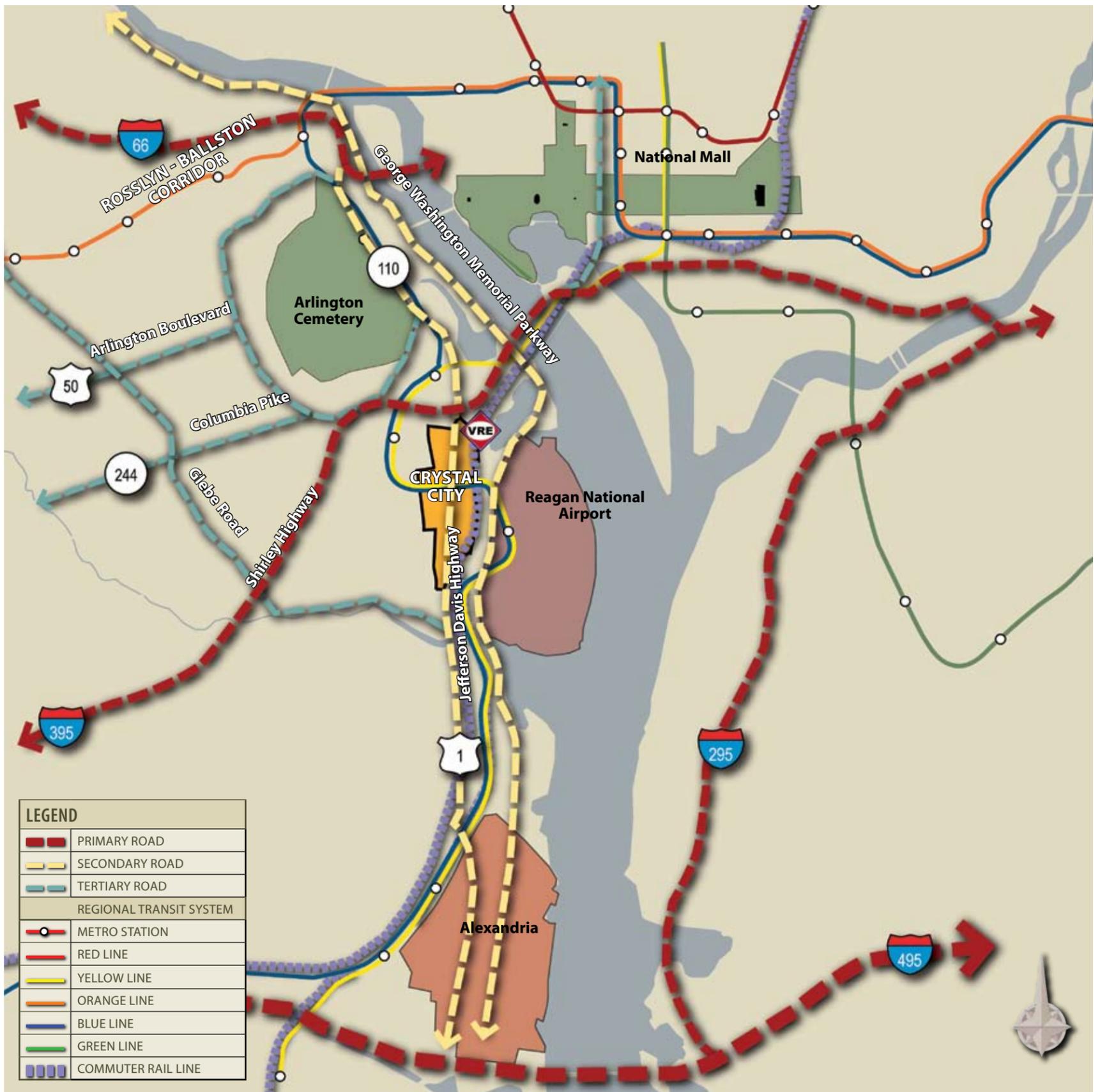
COG ACTIVITY CENTERS

Figure 1.2.1



LEGEND	
REGIONAL ACTIVITY CENTERS	
COG INNER JURISDICTIONS	
XX	DC CORE
XX	MIXED-USE CENTER
XX	EMPLOYMENT CENTER
XX	SUBURBAN EMPLOYMENT CENTER
XX	EMERGING EMPLOYMENT CENTER
PRIMARY ROAD	
SECONDARY ROAD	
REGIONAL TRANSIT SYSTEM	
●	METRO STATION
—	RED LINE
—	YELLOW LINE
—	ORANGE LINE
—	BLUE LINE
—	GREEN LINE
—	COMMUTER RAIL LINE

Based on Maps and Data Provided in COG Publication 20078299: Metropolitan Washington Regional Activity Centers and Clusters



Analysis of Surrounding Context - Figure 1.2.2

1.2.1 CRYSTAL CITY PLANNING AREA AND VICINITY

The 260-acre Crystal City Planning Area for this document is a sub-area of the 391-acre Crystal City Metro Station Area, which also includes Long Bridge Park (the North Tract), Potomac Yards (the South Tract), and the South End service area. The Metro Station Area is itself part of the Jefferson Davis Corridor that also includes Pentagon City. The Jefferson Davis Corridor is one of Arlington’s high-density, mixed-use neighborhoods focused around a Metrorail station. As shown in Figure 1.2.2, this corridor is connected to the region by an extensive transportation network that includes Shirley Highway/I-395, Jefferson Davis Highway/US Route 1, the George Washington Parkway, Metrorail’s Blue & Yellow Lines, the CSX/VRE Railroad Lines, and Reagan National Airport.

The boundaries for both the Planning Area and Metro Station Area are shown in Figure 1.2.3. (The North and South Tracts

were excluded from the planning area due to recently completed planning efforts specific to those areas.) Selected 2008 demographic estimates for the Crystal City Planning Area, summarized in Table 1.2.2, report a population of about 8,100 residents in roughly 5,000 households. Projections for 2030 anticipate a 28% increase in the County’s total number of housing units, however during the same period, the number of housing units in the study area is forecast to increase by nearly 70%. For the same period, Crystal City’s workforce is expected to increase by 22%, compared to a County wide increase of 40%. While a good portion of this future projected growth in households and jobs will be absorbed by the development underway in the Potomac Yard/South Tract area, additional development capacity could be provided within Crystal City to keep pace with these projections.

As shown in Figure 1.2.4 (p. 16), the Jefferson Davis Corridor abuts the Aurora Highlands and Arlington Ridge residential neighborhoods to the west, the Pentagon to the north, and Reagan National Airport to the east. Also, the Long Bridge Park/North Tract area to the north and the mixed-use Potomac Yard development to the south are technically within the the Jefferson Davis Corridor. Because these places surround and have immediate access to Crystal City, they provide the context for creating a

TABLE 1.2.2 - HOUSEHOLDS, POPULATION, AND EMPLOYMENT ESTIMATES (2005)

CRYSTAL CITY PLANNING AREA		
	COUNT	% OF TOTAL
HOUSEHOLDS	5,000	5.4%
POPULATION	8,100	4.1%
EMPLOYMENT	23,600	12.1%

Crystal City plan that respects development impacts, transitions, connectivity, synergy, accessibility, energy use, safety, and economic development within the shared areas. Below is a more detailed discussion of the physical, social, and operational interrelationships between these areas.

AURORA HIGHLANDS AND ARLINGTON RIDGE NEIGHBORHOODS

Situated immediately to the west of Crystal City are the mostly single-family residential neighborhoods of Aurora Highlands and Arlington Ridge. Much of the development in these neighborhoods predate the first generation of mixed-use development in Crystal City, when the area comprising Crystal City and Pentagon City was home to industrial and auto-oriented uses such as brickyards, junkyards, and drive-in movie theaters. As Crystal City and Pentagon City evolved over the past four decades, deliberate efforts were made to establish height and bulk transitions between the high-density growth pattern in these new development areas and the lower-density, existing residential neighborhoods to the west. This plan for the next generation of redevelopment in Crystal City will carefully manage development patterns and land use characteristics along this edge to retain and reinforce this transition strategy. The importance of retaining this transition strategy was highlighted in 2008, when much of Aurora Highlands received the largely-honorable historical designation of inclusion in the National Register of Historic Places.

In the development of this plan, a number of planning issues related to the surrounding Aurora Highlands and Arlington Ridge neighborhoods were identified, including:

- Tapering down in building heights and scale from Crystal City to the neighborhoods;
- Potential transportation impacts resulting from planned future development, including the potential for an increase in cut-through traffic on neighborhood streets;
- Avoiding new street connections between the street grid in Crystal City and the Aurora Highlands and Arlington Ridge neighborhoods;
- Improving pedestrian and bicycle connectivity to and from Crystal City to allow safe and enjoyable travel to experience the area's increasing amenities;
- "Restaurant Row" along 23rd Street S. between Eads and Fern Streets was identified as a major community asset with local businesses that should be preserved or protected,
- Parking challenges for Restaurant Row retailers need to be addressed;
- Interest in reinvestment into their neighborhood public open spaces as demands on these spaces are likely to increase with a growing Jefferson Davis Corridor.

Crystal City Metro Station Area

Figure 1.2.3

The Crystal City Planning Area, outlined in red, is a sub-area of the MSA and the primary focus of this planning initiative.

- Interest in other potential impacts on their neighborhoods and community facilities.

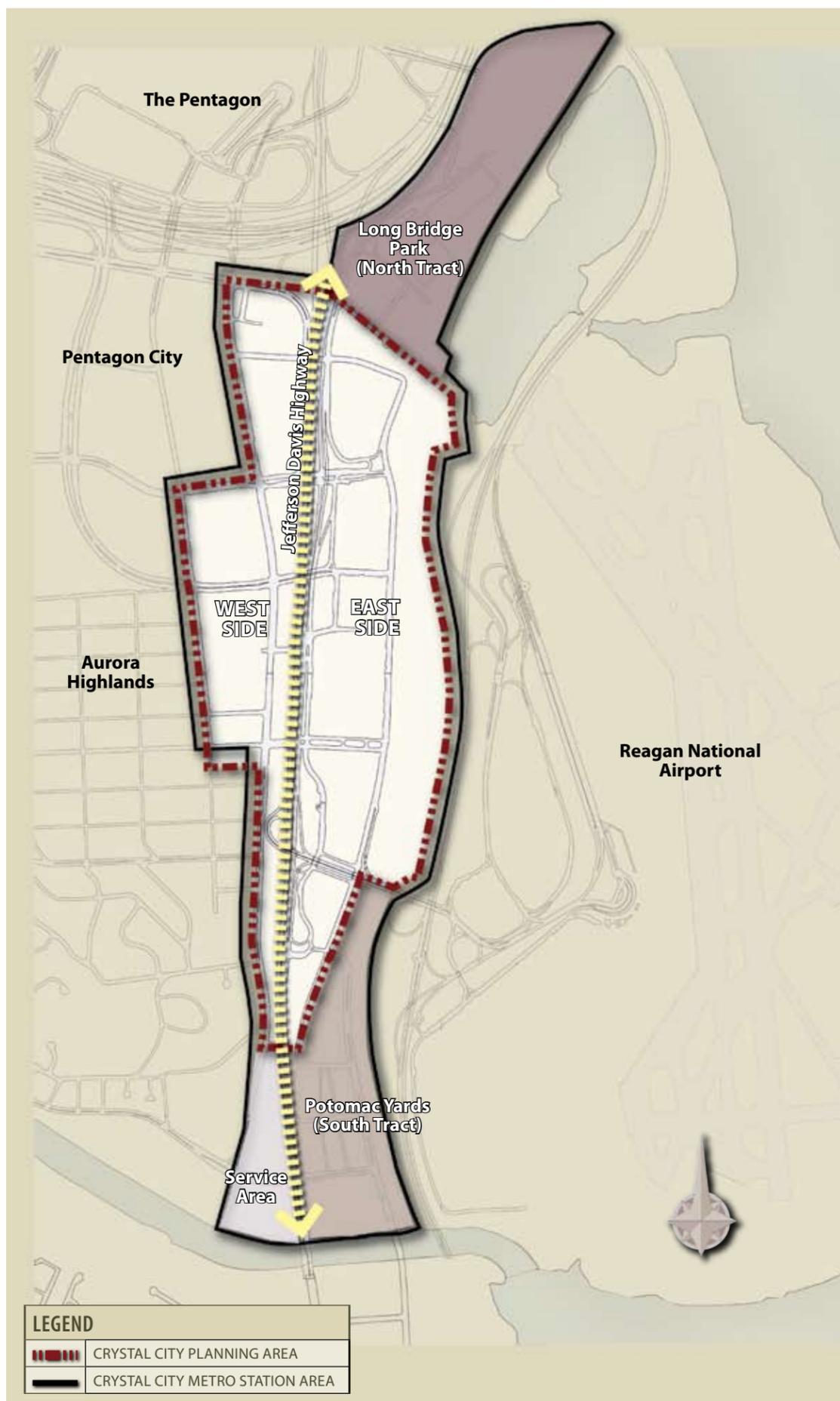
PENTAGON CITY

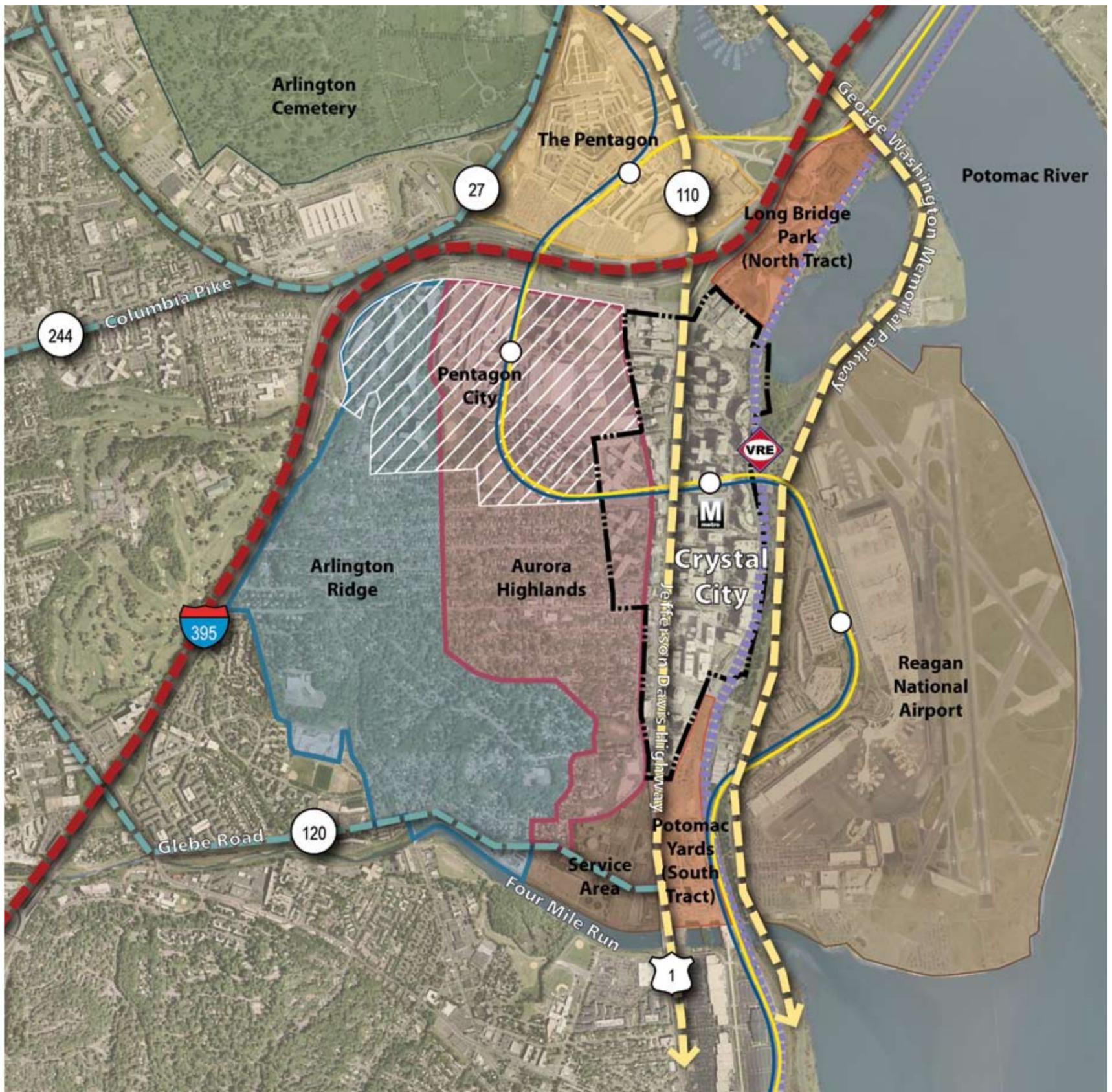
The Pentagon City Metro Station Area comprises 234 acres to the west of Crystal City. Pentagon City has easy access to Crystal City as well as Interstate 395, the Blue and Yellow Metrorail lines, and is home to major retail development, including the Fashion Centre at Pentagon City and Pentagon Row. Over time, Pentagon City has redeveloped with a rich mix of office, retail, hotel rooms, and residential units. The recent approvals of the Metropolitan Park Phased Development Site Plan (PDSP) and Pentagon Centre PDSP will enhance the overall development mix in Pentagon City with continued transit-oriented development. Portions of Pentagon City lie within the boundaries of the Aurora Highlands and Arlington

Ridge Civic Associations, underscoring the interrelationship and overlap among these neighboring areas.

PENTAGON

As the headquarters of the U.S. Department of Defense, the Pentagon is located immediately north of the Crystal City Planning Area across Interstate 395. While the Pentagon is the world's largest office building by floor area, it is also a major transit hub including a Metro station as well as a recently completed major intermodal transit center. Even though it is isolated from Pentagon City and Crystal City by Interstate 395, there are opportunities for enhancing pedestrian connectivity and energy needs among these areas. The federal government has long-term plans that envision more environmentally friendly and sustainable development on its property.





Neighborhoods Adjacent to Crystal City - Figure 1.2.4

REAGAN NATIONAL AIRPORT

Reagan National Airport is the nearest commercial airport to Washington, D.C. and is centrally located within the greater Washington metropolitan region, serving approximately 18.5 million passengers per year. For many visitors arriving by air, it serves as a gateway into Arlington County, Crystal City, and the metropolitan area. Its proximity to Crystal City offers many benefits, such as immediate access to destinations throughout the nation that are just one Metrorail stop and one flight away. The airport also ensures a strong market base for the neighborhood's hotel operators. This plan for Crystal City and its recommended implementation actions are intended to maintain and protect the viability of the airport's continued operations. To this end, the County worked with staff at the Federal Aviation Administration (FAA) and interested stakeholders on an FAA-lead feasibility analysis that looked at the anticipated first 15 years of development proposed in the Crystal City Sector Plan to discern any potential impacts to flight operations and surveillance conditions.

Initial findings from the feasibility study are summarized in the Appendix.

LONG BRIDGE PARK

Long Bridge Park will be a new park and state-of-the-art aquatics, health and fitness facility in the north end of Crystal City. Current plans envision a very energy efficient and architecturally stunning swimming and exercise venue set within a dynamic recreational complex that will feature four full-size athletic fields with views of Washington, D.C. Arlington residents have expressed an interest in having more swimming pools and trails and this project is being undertaken in response to those desires. Long Bridge Park's proximity to Crystal City will offer convenient access to the facility's array of both active and passive amenities. Immediately south of Long Bridge Park, several redevelopment projects have been approved which will help connect the mixed use development in Crystal City with the park.

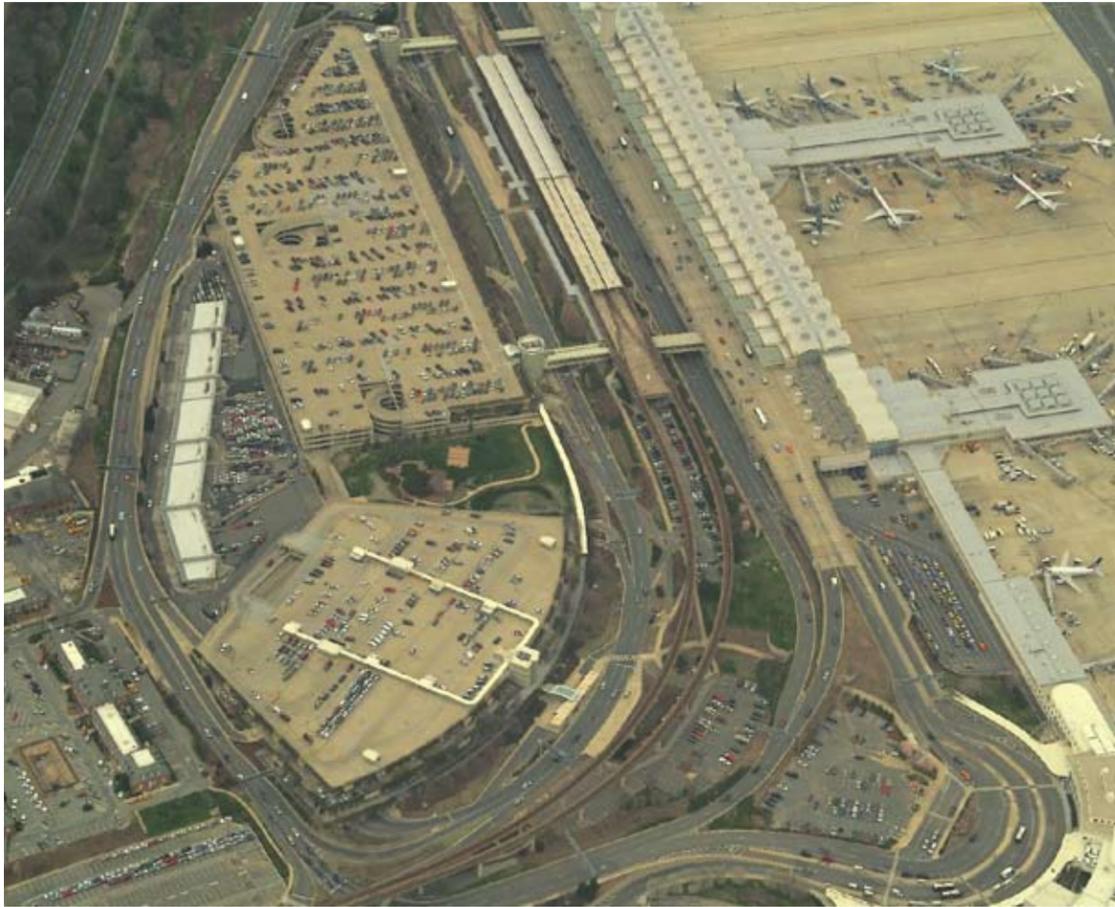
POTOMAC YARD

Potomac Yard is envisioned to be a transit-

and pedestrian-oriented neighborhood, reinforcing an urban lifestyle with a rich mix of uses, including:

- 2.1 million square feet of office space,
- 225,000 square feet of retail space and a grocery store,
- 1,500 residential units, and
- 600 hotel rooms.

The proposed development features a transportation network that creates an active and memorable pedestrian environment that is well-connected to public transit. This will be accomplished by providing a street network to accommodate pedestrians, bicyclists and vehicles; a complete network of sidewalks and trails, and a dedicated transitway, to ultimately accommodate a streetcar system. At nearly two acres, the Center Park is envisioned as the grand outdoor room of Potomac Yard and is intended to serve as the focal point of public life there, with public art and opportunities for special events and programs.



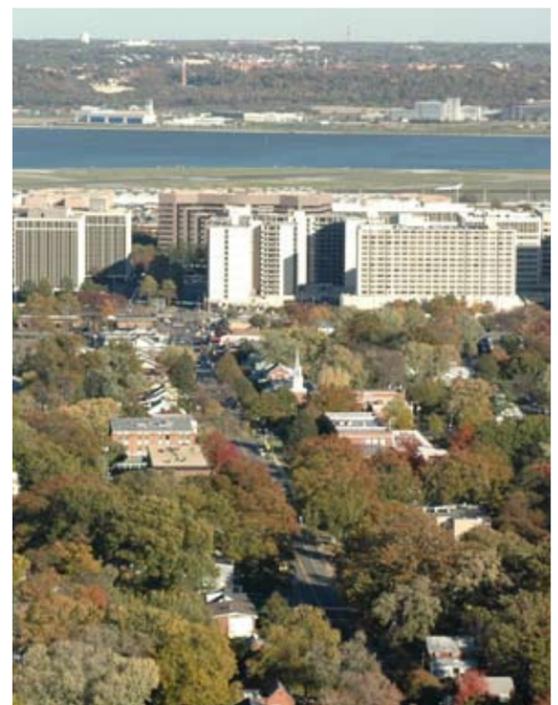
View of Reagan National Airport



View of Long Bridge Park from Crystal City



View of Potomac Yards and Crystal City



View of west side above Aurora Highlands

WHAT IS SMART GROWTH

Smart Growth is an expanding movement within the planning, environmental, and development community trying to change the way development occurs in our cities and suburbs nationwide. The effort is led by organizations such as the Smart Growth Network, a partnership of federal, state and local governments with such diverse groups as developers, environmentalists, historic preservation advocates, various professional organizations, and diverse interests in the real estate industry. Launched by the U.S. Environmental Protection Agency in 1996, this group has developed and promoted a number of strategies, including a set of principles that can guide state and local planning efforts¹:

Create a Range of Housing Opportunities and Choices: Providing a diversity of good quality housing for people of all income levels and tenures is an integral component in any Smart Growth strategy.

Create Walkable Neighborhoods: Walkable communities are desirable places to live, work, learn, worship and play, promote healthy exercise, and are accessible to people of all ages.

Foster Distinctive, Attractive Communities with a Strong Sense of Place: Communities and stakeholders should craft a vision and set of standards for development and construction which respond to community values of regional history, architectural quality, and distinctiveness.

Make Development Decisions Predictable, Fair and Cost Effective: Development opportunities should be embraced by the private sector.

Mix Land Uses: Mixed land uses are a critical component of a pedestrian-friendly place to live.

Preserve Open Space, Farmland, and Critical Environmental Areas: Preserved and enhanced natural and man-made open

spaces bolster local economies, safeguard critical environmental areas, protect natural habitat for plant and animal communities, improve quality of life, and focus new growth into existing communities.

Provide a Variety of Transportation Choices: Providing choices in transportation for people of all ages is a key component of Smart Growth and protecting the environment.

Strengthen and Direct Development Towards Existing Communities: Direct development towards communities served by existing infrastructure, in order to conserve open space, minimize development and community costs, and preserve natural resources.

Take Advantage of Compact Building Design: Incorporate more compact building design as an alternative to conventional, environmentally unsustainable and land consumptive development.

¹ Source: Smart Growth Online, Smart Growth Network, <http://www.smartgrowth.org/default.asp>.

TABLE 1.2.3 - PLANNING AREA SUMMARY

AREA OF STUDY	GROSS AREA	
	ACRES	SQUARE FEET
WEST SIDE	103	4,483,640
EAST SIDE	157	6,834,360
TOTAL	260	11,318,000

1.2.2 THE CRYSTAL CITY PLANNING AREA

The Crystal City Planning Area illustrated in Figure 1.2.3 (p. 15) is bounded by 10th Street and Army-Navy Drive to the north, 32nd Street to the south, Eads and Fern Streets to the west, and the CSX rail right of way to the east. The total planning area is 260 acres, with the east side of Jefferson Davis Highway comprising approximately 157 acres or 60% of the study area. The breakdown of the planning area between the east and west sides is provided in Table 1.2.3.

EDGE CONDITIONS

A variety of edge conditions define the planning area, as depicted in Figure 1.2.5. To the north, medium density, mixed-use development prevails in close proximity to I-395 and Long Bridge Park. The edge along the Pentagon City Metro Station Area is mostly characterized as medium to high density mixed-use development, with some light industrial usage to be phased out on the Metropolitan Park site that has PDSP-approval for around 2,200 residential units and 300 hotel rooms. The eastern edge is predominately wooded, consisting of the CSX railroad right of way and George Washington Parkway, with Reagan National Airport beyond. The southeastern edge borders the mixed-use Potomac Yard development area. The southwestern edge borders a light industrial and service zone. The western edge along Eads and Fern Streets is where Crystal City abuts the Aurora Highlands single family neighborhood.

SITE ANALYSIS

The Planning Area has many recognizable elements as shown in Figure 1.2.6. These elements fall into five distinct categories: districts, paths, edges, activity centers, and landmarks. The districts represent identifiable geographic areas within Crystal City. Paths represent the principal corridors of movement through Crystal City. Edges are either visual and/or physical barriers or areas with notable changes in character. Activity centers are nodes of concentrated activity within a district. Similarly, landmarks are prominent objects in the landscape, and can assist in navigation and orientation.

The dominant element of Crystal City today is Jefferson Davis Highway, which acts both as a path and an edge barrier separating the east and west sides. Due in part to Crystal City's elongated shape and the strong edge condition along Jefferson Davis Highway, east-west district divisions are much clearer than north-south divisions. The airport viaduct and ramps also create a strong barrier condition that defines the South End district. The circulatory network in Crystal City is characterized by a hierarchy of paths, with Jefferson Davis Highway serving as a primary thruway and regional commuter route. Principal local paths include Crystal Drive, Eads Street, and the cross streets ranging from 12th Street to the north to 23rd Street to the south. Other streets in the northern and southern districts are often less used either because of limited access, poor connectivity, or single direction traffic flow. In many cases, streets are configured as feeder and service access roads, with little or no pedestrian accommodation or connectivity.

Principal edge conditions include the western border with Aurora Highlands, where medium-density mixed-use development rapidly transitions to a lower density, residential neighborhood. The least penetrable edge is to the east side, where Crystal City abuts the wooded CSX railroad right of way and the George Washington Parkway.

Principal activity centers include the Metro Station entrance on 18th Street, the retail shops on Crystal Drive between 20th and 23rd Streets, and the area known as "Restaurant Row" on the west side along 23rd Street. Landmarks include features such as the Water Park along Crystal Drive, the Doubletree Hotel which marks the gateway when entering Crystal City from the north, and the Airport Viaduct in the south end as it crosses over Jefferson Davis Highway en route to the airport.

THE CRYSTAL CITY UNDERGROUND

One important component of Crystal City not shown in this diagram is the Underground. The Underground is a climate controlled interior pedestrian concourse lined in some areas by retail shops serving residents, workers, and visitors. Many residents and employees in Crystal City are familiar with the Underground and the convenience it affords. However, for unfamiliar visitors, the Underground may be difficult to find and navigate. This study will provide opportunities to improve how people perceive Crystal City's retail experience from the Underground and streetscapes, and provide a clear and understandable system for all users. Additionally, the plan will include a strategy for preservation of the Underground's distinct positive attributes, including its ability to extend the reach of transit.

REDEVELOPMENT OPPORTUNITIES

Although Crystal City is mostly built-out under the existing planning and zoning parameters, both near- and long-term redevelopment opportunities may exist within the planning area should additional growth potential be provided. An analysis of potential redevelopment sites is provided in Figure 1.2.7. The diagram also identifies potential new development sites that could be created through the proposed removal of selected inefficient highway ramps or realignment and merging of certain streets (such as Clark and Bell Streets). Additionally, areas with potential as infill sites with good street frontage are also identified. According to property owners, some existing office buildings that are now or soon will be obsolete have also been identified as candidates for demolition and redevelopment within the planning period. This diagram demonstrates the many opportunities for growth in Crystal City through a combination of redevelopment, in-fill development, and development on new sites.



Edge Conditions - Figure 1.2.5

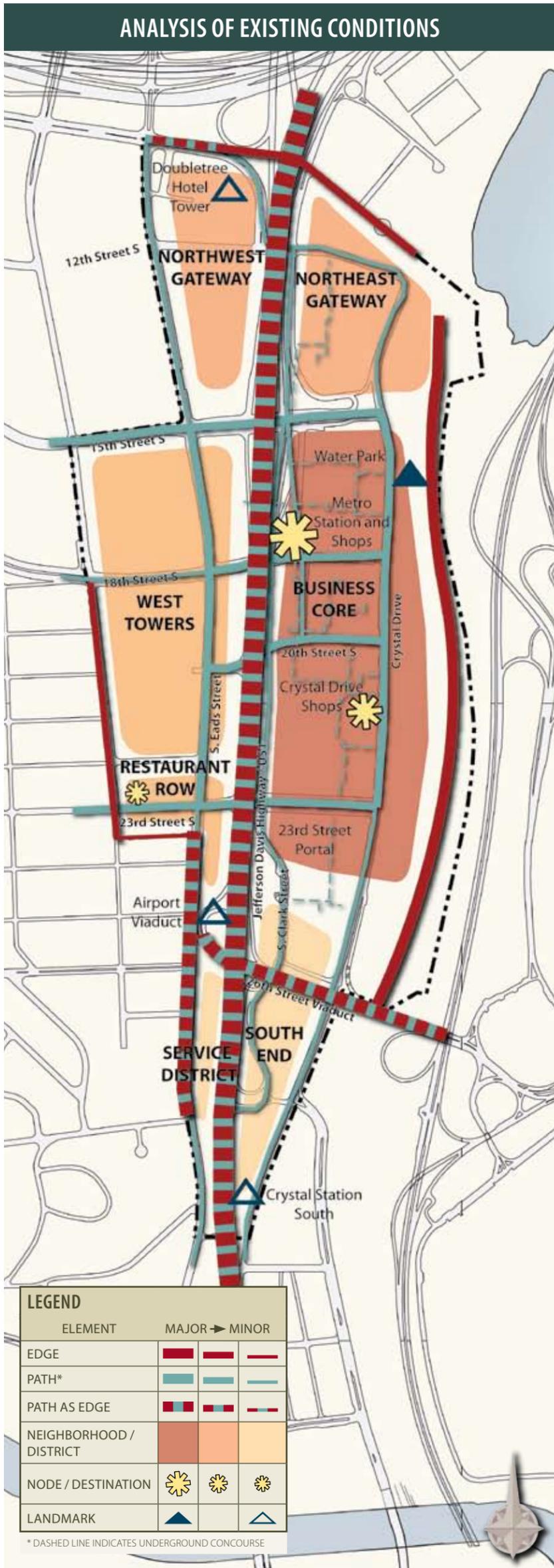


Figure 1.2.6
 Crystal City has distinct areas with identifiable characteristics framed by differing edge conditions. There is also a network of paths and streets that connect these areas. A number of landmarks are also identified, which help contribute to the identity of Crystal City. This diagram identifies these various characteristics and their spatial relationship.



Figure 1.2.7
 This figure identifies buildings anticipated to remain over the plan's lifetime, possible new sites for development, and likely redevelopment sites within Crystal City. Each site provides opportunities to either stimulate the redevelopment of obsolete building, or to better define the edges along public parks and streets in order to enhance the public realm.

1.2.3 EXISTING GENERAL LAND USE PLAN

In most areas, development in Crystal City reflects the existing General Land Use Plan (GLUP) designations within the area, as shown in Figure 1.2.8. High-density residential and office uses with ground level retail activity (internal or street facing) prevail in the core area between Jefferson Davis Highway and Crystal Drive. Low-medium density mixed use development exists east of Crystal Drive, within the Crystal Park site plan. The area between Jefferson Davis Highway and Eads Street is planned for high density residential development. Densities of residential development taper down to the west towards Aurora Highlands, as do commercial and industrial planned densities and activity. Low density residential development with single family detached, duplex, and low-rise multi family dwelling building types are located beyond Crystal City's western boundary into Aurora Highlands.

The majority of Crystal City was developed beginning in the 1960s and continuing through the 1980s with large office, residential and hotel buildings. A recent change to the GLUP converted Service Industry parcels in the Potomac Yard South Tract to a "striped" land use pattern of 2/3 Low Office-Apartment-Hotel and 1/3 Medium Residential. At the same time land in the North Tract was converted from Service Industry to a combination of Low Office-Apartment-Hotel and Public. These land use changes were associated with the approval of the Potomac Yard PDSP.

In most areas, development has progressed consistent with the General Land Use Plan, or in areas where development predates the GLUP designations, the GLUP map has been amended to reflect prevailing land use and development patterns. In fact, very few properties in the Crystal City Planning Area remain available for redevelopment under the existing GLUP (as of 2008), especially in the core area. Under the existing GLUP,

Legend

Land Use Category**	Range of Density/Typical Use	
Residential		
Low	1-10 units per acre	
Low-Medium	16-36 units per acre	
Medium	Up to 37-72 units per acre	
High-Medium	Up to 3.24 F.A.R. (Floor Area Ratio) Residential	
High	Up to 4.8 F.A.R. Residential Up to 3.8 F.A.R. Hotel	
Commercial and Industrial		
Service Commercial	Personal and business services. Generally one to four stories, with special provisions within the Columbia Pike Special Revitalization District.	
Service Industry	Wholesale, storage, and light manufacturing uses, including those relating to building construction activity.	
Public and Semi-Public		
Public	Parks (local, regional, and federal), schools (public), parkways, major unimproved rights-of-way, libraries and cultural facilities.	
Government and Community Facilities	County, state and federal administration and service facilities (police, fire, property yard, etc.), hospitals, nursing homes, and institutional housing, utilities, military reservations, airports, etc.	
Office-Apartment-Hotel		
	Office Density Apartment Density Hotel Density	
Low	Up to 1.5 F.A.R. Up to 72 units/acre	Up to 110 units/acre
Medium	Up to 2.5 F.A.R. Up to 115 units/acre	Up to 180 units/acre
High	Up to 3.8 F.A.R. Up to 4.8 F.A.R.	Up to 3.8 F.A.R.

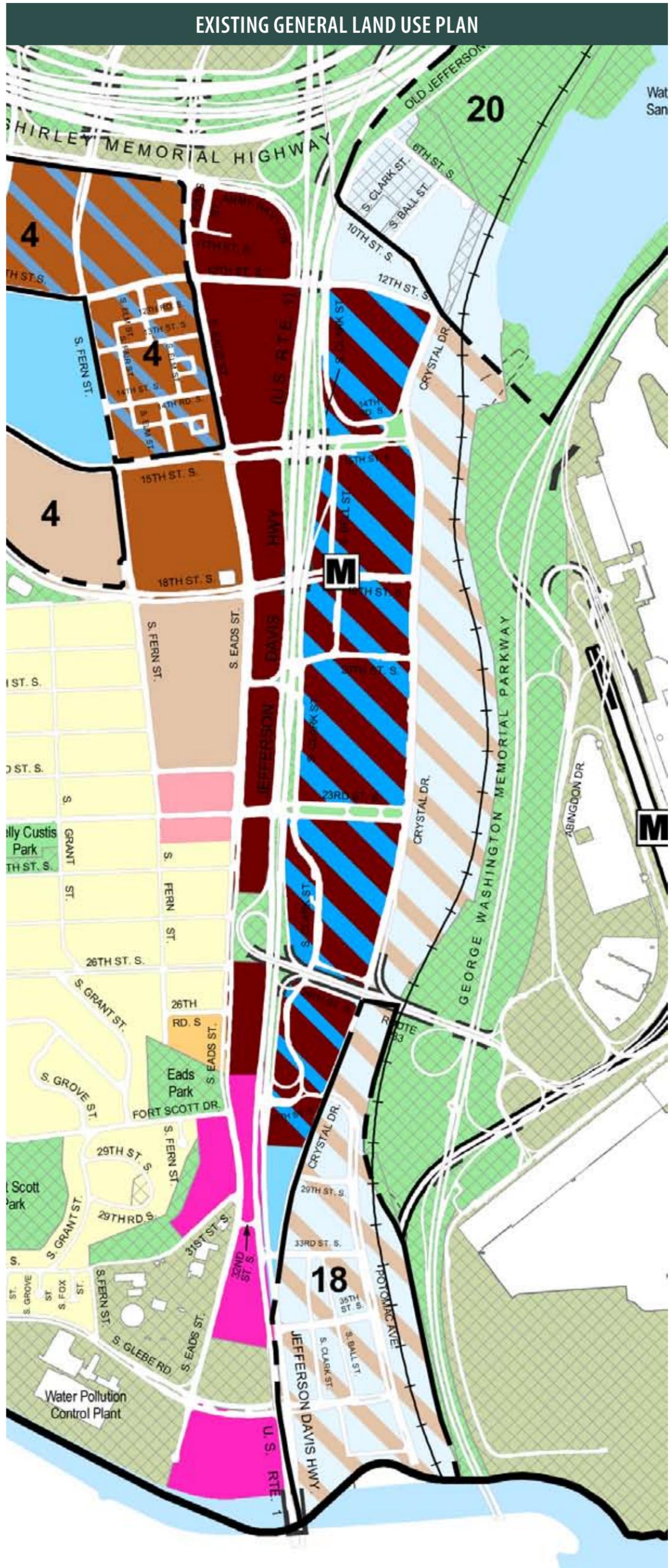
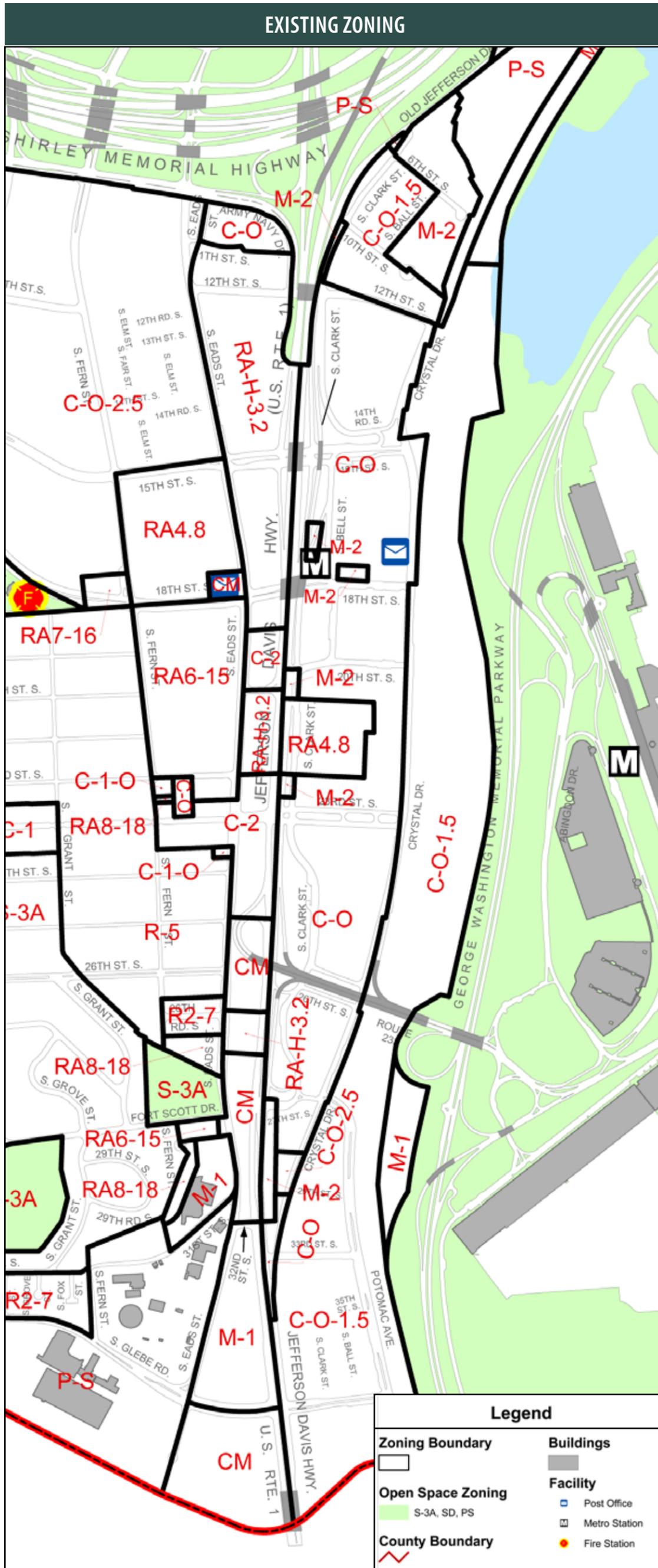


Figure 1.2.8

FOR COMPLETE LEGEND, SEE ARLINGTON GLUP MAP AT WWW.ARLINGTONVA.US/DEPARTMENTS/CPHD/PLANNING/DOCS/CPHDPLANNINGDOCSGLUP.ASPX



the majority of low-scale commercial sites available for redevelopment are concentrated in the southwestern portion of the planning area, south of 23rd Street and east of Eads Street. However, based on the latest available figures for projected development potential based on the existing GLUP, approximately 3,200 medium- to high-density residential units, 143,000 square feet of office space, 9,300 square feet of retail space, and 640 hotel rooms could still be constructed, after appropriate zonings and site plan approvals.

1.2.4 EXISTING ZONING

The existing zoning in the Crystal City Planning Area is mostly consistent with the GLUP, with some exceptions. Figure 1.2.9 illustrates the existing zoning pattern for the planning area. Over the years, the County Board has rezoned properties either as a result of land use and zoning studies, or with the approval of special exception site plan projects consistent with the GLUP. The mixed-use high density core area, defined by Jefferson Davis Highway, 10th Street, and Crystal Drive, is primarily zoned “C-O”, with the Crystal Plaza apartment community zoned “RA4.8” and other small remnants of land zoned “M-2”. The area east of Crystal Drive is zoned “C-O-1.5,” reflecting low- to medium-density mixed use development within the Crystal Park site plan.

West of Jefferson Davis Highway, properties that have been redeveloped consistent with the GLUP’s high-residential designation for the area are zoned primarily RA-H-3.2, while properties with commercial office or retail buildings in this swath are zoned either “C-O”, “C-2”, or “C-M”. Especially south of 23rd Street, low-rise commercial properties on land zoned “C-2” or “C-M” have not yet been redeveloped to reflect the County’s long-range vision for the area. Existing zoning along 23rd Street, or “Restaurant Row”, is primarily a mix of “C-2” and “C-O”, with the medium density residential blocks north towards 15th Street zoned “RA6-15” and RA4.8”, with the post office site at the corner of Eads and 18th Streets zoned “CM”.

ZONING CLASSIFICATIONS	
C-1	LOCAL COMMERCIAL DISTRICTS
C-1-O	LIMITED COMMERCIAL PROFESSIONAL OFFICE BUILDING DISTRICTS
C-2	SERVICE COMMERCIAL - COMMUNITY BUSINESS DISTRICTS
CM	LIMITED INDUSTRIAL DISTRICTS
C-O	COMMERCIAL OFFICE BUILDING, HOTEL AND MULTI-FAMILY DWELLING DISTRICTS
C-O-1.5	COMMERCIAL OFFICE BUILDING, HOTEL AND APARTMENT DISTRICTS
C-O-2.5	COMMERCIAL OFFICE BUILDING, HOTEL AND APARTMENT DISTRICTS
M-1	LIGHT INDUSTRIAL DISTRICTS
M-2	SERVICE INDUSTRIAL DISTRICTS
P-S	PUBLIC SERVICE DISTRICTS
R2-7	TWO-FAMILY AND TOWN HOUSE DWELLING DISTRICTS
R-5	ONE-FAMILY, RESTRICTED TWO-FAMILY DWELLING DISTRICTS
RA-4.8	MULTI-FAMILY DWELLING DISTRICTS
RA6-15	APARTMENT DWELLING DISTRICTS
RA7-16	APARTMENT DWELLING DISTRICTS
RA8-18	APARTMENT DWELLING DISTRICTS
S-3A	SPECIAL DISTRICTS

FOR COMPLETE LEGEND AND LIST OF ZONING CLASSIFICATIONS, SEE ARLINGTON ZONING MAP AT WWW.CO.ARLINGTON.VA.US/DEPARTMENTS/CPHD/PLANNING/ZONING/CPHDPLANNINGZONINGOFFICE.ASPX

Figure 1.2.9

“ MAKE NO LITTLE PLANS; THEY HAVE NO MAGIC TO STIR MEN’S BLOOD AND PROBABLY WILL THEMSELVES NOT BE REALIZED. MAKE BIG PLANS; AIM HIGH IN HOPE AND WORK, REMEMBERING THAT A NOBLE, LOGICAL DIAGRAM ONCE RECORDED WILL NOT DIE.”

DANIEL BURNHAM
19TH CENTURY AMERICAN
ARCHITECT AND URBAN DESIGNER

1.3 THE PLANNING PROCESS

1.3.1 BACKGROUND AND PURPOSE

This planning process began in 2005 when the County Board appointed the BRAC Transition Task Force to address issues related to the recently enacted base closure legislation. With the anticipated loss of 3.2 million square feet of office space leased to government tenants and contractors in Crystal City alone, the County faced a significant economic challenge. A primary recommendation of the BRAC Transition Task Force was the initiation of a formal planning process for Crystal City that could address issues arising from BRAC while defining a vision for Crystal City’s future. By the fall of 2006, the planning process was launched with the first Crystal City Task Force meeting. The Task Force, appointed by the Arlington County Board, represented various stakeholders within the greater Crystal City community. Their meetings provided a regular platform for intense discussion and evaluation. Their primary responsibilities included providing a forum for community feedback, helping to identify planning issues, and reviewing and commenting on the proposed policy framework and concept plan generated by County staff and consultants. A series of meetings and events were organized to develop a community vision for Crystal City. These included:

- **Crystal City Task Force Meetings** - More than 30 meetings were held on a regular basis, were open to the public and served as the primary means for presenting and discussing advances in the planning effort. The Task Force efforts were completed with the County Board adoption of the Policy Framework.
- **The Camp Out** - Field observations were made on a number of weekday and weekend visits at different times of the day. Observations and assessments were made on the level and intensity of activity on the streets and in the restaurants, shops, Underground, and parks and open spaces throughout the course of a typical week.
- **The Crystal City Walking Tour** - This event offered the public an opportunity to walk the neighborhood with the project team. The event allowed participants to identify what they did and did not like about Crystal City’s existing environment, and suggest changes for the future.
- **Stakeholder Meetings** - These meetings were held throughout the process to gather information on potential development and redevelopment opportunities and to discuss in detail the concerns of individual stakeholders in the community. Principal among these were resident groups, property owners and developers, office and retail business representatives, and representatives of commissions, federal and state agencies, and other entities with some jurisdictional stake in the process.
- **The Community Charrette** - This week-long event gave the community an opportunity to observe the

development of multiple possible scenarios for the future of Crystal City, discuss issues and concerns, suggest ideas, and attend and comment on presentations of the several concept plan alternatives that emerged from the charrette.

- **Transportation Walking Tour** - This event offered the community an opportunity to tour Crystal City and review issues related to traffic, transit, and other transportation issues.
- **Regional Partners Transportation Working Sessions** - These sessions were organized to solicit comments from regional transportation organizations such as Washington Metropolitan Area Transit Authority (WMATA), VRE, Virginia Department of Transportation (VDOT), the Metropolitan Washington Airport Authority (MWAA), National Park Service (NPS) and others whose operations are impacted by the planning effort.
- **Task Force Transit Subcommittee** - Due to the complexity of the long-term transit options considered in the planning process, a subcommittee was formed to review options and recommend a final alignment of the planned surface transitway.
- **Community Forums** - Held on a periodic basis, these events allowed the community to comment directly on the evolution of the concept plan alternatives and refinements.
- **County Board Work Sessions** - These sessions enabled the County Board to assess progress in the planning efforts and provide direction and guidance moving forward.
- **Long Range Planning Committee** - After adoption of the Policy Framework and development of a first draft plan, a special process was initiated to conduct a technical review of the plan to ensure completeness and consistency with the Policy Framework.

Collectively, these events have provided the community with multiple platforms to explore issues and ideas associated with a plan for Crystal City’s future. In addition, all events, updates and information were posted and advertised on a County website available throughout the process. As a product of this process, the Crystal City Sector Plan provides all stakeholders of Crystal City with a vision of what their community wants to achieve, as well as a standard by which all future development proposals can be evaluated.



The Crystal City Walking Tour

1.3.2 ABOUT THIS DOCUMENT

The Crystal City Sector Plan is a guiding document for future reinvestment and development in Crystal City. It includes a concept master plan supported by a policy framework and guidelines that addresses significant planning and development topics. This document provides the community and stakeholders with a refined vision and guiding framework for future development in Crystal City, with a special focus on urban design, building form and height, land use, public open space, environmental sustainability, energy use, transportation and transit, and other key attributes of the built environment and public realm. Its principal objective is to guide future development to be consistent with this preferred vision.

For County staff and public officials, this document is a guide for future implementation actions intended to realize the plan. Specifically, this document provides

the necessary guidance required to:

- Amend the General Land Use Plan (GLUP) to reflect changes in both the kind and balance of uses described in the plan;
- Amend the Zoning Ordinance to implement the plan;
- Amend the Master Transportation Plan and other master planning documents used to guide transportation planning efforts county-wide;
- Evaluate private development proposals for consistency with the vision of the Master Plan;
- Recommend public use easements and/or the acquisition of property for public use within the planning area;
- Include the Crystal City area for a potential district energy scale project in the forthcoming Arlington County Community Energy Plan.

Chapter Two presents the Policy Framework, which includes the Vision Statement, Goals and Objectives, and Policy Directives. Chapter Three presents the Master Plan, as well as a set of urban and architectural design guidelines to inform public and private development and infrastructure proposals. Chapter Four includes a description of the anticipated next steps and implementation recommendations, which are followed by a glossary of terms used throughout this document.



Aerial View of Crystal City



The Community Charrette



Transportation Walking Tour



Community Forums

2. POLICY FRAMEWORK



CRYSTAL CITY WILL BECOME A COMPLETE COMMUNITY WHERE ONE MAY GROW UP AND GROW OLD. IT WILL OFFER THE ABILITY TO LIVE-OUT EVERY STAGE OF LIFE, A PLACE TO EXPERIENCE CHILDHOOD, ENJOY THE ACTIVITIES OF A YOUNG ADULT, WORK, RAISE A FAMILY, AND LIVE COMFORTABLY AND SECURELY IN LATER YEARS.

2.1 VISION STATEMENT

Crystal City is one of Arlington's great urban centers and is well positioned for future success. In this vision, Crystal City will grow into a community of neighborhoods with active, pedestrian-focused streets, quality architecture, and a rich urban character. Principal features will include:

- Well-defined public and complete streets that provide equally for traffic and pedestrians, and are great places to experience,
- Very high quality public parks that are accessible to all,
- Vibrant street-level retail throughout Crystal City to attract and serve residents, workers and visitors alike,
- The calming and humanizing of Jefferson Davis Highway with expansive landscaping and attractive building frontages along its edge,
- Fully integrated and accessible multi-modal transit that links neighborhoods and communities within Crystal City and beyond, and
- A full mix of uses typical of a complete, urban community.

Crystal City will comprise a vibrant mix of housing, office, retail, hotel, cultural, and civic uses. This will be a place full of life in daytime and nighttime hours where people will want to see and be seen. Crystal City will become a complete community where one may grow up and grow old. It will offer the ability to live-out every stage of life, a place to experience childhood, enjoy the activities of a young adult, work, raise a family, and live comfortably and securely in later years. Within this plan, one might envision a young couple meeting a group of friends after work for drinks, a light dinner and to watch the Nationals baseball game on TV, before walking to a local nightclub to listen to live music into the late hours. At the same time, a retired couple living in a new apartment overlooking the Potomac River, might be slowly strolling by all the new storefronts along Crystal Drive as workers and area residents pass by along the street. This couple eventually sits down to a wonderful dinner before going to one of the local black-box theaters to see the opening of a locally written play. In this vision, Crystal City has become one of the vibrant urban centers of a thriving Arlington County.

This vision is by no means guaranteed in the absence of a deliberate effort to make it happen. Forces such as BRAC and the associated loss of tenants, the replacement of aging office buildings, an ever expanding demand on transportation infrastructure, and the need

to accommodate more residents as the region continues to grow increasingly compel change within Crystal City. The absence of any coherent, proactive plan for Crystal City could result in a decline of urban form and quality of life. The principal intent of the Crystal City Sector Plan is to explore how change and growth should take form. This vision anticipates growth, meets the demands of an evolving marketplace, and seeks to preserve the best qualities and features of the existing urban fabric while minimizing disruptions to residents. Above all else, it seeks to utilize this unique opportunity to revitalize Crystal City's urban environment for the benefit of all who live and work there now, as well as in the future.

Crystal City's existing assets and potential for sustainable growth are nearly unparalleled in the region. Its close proximity to the Potomac River overlooking the monuments of the national mall ideally position Crystal City to continue as one of Arlington County's principal transit-oriented urban centers. Adjacent to Reagan National Airport and featuring highly used transit stations for Metro and the Virginia Railway Express, Crystal City today possesses one of the highest transit modal shares in the nation with extensive links to the Washington Metropolitan Area. Furthermore, Crystal City offers a mixed-use environment of existing office, hotel, residential, and retail buildings near the heart of the nation's capital, and is well positioned to improve and grow with expanded transit options. This vision builds on these successes in transit and urban form by introducing a new surface transitway system that will offer greater connectivity and accessibility to neighborhoods and communities in and around Arlington County.

A key feature any vision should explore is how to use existing and proposed buildings to better frame and give definition to streets and public spaces as places of shared civic use. A first priority is to create active streetscapes that promote pedestrian use, foster increased retail activity and growth, and generally create a "sense of place" in an urban setting. This "sense of place" will be further strengthened by providing distinct neighborhoods with high-quality sustainable architecture, and additional civic, cultural, recreational, and community amenities which feature public art and are both attractive and safe. In the future, landscaped streets and sidewalks, bicycle lanes and trails, interior public walkways connecting to transit, walkways and streets lined with bustling restaurants, local and national retailers, cultural venues and neighborhood services will all enliven Crystal City and provide for an active public realm.

This statement, and the following Goals and Objectives, has guided and directed planning efforts, and will empower all participants to evaluate through the lens of a shared vision the many plans and proposals that will be presented to the Crystal City community, both now and in the future.

2.2 GOALS AND OBJECTIVES

This vision for Crystal City is expressed through the following seven goals and supporting objectives:

1. CREATE A HIGH QUALITY PUBLIC REALM THAT STRENGTHENS THE SENSE OF PLACE.

- Coordinate the public realm so that the street system, transit system, sidewalks and interior walkway system, and a variety of public open spaces work together to establish the framework around which redevelopment shall occur.
- Improve the urban form and pedestrian experience while enhancing street-level activity and connectivity for all users by designing smaller, tree-lined neighborhood blocks.
- Target existing underutilized paved spaces for consolidation into development sites before impacting existing green spaces.
- Increase the amount of high-quality, accessible and “usable” public open space in Crystal City.
- Create a variety of accessible public spaces that are strategically phased and located throughout Crystal City. These public spaces should be appropriately sized, designed, and programmed to attract, serve and support the anticipated population of residents, workers, and visitors including their recreation, leisure, social and cultural needs.
- Acknowledge residual open spaces between buildings for their ability to provide visual relief and a calming influence.
- Establish at least one primary, centrally located public space that can serve as the “heart” of Crystal City and a venue for significant, programmed community events.
- Integrate cultural venues with public spaces, streets, and interior walkways in an effort to increase visibility and accessibility, create synergy between uses, and increase pedestrian activity levels overall.

- Provide attractions and/or amenities in the interior walkway system and along streets to stir interest and to encourage an active round-the-clock street life, such as public art, streetscape furniture, wayfinding, retail and cultural venues.

2. PROVIDE A MIX OF USES BY BALANCING OFFICE, RESIDENTIAL, RETAIL, CULTURAL, AND CIVIC USES AMONG SEVERAL DEFINED NEIGHBORHOOD CENTERS.

- Define Crystal City by its neighborhoods, including the northern neighborhood, the central Metro station district, the entertainment district along Crystal Drive, and the hotel district to the south.
- Create a more even balance between residential and office uses and daytime and evening populations, and maintain an economically sustainable hotel base.
- Improve the availability of primary elements of daily living within Crystal City.
- Create a thriving “Class A” office environment.
- Provide a mix of housing options to accommodate households with differing income levels, family composition, and accessibility requirements.
- Provide varied cultural and civic facilities and uses (such as theaters, emergency service facilities, health care, day care, urgent medical care, meeting spaces, etc.) for all age groups, and strategically locate them near transit centers, public spaces, and restaurants to promote those venues and help define neighborhood centers.
- Encourage a diverse mix of retail spaces, including grocery stores, to maintain and attract local retail and neighborhood services in addition to major and national retailers.
- Create a safe environment for all by mixing uses, programming activities in public spaces and through design techniques that foster social activity, interaction, and visibility.

3. RELATE ARCHITECTURAL AND URBAN DESIGN TO THE HUMAN SCALE.

- Create new buildings where the base of at least one or two stories relates to the street level and the top creates a meaningful connection to the sky.
- Use wide expanses of glass for the base of building retail spaces to promote street activity.
- Use building massing and elevations to create and frame the public realm and to preserve and enhance views from within the public realm.
- Create distinct and defined block edges.
- Provide a meaningful and careful transition from the core of Crystal City to the adjacent single family neighborhood.
- Establish identifiable landscape, public art, or architectural features at gateway locations between Crystal City and adjoining lower-density residential neighborhoods.

4. ENHANCE MULTIMODAL ACCESS AND CONNECTIVITY.

- Improve transportation and land-use connections within and beyond Crystal City through transit-oriented development.
- Enhance Crystal City’s transit orientation with new and better transit services and facilities designed to meet the future needs of Crystal City, and to further encourage residents, workers, and visitors to select transit over personal vehicles.
- Enhance Crystal City’s multimodal transportation infrastructure by designing transit facilities as integral architectural elements and improving overall transit, pedestrian, and bicycle access and connectivity.
- Provide high quality surface transit service that has travel times competitive with private automobiles, attracts riders, reduces automobile dependency, and limits roadway congestion.



High Quality Public Parks - Boston, MA



Varied Civic Spaces - Barcelona, ES



Great Places to Sit and Eat

- Enhance the urban quality of Crystal City by strengthening the urban street grid.
- Create a hierarchy of streets to facilitate automobile, transit, bike, and pedestrian use.
- Create vibrant, pedestrian oriented streets through the better use of sidewalks, streetscapes, and open space areas to improve space for pedestrians, bicyclists, parking, and transit.
- Transform Jefferson Davis Highway (Route 1) into an asset of the overall multimodal transportation network.
- Supply appropriate parking to support a vibrant mix of uses while discouraging unnecessary single occupancy vehicle use.
- Maximize the use of all parking resources through measures such as Transportation Demand Management ("TDM").
- Maintain and improve connections to the interior walkway system both vertically and horizontally as development occurs while maintaining its connectivity to Metrorail and creating linkages to transitway stations.
- Enhance the utility and safety of the bicycle network as part of the Crystal City transportation network.
- Provide better connections to Reagan National Airport and the surrounding regional transportation network.
- Provide comprehensive wayfinding for all users.

5. INCORPORATE SUSTAINABLE AND GREEN BUILDING PRINCIPLES INTO ALL URBAN AND ARCHITECTURAL DESIGN.

- Consider environmental sustainability and overall energy efficiency as integral parts of all aspects of building design and development.
- Design buildings and neighborhoods using the best available technologies and processes feasible to protect the local environment (stormwater quality, waste reduction, heat island reduction)

and the regional environment (climate change, Chesapeake Bay protection, air quality).

- Design and build new buildings to meet county policies on sustainable development.

6. PRESERVE THE INTEGRITY OF THE SINGLE-FAMILY NEIGHBORHOOD TO THE WEST.

- Taper buildings up in scale and height, west to east, from Fern Street to Eads Street between 18th and 23rd Streets, so that buildings along the east side of Fern Street are compatible in scale and form and have setbacks that respond appropriately to the single-family homes on the west side of Fern Street.
- Taper buildings up in scale and height, west to east, across Eads Street between 23rd Street and Fort Scott Drive, so that buildings along the east side of Eads Street are compatible in scale and form and have setbacks that respond appropriately to the single-family homes on the west side of Eads Street.
- Provide improved pedestrian, bike and other connections between Crystal City and adjacent single-family neighborhoods, to help reduce the barrier effect of Jefferson Davis Highway.
- Direct traffic to major arterials and multi-modal network elements, and avoid street designs that increase cut thru traffic into adjacent single-family neighborhoods.

7. ENSURE CRYSTAL CITY'S LONG-TERM ECONOMIC SUSTAINABILITY.

- To the extent possible, plan at the block level or in increments of multiple blocks in order to realize a balanced mix of uses accompanied by sufficient open spaces and service and cultural uses.
- Create a vision plan which ensures that new development can be economically viable.
- Provide flexibility to phase development to meet market conditions, support timely redevelopment of properties most impacted by BRAC, encourage

redevelopment, and address future public improvements.

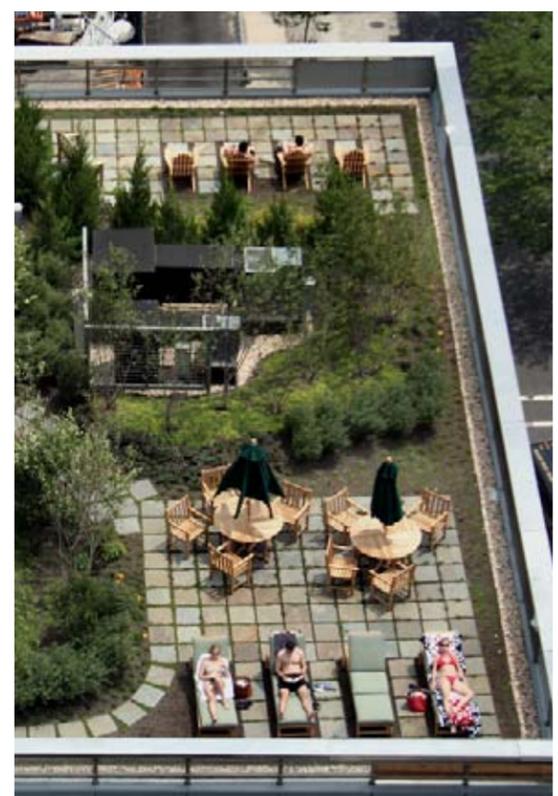
- Promote public/private partnerships for achieving community enhancements.
- Provide assistance to property owners, tenants, and small businesses during the BRAC transition and Crystal City redevelopment.
- Maintain and encourage a robust hotel environment at Crystal City.
- Recognize the importance of Reagan National Airport and the key elements of its economic viability in the long-term sustainability of the county.
- Strengthen Crystal City's competitive edge with other close-in jurisdictions and localities in the Washington, D.C. region in attracting and retaining private sector users of Class A office space.
- Acknowledge and respect Crystal City's existing populations during redevelopment activities and minimize any associated potential negative impacts to their quality of life.



Multimodal Transportation - Barcelona, ES



Integrated Transit - Houston, TX



Sustainable Roof Garden - Chicago, IL

“HUMAN AND MORAL FACTORS MUST ALWAYS BE CONSIDERED. THEY MUST NEVER BE MISSING FROM POLICIES AND FROM PUBLIC DISCUSSION.”

HERMAN KAHN
AMERICAN MILITARY STRATEGIST
AND SYSTEMS THEORIST

2.3 POLICY DIRECTIVES

In order to achieve the vision and goals and objectives for Crystal City, a series of Policy Directives, or major recommendations for guidance on future decisions relating to public and private reinvestment, are outlined as follows. (Policy Maps referenced in the directives below can be found in Chapter Three, the Crystal City Master Plan).

LAND USE AND COMPLETE COMMUNITY (LU)

- LU 1) Ensure ample and diverse opportunities for work, recreation and entertainment within Crystal City to create an active, 18-hour per day street life. Crystal City will be an economically and socially vibrant neighborhood, supporting a healthy mix of residents and visitors seven days a week.
- LU 2) Attain an ultimate build out in the Crystal City Planning Area with more residential than office Gross Floor Area (GFA) to reach an evening population at least half the daytime population and to steadily improve the resident to employment balance.
- LU 3) Establish recommended land uses for each block in the Crystal City Planning Area as shown on the Land Use Map to guide actual use mixes proposed within block-level Phased Development Site Plans. Recommend some blocks to have specific minimum percentages for certain land uses, as outlined on the Land Use Map. (See page 103)
- LU 4) Designate specific areas in Crystal City for ground floor retail uses that are accessible from sidewalks, the interior pedestrian concourse, or both, as shown on the Retail Frontage and Interior Pedestrian Concourse Map, and strategically locate interior retail to not detract from street level retail areas. (See page 107)
- LU 5) Engage critical County service providers and stakeholders, such as police, fire, schools and emergency response services, in planning for and implementing the infrastructure necessary to accommodate future demand for service provision as Crystal City grows.
- LU 6) Create tools and incentives to establish a strong presence of desired cultural and community-oriented facilities (such as theaters, large format grocery stores, day care and medical facilities) in the core of Crystal City.

BUILDING FORM AND HEIGHTS (B)

- B 1) Establish build-to lines for the Crystal City Planning Area along the perimeter of development blocks as demarcated on the Build to Lines Map. (See page 47)
- B 2) Establish absolute maximum building heights (in feet) for all blocks in the Crystal City Planning Area, as shown on the Building Heights Map. (See page 95)
- B 3) Require proposed development projects in Crystal City to submit their projects for review by Federal Aviation Administration (FAA) when they file a site plan application with the County, and secure notice from FAA that the

project is not a hazard to air navigation before a County Board public hearing is scheduled for formal action on the site plan application.

- B 4) Undertake future study (as needed) to develop alternative physical planning parameters for achieving planned densities should the FAA determine that currently planned heights are not feasible for airport operations.
- B 5) Establish maximum building tower coverages, measured above the fifth floor, for all blocks within the Crystal City Planning Area, as shown on the Tower Coverage Map. (See page 99)
- B 6) Require minimum horizontal separation of 60 feet between building towers above the fifth floor to ensure light, air, relief, and respite to outdoor and indoor spaces.
- B 7) Apply bulk/plane height controls, as shown in the Bulk Plane Angle Map, near identified parks and plazas to limit shadows on and ensure natural daylight to such spaces. (See page 97)

DENSITY (D)

- D 1) Establish base densities for each block in the Crystal City Planning Area, as shown on the Base Density Map. (See page 93)
- D 2) Allow for optional increases over the base density (as shown in the 2008 GLUP) within the maximum building height limits on sites in Crystal City, in return for extraordinary community benefits outlined in this plan, at the County Board's discretion.
- D 3) Utilize a tear-down credit (or similar mechanism) to encourage redevelopment that furthers Crystal City Planning goals and achieves public improvements, while retaining overall economic feasibility by recognizing the significant cost of demolishing existing major assets.

PUBLIC OPEN SPACES (P)

- P 1) Provide, at a minimum, all public open spaces as indicated on the Public Open Space Map in accordance with the general size outlined in the Open Space Inventory Table on the map. (See page 79)
- P 2) Address the displacement of existing public open spaces by concurrently providing comparable or enhanced spaces, either through development of new park sites or through improvements to existing open spaces along with public easement dedications.
- P 3) Allow low-scale infill development on the existing open space in front of 2121 Crystal Drive only after the Center Park on Block J-K is realized.
- P 4) Establish County control over all public open spaces shown on the Public Open Space Map through either public dedication/acquisition or public-use and access easements set in perpetuity.
- P 5) Increase tree canopy coverage in Crystal City by meeting or exceeding

the most current applicable goals in the County's Urban Forest Master Plan (and in no case below existing levels of tree canopy coverage), and by strategically installing street trees, where feasible, in areas where redevelopment is projected for later phases.

- P 6) Achieve dedicated publicly accessible tree-lined pedestrian routes through large urban blocks that provide for safe and attractive passage and connectivity between buildings.

SUSTAINABLE DESIGN AND DEVELOPMENT (S)

- S 1) Reach, at a minimum, operational carbon neutrality in Crystal City through actions such as energy efficiencies, maximizing vegetated areas, comprehensive water and stormwater management planning, efficient use and conservation of all resources, and provision of exceptional access to transit, in order to align with County goals and to enhance its overall economic and environmental position in the region.
- S 2) Uphold the County's then current highest and best environmental sustainability standards for all projects, including renovation and redevelopment projects throughout Crystal City.
- S 3) Design, construct, and manage all public and private spaces, streets, infrastructure, and buildings to help the Crystal City Plan meet selected certification standards under the United States Green Building Council's (USGBC) LEED Neighborhood Development program.

TRANSPORTATION (T)

- T 1) Address and manage the Crystal City multimodal transportation system to accommodate future planned growth in the area. Ensure that such system meets the needs of residents to travel from Crystal City for work, pleasure, and other reasons; that individuals working but not residing in Crystal City can easily and economically travel to Crystal City via transit, pedestrian and bicycle thoroughfares, and other transportation modes; and that others can also easily access Crystal City for business, visiting residents, entertainment, recreation, shopping, etc.
- T 2) Establish a revised street network for Crystal City as shown in the Street Network and Typology Map, in accordance with and to be reflected in the County's Master Transportation Plan. (See page 51)
- T 3) Expand County control over all streets and rights of way through public ownership, dedication, or public-use easements set in perpetuity.
- T 4) Improve the safety and quality of pedestrian travel by providing elements such as sufficient sidewalk clear zones, adequate space for street trees and landscape elements, and reduced pedestrian crossing distances.
- T 5) Maintain continuity and safety and minimize temporary disruptions

for pedestrians, bicyclists, motorists, and transit users during all phases of construction throughout Crystal City, including in the interior pedestrian concourse.

- T 6) Maintain an interior pedestrian concourse from 12th Street to 23rd Street, as shown conceptually on the Retail Frontage and Interior Pedestrian Concourse Map that extends the reach of transit, provides frequent connections to sidewalks, and is adequately flexible to permit creative design solutions for new development. (See page 107)
- T 7) Locate and consolidate building loading and service access points to secondary and tertiary streets and alleys where feasible, as recommended in the Services and Loading Map. (See page 111)
- T 8) Implement the proposed alignment and enhanced surface transit technology (streetcar), as shown on the Surface Transitway Map, and design stations as integral elements of the built environment. (See page 57)
- T 9) Establish additional access points to the Crystal City Metro Station in the vicinity of the Crystal Drive and 18th Street intersection.
- T 10) Create a multi-modal transfer area in the short-term on 18th Street under Jefferson Davis Highway, while working to integrate long-term future development adjacent to the existing Metro Station entrance with an enhanced multi-modal transfer facility situated at the ground floor.
- T 11) Establish near-term parking ratios for new projects that range from a maximum of 1 space per 750sf and/or a minimum of 1 space per 1,000sf for office uses and between 1 and 1.125 spaces per residential dwelling unit (or apply the County's most current parking management policies), while maximizing the sharing of parking space by various users and addressing short-term visitor and retail parking needs in Crystal City.
- T 12) Apply Transportation Demand Management (TDM) measures that reinforce the use of a smaller parking supply.
- T 13) Develop a plan to ensure that conditions are created to unify Crystal City into a single, seamless community by sufficiently and effectively finding mechanisms for pedestrians, vehicular traffic, bicycle traffic, transit, and commerce to flow over, under, or in some other way not be impeded by the Jefferson Davis Highway.

HOUSING MIX AND AFFORDABILITY (H)

- H 1) Increase the committed affordable housing stock in Crystal City by developing implementation tools that encourage the provision of on-site or nearby off-site affordable units.
- H 2) Develop implementation tools to ensure a housing mix with a sufficiently broad range of sizes and price points such that:

- those who work in Crystal City have affordable opportunities to live there;
- households of various sizes, composition, and accessibility requirements are accommodated (See page 102)

- H 3) Maximize a stock of committed affordable housing within Crystal City. To the extent that a developer's affordable housing commitment is not met by providing such housing within the Crystal City Planning Area, work to ensure that such housing is provided as close to Crystal City as feasible. (See page 102)
- H 4) Apply the Affordable Housing Ordinance and create special provisions for bonus density of up to 20 percent of Gross Floor Area (GFA) above the base densities per the 2008 GLUP in response to developers' meeting or exceeding the target for affordable dwelling units available in both new and existing buildings. (See page 104)
- H5) Leverage existing and potential future tools to add a total of between 550 and 1,200 committed affordable housing units in the Crystal City Planning Area by 2050. (See page 104)

IMPROVEMENT IMPLEMENTATION (I)

- I 1) Develop financing tools beyond traditional community benefit to pay for infrastructure and other public improvements essential to the spirit of the illustrative plan in recognition of (1): the transformational nature of the Crystal City redevelopment plan; (2): the limitations of developer contributions due to the high cost of demolition-replacement projects; and, (3) the need to implement the enhanced surface transit (streetcar) at the beginning of the redevelopment process.
- I 2) Review future redevelopment activities in Crystal City at a Phased Development Site Plan (PDSP) level, in accordance with the block boundaries outlined in the Phased Development Site Plan Block Map, either prior to or concurrent with final site plans to ensure overall feasibility of achieving major plan improvements.

3. CRYSTAL CITY MASTER PLAN



THIS MASTER PLAN IS A COMPILATION OF AN ILLUSTRATIVE SITE PLAN, FRAMEWORK POLICIES, DESIGN AND POLICY DIAGRAMS, AND OTHER DESCRIPTIVE ELEMENTS THAT TOGETHER FRAME A VISION FOR THE FUTURE OF CRYSTAL CITY.

3.1 INTRODUCTION

The Crystal City Master Plan details the envisioned future of Crystal City. It includes an Illustrative Concept Plan, relevant maps, and other elements to guide the future development and revitalization of Crystal City. The Master Plan also includes planning recommendations for land use, transportation, public open space, sustainability and green building practices, density, affordable housing, and program, and other topics that address urban design and public policy decision-making.

In the following pages, the final Crystal City Master Plan is illustrated and described. It should be noted that many of the illustrations and diagrams are representational in nature and do not recommend or direct specific detailed designs for any given site.

3.2 THE ILLUSTRATIVE CONCEPT PLAN

The Illustrative Concept Plan (Figure 3.2.2) shows a potential future for Crystal City consistent with the Policy Framework. The plan incorporates key urban elements and design strategies to enhance Crystal City's districts and create a great place with a built environment that shapes great streets, sidewalks, and public open spaces. Principal among these elements are a legible framework of streets and blocks, high-quality parks and plazas, vibrant streetfront retail areas, an integrated transit network, and a balanced mix of uses. The Illustrative Concept Plan represents just one way properties could be developed in accordance with the recommendations set forth in the Policy Directives, and the exact location, scale and design character of public and private improvements may ultimately vary in detail, but should be consistent with the spirit of this plan.

The Illustrative Concept Plan embodies primary urban design objectives and features, including park and plaza locations, building types, building heights, building massing,



Existing Conditions, Figure 3.2.1
Existing Illustrative Plan Circa 2007

and street configuration throughout the planning area. It does not specify a particular development plan for any given site, but rather communicates an acceptable direction and level of development consistent with the stated goals, objectives, and policies of this document. Applicants should gain from this plan a clear understanding of the community's expectations for support and approval. The Illustrative Concept Plan in combination with the policies, diagrams, tables, guidelines, images, and descriptions in the following sections, constitute the Crystal City Master Plan.

The preceding Goals and Objectives are expressed in this Illustrative Concept Plan and other components of the Master Plan. Many of Crystal City's best characteristics will be maintained and enhanced, and will serve as inspiration for future development and improvements. In particular, the internal pedestrian circulation and resulting connectivity to transportation options in the Crystal City Underground will be retained, but sections may be relocated in some instances, to adapt to redevelopment above ground. Other significant features of the plan include:

- Creation of clearly defined and well connected streets lined with cultural and retail uses. A vibrant and cohesive street environment would be created by introducing build-to lines, a diverse mix of uses, and well-defined building envelope standards;
- Improved pedestrian, transit, bicycle, and vehicular connectivity and circulation throughout the planning area;
- Increased quality, accessibility, and quantity of parks, plazas, and other public open spaces and places;
- Emphasis on near-term introduction of public parks and cultural amenities, while providing flexibility in development phasing.

The plan proposes a number of unique new features for Crystal City, including:

- 1 **Jefferson Davis Boulevard** – Today Jefferson Davis Highway divides Crystal City into two distinctly separate areas. The plan maintains the capacity of this major transportation corridor yet unites the two sides of Crystal City by creating a central boulevard lined with wide sidewalks with large street trees, active building entrances, and amenities one would expect on a major urban street;
- 2 **A New Clark-Bell Street** – Clark and Bell Streets are merged to form a new north-south street between Jefferson Davis Boulevard and Crystal Drive. This street will substantially improve traffic performance of intersections at 20th and 23rd Streets with Jefferson Davis Boulevard, and will create several new street addresses on underutilized land;
- 3 **Surface Transitway** – A new surface transitway alignment and system will offer enhanced connectivity within and beyond Potomac Yard and Crystal City, with connections to Columbia Pike and the Pentagon City and Braddock Road (Alexandria) Metro stations. The transitway alignment would be

employed incrementally as the phased realignment of Clark-Bell Street allows. A new multimodal transfer area in the vicinity of the existing Metro station entrance is also recommended to provide clear and efficient transfers for users among various modes of transit;

- 4 **Center Park** – A new, two-acre central park, programmed for active use, which will be the principal gathering space for the entire community. Concerts, festivals, pick-up games, and family picnics are just a few of the activities anticipated for this park;
- 5 **Metro Market Square** – A new plaza located along 18th Street between Crystal Drive and Clark-Bell Street will provide a retail destination in the heart of Crystal City, with visual and pedestrian connections to the multiple transit options of Metro, bus, VRE, and future transit;
- 6 **National Circle at 26th Street** – Replacing the existing highway access ramps to Reagan National Airport, this new traffic circle will establish a dramatic gateway to the airport and to Crystal City from the south that is both functional and symbolic, permitting uninterrupted through traffic flow along Jefferson Davis Boulevard while retaining the boulevard edge crucial to a successful urban avenue;
- 7 **Water Park** – While an existing feature, the Water Park on Crystal Drive between 18th and 15th Streets will be retained and enhanced as a community focal point. Possible improvements include retail programming along the park's edges as well as improved connections to the VRE station and the Mount Vernon trail connector;
- 8 **Market Plazas** – New squares are planned along Clark-Bell Street's intersections with 23rd Street and the new 25th Street. They will be neighborhood gathering places- a spot to meet friends, shop, have coffee, or dine al fresco at a local café;
- **New Neighborhood Parks** (unlabeled) – Several new or modified neighborhood parks are proposed, including the new 15th Street Park, a reconfigured park on Crystal Drive at the intersection of the new 25th Street, and others at 12th and Clark Streets, 22nd and Fern Streets, and at 27th Street and Jefferson Davis Boulevard. As part of the overall open space network, all dwelling units and commercial buildings will be within a 3 minute walk of a public open space.

The introduction of these features within the plan will be phased and coordinated on an on-going basis. As market conditions support specific building projects, the plan will provide a guide for coordinating the construction of new streets, open spaces, civic and cultural venues, and other amenities.

ILLUSTRATIVE CONCEPT PLAN

Figure 3.2.2



Proposed Districts

LEGEND

	EXISTING OR APPROVED BUILDING
	POTENTIAL BUILDING
	SURFACE TRANSITWAY

3.3 DISTRICT OVERVIEWS



View East at 15th Street Garden Park

As one of Arlington's eight Metrorail Station areas, Crystal City can be understood and envisioned as a collection of six identifiable districts. The Illustrative Concept Plan (Figure 3.2.2) includes a depiction of the areas pertaining to each of the six districts: Northeast Gateway, Central Business District, Entertainment District, South End, Northwest Gateway, and West Side. The narrative that follows presents a detailed overview outlining the plan's key recommendations within each district.

3.3.1 NORTHEAST GATEWAY

BUILDINGS AND DEVELOPMENT

The Northeast Gateway includes the two blocks north of 15th Street, south of 10th Street and east of Jefferson Davis Boulevard. The Master Plan proposes the introduction of a new 15th Street Park (Figure 3.3.2), removal of the outboard highway ramps and elevated Clark Street, replacement of the Crowne Plaza Hotel building, and the introduction of new buildings on the land formerly accommodating the 15th Street ramps, and on private property north of 12th Street. A small infill structure is also envisioned along Clark-Bell Street near the garage ramp serving the Crystal Gateway buildings (1215, 1225, and 1235 Clark Street).

TRANSPORTATION

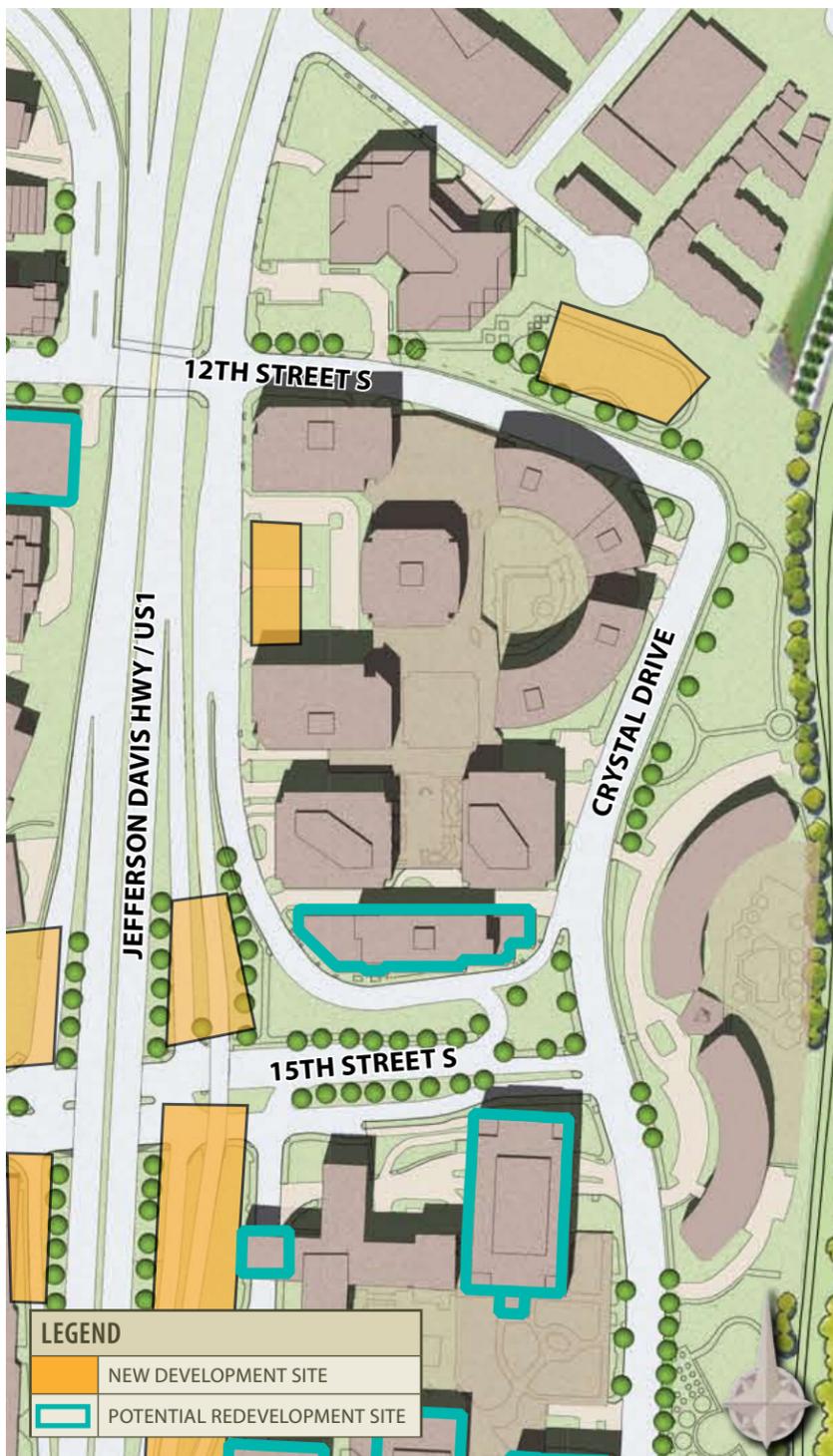
The intersection of Clark Street and 15th Street is reconfigured to permit north-south, two-way vehicular travel through the intersection. The introduction of two-way traffic flow is proposed on Crystal Drive north of 15th Street. North of 12th Street, a proposed new street would provide better connectivity to 10th Street, helping to strengthen the urban grid. As a long term vision, the current Jefferson Davis Highway ramps are reconfigured as center-inboard ramps, reducing their effective footprint and allowing new buildings and sidewalks along Jefferson Davis Boulevard.

PUBLIC OPEN SPACE

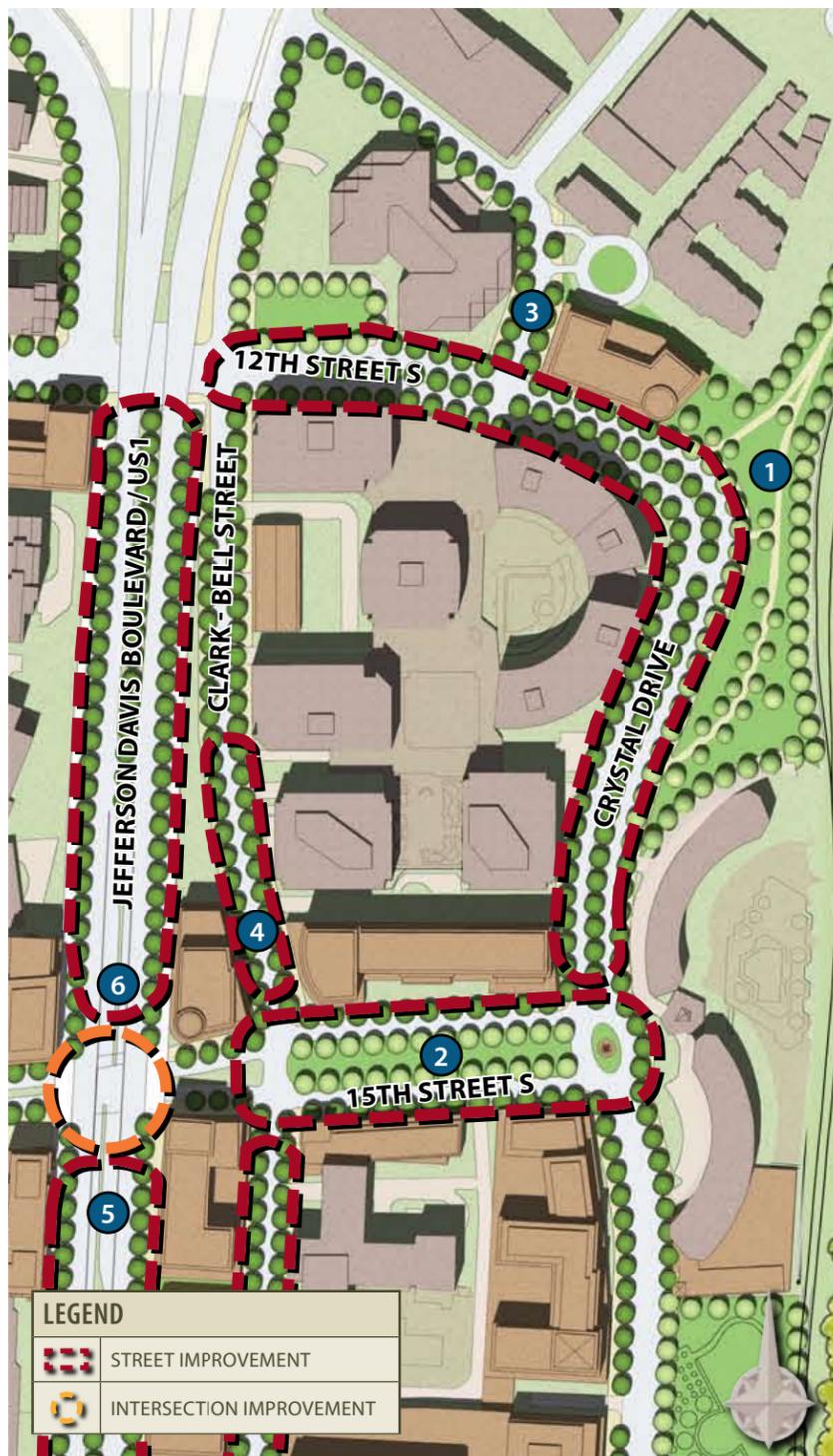
Public open space improvements include providing an improved entrance park for and direct pedestrian connection to the planned Long Bridge Park immediately north of the study area. This park will be achieved on the existing privately owned green space situated at the northeast edge of Crystal Drive. The balance of the park could be programmed for public active and passive recreation. In addition, a reconfiguration of 15th Street provides a concourse park as a place for respite, while increasing the amount of usable open space and opportunities for tree canopy in the immediate area.

Annotated Plan Legend

- 1 Gateway Park – This park will provide active and passive recreational opportunities and will include a trail that connects Long Bridge Park and Crystal City, near Crystal Drive and 12th Street.
- 2 15th Street Garden Park – This is a passive picturesque park located in the heart of the mixed-use community at 15th Street between Clark-Bell and Crystal Drive.
- 3 10th Street Connection – This new connector street will link 10th and 12th Streets and provide a direct connection to development north of 12th Street and to the west.
- 4 New Clark-Bell Street – This new north/south street offers improved pedestrian, vehicular and transit circulation throughout Crystal City and will provide needed relief to cross street intersections at Jefferson Davis Boulevard.
- 5 Jefferson Davis Boulevard – Jefferson Davis Highway will be modified into a six-lane boulevard with landscaped sidewalks and median making it a unifying feature of Crystal City.
- 6 New Ramps at Jefferson Davis Boulevard – By relocating ramps to the middle of Jefferson Davis Boulevard, new buildings will be able to front directly onto the boulevard, creating a grand tree-lined urban boulevard.



Existing Conditions - Figure 3.3.1



Proposed Plan - Figure 3.3.2



Existing Conditions 3D view - Figure 3.3.3



Proposed 3D Plan View - Figure 3.3.4



Aerial View view of Center Park and 18th Street Market Square

3.3.2 CENTRAL BUSINESS DISTRICT

BUILDINGS AND DEVELOPMENT

Centered on 18th Street, this area is envisioned as the Central Business District for Crystal City, oriented around the existing Metro Station entrance, Metro Market Square and Center Park (Figure 3.3.6). This area east of Jefferson Davis Boulevard is framed by 15th Street to the north and 20th Street to the south. Most of the existing buildings within the Crystal Square and Crystal Mall site plans are envisioned as future redevelopment sites. With the realignment of Clark-Bell Street, new development sites are created along Jefferson Davis Boulevard where outboard ramps and the Clark Street fly-over would be removed. This plan also includes new development added to or replacing structures to the north and south of Water Park. While a Class A office district is envisioned around 18th Street, increased residential program is also planned for the edges of this district. Given its proximity to Metro, the plan shows building heights up to the allowable maximum of 300 feet, and a higher percentage of new development and building replacement within this core district.

TRANSPORTATION

With the convergence of the existing and proposed public transportation components in Crystal City (Metro, transit, VRE, bus, carpool), this location is optimally positioned to support additional commercial density. As the existing Metro Station entrance will be retained, a second entrance to the Metro station is envisioned in the proximity of 18th Street and Crystal Drive. While the ultimate vision calls for access to the second Metro Station entrance from east and west of Crystal Drive, nearer-term access improvements to the station can be made as part of the Metro Market Square project by providing

improved access to the underground level retail and subsequently the Metro station itself. Additional major transportation improvements include a new multi-modal station near Clark-Bell and 18th Streets, that would connect Metrorail with the surface transitway, commuter and local buses, and pedestrians and bicyclists. In terms of additional streets, the evaluation of a shared, managed space between the Metro Market Square and buildings on the north side of the space should occur at the PDSP level, based on specific phasing and operation conditions. If such a space is deemed appropriate at that time, it should be primarily for 'front-door' drop-off and pick-up and short-term delivery, but should not be used for access to parking garage entrances or building service areas or similar purposes.

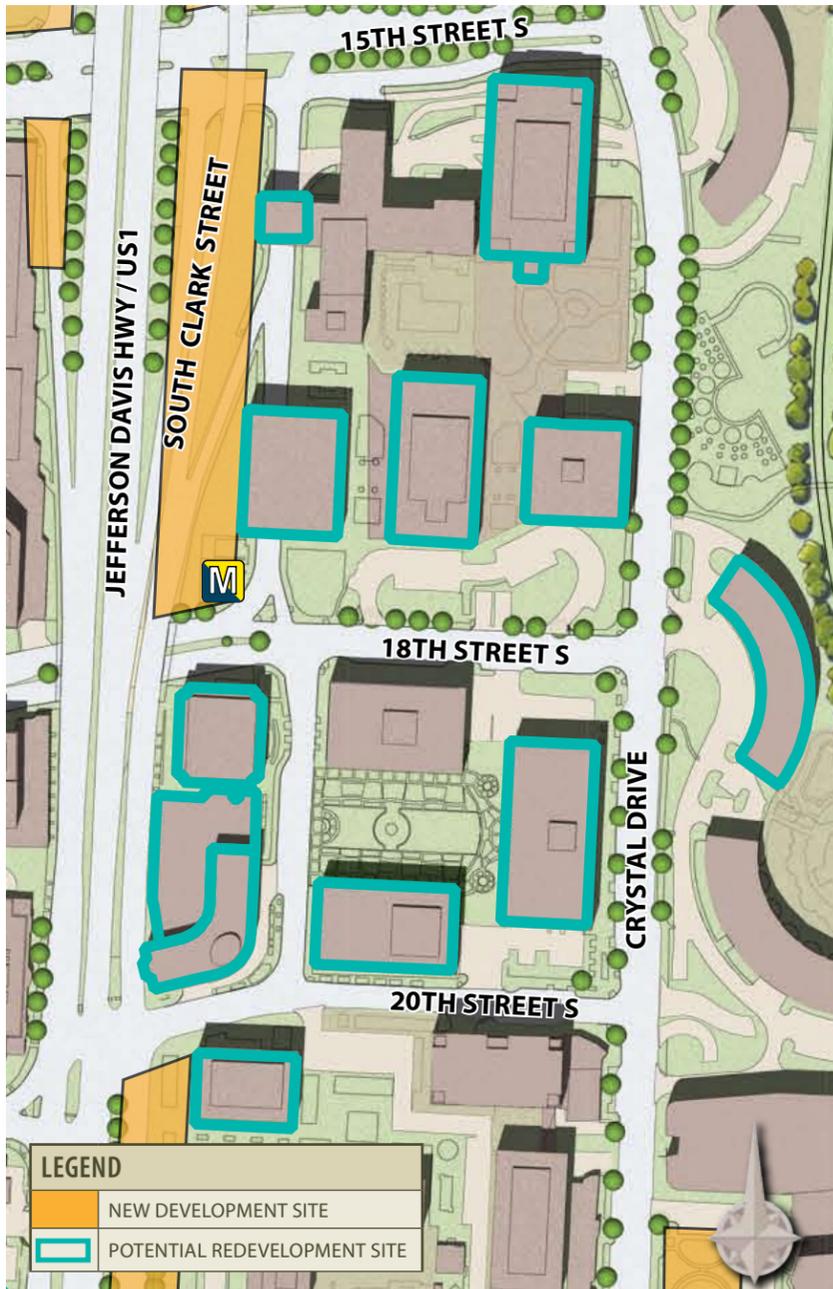
PUBLIC OPEN SPACE

The Central Business District will contain three of the largest open spaces proposed in the plan. The existing Water Park will be retained as an important landmark and amenity for Crystal City. Additional retail frontage is proposed for the north and south ends of the park, to help activate the space and enhance its role as a destination with more café and restaurant programming. Other civic uses could also front on the park, such as a public library, a public multi-media center, and/or a bicycle storage/rental/shower facility. The proposed Metro Market Square is envisioned as a vibrant pedestrian center and marketplace, with robust retail frontage, market shed and kiosks, and café seating. Traversed by commuters, its programming will entice many to linger and enjoy the space. By contrast, the Center Park is imagined as a multi-purpose park accommodating informal everyday activity and large gatherings, such as open-air concerts and festivals. The Plan proposes a large lawn for seating large crowds, informal gatherings for sport, or a simple stroll with a friend. Required terracing to manage grade differences along the 20th

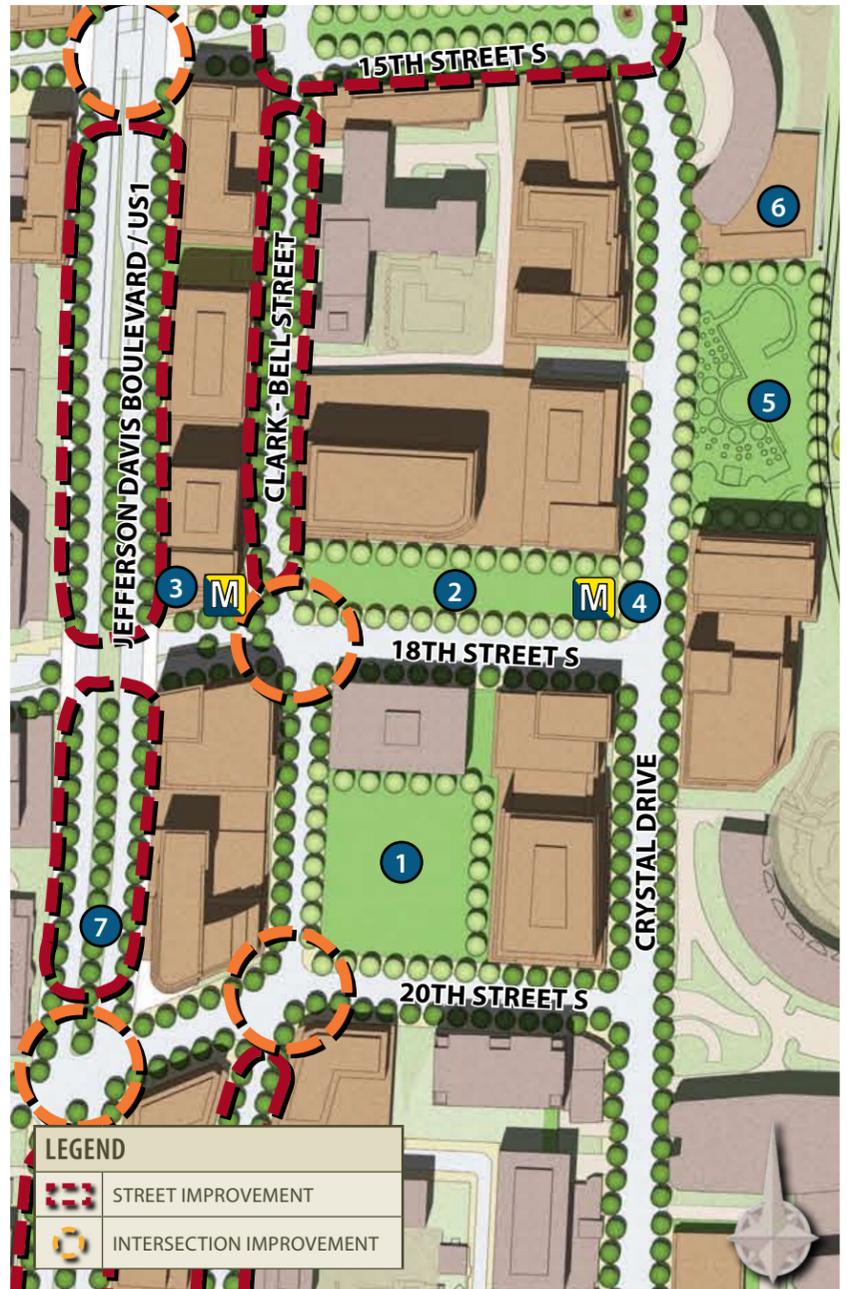
Street edge will contribute to the aesthetic and visual interest of the space. Over time, this district and these open spaces will take on an image as the heart of Crystal City.

Annotated Plan Legend

- 1 Center Park – As the centerpiece of Crystal City, this park will function as an active focal point for surrounding activities.
- 2 Metro Market Square – This will celebrate the existing and future second entrance to Metro and will be a retail oriented square with market structures for fairs, carnivals and farmers' market activities.
- 3 Multi-Modal Station – A new multi-modal station directly connects Metro to the transitway, commuter and local buses, and pedestrian and bicycle networks.
- 4 New Metro Entrance – A new entrance to Metro is proposed at the east end of Metro Market Square providing direct access to the station from Crystal Drive and the VRE.
- 5 Water Park – While the general configuration and features of the park will be preserved, activating program features will be added to both the northern and southern edges. The northern edge will be enhanced with improvements to the VRE station, including a possible lining of retail facing the park. The southern edge might include improvements such as a public or privately operated bicycle storage, rental, and retail center.
- 6 Connections to VRE – Additional development at the VRE Station will allow for commuter connections to civic and retail uses, and covered connections to Crystal Drive and the future Metro Entrance.
- 7 Jefferson Davis Boulevard – Jefferson Davis Highway becomes a six-lane boulevard making it a more unifying element of the Crystal City public realm.



Existing Conditions - Figure 3.3.5



Proposed Plan - Figure 3.3.6



Existing Conditions 3D view - Figure 3.3.7



Proposed Plan 3D View - Figure 3.3.8



View of 23rd Street Plaza from Clark-Bell

3.3.3 THE ENTERTAINMENT DISTRICT

BUILDINGS AND DEVELOPMENT

Just south of the Central Business District, the Entertainment District will become recognized throughout the region for its many offerings in culture and the arts, complemented by a robust and active restaurant and retail experience. This area is located east of Jefferson Davis Boulevard between 20th Street and the new 25th Street. Much of the success of this district will build on the entertainment, restaurant, and retail program already in place along Crystal Drive, 23rd Street and in the Underground. Much of the proposed new construction will be accommodated on the footprints of demolished existing structures. This district is envisioned with additional density focused around 23rd Street, with maximum building heights immediately north of 23rd Street comparable to those in the Central Business District. While additional commercial development will be accommodated, the plan also calls for a greater relative increase in residential development in this area.

TRANSPORTATION

A substantial realignment of Clark-Bell Street is proposed, which will create new sites for development along Jefferson Davis Boulevard. Between 20th and 23rd Streets, the plan envisions that the westernmost

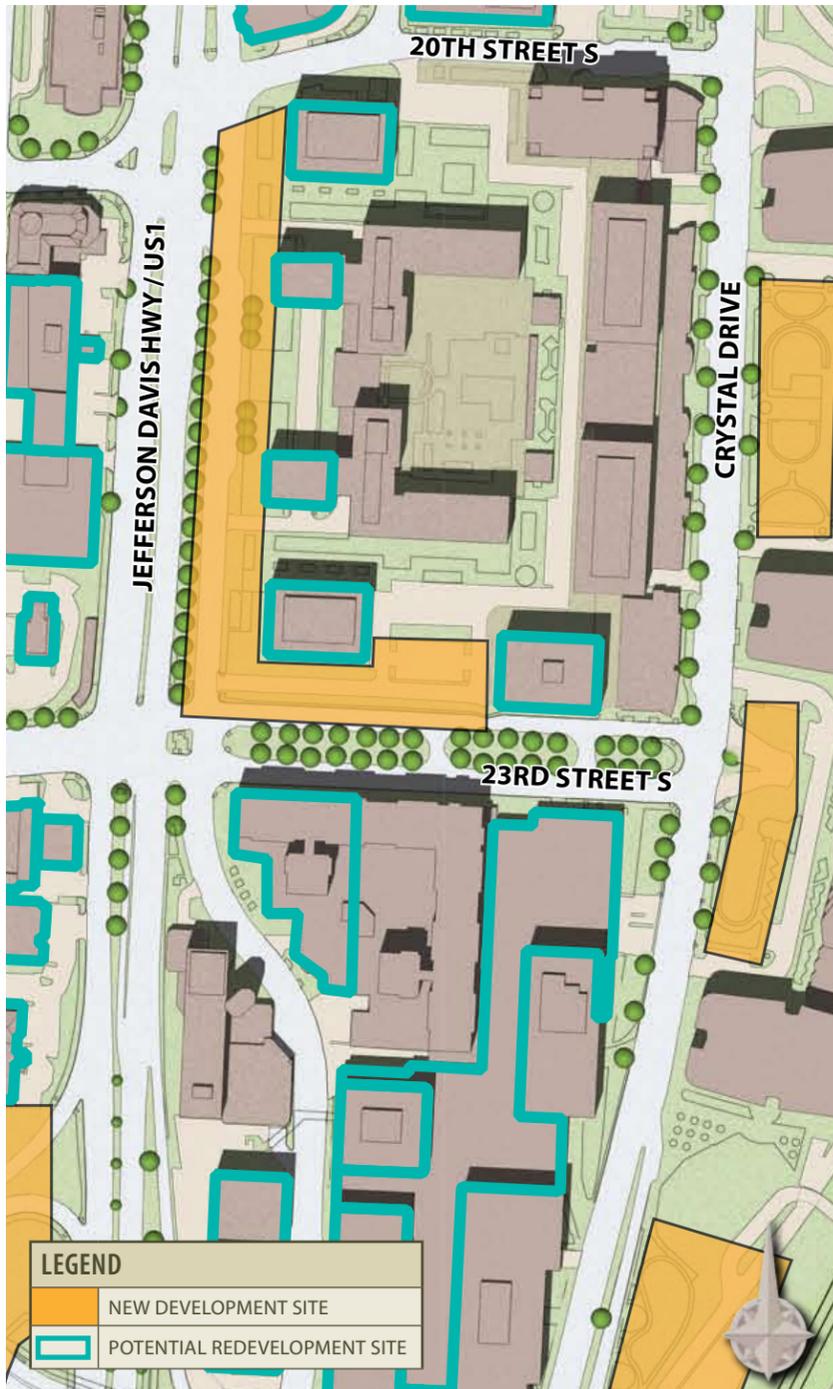
portions of the Crystal Plaza apartment buildings are removed to provide the land needed for the new street alignment. While this is the preferred approach, an alternative strategy that may be considered includes realigning Clark-Bell Street through the apartment buildings, by removing one or two floors of habitable space above the realigned street. Under this alternative approach, reductions in the maximum building heights and massing for new development on this block between Clark-Bell Street and Jefferson Davis Boulevard may be considered in order to ensure adequate permeation of daylight and air in this area.

PUBLIC OPEN SPACE

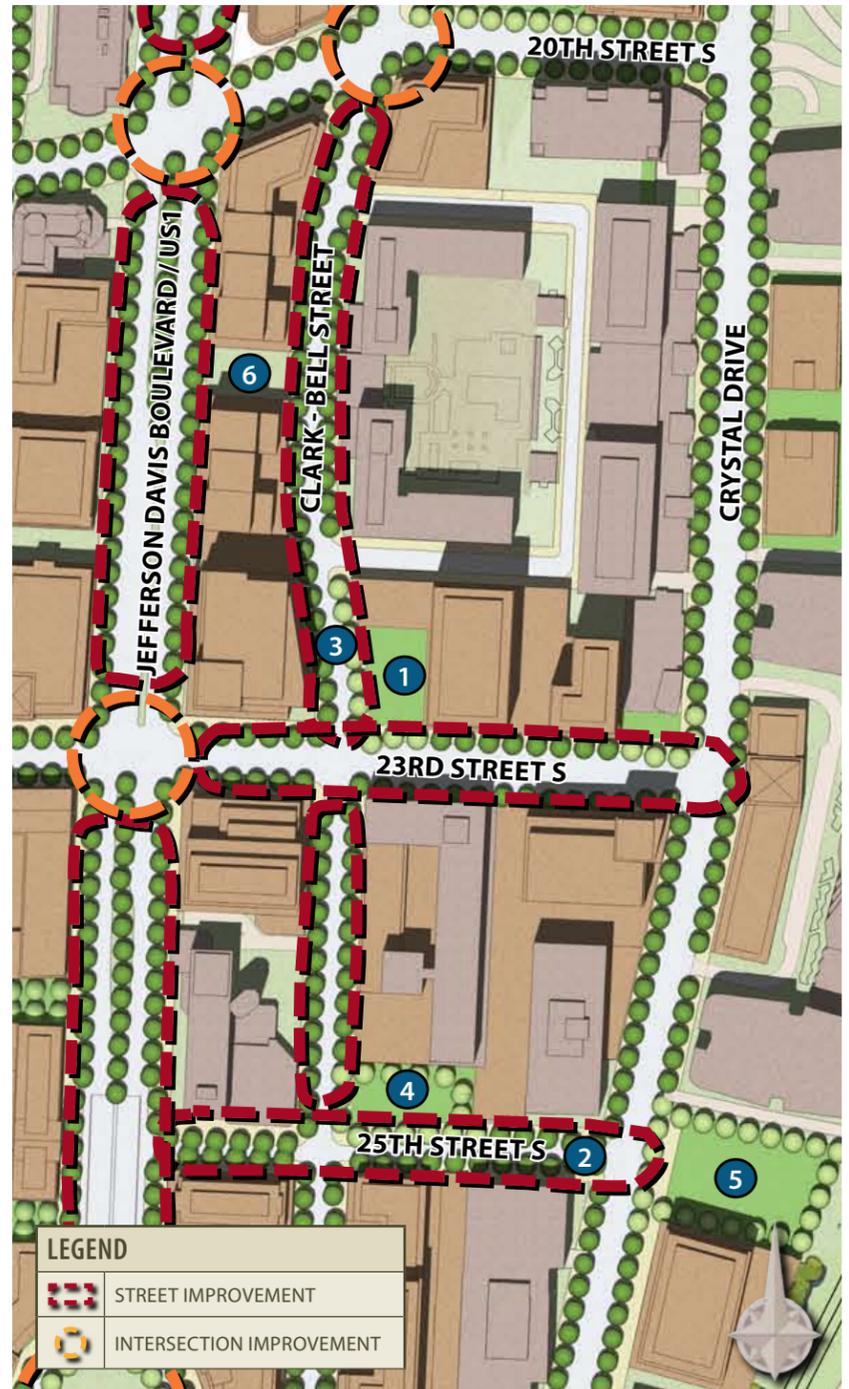
The principal district center will be a new 23rd Street Plaza, or market square (Figure 3.3.10) located on the northeast corner of 23rd and Clark-Bell Streets. The square will be programmed with retail frontage, café zones, and landscaping and hardscape elements appropriate for an active pedestrian urban space. A new 25th Street plaza is also proposed as a centrally located public space to serve the surrounding populations south of 23rd Street, while a reconfigured and enhanced recreational park proposed for the terminus of 25th Street could accommodate gatherings and other activities. There are opportunities for public art in these plazas and indeed throughout the district. Public art would reinforce the existing cultural and artistic character of the district.

Annotated Plan Legend

- 1 23rd Street Plaza – This active retail plaza with benches, a fountain, café seating, civic art, and landscape will be the heart of the 23rd Street retail spine.
- 2 25th Street – This new east/west street will divide the superblock into smaller pieces to increase connectivity and pedestrian accessibility.
- 3 New Clark-Bell Street - This realigned north/south street allows greater pedestrian, vehicular and transit circulation and will provide needed relief to cross street intersections at Jefferson Davis Boulevard.
- 4 25th Street Plaza – This plaza will provide a central pedestrian gathering space within the new multi-block configuration between Crystal Drive and Jefferson Davis Boulevard.
- 5 Crystal Park – A recreational park created at the terminus of the new 25th Street will provide residents and workers an area for active recreation at the south end of Crystal City.
- 6 Mid-Block Parks – These small neighborhood parks will provide pathways to connect neighborhoods while also inviting people to slow down to view unique landscaping and park elements.



Existing Conditions - Figure 3.3.9



Proposed Plan - Figure 3.3.10



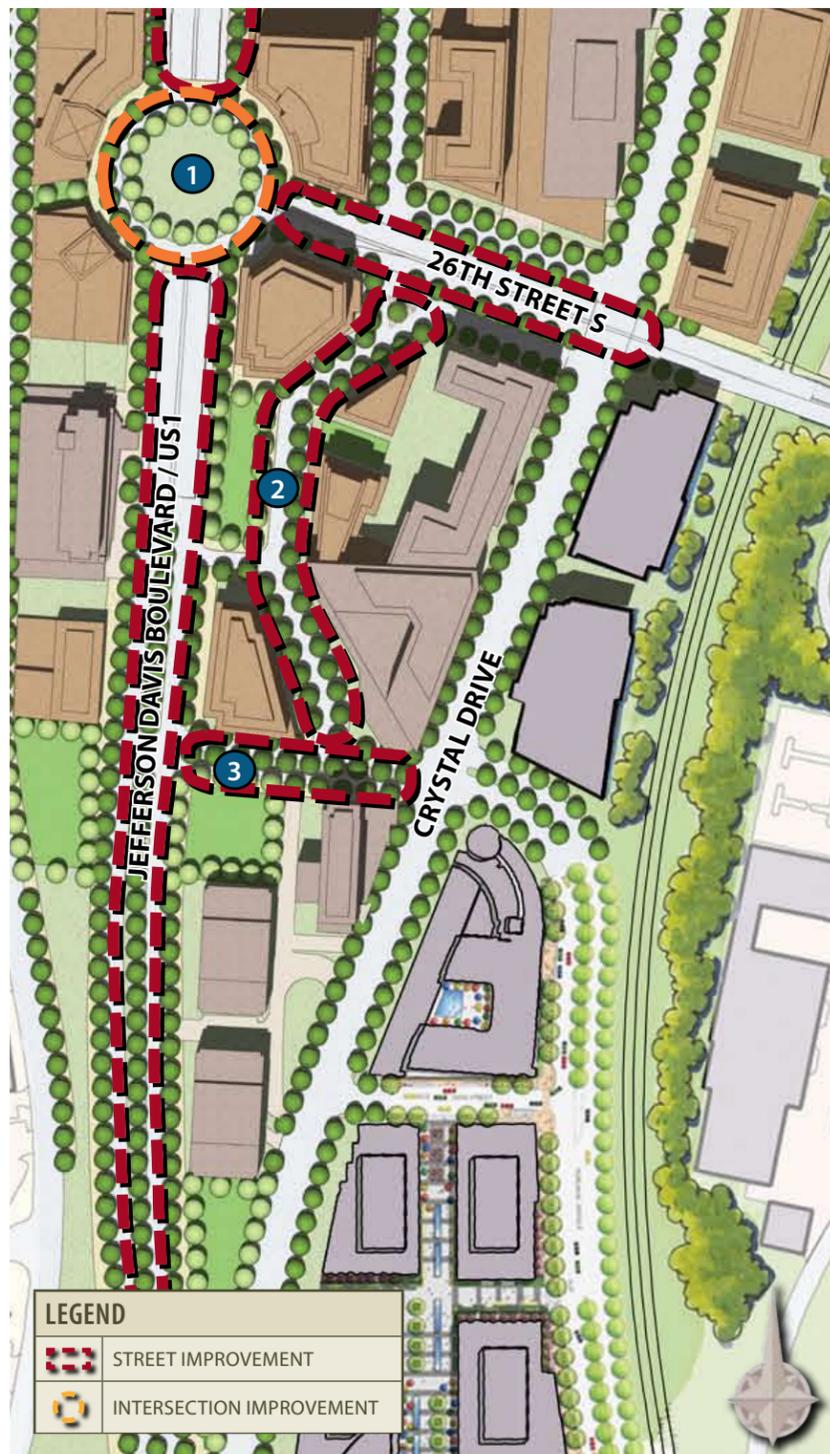
Existing Conditions 3D view - Figure 3.3.11



Proposed Plan 3D View - Figure 3.3.12



Existing Conditions - Figure 3.3.13



Proposed Plan - Figure 3.3.14

3.3.4 SOUTH END

BUILDINGS AND DEVELOPMENT

This district includes the blocks at the southern-most tip of Crystal City east of Jefferson Davis Boulevard. It includes the two blocks just north of 26th Street created by the construction of the proposed 25th Street, as well as the sites across Crystal Drive just south of the proposed Crystal Park. Below 26th Street, it includes the two remaining blocks of the eastside planning area, which begin the transition to the Potomac Yards neighborhood to the south. The district today mostly consists of office and hotel buildings. One new multi-family building, the Concord, is bringing more residential use into the mix. New development sites made available in the plan propose more residential buildings be provided in the district, with the objective of creating a better balance of uses within the combined South End/North Potomac Yards district.

TRANSPORTATION

An important, yet very long-term new feature of the district will be National Circle, the reconfiguration of the airport access ramp, providing improved pedestrian circulation across 26th Street along Jefferson Davis Boulevard. Additional road improvements include the realignment of S. Clark Street south of 26th Street to recover development sites along Jefferson Davis Boulevard, and the realignment of 27th Street between Crystal Drive and the Jefferson Davis Boulevard. Another significant feature will be the entry of the transitway into Crystal City along Crystal Drive, with two proposed stops, one adjacent to the EPA Building, the other at the intersection of the proposed 25th Street.

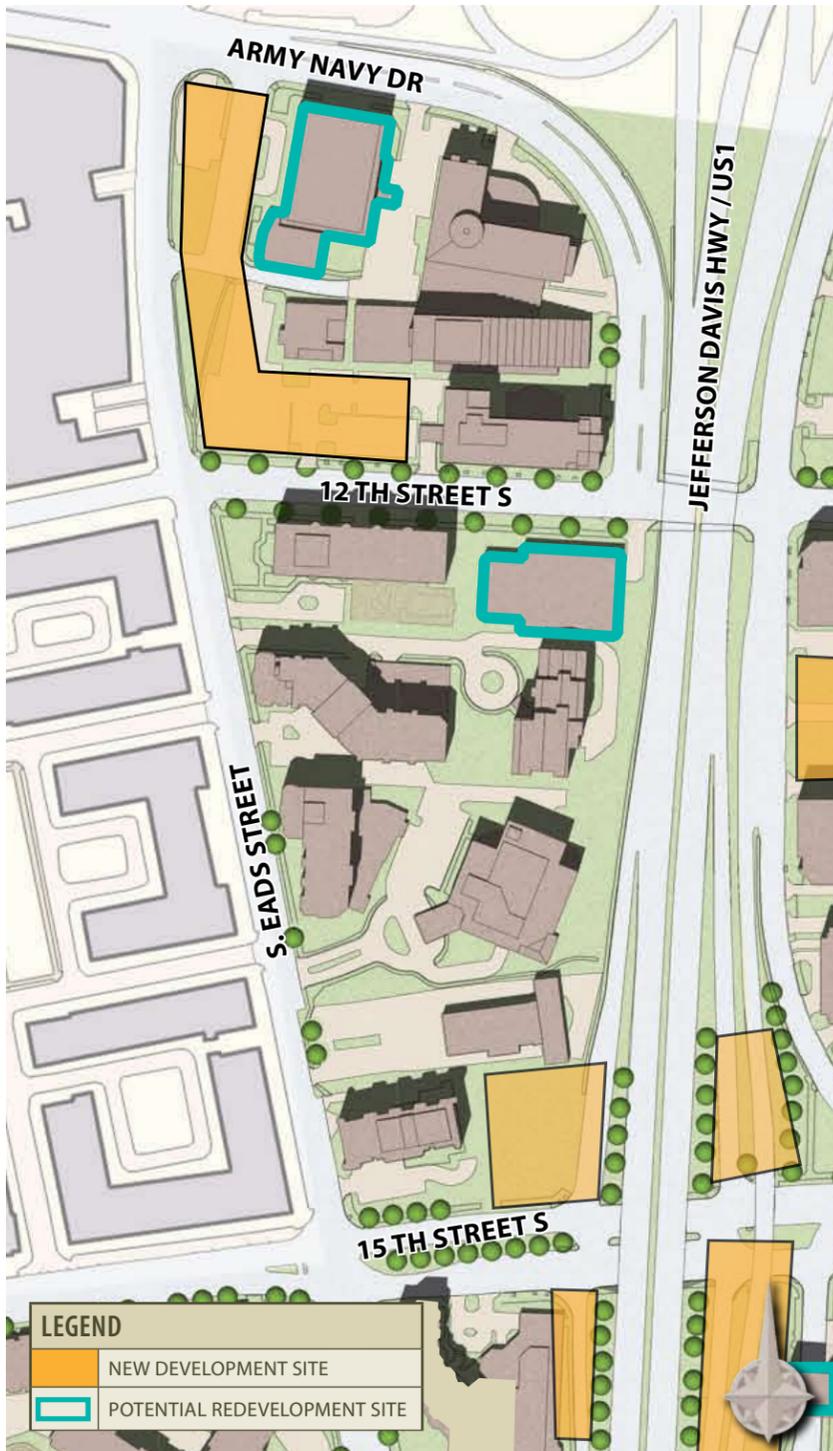
PUBLIC OPEN SPACE

The Master Plan proposes the creation of two new open spaces and the preservation and enhancement of one existing open space in the

South Side. The existing open space at the southern-most tip of Crystal City, between Crystal Drive and Jefferson Davis Boulevard will be preserved, with proposals to enhance its appearance and accessibility to the public. Improvements could include new landscaping, particularly the planting of trees, and the addition of walkways and seating areas. The reconfiguration of 27th Street will permit the creation of a new public open space at the southeast corner of 27th Street and Jefferson Davis Boulevard. This open space should possess a high public profile, with active landscaping, seating areas, and opportunities for public art. One block to the north, the plan proposes another public open space between the realignment of Clark-Bell Street and Jefferson Davis Boulevard. This open space will provide an important pedestrian link between the Boulevard and Clark-Bell Street just south of the proposed National Circle.

Annotated Plan Legend

- 1 National Circle – This prominent new feature will not only provide an exciting new entrance to the airport, but will improve pedestrian circulation along Jefferson Davis Boulevard, creating a connection between the blocks north and south of 26th Street. The removal of the side ramps associated with the overpass will provide additional development sites, by virtue of the simpler configuration of the traffic circle.
- 2 Clark Street Realignment – The alignment of S. Clark Street has been adjusted in the block south of 26th Street to improve potential development sites along Jefferson Davis Boulevard and provide a new green space in the block.
- 3 27th Street Realignment – The segment of 27th Street between Crystal Drive and Jefferson Davis Boulevard will be realigned to provide a more regular block configuration and improve the efficiency of the intersections at both ends. The open space will be consolidated into a more useable space at the northwest corner of the south block.



Existing Conditions - Figure 3.3.15



Proposed Plan - Figure 3.3.16

3.3.5 NORTHWEST GATEWAY

BUILDINGS AND DEVELOPMENT

The Northwest Gateway district includes the two blocks north of 15th Street, and is bounded by the current Jefferson Davis Highway to the east, Eads Street to the west, and Army-Navy Drive and I-395 to the north. Most of the buildings on these two blocks are residential, with some hotel and office buildings, and a small amount of ground floor retail. The Concept Plan envisions all of the existing residential and hotel buildings remaining in place through the planning period. The potential for redeveloping existing structures at two sites is identified in the plan, one at the northwest corner of the northern block (currently occupied by an office building), the other located at the northeast corner of the south block, presently occupied by a free-standing garage structure. The block also includes two potential infill sites. One is located adjacent to the office building identified above as a potential redevelopment.

TRANSPORTATION

The street network in this district will remain largely unchanged. However, two important transportation improvements will occur. In the near-term, 12th Street will be reconfigured to accommodate the transitway, with travel in both directions. Just beyond the planning area boundary across Eads Street, it is anticipated that 12th Street will be extended between Eads and Fern Streets. As a long term vision, the south-bound exit ramp from Jefferson Davis Highway will be removed and replaced as part of the center-inboard ramp configuration. Finally, a duplicate segment of Eads St. near the Army Navy Drive intersection would be vacated to simplify the roadway network in this location, and to facilitate a new development opportunity to define that corner.

PUBLIC OPEN SPACE

Public Open Space improvements include a commitment to preserve the existing open space located at the southeast corner of Eads and 12th Streets. Creative landscaping and benches will make the park more inviting for small groups to gather or for workers to enjoy during their breaks.



View of Eads Street towards 23rd Street S

3.3.6 WEST SIDE

BUILDINGS AND DEVELOPMENT

This district includes all the blocks within the planning area boundary west of Jefferson Davis Boulevard and south of 15th Street. The Master Plan for this district balances preservation of the Aurora Highlands neighborhood to the west with potential development in the planning area that incorporates reduced planned building heights for most blocks south of 20th Street and limiting cut-through traffic in the neighborhood by directing vehicles towards arterial streets. The narrow blocks between Eads Street and Jefferson Davis Boulevard north of 23rd Street will see some redevelopment, mostly on the southernmost block. An opportunity for infill development on the northeast corner of the block south of 15th Street would occur with the reconfiguration of the highway on/off ramps, creating new frontage on Jefferson Davis Boulevard. On the two large blocks to the west, the plan anticipates the existing residential building will stay in place with some residential infill, mostly three story multi-family buildings located along Fern Street. At the corner of 18th Street and Eads Street, the post office site is envisioned for redevelopment possibly of residential use. While it's understood that the USPS does not envision maintaining the free standing building at this location, they wish to maintain a retail presence in the vicinity, which is strongly supported by the community. At Restaurant Row (500 block of 23rd Street), the plan visualizes preserving and retaining small, neighborhood oriented retailers. Should redevelopment occur in this area, such retailers should be accommodated, to help support active streetscapes.

Recommended building envelopes in this plan provide deliberate tapering down to the west, while offering flexibility for development at the corner of 22nd and Eads Streets to help achieve parking to support the 23rd Street retailers. In a similar manner, the blocks south of 23rd Street between Eads Street and Jefferson Davis Boulevard provide multiple opportunities for infill and

redevelopment, with a tapering strategy that steps-down height from the Jefferson Davis Boulevard frontage to three-story heights along Eads Street. At the very southern end, parcels under current County ownership are currently used to accommodate the ART operations center, a use which is anticipated to continue into the future.

TRANSPORTATION

The West Side will benefit from many of the street and intersection proposals in the Master Plan. Creating complete streets throughout the district, which will accommodate pedestrians, bicyclists, bus riders, and motorists, is an important objective. Improvements to the configuration of intersections along Jefferson Davis Boulevard, particularly at 20th and 23rd Streets, will relieve traffic congestion within the district. As a long-term proposal, the reconfiguration and removal of the highway on/off ramps at 15th and 26th Streets will improve the frontage along both Eads Street and Jefferson Davis Boulevard in these locations.

PUBLIC OPEN SPACE

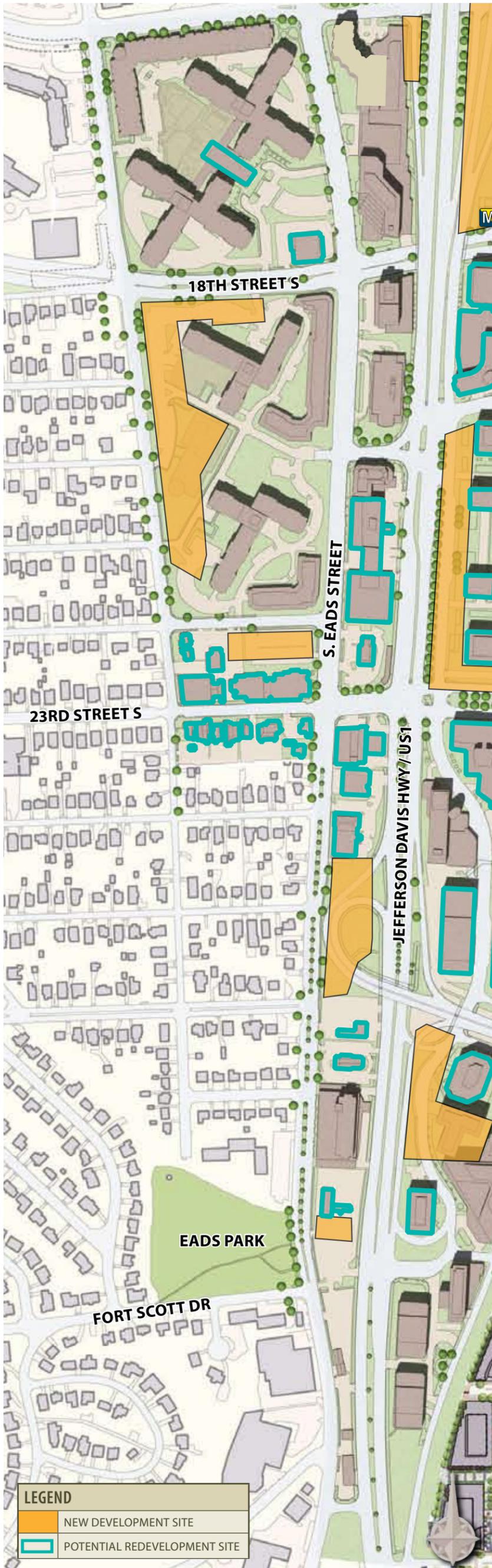
The Master Plan includes preservation of existing open space and the provision of new public open space within the West Side neighborhood. Existing open spaces, such as those at the southwest corner of Eads and 15th Streets, and at the southwest corner of Eads and 20th Streets are to be preserved and enhanced with improved public access and amenities. A new public park is proposed for the northeast corner of Fern and 22nd Street, which will have neighborhood serving facilities within walking distance for residents from nearby Aurora Highlands and Crystal City.

A series of open spaces are planned for on the blocks south of 23rd Street between Eads Street and Jefferson Davis Boulevard. Many of these open spaces align with the streets west of Eads Street, providing a pedestrian connection to the boulevard. The proposed open space at the southern end of these blocks (see Figure 3.3.18, Item #7) provides

the potential to interconnect open spaces between the existing Eads Park on the west side to the proposed park directly across Jefferson Davis Boulevard south of 27th Street.

Annotated Plan Legend

- 1 **Infill Frontage** – As a long-term objective, the removal and reconfiguration of the highway on/off ramps at 15th Street will create an infill opportunity to provide building frontage along Jefferson Davis Boulevard with sidewalks and building entrances.
- 2 **22nd Street Park** – This new park will provide neighborhood serving recreational facilities.
- 3 **Restaurant Row** – While the Master Plan anticipates only some near-term infill development on the blocks immediately north and south of 23rd Street, the plan provides a long-term vision to ensure that the scale and density of any future development is appropriate for the surrounding neighborhood.
- 4 **23rd Street Intersection** – As part of the general reconfiguration of the intersection at Jefferson Davis Boulevard, some modification to the western side of the intersection can be anticipated to improve the intersections performance and reduce traffic congestion.
- 5 **Pedestrian Connections** – A series of open spaces are proposed for the blocks south of 23rd Street that will provide connections between the neighborhoods within a park setting. These small parks will be designed with interactive park elements and seating for residents to enjoy between Eads Street and Jefferson Davis Boulevard.
- 6 **Removal of Highway Ramps** – As a long-term vision, the removal of the highway ramp as part of the National Circle reconfiguration will provide an opportunity to create new building sites on the land between Eads Street and Jefferson Davis Boulevard.
- 7 **New Park** – A new park is provided near the intersection of Fort Scott Drive and Eads Street. The park will include active recreational facilities that will be selected to compliment facilities in Eads Park and will include paths, shade trees, and seating.



Existing Conditions - Figure 3.3.17



Proposed Plan - Figure 3.3.18

In order to help frame and implement the vision, goals and objectives of the Plan, in December 2008 the County Board adopted a set of Policy Directives, introduced in Chapter 2. These Policy Directives reappear in the margins throughout Chapter 3 whenever they support more specific guidance outlined in the Master Plan.

POLICY

- S 1 Reach, at a minimum, operational carbon neutrality in Crystal City through actions such as energy efficiencies, maximizing vegetated areas, comprehensive water and stormwater management planning, efficient use and conservation of all resources, and provision of exceptional access to transit, in order to align with County goals and to enhance its overall economic and environmental position in the region.**
- S 2 Uphold the County's then current highest and best environmental sustainability standards for all projects, including renovation and redevelopment projects throughout Crystal City.**
- S 3 Design, construct, and manage all public and private spaces, streets, infrastructure, and buildings to help the Crystal City Plan meet selected certification standards under the United States Green Building Council's (USGBC) LEED Neighborhood Development program.**

3.4 ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability will be an integral element of all future development guided by the Crystal City Sector Plan. The vision for Crystal City as a vital, mixed-use neighborhood with increased densities and a neutral carbon balance is a vision for an environmentally sustainable place. Improving the jobs/housing balance will offer significant benefits for reducing traffic congestion and commute times, air quality, economic and fiscal conditions, and quality of life. The planned improvements to public open spaces and increases in tree canopy will support broader sustainability goals of encouraging walking, physical activity, and time spent outdoors. The Plan's guidelines for wider sidewalks, adequate bike lanes, and more street trees will provide appealing and comfortable pedestrian environments to promote pedestrian and bicyclist activity, bringing public health benefits through increased physical activity. With an array of transportation choices and an existing 40% non-automobile modal split for trips, planning for growth in Crystal City is a key sustainable element of the Plan. The greater Arlington community's interest in seeing a district energy scale project implemented in Crystal City showcases the potential economic, energy, security, and environmental benefits associated with such a project. As a testament to the many ways in which Crystal City is already and will become even more of a sustainable neighborhood through the Plan, the draft elements of the Crystal City Sector Plan were submitted as a Leadership in Energy and Environmental Design (LEED) for Neighborhood Development (ND) pilot program project administered by the United States Green Building Council's (USGBC's), and received a LEED-ND "Certified" rating.

At the adoption of this Plan, the County is in the process of bringing together community leaders as part of a Community Energy and Sustainability (CES) Task Force in an effort to identify actions to ensure Arlington's energy and sustainability future. The CES Task Force is charged with guiding the development of a Community Energy Plan (CEP) for Arlington, which will establish energy goals and strategies that will become a foundation for creating an Energy Master Plan for the County. The CEP will offer strategies to ensure reliable and affordable energy supplies, demonstrate the County's long-term commitment to environmental responsibility, and enhance Arlington's economic competitiveness. It is anticipated that upon its completion, the CEP will include an array of recommended action items, many of which may apply and should be implemented as part of redevelopment efforts in Crystal City.

Notwithstanding recommendations that may come out of the Community Energy Plan, particular building level strategies are typically encouraged to ensure that each built structure is as beneficial for the environment as possible. While meeting a "Certified" rating under the USGBC'S LEED program is often a minimum goal, the County strives for and encourages new buildings to achieve certification at the "Silver" level or above. Also part of the LEED programs themselves, a range of strategies from alternative energy production or distribution methods to rainwater harvesting should be considered when planning and designing buildings, in order to meet the County's then-current

highest and best sustainability standards for development projects as they come forward.

By applying sustainability standards in the design and review of all new development, the design focus of projects should be on maximizing energy efficiency, minimizing carbon footprints, and dramatically reducing generated waste. Potential components of sustainable development for new site and building construction in Crystal City should include the following:

DEVELOPMENT:

- Reference the framework and sustainability intent of the LEED-ND program as general guidance to ensure that the planning and construction of individual buildings positively contribute to the overall sustainability of the Crystal City area.
- Conduct an energy demand assessment to determine how any proposed buildings relate to benchmark energy efficiency standards.
- Establish a target balance between office and residential uses, expressed as a percentage of total gross floor area (GFA).
- Establish a minimum quantity of moderate- and low-income residential units to be provided in all new site plan residential development, to enable citizens with a wide range of economic levels and age groups to live within Crystal City.
- Continue the farmer's market within Crystal City to minimize environmental impacts associated with transporting food over long distances and increase direct access to fresh food.
- Encourage Crystal City residents, employees and visitors to travel more frequently by bus, transitway, Metro, VRE, carpool, bicycle or walking in order to minimize use of single occupancy vehicles and to reduce traffic congestion.
- Promote optimal energy efficiency, and educate tenants and residents on how to attain greater efficiencies.
- Promote purchase of sustainable energy through local power companies.

SITE AND BUILDING CONSTRUCTION:

- Encourage the best available technology at the time development occurs for green infrastructure and low impact development.
- Include retrofits of redevelopment projects to the best available pollution control technology.
- Encourage district heating and cooling and distributed energy systems, and if new buildings pre-date these systems, such buildings should be district energy system ready.
- Encourage building and site deconstruction strategies and programs that minimize waste and maximize building and materials reuse.
- Maximize sustainable stormwater strategies through the use of low impact

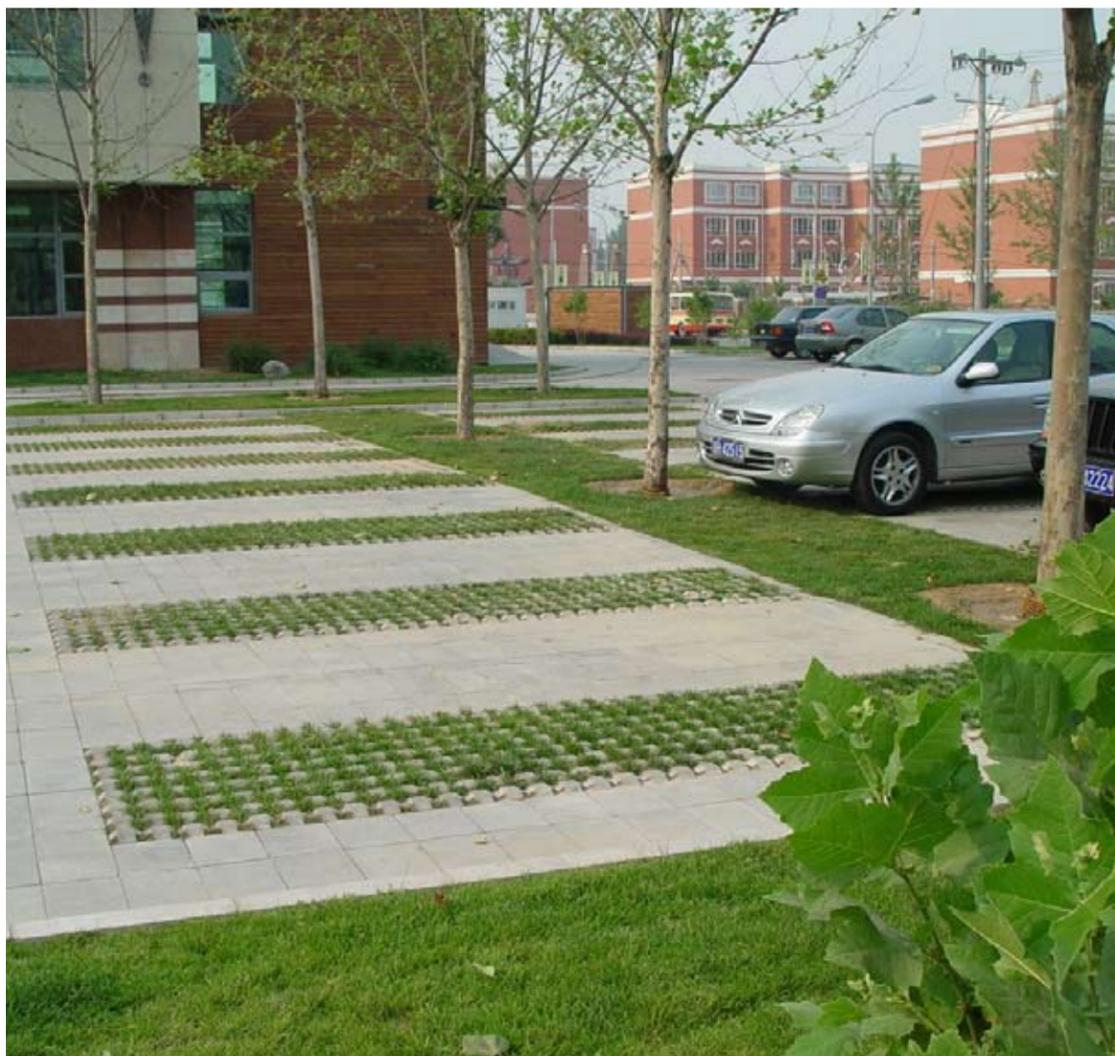
development practices, such as pervious paving, infiltration tree pits, rain gardens and bio-retention swales, green roofs.

- Encourage the integration of rainwater harvesting systems into the design and construction of public open spaces.
- Maximize use of native, drought tolerant plant and tree species.
- Maintain good indoor air quality through the use of zero emission or low off-gassing adhesives, paints and other materials.
- Promote use of non-carbon energy production at each building.
- Use Energy Star rated and Water Sense fixtures, equipment and appliances to minimize energy and water use.

- Maximize natural day-lighting in all buildings.
- Utilize the most advanced water conservation technologies for interior (toilets, faucets, etc.) and exterior (irrigation, water features, etc.) applications available at the time of construction or redevelopment.
- Utilize grey-water recycling for non-potable water needs, where feasible.



Farmer's Market - Boston, MA



Pervious Paving - Beijing, CN



Energy Efficient Appliances



Green Roof - New York, NY

GREEN BUILDING

The International Panel on Climate Change reported in 2007 that buildings contribute 38 percent of CO2 emissions from fossil fuel combustion in the U.S. and 15 percent of global greenhouse gas emissions. Transportation contributes another 33 percent to CO2 emissions from fossil fuel combustion in the U.S. and 14 percent of global greenhouse gas emissions. Most transportation emissions are due to auto travel, with over 60 percent of the U.S. CO2 emissions from personal vehicle use. If the U.S. is to slow the onset of climate change, cities will need to reduce resource use, vehicle travel, and the loss of open space.

Green Building is a collection of design and construction strategies that significantly reduce or eliminate the negative environmental impacts of a building while providing healthy indoor space for

its occupants. Building green requires an integrated design approach that looks at all components of a building project and evaluates the interrelationships among the building, its specific components, its surroundings, and its occupants. This approach means different things for each project.

For Crystal City, it can include incorporating energy and water efficient systems, fixtures and appliances, creating healthy indoor environments (good daylight and ventilation, and reduced exposure to toxic chemicals), reducing waste during construction and building operation, using materials that minimize the impact on the regional environment, purchasing regionally produced building materials over national or internationally produced products, and/or using recycled or recyclable materials for

construction. Green buildings have many benefits including more efficient and cost effective use of building resources, significant energy and operational savings, increased productivity and reduced absenteeism among occupants, and reduced stormwater and air pollution impacts. Recent analysis of existing green buildings shows that the upfront cost of building green ranges from 0-5% of total construction cost. However, green buildings have many benefits that can recoup these upfront costs within a short period of time. These benefits include better use of building resources, significant operational savings, and increased workplace productivity.

POLICY

- B 1** Establish build-to lines for the Crystal City Planning Area along the perimeter of development blocks as demarcated on the Build to Lines Map.

3.5 BLOCK STRUCTURE

A main objective of the plan is to create a well-defined network of street rights-of-way and a recognizable block structure. Street rights-of-way are important elements of the public realm, usually defined in urban settings by building façades. The perception of a neighborhood is largely dependent upon the quality and character of its streets. By establishing a common line for building facades at the edge of a street or open space, called a Recommended Build-To Line (RBL), this plan establishes a clear spatial figure of streets and open spaces. Collectively, the proposed RBLs provide a mechanism to ensure future buildings will cohesively frame a well-defined and recognizable structure of quality streets and open spaces, or public realm.

One method to better understand the relationship between buildings and the public realm spaces they create is the use of a figure-ground diagram. In such a diagram, building footprints are depicted as a uniform black fill, creating a positive or solid figure on a white (or negative) ground, which represents the space between buildings. For example, Figure 3.5.1 is a figure-ground diagram for existing conditions in and around Crystal City. The contrast between the loose configuration of buildings in the core of Crystal City and the readily identifiable grid of the Aurora Highlands neighborhood is clearly evident. In areas east of the current Jefferson Davis Highway, it can be difficult to distinguish where one block ends and another begins, largely due to an absence of any hierarchy in the dimension of spaces that separate buildings or a clear delineation of street edges. To improve these conditions, the spatial clarity of the public realm should be strengthened and reinforced so that streets and blocks can be more clearly recognized in Crystal City.

The first step in creating a block framework is to utilize RBLs to create a clear perimeter edge for each block. This would require all new construction to engage a majority of the RBL along all its principal street frontages. Figure 3.5.3 establishes a system of RBLs for Crystal City consistent with the Illustrative Concept

Plan, and includes a network of street rights-of-way of designated widths, and reciprocal block perimeters. RBLs are also established to define those proposed open spaces that will have limited flexibility in location and orientation and are illustrated to represent the approximate demarcation between the public open space and sidewalk. The street width recommendations in Figure 3.5.3 should be understood as general guidance when considering future new streets or street reconfigurations, within the context of this plan. In some instances, where certain east-west cross streets may or may not accommodate temporary transit routes, street and right-of-way widths may be adjusted somewhat, dependent upon further analysis of the surface transitway system. Section 3.12 provides standards and guidelines for complying with build-to recommendations.

Applying the same figure-ground diagramming technique to the Illustrative Concept Plan conveys a clear effect on the structure of blocks and streets. The proposed figure-ground relationship in Figure 3.5.2 exhibits a more coherent urban pattern than currently exists. Now each cluster of buildings forms a recognizable block with a defined edge at its perimeter. The positioning of buildings gives priority to the width of street rights-of-way, further reinforcing the figure of each block and open space. Important streets such as Crystal Drive, 15th, 18th and 23rd Streets, and even Jefferson Davis Boulevard are more readily identifiable within the configuration of building footprints and block clusters. The impact on the form of the public realm is also easily observed in the three-dimensional representation of the Illustrative Master Plan. For example, in the before and after representations on the center block(s) for the Entertainment District (Figures 3.3.11 and 3.3.12, p. 39), the loose, tower-in-the-park quality of the block is replaced with two new blocks that have clearly defined edges and nodes. These images also show how streets are more clearly defined, and how this quality in turn reinforces the reading of the blocks. The overall effect is the creation of attractive, walkable streets and accessible, dynamic public open spaces.



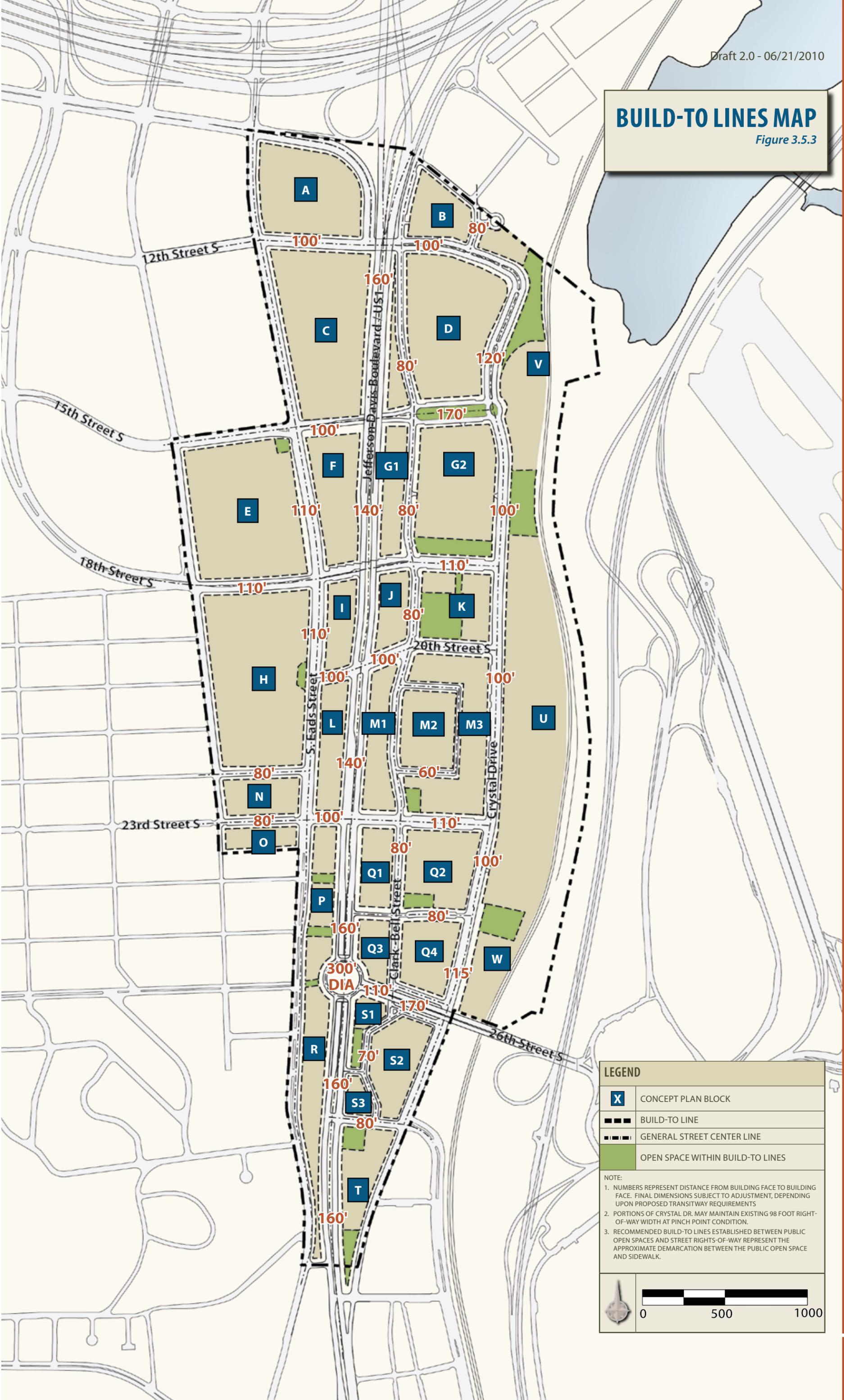
Figure Ground - Existing
Figure 3.5.1



Figure Ground - Proposed
Figure 3.5.2

BUILD-TO LINES MAP

Figure 3.5.3



LEGEND	
	CONCEPT PLAN BLOCK
	BUILD-TO LINE
	GENERAL STREET CENTER LINE
	OPEN SPACE WITHIN BUILD-TO LINES

NOTE:

- NUMBERS REPRESENT DISTANCE FROM BUILDING FACE TO BUILDING FACE. FINAL DIMENSIONS SUBJECT TO ADJUSTMENT, DEPENDING UPON PROPOSED TRANSITWAY REQUIREMENTS
- PORTIONS OF CRYSTAL DR. MAY MAINTAIN EXISTING 98 FOOT RIGHT-OF-WAY WIDTH AT PINCH POINT CONDITION.
- RECOMMENDED BUILD-TO LINES ESTABLISHED BETWEEN PUBLIC OPEN SPACES AND STREET RIGHTS-OF-WAY REPRESENT THE APPROXIMATE DEMARCATION BETWEEN THE PUBLIC OPEN SPACE AND SIDEWALK.

3.6 TRANSPORTATION



View North on Jefferson Davis Boulevard at National Circle

3.6.1 OVERVIEW AND RECOMMENDATIONS

The Master Plan's transportation elements are critical in ensuring continued ease of movement in, through, and around Crystal City. Growth in the Jefferson Davis Corridor is expected to expand in the coming years, as new construction in Crystal City, Pentagon City, Potomac Yards, and points south increases the employment and residential densities of the area. This growth will increase demands on the existing transportation infrastructure, and will require investments to expand the capacity of the overall system. This Plan seeks to balance any proposed investments in transportation infrastructure with improvements in the efficiency and effectiveness of the existing network, so that the maximum benefit can be delivered at the lowest cost. To this end, improvements in Crystal City should support and enhance existing transportation systems, and embrace currently planned improvements in order to create an optimally utilized multimodal transportation system. Additional improvements will also be needed going forward, such as construction of a streetcar rail system and realignment of Clark-Bell Street. Relevant transportation matters in Crystal City have been studied

and analyzed as part of the overall planning process, and the findings are provided in the supporting document titled "Crystal City: Multimodal Transportation Study". The key recommendations include:

- Maintain the capacity of the current Jefferson Davis Highway while enhancing its physical environment into an urban boulevard, and direct traffic primarily to arterial streets to minimize adverse impacts of cut through traffic into surrounding neighborhoods.
- Realign Clark-Bell Street and other existing streets and introduce new streets to create a finer-grained road network, increase the functionality of traffic intersections, and improve overall circulation throughout Crystal City;
- Enhance connections between existing public transportation modes (Metro, VRE, bus, and carpools) with improvements such as a Multimodal Transportation Center, an additional Metro Station entrance, stronger linkages to the VRE station entrance from Crystal Drive and Water Park, and better utilization of the Underground pedestrian network as a link to multiple transit modes;
- Create Complete Streets that accommodate the transportation needs of all surface transportation users, motorists, transit riders, bicyclists, and pedestrians, and that are designed to support the type and character of planned/existing adjacent land uses.
- Introduce a new surface transit system with connections to other networks beyond Crystal City;
- Phase and coordinate transportation improvements through the timing of building demolition and construction through the PDSP review process;
- Adopt and implement Parking and Transportation Demand Management (TDM) strategies to better utilize existing and future parking facilities, and reduce dependence on single-occupancy vehicles;
- Improve laneage and reduce one-way streets, for better traffic flow and street utilization consistent with load forecasts;
- Extend and enhance the bikeway and trail system of Crystal City, particularly its connections to the regional trail system and Reagan National Airport.

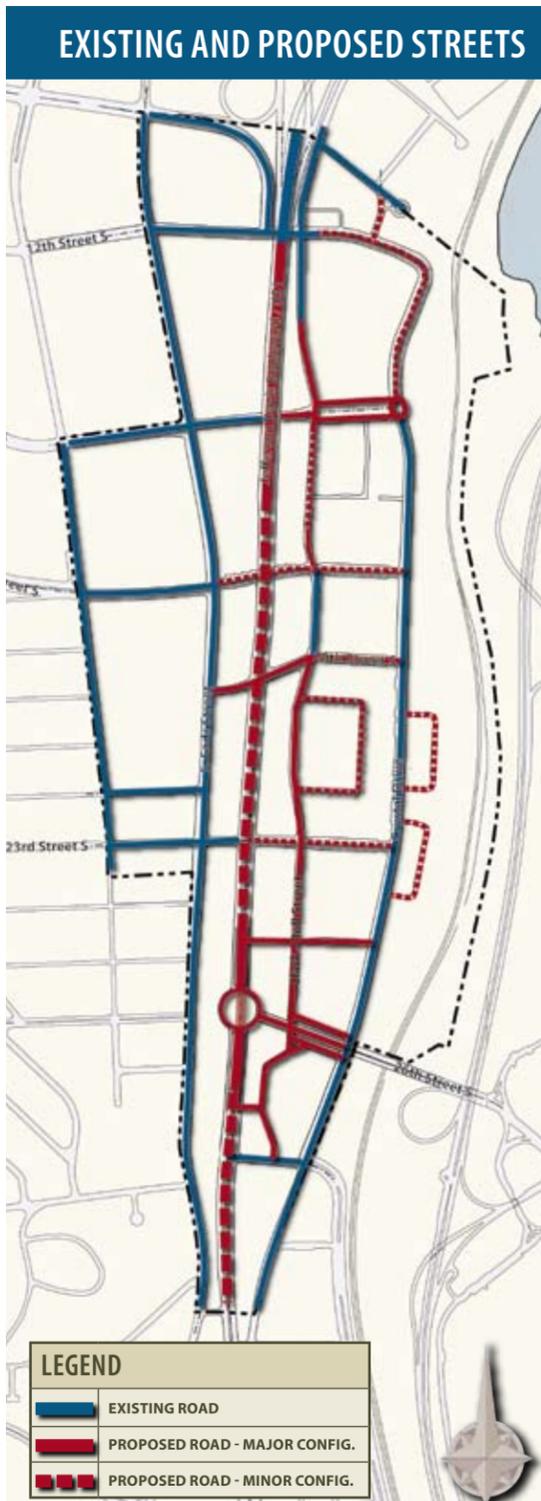


Figure 3.6.1

The findings of the transportation study and its recommendations are fully expressed in the goals, objectives, and policies of this document, and have served as a primary driver for development of the Crystal City Master Plan. The key transportation components of the Plan are discussed in the following sections.

3.6.2 STREET NETWORK AND CIRCULATION PATTERNS

The Master Plan proposes a number of improvements to the street network within the Crystal City planning area. An examination of the existing street network reveals a number of problems the proposed plan should address. The current street network is dominated by the three principal north-south streets, Crystal Drive, Jefferson Davis Highway, and Eads Street. Clark and Bell Streets are currently separate and disjointed, and limit overall circulation. One-way streets occur with unnecessary frequency and impede efficient circulation.

Shown in Figure 3.6.1, the proposed street network greatly simplifies the system. The Clark Street fly-over ramp is removed and Clark and Bell Streets are merged into a common alignment, located as far to the



Figure 3.6.2

east from Jefferson Davis Boulevard as conditions permit. This realignment creates several new blocks, similar in dimension to the blocks found on the west side of Jefferson Davis Boulevard. As a long-term objective, the outboard ramps at 15th Street are reconfigured to a tighter inboard configuration, which also contributes land to the new blocks. This restructuring of ramps also permits the new Clark-Bell Street to form a through intersection at 15th Street, eliminating the need for the loop, and freeing land for a reconfiguration of 15th Street to include area for a Garden Park.

Further south, 20th Street is aligned east and west to permit a cleaner intersection at Jefferson Davis Boulevard. The intersection at 23rd Street and Jefferson Davis Boulevard is simplified with the narrowing of 23rd Street on the east side, and the relocation of the Clark-Bell intersection further east. Clark-Bell Street is realigned south of 23rd Street, and together with the introduction of the new 25th Street, permits the creation of a rational circulation pattern for those blocks. The ramps and overpass to the airport are removed and replaced with an at-grade traffic circle, which also provides uninterrupted traffic movement on Jefferson Davis Boulevard with an underpass below the circle. A new viaduct ramps down to grade



Figure 3.6.3

at the circle, completing the connection to the airport. It should be noted that the achievement of the National Circle is envisioned as a long-term objective, given challenges associated with the federally owned property around National Circle that is on long-term lease to the Metropolitan Washington Airports Authority (MWA) beyond 2050.

West of Jefferson Davis Boulevard, a new segment of 12th Street between Eads and Fern Streets is planned just beyond the planning area boundary. No additional streets are planned between Eads Street and Jefferson Davis Boulevard between 23rd and 32nd Streets, to reinforce preservation of the residential neighborhoods to the west. Nevertheless, the County still adheres to its adopted policy of generally enhancing the street grid by breaking up large blocks.

In addition to a simplified network of streets, the Master Plan proposes changes in existing traffic patterns. One-way streets can limit circulation options, inhibit wayfinding, promote speeding, and deprive streets of necessary vitality. Furthermore, even with the improved street network proposed in the Master Plan, Crystal City's street grid is relatively limited in the number of streets available and the number of access points at its periphery. As a result, one-way travel on

POLICY

- T 2** Establish a revised street network for Crystal City as shown in the Street Network and Typology Map, in accordance with and to be reflected in the County's Master Transportation Plan.
- T 3** Expand County control over all streets and rights of way through public ownership, dedication, or public-use easements set in perpetuity.
- T 4** Improve the safety and quality of pedestrian travel by providing elements such as sufficient sidewalk clear zones, adequate space for street trees and landscape elements, and reduced pedestrian crossing distances.
- T 13** Develop a plan to ensure that conditions are created to unify Crystal City into a single, seamless community by sufficiently and effectively finding mechanisms for pedestrians, vehicular traffic, bicycle traffic, transit, and commerce to flow over, under, or in some other way not be impeded by the Jefferson Davis Highway

a single street can severely limit movement throughout the network, and compel a motorist to seek convoluted routes to reach his or her destination. The plan proposes the elimination of one-way traffic flow wherever possible, to be replaced with two-way streets. As illustrated in Figure 3.6.2, a number of one-way conditions currently exist in Crystal City, and while negotiation of the street network is possible, for those unfamiliar with the circulation pattern, it can be confusing, frustrating, and difficult to navigate. Figure 3.6.3 shows the Master Plan's proposed traffic patterns. The new street network will eliminate all one-way streets from the planning area, except for a stretch of Crystal Drive south of 27th Street South, where the Y-intersection with Jefferson Davis Boulevard will only permit northbound traffic flow.

In summary, these changes will dramatically simplify the street network in Crystal City. The difference between the existing street network and what is proposed in the plan, can be observed in Figures 3.6.4 and 3.6.5. Along the entire length of Jefferson Davis Boulevard, changes in the ramps, laneage, and intersections permit the transformation of the highway into an urban boulevard with wide landscaped useable sidewalks and real building frontages. The system of ramps and service roads along the current Jefferson Davis Highway are removed, releasing a substantial quantity of land for future development. The street network is more legible overall, thereby improving connectivity, circulation, intersection functionality, and way-finding. By simplifying the street network, an important first step is provided towards fulfilling the goal of creating Complete Streets, which have the

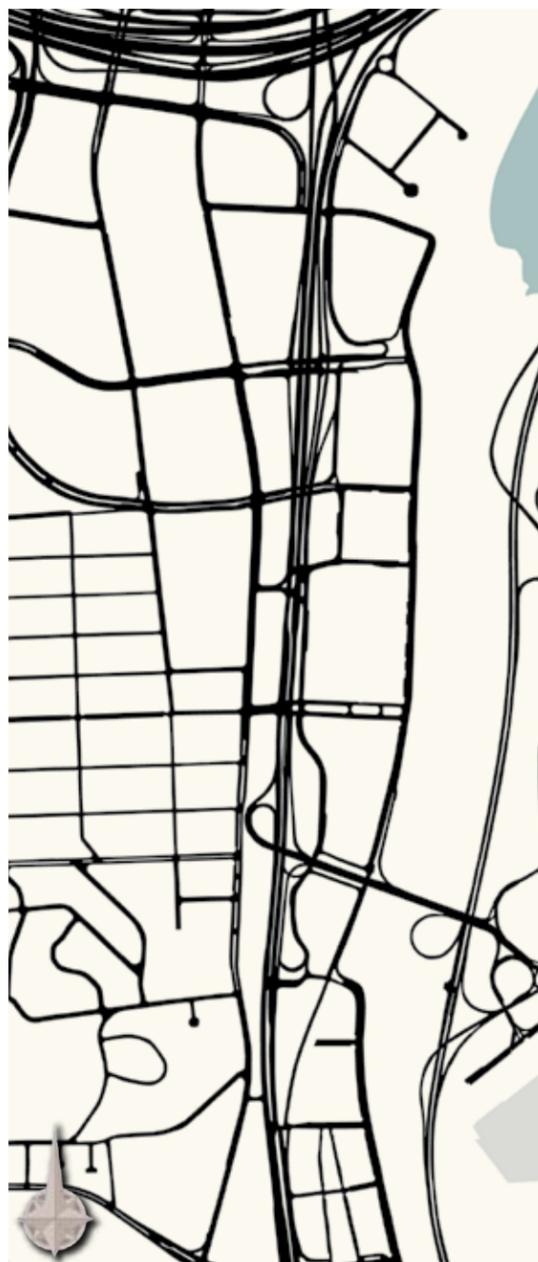
necessary configuration, connectivity, and capacity to accommodate multiple modes of traffic movement.

3.6.3 STREET TYPOLOGY

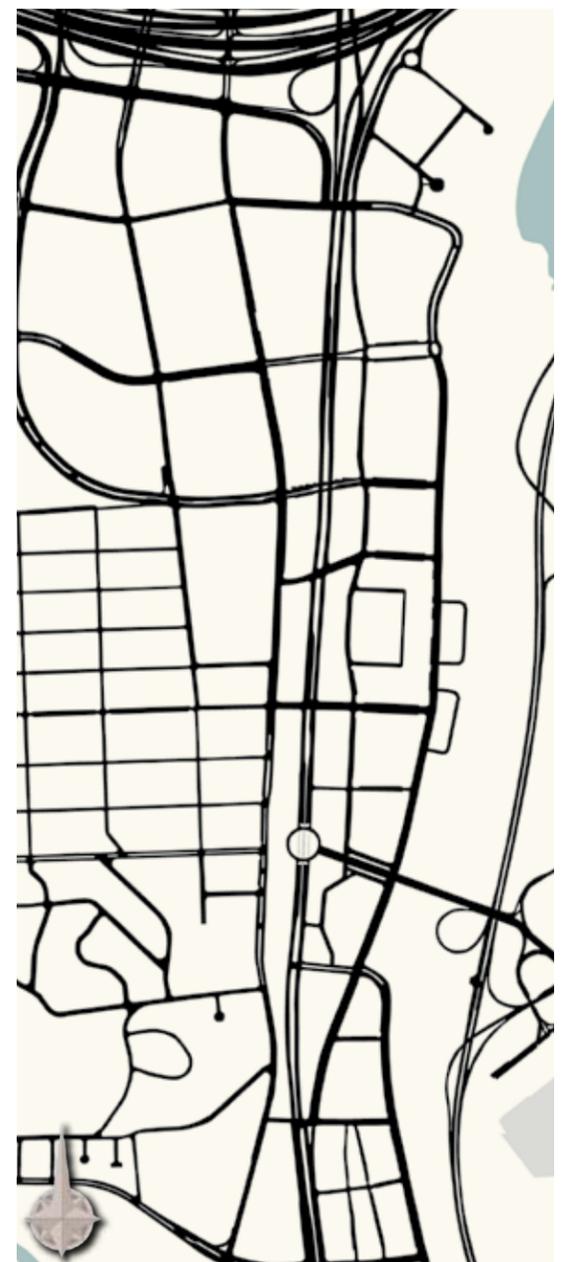
Under this plan, each street is assigned as a specific type of arterial or neighborhood street, using the same classification system used in the County's Master Transportation Plan (MTP). These street type classifications address whether a street is arterial or local, identify the general land use character of the frontage, and provide general guidelines on modes, laneage, dimensions, and other design characteristics. Figure 3.6.6 illustrates the proposed street typology under the Crystal City Master Plan. Supporting information on conceptual designs for streets within the network are included elsewhere in this document and provide greater detail on the potential configuration and furnishings of streets within the planning area.

While the MTP provides the overall vision of the streets and their network, the more detailed recommendations in this Plan, such as those illustrated in street cross sections, should be used as guidance in instances where the two documents may diverge.

Recommended street widths and capacities have been designed to carry forecasted traffic loads while providing for complete streets. Collectively, the proposed street classifications presented in Figure 3.6.6 will serve as a primary guide for the rebalancing, redesigning, and rebuilding of Crystal City's streets to become complete streets that provide for all modes of travel as well as serve the adjacent land uses.



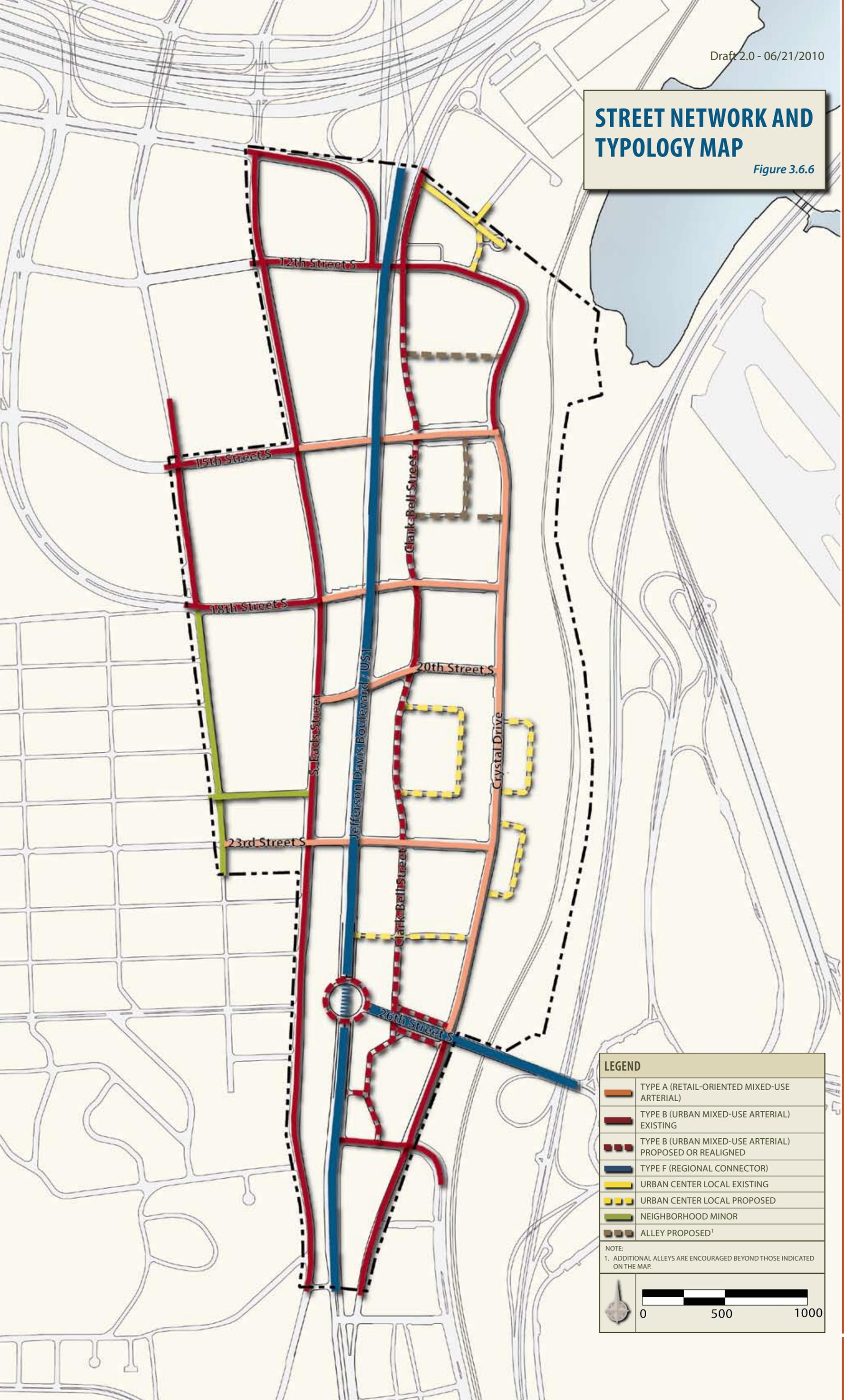
Existing Street Network
Figure 3.6.4



Proposed Street Network
Figure 3.6.5

STREET NETWORK AND TYPOLOGY MAP

Figure 3.6.6



LEGEND

	TYPE A (RETAIL-ORIENTED MIXED-USE ARTERIAL)
	TYPE B (URBAN MIXED-USE ARTERIAL) EXISTING
	TYPE B (URBAN MIXED-USE ARTERIAL) PROPOSED OR REALIGNED
	TYPE F (REGIONAL CONNECTOR)
	URBAN CENTER LOCAL EXISTING
	URBAN CENTER LOCAL PROPOSED
	NEIGHBORHOOD MINOR
	ALLEY PROPOSED ¹

NOTE:
1. ADDITIONAL ALLEYS ARE ENCOURAGED BEYOND THOSE INDICATED ON THE MAP.

3.6.4 PEDESTRIAN AND BICYCLE ACCOMMODATION

To provide for future growth and maintain mobility in Crystal City, providing safe and efficient pedestrian and bicycle facilities is essential. Walking and biking have innumerable benefits to personal and societal health, traffic conditions, livability, sustainability, and an area’s vibrancy. Most trips, even those made by car or transit, begin with walking. This alone necessitates design of places that accommodate pedestrians. For Crystal City, it is essential that over time, walk trips represent a greater proportion of all trips made. The pedestrian and bicycle networks should be interconnected, consistent, and safe and serve the area’s residents, employees, and visitors. Great, not just adequate, sidewalks should be provided on both sides of every street. Crossings must be highly visible and provide adequate time for safe pedestrian passage. Generally, pedestrian accommodations should include:

- 6-foot wide (minimum) sidewalks: most are 8- and 10-foot wide minimum (exclusive of 2-foot building setback),
- 5-foot wide minimum utility/landscape strips; generally larger on Jefferson Davis Boulevard,
- High-visibility crosswalks,
- Pedestrian count-down heads at all signalized intersections and pedestrian crossings. Signals must provide adequate time for safe pedestrian passage,
- Pedestrian push buttons where the pedestrian signal phase needs to be called,
- Bulb-outs where necessary to shadow on-street parking and reduce crosswalk distances at intersections,
- Median pedestrian refuges on streets wider than 60 feet, curb to curb,
- Pedestrian level lighting.



Existing Sidewalk on Crystal Drive

BICYCLE ACCOMMODATION

General guidance for bicycle facilities is outlined in the following:

Bicycle lanes are generally 5-feet in width, but may be reduced to 4 feet adjacent to the curb where there are space restrictions. Bicycle lanes must maintain at least 5 feet in width adjacent to on-street parking to avoid “door zone” issues. Shared lanes should be adequately signed or marked using indicators such as “sharrows,” route signage, and “Share the Road” signage. Where they may occur, cycle tracks are generally 5- to 8-feet in width, but can be wider depending on anticipated use. Cycle tracks must maintain 2 to 5 feet separation from parking or travel lanes. With less separation, physical barriers such as bollards should be incorporated.



Pedestrian and Bicycle Trail

PEDESTRIAN AND BICYCLE NETWORK

Crystal City has an existing sidewalk and bikeways network, and is well-served by the regional bikeway and trails network. The Mount Vernon Trail runs east of Crystal City along the George Washington Memorial Parkway and the Four Mile Run Trail is south of Crystal City along Four Mile Run. To improve accommodations for pedestrian and bicyclists as Crystal City evolves over time, the following are recommended:

- A trail connection from Crystal Drive to the Long Bridge Park multiuse trail,
- Modification of the Crystal City connection to the Mount Vernon Trail south of the Water Park to improve trail visibility, aesthetics, lighting, and width,
- Direct pedestrian and bicycle connection from the Mount Vernon Trail to Terminal A of Reagan National Airport,
- Direct pedestrian and bicycle connection from the Mount Vernon Trail to Terminal C of Reagan National Airport,
- Parallel pedestrian and bicycle facilities along Route 233 (Airport Viaduct) from Crystal City to Reagan National Airport with a connection to the Mount Vernon Trail,
- Pedestrian and bicycle connection across Jefferson Davis Boulevard to S.Eads Street in conjunction with the reconfigured Route 233/Jefferson Davis Boulevard interchange,
- Trail connection from the Four Mile Run Trail to Potomac Yard/Crystal City,

- Continued maintenance of the pedestrian tunnel at the Jefferson Davis Boulevard/23rd Street S. intersection until it is gradually phased out in coordination with future redevelopment and improvements to the Jefferson Davis Boulevard and 23rd Street South intersection,
- Streetscape enhancements on 18th Street S. in the vicinity of Metro and under the Jefferson Davis Boulevard bridge,
- Streetscape enhancements on 12th Street S. in the vicinity of the Jefferson Davis Boulevard bridge,
- Pedestrian-level wayfinding throughout Crystal City,
- Adequate bicycle parking throughout Crystal City,
- Consistent with Arlington County’s Master Transportation Plan, provide bicycle parking upgrades at the Crystal City Metrorail station and consider Crystal City as a candidate for a full-service bicycle station.

Figures 3.6.7 and 3.6.8 indicate the recommended network of pedestrian and bicycle facilities throughout Crystal City. The Plan supports improved transit, bicycle and pedestrian-friendly improvements to strengthen the connections both within Crystal City and between Crystal City and adjacent neighborhoods in all directions. Over time, sidewalk accommodations should continue to be assessed and upgraded as part of development projects to adequately



Pedestrian Tunnel

accommodate the prevailing flows of people travelling to and from Crystal City. In addition to Crystal City’s surface pedestrian network is the extensive system of internal walkways and corridors. The existing Underground is a set of internal paths and plazas, lined by retail in certain locations, that extend from 12th Street S. to 23rd Street S. between Jefferson Davis Boulevard and Crystal Drive. The Underground provides an alternative to walking along sidewalks, allowing pedestrians to travel from place-to-place in climate controlled and traffic-free conditions. Recognizing the value of this existing system, it is recommended to preserve its connectivity over-time with the understanding that the current layout may need to be modified to support the area’s redevelopment.

PEDESTRIAN BRIDGES AND TUNNELS

Aside from the Underground, there are also several exterior pedestrian bridges and tunnels currently located throughout Crystal City. Generally, the pedestrian bridges were built with development in Crystal City to provide a pedestrian circulation

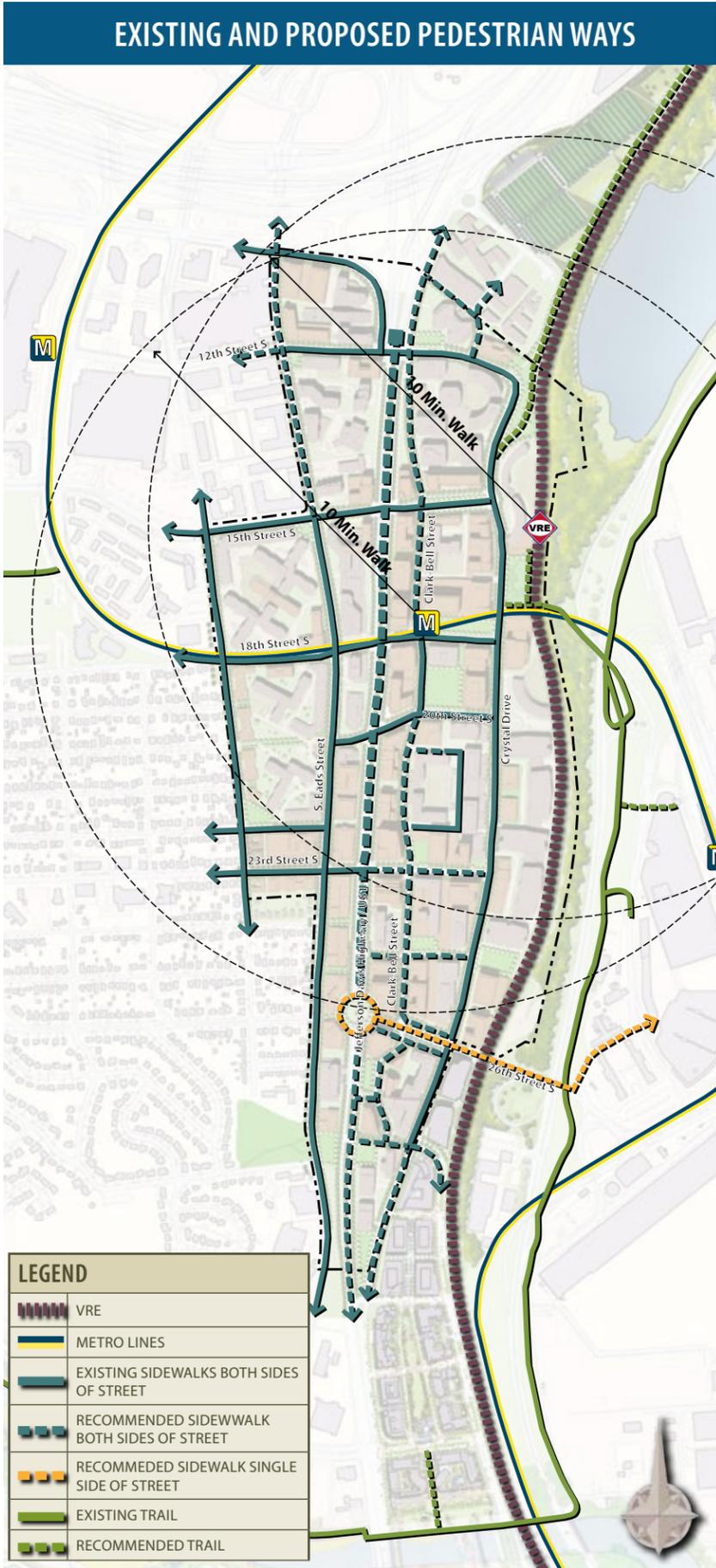


Figure 3.6.7

system separate from and above the vehicular traffic on the streets. Enhancing the street-level pedestrian experience through sidewalk and street improvements, redevelopment, and other infrastructure modifications is a major objective of this Plan. To achieve this objective, the Plan recommends no new pedestrian bridges, and the removal of the existing pedestrian bridges in Crystal City, either as part of a redevelopment project or as a stand-alone initiative. To address the removal of these pedestrian bridges, projects that improve at-grade pedestrian crossings should continue to be advanced. Recent examples of projects that improve conditions for and safety of pedestrians to address the removal of pedestrian bridges include the two signalized at-grade pedestrian crosswalks across Crystal Drive between 23rd and 20th Streets South.

Other than the tunnel components of the Crystal City Underground, the primary pedestrian tunnel currently in Crystal City is located under the current Jefferson Davis Highway at its intersection with 23rd Street South. In order to facilitate the reconfiguration of this intersection and the narrowing of the 23rd Street right-of-way, this Plan recommends the phased removal of the pedestrian tunnel under Jefferson Davis Boulevard. The exact phasing of the removal of this tunnel should be determined in coordination with future planning for the reconfiguration of 23rd Street east of Clark-Bell and ultimately through

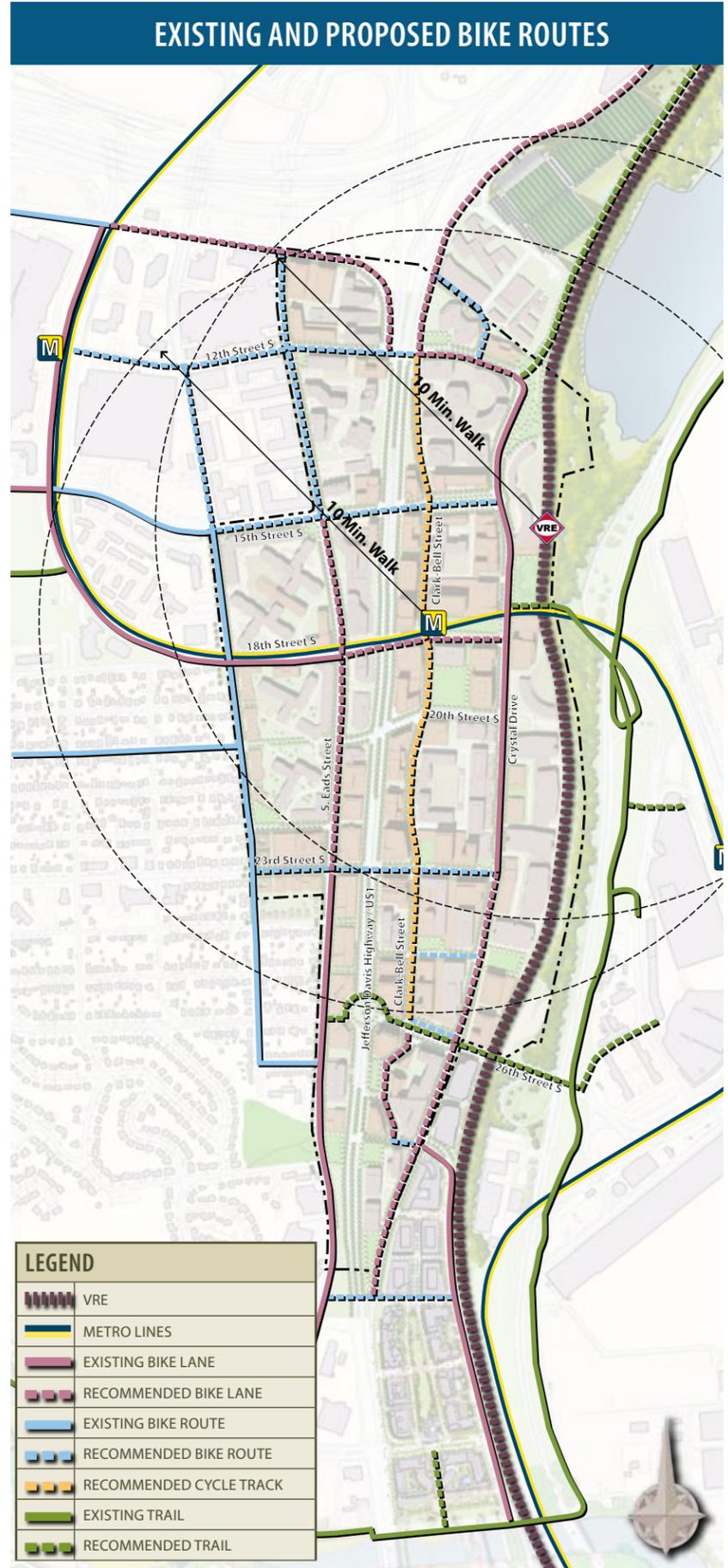


Figure 3.6.8

to Jefferson Davis Boulevard. To address the removal of this tunnel, the project to reconfigure this entire intersection will include a strong focus on improving conditions for pedestrians to cross the roadway in a safe environment.

BICYCLE SHARING PROGRAM

Arlington County is in the process of developing a bike-sharing program. The intent is to replace car trips with bicycle trips and increase the reach of transit by providing a reliable and convenient means to get to and from distant destinations. Arlington County is working to have a pilot program in operation by mid-2010, as a joint project with the District of Columbia government and Crystal City BID. Initial plans call for the first rollout of nearly 100 bicycles to be located in Crystal City and Pentagon City, among bicycle stations located at Metrorail stations, near connections to regional trails, and adjacent to other activity nodes. The system would allow customers to check-out and return a bicycle by using their mobile phone to receive a random lock access and return code. Customers would pay an annual fee to subscribe to the program. The first half hour of rental would be free and a fee would be charged for further use. Bicycle stations are currently proposed for nearly a dozen locations throughout Crystal City, including at the Metrorail station, near the VRE station, and at locations along Crystal Drive.



Existing Transit Center



Bike and Pedestrian Connection to Airport



VRE Station in Crystal City

3.6.5 EXISTING AND PROPOSED TRANSIT CONDITIONS

Crystal City has easy access to multiple modes of public transit (Figure 3.6.9). The Metro Station provides an easy connection to the greater region. The VRE station provides an extended commuter reach south along the I-95 corridor and west to Manassas. Metrobus service is provided throughout Crystal City, including a transfer station located at 18th and S. Bell Street. This Master Plan proposes a significant amount of new development resulting in a more even balance between office and residential uses. This improved balance will result in greater choice in the way people travel to, from, and within Crystal City.

The future transportation network in Crystal City is proposed as a system of streets, transit services, bikeways, trails, and sidewalks that currently exist and/or will be expanded and enhanced as the plan is realized. Beyond the creation of a surface transitway system described in Section 3.6.6 (p. 56), other actions will continue to be taken in current project and planning efforts to enhance the transit environment. For instance, bus stops have been incorporated into the design of Long Bridge Park and the reconstruction of Old Jefferson Davis Highway, laying the groundwork for accommodating bus service to those locations in the future.

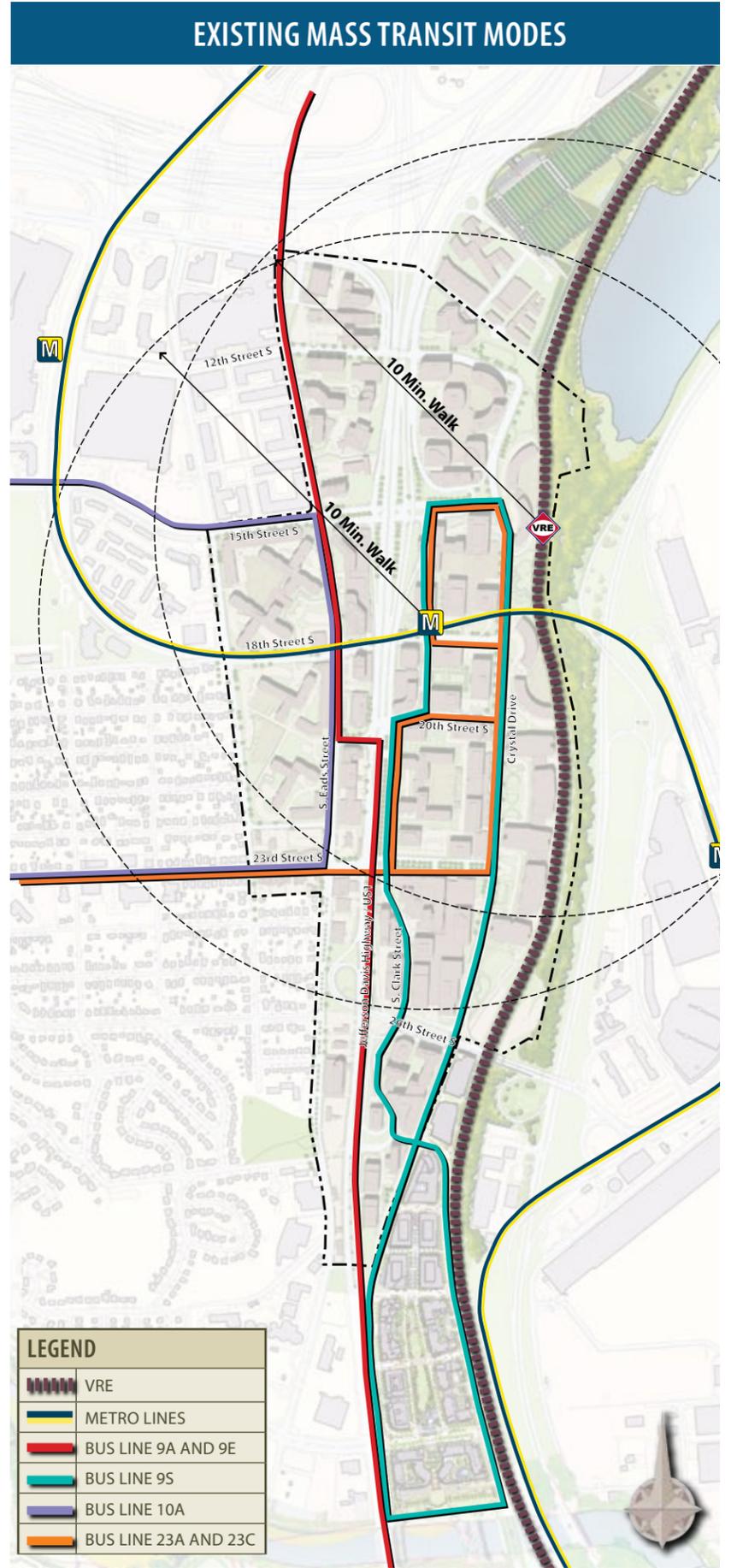
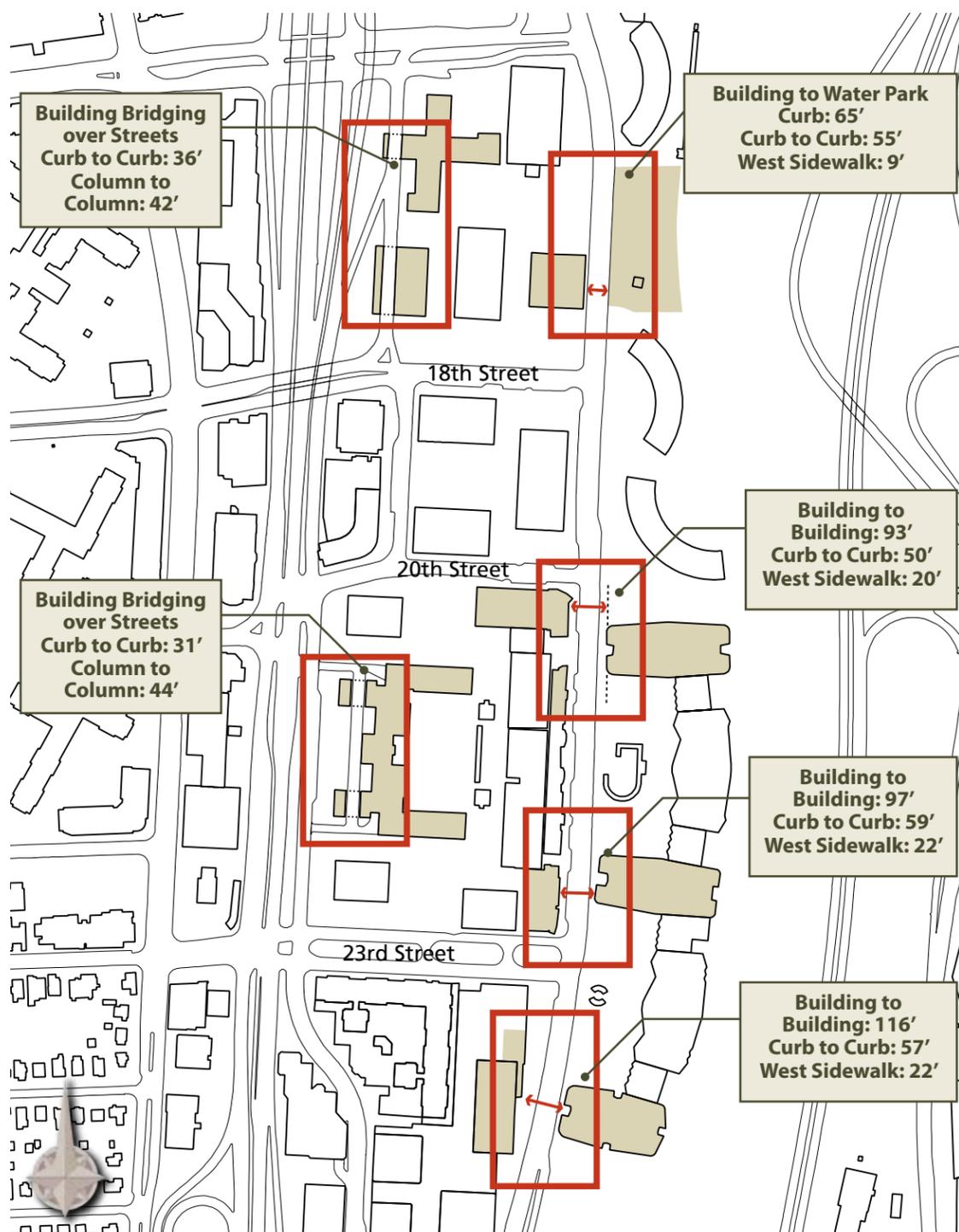


Figure 3.6.9

The availability of transit options in 2007 allowed for an observed modal split of approximately 40% transit to 60% auto use. With the introduction of the surface transitway and a greater balance of residential to commercial uses, this modal split is anticipated to increase to a 50% transit to auto use within the planning period. Opportunities for new or expanded bus routes to help support this modal split will be examined on an ongoing basis. The MTP-Transit Element identifies priority corridors for improving bus transit service, which included the current Jefferson Davis Highway and S. Glebe Road corridors. Additionally, the County will continue to work with WMATA on a regular basis to analyze effectiveness of existing bus service and opportunities for upgraded or streamlined service.



Pinch Point on Crystal Drive



Pinch Point at S Clark Street and 18th Street

Pinch Points Diagram - Figure 3.6.10

The Pinch Points Diagram identifies existing conditions that limit street reconfiguration options due to the narrowing of streets between existing buildings, conditions likely to persist throughout the planning period. These points are narrower than the optimal street right-of-way widths, however study of the Illustrative Concept Plan demonstrates that sufficient dimension exists at these points to accommodate the desired street configuration and program, provided sidewalks or other street elements are adjusted down in width to the lower range of acceptable widths. See Section 3.6.9 and Section 3.11.5 for more information.

TRANSIT AND WALKABLE COMMUNITIES

Transit systems, and particularly a streetcar system as proposed for the Crystal City Transitway, are very effective as a means to connect and shape neighborhoods. They connect neighborhoods by linking activities and destinations to a greater regional transit network. They shape neighborhoods by stimulating redevelopment, supporting active uses, promoting public-private investments, and creating places where people want to be. Ultimately any transit mode should support the pedestrian experience and create great and interesting walkable places.



Streetcar - Toronto, CA

Walkability is the key to any neighborhood's transportation network. The creation of a walkable community provides the most affordable transportation system any community can plan, design, construct, and maintain. Walkable communities lead to more social interaction, greater physical fitness, and lower crime rates. Such communities allow greater mobility for those who might have limited access to auto transportation, such as children and seniors. Through the development of walkable communities with transit options, neighborhoods become more livable places. This in turn promotes a better quality of life for the people who live, work, shop, and play within these communities.

The goal of a walkable community is to give people a range of transportation choices and encourage them to select the mode that makes the most sense for any given trip. According to a Portland, Oregon study, done by Parsons Brinckerhoff Quade and Douglas, with Cambridge Systematics and Calthorpe Associates in 1993, people who live in pedestrian-friendly neighborhoods:

- Make four times as many walking and biking trips;
- Make three times as many transit trips;



Bicycle Rental - Barcelona, ES

- Take fewer car trips; and
- Drive fewer miles every day.

The transportation choices people make every day have a direct impact on the shape of our neighborhoods, and the impact our actions have on the environment and the preservation of natural systems.

POLICY

- T 1** Address and manage the Crystal City multimodal transportation system to accommodate future planned growth in the area. Ensure that such system meets the needs of residents to travel from Crystal City for work, pleasure, and other reasons; that individuals working but not residing in Crystal City can easily and economically travel to Crystal City via transit, pedestrian and bicycle thoroughfares, and other transportation modes; and that others can also easily access Crystal City for business, visiting residents, entertainment, recreation, shopping, etc.
- T 8** Implement the proposed alignment and enhanced surface transit technology (streetcar), as shown on the Surface Transitway Map, and design stations as integral elements of the built environment.
- T 9** Establish additional access points to the Crystal City Metro Station in the vicinity of the Crystal Drive and 18th Street intersection.

3.6.6 PROPOSED TRANSITWAY

The addition of a dedicated surface transitway to Crystal City's existing system of transportation options is a critical public infrastructure component of the plan. Figure 3.6.11 illustrates the proposed surface transitway configuration consistent with the vision, goals and objectives of the plan that will include streetcars or trolleys as the vehicular mode. While the plan envisions the system running within dedicated lanes, sharing lanes with traffic in select locations is also technologically feasible if circumstances warrant and permit such a traffic pattern. The proposed transitway's energy needs should be incorporated into the recommended district energy scale project feasibility study. Further study during the implementation phase of the planning process will address these issues.

The recommended transitway alignment, shown in Figure 3.6.11, is described as a "couplet" alignment, where northbound and southbound lines are split between Clark-Bell Street and Crystal Drive. Both lines would follow Crystal Drive south of the 26th Street viaduct, then split to the north, and rejoin

at the intersection of Clark-Bell and 12th Streets. Between 12th and 26th Streets, several options are proposed for where the south-bound line might connect from Clark-Bell Street to Crystal Drive: 18th Street, 23rd Street, and 26th Street. These options are provided to assist interim phasing as permitted with redevelopment, with a final cross-over alignment proposed at 26th Street.



Streetcar - Houston, TX



Streetcar - Portland, OR

SURFACE TRANSITWAY MAP

Figure 3.6.11



LEGEND	
	PROPOSED NEAR-TERM TRANSITWAY ALIGNMENT
	PROPOSED MID-TERM TRANSITWAY ALIGNMENT
	PROPOSED LONG-TERM TRANSITWAY ALIGNMENT
	METRO LINE
	VRE
	PROPOSED TRANSIT STOP
	EXISTING METRO STATION ENTRANCE
	POTENTIAL SECOND ENTRANCE TO METRO
	0 500 1000

POLICY

T 10 Create a multi-modal transfer area in the short-term on 18th Street under Jefferson Davis Highway, while working to integrate long-term future development adjacent to the existing Metro Station entrance with an enhanced multi-modal transfer facility situated at the ground floor.

3.6.7 PROPOSED MULTI-MODAL TRANSFER FACILITY

Connectivity to public transportation is one of Crystal City's most important assets. No place in Crystal City better represents this value than the Metro Station entrance at the corner of 18th and S. Clark Streets. With direct connection to the Crystal City Underground, a bus transfer-station situated curbside at the surface entrance, and the VRE station one block away, the blocks immediately adjacent to this site currently possess the highest transit mode split in Crystal City, approaching 50%¹.

The addition of the surface transitway will create the potential to expand this high transit mode split to additional blocks surrounding the Metro Station, increasing the prominence of this transit node in the Jefferson Davis Corridor. Furthermore, the creation of the Metro Market Square in the Concept Plan at this location is intended to raise the visibility and stature of this important transportation node (see Figure 3.6.12).

An important recommendation of the Crystal City Multimodal Transportation Study was the creation of a multi-modal transportation facility at this location. As proposed in the Master Plan, this facility would elevate the visibility of public transportation options available in Crystal City, and improve the functionality, ease of use, and quality of the experience for public transportation in Crystal City.

A concept plan for the multi-modal transportation facility is provided in Figure 3.6.13. This facility would unite and coordinate access among Metrorail, the surface transitway, Bus, VRE, and ride-sharing within a single facility. Redevelopment on the block north of 18th Street between the current Jefferson Davis Highway and Crystal Drive will provide an opportunity to build the proposed alignment of Clark-Bell Street, implement the transitway and station, and construct the

proposed structures on the recovered land between Jefferson Davis Boulevard and Clark-Bell Street. The concept plan for the facility envisions a bus transfer station located in the podium of the new building erected on the northwest corner of 18th and Clark-Bell Streets, which would also incorporate the surface entrance to the Metro Station. The south-bound transitway, aligned to the west side of Clark-Bell Street, would provide a stop in front of the facility, allowing easy transfer to Metro subway and bus service. Ride-share pick-up and drop-off sites would be provided adjacent to the facility. Bicycle racks and locker storage could also be provided at the facility.

Consistent with the concept for this area as a vibrant retail center, the multi-modal transportation facility includes a lining of retail shops along Clark-Bell Street, taking full advantage of the high-volume of pedestrian foot-traffic that will occur. The provision of street-level retail will raise the experiential quality of utilizing public transportation at this facility, encouraging more use by workers, visitors, and residents.

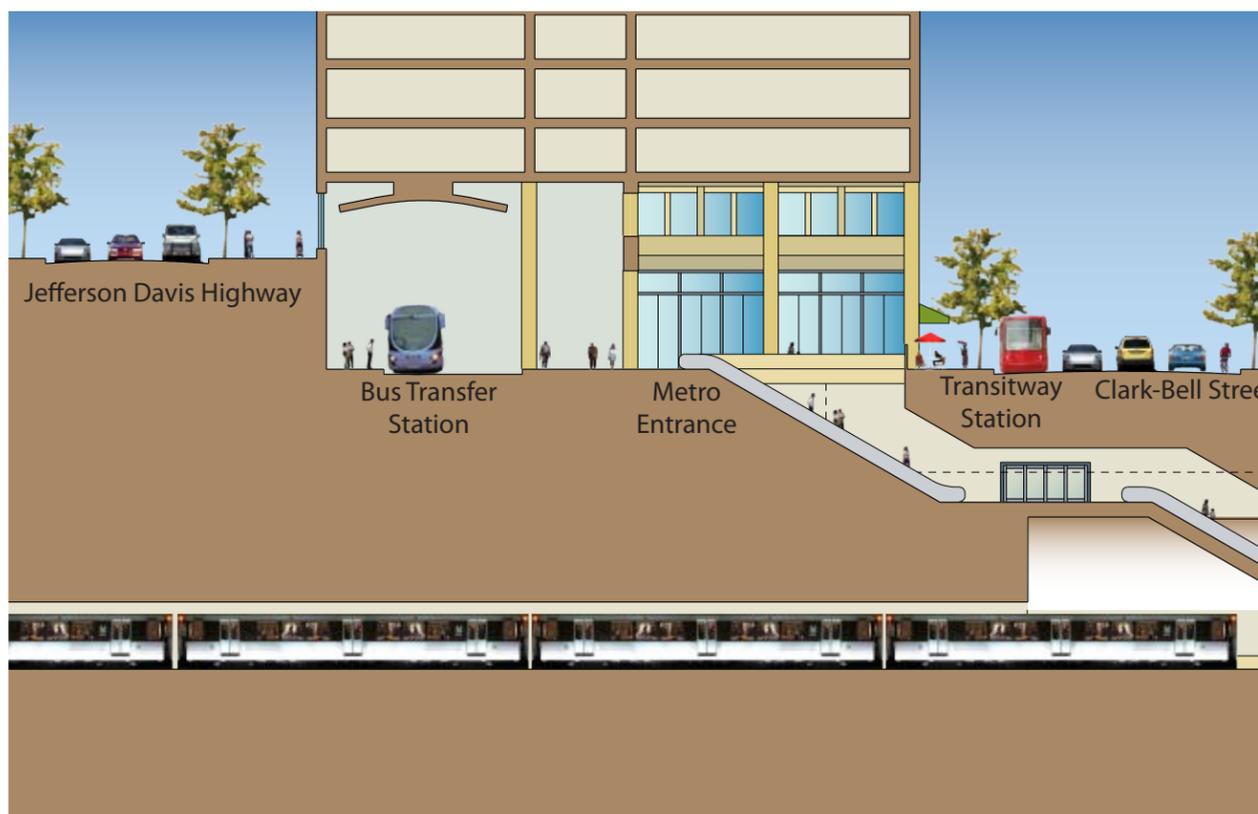
Utilizing the Metro's entrance access to the Crystal City Underground, the facility would readily tie into the pedestrian concourse system, providing weather-protected access throughout Crystal City. The addition of a second Metro entrance on Crystal Drive would improve access to the pedestrian concourse system, VRE and the multi-modal transportation facility. Improvements to the VRE station might include a below-grade pedestrian connection under Crystal Drive to the Underground and Metro, providing a complete, weather-protected connection to the VRE from the multi-modal transportation facility. Figure 3.6.14 shows the conceptual, cross-sectional relationships between the various modes of transit tied together by this facility.

During construction of the new facility, the existing bus transfer station can be relocated to 18th Street, below the Route 1 overpass. This will facilitate continued transfer between bus and subway service during the construction period.

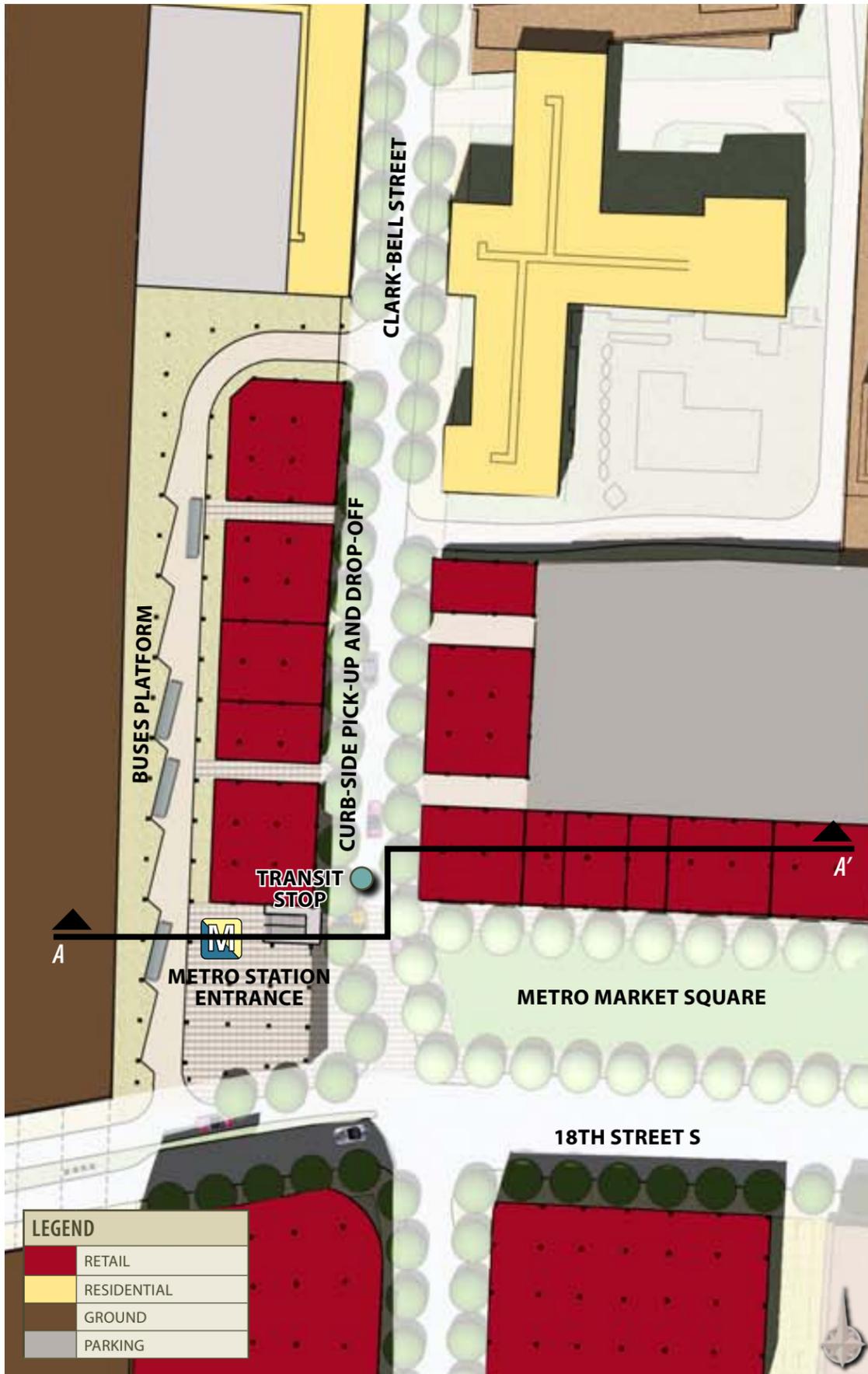


Key Plan - Figure 3.6.12

¹ Crystal City Multimodal Transportation Study, Arlington County Division of Transportation, October 2009, pp. 19-20.



Multi-Modal Transfer Facility - Proposed Section A-A' - Figure 3.6.14



Existing Metro Entrance

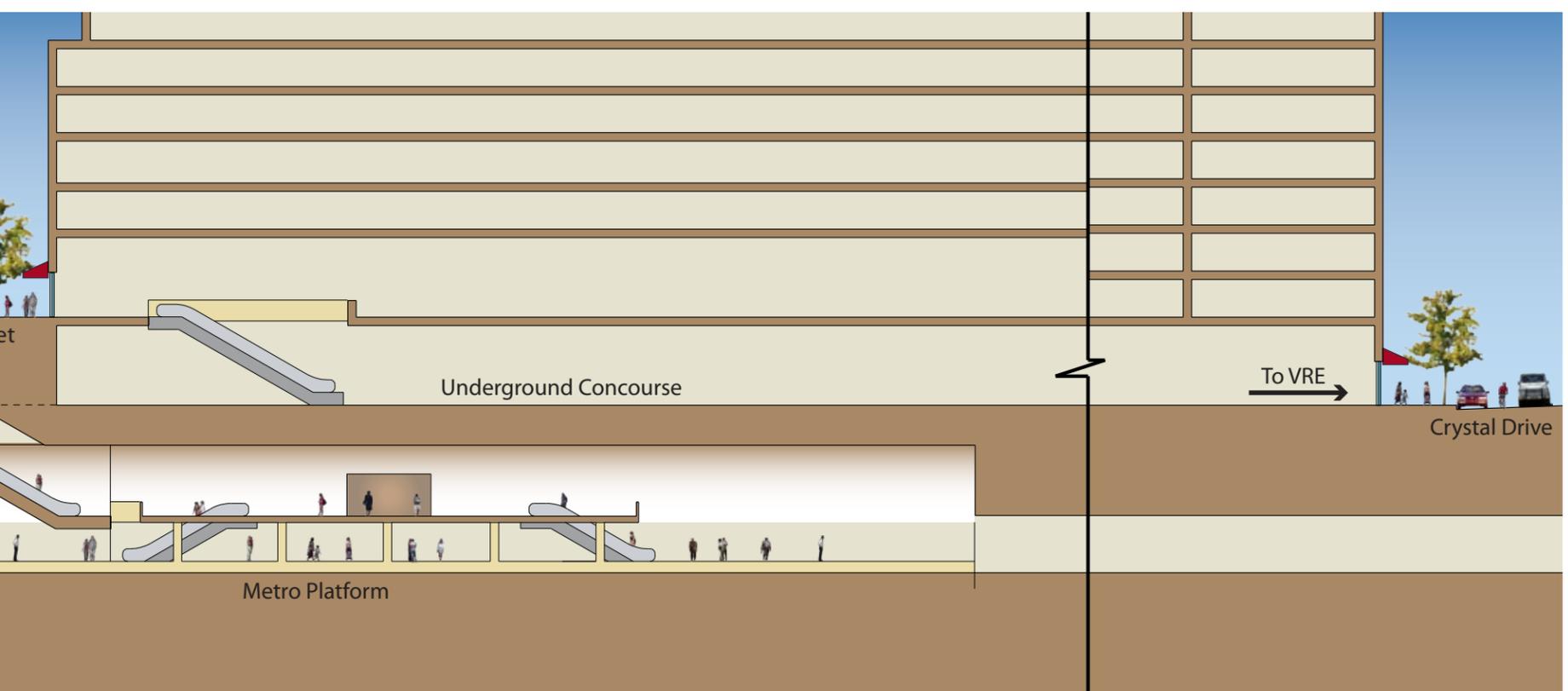


Existing Bus Stop



Existing Bus Stop

Proposed Multi-Modal Station - Figure 3.6.13



3.6.8 STREET CONFIGURATION AND NETWORK



Aerial View to the North

Streets are an important component of the public realm, both in terms of their transportation function and urban character. Roadbeds must be configured and sized to accommodate travel lanes for various vehicular modes (cars, buses, streetcars, bicycles), and provide parking lanes where feasible. The recommended number of travel lanes for a particular street is informed by the traffic load studies examined in the supporting Multimodal Transportation Study. Sidewalk widths must be similarly sized to accommodate anticipated pedestrian volumes, as well as furnishing and landscaping objectives. Additional decisions must be made on the need or desirability of medians, intersection bulb-outs, and other street elements.

The diagrams provided in this section illustrate how the various components that comprise a street can typically be accommodated within the rights-of-way (ROWs) specified in the Build-to Lines Map (Figure 3.5.3, p. 47). Although specified right-of-way widths are intended to apply uniformly along a street, some existing structures may encroach into proposed rights-of-way, as has been documented in the Pinch-Points Diagram, Figure 3.6.10 (p. 55). The dimensions for street elements shown in the street-section diagrams represent a typical condition selected along a street's course,

providing guidance on the design intent for that street. Each street configuration has been reviewed along its entire course where the specified right-of-way width applies, to ensure that encroachments and/or pinch points can be reasonably accommodated. For example, minor adjustments in the width of sidewalks or medians, or whether parking is allowed on one or both sides of the street, can provide sufficient flexibility to accommodate these encroachments. Should encroaching buildings be replaced in the future, successor structures respecting the Build-to Lines should require only minor reconfiguration of curbs and sidewalks along their frontage to achieve the desired street section.

Each typical street configuration is documented with a section dimensioning each component, a corresponding plan, and a three-dimensional representation. Key plans are provided on each page indicating which segment of a given street is addressed, with the understanding that the segment best represents a typical condition along that street and final details may vary. Finally, the conditions shown in these sections should be understood as general guidelines for typical conditions, which are subject to further and more specific refinement during future PDSP and Final Site Plan review processes.

3.6.9 STREET-BY-STREET RECOMMENDATIONS

CRYSTAL DRIVE

Crystal Drive will be a retail-oriented mixed-use arterial street (Type A per the County Master Transportation Plan classification) providing north-south connectivity. Crystal Drive will become two-way entirely from 12th to 27th Streets. Crystal Drive will also include part of the surface transitway alignment. The proposed transitway would run in a dedicated northbound lane on Crystal Drive from 26th to 12th Streets, with occasional stops. The southbound alignment is ultimately envisioned on Clark-Bell Street between 12th and 26th Streets. However, as an interim condition, southbound transitway vehicles may run in mixed traffic along portions of Crystal Drive until Clark-Bell Street is fully realigned.

CLARK-BELL STREET

Clark-Bell Street will be significantly reconfigured as an urban mixed-use arterial street (Type B) offering north-south connectivity. Removing elevated portions of the street and providing greater distance from Jefferson Davis Boulevard at critical locations will establish a more regular street grid and create new development sites. The street will provide for two-way travel. New

buildings along the west side of the street will better frame both Clark-Bell Street and Jefferson Davis Boulevard. As mentioned above, the southbound alignment of the surface transitway is ultimately envisioned on Clark-Bell Street north of 26th Street, but will likely be phased in over time as the street is reconfigured in stages.

JEFFERSON DAVIS HIGHWAY

Jefferson Davis Highway will become an attractive urban boulevard and unifying element of Crystal City. The laneage and capacity of this regional connector (Type F) roadway will be maintained, but not expanded. Its environment will be improved with new buildings and streetscapes that address the street. In Crystal City, Jefferson Davis Boulevard will generally have 140' to 160' between building faces. Grade separations at 12th, 15th, and 18th Streets will remain, although the plan includes a reconfigured, more urban interchange at 15th Street. Between 20th and 26th Streets the street would remain at grade, and south of 26th Street traffic would be trenched under a newly created National Circle, with service roadways that provide access to the airport with ramps connecting to the roadway's through travel lanes. The design and operations of the circle must continue to accommodate commercial vehicle access to and from the airport, as this its only permitted access point.

EADS STREET

Eads Street will be an urban mixed-use arterial street (Type B) paralleling Jefferson Davis Boulevard. North of 23rd Street, the proposed 110' between building faces provides space for a parking lane, bicycle lane, and two travel lanes on each side of the street, with sidewalks nearly 20' wide and left turn lanes at major intersections. South of 23rd Street, improved sidewalk widths should be achieved with redevelopment. The existing center medians will be retained.

FERN STREET

Fern Street will continue to be classified as an urban mixed-use arterial street (Type B) north of 18th Street. Between 18th and 24th Streets, Fern Street is envisioned as a neighborhood minor street.

BALL STREET

This new segment of Ball Street will be created to connect 10th and 12th Streets in Crystal City's north end, to improve access and loading for development in this area. The creation of this street is envisioned to be achieved in concert with the planned new development on the north side of 12th Street, and the design of its cross-section will be for a low speed and low volume local residential and access street. This new street would also have adequate sidewalks in the design linking a clear path for these new residents to the rest of Crystal City and the Metro/VRE station. The curb-to-curb width will vary depending on whether the design includes on-street parking lanes, with a goal of minimizing the amount of pavement and maximizing street trees.

12TH STREET

12th Street will be an urban mixed-use arterial street (Type B) connecting Crystal City and Pentagon City. 12th Street will also

accommodate two-way travel for its entire length, with 100' between building faces. 12th Street also includes the alignment of the surface transitway. On-street parking will occur where right-of-way widths permit. East of Clark-Bell Street, a new connection to 10th Street is identified to strengthen the urban grid in this area.

15TH STREET

15th Street will be a retail-oriented mixed-use arterial street (Type A) east of Eads Street and an urban mixed-use arterial street (Type B) west of Eads Street. East of Jefferson Davis Boulevard, its alignment is simplified, with two one-way travel ways enclosing a new concourse park east of Clark-Bell Street. With 15th Street connecting to Pentagon City, opportunities for ground floor retail should be encouraged to strengthen this linkage. In later phases, the plan envisions a major reconfiguration of the 15th Street / Jefferson Davis Boulevard interchange. Depending on timing, alignment, and available resources, other, lower-cost alternatives to achieving similar ends could be explored (such as tucking the existing out-board ramps closer to the through lanes) that would still create new development sites.

18TH STREET

18th Street will be a retail-oriented mixed-use arterial street (Type A) east of Eads Street and urban mixed-use arterial street (Type B) west of Eads Street, again connecting to Pentagon City. While its alignment would stay the same, the space within 18th Street would be reallocated somewhat within its 110' width. The north edge of 18th Street will border a new Metro Market Plaza open space between Clark-Bell Street and Crystal Drive, with ground floor retail uses strengthening the pedestrian oriented focus of this area. The 110' dimension would provide sufficient space for a wide sidewalk, parking lane, bicycle lane, and two travel lanes in each direction.

20TH STREET

20th Street will be a retail-oriented mixed-use arterial street (Type A) that connects Crystal Drive with Eads Street, crossing Jefferson Davis Boulevard at grade. Its alignment would generally remain the same. 20th Street will be an important entry point into the heart of Crystal City given its adjacency and orientation to the new Center Park. 20th Street will generally have a right-of-way dimension of 100' between building faces. This dimension provides sufficient space for two travel lanes and one parking lane in each direction, and wide sidewalks. 20th Street is also envisioned as a lively retail street, an expansion of the Crystal Drive and Underground retail nearby.

22ND STREET

22nd Street will remain a neighborhood minor street that connects Eads and Fern Streets. As a local street, 22nd Street will primarily provide local access to adjacent properties, with on-street parking and adequate sidewalks. The 80' dimension between building faces would be allocated to achieve the optimal cross-section to achieve these goals.

23RD STREET

In Crystal City 23rd Street will be a retail-oriented mixed-use arterial street (Type A).

East of Jefferson Davis Boulevard, the roadway will be reconfigured by removing the center median and accommodating two-way travel in the southern half of the existing right-of-way. The realignment of Clark-Bell Street and new intersection with 23rd Street will simplify the intersection with Jefferson Davis Boulevard, improving its overall performance. These changes will also help create a new 23rd Street market plaza and pocket park at the northwest corner of the Crystal Drive and 23rd Street. Ground floor retail will expand upon the strong retail presence already in the area. The general guidance for the 23rd Street cross-section includes a building face to building face dimension of 110'. This dimension would provide sufficient space for a wide sidewalk, parking lane, bicycle lane, and two travel lanes in each direction.

25TH STREET

25th Street is a proposed new street between Crystal Drive and Jefferson Davis Boulevard splitting the block south of 23rd Street. With an 80' dimension between building faces, the proposed street has an urban center local designation, and would strengthen access into and connectivity through this large block. The roadway terminates at Crystal Drive directly across from a reconfigured and enhanced Crystal Park. The street also provides access to a new urban plaza at the northeast corner of its intersection with Clark-Bell Street.

26TH STREET

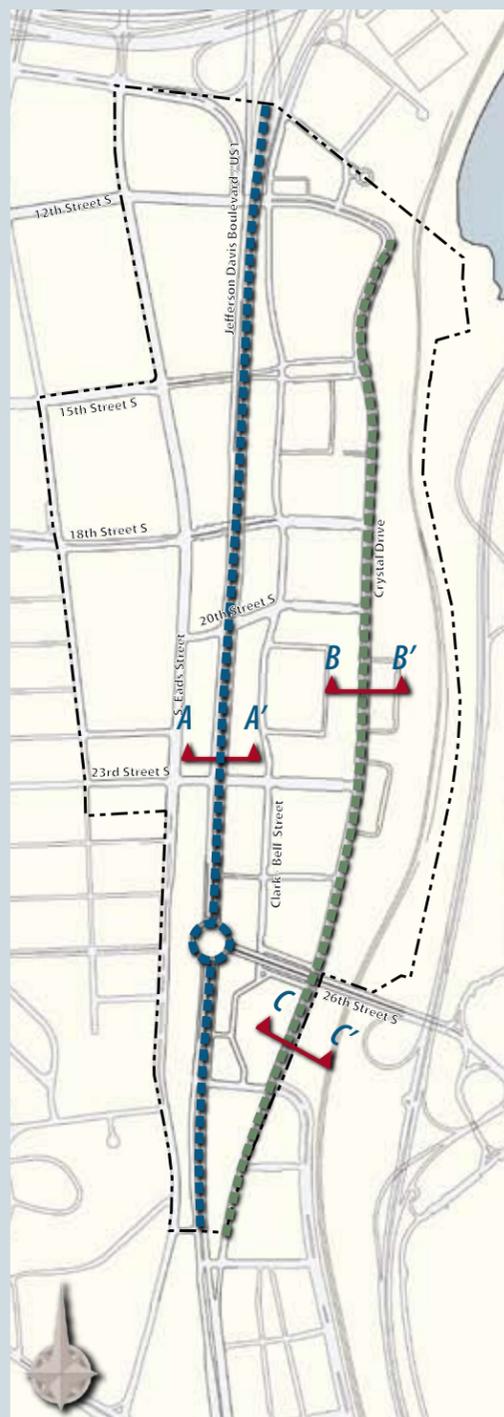
26th Street will continue to provide ground level connectivity north and south of the airport access road. As an urban mixed-use arterial street (Type B), 26th Street north of the viaduct will accommodate two-way traffic between Crystal Drive and Clark-Bell Street, providing the ultimate cross-over location for the surface transitway, once Clark-Bell is realigned through this block. With 70' between the building face and airport access road, adequate dimensions are provided for 13.5' sidewalks, a 12' travel transit lane, a travel lane in each direction, and on-street parking along the north edge of the street.

Also a Type B street, 26th Street south of the airport access road will be a particularly important street segment if the future National Circle and airport access road project is engineered to preclude the continuation of Clark-Bell Street under the access road. This segment would continue to provide access into the block from Crystal Drive as it does today.

27TH STREET

27th Street will be an urban mixed-use arterial street (Type B) between Potomac Avenue and Jefferson Davis Boulevard. Beyond minor street realignments, this street will be converted to two-way travel. The street space would be allocated to achieve desired transportation facilities within the 80' dimension between building faces.

The cross sections illustrated herein generally communicate the ultimate recommended conditions, and interim conditions not shown herein may apply on a temporary basis as dictated by project phasing.



Key Plan - Figure 3.6.15

A-A' - JEFFERSON DAVIS BLVD AT 23RD STREETS S

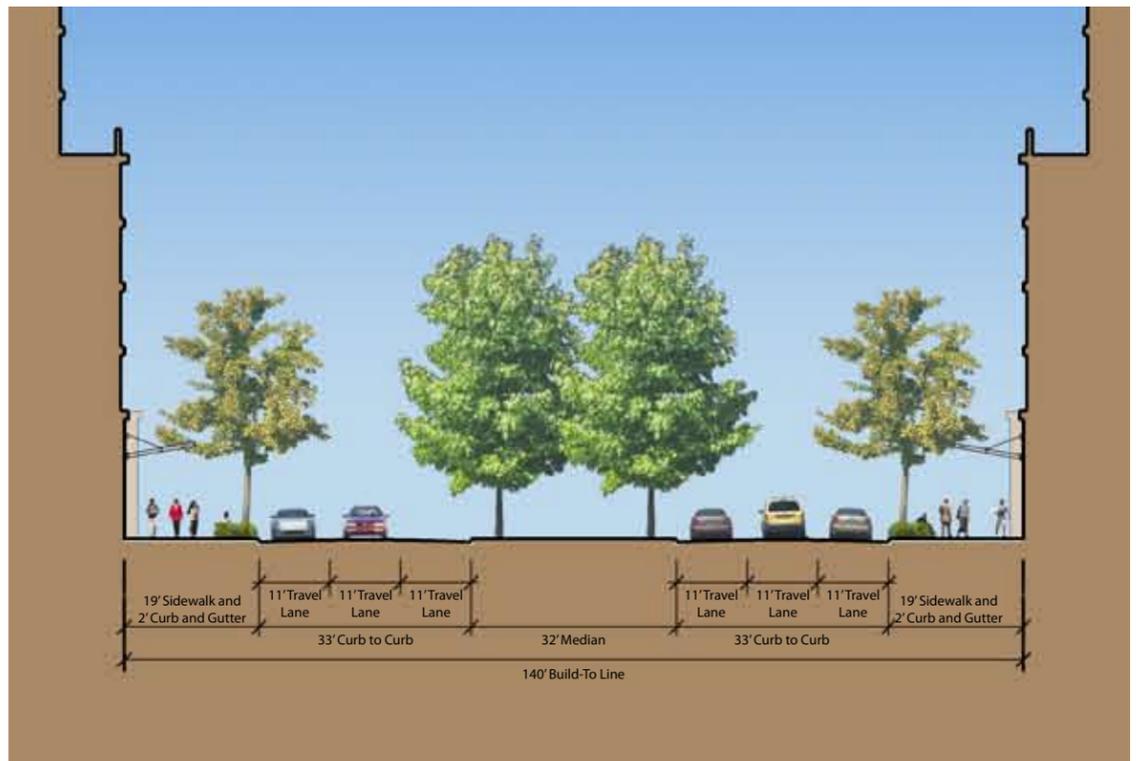
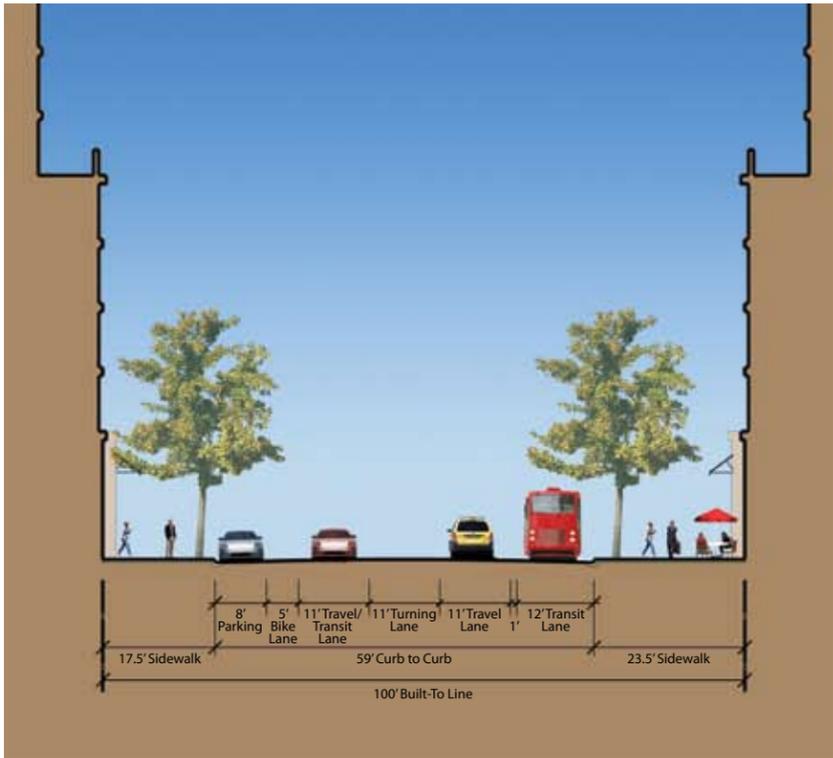


Figure 3.6.16

B-B' - CRYSTAL DRIVE - NORTH OF 23RD STREET S



C-C' - CRYSTAL DRIVE - SOUTH OF 26TH STREET S

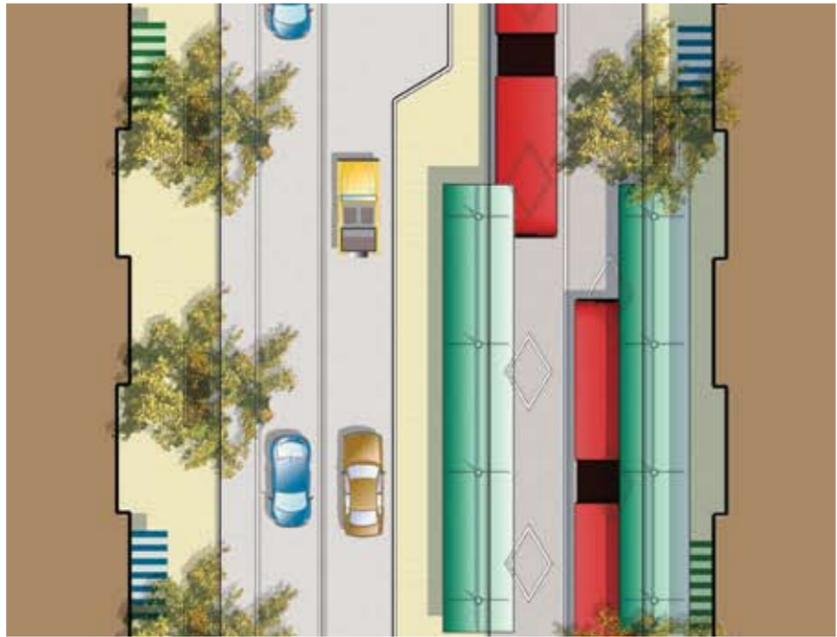
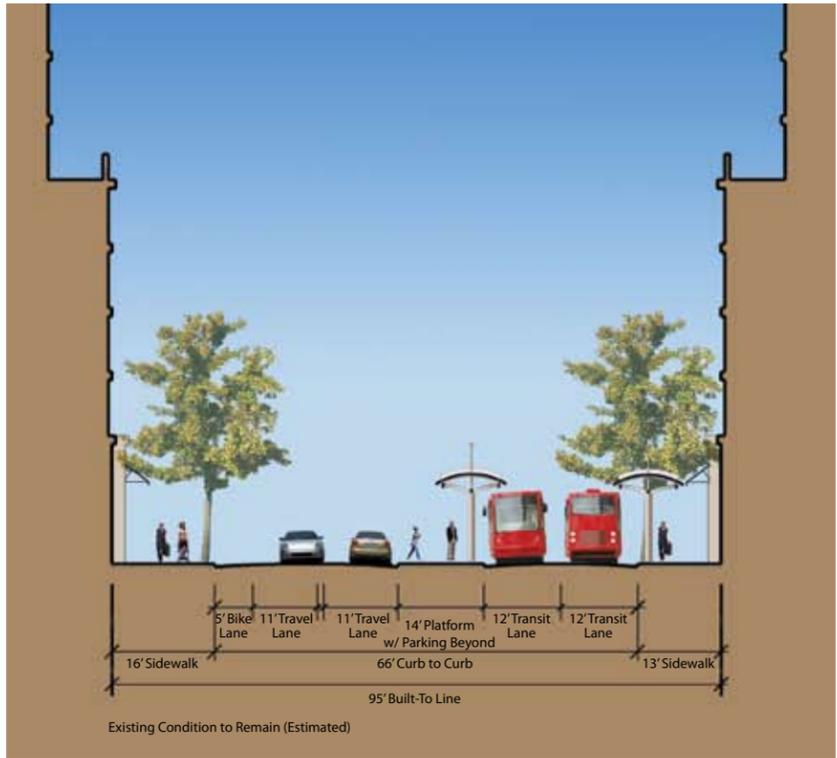
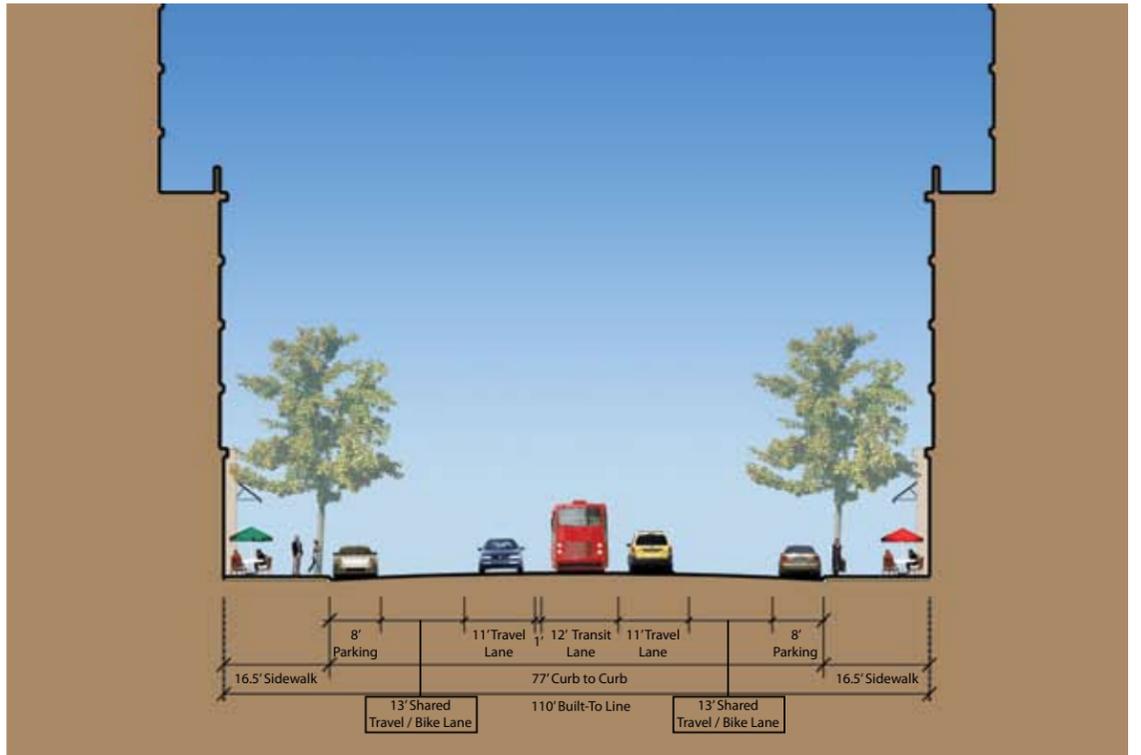


Figure 3.6.17

Figure 3.6.18

D-D' - 23RD STREETS S

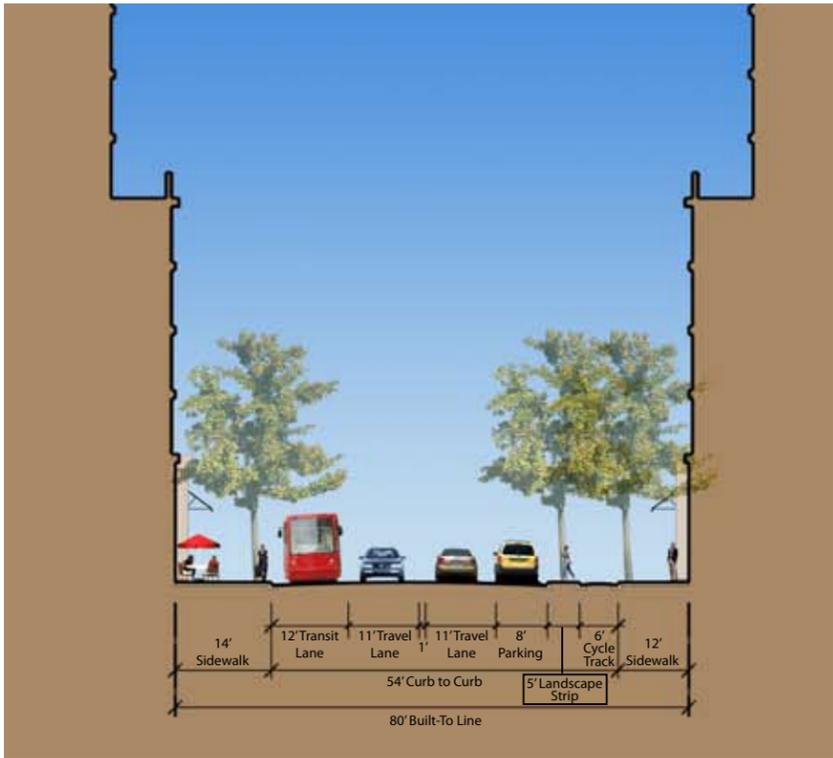


Key Plan - Figure 3.6.19



Figure 3.6.20

E-E' - CLARK - BELL STREET



E-E' - CLARK - BELL STREET ALTERNATE

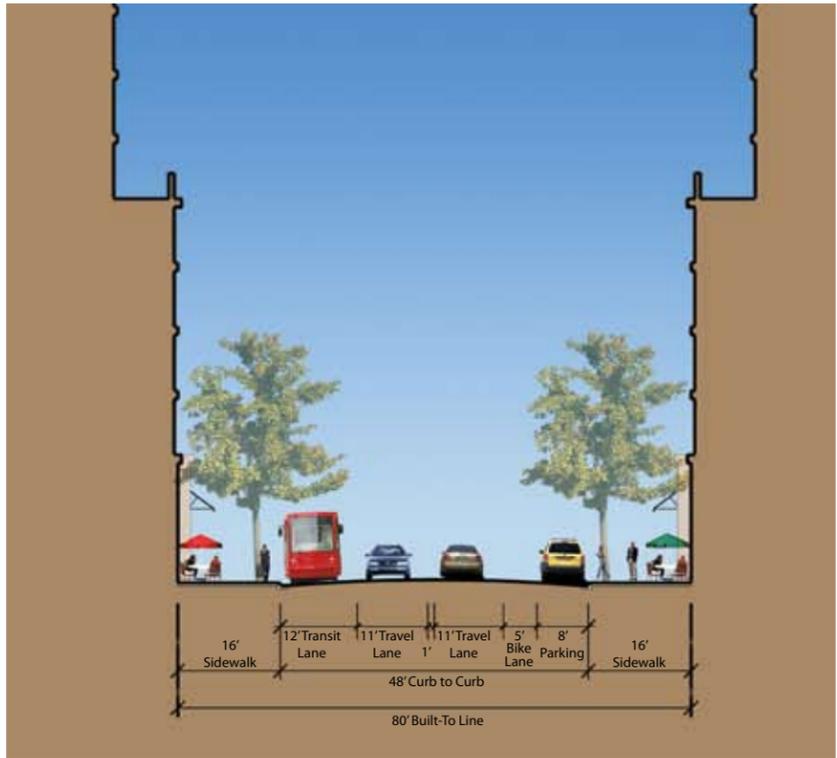


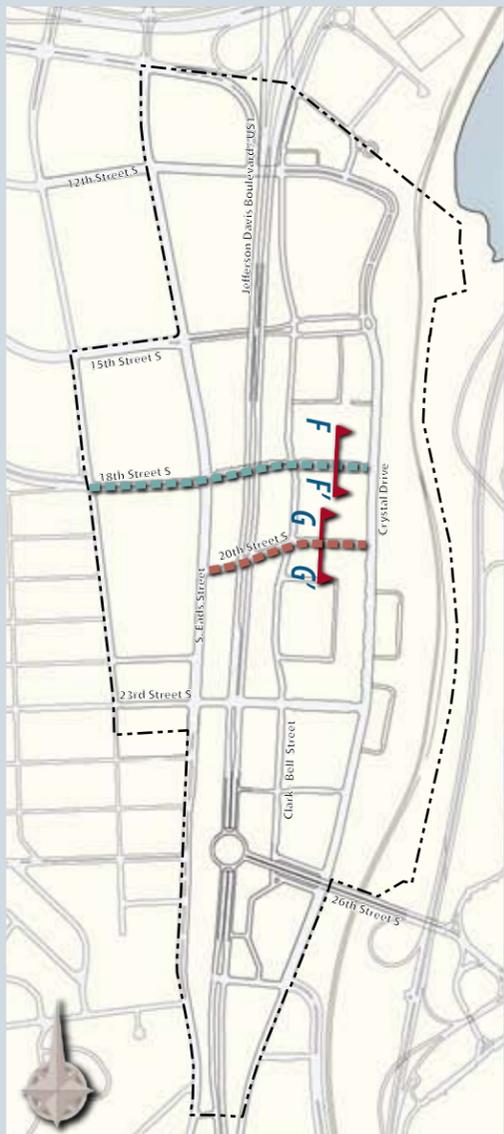
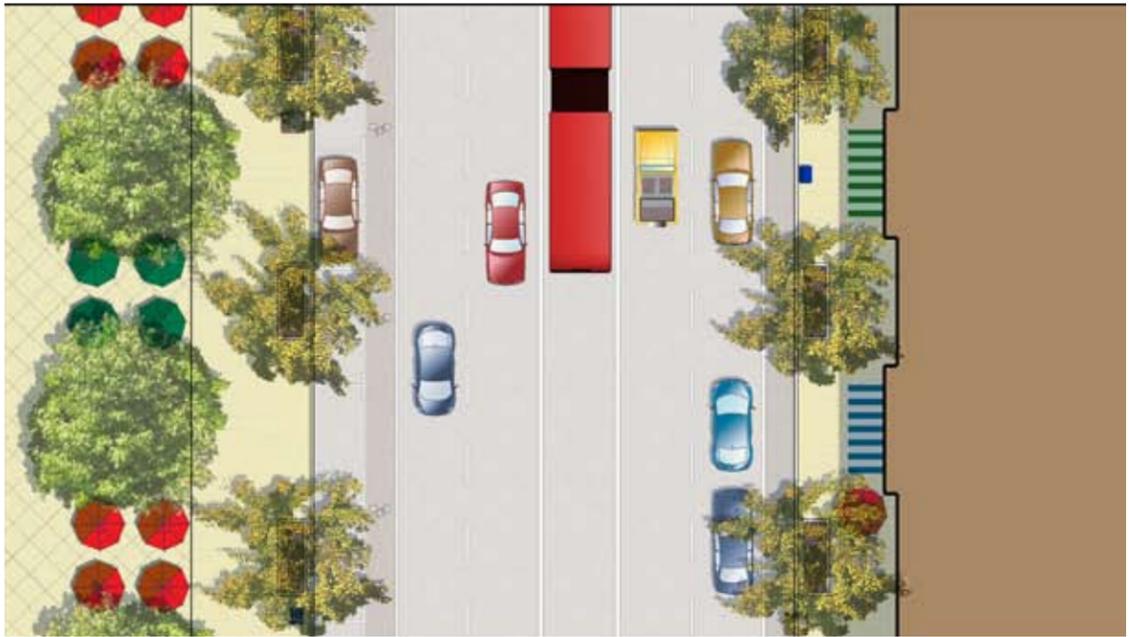
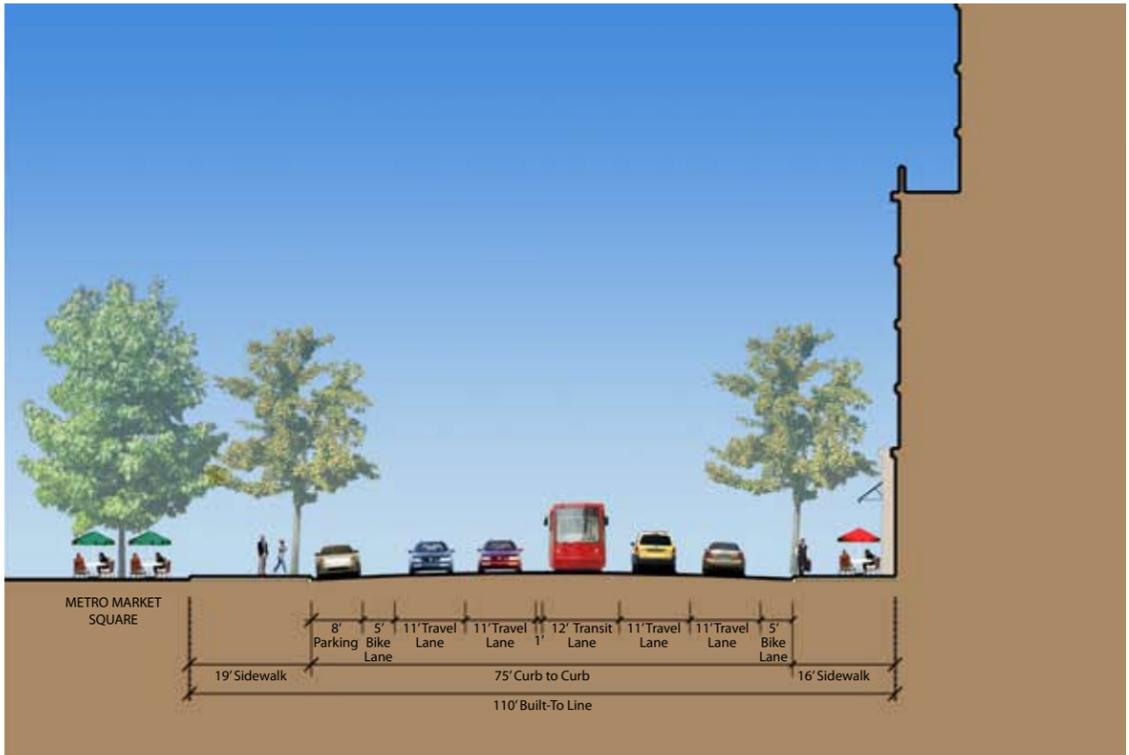
Figure 3.6.21

Figure 3.6.22

**“IN A QUALITY CITY,
A PERSON SHOULD
BE ABLE TO LIVE
THEIR ENTIRE LIFE
WITHOUT A CAR,
AND NOT FEEL
DEPRIVED”.**

**PAUL BEDFORD
CANADIAN CITY PLANNER**

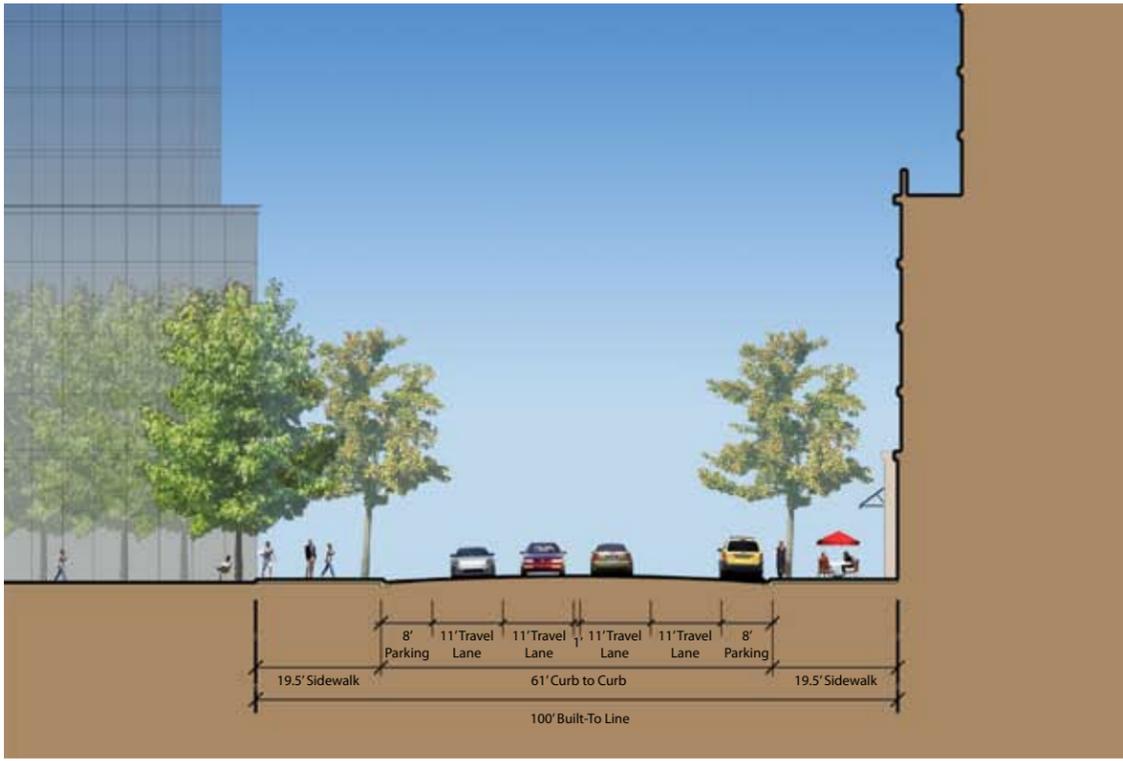
F-F' - 18TH STREETS S



Key Plan - Figure 3.6.23

Figure 3.6.24

G-G' - 20TH STREET S



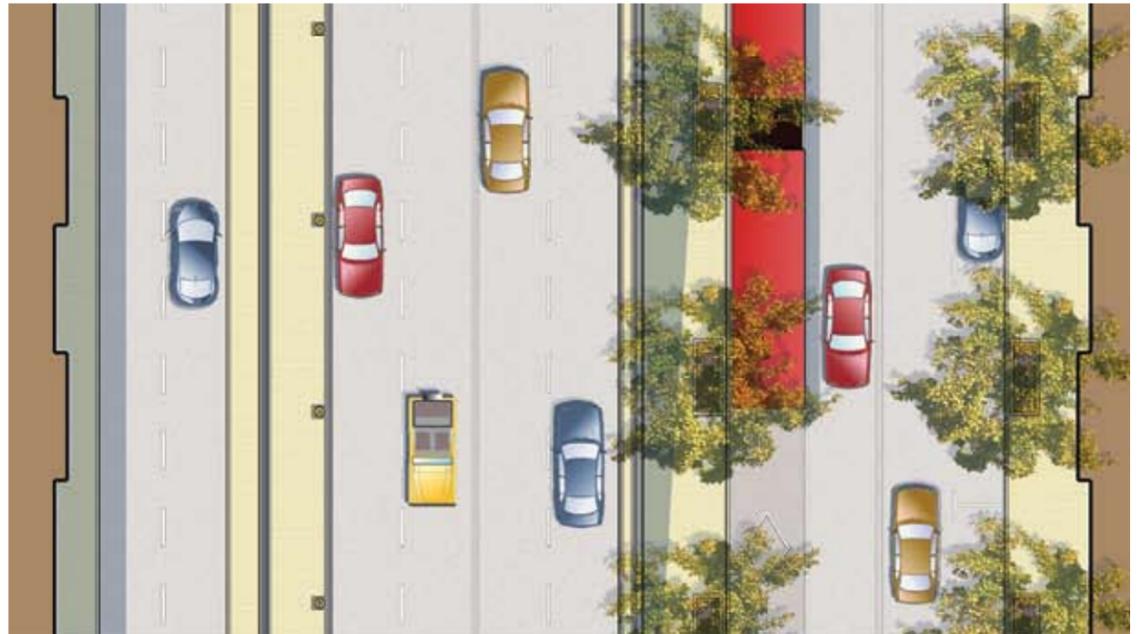
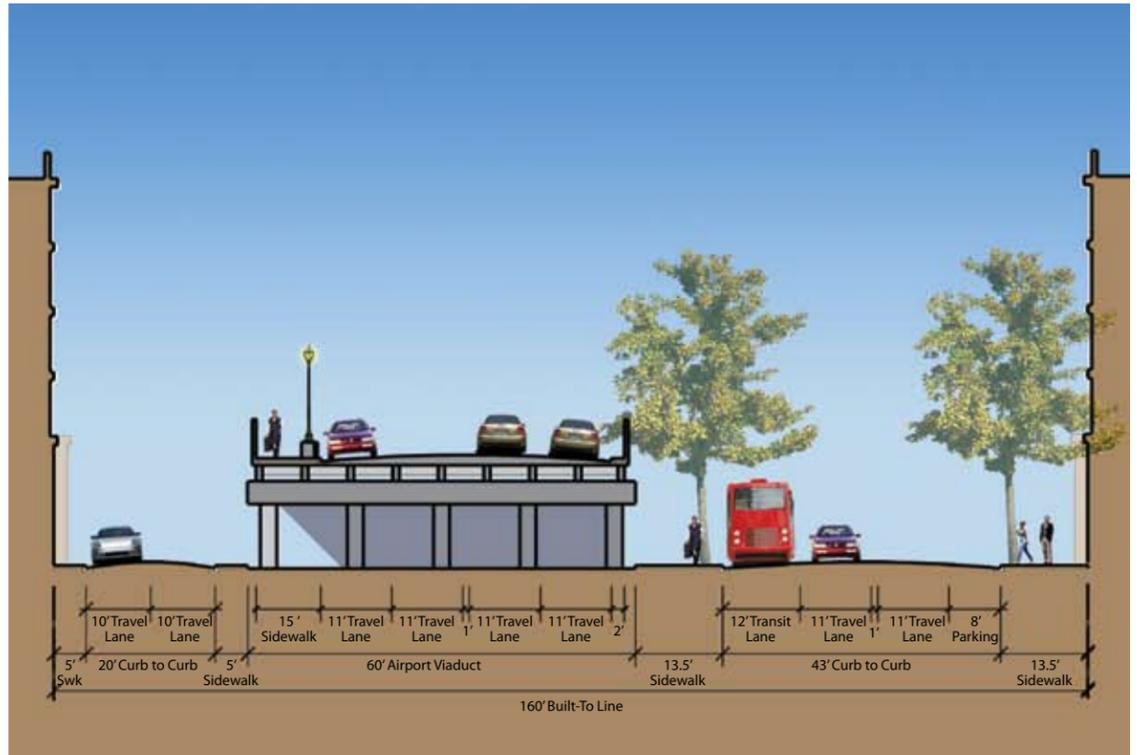
Existing 20th Street Configuration



Existing 20th Street Configuration

Figure 3.6.25

H-H' - 26TH STREETS S



Key Plan - Figure 3.6.26



Figure 3.6.27

I-I' - 15TH STREET S

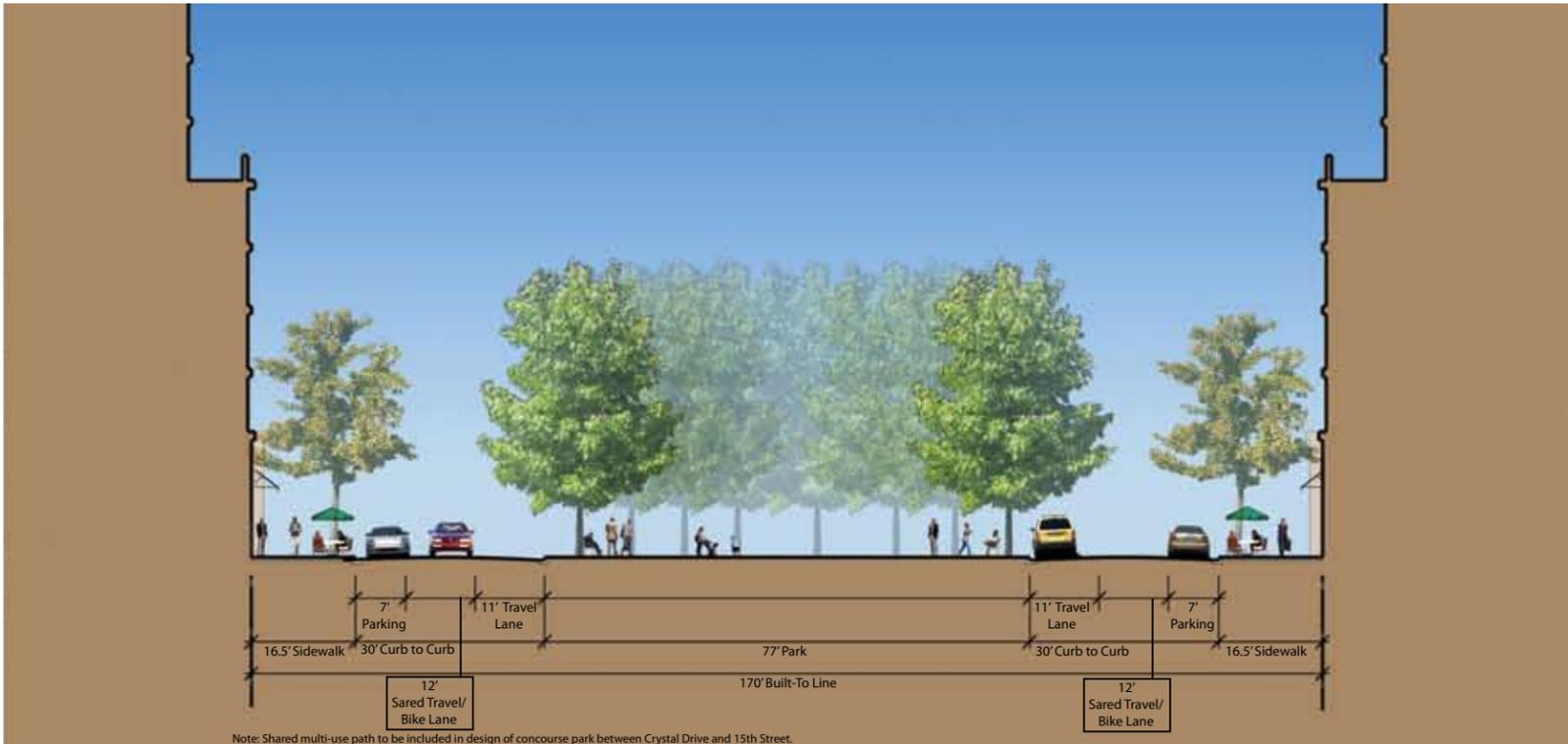
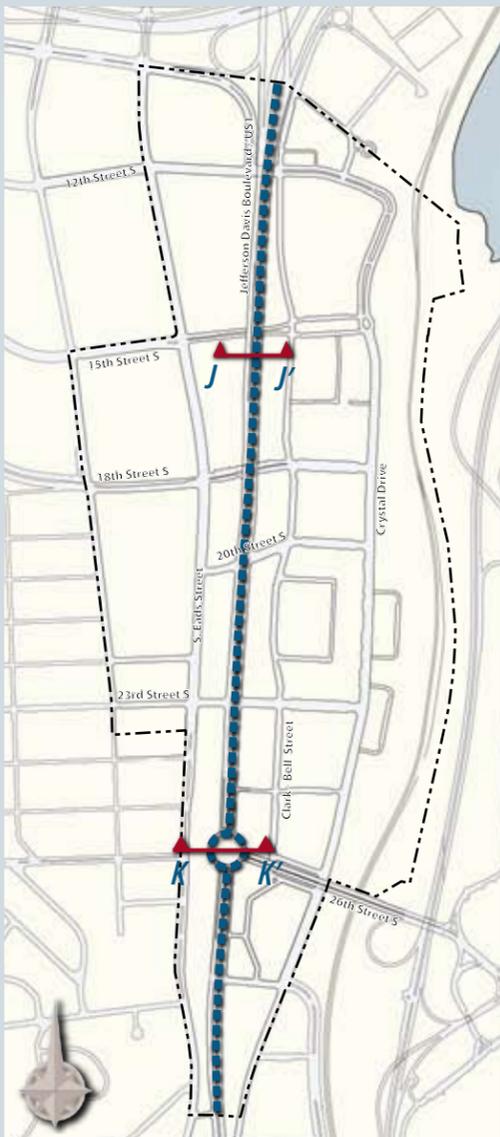
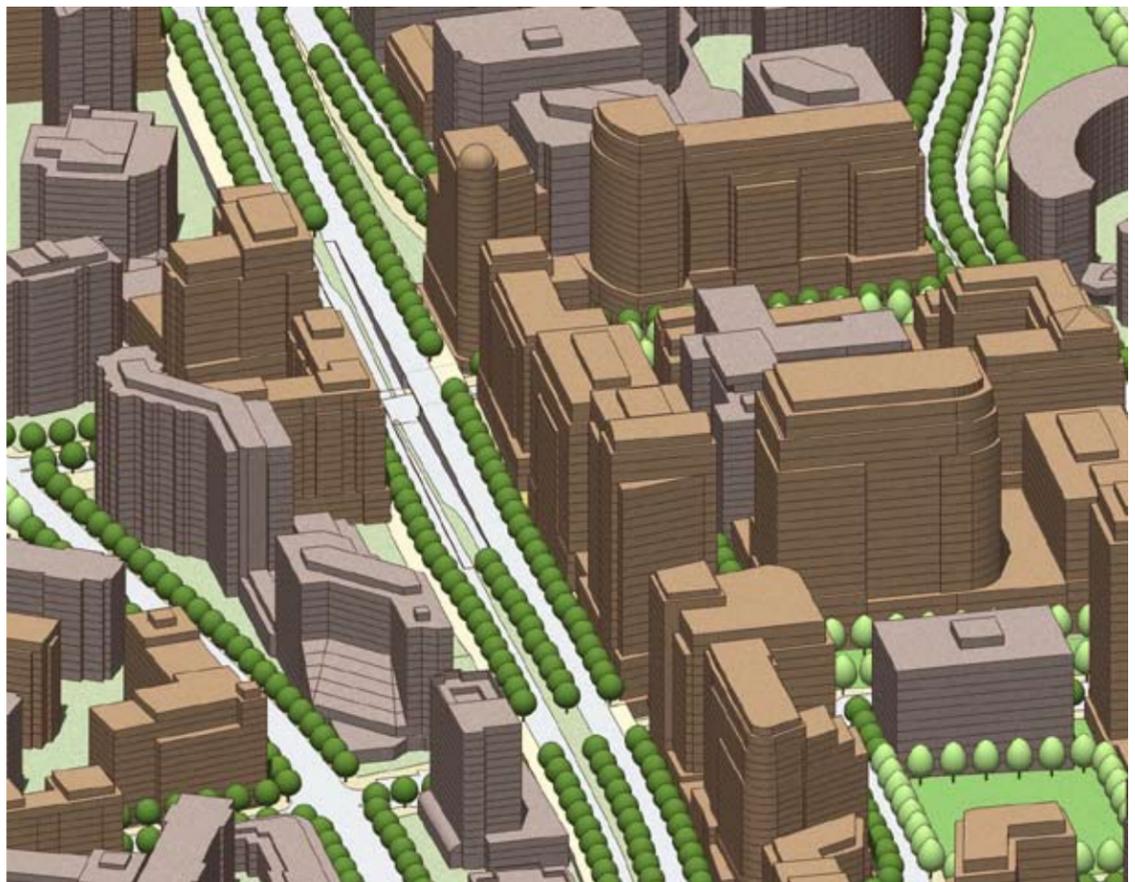
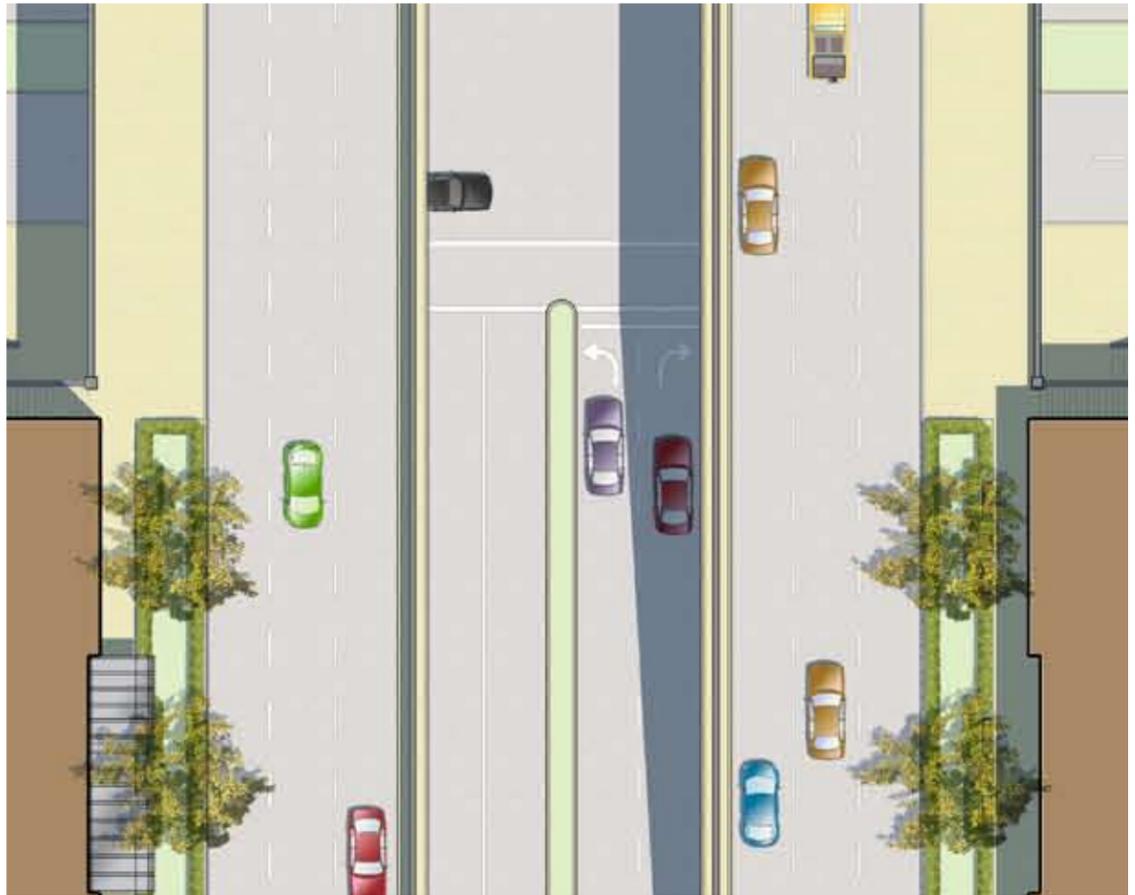
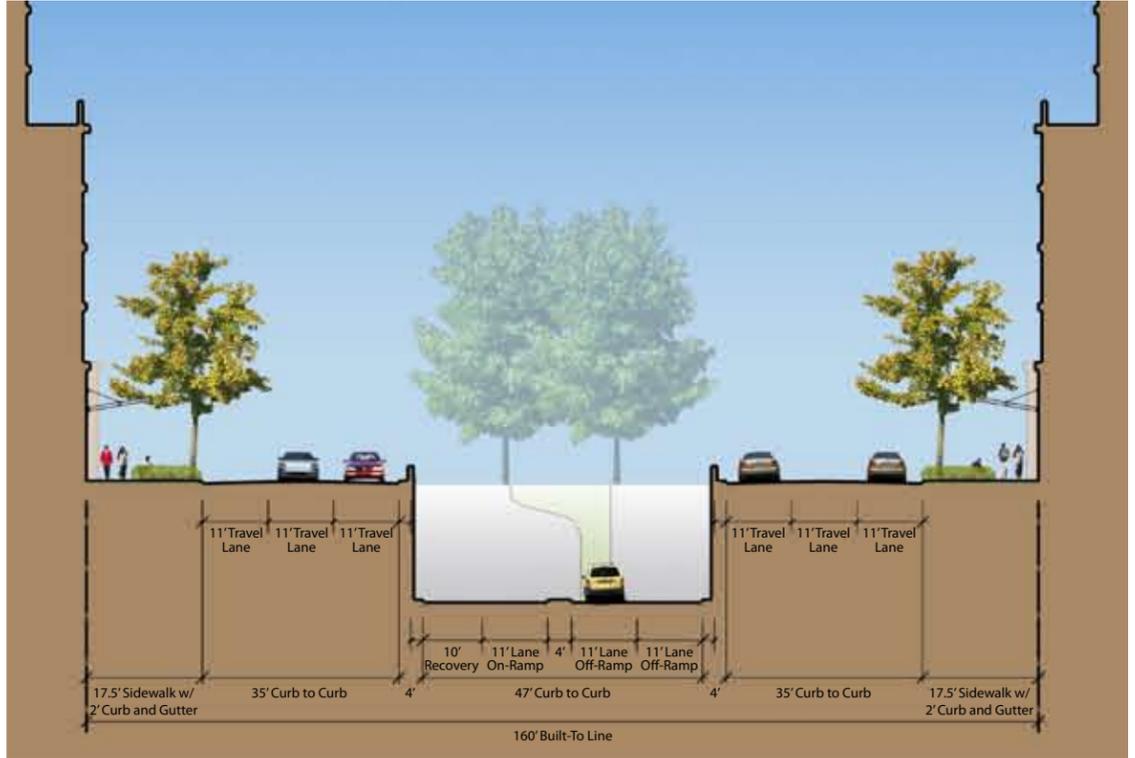


Figure 3.6.28

J-J' - JEFFERSON DAVIS HWY AT 15TH STREETS S



Key Plan - Figure 3.6.29

Figure 3.6.30

3.6.10 PARKING AND TDM MEASURES

PARKING

Parking and curb space are valuable resources in Crystal City. Currently there is intense competition for curb space among various users and double parked vehicles are a common sight. A recent survey showed that there are over 700 metered on-street parking spaces in Crystal City, and half of these have 12 hour meters that support all-day parking. Additionally, there are over 20,000 off-street parking spaces located in about 60 garages or surface parking lots. Parking and curb space issues will need to be carefully addressed for each development or redevelopment project. One of the overall goals of the plan is to convert any on-street private spaces or reserved parking areas to public on-street parking through redevelopment projects.

While the majority of Crystal City is densely developed, some sites, particularly west of the current Jefferson Davis Highway, have



Multi-space Meters

surface parking lots. A 2005 study of the retail area along 23rd Street South showed that while on-street parking spaces were often congested, spaces in private lots were underutilized. The study found employees often compete with customers for parking spaces, further constricting the supply of convenient parking. Management of parking and curb space is essential to advance the economic competitiveness of the area.

CURB SIDE USES

The optimum configuration of curb space depends on the specific land uses and businesses served. As a result, the recommended curb side uses could vary by block. In general, the highest priority will be given to safety features like fire hydrants, curb nubs for pedestrians, and sight lines for drivers. The next priority would be for public multi-user vehicles (e.g. bus stops and taxi-stands), followed by periodic/temporary uses (e.g. car-share, shuttles and private buses, vending, loading and deliveries, and slug lines), dedicated short-term parking (e.g. paratransit drop off and short term meters), and lastly the long-term parking of vehicles (e.g. tour buses, valet parking and all-day

meters). This order of priority ensures that each space maximizes its potential to support the transportation infrastructure, advance the economic well-being of the County, and serve the greatest number of users.

Time restrictions and designation of spaces may be used to optimize the use of curb space and to give priority to the appropriate users at appropriate times. In such a high-demand area, the County anticipates charging for curb space use through permits or meters. As sites develop or redevelop, curb space uses must be re-evaluated and reconfigured appropriately. Additional parking opportunities may be created along street frontages by replacing single-space meters and delineated parking space lines with multi-space meters and parking lanes without delineated spaces. New parking lanes or spaces may be created by restriping existing streets and narrowing overly-wide travel lanes. Remnant areas in parking lanes or garages may be dedicated for the exclusive use of small vehicles such as scooters, bicycles, and motorcycles. Street features such as curb nubs, fire hydrants and bus stops must be appropriately located to maximize available curb space length and versatility. The number and sizes of driveway curb cuts must be minimized in order to achieve longer lengths of available curb space.

With increased street-level retail and businesses, the demand for short-term on-street parking is expected to increase. Multi-space meters have recently been introduced in Crystal City and will continue to be installed on appropriate blocks in the future. If warranted, meter hours in certain parking districts (groups of blocks) may be extended into the evening, or variable pricing may be introduced during peak hours of usage.

OFF-STREET PARKING

Most existing development in Crystal City has been approved through the County's special exception site plan process and this trend is anticipated to continue. Special exception projects encourage development to be evaluated and regulated on a site-specific basis. The Zoning Ordinance identifies a minimum parking requirement for special exception projects which may differ by zoning district. In addition, the Zoning Ordinance allows the County Board to adjust the requirement where it finds the standards for approval have been met overall. These development processes play an important role in supporting land use and transportation policies that encourage sustainable development.

With Crystal City's rich mix of transportation choices, the flexibility of these processes should continue to be used to apply a more appropriate parking requirement that takes into account other factors including, but not limited to, site location, accessibility to transit, transportation demand management (TDM) measures, trends in parking demand, and management strategies for parking spaces. The recommended parking requirement for office buildings in Crystal City is between 1 space per 750 square feet (1:750) and 1 space per 1,000 square feet (1:1,000). The recommended parking requirement for residential buildings is 1.125 spaces per dwelling unit. Adjustment of parking requirements below the Zoning Ordinance



Garage Display Board

standards will go hand-in-hand with facilitating and increasing support for other modes of travel through TDM measures and the provision of transportation infrastructure.

Sharing of existing and future off-street parking spaces should be encouraged whenever possible to increase utilization of the transportation infrastructure. Through the special exception process, shared parking arrangements are encouraged where: parking spaces in garages built by private developers are shared with the general public; parking spaces are shared by various groups using the spaces at different/complementary times of the day or week; unused or excess parking spaces in existing or future garages are shared to satisfy the parking requirements of other proximate developments through off-site agreements; parking spaces are shared among all users of the garage (i.e. no reserved spaces).

Surface parking lots can degrade the quality of the built environment, and are a suboptimal use of highly accessible urban land. The recommended build-to lines and building envelope parameters will help



Commuter Direct Homepage

achieve the desirable street cross-section and character. Future surface parking lots are strongly discouraged in Crystal City, particularly in locations between the curb and the building façade.

3.6.11 TRANSPORTATION DEMAND MANAGEMENT (TDM)

THE IMPORTANCE OF MANAGING DEMAND

If not managed effectively, the increase in transportation demand and, more specifically, vehicular traffic, that results from projected local and regional growth will far exceed the existing and planned capacity of streets and intersections in Crystal City. Such congestion could have a negative impact upon the quality of life and business climate in Crystal City and surrounding areas. Fortunately, the County's experience with TDM has a proven record of success in reducing vehicular traffic, especially along the Metrorail corridors. Aggressive partnerships among the County, developers, and businesses in Crystal City can enhance the effectiveness of TDM to accommodate the planned growth and preserve the area's attraction as place to live, work, play, and shop.

The County treats TDM as both a collection of guiding principles underlying its development and growth policies, and as an array of services provided by Arlington County Commuter Services (ACCS), which together reduce demand for travel by single occupant vehicles (SOVs). The pedestrian-friendly, multi-modal design of Crystal City and the provision of many transportation options, services, and tools to ensure people understand those options are fundamental parts of the County's TDM policy. The concentrated implementation of TDM services in Crystal City will further improve access while minimizing congestion and parking demand.



Mobile Commuter Store

IMPLEMENTATION OF TDM STRATEGIES

The County's Transportation Demand and System Management (TDSM) element of its Master Transportation Plan was adopted in December 2008. The TDSM element lays out TDM policies and implementation actions, and it is hereby adopted by reference as part of the transportation recommendations of this Master Plan. As the TDSM element is amended in future years, those amendments will also be considered to apply to Crystal City. The TDM policies of the Master Transportation Plan most relevant to Crystal City are summarized in the following:

Policy 1: Incorporate comprehensive TDM plans for all site plans and use-permit developments to minimize vehicular trips and maximize the use of other transportation options.

Policy 2: Incorporate TDM measures with respect to all existing public buildings and facilities, irrespective of redevelopment status. Explore strategies and incentives to achieve TDM measures in existing private buildings.

Policy 3: Require regular travel surveys of new development with TDM plans and link to performance measures to enable follow-up actions. Undertake biennial evaluations of the effectiveness of the County's TDM policies and private-sector compliance with TDM commitments, and implement revisions as warranted.

Policy 4: Apply TDM programs to non-work travel, as well as commuting, for resident, visitor and employee trips through informational displays, website, promotional campaigns and mailings of materials.

ACCS manages and facilitates implementation of these policies by providing TDM services in a multi-layered strategy, much of this in partnership with developers and businesses in the community.

Development Projects: As new site plan projects, renovations, or redevelopments are proposed, the County's TDM staff negotiates

with developers during the approval process to prepare a TDM plan appropriate for the development. ACCS provides assistance to developers and property managers to make it easier for them to effectively fulfill the requirements of their TDM plans. These TDM plans provide important benefits to the properties and their occupants while reducing traffic and parking load.

Employers, Hotels, and Residential Properties: Arlington Transportation Partners (ATP) works with agents of individual businesses to provide a full range of TDM business services that benefit the companies as well as their tenants, guests or customers. These include such services as setting up commuter benefit programs and tax-free financial incentives to use transit, personalized transportation packages, carpool formation assistance, telework assistance, lobby transportation information displays, and regular promotion of the range of transportation options available.

Individual Assistance Services: ACCS also provides information and assistance to individual commuters, residents, or visitors through its www.Commuterpage.com family of websites, online transit fare sales, bus stop information, marketing services, and individual assistance and pass sales at the Crystal City Commuter Store.



Lobby Transportation Kiosk



Commuter Store

3.7 PUBLIC REALM



View East at 15th Street Garden Park

POLICY

- P 5** Increase tree canopy coverage in Crystal City by meeting or exceeding the most current applicable goals in the County's Urban Forest Master Plan (and in no case below existing levels of tree canopy coverage), and by strategically installing street trees, where feasible, in areas where redevelopment is projected for later phases.
- P 6** Achieve dedicated publicly accessible tree-lined pedestrian routes through large urban blocks that provide for safe and attractive passage and connectivity between buildings.
- T 5** Maintain continuity and safety and minimize temporary disruptions for pedestrians, bicyclists, motorists, and transit users during all phases of construction throughout Crystal City, including in the interior pedestrian concourse.

3.7.1 OVERVIEW

This Plan envisions a diverse, vibrant, and pedestrian-friendly public realm, with well-defined complete streets and high-quality public open spaces. Currently, a number of existing spaces in Crystal City meet this definition, are valued by the community, and are complemented by accessible public open spaces in the surrounding area. Figure 3.7.1 (p. 76) shows the Master Plan's proposed public open space network relative to the existing and planned public open spaces nearby. These existing public open spaces and streetscapes provide a good foundation for future enhancements to the public realm as recommended in this Plan.

In the context of Crystal City, public and private open spaces play clearly different roles. Public open spaces, such as the Water Park and the courtyard at 2121 Crystal Drive, are basic parts of the public realm. Although privately owned, such spaces are highly accessible to the public and foster impromptu or organized gathering and diverse activities. Both of these examples benefit from their Crystal Drive frontage, with its surrounding retail and pedestrian activity. New public open spaces resulting from the Plan should likewise have great visibility, significant open frontages along streets, and an array of amenities and activities throughout the year.

In contrast, private open space is often perceived as or is physically less accessible, sometimes by means of barriers such as walls and fences. In Crystal City, many interior block private open spaces have limited visibility from streets (see Figure 3.7.2, p. 78) while others physically restrict access to the public. For example, the elevated plaza unifying the Crystal Gateway site plan is physically accessible to those familiar with the space and willing to negotiate their way from the sidewalk, between buildings,

and into the center of the block. In other instances, courtyards can provide amenities for the residents of specific buildings, as they do at the Crystal Square and Crystal Plaza apartments, where access to these spaces is physically restricted to building residents. Accessibility issues aside, private open space allows light and air to penetrate the interior of blocks and may provide facilities to meet the recreational needs of tenants, both benefits that should be continued in the future. However, lacking universal accessibility and often programmed for limited activities, private open space does not serve the same role as public open space. As Crystal City grows, emphasis will be placed on creating public open spaces that are universally accessible and have strong presence along the street, and are clearly distinct from private open spaces.

Figure 3.7.3 (p. 79) shows the Master Plan's recommended public open space network. Proposed street-facing parks and plazas are fully public and accessible to all, while interior open spaces become private or semi-private, primarily the realm of the surrounding buildings' inhabitants. The new public open spaces and streets are better-defined by a more continuous line of buildings along their edges. In this way, public open spaces and active streetscapes come together to provide increased accessibility and visibility. As the Master Plan is implemented, the design of the proposed open spaces will be further refined with continued planning and management efforts to better define their program and fully explore their potential. The main objective is a much improved and complete public realm, which includes places where people will participate in the daily civic life of Crystal City.

3.7.2 STREETS AND SIDEWALKS

The public realm of the street resides within rights-of-way framed by the urban block, previously described in Section 3.5 - Block Structure. The pedestrian experience is completely shaped by the character and program of the streetscape. The zone between the roadway curb and the building face, called frontage, will include a number of program elements which vary based on the building frontage types. In the Master Plan, frontage types fall into the basic categories of retail, commercial, civic, and residential. The preferred urban frontage types are retail or residential uses, and since their respective characters are easily contrasted, a clear character may emerge for each street type. Retail streetscapes typically have wide sidewalks with retail displays and signage. Street trees line the curb and typically utilize tree pits with decorative metal fences or grates. Additional spaces can be provided for café seating, retail display, or benches.

Residential streets, on the other hand, typically are lower intensity environments, with landscaping often between the sidewalk and the building face. Non-retail commercial frontage is generally similar to retail frontage, but lacks the vitality and character of an active retail frontage. Civic frontage can be similar to commercial frontage, but with landscaped areas and plazas that create engaging places for people to gather.

In the Master Plan, all streets will be fully landscaped and furnished to enhance the pedestrian experience. The area dedicated to active landscaped streetscapes and sidewalks will increase from 3.9 acres to over 22 acres through plan build-out, a substantial increase. Landscaped street setbacks will

be provided where appropriate, all within the stipulations of block RBLs and frontage requirements. The use of medians and traffic islands will be minimized, to promote shorter walking distances at crosswalks. On-street parking and drop-off areas will be created throughout the planning area to help buffer the pedestrian from moving traffic, provide convenient short-term parking for shoppers, and allow more parking options for visitors.

3.7.3 URBAN FOREST CANOPY COVERAGE

In keeping with the County's goal of having a sustainable urban forest that contributes to the health and livability of its community, the Master Plan includes a policy directive (P 5) to maintain and expand upon the existing level of tree canopy coverage throughout the implementation of this plan. Currently, the estimated tree canopy coverage in the Crystal City planning area is 17.6%, which exceeds the current goal of Arlington County's Urban Forest Master Plan for central business districts. As the plan advances, 17.6% canopy coverage will be the baseline for the planning area with the long-term goal of increasing this percentage by maximizing tree planting along streets, in public spaces, and private property. As development proceeds, design proposals should take full advantage of all tree planting opportunities, providing adequate space and engineering solutions that maximize root growth and tree health. In addition, opportunities will likely arise where landscape plans are updated for existing buildings, which should also maximize tree planting opportunities. Developers should follow the County Landscape Standards which

provide planting details and the underground structures required to support healthy trees planted in an urban environment such as along streets and above building structures.

Although many of Crystal City's streets are lined with trees, a number of street sections are treeless or have mature landscaping that has not been maintained adequately. These areas will likely remain in this condition until they are redeveloped. In the near-term, the County recommends planting trees along streets and sites or refurbishing old landscaping at locations that are not likely to be redeveloped within the next 20 years. These additional trees will help mitigate potential loss of canopy coverage in the first phases of redevelopment and will create cohesive, tree-lined streets throughout the sector. Suggested locations for targeting additional street tree planting in the near term are discussed in the Public Open Space implementation actions in Chapter 4.

3.7.4 PUBLIC OPEN SPACE

Public open space in urban areas takes many forms, such as plazas, parks, squares, and greenways. These spaces can differ substantially in type, particularly with respect to programming, character, size, landscaping, and uses. When planned as a system, public open spaces should provide a range of activities and programming to meet the needs and interests of the community. A well-designed system will provide activities and programs for people of all ages and will encourage social gatherings. The intent of this plan is to create well-designed, high-quality public open spaces that will contribute significantly to the quality of life in Crystal City as it grows in the future.

DEFINING THE PUBLIC REALM

The public realm is the shared civic space of the city. It consists of two principal elements: public open spaces, such as plazas, squares, and parks, and street rights-of-way. Both elements are defined and framed by the building façades forming their edges. Though described as public, ownership of the public realm can be either public or private; the defining characteristic is universal accessibility. In this way, some streets may include setbacks for yards or other zones in which the pedestrian typically does not encroach, yet which are visually accessible and part of the public experience. The public realm is that common civic space of the street and square, framed by buildings, and providing an urban environment with active street-life and a recognizable "sense of place."

Conversely, the private realm is defined by limited accessibility and visual checks. It is normally confined to the space between or behind buildings, or to the interior of blocks. These spaces provide breathing room between buildings, and allow penetration of light and air into the block interior. In an urban setting, the components of the private realm include back yards, side yards, courts, and private drives and are often fenced or walled off to limit access and maintain adequate security. Sometimes these areas may have a semi-public quality which means they are visually accessible to the public, yet physical access is still controlled by the private owner.

Just as buildings define streets and public open spaces, a coherent network of streets



Park Water Features - Barcelona, ES

and open spaces also defines and gives structure to the collective urban setting. Consequently, the more successful buildings are in defining the public realm, the more effective the public realm will be in defining the framework and character of the city. Clear perception of the urban framework improves wayfinding (both vehicular and pedestrian), contributes to an active pedestrian experience, and promotes economic and social vitality. A complete public realm is programmed and furnished in a manner appropriate to its various frontage types, with paving, landscaping, street lighting, street furnishings, public art, and other amenities that enrich the pedestrian experience.



Festive Park Atmosphere - Boston, MA



Parkside Cafe



Garden Pergola



Public Water Feature

The Public Open Space policy directives will guide the establishment of a cohesive system of high-quality open spaces, recalibrate the balance between types and uses, and provide permanent public access to the open spaces either through public-use easements or through County ownership. The policy directives also reflect the desire of the community to minimize the impact from loss of existing open spaces by having new or improved existing open spaces provided as spaces are lost. As redevelopment occurs in Crystal City, preserving and creating high quality public open spaces for the community will remain a key priority.

The Master Plan focuses on improving the quality and utilization of public open space, whether new or proposed, by increasing accessibility, visibility, programming, and appearance. Thus more usable spaces, such as retail plazas, civic parks, and recreational parks with direct access to the street are preferred over office plazas, landscaped medians, and landscaped street setbacks. An additional objective is to more effectively distinguish between private and public spaces, and help reinforce a strong sense of

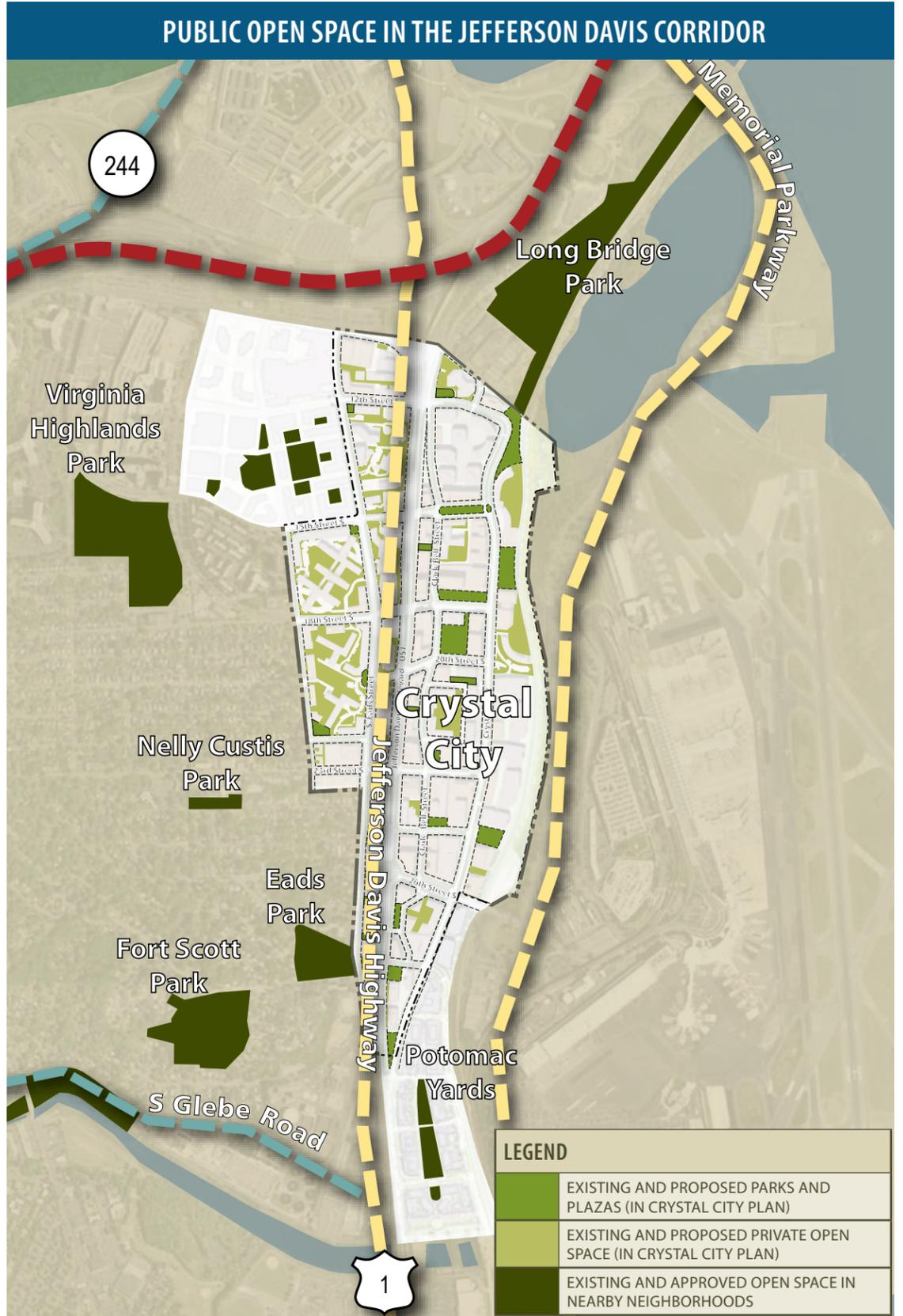


Figure 3.7.1

openness and accessibility to those spaces planned for public use. In some cases, existing open spaces are underperforming. Repeated observation of the existing open spaces reveals that some are currently underutilized both during the weekday and on weekends. In other instances, existing open spaces are planned for preservation, as their form, accessibility, and programming contribute to the overall goals and policy objectives of the Master Plan.

OPEN SPACE PLANNING RECOMMENDATIONS

- As individual site plans are proposed for Crystal City, the County should look for opportunities to increase the public open space beyond what is shown in the Public Open Space Map (Figure 3.7.3);
- When existing public open space is displaced by new development, the developer will concurrently provide the County with either a new comparable public open space in Crystal City or with an improved existing public open space in Crystal City or adjacent

neighborhoods, including a public easement dedication where applicable;

- Active recreation facilities should be incorporated into new and existing public open spaces in Crystal City. Table 3.7.1 – Open Space Design Concepts, identifies several of the 26 open spaces that are recommended for active recreational facilities. Active recreational facilities could include tennis, basketball and volleyball courts, and other outdoor amenities including playgrounds, community canine areas, a skateboard facility, petanque courts or other facilities desired by the community;
- Site plan applications should include a variety of active recreational facilities within the development that will contribute toward meeting the recreational needs of their future tenants. Innovative designs for recreational facilities should be utilized and may include facilities on the rooftops, interior, or exterior of buildings. Public accessibility to these facilities should be explored on a project by project basis; and

- Community Canine Areas (CCA) should be built to serve Crystal City residents and the adjacent residential community. Future CCA's can be located in either one of the public open spaces shown in the Public Open Space Map, Figure 3.7.3 or public open space adjacent to Crystal City.

The plan calls for the creation of at least one primary, centrally located public space to serve as a venue for significant, programmed events for the entire community. The location of this space, the Center Park, is currently proposed for the northeast corner of 20th and Clark-Bell Streets. A complete list of all the proposed and retained public open spaces is provided in the Table 3.7.1 - Open Space Design Concepts.

The information included in the table is intended to offer guidance for the development of a public open space system. The community will have an opportunity to comment on the types of facilities in each of the public open spaces as special exception site plans are processed through Arlington County's site plan review system.

The table provides the target size of each space, whether a space has a fixed location and orientation (shown in Table 3.7.1 in the Defined by Build-To Lines column) and provides a preliminary park design recommendation for the site.

For open spaces that are not fixed by Build-to Lines, the Public Open Space Map provides a suggested approximate location, with the understanding that the final location and orientation will be resolved with individual site plan applications.

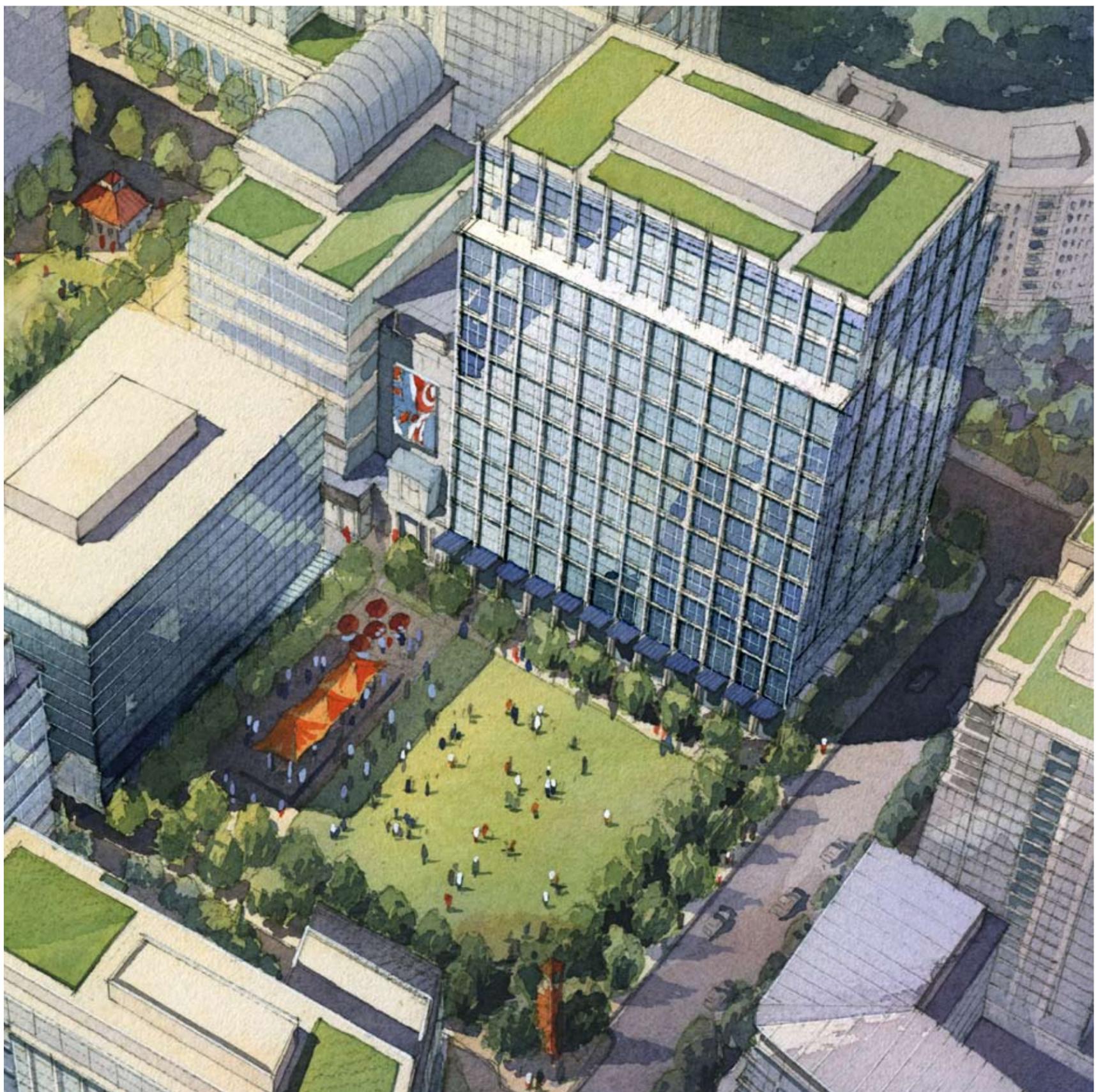
In addition to the public open spaces themselves, another goal for improving the public realm is to increase pedestrian connectivity and permeability through some of Crystal City's largest superblocks. Many of Crystal City's blocks are several times larger than conventional city blocks, and present challenges for pedestrians trying to traverse such blocks using sidewalks and outdoor paths. Consistent with Policy Directive P6, this Plan recommends that opportunities be explored as part of future development proposals to achieve dedicated, publicly accessible tree-lined pedestrian routes.



Existing Gateway Park



Existing Water Park



Proposed Center Park

POLICY

- P 1 Provide, at a minimum, all public open spaces as indicated on the Public Open Space Map in accordance with the general size outlined in the Open Space Inventory Table on the map.
- P 2 Address the displacement of existing public open spaces by concurrently providing comparable or enhanced spaces, either through development of new park sites or through improvements to existing open spaces along with public easement dedications.
- P 3 Allow low-scale infill development on the existing open space in front of 2121 Crystal Drive only after the Center Park on Block J-K is realized.
- P 4 Establish County control over all public open spaces shown on the Public Open Space Map through either public dedication/acquisition or public-use and access easements set in perpetuity.



Active Retail Plaza - Santana Row, CA

TABLE 3.7.1 - OPEN SPACE DESIGN CONCEPTS

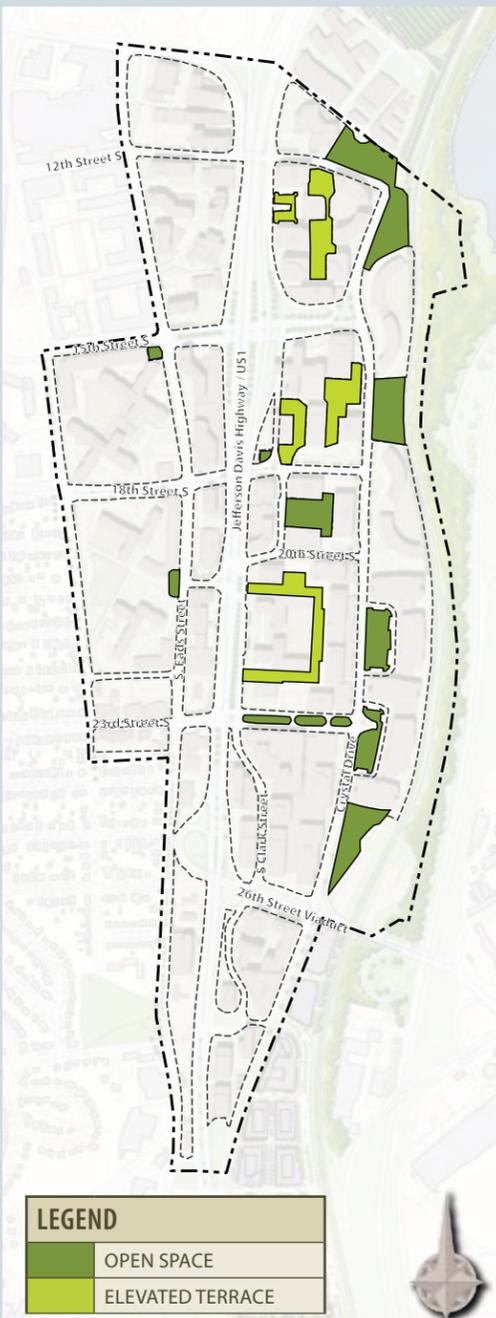
PARK NUMBER*	NAME	SIZE (SQ. SF.)**	DEFINED BY BUILD-TO LINES	PARK DESIGN RECOMMENDATION
1	NORTH GATEWAY PLAZA	14,200	NO	OPEN SPACE WITH A PATH, BENCHES AND OTHER PARK ELEMENTS SUCH AS A WATER ELEMENT OR OTHER ATTRACTIVE FEATURE
2	GATEWAY PARK	54,500	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 84
3	GARDEN PARK	33,500	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 80
4	WATER PARK (IMPROVEMENTS)	60,000	YES (EXISTING)	DESIGN CONCEPT PROVIDED, SEE PAGE 85
5	POCKET PARK	7,800	NO	LANDSCAPED SPACE WITH INTERACTIVE ELEMENTS (SEE DEFINITION BELOW) TO ACTIVATE THE SPACE, A PATH, AND SEATING
6	METRO MARKET SQUARE	43,900	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 83
7	CENTER PARK	74,200	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 81
8	PARK/PLAZA	9,700	NO	PARK WITH TREES, GARDENS AND BENCHES ALONG A PATH CONNECTING THE PARK TO CRYSTAL DRIVE
9	POCKET PARK	8,400	NO	LANDSCAPED SPACE WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
10	23RD ST PLAZA	13,000	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 82
11	PLAZA	3,300	NO	LANDSCAPED PLAZA WITH TABLES AND SEATING FOR OUTDOOR DINING
12	25TH ST PLAZA	15,000	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 86
13	CRYSTAL PARK	38,000	YES	DESIGN CONCEPT PROVIDED, SEE PAGE 87
14	PARK/PLAZA	13,900	NO	PARK WITH A PLAZA INCORPORATING SEATING AND FLOWER GARDENS INTERSPERSED THROUGHOUT THE SITE
15	PARK	17,800	YES	ACTIVE RECREATIONAL FACILITIES COULD INCLUDE SPORT COURTS AND OPEN SPACE COMBINED WITH TABLES AND SEATING UNDER SHADE TREES
16	PARK	18,500	NO	PROMINENT LANDSCAPING INCORPORATING TREES AND POSSIBLY PUBLIC ART TO CREATE "GATEWAY" TO CRYSTAL CITY, SOME OPEN INTERIOR SPACE, WITH A PATH TO CONNECT CRYSTAL DRIVE AND JEFFERSON DAVIS HWY, AND SEATING.
17	PLAZA	5,100	NO	LANDSCAPED CORNER WITH TREES AND PATHS WITH SEATING
18	PARK/PLAZA (EXISTING)	6,000	YES (EXISTING)	LANDSCAPED CORNER WITH TREES AND PATHS
19	PARK/PLAZA	7,700	YES (EXISTING)	LANDSCAPED SPACE WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
20	PARK	19,400	NO	PARK WITH NEIGHBORHOOD SERVING FACILITIES
21	POCKET PARK***	6,400	YES	A NEIGHBORHOOD PARK WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
22	POCKET PARK***	7,400	YES	A NEIGHBORHOOD PARK WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
23	POCKET PARK***	5,000	YES	A NEIGHBORHOOD PARK WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
24	POCKET PARK***	5,000	NO	A NEIGHBORHOOD PARK WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
25	POCKET PARK***	5,000	NO	A NEIGHBORHOOD PARK WITH INTERACTIVE ELEMENTS TO ACTIVATE THE SPACE, A PATH, AND SEATING
26	PARK/PLAZA	21,000	NO	DESIGN PARK WITH ACTIVE RECREATION FACILITIES THAT COMPLEMENT EADS PARK, PATHS, SHADE TREES AND SEATING

* PARK NUMBER CORRESPONDS TO PUBLIC OPEN SPACE MAP (FIGURE 3.7.3)

** ESTIMATED TARGET SIZE SUBJECT TO REFINEMENT

*** THESE POCKET PARKS SHOULD BE DESIGNED TO INCLUDE COORDINATED INTERACTIVE FEATURES, FOCAL POINTS OR ACTIVITIES TO CREATE A CONNECTION BETWEEN THEM.

INTERACTIVE ELEMENTS: SCULPTURES, ART, WATER FEATURES OR UNIQUE LANDSCAPE DESIGN THAT STIMULATES PEOPLE TO PARTICIPATE IN AN ACTIVITY, THINK CREATIVELY OR PROVIDES AMUSEMENT. THESE COULD BE AS SIMPLE AS PAVERS DESIGNED TO FORM A MAZE, DECORATIVE WIND TURBINES, A WATER PUMP FOR KIDS OR CLIMBABLE STATUES.



Existing Public Realm
Figure 3.7.2

PUBLIC OPEN SPACE MAP

Figure 3.7.3



LEGEND	
XX	PARK NUMBER
	PUBLIC OPEN SPACE

“IF YOU DESIGN COMMUNITIES FOR AUTOMOBILES, YOU GET MORE AUTOMOBILES. IF YOU DESIGN THEM FOR PEOPLE, YOU GET WALKABLE, LIVABLE COMMUNITIES”.

PARRIS GLENDENING
FORMER GOVERNOR OF MARYLAND

CHRISTINE TODD WHITMAN
FORMER GOVERNOR OF NEW JERSEY

1 - 15TH STREET GARDEN PARK



Key Plan - Figure 3.7.4



Garden Park - Barcelona, ES

Positioned as the central feature of the 15th Street reconfiguration between Crystal Drive and Clark-Bell Street, the 15th Street Park will be a quiet, neighborhood-oriented green space. The proposed size of 33,500 square feet and the curb-to-curb width of approximately 80 feet provides ample room to create a lush experience of flower gardens featuring seasonally colored trees and flowers, including some grand trees at the heart of the space. Paved walks and seating areas with benches will provide neighborhood residents

and workers a quiet place to relax. Also included in this concept are flower gardens around a central water feature and pavilion, which will serve as focal points for the park. Sustainable features such as water filtration gardens, native plant species, and pervious paving should be incorporated in the design. A meandering, multi-use trail is envisioned as an integrally designed element of the park that could also accommodate bicyclists in a more passive way to complement the more active bicycle facilities provided in the street.

2 - CENTER PARK



Bryant Park - New York, NY



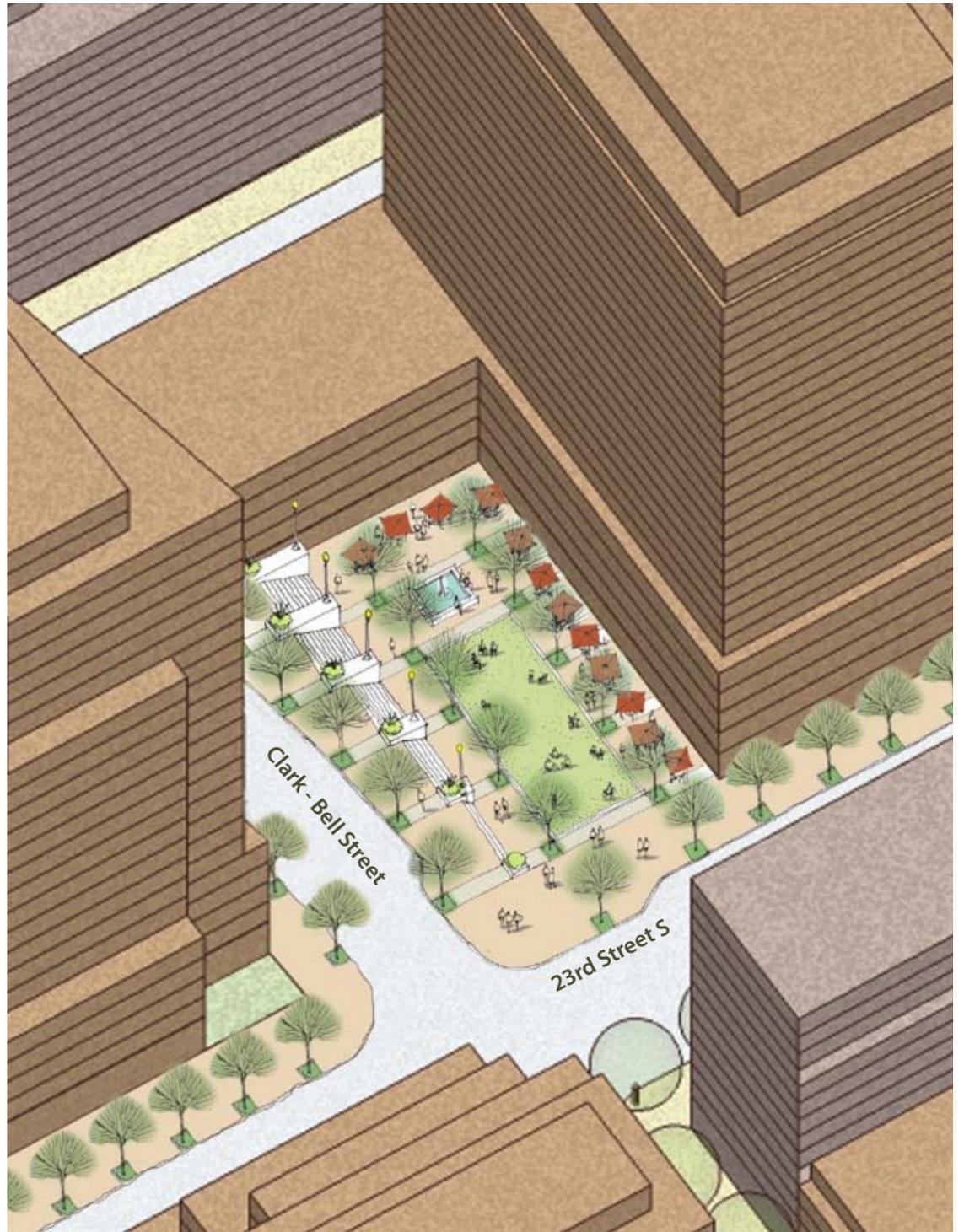
Outdoor Activities

Center Park, located at the intersection of Clark-Bell and 20th Streets, is intended to be the centerpiece of Crystal City, and to act as a focal point for all surrounding activities. Envisioned as an open space with a civic character, it will be the largest park in Crystal City with a target size of 74,200 square feet. The size of the space would allow for a wide variety of uses, such as passive recreation, exhibitions, concerts, festivals, cafés, some temporary kiosk retail, and evening outdoor movies. Retail uses are envisioned on the

north and east sides of the park, with the possibility of a retail arcade at the north end which could be enclosed in the winter months. A prominent vertical architectural feature could be located at the southwest corner of the park to signal a point of entry and gathering when arriving from Jefferson Davis Boulevard. A strong link between 18th and 20th Streets should also be considered with a grand stair/seating area located along the 20th Street frontage serving as one possible strategy to negotiate the grade

differences. Much of the park should be pervious and predominantly grass. Special art features could be incorporated into the landscape and architecture of the park, and artistic lighting should highlight the park during the evenings. Cisterns within the park and adjacent buildings could capture rainwater for park irrigation. Wind turbines and/or solar panels could be used in artistic ways to educate visitors and to supply power for park events.

3 - 23RD STREET PLAZA



Key Plan - Figure 3.7.5



Active Plaza - Cambridge, MA

This new retail plaza will be located at the corner of 23rd and Clark-Bell Streets, with at-grade access from 23rd Street. The target size is 13,000 square feet. Retail uses are envisioned on the north and east sides of the plaza, with pervious paving and landscaping appropriate for an active retail venue. The building wing to the north should have a noteworthy design that helps create a sense of place to the park backdrop, with a level of transparency that helps activate the space and enliven the plaza at night. This will

be a neighborhood gathering place, with benches, café seating, and a fountain or sculptural piece at the center of the plaza. This space could provide a direct entrance to the underground or could be linked to the existing access point at 23rd Street through a creative streetscape design that celebrates the connection between the underground entryway and the plaza. Solar panels could be incorporated into the design of the northern building wing to help power plaza lighting and to celebrate renewable energy sources.

4 - METRO MARKET SQUARE



Retail Square - Boston, MA



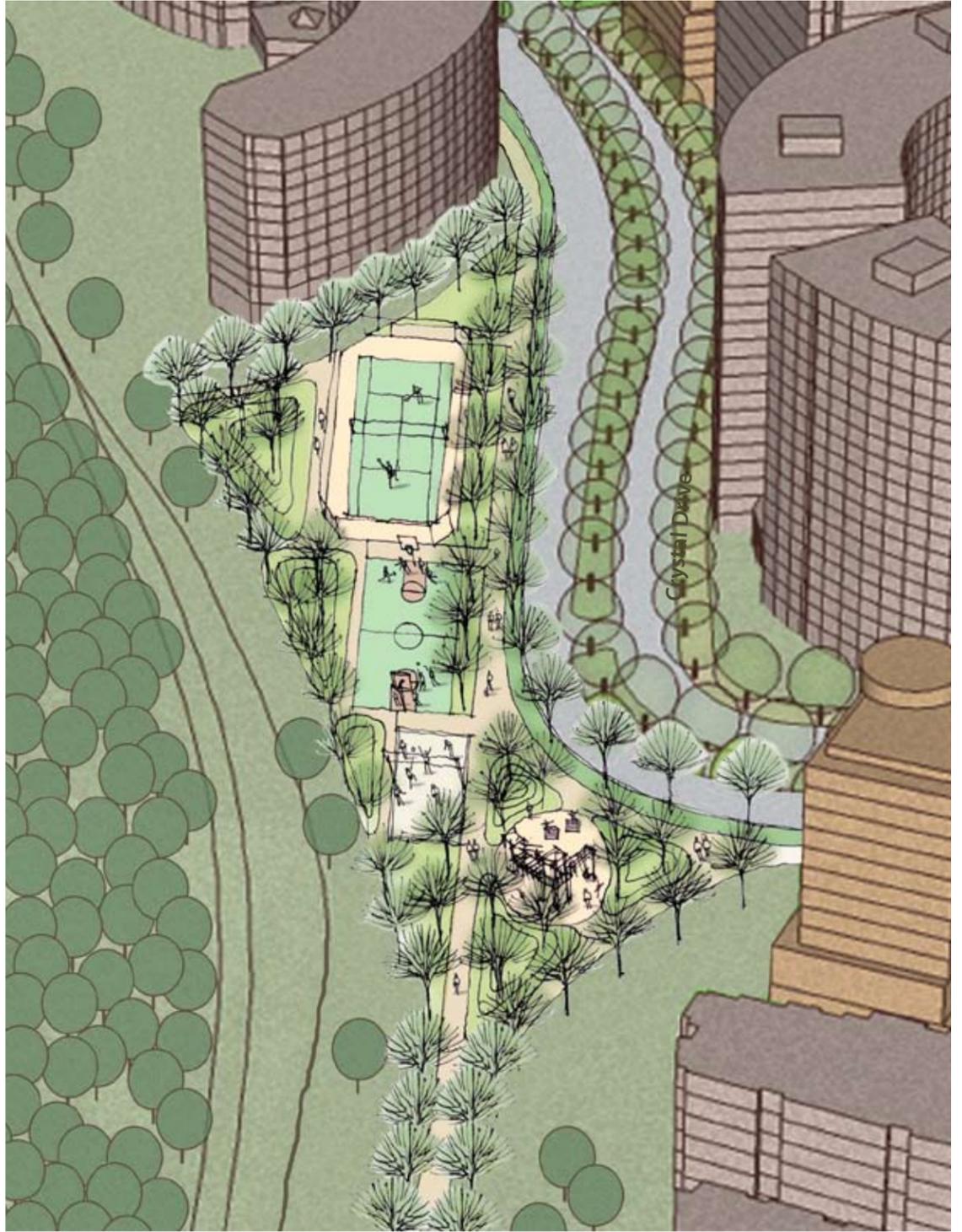
Retail Square - Boston, MA

Metro Market Square is located along 18th Street between Clark-Bell and Crystal Drive and will have a target size of 43,900 square feet. This space will provide for and celebrate a new entrance to the Metro Station at the east end of the plaza and will be a primary center of retail activity. The ground plane of Metro Market Square will be finished primarily in hard surfaces which will allow for market uses, temporary pushcart retail, public gatherings, outdoor entertainment,

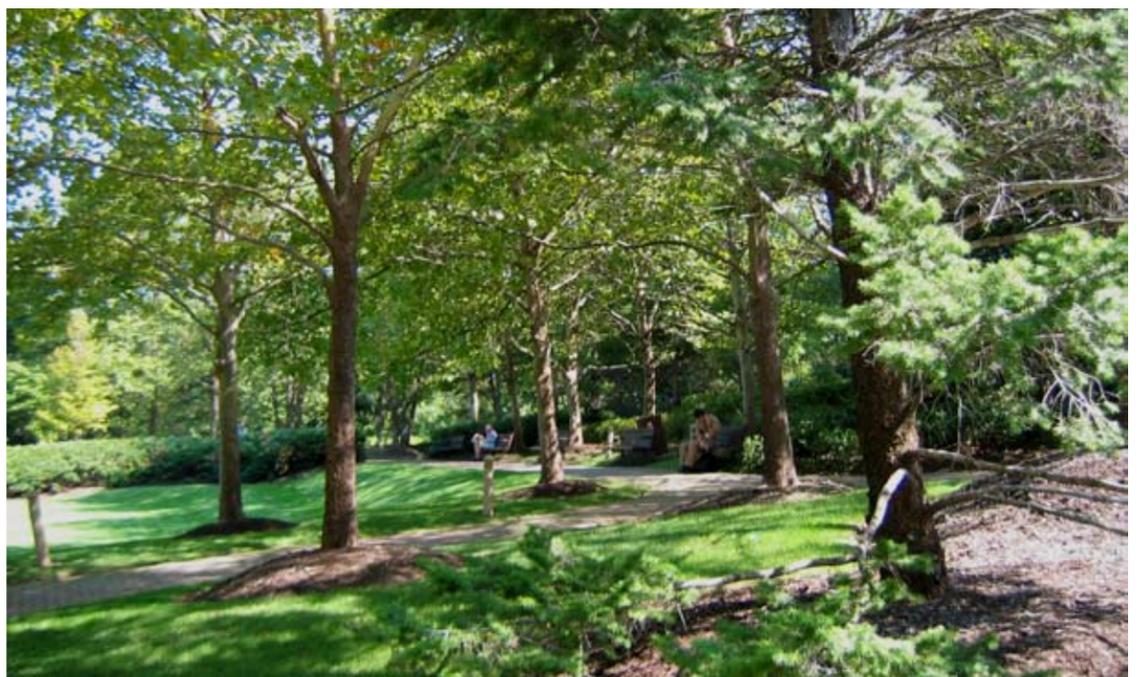
and a variety of related uses. Metro Market Square could also create an opportunity for crafting a permanent market building arcade along the length of the plaza which could be used for a local farmer's market, arts and crafts festivals, and/or carnivals. The head house on the east end of the market arcade could be the new entry to the Metro Station. A major connection across 18th Street to the Center Park should be emphasized in the plaza design. Small water features, benches,

café seating, larger interactive sculptures, chess tables, bosques of trees, and similar features should be incorporated into the overall design. Pervious paving, artistic wind turbines, and/or solar panels on the roof of the market building could all be incorporated into the design.

5 - GATEWAY PARK



Key Plan - Figure 3.7.6



Existing Gateway Park - Crystal City

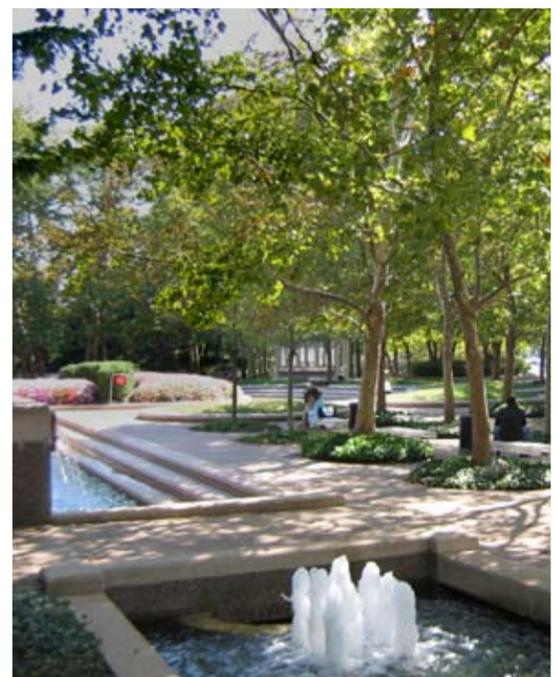
Gateway Park is a proposed reconfiguration of the landscaped parcels at the northern terminus of Crystal Drive. This park will include an entrance into the new Long Bridge Park north of Crystal City and will have a target size of 54,500 square feet. It is anticipated that the Long Bridge Park Esplanade will directly tie into a path that leads through the park to Crystal Drive and 12th Street. The vision for this park includes neighborhood serving recreational

facilities such as tennis or volleyball courts, a playground, benches, and picnic tables. The park may also feature pedestrian-scaled lighting which ties into the Long Bridge Park lighting design, pervious paving and rain gardens. The design for Gateway Park should integrate the Long Bridge Park Esplanade as a coordinated element whose character, design, and width continues through the space toward Crystal Drive.

6 - WATER PARK



Existing Water Park - Crystal City



Existing Water Park - Crystal City

The Water Park is one of Crystal City's public spaces most valued by the community, and a true landmark along Crystal Drive. Much of what exists today is proposed to remain, and be publicly acquired or controlled through public-use easements. Any proposed changes should occur along its edges, where retail and pedestrian uses planned to the north and south of the park, and across Crystal Drive, will provide more destination activity.

Some minor design modifications could be incorporated that would allow greater access and visibility into the park, particularly with regard to the upper terrace area. As this park is the head of the bicycle connection to the George Washington Parkway, one use that could be incorporated into an adjacent building might be a public or privately operated bicycle storage, rental, and retail center with locker rooms and shower facilities

for bicycle commuters. While several small-scaled, minor improvements could enhance this space even further, care should be taken to not over-program or design the park in a way that results in unnecessary clutter or otherwise restricts enjoyment of the space.

7- 25TH STREET PLAZA



Active Retail Plaza - Pentagon Row

The 25th Street Plaza is proposed as a component of the new streetscape that would be created with the introduction of 25th Street through the block south of 23rd Street. Located on the northeast corner of the intersection with Clark-Bell Street, the plaza will provide a neighborhood gathering place featuring retail frontage along its north and east sides. The plaza will feature a blend

of hardscape and greenscape elements, including patterned paving, lawn panels, tree bosques, benches, café seating, and a fountain or sculptural piece as a central anchor. Additional features could include pervious paving, water filtration gardens, demonstration wind turbines and solar panels.

Key Plan - Figure 3.7.7

8 - CRYSTAL PARK



Tot Lot Area - Barcelona, ES



Active Park - Barcelona, ES

Crystal Park is a proposed improvement of an existing recreation area along Crystal Drive, near the eastern end of the new 25th Street. As proposed, the new park would reside between the southernmost Crystal Park building and the proposed development east of Crystal Drive and north of 26th Street. It has a target size of 38,000 square feet and is intended for predominately recreational uses.

It will be framed with trees, and may include athletic courts as well as a playground with bench seating for on-looking parents. While this area today is used in part to meet the requirements of an adjacent child day care facility, this space is envisioned as a public park in the future. If a childcare facility remains in this area, a strategy will be needed for how the outdoor space requirements are met.

“WHAT IS ART BUT A WAY OF SEEING?”

SAUL BELLOW
CANADIAN WRITER

3.7.5 PUBLIC ART

Redevelopment in Crystal City affords an excellent opportunity to introduce and expand the County’s public art program as a primary component of the master planning process. In general, the County’s Public Spaces Master Plan and Public Art Master Plan call for the creation of a network of civic spaces hosting a range of community functions including recreation, cultural programs, and public gathering. These plans provide a conceptual framework for the improvement of existing spaces and the creation of new outdoor public spaces, in Crystal City and countywide.

High quality public art, together with strong urban design, architecture, and landscape architecture, can distinguish Crystal City’s built environment. Public art marks civic space, and through a variety of media and scales, enriches individuals’ experience of place. In accord with the Public Art Master Plan, public art should be selectively incorporated into streetscapes, public and private buildings, parks, transit and infrastructure. County officials will continue to coordinate public art installations, in instances working with important partners such as the Crystal City BID and Metropolitan Washington Airports Authority.

The Public Art Master Plan lists civic spaces, transit ways, and significant entryways as priority locations for public art in Crystal City. Public art should be an integral part of the design and redevelopment of the Plaza at 23rd Street and Clark-Bell Street, the Center Park at 20th Street and Clark-Bell Street, and the Metro Plaza at 18th Street and Clark-Bell Street. Particular focus should be given to the Center Park and adjacent civic building as the civic center of Crystal City. As points

of congregation, public transportation stops and routes are prime locations for integrated art. As design and implementation of the transitway proceeds, a public artist should be part of the design team. Public art can also be an effective tool for marking the entry points into Crystal City. Most prominently, the National Circle and the Airport Access Road should include public art in the circle and/or to enliven a future pedestrian path to the airport. Redesign of Gateway Park should include public art to mark the pedestrian passage to and from Long Bridge Park. Finally, the Southern Gateway entrance to Crystal City might also be marked with public art.

Private sector participation in the County’s public art program enriches the County’s public realm. Financial contributions to the County’s Public Art Fund supplement public dollars for public art in publicly-owned special places, streetscape, and infrastructure. In lieu of financial contributions, integrated public art on private development sites enlivens the environment by transforming elements of the built environment into experiences that challenge or delight. While there may be appropriate locations for art in private development, the nature of the redevelopment in Crystal City reinforces the bias stated in the Public Art Master Plan for site plan contributions to the Public Art Fund to be used in aggregate in public spaces.

In addition to the above recommendations regarding Public Art, the Cultural Resources discussion in Section 3.9.4 describes recommendations pertaining to future cultural art resources in Crystal City.



Permanent Art Work - Barcelona, ES



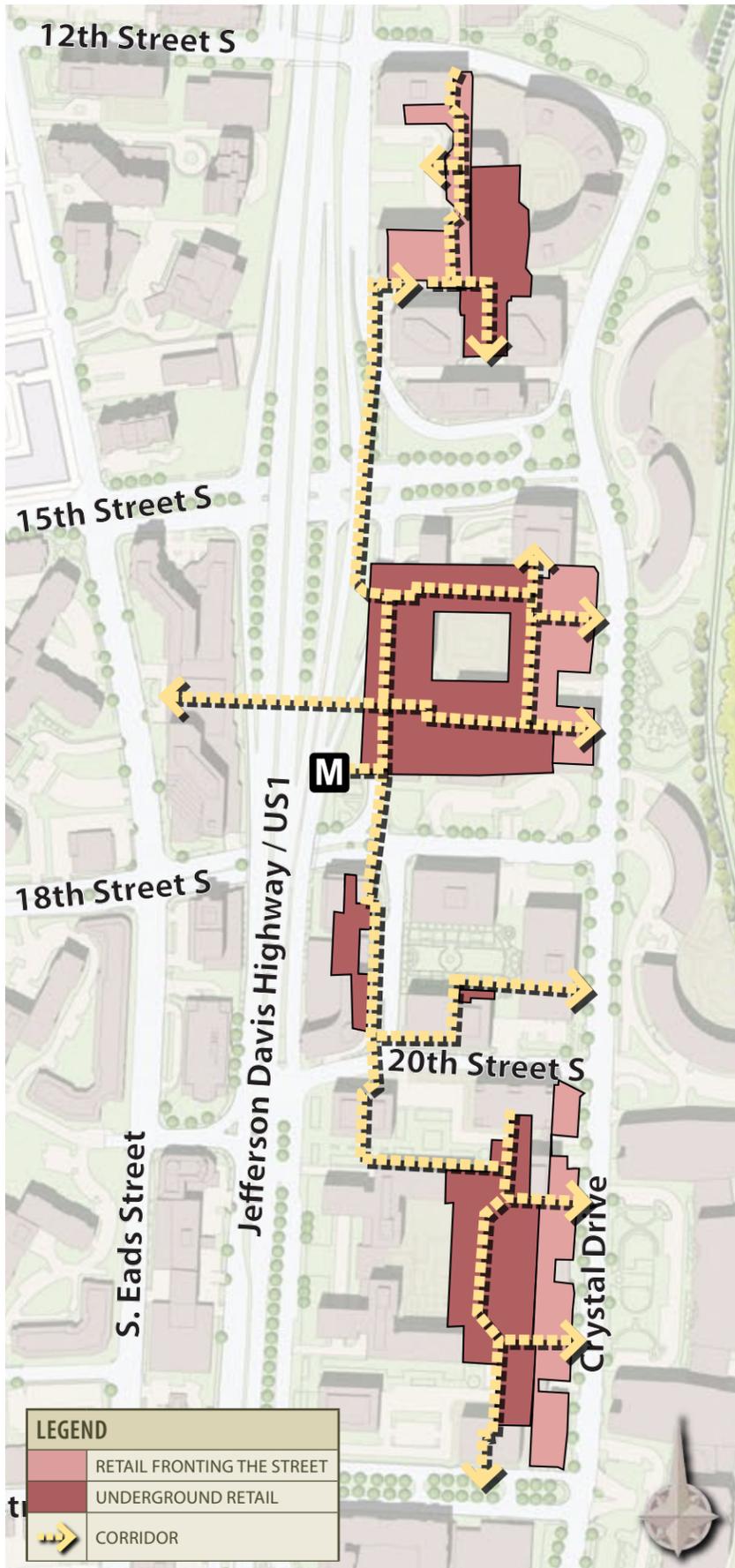
Temporary Art Work - Florida



Performing Arts - Boston, MA



Interactive Art - Silver Spring, MD



Existing Underground System
Figure 3.7.8

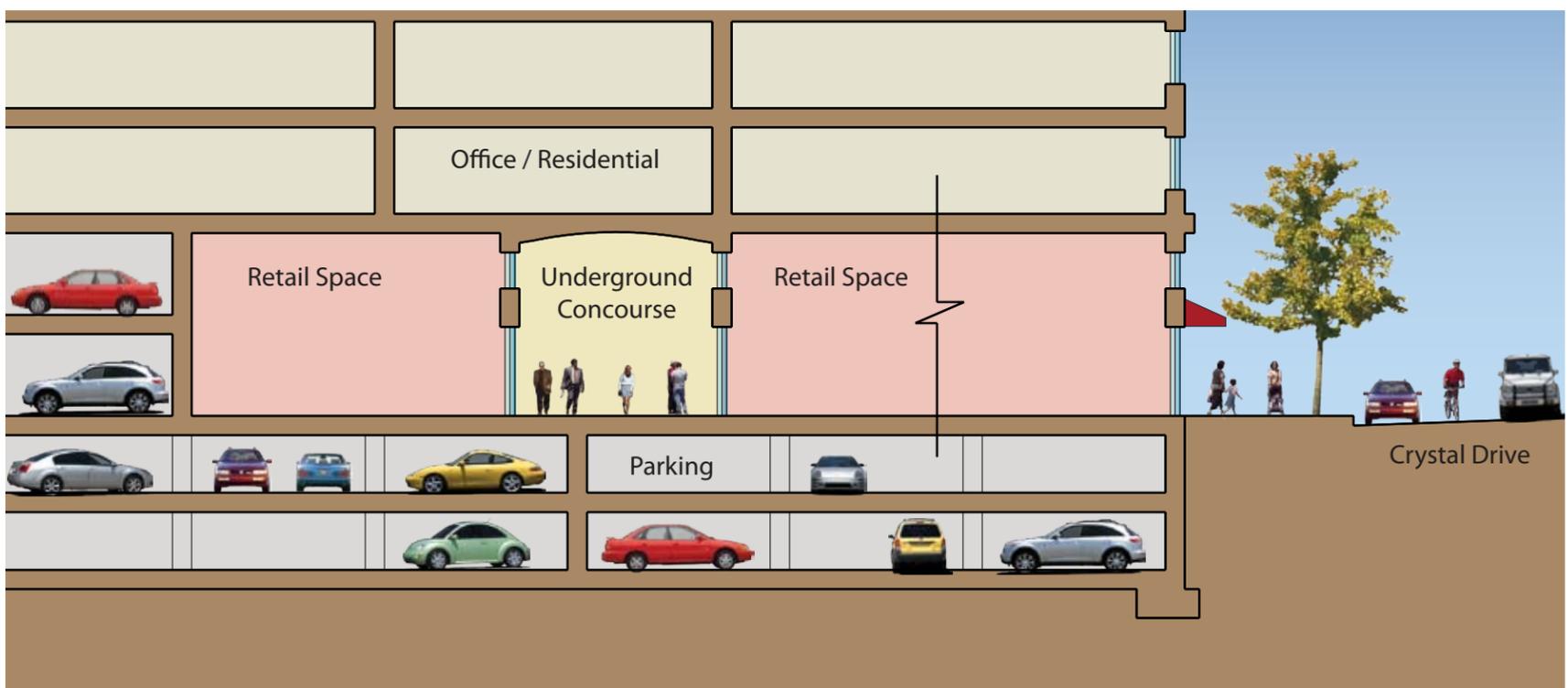
3.7.6 PUBLIC REALM AND THE UNDERGROUND

At the heart of Crystal City’s civic and retail core is one of its most distinctive features, the Crystal City Underground. Originally conceived as a modern, interior retail “street” separated from the negative effects of automobile traffic and inclement weather, the Underground provides an enclosed corridor throughout the east side of Crystal City, with convenient access to restaurants, retail, services, and transit (Figure 3.7.8). Direct links to the office, hotel, and residential buildings allow people to move about Crystal City without having to go outside. As such, the Underground has been an integral part of Crystal City’s public realm.

In the Master Plan, the Underground will be preserved in much of its current form, although new development that replaces existing buildings will require an evolution in both its form and program. The Underground will have improved access to, and frontage on, the street, which in some cases may lead to street level crossings where it’s not feasible or preferred to continue the Underground below the street. Combined, these efforts will enhance the pedestrian experience, promote economic vitality, and integrate the Underground into the larger public realm of Crystal City. (For more information regarding the recommendations for the Underground, see Section 3.9.3.) The new and existing elements of the Underground should include:

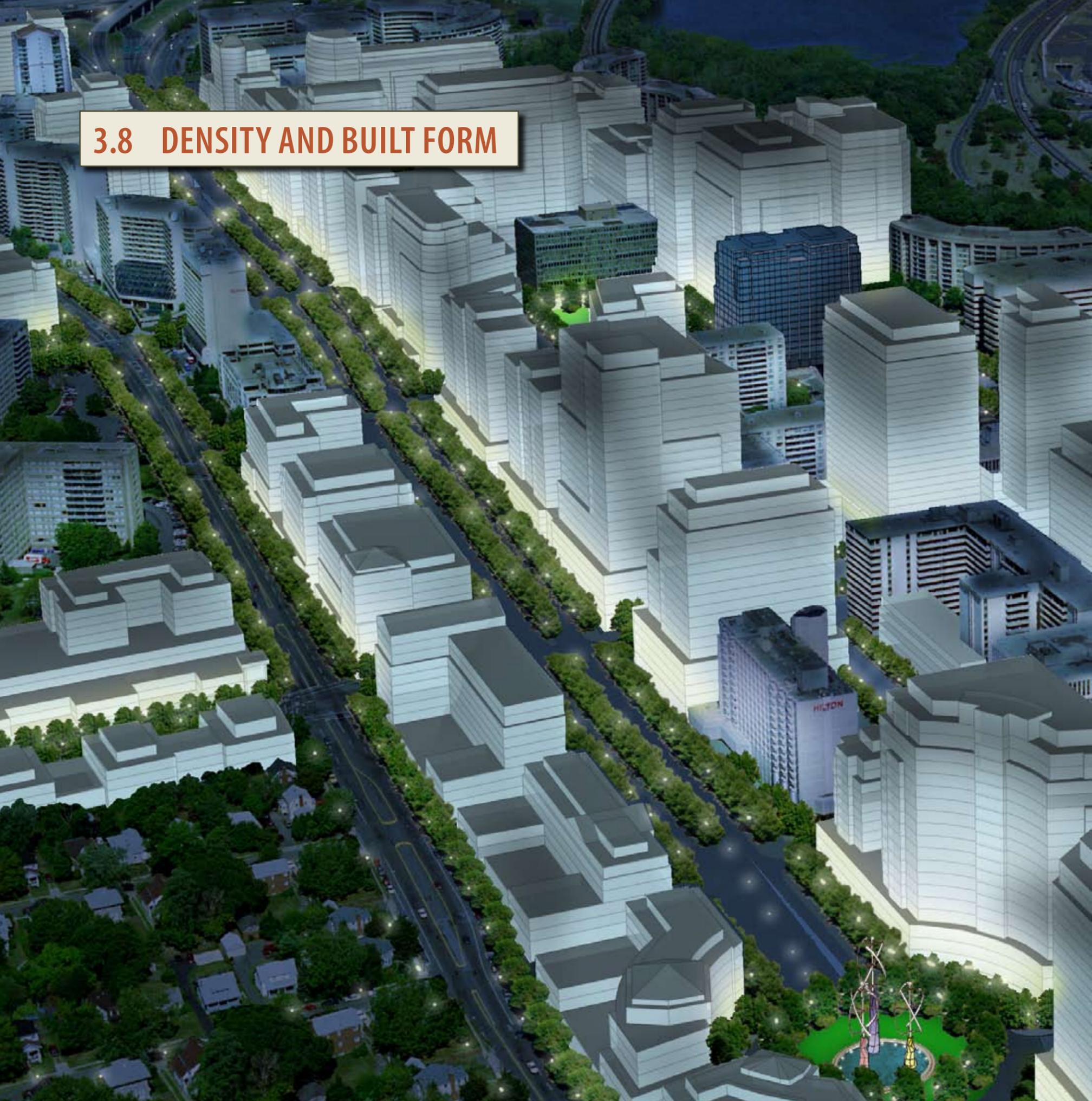
- A continuous pedestrian connection extending from 12th Street south to 23rd Street with connections to hotels on the west side of Jefferson Davis Boulevard,
- Vertical connections to the lobbies of buildings above,
- Connections to Metro and other modes of public transportation,
- Convenient access to parking,
- Mid-block access to streets,
- Direct connections between street-fronting retail and the interior corridor and retail uses,
- New cultural and arts features such as theaters, playhouses, galleries, and exhibit space, all located within the Underground with both interior and exterior marquee frontage,
- Clear and effective wayfinding signage and other elements that help orient pedestrians,
- An active Public Art program with projects specifically targeted for the Underground.

In many ways, streetscapes and the Underground work separately and against each other rather than reinforcing their interdependence. The Master Plan proposes a more seamless relationship where pedestrians experience an increased permeability between the Underground and retail uses facing public streets. As shoppers move more freely between interior and exterior retail, these uses will begin to complement one another, fostering a stronger retail environment in every part of Crystal City. The goal is to establish a dynamic pedestrian experience that grows and supports a robust marketplace, while creating an attractive, interesting, and fun community and civic life.



Relationship of the Underground Concourse to Street-Front Retail - Proposed Section
Figure 3.7.9

3.8 DENSITY AND BUILT FORM



Aerial View of Crystal City's Potential Build-Out

3.8.1 OVERVIEW

It is well established policy in Arlington County to focus high density development within its two Metrorail corridors: The Rosslyn-Ballston Corridor and the Jefferson Davis Corridor. Current projections (2005-2030) indicate that 89% of all future job growth, and 84% of future household growth in the County will occur within these two areas¹. The Jefferson Davis Corridor consists of the Crystal City and Pentagon City Metro Station Areas. Within the Crystal City Metro Station Area, which also includes Potomac Yards and Long Bridge Park (North Tract), projections over the same period anticipate a 64% increase in jobs, and a 48% increase in households².

Crystal City will undoubtedly accommodate some of the future growth projected by COG. Early in the planning effort, several studies to

assess future demand for office, residential, hotel, and other uses within Crystal City were conducted to assist in the development of the Master Plan. While temporary demand for specific uses is projected to vary over time, the studies suggest that there is sufficient demand into the future for additional commercial, residential, and retail development within Crystal City. In the face of these growth projections and pending impacts from BRAC, the additional density proposed under this plan reflects analyses of the future vision of Crystal City, a workable and sufficiently improved transportation network, market demand, the maintenance of Crystal City as a major economic engine for the County, and meeting regional responsibilities for future growth.

Within the Crystal City planning area, there has been limited new development since the mid-1990s, primarily due to the lack of building sites and the near build-out under the existing General Land Use Plan (GLUP)

and zoning regulations. Meanwhile, many of Crystal City's older commercial office buildings are losing their competitive edge in the current office market due to their age, condition, or configuration. Replacement of these structures may be financially difficult if allowable densities are limited by existing GLUP and zoning regulations. While similar circumstances may also apply to residential and hotel buildings and retail space, the actual challenges involved in replacing existing buildings will vary on a case by case basis. All of these factors suggest that the density currently permitted under the GLUP and Zoning Code may inhibit the full redevelopment of existing buildings, and may result in the retention of aging buildings that may or may not undergo renovations. Consequently, Crystal City may be ill-positioned to accommodate and absorb the additional workers and residents anticipated under current forecasts. The county could miss the opportunity to strengthen a top

¹ Growth Trend to 2030: Cooperative Forecasting in the Washington Region, MWCOG, Fall 2007, pp. 15-16.
² Metropolitan Washington: Regional Activity Centers and Clusters, MWCOG, 2007, pp. 4-5.



employment center and an important source of local tax revenue if policy steps accommodating greater capacity are not undertaken.

From the inception of the planning process, a number of assumptions about density were explored to help guide the design of the Master Plan. From these discussions, a set of key assumptions emerged:

- BRAC and other office-tenant repositioning offered an opportunity to replace some aging structures, if sufficient additional density could be provided to render the projects financially viable,
- Land utilization in Crystal City, both in terms of the street network and building placement, could be improved and yield additional building sites,
- Permitting additional density would provide opportunities and resources to improve the physical environment in Crystal City, primarily in the public realm,
- Any increase in density would also require increases in the quality and quantity of public open space,
- The planned increase in development will necessitate the identified planned improvements to the overall transportation network in order to maintain sufficient levels of mobility for Crystal City residents, employees, and patrons,
- The provision of additional density would allow Crystal City to absorb the anticipated demand for additional commercial and residential space reflected in County and regional demographic forecasts,
- The provision of any additional density would need to be balanced with community concerns about the quality of life in Crystal City.

These assumptions, in concert with the Goals and Objectives of Chapter 2, were the foundation for the vision that emerged in the Master Plan. The opportunity to increase density is utilized in the Master Plan to craft a vision of a new urban environment where buildings clearly shape public space and increase the quality of the public realm.

POLICY

- D 1** Establish base densities for each block in the Crystal City Planning Area, as shown on the Base Density Map.
- D 2** Allow for optional increases over the base density (as shown in the 2008 GLUP) within the maximum building height limits on sites in Crystal City, in return for extraordinary community benefits outlined in this plan, at the County Board's discretion.
- D 3** Utilize a tear-down credit (or similar mechanism) to encourage redevelopment that furthers Crystal City Planning goals and achieves public improvements, while retaining overall economic feasibility by recognizing the significant cost of demolishing existing major assets.



Density Distribution
Figure 3.8.1

3.8.2 DENSITY DISTRIBUTION AND MASSING

The physical form proposed for Crystal City will be guided by parameters that stipulate the general placement and massing of any new buildings within the block structure described in this document. As it evolved through the planning process, the Illustrative Concept Plan was studied to generate rules that will guide the future built-form of Crystal City. Massing rules were explored for their ability to yield new buildings that work together to shape a high-quality public realm. Likewise, opportunities to create new development sites through the identification of underutilized land resources were also examined.

The methods used for controlling the placement and massing of buildings in the Illustrative Concept Plan include:

- High/low density zones, which govern the distribution of density throughout the planning area based on criteria such as access to transit, existing context, and land use objectives;
- Allowable building height, which is governed by factors such as existing context, desire for a more diverse skyline, and density objectives;
- Bulk plane angles, which control heights along particular frontages in order to preserve day lighting and minimize shadows within designated open spaces;
- Tapers and setbacks, which reduce bulk and sculpt the massing of buildings,
- Tower coverage, which determines the maximum allowable coverage of floor plates above a buildings podium base, relative to the total land area of the block,
- Tower and building spacing, which establishes a minimum separation between buildings, particularly multistory towers.

Each of these items was derived from and tested with the Illustrative Concept Plan, and subsequently used to map a set of rules and policies that should apply throughout the planning area. The set of diagrams that follows illustrates the density, coverage, and massing policies of the Master Plan.

3.8.3 HIGH/LOW DENSITY ZONES

Under the Master Plan, the largest increases of density are concentrated in a limited number of locations. Figure 3.8.1 identifies three principle areas within the planning area that were identified as most suitable to receive the largest share of new density. Generally, the largest increases in density will occur on the East Side of Jefferson Davis Boulevard, with the largest concentrations located along 18th Street adjacent to the Metro Station, and along 23rd Street, at the heart of the Entertainment District. Also, Figure 3.8.2 maps the spatial distribution of base densities throughout the planning area. For the purposes of this plan, standard site plan base density refers to maximum planned densities

for a particular area according to the GLUP designations as they exist in 2008. Under this plan, standard site plan base density will be an important factor in helping to determine how density above the established base could be permitted, and what expectations may be associated with such additional density.

3.8.4 DENSITY YIELD

Early in the planning process, the existing density in Crystal City was inventoried and summarized. Every existing building was entered into a database, recording the location, height, typical floor area, floor area by use, and total gross floor area (GFA) for each building. Uses were broken down by office, retail, hotel, residential, Underground circulation, and service. The resulting database was used as the basis for measuring potential increases in density under the Master Plan.

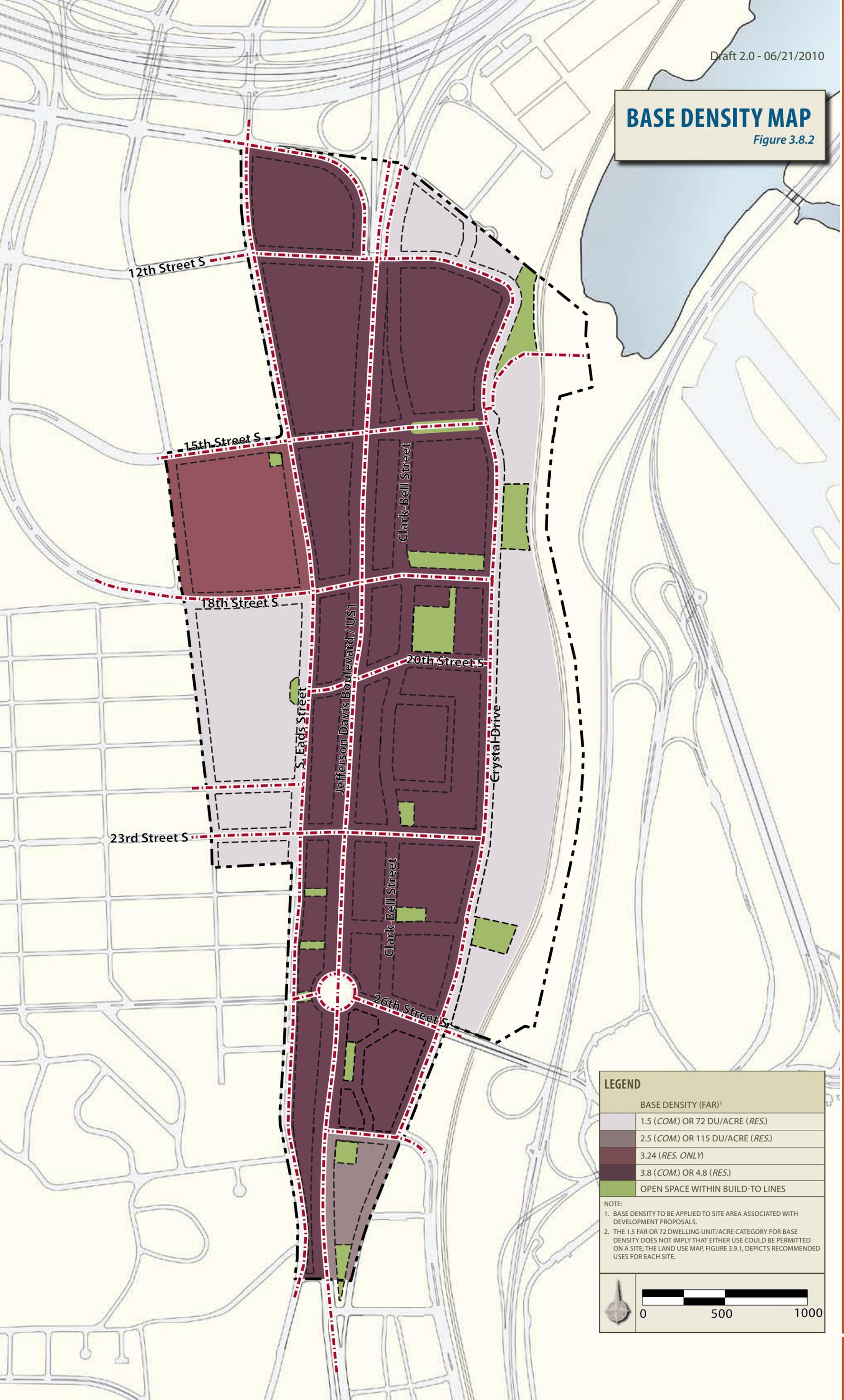
Existing development in the Crystal City planning area is measured at approximately 24.7 million square feet. About 17.1 million square feet, or 69% of this total is located east of the current Jefferson Davis Highway, and 7.6 million square feet, or 31% is located on the west side. As of 2008, about 44% of total density in the planning area is designated as office use, located almost exclusively on the east side. Combined hotel and residential use constitutes about 52% of total density, with a moderately larger inventory of such space on the west side. Retail use is measured at about 850,000 square feet, with approximately 84% of the total located on the east side.

The Illustrative Concept Plan models a density increase of approximately 61% by around 2050 over existing conditions. Market analyses indicate sufficient projected market demand for such additional growth in Crystal City. The Illustrative Concept Plan and related use mix policies also propose an increased share of residential program in the overall use mix, which the studies also indicate is supportable by market demands. While the modeling of the Illustrative Concept Plan is based on assumptions regarding specific land uses on a building by building basis, the flexibility provided in the policy directives and Master Plan elements may result in a buildout that varies somewhat from the modeled projections.

To establish a baseline for measuring potential increases in density, the Base Density Map (Figure 3.8.2) records maximum planned densities envisioned under the existing GLUP illustrated in Figure 1.2.8. Density is recorded as a Floor Area Ratio (FAR) value or in dwelling units per acre for certain designations. The provision of standard site plan base density values is intended only as a means of gauging increases in density over currently planned densities, and in no way implies a limit on FAR within the Master Plan. Ultimate density limitations are determined by Master Plan features such as building height limits, tower coverage limits, setbacks, and other standards that influence building placement, massing, and bulk.

BASE DENSITY MAP

Figure 3.8.2



LEGEND

BASE DENSITY (FAR) ¹	
[Light Grey Box]	1.5 (COM.) OR 72 DU/ACRE (RES.)
[Medium Grey Box]	2.5 (COM.) OR 115 DU/ACRE (RES.)
[Dark Grey Box]	3.24 (RES. ONLY)
[Dark Brown Box]	3.8 (COM.) OR 4.8 (RES.)
[Green Box]	OPEN SPACE WITHIN BUILD-TO LINES

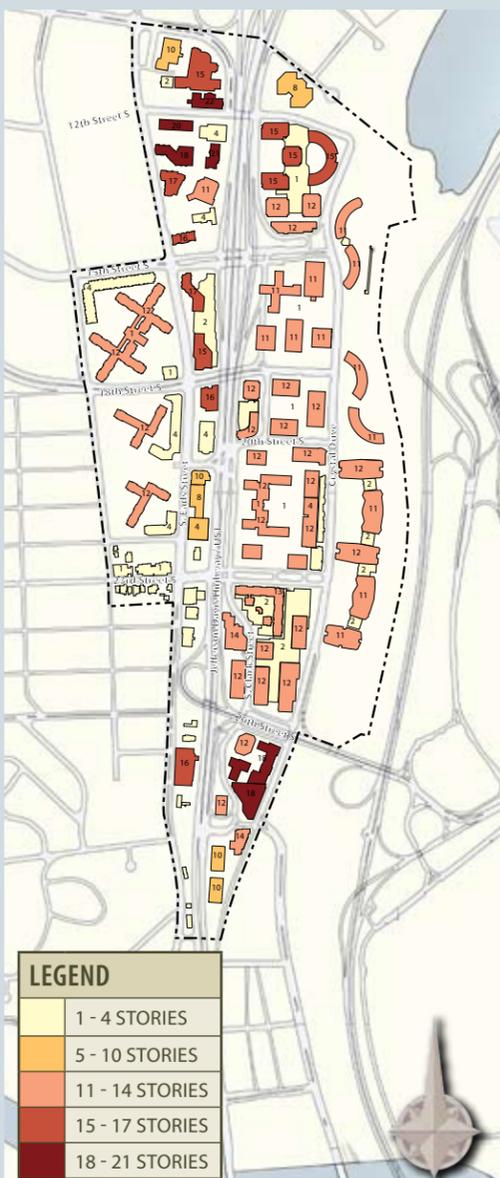
NOTE:

1. BASE DENSITY TO BE APPLIED TO SITE AREA ASSOCIATED WITH DEVELOPMENT PROPOSALS.
2. THE 1.5 FAR OR 72 DWELLING UNIT/ACRE CATEGORY FOR BASE DENSITY DOES NOT IMPLY THAT EITHER USE COULD BE PERMITTED ON A SITE; THE LAND USE MAP, FIGURE 3.9.1, DEPICTS RECOMMENDED USES FOR EACH SITE.

[North Arrow] [Scale Bar: 0, 500, 1000]

POLICY

- B 2** Establish absolute maximum building heights (in feet) for all blocks in the Crystal City Planning Area, as shown on the Building Heights Map.
- B 3** Require proposed development projects in Crystal City to submit their projects for review by Federal Aviation Administration (FAA) when they file a site plan application with the County, and secure notice from FAA that the project is not a hazard to air navigation before a County Board public hearing is scheduled for formal action on the site plan application.
- B 4** Undertake future study (as needed) to develop alternative physical planning parameters for achieving planned densities should the FAA determine that currently planned heights are not feasible for airport operations.
- B 6** Require minimum horizontal separation of 60 feet between building towers above the fifth floor to ensure light, air, relief, and respite to outdoor and indoor spaces.



Existing Building Heights
Figure 3.8.3

3.8.5 ALLOWABLE BUILDING HEIGHTS AND TAPERING STRATEGIES

The Master Plan proposes increased maximum building heights across much of Crystal City. Contextual conditions, areas targeted for increased density, and other considerations informed the proposed height limits. Figure 3.8.5, the Building Heights Map, depicts recommended maximum building heights for all Crystal City sites. Figure 3.8.5 illustrates the maximum height limits for rentable floor area; modest additional height may be allowed for architectural features or penthouses, to be determined through the Zoning Ordinance. Also, properties where existing site plan buildings exceed the Sector Plan heights should provide appropriate transition yet have flexibility in heights, within certain limits. Generally, this flexibility would provide up to an additional 25 feet or 40 feet, where planned maximum building heights are ≤ 60 feet or ≥ 75 feet, respectively; or, for sites with two maximum height designations, up to an additional 65 feet could be allowed on the portion planned for ≥ 75 feet. The height of a new building should never exceed that of the building being replaced. Finally, the depths of height limit zones for all sites in Crystal City, where noted on the map, are intended to be somewhat flexible to account for site-specific conditions that may warrant reasonable adjustments.

TAPERS AND SETBACK

Tapering refers to adjustments in building heights in response to contextual changes. In addition to varied maximum building heights, facade setbacks and other forms of architectural expression can shape overall building massing. These techniques allow tapering, articulating, or mitigating the apparent mass of a building in relation to its context, reduce bulk, increase penetration of light and air, and provide opportunities for visual interest and architectural expression. In

conjunction with maximum building heights, tapers, setbacks and other architectural features are integrated into the Plan to achieve harmonious relationships among buildings.

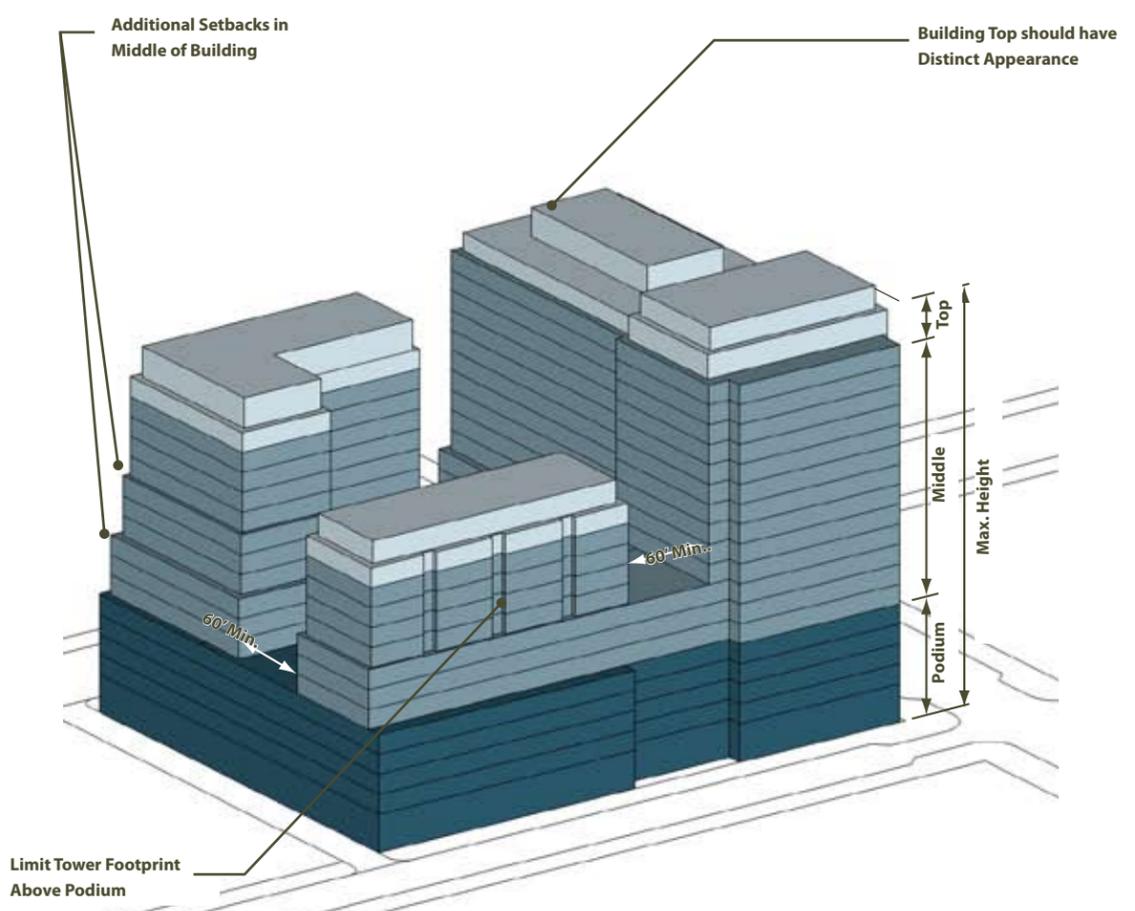
TOWER AND BUILDING SPACING

This Master Plan is designed to improve Crystal City's urban character, particularly at street level. Recommended build-to lines are primarily used to achieve this objective. These build-to guidelines call for a continuous building edge along streets, generally up to the five-story podium height. Where conditions require podium division, party-walls can be utilized to sustain continuity at the street edge. Any podium gaps should be limited to 40 feet wide regardless of minimum frontage requirements, except for garage or service entrances, where breaks in the facade (including entrances) for vehicular ways should at most be 25 feet wide.

Above the fifth-floor podium, all portions of a building are designated as a tower component, and must maintain a minimum separation distance of 60 feet from adjacent towers. This separation will maintain privacy between tower views, allow ample penetration of light and air onto street rights-of-way and the interiors of blocks, and provide relief in the massing and bulk of each block. In select instances, exceptions to this rule may be considered where existing conditions and retained buildings present major challenges to achieving the full 60 feet of separation.

HEIGHT FEASIBILITY STUDIES WITH THE FAA

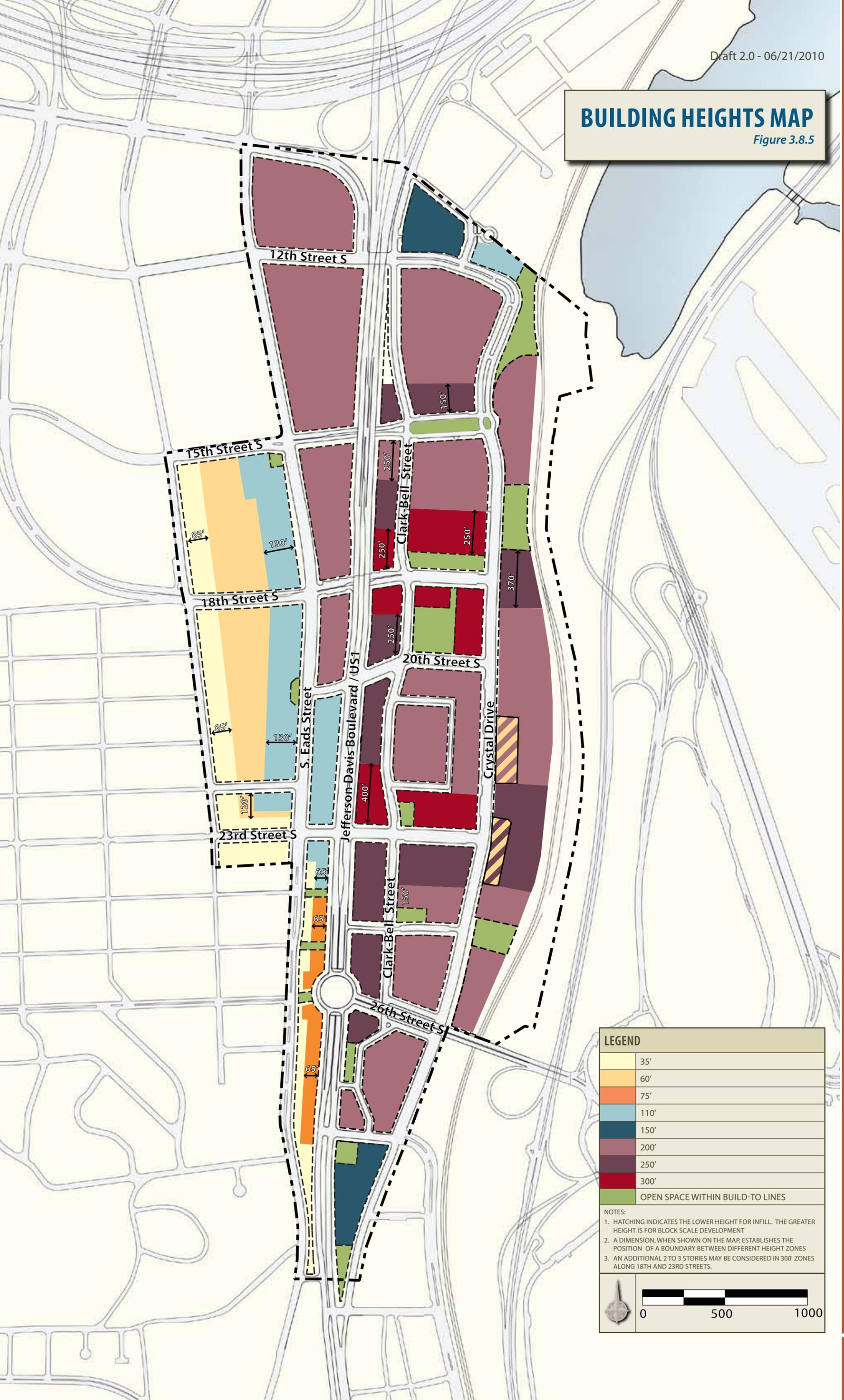
The County and the Federal Aviation Administration (FAA) cooperatively evaluated potential impacts of the Plan on regional airspace and operations around Reagan National Airport. The results of the analysis are chronicled in a Feasibility Study report, located in the plan appendices, and the findings will carry through to future reviews of individual buildings.



Building Massing Strategies
Figure 3.8.4

BUILDING HEIGHTS MAP

Figure 3.8.5



LEGEND	
	35'
	60'
	75'
	110'
	150'
	200'
	250'
	300'
	OPEN SPACE WITHIN BUILD-TO LINES

NOTES:

- HATCHING INDICATES THE LOWER HEIGHT FOR INFILL. THE GREATER HEIGHT IS FOR BLOCK SCALE DEVELOPMENT
- A DIMENSION, WHEN SHOWN ON THE MAP, ESTABLISHES THE POSITION OF A BOUNDARY BETWEEN DIFFERENT HEIGHT ZONES
- AN ADDITIONAL 2 TO 3 STORIES MAY BE CONSIDERED IN 300' ZONES ALONG 18TH AND 23RD STREETS.

POLICY

- B 7** Apply bulk/plane height controls, as shown in the Bulk Plane Angle Map, near identified parks and plazas to limit shadows on and ensure natural daylight to such spaces.

BULK ANGLE HEIGHT CONTROLS

Figure 3.8.7 indicates frontages where building form is further restricted to preserve sun exposure and minimize shadow on public open spaces. As part of this planning process, solar studies informed additional setback requirements necessary to maintain desirable solar exposure. A target criteria is that most public open spaces should have no less than 55% solar exposure at any time between the hours of 11:00 a.m. and 3:00 p.m.

on either the vernal or autumnal equinox. Bulk plane angles were established along the frontage of each affected open space, the maximum angle of setback determined by the sun's altitude and the frontage distance from the edge of the space (see Figure 3.8.6). The legend of Figure 3.8.7 lists each of the restricted frontages and specifies the related setback requirements.

SUN STUDIES AT EQUINOX



11:00 am



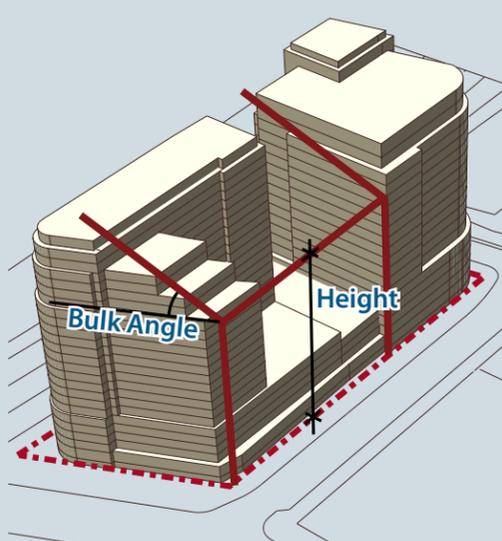
12:00 p.m.



2:00 p.m.



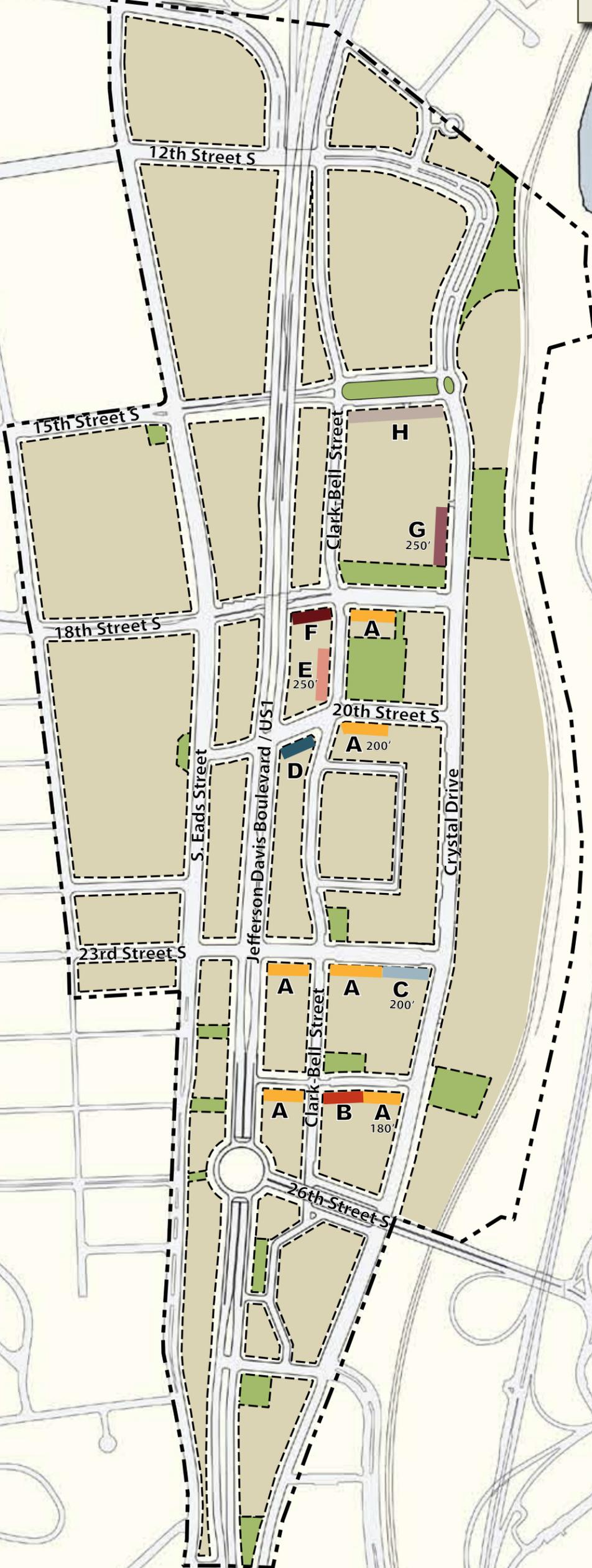
3:00 p.m.



Positioning the Bulk Plane
Figure 3.8.6

BULK PLANE ANGLE MAP

Figure 3.8.7



LEGEND	
FRONTAGE	HEIGHT AND ANGLE
A	HEIGHT: 140' / ANGLE 50°
B	HEIGHT: 120' / ANGLE 50°
C	HEIGHT: 200' / ANGLE 50°
D	HEIGHT: 180' / ANGLE 50°
E	HEIGHT: 180' / ANGLE 43°
F	HEIGHT: 220' / ANGLE 50°
G	HEIGHT: 160' / ANGLE 43°
H	HEIGHT: 100' / ANGLE 50°
	OPEN SPACE WITHIN BUILD-TO LINES

NOTE:
A DIMENSION, WHEN PROVIDED ON THE MAP, ESTABLISHES A FRONTAGE LENGTH FOR THE BULK PLANE REQUIREMENT, OTHERWISE THE REQUIREMENT APPLIES TO THE ENTIRE FRONTAGE.

POLICY

B 5 Establish maximum building tower coverages, measured above the fifth floor, for all blocks within the Crystal City Planning Area, as shown on the Tower Coverage Map.

3.8.6 TOWER COVERAGE AND BUILDING ENVELOPES

A primary goal of the Master Plan is to create a great public realm framed by attractive architectural façades that promotes a high-quality pedestrian experience. To meet this goal, block coverage requirements will focus on tower footprints above any podium base, providing more flexibility in how the podium provides the integrity of the street edge at the base of all structures. The proposed five-story podium height allows a low-rise building format to frame all the primary streets of Crystal City, with no limitations on building coverage for areas within the build-to lines. Meanwhile, tower footprint elements are controlled to promote the distribution of density in discrete massing elements above the podiums, emphasizing the use of towers over continuous building bars with fewer separations. One of the primary objectives of limits on tower coverage is to promote the penetration of light and air into the center of blocks, and to permit interior views to the outside.

Figure 3.8.9, the Tower Coverage Map, shows the allowable tower coverage by sub-zone and block. The public open space areas defined by build-to lines on each block are excluded from the calculation, so that each percentage reflects the buildable area denoted within build-to lines. While tower coverage varies from block to block, blocks with smaller and narrower dimensions generally permit greater tower coverage than blocks where the net buildable area is larger and broader. This is because smaller, narrow blocks rely more on street rights-of-way and dedicated open space to provide light and air exposure, while larger and broad blocks require lesser coverage above the podium to ensure ample light and air within the larger block interiors. Permitted tower coverage is also related to the use-mix associated with

each block, so that blocks with a greater percentage of residential and hotel use are associated with lesser tower coverage. The tower occupancies specified in Figure 3.8.9 express a maximum permissible coverage. However, other requirements and guidelines within this document may preclude achieving this maximum allowance when applied to the particular circumstances of any given block.

Collectively, build-to lines, building height, tower coverage, tower separation, and tower setback parameters are the factors that will determine achievable densities under the Master Plan. Building height restrictions, street-face build-to guidelines, and internal block site boundaries determine the basic buildable envelope for any development proposal.

Figure 3.8.8 illustrates a hypothetical building envelope established by the combination of height and bulk parameters. The envelope defines the limits of massing options. With the addition of coverage requirements, bulk plane requirements, tower separation requirements, and the design guidelines encouraging additional tower setbacks, a complete set of criteria for exploring allowable building form(s) is provided. Any resulting density is derived directly from these form-giving rules, rather than a formulaic and generic limit on floor area ratio.

ILLUSTRATION OF BUILDABLE ENVELOPE

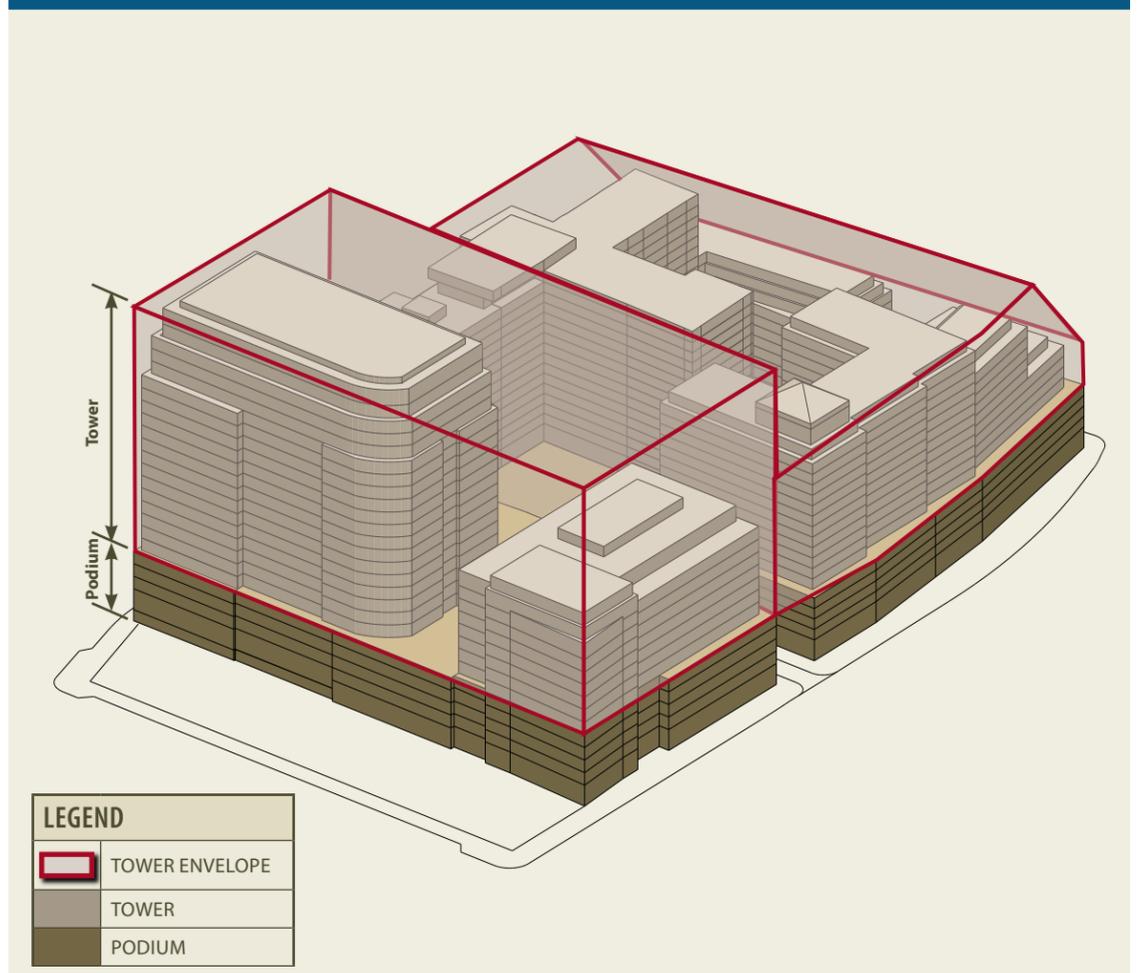
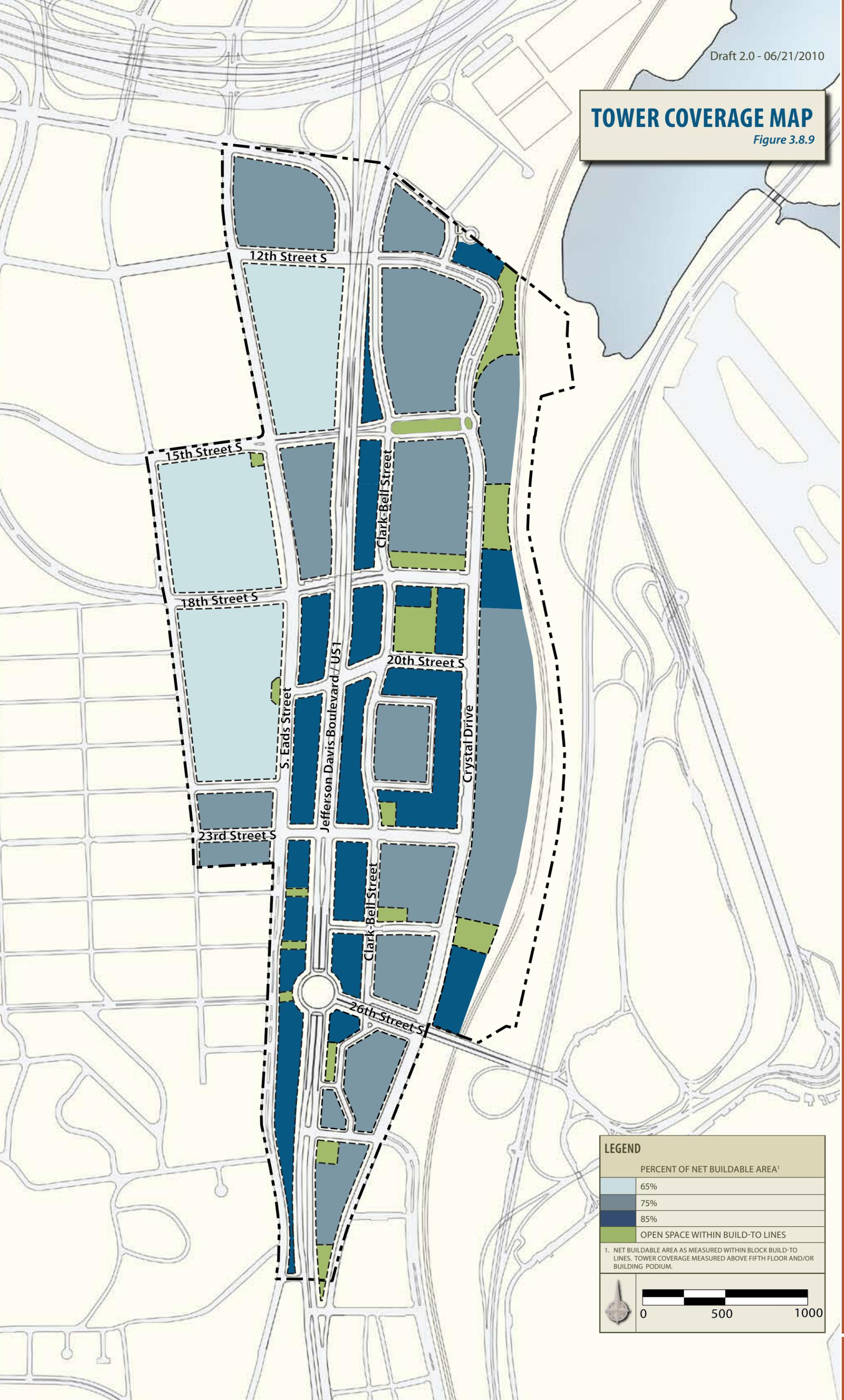


Figure 3.8.8

TOWER COVERAGE MAP

Figure 3.8.9



LEGEND

PERCENT OF NET BUILDABLE AREA¹

	65%
	75%
	85%
	OPEN SPACE WITHIN BUILD-TO LINES

1. NET BUILDABLE AREA AS MEASURED WITHIN BLOCK BUILD-TO LINES. TOWER COVERAGE MEASURED ABOVE FIFTH FLOOR AND/OR BUILDING PODIUM.

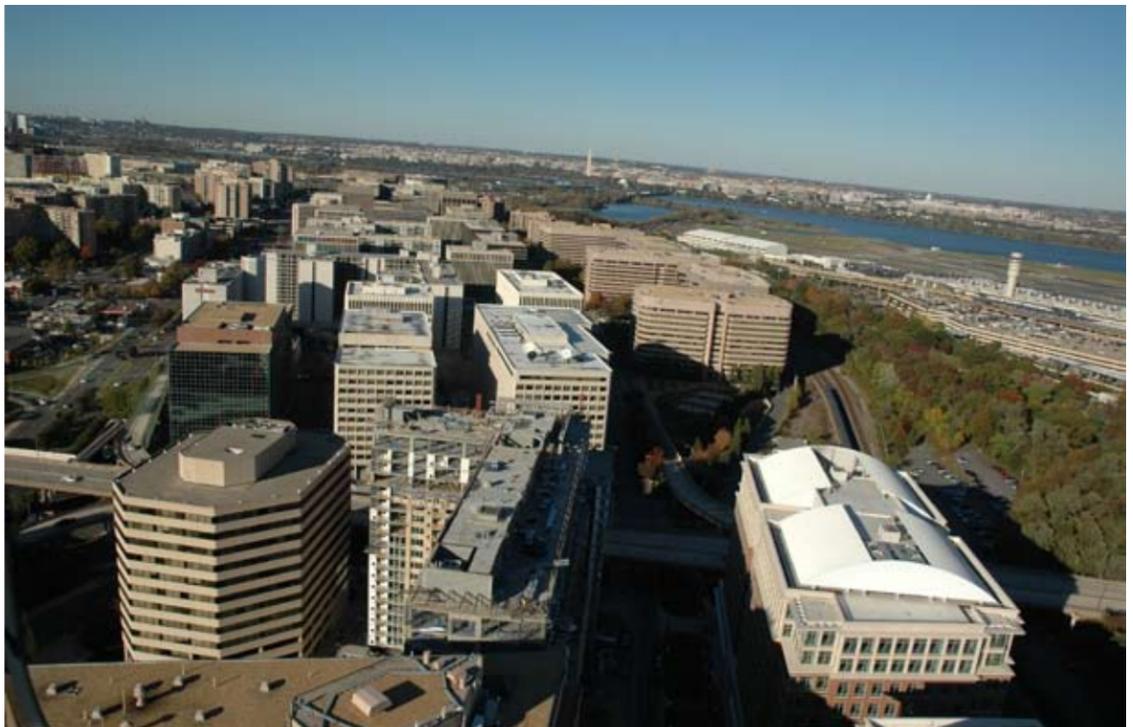
3.8.7 DESIGNING THE SKYLINE

The Crystal City skyline will change significantly as a result of the Master Plan build out. By increasing allowable height in certain areas, replacing some buildings, and creating new building sites, the appearance of the skyline from any number of vantage points will be affected. By identifying key locations that would best be served by additional height and density, a simultaneous strategy was developed to taper the skyline to increase its variation. In order to better understand and study the consequences of the massing provisions incorporated into the Master Plan, computer models of existing and proposed conditions were prepared, as shown throughout this document. The general tapering strategy, diagrammed in Figure 3.8.10, illustrates an idea of building heights stepping up and down, with areas of taller buildings clustered together, while a relatively constant height is maintained for the podium bases.

Before and after profiles from the computer models show the skyline from both northern and eastern vantage points (Figures 3.8.11-14). Both of the existing profiles (north and east) show little variation in the profile of the skyline. The proposed northern profile presents a more compressed effect, but a general tapering up from the eastern edge, cresting between Crystal Drive and Jefferson Davis Boulevard, and tapering down again to the west can be observed. The view from the east of the proposed skyline shows a distinct pattern of tapering, with clusters of height and bulk around 18th Street, and to a lesser degree around 23rd Street. The overall effect is a more varied and visually interesting skyline than exists today, with a stronger visual marker for where the activity centers reside within Crystal City.



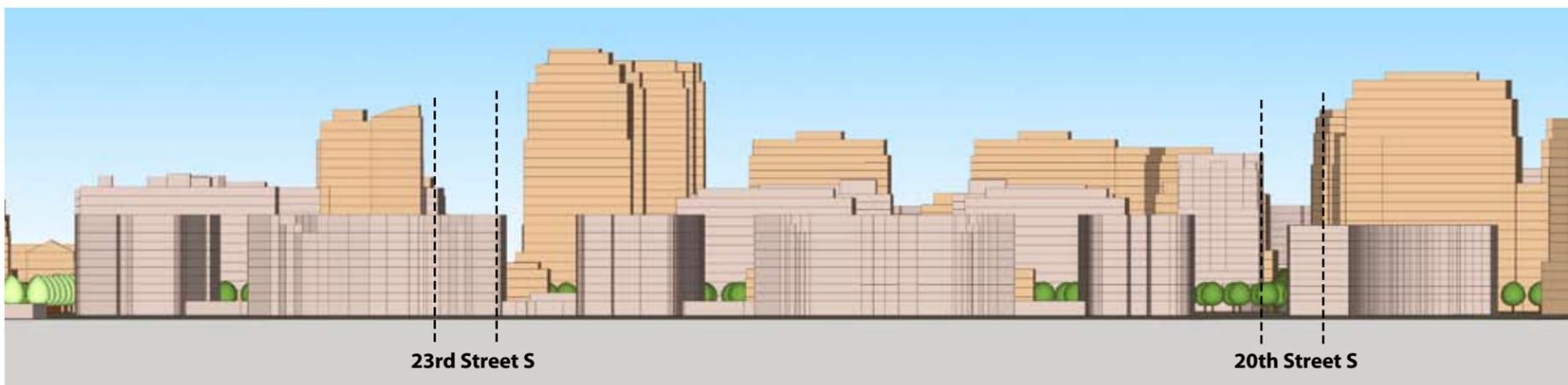
Aerial View of Crystal City looking East



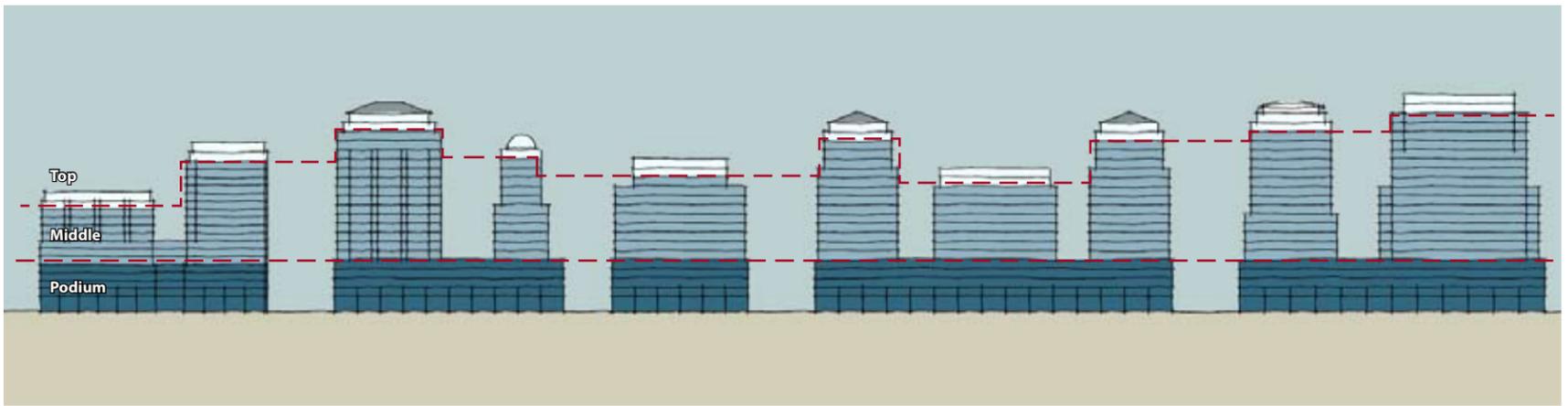
Aerial View of Crystal City looking North



Existing Skyline from East Side - Figure 3.8.13



Proposed Skyline from East Side - Figure 3.8.14



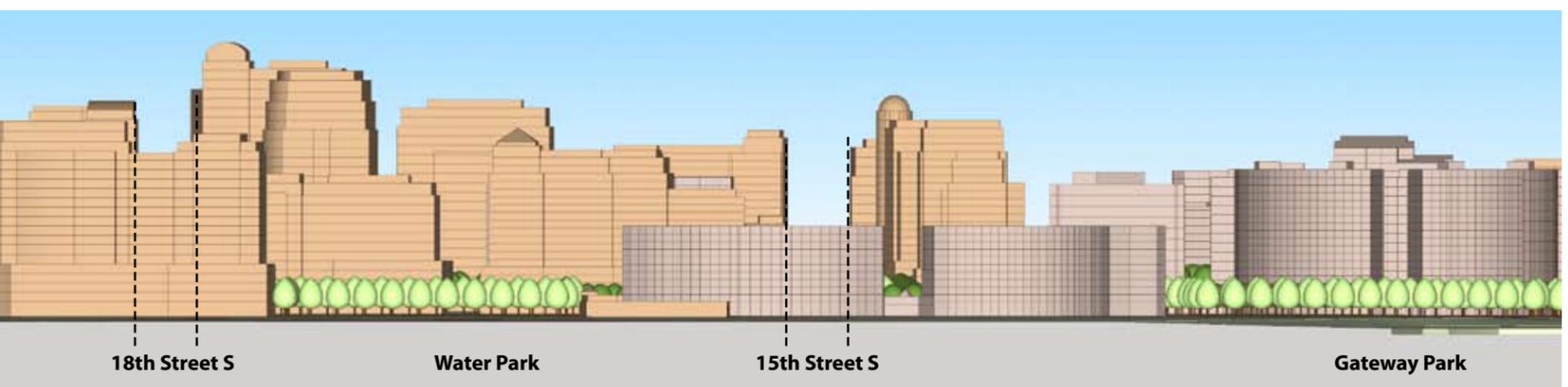
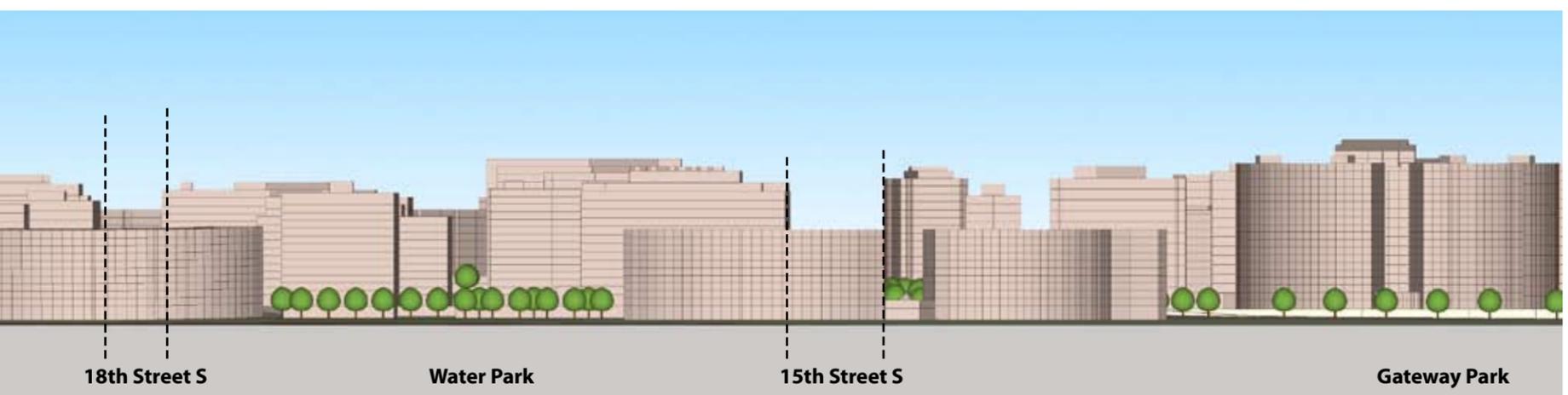
Skyline Strategy - Figure 3.8.10



Existing Skyline from North Side - Figure 3.8.11



Proposed Skyline from North Side - Figure 3.8.12



POLICY

- LU 1** Ensure ample and diverse opportunities for work, recreation and entertainment within Crystal City to create an active, 18-hour per day street life. Crystal City will be an economically and socially vibrant neighborhood, supporting a healthy mix of residents and visitors seven days a week.
- LU 2** Attain an ultimate build out in the Crystal City Planning Area with more residential than office Gross Floor Area (GFA) to reach an evening population at least half the daytime population and to steadily improve the resident to employment balance.
- LU 3** Establish recommended land uses for each block in the Crystal City Planning Area as shown on the Land Use Map to guide actual use mixes proposed within block-level Phased Development Site Plans. Recommend some blocks to have specific minimum percentages for certain land uses, as outlined on the Land Use Map.
- H 1** Increase the committed affordable housing stock in Crystal City by developing implementation tools that encourage the provision of on-site or nearby off-site affordable units.
- H 2** Develop implementation tools to ensure a housing mix with a sufficiently broad range of sizes and price points such that:
- those who work in Crystal City have affordable opportunities to live there;
 - households of various sizes, composition, and accessibility requirements are accommodated
- H 3** Maximize a stock of committed affordable housing within Crystal City. To the extent that a developer's affordable housing commitment is not met by providing such housing within the Crystal City Planning Area, work to ensure that such housing is provided as close to Crystal City as feasible.

3.9 LAND USE AND USE MIX

In certain areas, the General Land Use Plan (GLUP) may need to be adjusted to realize the vision of the Master Plan. The existing GLUP for Crystal City is shown in Figure 1.2.8 (page 20). Currently, the GLUP shows office-apartment-hotel use designations ranging from low to high density on the east side of the current Jefferson Davis Highway, while the west side is characterized exclusively as residential and hotel, ranging from medium to high density, with the exceptions of the Service Commercial designation for Restaurant Row on 23rd Street and Industrial Service district at the south end. In terms of desired use mix, on the east side of Jefferson Davis Boulevard, the Master Plan envisions a continued mix of uses, with a notable increase in the share of residential uses. On the west side, the current GLUP shows only residential and hotel use, while the Master Plan also introduces some office use on the blocks between Jefferson Davis and Eads Street. In general, the GLUP would require modifications to reflect changes in density and the use-mix balance presented in the Master Plan. Specific recommendations on potential amendments to the GLUP are discussed in more detail in Chapter 4.

The Land Use Map, Figure 3.9.1, shows the proposed mix of uses developed in the Master Plan. The legend indicates allowable uses by zone, with minimum percentage requirements for some uses in certain areas. The Land Use Map does not specify the precise balance of uses for any given zone, beyond the minimums already described. In addition to this map, Policy LU 2 should be used continuously as a guide to ensure that residential gross floor area is being developed to match and ultimately exceed office floor area in the planning area. Additionally, in some instances, the existing zoning categories may not allow for the heights and densities envisioned in the Master Plan. In addition to potential GLUP amendments, Zoning Ordinance amendments may be needed as well to establish the tools necessary to implement the plan. Such amendments will provide an opportunity to review allowable uses and make adjustments to be more particular about desired uses or exclude any uses inconsistent with the intent of the Master Plan.

3.9.1 HOUSING

Increasing the quantity, availability, and affordability of housing in Crystal City is a central tenet of the Master Plan. Recent forecasts show demand for housing in the Planning Area could increase 95% by 2030, putting pressure on an already tight housing market. Under the Master Plan, a proposed increase in residential GFA of just over 70% by 2050 should help to keep pace with much of this demand, thereby channeling significant residential development into an area already served by transit, which will be supplemented with new surface transit technology. The anticipated growth in housing inventory is associated with a projected increase of nearly 100% in Crystal City's residential population during the planning period. While an overall increased inventory of housing is a key goal of the plan, an increased diversity in housing types and price points, including affordable housing, will be necessary to achieve the vision for Crystal City as a complete

community catering to the needs of all demographics.

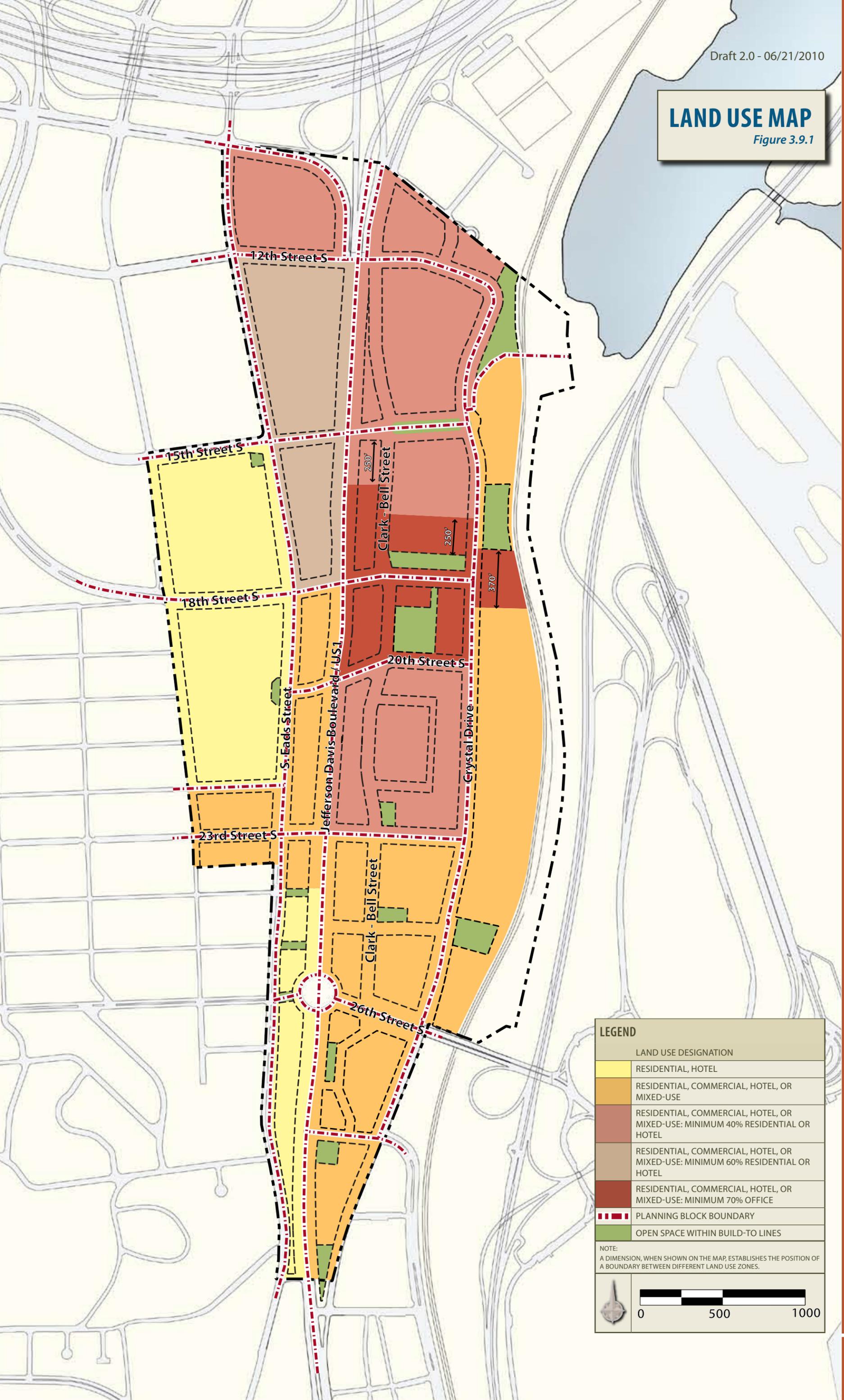
Within the Planning Area, current housing types are exclusively multi-family units, consisting of condominiums and rental apartments. Census data for 2000 indicate the percentage of households with one or two occupants constituted over 90% of all households in Crystal City, a number unlikely to have changed much since that time. This pattern and research on existing inventories suggest that most units in Crystal City are either one or two bedrooms in size. Accommodating larger families will be a challenge going forward, since providing units with three bedrooms or more has not been the norm. Existing residential buildings are typically 12 to 18 stories in height, while some new buildings introduced on the west side are lower in height (either built or approved site plans). The size of residential buildings proposed in the Master Plan ranges from three-story buildings with relatively small footprints located on the western edge of the planning area to high-rise multi-family residential towers located in the core neighborhoods of the east side. With a focus on increasing the range of residential building types, number of bedrooms per unit, and overall price points, the plan will be better suited to encourage the development of a more diverse mix of housing types, although additional tools may be needed to achieve the vision.



New Housing in Crystal City

As outlined in the Policy Directives pertaining to housing, ensuring the provision of affordable housing within Crystal City is a critical objective of the Plan. Providing affordable opportunities for those who work in Crystal City to be able to live there will also go a long way towards advancing the sustainability objectives of the plan. With new and redevelopment projects, affordable housing units will be achieved on-site or nearby off-site through the application of the Affordable Dwelling Unit (ADU) Ordinance, in addition to recommended special provisions that would pertain to projects exceeding the planned standard site plan base density. As a long-term planning goal, this Plan establishes a range of achieving between 550 and 1,200 additional committed affordable housing units in the Crystal City Planning Area by 2050, depending upon how much of the affordable housing contribution required by the Ordinance is achieved in the way of units versus cash contributions. Also, where it's not feasible to achieve such units in Crystal City, consideration may also be given to achieving the associated affordable dwelling units in nearby areas also served by transit, such as Pentagon City. More specific details on the recommended strategies and tools aimed to help achieve the above goals are detailed in Chapter 4, Implementation.

LAND USE MAP
Figure 3.9.1



LEGEND

LAND USE DESIGNATION

- RESIDENTIAL, HOTEL
- RESIDENTIAL, COMMERCIAL, HOTEL, OR MIXED-USE
- RESIDENTIAL, COMMERCIAL, HOTEL, OR MIXED-USE: MINIMUM 40% RESIDENTIAL OR HOTEL
- RESIDENTIAL, COMMERCIAL, HOTEL, OR MIXED-USE: MINIMUM 60% RESIDENTIAL OR HOTEL
- RESIDENTIAL, COMMERCIAL, HOTEL, OR MIXED-USE: MINIMUM 70% OFFICE
- PLANNING BLOCK BOUNDARY
- OPEN SPACE WITHIN BUILD-TO LINES

NOTE:
A DIMENSION, WHEN SHOWN ON THE MAP, ESTABLISHES THE POSITION OF A BOUNDARY BETWEEN DIFFERENT LAND USE ZONES.

POLICY

- H 4** Apply the Affordable Housing Ordinance and create special provisions for bonus density of up to 20 percent of Gross Floor Area (GFA) above the base densities per the 2008 GLUP in response to developers' meeting or exceeding the target for affordable dwelling units available in both new and existing buildings.
- H5** Leverage existing and potential future tools to add a total of between 550 and 1,200 committed affordable housing units in the Crystal City Planning Area by 2050.
- LU 4** Designate specific areas in Crystal City for ground floor retail uses that are accessible from sidewalks, the interior pedestrian concourse, or both, as shown on the Retail Frontage and Interior Pedestrian Concourse Map, and strategically locate interior retail to not detract from street level retail areas.
- T 6** Maintain an interior pedestrian concourse from 12th Street to 23rd Street, as shown conceptually on the Retail Frontage and Interior Pedestrian Concourse Map that extends the reach of transit, provides frequent connections to sidewalks, and is adequately flexible to permit creative design solutions for new development.

3.9.2 RETAIL USES

To support the vision of a complete urban community with a vibrant and attractive public realm, the Master Plan envisions a diverse and robust retail environment for Crystal City. The types, quantity, and mix of retail establishments proposed in the Master Plan should satisfy the demand for neighborhood-oriented retail serving the residents, workers, and visitors of Crystal City. Convenience and services retail, as well as restaurants of all sorts, should continue to populate the neighborhood.

The community expressed a very strong desire to achieve establishments such as a full service grocery store or a hardware store in Crystal City to serve its daily needs. The location of retail establishments will vary generally among street-fronting retail space, internal retail space accessible from the Underground, or hybrid spaces with access from both. The plan encourages enhanced visibility and accessibility to retail establishments, expansion in the quantity and type of retail establishments, and greater synergy between the street-front and internal retail spaces.

ABOUT THE CRYSTAL CITY RETAIL ANALYSIS

The County commissioned Economics Research Associates to conduct a retail analysis of current and future conditions in Crystal City. The retail analysis measured demand from residents, workers, and visitors, based on the projected build out of residential, office and hotel uses in the Draft 1.5 Alternative of the plan ("the draft plan"). The demand was calculated for three major retail categories: General Apparel, Furnishings, and Other (GAFO); Convenience and Services; and Food and Beverage Away from Home. GAFO includes items such as books, clothes, music and electronics. Convenience and Services includes food stores (including grocery), pharmacies, dry cleaners, fitness centers, financial services, and health and beauty stores. Food and Beverage Away from Home refers to restaurants. Additional uses considered in the analysis but not quantified in the total demand (because they are outside the three major categories) include education, civic, arts, entertainment, and medical services.

The analysis projected demand for 1,339,000 gross square feet of retail upon build out of the draft plan. The draft plan supplied 1,795,474 gross square feet of retail space, with the expectation that the uses not included in the total demand

(education, civic, arts, entertainment and medical services), the transitions inherent in redevelopment and regular vacancies would tighten the relationship between supply and demand. In forming the final Illustrative Plan, the retail supply was reduced to about 1,500,000 gross square feet, consistent with the overall reduction in gross square footage of all uses.

DEMAND AND TRENDS BY RETAIL CATEGORY

The Crystal City plan would bring an increase in residents while maintaining strong office and hotel markets. Accordingly the retail demand in Crystal City would shift from an employee and visitor-driven market to a more balanced market, with households comprising a greater proportion of the total captured expenditures than they do today. The increase in residential use and the continuing strength of the employee and visitor markets mean that demand for the convenience and services and food and beverage-driven retail categories would remain predominant. While some demand is expected for general and specialty retail stores in the GAFO category, the majority of this demand will likely be satisfied by existing retail supply in the Pentagon City Mall and other retail nearby.

MATCHING RETAIL CATEGORIES TO TYPES OF RETAIL FRONTAGE

The analysis matched the projected demand by retail type to the three types of retail frontage in Crystal City: internal space in the underground mall system; external space with a traditional street-level orientation; and hybrid space with both internal and external access points. Table 3.9.1 represents total retail demand in Crystal City at buildout, including the 850,000 square feet existing today. Of the 850,000 existing square feet, about 380,000 is internal space. The projection shows that demand for internal space remaining at the current level or below, with opportunities for new retail being strongest in the street-level and hybrid spaces.

These targets would change the distribution of internal to external (or hybrid) frontage from approximately 50-50 (%) today to about 25-75 (%) at buildout. As such the external and hybrid spaces would compete for the majority of new retail, with the internal areas maintaining about the current amount of space and geared toward convenience and service uses. The street-front and hybrid space are better suited for destination uses that require higher visibility, such as restaurants

TABLE 3.9.1 - PLANNING TARGETS FOR RETAIL GFA BY FRONTAGE TYPE AT BUILDOUT

INTERNAL FRONTAGE ONLY		
RETAIL TYPE	TARGET	SQUARE FEET
GAFO	15% - 20%	36,000 - 47,000
CONVENIENCE AND SERVICE	25% - 30%	157,000 - 188,000
F&B AWAY FROM HOME	20% - 25%	95,000 - 119,000
SUBTOTAL	21% - 26%	288,000 - 354,000
EXTERNAL AND SHARED FRONTAGE		
RETAIL TYPE	TARGET	SQUARE FEET
GAFO	80% - 85%	190,000 - 201,000
CONVENIENCE AND SERVICE	70% - 75%	439,000 - 470,000
F&B AWAY FROM HOME	75% - 80%	356,000 - 380,000
SUBTOTAL	74% - 79%	985,000 - 1,051,000

and grocery stores. The internal retail comprises a substantial existing supply that would, for some period of time, potentially be a competitor and reduce demand for at-grade, street-front retail. Additionally, some of the ground level spaces targeted for potential retail uses could be programmed to provide space for the array of civic and culturally oriented uses that collectively help contribute towards a complete urban community, as identified elsewhere in this plan.

Overall, the majority of the retail should be located on the east side of the highway to meet the desires for clustering and visibility. Some convenience-oriented retail should be located on the west side to serve those residents, however all destination retail should be located on the east side.

GUIDANCE FROM THE RETAIL ANALYSIS ABOUT SUCCESSFUL RETAIL

The retail analysis also provides guidance about how to create successful retail developments. Successful retail relies on a combination of factors: whether there is sufficient ongoing market support, how well the retail mix responds to the needs of multiple market segments, the competitive retail context, the ability to attract and sustain viable tenants, and whether the project is designed in a manner that accommodates the functional and operational requirements of retail, food & beverage and consumer service tenants. The presence of market demand

for retail does not necessarily mean that demand can be captured. Several elements influence the success in and feasibility of capturing dollars; typically successful retail in urban environments has the following characteristics: Contiguous storefronts with distinct storefront design, limited or no gaps (parks, office buildings, parking lots, blank facades, etc.) between retail clusters, and preferably on "double loaded" streets with activating retail uses on both sides,

- Contiguous storefronts with distinct storefront design, limited or no gaps (parks, office buildings, parking lots, blank facades, etc.) between retail clusters, and preferably on "double loaded" streets with activating retail uses on both sides
- Stores with individual street entrances at grade level, limited or no arcade or internally circulated space,
- Balance of auto and pedestrian focused design (i.e. two-way, two lane streets and wide sidewalks), Storefronts that are appropriately sized and have good quality design that suits retailers' operational needs and is attractive to potential target customers,
- Adequate and affordable parking for the market that does not obstruct or inhibit the retail and pedestrian environment,
- Storefronts that are appropriately sized

and have good quality design that suits retailers' operational needs and is attractive to potential target customers,

- A strong retail presence with a critical mass of tenants; a well thought out tenant mix that is balanced and appeals to the targeted customer groups,
- Primary customer markets (residents, employees, visitors, etc.) have well-defined and comfortable ways to access the retail,
- Aesthetically pleasing, carefully designed, and well-maintained public space, and
- Access to a competitively priced and reliable energy supply.

GUIDANCE FROM THE ECONOMIC DEVELOPMENT COMMISSION ABOUT SUCCESSFUL RETAIL

Additional guidance about how to address retail in Crystal City can be drawn from the Arlington Economic Development Commission (EDC) report, titled Recommendations for Successful Retail in Arlington. While not an official County adopted planning or policy document, the report outlines characteristics of successful retail and provides an array of recommendations regarding Arlington County retail policies. To highlight just one, the document recommends the County's



View of Crystal Drive from 23rd Street S

POLICY

- LU 4** Designate specific areas in Crystal City for ground floor retail uses that are accessible from sidewalks, the interior pedestrian concourse, or both, as shown on the Retail Frontage and Interior Pedestrian Concourse Map, and strategically locate interior retail to not detract from street level retail areas.
- T 6** Maintain an interior pedestrian concourse from 12th Street to 23rd Street, as shown conceptually on the Retail Frontage and Interior Pedestrian Concourse Map that extends the reach of transit, provides frequent connections to sidewalks, and is adequately flexible to permit creative design solutions for new development.

Retail Action Plan should be updated in a way that may support appropriately concentrated retail nodes where businesses can thrive, benefit from synergies with other complementary uses and contribute to an exciting and vibrant streetscape (The EDC report can be referenced for a full review of related recommendations).

APPLICATION OF THE RETAIL ACTION PLAN

Adopted by the County Board in 2001, the Retail Action Plan serves as a formal policy document to guide retail development in Arlington. While its primary geographic focus is on the five Metro Station areas comprising the Rosslyn-Ballston Corridor, it includes several aspects of broader guidance that can be applied outside of these specific locations (furthermore, future updates to the Retail Action Plan could be expanded to include other areas throughout the County). Its guiding principles for retail strategy development and urban design principles and guidelines should continue to be referenced when considering future retail in Crystal City, even as the Retail Action Plan may evolve over time through various updates.

the street. In general, the most active retail will be located within the Central Business District centered on 18th Street and the Entertainment District centered on 23rd Street, as well as on Crystal Drive. Major retail plazas are provided within the plan, the most important at the Metro station on 18th Street, and others along Clark-Bell Street, at 23rd and 25th Streets respectively. Although this Plan expands retail uses throughout Crystal City, its primary intent is to create concentrations of retail around major activity nodes.

Retail building fronts should be composed in a manner that encourages active streetscape environments (additional recommendations on retail frontage are detailed in Sections 3.11.4-6). In destination retail locations such as the Metro Market Plaza and the Entertainment District, activating retail (GAFO, Service, and Food & Beverage establishments)



Retail Frontage on *Crystal Drive*

are preferred over office front retail, professional services, and other program inconsistent with a dynamic pedestrian experience.

The Master Plan provides several retail-oriented public open spaces intended as neighborhood activity centers. These retail plazas should be intensely programmed to promote the retail experience and social interaction. Varied program elements can be employed to achieve the desired effect. Café and restaurant seating zones can be integrated into the look and feel of the space, retail kiosks with merchandise, food and beverage, and other services can be provided, and features such as ice skating rinks, game boards, interactive fountains, movable seating and other such elements that promote the plaza as a destination should be incorporated.

3.9.3 PREFERRED RETAIL LOCATIONS

As discussed in Section 3.7 - Public Realm, retail street frontage is an indispensable component in any active neighborhood. The Master Plan provides a network of retail frontages along streets, public spaces, and within the Underground. Figure 3.9.3 shows the preferred location for retail street frontage throughout Crystal City. This figure distinguishes those frontages required to provide retail versus those where retail would be permitted if proposed. The basis of this approach is to identify the priority areas for ground floor retail without over prescribing an amount of retail that is not supported by market demand. For required retail frontages, it is understood that portions of the frontages may include lobbies, entrances, and other elements, while still maintaining a predominantly retail character. On the east side, retail frontage has been coordinated with the Underground to encourage shared access both from the Underground and



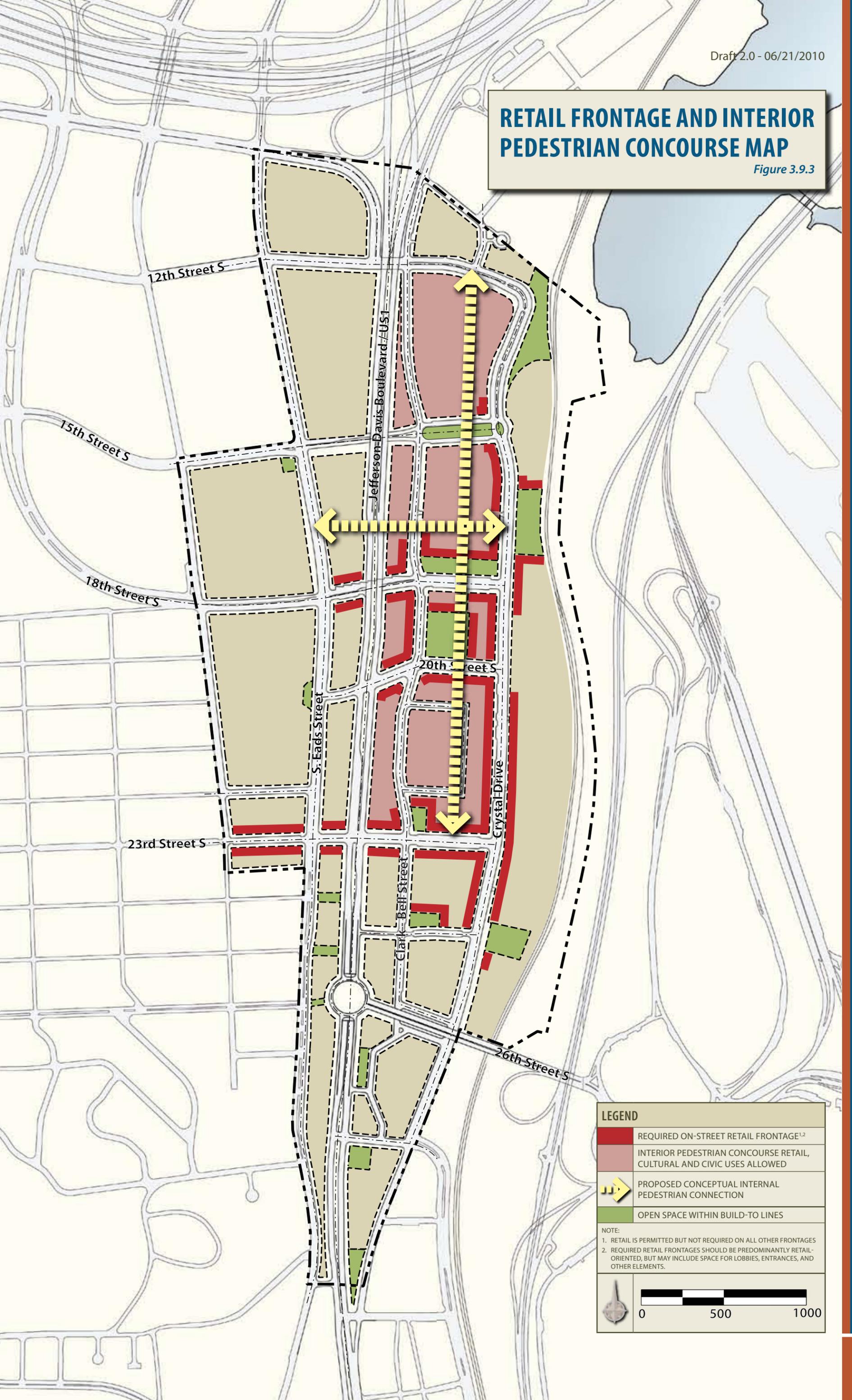
Existing Retail Location
Figure 3.9.2



Retail Frontage on *Crystal Drive*

RETAIL FRONTAGE AND INTERIOR PEDESTRIAN CONCOURSE MAP

Figure 3.9.3



LEGEND

- REQUIRED ON-STREET RETAIL FRONTAGE^{1,2}
- INTERIOR PEDESTRIAN CONCOURSE RETAIL, CULTURAL AND CIVIC USES ALLOWED
- PROPOSED CONCEPTUAL INTERNAL PEDESTRIAN CONNECTION
- OPEN SPACE WITHIN BUILD-TO LINES

NOTE:

1. RETAIL IS PERMITTED BUT NOT REQUIRED ON ALL OTHER FRONTAGES
2. REQUIRED RETAIL FRONTAGES SHOULD BE PREDOMINANTLY RETAIL-ORIENTED, BUT MAY INCLUDE SPACE FOR LOBBIES, ENTRANCES, AND OTHER ELEMENTS.

POLICY

- LU 5 Engage critical County service providers and stakeholders, such as police, fire, schools and emergency response services, in planning for and implementing the infrastructure necessary to accommodate future demand for service provision as Crystal City grows.**
- LU 6 Create tools and incentives to establish a strong presence of desired cultural and community-oriented facilities (such as theaters, large format grocery stores, day care and medical facilities) in the core of Crystal City.**

3.9.4 CULTURAL RESOURCES

Redevelopment in Crystal City affords an excellent opportunity to introduce and expand the County's public art program as an integral component of the master planning process. In general, the County's Public Spaces Master Plan and Public Art Master Plan call for the creation of a network of civic spaces hosting a range of community functions including recreation, cultural programs, and public gathering. These plans provide a conceptual framework for the improvement of existing spaces and the creation of new outdoor public spaces, in Crystal City and countywide.

High quality public art, on a foundation of strong urban design, architecture, and landscape architecture, can distinguish Crystal City's built environment. Public art marks civic space, and through a variety of media and scales, enriches individuals' experience of place. In accord with the Public Art Master Plan, public art should be selectively incorporated into streetscapes, public and private buildings, parks, transit and infrastructure. County staff will coordinate public art by working with important partners such as the Crystal City BID and Metropolitan Washington Airports Authority.

The Public Art Master Plan lists civic spaces, transit ways, and significant entryways as priority locations for public art in Crystal City. Public art should be an integral part of the design and redevelopment of the Plaza at 23rd Street and Clark-Bell Street, the Center Park at 20th Street and Clark-Bell Street, and the Metro Plaza at 18th Street and Clark-Bell

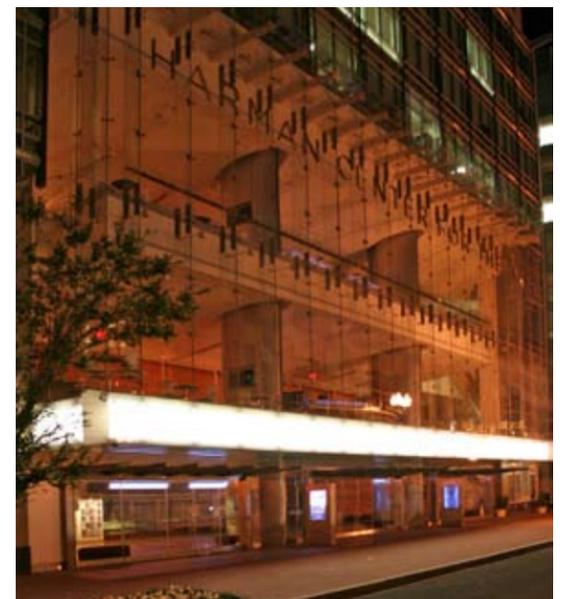
Street. Particular focus should be given to the Center Park and adjacent civic building as the civic center of Crystal City. As points of congregation, public transportation stops and routes are prime locations for integrated art. As the transitway is further defined, a public artist should be part of the design team. Public art can also be an effective tool for marking the entry points into Crystal City. Most prominently, the Airport Circle and Airport Access Road should include public art in the circle and/or to enliven a future pedestrian path to the airport. Redesign along 12th Street including the park at Crystal Drive and Old Jefferson Davis Highway should include public art to mark the link between Crystal City and Pentagon City. Finally, the Southern Triangle entrance to Crystal City might also be marked with public art.

Private sector participation in the County's public art program strengthens the County's public realm. Integrated public art on private development sites can enliven Crystal City by transforming spaces into places that challenge or delight. Contributions to the County's Public Art Fund supplement public dollars and can be aggregated to create public art for public places, streetscape, and infrastructure. While there are appropriate locations for art in private development, the nature of the redevelopment in Crystal City reinforces the bias stated in the Public Art Master Plan for site plan contributions to the Public Art Fund.

The Cultural Resources discussion in Section 3.9.4 describes further recommendations pertaining to future cultural resources in Crystal City.



Theater Entrance Part of Pedestrian Experience - Washington, D.C.



Lobby Activates Street - Washington, D.C.



Marquee Lights up Street at Night - Silver Spring, MD



Theater one Part of Mixed-use Building - Toronto, CA

3.9.5 COMMUNITY SERVICES

For Crystal City to become a place that meets its population's daily needs, it must offer an array of community and civic amenities. The facilities and services listed below help create a successful, safe and self-sufficient community. As Crystal City grows, ongoing monitoring and planning is needed to ensure service provision keeps up with increased demands. Program requirements for County services were reviewed to gauge perceived need. The Plan recognizes that community services could be public or private, provided in existing or new development, and possibly collocated for convenience as efficiency. The anticipated near-term and potential future needs and areas to monitor are described below, along with preferences on potential locations or site characteristics for these services.

Future community facilities and services in Crystal City will likely be achieved as part of private redevelopment projects, given the lack of publicly owned land. The full-block PDSP approach provides the opportunity to discuss potential accommodations for any needed community facility. The incremental nature of PDSPs provides flexibility to try to achieve specific facilities at a point in time that optimally matches anticipated demands. In this way, the Plan's recommendations offer the flexibility to align needs with spaces as circumstances arise over time.

ANTICIPATED NEAR-TERM NEEDS

(listed in no particular order)

Police Substation – the Police Department identified a need for a police substation in Crystal City, to service the growing population. Ideally, the substation space would be centrally located, be at ground level with a public entrance, and offer direct access to below grade parking for police vehicles.

Target Locations: East of Jefferson Davis Highway, generally between 15th and 20th Streets, with street frontage near the Metro Station; may be a hybrid space also having Underground frontage.

EMS/Fire Station – Crystal City is served by the newly constructed Fire Station 5 – Jefferson District/Aurora Highlands. Additional service capacity may be needed to support Crystal City, particularly its southern extent (including Potomac Yards), due to increases in vertical response times, population, and density. The exact need relating to additional service capacity should be determined through future studies.

Target Locations: If needed, several options for a future fire station include: 1) On Site: within the base of a redevelopment project, south of 23rd Street with easy access to major arterials; 2) Off-site: new station on County property at the intersection of S. Glebe Road and S. Lang Street, either as an additional or relocated station; or 3) Off-site: expansion of existing facilities at Station 5.

Daycare Facilities – Increased residential and employee populations in Crystal City will likely increase demand for child day care facilities. The several existing facilities in Crystal City will likely need to be supported by additional facilities to meet demands. Recently, Arlington Economic Development

studied the issue of achieving child care facilities in the County's transit corridors, and developed recommended policies and actions to overcome existing challenges. The study's recommended potential strategies continuing to be include development incentives for additional density, modifying the County's retail policies to allow child care centers to occupy appropriate retail locations, and identifying partnership opportunities for child care work force development. Regardless of the outcome of these recommended actions, various strategies should be explored to ensure an adequate supply of child day care facilities in Crystal City.

Target Locations: Within existing or new development, preferably street level or hybrid retail space in the Underground, or part of a larger multi-purpose community or civic venue. Space also needed to provide required outdoor play area.

Grocery Stores – As of 2009, there are no full-service grocery stores within the Crystal City study area. (Full-service grocery stores are considered those that stock a wide array of food products, typically including vegetables, fruits, meat, poultry, dairy products, breadstuffs, etc.) Nearby stores in Pentagon City and Potomac Yards are nearly a mile away from the center of Crystal City. Grocery stores in urban areas can become cornerstones of great places to live and key components of a neighborhood's center. These stores can be successful at a smaller scale (such as between 15,000-30,000 square feet), sized appropriately to accommodate the local population. This Plan envisions one or more full-service grocery stores to better serve the Crystal City population. Achieving this will offer Crystal City residents fresh, healthy, and affordable food options, and increased proximity to these stores will encourage more walking or bicycling trips. Additional growth should increase the market demand for such uses in Crystal City.

Target Locations: Within existing or new development, preferably street level or hybrid retail space in the Underground, highly visible and accessible from the public realm. A central site near 18th Street would be well situated to serve the neighborhood. Additional establishments elsewhere may also be established as the population increases.

Urgent Care Facilities – While Virginia Hospital Center is within five miles of Crystal City, the community strongly desires a local urgent care facility. In addition to traditional walk-in medical care facilities, the growing trend among pharmacy retailers that provide walk-in clinic services through their retail outlet should be explored.

Target Locations: Within existing or new development, preferably street level or hybrid retail space in the Underground, that is highly visible from the public realm.

POTENTIAL FUTURE NEEDS / AREAS TO MONITOR

(listed in no particular order)

Schools – The ability to plan for adequate school capacity amid fluctuations in student populations is critical to the health and stability of schools countywide. As a matter of course, the County will continue to regularly monitor student populations and proactively

plan for future service and facility needs. Based on current district boundaries, students residing in Crystal City would attend Oakridge Elementary School, Gunston Middle School and Wakefield High School.

Based on generation rates prevalent today in Crystal City (0.03 students per housing unit), the Plan is projected to increase student figures by 170 students by 2040, or an average increase of approximately 5 students per year. Alternative student projections were also developed using the current generation rates in Clarendon, Courthouse, and Virginia Square (0.07 students per housing unit), to estimate potential impact if Crystal City is attracts more family households over time. Based on this assumption, there would be a net increase of 360 students by 2040, or an average increase of 12 students per year

Target Locations: If needed, additional school capacity could be created by: 1) Expanding or reconstructing an existing school; 2) Constructing a new school at an off-site location; or 3) Constructing a new school on-site, incorporated into a redevelopment project with an urban form. Under this option, all opportunities to include other community-oriented facilities, such as an adult education center, preschool child development center, or district energy system, could be explored.

Polling Places – County polling places are venues at which voters may cast their vote on election days. As of 2009, the two polling places in Crystal City include the Water Park Towers building and the Crystal Plaza apartments. As it has grown in the past, the County has addressed an increase in voters in the Metrorail corridors by using larger venues, redrawing precinct boundaries, and creating new precincts (with new polling places). As Crystal City's population grows in the future, the potential need for additional polling places should be monitored.

Target Locations: If additional polling places are needed, such places could be achieved through redevelopment. While the two existing venues are residential apartment buildings, future polling places could be located in public facilities if they were to be built in Crystal City. Otherwise, locating polling places in multifamily residential buildings could suffice, so long as they are open to the public on all Election Days and handicap accessible. Ideally, the selected location should be centrally located to the precinct it serves.

Community Center/Learning Center/Civic Center – A place(s) with a number of venues and programs that enrich an active civic lifestyle would be an amenity for Crystal City. These types of centers could cater to a spectrum of the population, with a diverse array of programming and facility offerings. Elements could include meeting rooms, classrooms, lecture halls, a library/technology/media center, and/or supporting retail such as a bookstore and café, and relevant programming based on population interests and needs.

Target Locations: An ideal location for such a facility would be adjacent to Center Park or Metro Market Square, or another location having a quality of civic prominence.

POLICY

- T 11** Establish near-term parking ratios for new projects that range from a maximum of 1 space per 750sf and/or a minimum of 1 space per 1,000sf for office uses and between 1 and 1.125 spaces per residential dwelling unit (or apply the County's most current parking management policies), while maximizing the sharing of parking space by various users and addressing short-term visitor and retail parking needs in Crystal City.
- T 12** Apply Transportation Demand Management (TDM) measures that reinforce the use of a smaller parking supply.
- T 7** Locate and consolidate building loading and service access points to secondary and tertiary streets and alleys where feasible, as recommended in the Services and Loading Map.



Garage Elevations Designed to Fit Seamlessly into Streetscape - Arlington, VA



First Floor Retail at Garage - Arlington, VA

3.9.6 PARKING

The Master Plan proposes that future parking be provided primarily below-grade, but may allow above-grade structures embedded within building podiums where warranted. Locations to construct additional parking capacity, even in the full build-out of the Master Plan are limited. Providing parking at current (2008) parking space ratios will be difficult to sustain. As density increases, the parking load coming from single occupancy vehicle (SOV) trips could potentially grow beyond the physical capacity for structured parking within the Plan. Since other costs are associated with SOV trips such as traffic congestion, infrastructure wear and maintenance, increased fuel consumption, and diminished air quality, the Master Plan includes provisions for encouraging reduced reliance on the car, consistent with established County policy.

Arlington has adopted and continues to employ TDM policies to reduce dependence on the car. In general, these policies use strategies that shift person-trips away from SOVs to a mode split that favors public transportation, ride-sharing, and other modes of transport. Furthermore, as the County updates its Master Transportation Plan – Parking and Curb Space Management Element (under development), there is wide recognition that current parking requirements in the zoning code are more geared towards auto-oriented areas and by-right development. In transit oriented areas, there has been a recent trend to reduce the required amount of parking in new site plan developments, consistent with the County's vision of encouraging more efficient modes of travel and reducing the share of SOV trips. To avoid provision of excessive parking in future projects, parking requirements in these areas will be adjusted to match anticipated travel patterns. In this Master Plan, a range between a maximum of 1 space per 750sf and/or a minimum of 1 space per 1,000sf for office uses, and between 1 and 1.125 spaces per residential dwelling units are recommended to adequately accommodate anticipated parking demand, prevent the provision of excessive parking, and reflect and support other transportation policies. Parking is currently provided in Crystal City in a number of ways. On the east side, most parking is located in below-grade garages, with some metered spaces located on-street and other reserved spaces in small surface lots. Below-grade garages primarily provide parking capacity for office workers, residents, and hotel patrons, with some additional capacity to park business and retail visitors. Retail and business visitors are the principal users of on-street parking. The easy access to these spaces, their time constraints, and their adjacency to retail make them an attractive alternative to spaces in parking garages.

On the west side, which is dominated by residential uses, a mix of below-grade garages, above-grade structured parking, surface lots, and on-street parking is present. Retail parking is provided on the street and in surface lots associated with particular business establishments. Parking for residential uses is mostly provided below-grade, or in surface parking lots.

Generally speaking, below-grade structured parking is the preferred treatment for any new

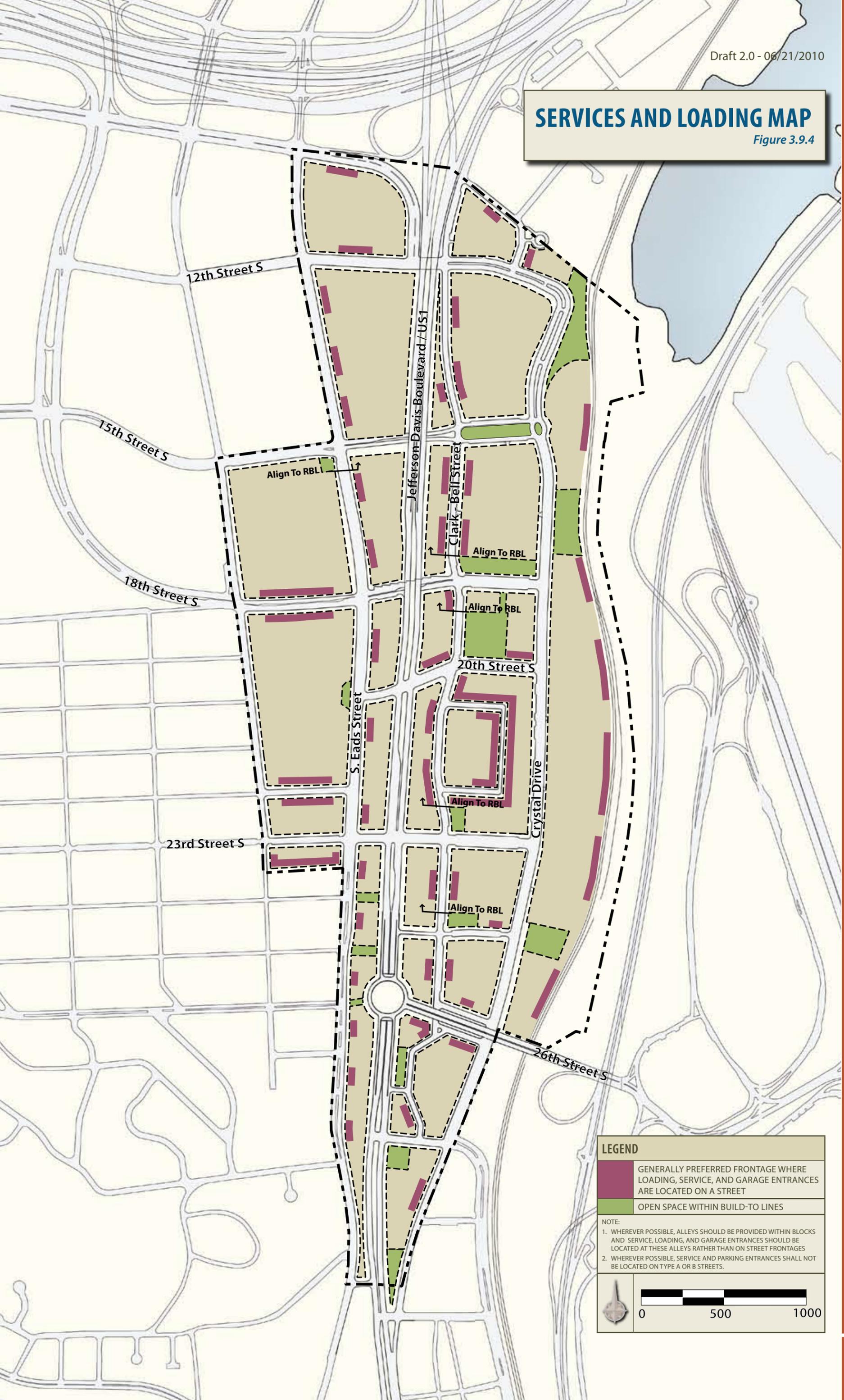
off-street parking resources associated with development per the Master Plan. Above grade parking is strongly discouraged, but may be permitted if all the parking needed to meet the requirements could not be accommodated underground. Additionally, above grade parking, where it occurs, should be lined either with active programmed space or treated with enhanced architectural façades, depending upon its relationship to the public realm.

3.9.7 SERVICE AND LOADING

It is the intent of the Master Plan to limit the visibility of loading facilities, service entrances, and garage doors on or from the street. Ideally, these functions would be located on alleys or on other centralized courts or areas within the block where consolidated service and loading could occur to service a building or multiple buildings. Examples of where this could occur include the properties along the west side of Clark-Bell between 15th and 23rd Streets. Properties along the east side of Eads Street would also benefit from common service courts, although south of 23rd Street the planned locations for open spaces may present some challenges requiring creative design solutions. However, where circumstances do not permit such an alley or consolidated area, Figure 3.9.4 identifies segments of street frontage within the plan where these functions would be encouraged. When located on a street frontage, the width of the access point should be minimized, and architectural treatments such as specialty doors and gates should be utilized to mitigate the visual impact. Access points requiring a curb cut should be located a sufficient distance from any street intersection so as not to disrupt traffic flow, and other actions should be taken to minimize potential conflict with other transportation network users.

SERVICES AND LOADING MAP

Figure 3.9.4



LEGEND

- GENERALLY PREFERRED FRONTAGE WHERE LOADING, SERVICE, AND GARAGE ENTRANCES ARE LOCATED ON A STREET
- OPEN SPACE WITHIN BUILD-TO LINES

NOTE:

1. WHEREVER POSSIBLE, ALLEYS SHOULD BE PROVIDED WITHIN BLOCKS AND SERVICE, LOADING, AND GARAGE ENTRANCES SHOULD BE LOCATED AT THESE ALLEYS RATHER THAN ON STREET FRONTAGES
2. WHEREVER POSSIBLE, SERVICE AND PARKING ENTRANCES SHALL NOT BE LOCATED ON TYPE A OR B STREETS.

3.10 SANITARY AND STORMWATER INFRASTRUCTURE

Environmental quality is a critical element of the overall quality of life for any community, as it is for Crystal City. A variety of natural and manmade factors can contribute to an area's level of environmental quality, which can help shape, and be shaped by, existing and future development in Crystal City. The design, maintenance, and operations of the water, sanitary, and stormwater infrastructure serving the Crystal City area today and in the future will have a significant impact on the local environmental quality conditions. In aggregate, future redevelopment in Crystal City provides significant opportunities to improve the quality of the natural environment in and around the Crystal City area.

The further concentration of Crystal City's already compact growth will continue to help reduce regional environmental impacts in a number of ways, by consuming relatively less land, providing opportunities for transit or non-motorized travel, and the like. Much of Crystal City was developed before modern-day local environmental statutes that address water quality and quantity issues (such as the Chesapeake Bay Preservation Ordinance and Stormwater Detention Ordinance) took effect. This means that techniques that are



Filterra Stormwater Bioretention Filtration System

commonplace in new construction and redevelopment projects, including enhanced landscaping and managed stormwater runoff for instance, should create positive environmental benefits over time.

Several of the County's Comprehensive Plan documents are relevant to informing future decisions and ongoing policy and programs relating to these environmental infrastructure elements. The Water Distribution System Master Plan (1992), Sanitary Sewer System Master Plan (2002), Stormwater Master Plan (1996), and Chesapeake Bay Preservation Ordinance and Plan (2003 and 2001, respectively) (which is supported by the County's 2001 Watershed Management Plan) will all continue to play a major role in guiding current and future decisions involving these systems.

WATER SYSTEM INFRASTRUCTURE

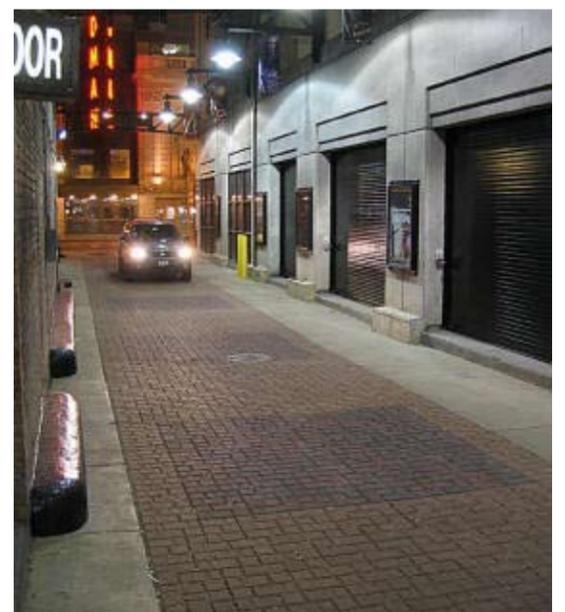
Water service to the study area is provided the County's Water, Sewer, and Streets Bureau, and the area falls within the system's Gravity



Rain Garden for Stormwater Collection and Filtration

Three pressure zone or service area. Based on existing conditions and trends, overall the water system should have adequate supply and capacity to meet future demands. Over time, it's anticipated that the system could require that some water mains be updated, on an as needed basis.

Redevelopment is an excellent opportunity to evaluate and replace aging portions of the water system while pipes are exposed due to construction, street realignment, etc. This opportunity should be capitalized upon by working with developers to upgrade existing infrastructure where mains may be old or undersized for the proposed redevelopment. Particular attention should be paid to fire flow capacity of the existing system and the demands likely to be placed on the system as a result of redevelopment at greater densities. Recent experience generally has shown that with new building construction, more efficient technologies and water saving fixtures are having substantial positive effects on reducing any increased demand from new construction and corresponding additional residents, workers, and visitors. As a result, water demand on the County's system has remained relatively level or only increased slightly over the past 17 to 18 years. Furthermore, it should be noted that water conservation is also an effective energy conservation measure. As such, water conservation is not just an issue of ensuring there is enough water for ecosystems and humans alike, but is also an important component of reducing our carbon footprint.



Alley with Permeable Paving - Chicago, IL

SANITARY SEWER SYSTEM INFRASTRUCTURE

Sanitary sewer service is available throughout the Crystal City Planning Area and is provided by the County's Water, Sewer, & Streets Bureau. The Potomac Interceptor is the major sewer line and sewer shed serving the Crystal City area. Currently, the existing sewer pipes near Crystal City are nearing or at full capacity, and may present potential long-term capacity issues. The nearing capacity of segments of the infrastructure network is not unique to Crystal City, as increased growth countywide has the potential to place a strain on local sewer capacity in certain locations. As one example of addressing capacity issues, in 2009, the County Board approved implementation of the Potomac Interceptor sewer system replacement project that will double the capacity of the existing system serving Rosslyn. This, in addition to other projects in the future, will allow Arlington to support future growth and better manage weather-related events, such as larger-than-normal flows that can cause sewer back-ups. Future efforts should include coordination with developers to evaluate the capacity needs of redevelopment and incorporate increased infrastructure needs into redevelopment plans and the County Capital Improvement Plan. As redevelopment also provides opportunities to replace sewer laterals, the existing system should be evaluated as redevelopment occurs to determine the need for pipe replacements.

Sanitary waste is ultimately piped to the County's Wastewater Treatment Plant, located along S. Glebe Road, and into Four Mile Run after it's been treated. The increased designed capacity of 40+ million gallons per day was planned in 2001 to accommodate anticipated growth in the County beyond



Greenroof - Arlington, VA

2020. Increased awareness and water saving devices/appliances have helped reduce anticipated increased volume even with additional growth. With the completion of current upgrade project, the plant has sufficient capacity to accommodate growth in the County beyond 2020 based on current regulatory requirements and development of Crystal City, Pentagon City, Roslyn-Ballston corridor and Columbia Pike. That said, while capacity is not the issue, it is likely new environmental regulations may necessitate additional construction or improvements



Urban Bioswale - Portland, OR

at the plant (as well as at other wastewater treatment plants) before 2020 even if there were no new development in the County.

STORMWATER INFRASTRUCTURE

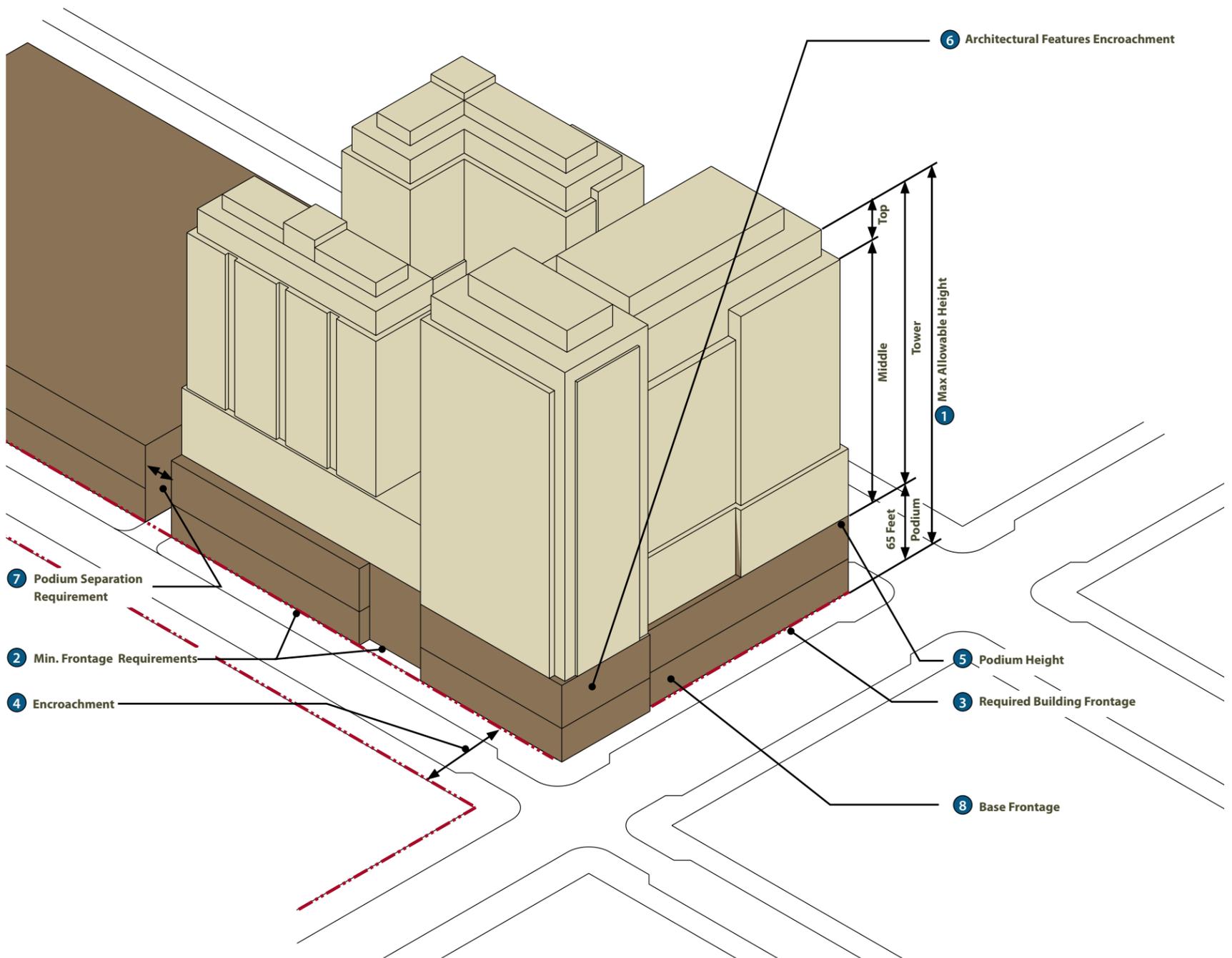
The study area falls within the boundaries of three stormwater watersheds in the County. Most of Crystal City is included within the Roaches Run watershed (191.6 acres), while some of the area (67.8 acres) drains to Four Mile Run. Located immediately north of Crystal City, Roaches Run itself is a nature preserve that is impacted by stormwater runoff from the surrounding area. The amount of existing impervious surface in Crystal City as of 2009 is estimated at 188.6 acres, or approximately 72.7% of the total planning area. While the exact quantity of impervious surface in Crystal City through buildout of this plan is impossible to predict with certainty, an order of magnitude estimate of 190.7 acres, or 73.5% of the planning area has been arrived at based on the Illustrative Concept Plan scenario. Based on these assumptions, impervious surface in Crystal City (without regard to the stormwater management techniques and standards described in the next paragraphs) is generally expected to remain about the same or increase slightly as a result of plan buildout.

Currently, the Commonwealth of Virginia is in the process of updating their Statewide Stormwater Management Regulations, with an anticipated implementation date of 2011. Based on the draft under final revision in September 2009, these standards will be more stringent than current controls for stormwater quality and quantity. Specifically, there will be a standard to reduce stormwater pollution from redevelopment by 10% to 20%. This standard will govern all of the parcel level redevelopment that will occur in Crystal City. At this time, it is recommended that these standards guide the stormwater planning and performance standards for the area, rather than coming up with standards outside of this regulatory process.

For the public rights-of-way in Crystal City, which are generally unregulated by such parcel-level stormwater management requirements, a similar net reduction goal should be pursued: reduce 'functional'

impervious area by at least 10 percent throughout Crystal City through the reduction of impervious surfaces, the use of permeable materials, and/or stormwater treatment for runoff from equivalent levels of impervious area. Recognizing that streetscape/block level stormwater management is often more challenging than at the parcel level, some flexibility is needed when this numerical goal cannot be met exactly on a case-by-case basis. The 10% net reduction goal should be viewed for Crystal City as a whole. In the spirit of flexibility and encouraging creative solutions in a complex urban environment, engineered pervious surface techniques such as permeable paving can be used to help meet impervious surface reduction goals for the public rights-of-way. Additionally, redevelopment should provide opportunities for streetscape retrofits, such as bioswales and stormwater tree pits – these strategies should be explored, potentially as part of public-private partnerships through the site development process.

3.11 DESIGN GUIDELINES



These design guidelines communicate general objectives relating to preferred streetscape and building design and massing characteristics of future projects in Crystal City. The purpose of the guidelines is to point a direction and to inform the response to specific development proposals. These are guidelines and not rules (unless particular items are ultimately codified within the Zoning Ordinance). At the same time, these guidelines are intended to be flexible, to recognize the economic and program forces that influence the form of buildings and development, and to acknowledge that the vision for Crystal City can be achieved by a variety of means and methods. Should certain elements of the guidelines prove infeasible or undesirable as a project advances through stages of increasing design detail, projects should consider alternative strategies that achieve the main objectives outlined below.

Many of the guidelines pertaining to building form and massing are aimed at allowing adequate sunlight to reach public streets and open spaces, as well as achieving a level of architectural interest, articulation, and sculpting currently lacking in Crystal City. Building setbacks from the vertical plane illustrated in this section, as well as changes in material, color, texture, and a variety of other forms of architectural expression may be employed to meet these goals in a diverse

manner. In considering building form and massing of specific projects, site area and orientation, building use, and typical floor plates for such uses all impact the ability to follow the recommended guidelines or the need to employ other creative strategies. Guidelines pertaining to ground level building and public sidewalk frontages and landscaping are intended to provide a human scale, comfortable walking environment, and good wayfinding.

3.11.1 BUILDING MASSING

The form and massing of all new or substantially renovated buildings should consist of a podium, middle, and top. The podium is the lower five to six stories of a building, as described throughout the Master Plan. The middle and top are collectively called the tower. The middle is that portion of a tower which begins above the podium base and includes all stories above, except for the building top. The top is generally the upper two to four stories of a tower, and often has a massing and appearance distinct from middle of the building.

BUILDING HEIGHT

Building height is the measure of the combined heights of the podium and any tower. Height will be determined as follows:

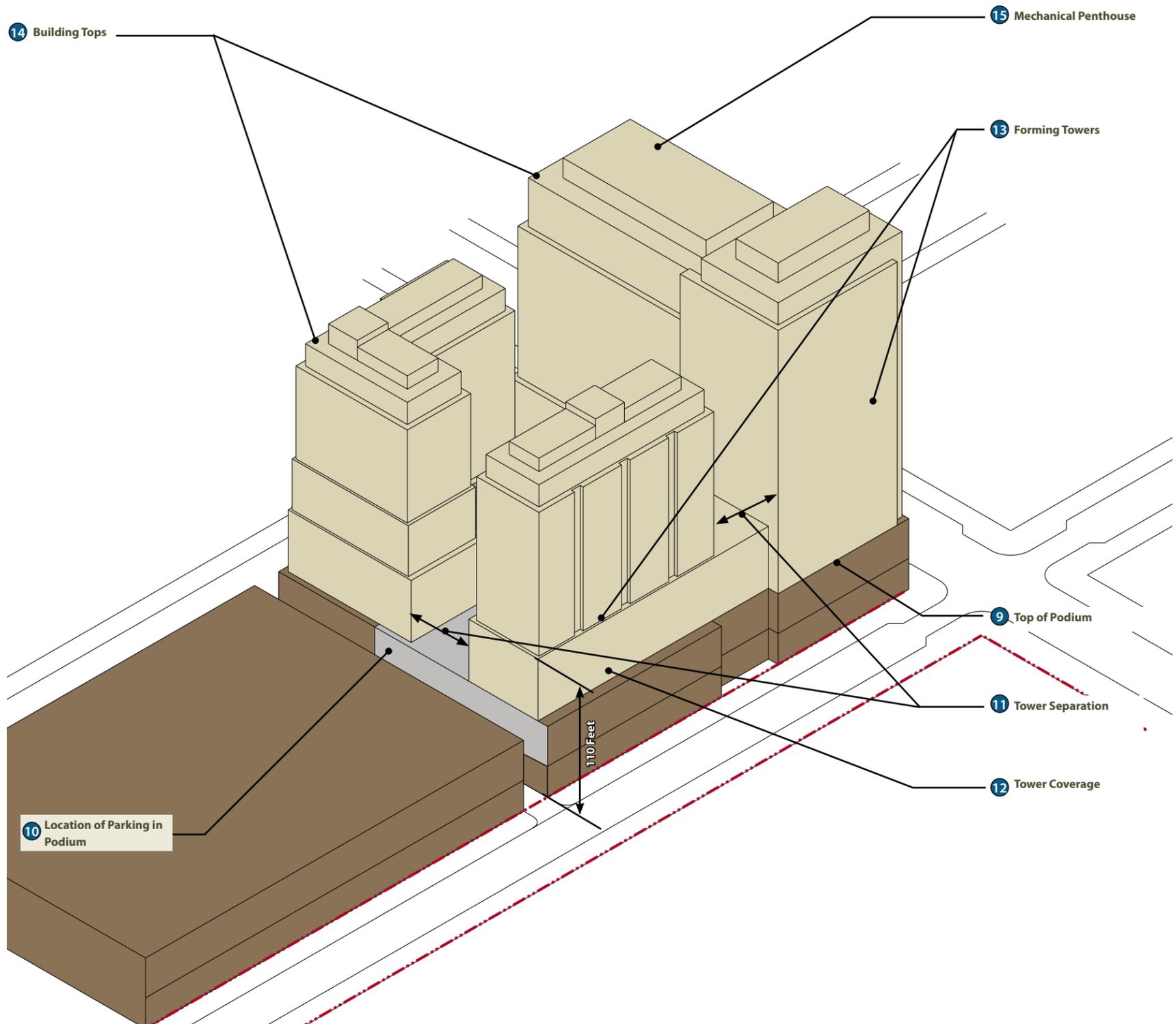
- 1 Maximum Allowable Height:** The combined height of the podium and tower shall not exceed the heights shown on Figure 3.8.5 (Building Heights Map, p. 95) for its site, as measured per the requirements of the Zoning Ordinance.

Note: Bulk Plane Height Controls: Additional limits on building heights may be required as shown on Figure 3.8.7 (Bulk Plane Angle Map, p. 97). The height of each bulk plane is measured vertically from the center point of its linear frontage along the Recommended Build-to Line (RBL) impacted by any bulk plane controls.

PODIUM

The massing, scale, and façade composition of the podium base should, as a principal objective, define and reinforce the quality of the public realm. To that end:

- 2 Minimum Frontage Requirements:** All podiums should engage the RBL within zero to two feet for a minimum of 80% of the street frontage, and podium façades should not be built more than 10 feet behind the RBL at any point.
- 3 Required Building Frontage:** Every building should have at least one podium frontage on an RBL, for a minimum linear extent of 65 feet along the RBL.



4 Encroachment: No building or part thereof should encroach within the right-of-way of any street or open space, except as described in Section 3.11.4 Building Frontage (p. 120), and in the additional guidelines stated here.

5 Podium Height: The maximum height of any podium should not exceed 65 feet.

6 Architectural Features Encroachment: For frontages targeted for architectural features (see Section 3.11.3 Architectural Features on p. 118), the podium and all portions of the tower above may encroach up to four feet beyond the RBL for one-third of the total building frontage.

7 Podium Separation Requirement: Where a podium base does not occupy an entire site and no party-wall condition exists, the podium should maintain a minimum separation distance of 40 feet from all other adjacent buildings, except when the separation is for an alley or other vehicular way, which should typically be 25 feet wide.

8 Base Frontage: The ground floor of the podium base should be distinguished with a pedestrian friendly quality and

appear to have a greater height than the floors above. The ground floor and second story may be combined in a single façade composition to achieve this effect.

9 Top of the Podium: The top of the podium should have a horizontal architectural unity through the use of cornices or other banding projections placed at the top of the upper most floor of the podium.

10 Location of Parking in Podiums: Structured parking that occupies a podium should be lined with actively programmed space or an enhanced architectural façade, depending on its location and relationship to public streets and open spaces. Generally, active liners are preferred along major streets and public open spaces, and are a lesser priority along minor streets or alleys. All ground floor podium parking fronting streets and public open spaces should have a podium liner, except for garage entry doors not to exceed 25 feet in width.

TOWERS

11 Tower Separation: Towers shall maintain a minimum separation distance of 60 feet above the podium

base from all adjacent towers either on the same site or on any adjacent sites.

12 Tower Coverage: Expressed as a percentage of the site area within designated RBLs and Lot Lines, and measured just above the podium base, values shall not exceed those provided on Figure 3.8.9 (Tower Coverage Map).

13 Forming Towers: Building massing above the podium should avoid long, continuous volumes of bulk along block perimeters in order to allow light, air, and views to penetrate into and through blocks.

14 Building Tops: A distinctive top, consisting of the upper two to four floors of a tower, should be provided through a change in at least two of the following features - window rhythm, apparent floor height, setbacks, sculpted form, or materials.

15 Mechanical Penthouse: The walls of all penthouse structures should be setback from the edge of the roof a distance no less than the height of the wall. All penthouse structures should have enhanced façade treatments of a quality and character consistent with the building's tower façade.

3.11.2 BUILDING SETBACK PROFILES

In order to achieve aesthetically interesting and attractive buildings, this Plan generally prefers buildings in Crystal City to be sculpted using multiple setbacks or tapers along facades of buildings that face streets and public open spaces. However, a single setback approach should also be considered when multiple setbacks may not be warranted or desired. The text below provides additional guidance on how the building mass for the podium, tower and top of buildings should generally be treated. Given that each site and project is unique, factors such as site area and orientation, program, and typical floor plate sizes for such uses must be considered in the application of these guidelines. Aside from massing strategies, creative treatment of

materials, colors, textures, and other elements of architectural expressions should also be employed in order to achieve architectural excellence in Crystal City.

PODIUMS (BASE)

Building podiums should generally engage the Build-to Lines as recommended in Section 3.11.1. Podiums, especially their ground level spaces, should not be setback from the Build-to Line and should meet the back of sidewalk.

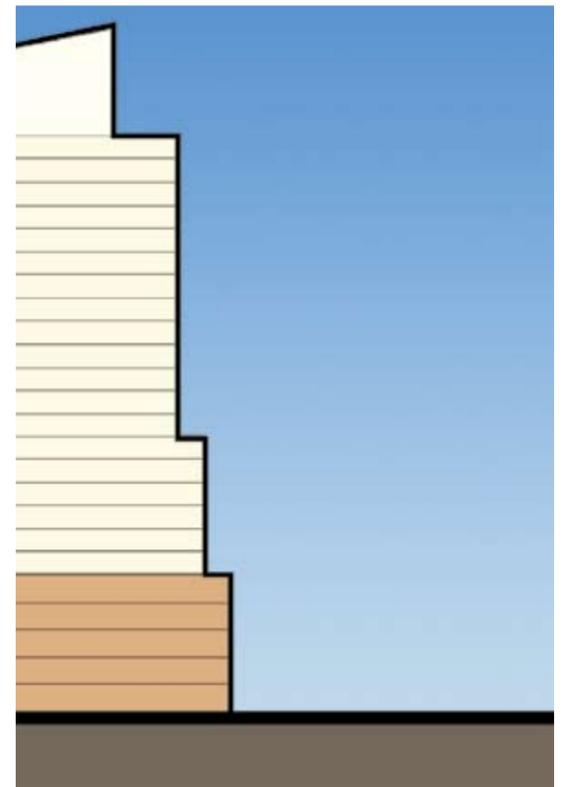
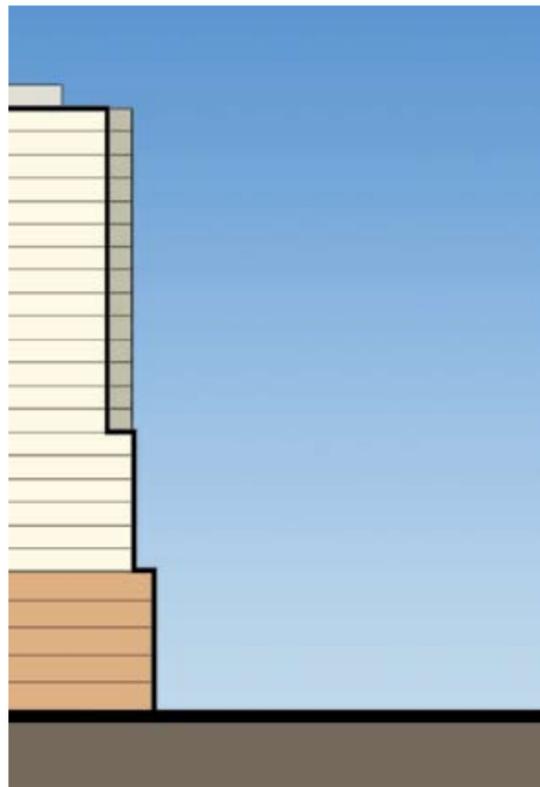
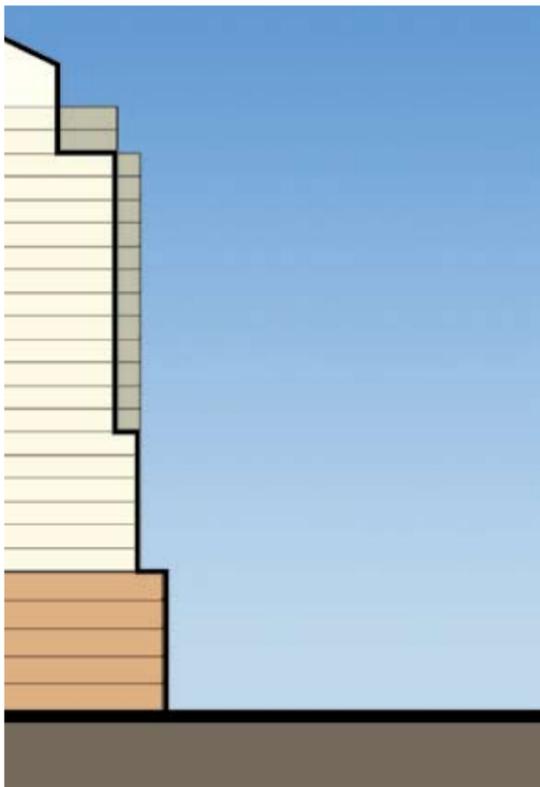
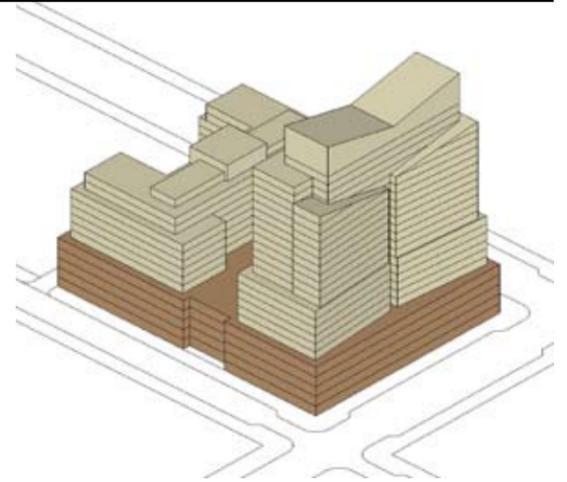
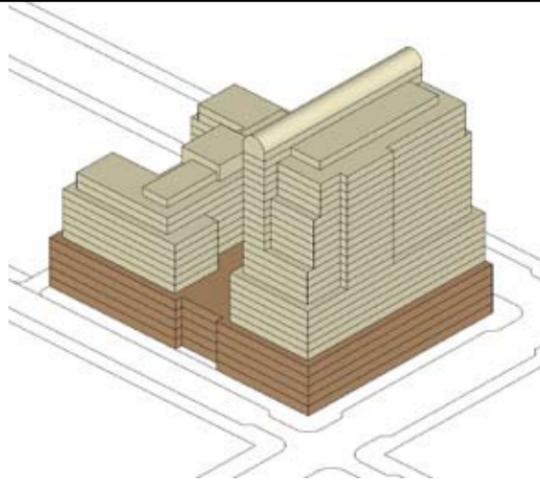
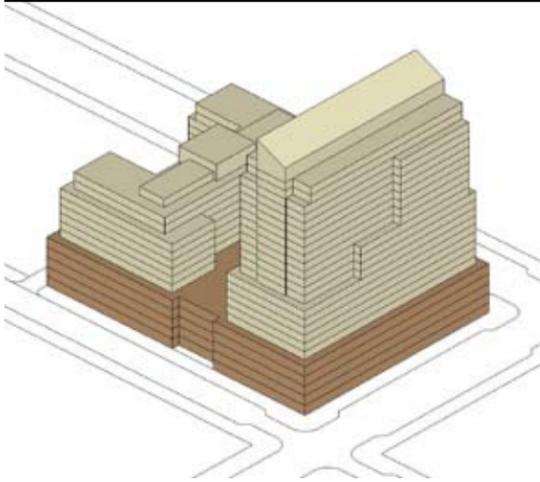
TOWERS (MIDDLE)

Massing and setbacks for the middle tower portion of a building may be approached in two manners:

Multiple Setback Approach

With the Plan's form-based approach, the achievable density on any given site is determined by a number of parameters, including the pertinent Build-to Lines, maximum building heights, bulk-plane angles, tower coverage limits, and minimum separation between towers. In the absence of an absolute numeric limit on FAR, it is conceivable that buildings could be proposed that rise straight up from the Build-to Line to the maximum building height (except where bulk-plane angles are called for). In order to avoid this condition, in this approach the tower of a building should be set back from its base to better define the street space for the pedestrian experience and provide architecturally interesting buildings. In order to ensure these goals are met by projects that would otherwise fill the absolute

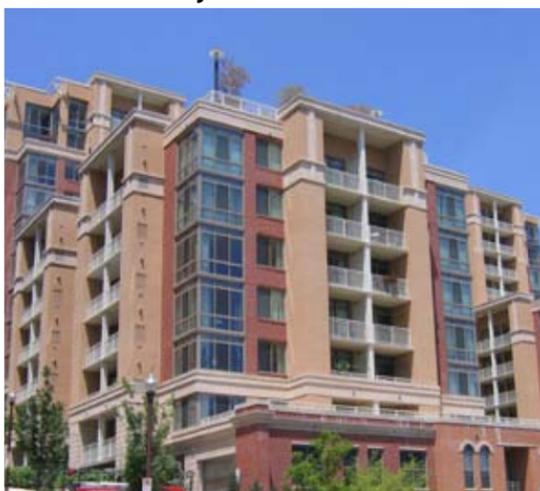
Multiple Setback Approach



Major Street Profile

Major Street Profile

Minor Street Profile



building envelope, multiple setbacks from the Build-to Line should be designed into the building tower as it rises upward (see massing examples below). The degree and number of setbacks may vary depending on the character of the abutting street and surrounding development.

Building frontages and their setback character should vary, partly depending upon whether their location is on a major or minor street, or on an open space. Generally, frontages along major streets and on public open spaces may have the most shallow setback depths, while frontages on minor streets may have somewhat deeper setbacks. Frontages along Eads Street south of 23rd Street should have the most deliberate and generous setbacks, given their relationship across from low-scale residential neighborhood on the west side of Eads Street.

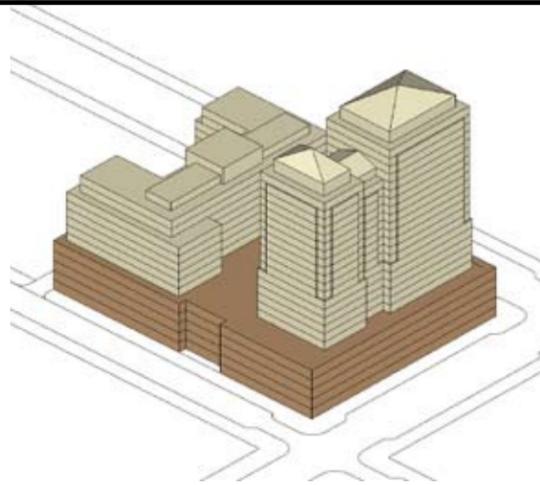
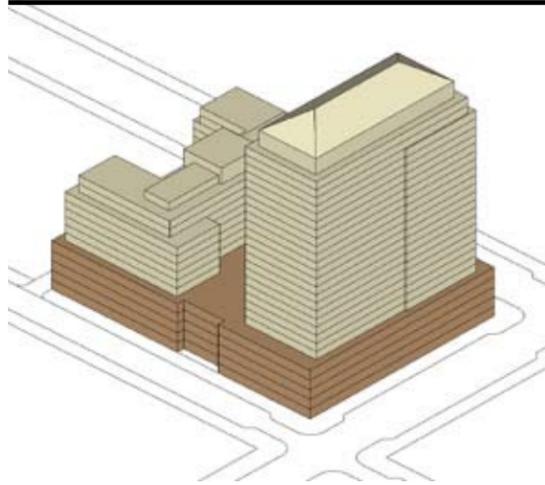
Single Setback Approach

Rather than employing a series of multiple setbacks at increasing heights, in this approach a building may also be successfully designed as a discrete tower with a single, simple setback above the podium level. Depending on the tower floor plate size and location of the tower relative to its specific site, this approach may allow as much, if not greater, relief and levels of sunlight to reach surrounding areas compared to the multiple setback approach. In addition, having a mix of buildings in Crystal City that use single and multiple setback approaches will avoid having a sense of monotony in the overall building form, and should ultimately provide for a more varied skyline. Similar to the generally preferred approach for multiple-setback buildings, buildings employing single setbacks at the podium level should incorporate such setbacks at depths that relate to the specifics of their site and surrounding context.

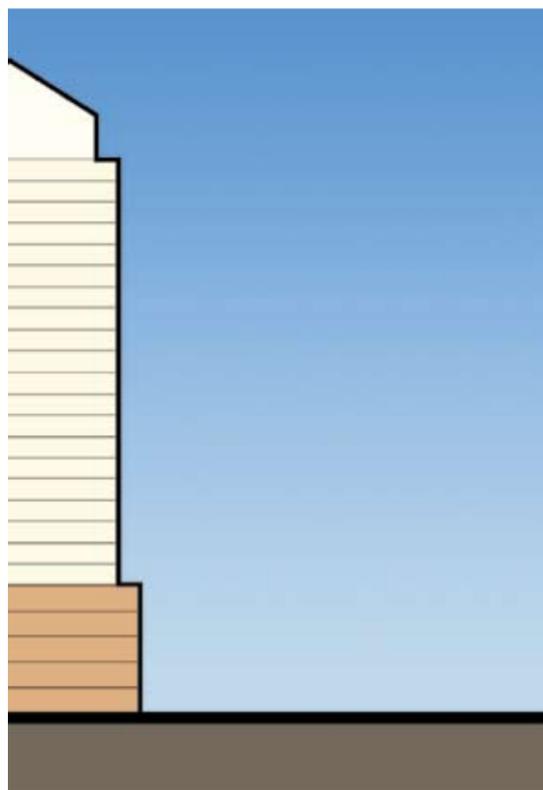
TOPS

Building tops should be designed to achieve a distinctive profile, and mechanical penthouses should be integrated as part of the overall building design. In addition to changes in other architectural features such as materials, colors, and textures, building tops should employ some degree of sculpting to set it apart from the rest of the building. Regardless of whether the building tower design uses the multiple or single setback approach, it is generally recommended that the upper two to four floors of all buildings should be no closer than 20 feet from the Build-to Line, unless the proposed design of the building top involves a dramatically creative architectural treatment that is integral to the overall composition of the building, such as proposed in the next section, Architectural Features.

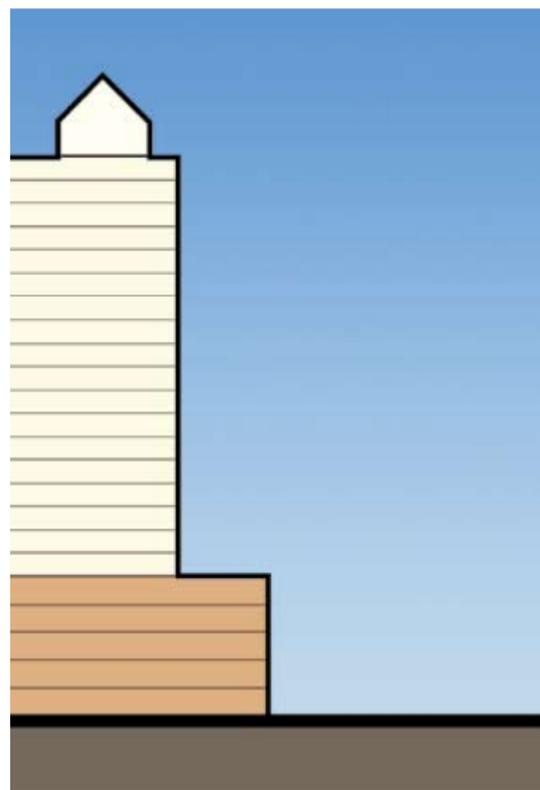
Single Setback Approach



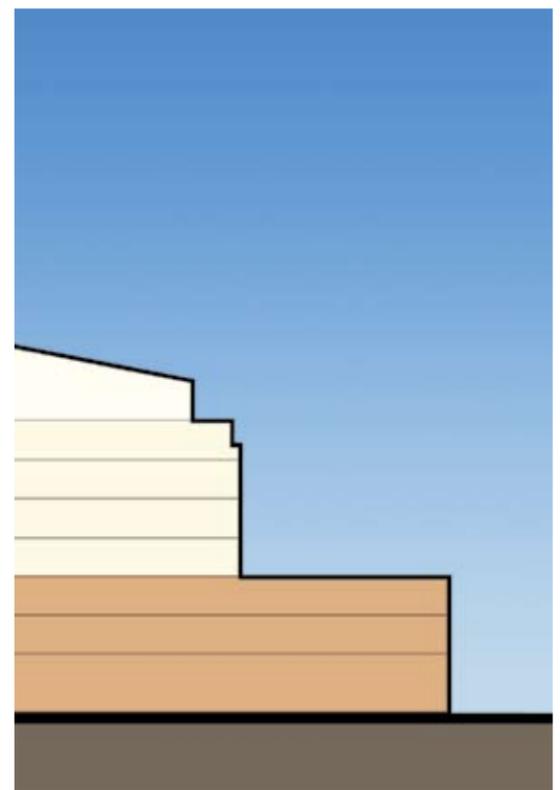
Eads Street South of 23rd Street



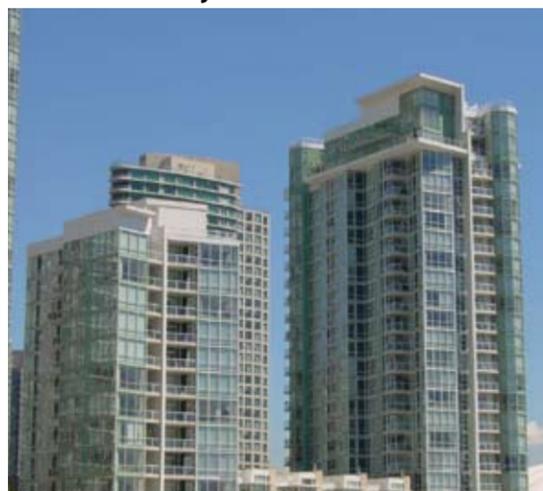
Major Street Profile



Minor Street Profile



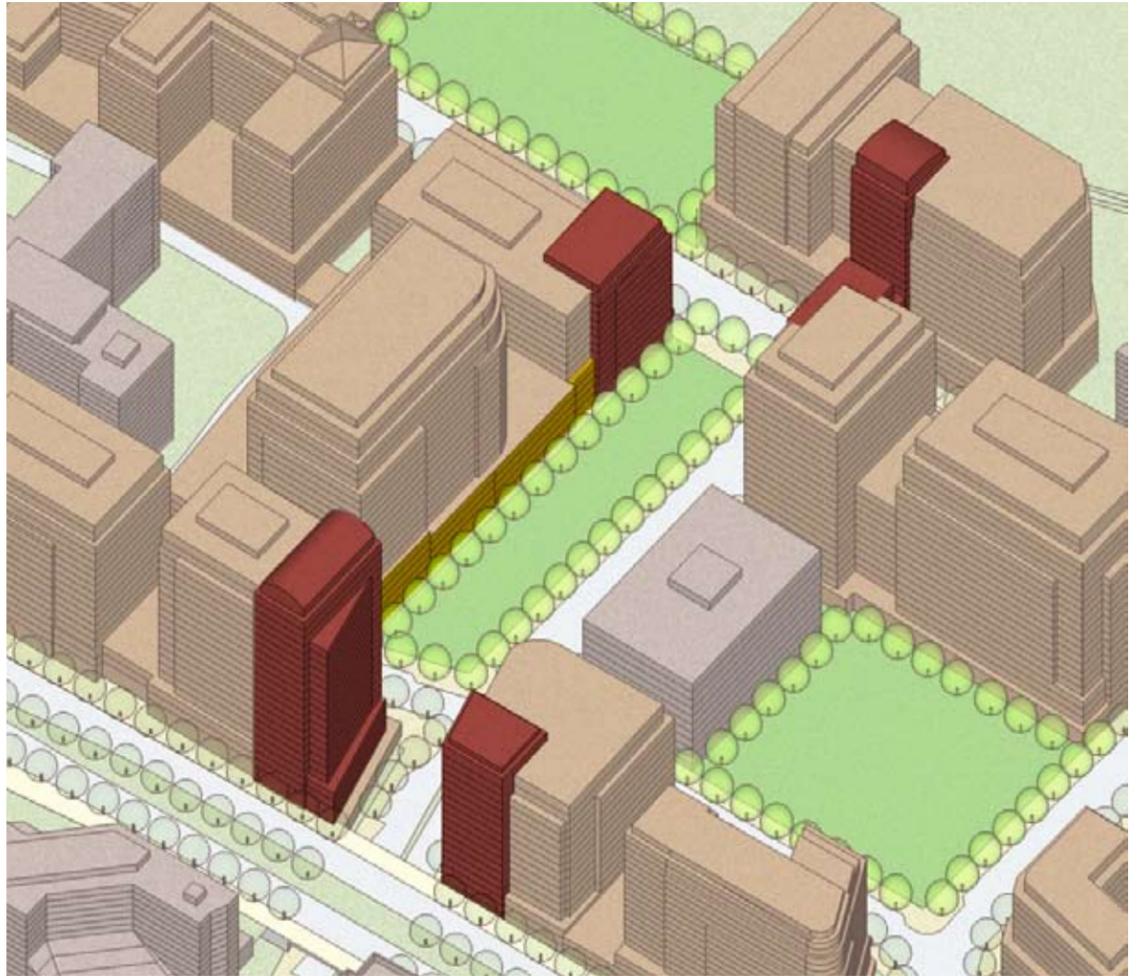
Eads Street Profile



3.11.3 ARCHITECTURAL FEATURES

An important objective of the Master Plan is the creation of landmark architectural features at signature sites that establish a distinct identity of place, symbolically mark gateways and significant points of interest, and contribute to the visual and architectural character of the Crystal City streetscape. The Architectural Features Map (Figure 3.11.1) identifies locations in the Illustrative Concept Plan where special architectural features would contribute to this objective. The diagram also identifies frontages where coordination in the composition of façades to create a more unified architectural theme would signify the prominence of selected locations. To this end:

- Innovative architectural expression should be given wide latitude in featured locations; guidelines on massing and setbacks are relaxed.
- Architectural features range from a special corner treatment to a complete building tower.
- Feature locations are often paired; each location should respond in a reciprocal manner as part of a larger urban-design composition.
- Coordinated frontages should mutually respond in massing, materials, and architectural language to visually unify the common space or street they frame.
- Where recommended architectural feature locations overlap with bulk-plane angles, consideration may be given for flexibility for portions of such frontages to vary somewhat from bulk-plane angles.



Example of Architectural Feature Locations at 18th Street



Corner Feature



Symbolic Entrance - Boston, MA



Corner Feature - Bethesda, MD



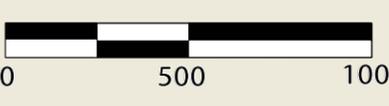
Change in Facade Treatment

ARCHITECTURAL FEATURES MAP

Figure 3.11.1



LEGEND

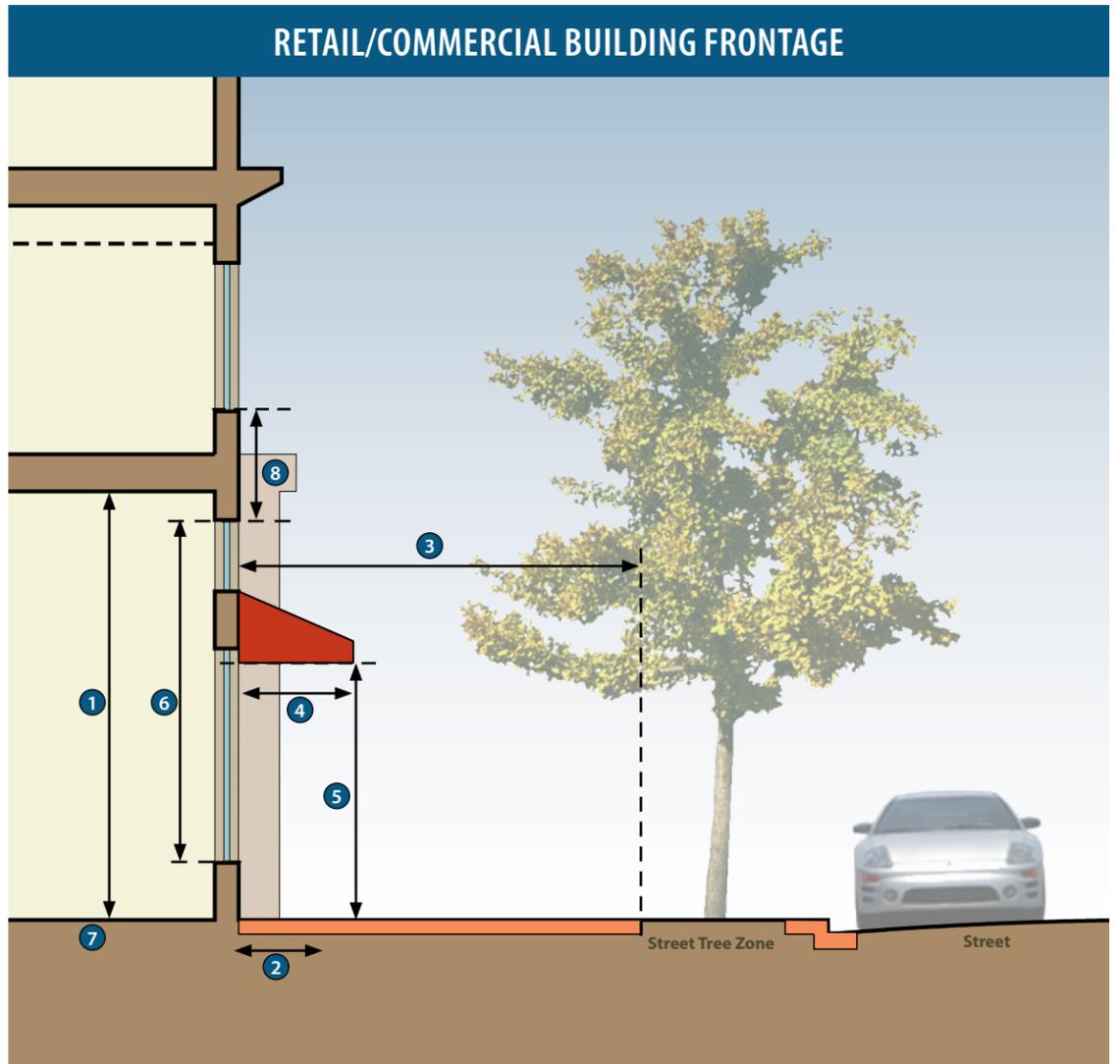
	ARCHITECTURAL FEATURE
	COORDINATED FRONTAGE
	 0 500 1000

3.11.4 BUILDING FRONTAGE

RETAIL/COMMERCIAL FRONTAGE

Retail frontage includes a number of features intended to support an active streetscape. For the Crystal City Master Plan, frontage and RBLs are the same, consequently most of the elements of private frontage abut or encroach on public frontage. Retail frontage guidelines, in order to be successful, must identify, and promote building and façade elements characteristic of retail establishments in a robust urban setting. To that end:

- 1 Minimum clear height in retail space should be 15 feet.
 - 2 A limited set of building frontage elements, such as bays, balconies, cornices, and blade signage may encroach and project across an RBL for a distance not to exceed 42 inches, so long as the designated sidewalk clear zone is not narrowed to less than six feet. Where they occur, supports for such structures should not encroach within the designated clear zone.
 - 3 Marquees, fixed canopies, and other over-head entry features may encroach beyond the RBL more than four feet, but should not project into or beyond the Street Tree and Furnishing zone.
 - 4 Retail awnings may encroach and project across an RBL for a distance not to exceed six feet.
 - 5 Retail awnings, marquees, fixed canopies, cornices, balconies, and other overhead projections must maintain a projecting minimum clear height of nine feet (10 feet is required for signs).
 - 6 Provide display windows amounting to a minimum of 50% of the surface area of the ground floor façade, with the area between 3 and 8 feet above grade reaching a minimum of 80% transparency.
 - 7 Retail floors should match the grade of exterior sidewalk to the extent feasible.
 - 8 A continuous signage band above ground floor fenestration should be incorporated into the design of the façade.
- Retail entries should be spaced along a frontage at intervals that encourage active streetscapes, with retail entrances not more than 60 feet apart on average.
 - Principal entrances for all new retail should be located on street frontages.
 - Arcades on street frontages are not recommended.
 - Paved surfaces should extend to the building face, with landscaping elements limited to movable planters.
 - Within the café/display zone, some fencing and partitioning between establishments can be permitted. Otherwise, these areas should remain accessible for pedestrian movement.

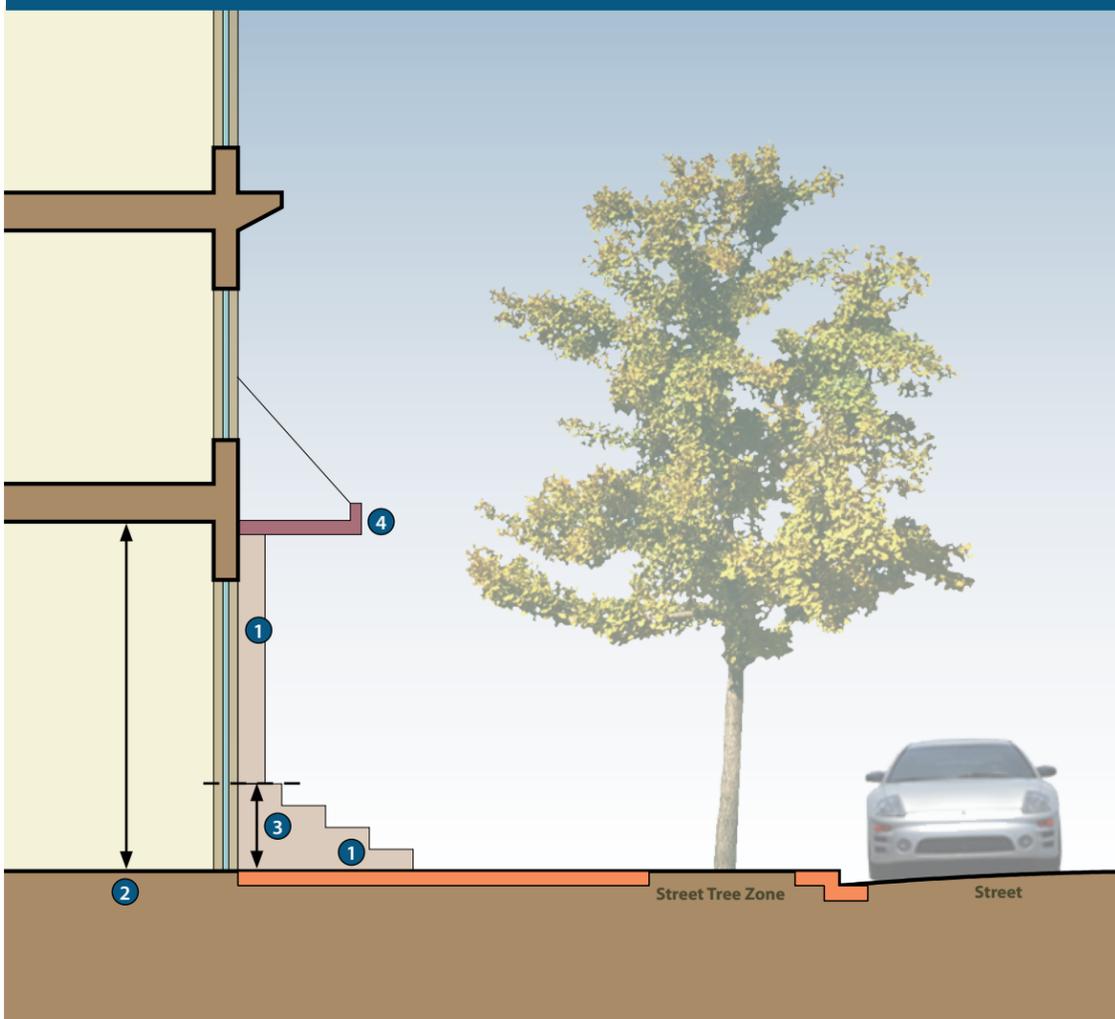


Retail Frontage - Bethesda, MD



Retail Frontage - Bethesda, MD

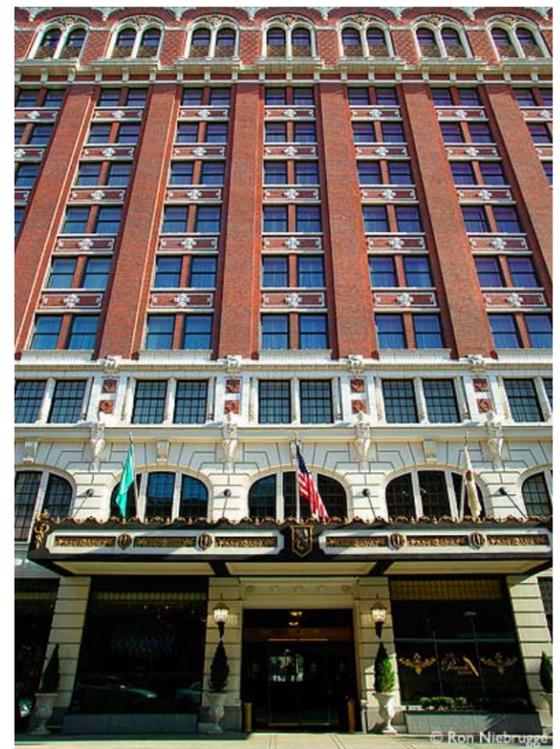
RESIDENTIAL BUILDING FRONTAGE



RESIDENTIAL FRONTAGE

On streets where residential buildings without a retail base occur, street frontage should express the more passive and quiet character of a residential neighborhood. To that end:

- 1 All residential lobby entrances should front onto streets, and opportunities for ground floor residential units having individual street entrances should be explored.
 - 2 Lobby entrances should be at grade, with a minimum clear height of 12 feet in the lobby.
 - 3 Ground floor residential units should typically be elevated a minimum of 24 inches above the exterior grade along the RBL.
 - 4 A limited set of building frontage elements, such as bays, balconies, cornices, stoops, and shading elements may encroach and project across an RBL for a distance not to exceed six feet.
- All handicap ramps should be internal to buildings.
 - Landscaping areas may be permitted between the pedestrian clear zone and the building face.



Residential Frontage - Arlington, VA

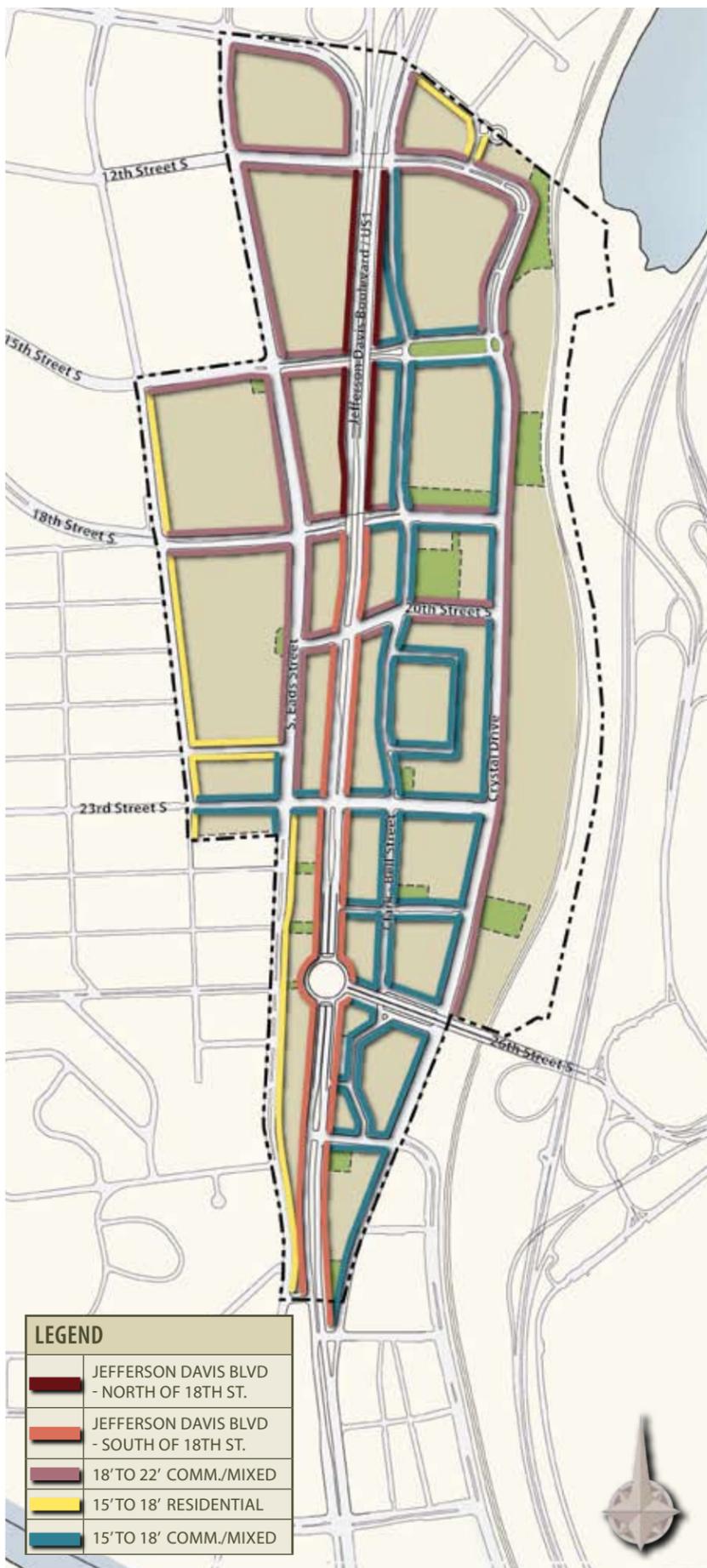


Residential Frontage - Washington, D.C.

3.11.5 PUBLIC SIDEWALK FRONTAGE

Public sidewalk frontage describes the configuration of the sidewalk, landscaping, and street furnishings in the area between the street curb and the RBL. To the extent that any portion of a building is setback from the RBL creating additional sidewalk area, these guidelines should be applied as appropriate to that extended area. Table 3.11.1 summarizes typical sidewalk design parameters. The street configuration diagrams in Section 3.6.9 identify two general ranges of overall sidewalk widths, by which the various components of the sidewalk can be specified. Table 3.11.2 is provided for the special case of Jefferson Davis Boulevard. Within the sidewalk width categories, components are specified by frontage type. Again, Jefferson Davis Boulevard is a special case, where the configuration is specified by locations along its course, rather than by frontage type. In some instances, a range of component-widths are provided for flexibility tailored to specific circumstances. The components of the public sidewalk frontage are:

- Sidewalk Clear Zone:** Intended to provide unobstructed passage for pedestrians along the course of a sidewalk. A range of dimensions are provided based on the overall sidewalk width and the frontage type.



Key Plan - Figure 3.11.3

15 TO 18 FEET - COMMERCIAL/MIXED



Retail Sidewalk - Bethesda, MD

15 TO 18 FEET - RESIDENTIAL



18 TO 22 FEET - COMMERCIAL/MIXED

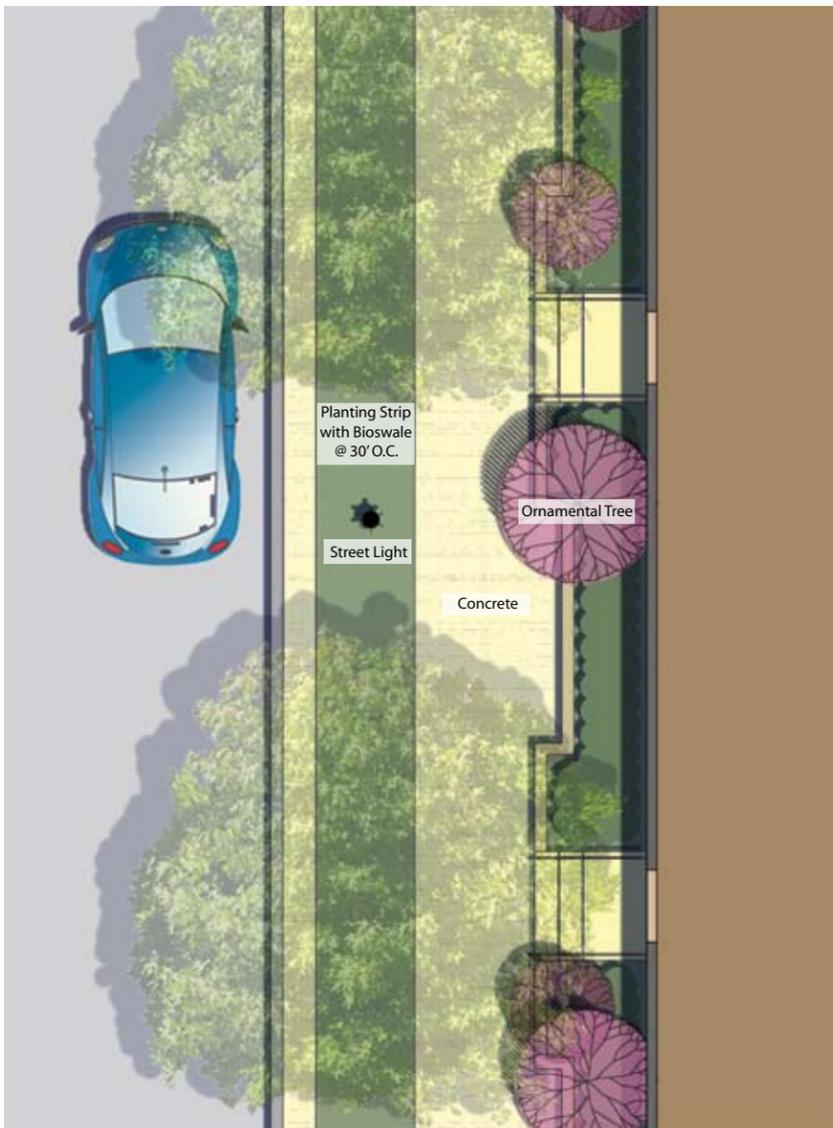


TABLE 3.11.1 - TYPICAL SIDEWALKS

SIDEWALK WIDTH	15 TO 18 FT		18 TO 22 FT
	COMMERCIAL/MIXED	RESIDENTIAL ONLY	COMMERCIAL/MIXED
FRONTAGE TYPE	COMMERCIAL/MIXED	RESIDENTIAL ONLY	COMMERCIAL/MIXED
SIDEWALK CLEAR ZONE	6 FT MIN.	6 FT MIN.	6 FT MIN.
STREET TREE AND FURNISHING ZONE	6 FT MIN.	6 FT MIN.	6 FT MIN. / 7 FT MAX.
CAFÉ/SHY ZONE	VARIES	N/A	VARIES
RESIDENTIAL SHY ZONE	N/A	VARIES	N/A
PAVING MATERIALS	CONCRETE/PAVERS	CONCRETE	CONCRETE/PAVERS
TREE PIT SIZE	5' X 12' MIN.	5' X 12' MIN.	5' X 12' MIN.
TREE PIT GRATES	PREFERRED	PERMITTED	PERMITTED
TREE PIT LANDSCAPING	PERMITTED	PERMITTED	PREFERRED
CONTINUOUS PLANTING STRIP	NOT PERMITTED	PREFERRED, 6.5 FT MIN.	NOT PERMITTED

- **Street Tree and Furnishing Zone:** This zone is immediately adjacent to the curb and is defined primarily by street trees contained either in tree pits or planting strips; this zone may include furnishings such as lampposts, benches, trash receptacles, planters, and similar street furnishings. On some commercial frontages, this zone may be integrated with a café zone, described below.
- **Café/Shy Zone:** This zone only occurs on commercial frontages. In addition to café seating in front of restaurants and cafés, this zone can be used for outdoor retail display and other retail-related activities. In the absence of such uses, the zone can be furnished with benches, planters, and other items consistent with a retail environment. This zone may be located either adjacent to the building frontage, or integrated with the Street Tree and Furnishing Zone, in which case the zone should be no less than the required width of the Street Tree and Furnishing Zone. The position of the Café/Shy Zone should be the same for all businesses along a block frontage.
- **Residential Shy Zone:** This zone only occurs on residential frontages and is intended primarily as a landscape buffer between the building face and the sidewalk Clear Zone. Landscaping elements may include door yards, raised integrated planters, and other continuous planting beds. The shy zone may be paved, but should be furnished with benches, planters, and other items consistent with a residential frontage.
- **Paving Materials:** Paved surfaces may consist of special paving, untreated poured concrete, or some combination of these surfaces. However, for the portion of the sidewalk comprising the Clear Zone, the treatment shall be concrete or stamped concrete. Additionally, choice and installation of paving materials must be ADA compliant, and should reference the most current Arlington County standards restricting use of beveled edge pavers and providing specifications for decorative concrete applications.
- **Tree Pit Size:** Tree pits should be detailed using Arlington County Landscape Standards.
- **Tree Pit Grates:** Specifies whether grates are a preferred choice for the tree pit, are a permitted option, or are not permitted. In general, Tree Pit Grates should be employed on narrow (15-18 feet) commercial sidewalks that limit the width of the pedestrian throughway. In these instances, utilizing an open, landscaped tree pit, either with or without a low fence, can create a tripping hazard for pedestrians and/or result in trampling of roots and ground cover.
- **Tree Pit Landscaping:** Specifies whether landscaping in an open tree pit is a preferred choice, is a permitted option, or is not recommended. In general, Tree Pit Landscaping should be employed on wider (18 feet or greater) sidewalks with an ample pedestrian Clear Zone. In addition to the tree, the tree pit may include flowering plants and shrubs, however, no plants with thorns or other sharp protrusions should be used, and these plants should be maintained below a height of 42 inches.
- **Continuous Planting Strip:** Tree pits may be replaced in specified conditions with a Continuous Landscaping Strip planted with street trees and other plants and shrubs, or just trees and grass. The tables specify whether a Continuous Planting Strip is a preferred choice, is a permitted option, or is not recommended. In general, planting strips should be used on frontages with lower intensity of uses and where there is no adjacent on-street parking.

Other components of the public sidewalk frontage that are the same regardless of sidewalk width or frontage type are:

- **Tree Spacing:** Use Arlington County standards, with 30 feet on center typical.
- **Light Fixture Type:** Use Carlisle light; single globe, 12 foot pole along Fern Street, for all other streets, use double globe, 16 foot pole. Fixtures along Jefferson Davis Boulevard may use light extension arms over traffic lanes. Extension arms for banners, flower baskets and similar enhancements are encouraged. Cobra fixtures and the like are not permitted. Generally, the County maintains a focus on improving the overall performance of County and Dominion Power owned street lights with an emphasis on improving energy efficiency and reducing maintenance and life cycle costs.
- **Light Fixture Spacing:** 100 to 120 feet on Fern Street; for all other streets, 60 to 90 feet.



Retail Sidewalk - Washington, D.C.



Cafe Seating - Bethesda, MD



Commercial Sidewalk - Washington, D.C.

JEFFERSON DAVIS HWY - NORTH OF 18TH ST



JEFFERSON DAVIS HWY - SOUTH OF 18TH ST.

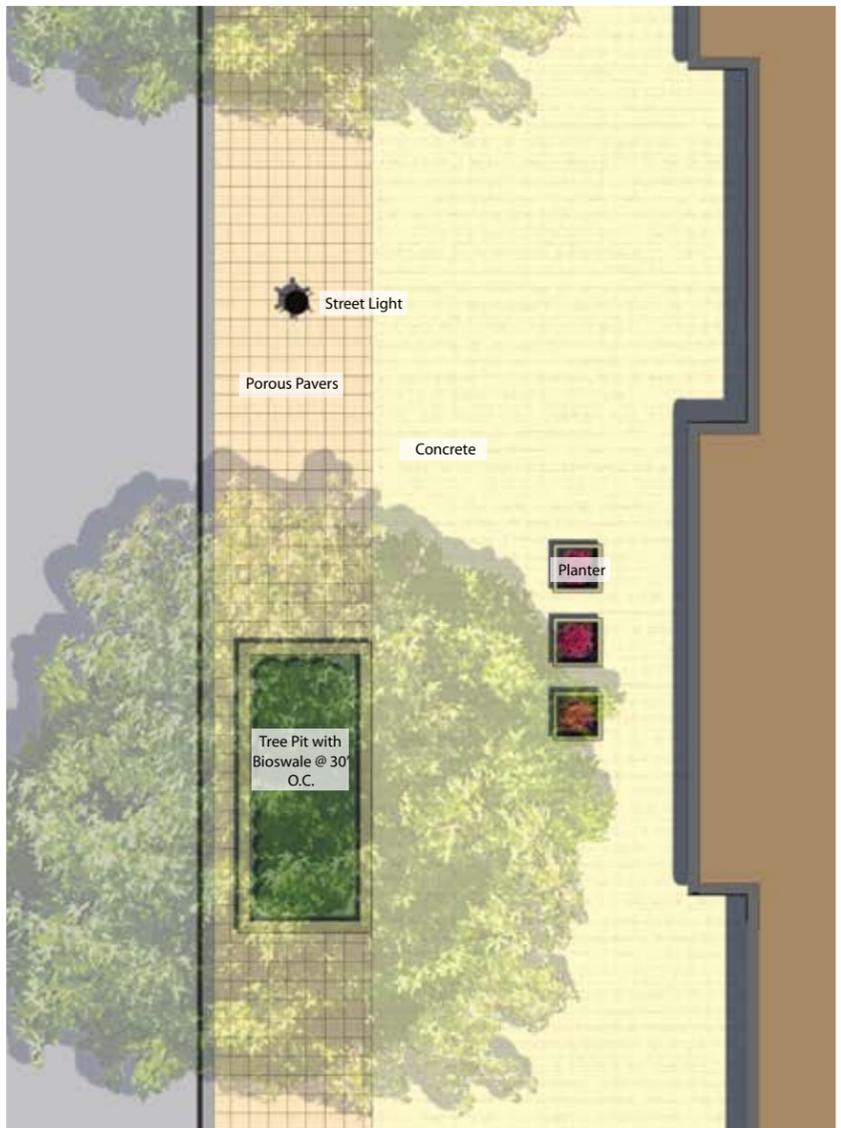
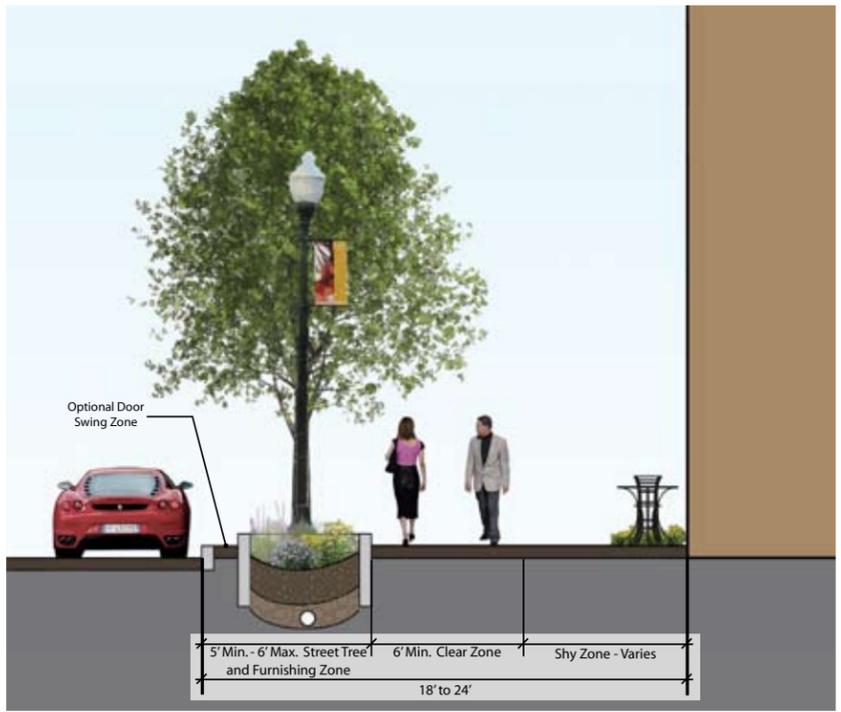


TABLE 3.11.2 - JEFFERSON DAVIS SIDEWALKS

SIDEWALK WIDTH	UP TO 25 FEET	
FRONTAGE LOCATION	NORTH OF 18TH ST.	SOUTH OF 18TH ST.
SIDEWALK CLEAR ZONE	6 FT MIN. / 8 FT MAX.	6 FT MIN. / 8 FT MAX.
STREET TREE AND FURNISHING ZONE	8 FT MIN. / 10 FT MAX.	5 FT MIN. / 6 FT MAX.
CAFÉ/SHY ZONE	VARIES	VARIES
RESIDENTIAL SHY ZONE	VARIES	VARIES
PAVING MATERIALS	CONCRETE/PAVERS	CONCRETE/PAVERS
TREE PIT SIZE	8' X 25' MIN.	5' X 12' MIN.
TREE PIT GRATES	NOT PERMITTED	NOT PERMITTED
TREE PIT LANDSCAPING	PREFERRED	PREFERRED
TREE SPACING	30 FT O.C.. TYP.	30 FT O.C. TYP.

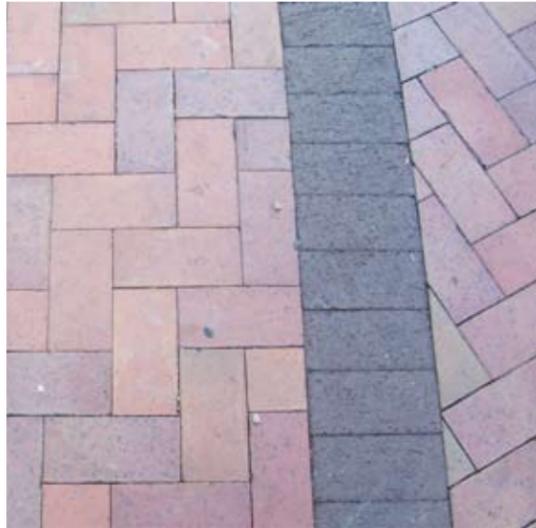
**“LOWLY,
UNPURPOSEFUL
AND RANDOM
AS THEY APPEAR,
SIDEWALK
CONTACTS ARE THE
SMALL CHANGE
FROM WHICH A
CITY’S WEALTH OF
PUBLIC LIFE MUST
GROW”**

JANE JACOBS
*AMERICAN-BORN CANADIAN
URBANIST, WRITER AND ACTIVIST*

3.11.6 PUBLIC SPACE LANDSCAPING

STREET AND OPEN SPACE FURNISHINGS

SIDEWALK PAVEMENTS



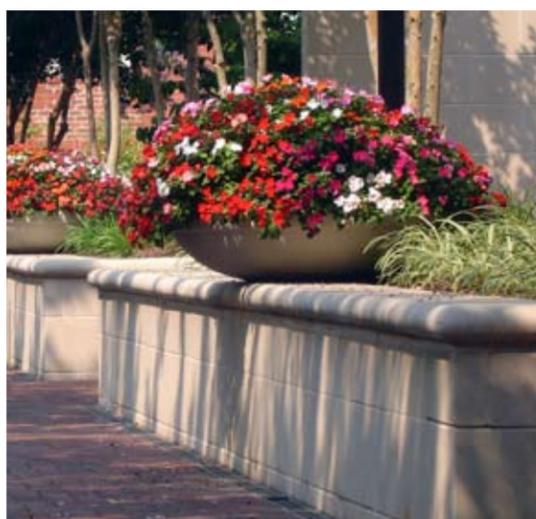
The overall intent for sidewalks is a warm colored, richly textured floor within a complete streetscape palette. Acceptable materials include poured in place concrete or pressed concrete pavers outside the Clear Zone, in a warm gray to tan range of color. Pressed concrete paver shapes should be limited to square or rectangular forms and patterns should have no more than three colors of pavers. In areas of streetscape reconstruction, porous pressed concrete pavers should be provided in a five foot band along the curblane, in alignment with the tree pits. In this manner, rainwater can percolate into the tree pit and contribute to the nourishment of the trees, while reducing stormwater runoff. Additionally, sidewalk pavements must be ADA compliant, and should reference the most current Arlington County standards restricting use of beveled edge pavers.

BENCHES



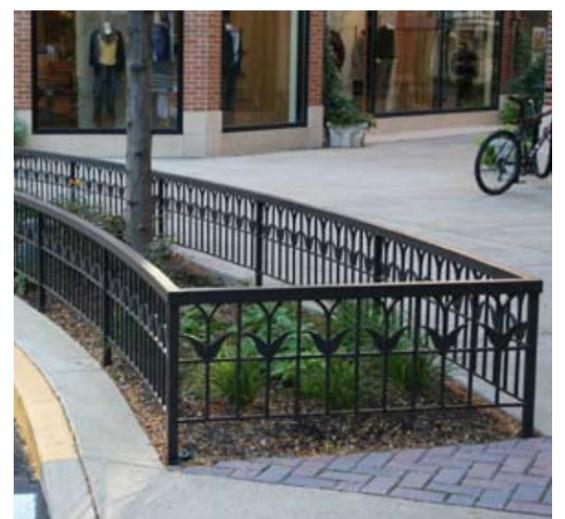
Benches should be provided throughout the streetscape for the comfort and convenience of pedestrians. Benches should be contemporary in character and made of sustainably harvested wood, steel, or a combination of the two materials. Lengths may vary from four feet to eight feet in length. Benches with backs and armrests are preferred over backless benches for user comfort. A minimum of two benches per 100 linear feet of streetscape is recommended.

PLANTERS



Freestanding planter pots can add to the color and texture of the streetscape. These should be provided within the shy zone or other furnishing zones, since any such planters would be furnished, installed, and maintained by the adjoining building owner or tenant. Planters should be simple in profile, contemporary in form, and precast concrete or cast stone in material. These should be a minimum of three feet square or round and a maximum of six feet square or round.

TREE PITS AND FENCING



Tree pits are openings in the sidewalk pavement for street trees and are typically filled with groundcovers. Tree pits without tree grates are preferable, as they can contain additional low-profile plants which enrich the streetscape, cleanse the air, and soak up rainwater. These open tree pits should be surrounded by a low steel fence or edge that defines the opening, protects the tree, and prevents trampling of roots and groundcover. Such fencing should be 6 to 12 inches in height. When such tree pit fencing is provided, each tree within a block or building front should receive the fencing, for a uniform appearance.

TRASH RECEPTACLES



Litter collection is a key to a cleaner, greener Crystal City. A single type of trash receptacle is recommended for unity and recognition by users. The preferred trash receptacle should be steel in material, with a removable lid or a side panel for ease of collection. A top compartment for recycling of cans and bottles is recommended. If these criteria cannot be met, then each trash receptacle should be partnered with one that is exclusively for recycled cans and bottles. One trash receptacle per 100 linear feet of streetscape is recommended.

BICYCLE RACKS



Bicycle travel for commuting and recreation is a key part of the transformation of Crystal City. A single type of bicycle rack is recommended for unity and recognition by users. Primary factors influencing the selection and installation of bicycle racks include functionality and adaptability/flexibility to different settings and clearances. Bicycle parking should be provided to accommodate two bicycles per 100 linear feet of streetscape.

BOLLARDS



Bollards are markers that separate pedestrian areas from automobile ways, promoting a safe pedestrian environment. They also establish a rhythmic element within a streetscape, and can be an important aesthetic design component. Bollards should be provided where there is no raised curb to separate a pedestrian walk from a vehicular lane. These should be simple in profile, contemporary in form, and steel in material. They should not exceed 3'-6" in height and should be spaced between five and eight feet on-center for effective spatial definition.

TREE GRATES



Tree grates are an elegant solution to the accommodation of a tree pit within a narrow sidewalk, as they allow pedestrians to walk over the tree pit, avoid trip hazards, and prevent trampling of the tree's roots. Tree grates should be composed of durable materials, preferably steel, and simple in form. All tree grates should have breakaway frames that allow for the growth of the tree trunk over time.

TABLES AND CHAIRS



For sidewalk cafés and other purposes, moveable tables and chairs are important additions to the usability and comfort of a streetscape. Recommended materials include steel, aluminum, and sustainably harvested wood. Well-designed and durable furnishings made from recycled plastics are also encouraged. Many tables have central openings to accommodate umbrella shading, which extends the useful season for outdoor seating and is strongly encouraged.

CAFE FENCING



Outdoor dining areas are encouraged on sidewalks, either in the café shy zone adjacent to the building face or at curbside. For some retailers, a defined zone is vital to their business, and thus, temporary fencing or corralling of seating is desired. Such fencing is acceptable, as long as it is clearly moveable, with posts affixed to bases and not anchored permanently into the ground. Such temporary fencing should be two to three feet in height and may be of wood, steel, or aluminum. Railings may be fixed or flexible (rope or cable). Café fencing shall not encroach upon the sidewalk Clear Zone within any streetscape.

“THE TREE IS MORE THAN FIRST A SEED, THEN A STEM, THEN A LIVING TRUNK, AND THEN DEAD TIMBER. THE TREE IS A SLOW, ENDURING FORCE STRAINING TO WIN THE SKY.”

ANTOINE DE SAINT-EXUPÉRY
FRENCH WRITER AND AVIATOR

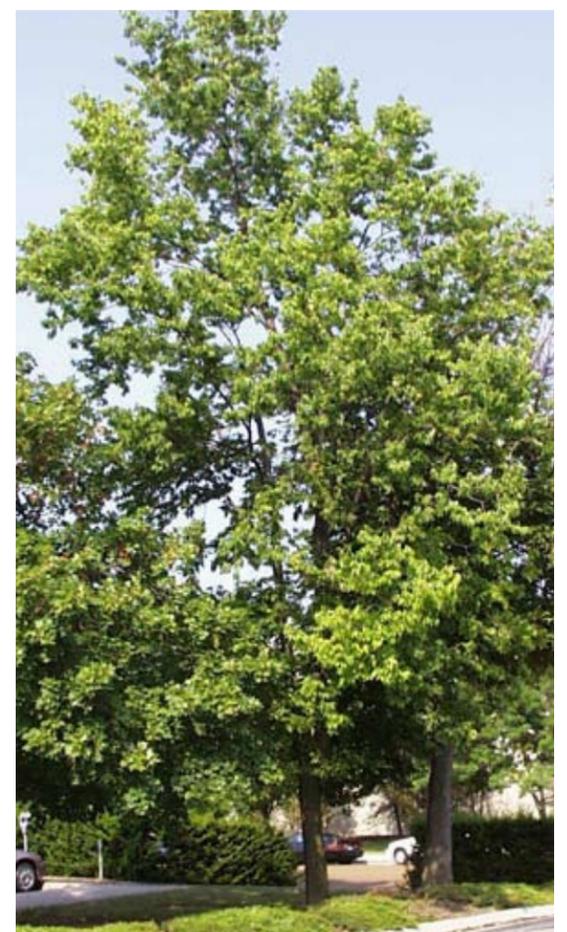
STREET TREES

TABLE 1.11.3 - RECOMMENDED STREET/SHADE TREES (3" CALIPER AT INSTALLATION MINIMUM)	
SCIENTIFIC NAME	COMMON NAME
ACER RUBRUM	RED MAPLE
BETULA NIGRA 'DURA HEAT'	RIVER BIRCH
CELTIS OCCIDENTALIS	HACKBERRY
GINKGO BILOBA	GINKGO
GLEDITSIA TRIACANTHOS 'INERMIS'	HONEY LOCUST
LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
LIRIODENDRON TULIPIFERA	TULIP TREE
PLATANUS ACERIFOLIA	LONDON PLANE TREE
QUERCUS COCCINEA	SCARLET OAK
QUERCUS PALUSTRUS	PIN OAK
QUERCUS PHELLOS	WILLOW OAK
ULMUS AMERICANA ALLEE	AMERICAN ELM
ULMUS AMERICANA 'NEW HARMONY' CHINESE ELM	AMERICAN ELM ULMUS PARVIFOLIA
ZELKOVA SERRATA	ZELKOVA

TABLE 1.11.4 - RECOMMENDED FLOWERING TREES (8'-10' HEIGHT AT INSTALLATION MINIMUM)	
SCIENTIFIC NAME	COMMON NAME
CERCIS CANADENSIS	REDBUD
LAGERSTROEMIA INDICA	CRAPPE MYRTLE
MAGNOLIA SOULANGEANA	SAUCER MAGNOLIA
PRUNUS YEDOENSIS	JAPANESE CHERRY



Red Maple



Hackberry



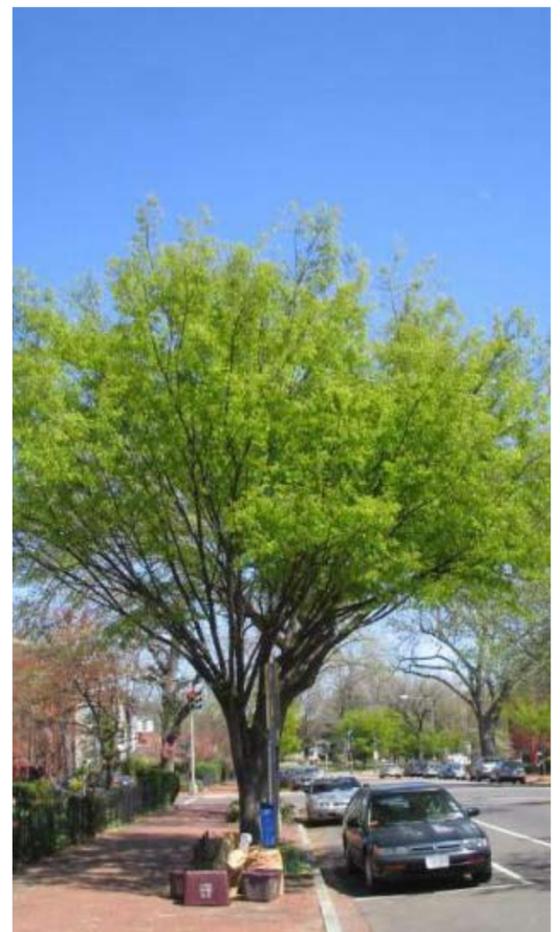
View East at 15th Street Garden Park



Saucer Magnolia



American Elm



Zelkova

4. IMPLEMENTATION



THE PURPOSE OF THIS PLAN IS TO ESTABLISH THE OVERALL FUTURE VISION FOR CRYSTAL CITY AND TO PROVIDE A FRAMEWORK TO GUIDE PUBLIC AND PRIVATE INVESTMENT FOR THE PHYSICAL REVITALIZATION OF THE AREA.

4.1 INTRODUCTION

The intent of this chapter is to identify some of the more tangible actions that need to be undertaken to implement the plan, rather than repeating all of the recommendations outlined in the Plan's first three chapters. Therefore, the recommendations in this chapter include the more action-oriented elements of the plan, and may provide an expanded description of how these actions should be pursued.

Organized by the following categories, the actions below are recommended to implement the Crystal City Sector Plan (also see Section 4.3, Implementation Matrix):

- Land Use and Zoning
- Affordable Housing
- Transportation
- Public Open Space
- Community Building
- Environmental Sustainability
- Economic Development

In addition to the narrative description of action items provided in this chapter, an Implementation Matrix is also provided that summarizes each action item with corresponding information on timing, responsible agency(ies), mechanism(s), and potential funding sources.

POLICY - IMPROVEMENT IMPLEMENTATION (I)

- I 1 Develop financing tools beyond traditional community benefit to pay for infrastructure and other public improvements essential to the spirit of the illustrative plan in recognition of (1): the transformational nature of the Crystal City redevelopment plan; (2): the limitations of developer contributions due to the high cost of demolition-replacement projects; and, (3) the need to implement the enhanced surface transit (streetcar) at the beginning of the redevelopment process.
- I 2 Review future redevelopment activities in Crystal City at a Phased Development Site Plan (PDSP) level, in accordance with the block boundaries outlined in the Phased Development Site Plan Block Map, either prior to or concurrent with final site plans to ensure overall feasibility of achieving major plan improvements.

4.2 IMPLEMENTATION

4.2.1 PLAN ADOPTION

Action 1: Adopt the Crystal City Sector Plan

The purpose of this plan is to establish the overall future vision for Crystal City and to provide a framework to guide public and private investment for the physical revitalization of the area. The plan also contains recommendations to help implement this vision, focusing on land use and zoning, urban design guidelines, economic development and revitalization, housing, transportation (including transit) infrastructure, and public open space.

4.2.2 LAND USE AND ZONING

This Plan establishes a new vision for the next generation of redevelopment in Crystal City, and will require changes to the land use and zoning frameworks. While certain changes will be necessary, the end goal of fostering Crystal City's evolution into a vibrant, mixed-use, transit oriented and pedestrian friendly commercial and residential neighborhood will remain quite similar to the goals generally established for Arlington's Metro Station areas. Land uses will continue to include a rich mix that provides for 18-hour per day activity while simultaneously helping to balance the demands on the transportation infrastructure. Planning and zoning parameters defining allowable building heights and development capacities will also reinforce the established approach of focusing greatest building heights and activities towards the center of the Metro Station area, with building heights and densities carefully transitioning down towards the boundaries with surrounding lower density neighborhoods. The major General Land Use Plan and Zoning changes needed to facilitate the Plan are generally outlined below.

GENERAL LAND USE PLAN ACTIONS

Action 2: Designate the "Crystal City Coordinated Redevelopment District". (See Figure 4.2.1)

The GLUP is the primary policy guide for the future development of the County. As such, the GLUP should be amended to reflect the new vision for Crystal City as expressed in this Crystal City Sector Plan. First, the boundaries of the study area, to be known as the "Crystal City Coordinated Redevelopment District," should be delineated on the GLUP. The creation of this district would signal that all properties within its boundaries would be eligible for the special regulations and incentives recommended in the Plan and subject to urban design guidelines. Text describing the vision and goals for this district also should be added to the GLUP booklet and map.

Action 3: Change land use designations and other elements on the GLUP map. (See Figure 4.2.1 and 4.2.2)

In order to help implement the new Crystal City vision, existing land use patterns on the GLUP should be changed. Currently, the study area is designated a mix of "Medium" Residential, "High-Medium" Residential, "High" Residential, "Service Commercial", "Service

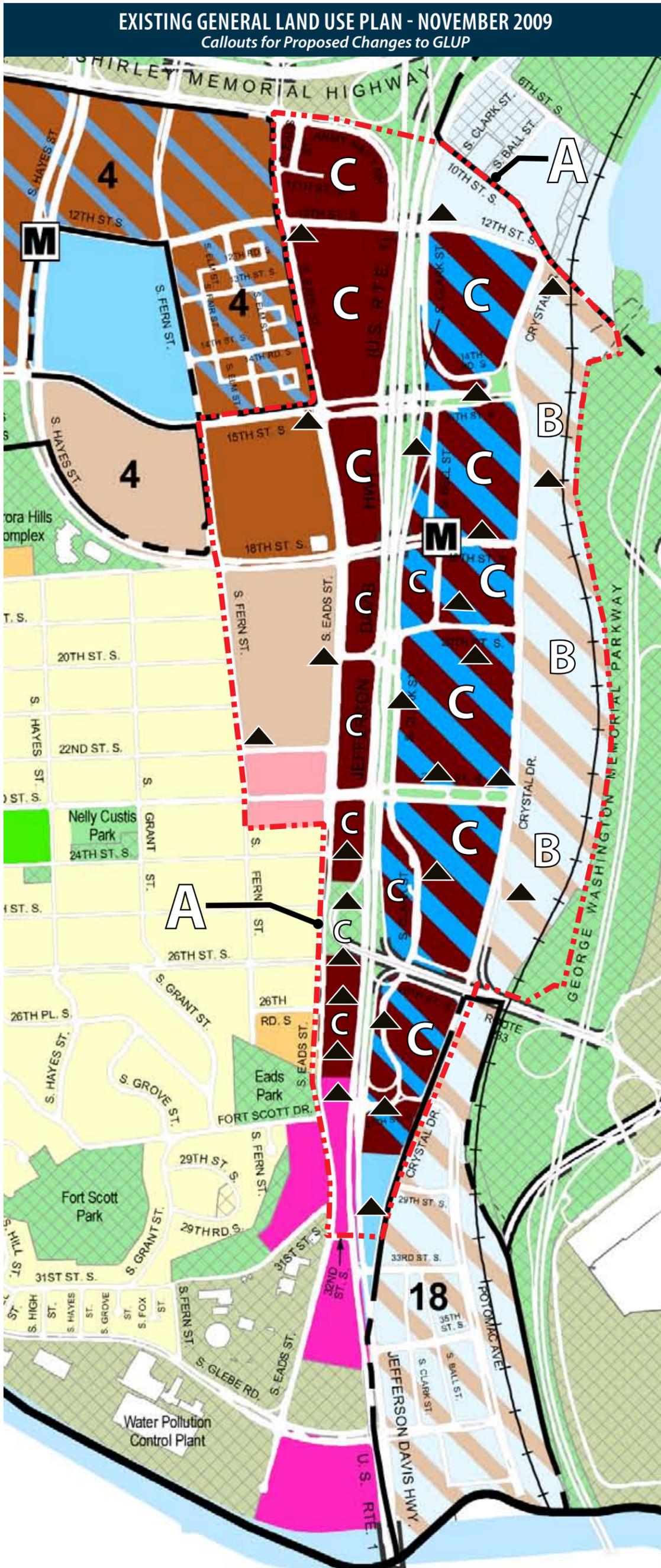
Industry," "Public," "Low" Office-Apartment-Hotel and "High" Office-Apartment-Hotel. Much of the study area is shown with a striping pattern, the color and width of the stripes indicating the type and percentage of uses desired. As the Plan speaks to the recommended future use mix for Crystal City, there is no longer a need for the striping as amending the GLUP to solid colors for those designations would still allow for the full range of both existing and planned residential, commercial, and hotel uses. Changes to the GLUP should include the following:

- Change from a mix of "Low" Office-Apartment-Hotel and "Medium" Residential to solely "Low" Office-Apartment-Hotel for the area east of Crystal Drive from 12th Street South to the Airport Viaduct.
- Change from a mix of "High" Office-Apartment-Hotel and "High" Residential to solely "High" Office-Apartment-Hotel for the area east of Jefferson Davis Highway and west of Crystal Drive, from 12th Street South to just south of 27th Street South.
- Change from a mix of "High" Residential and "Public" to "High" Office-Apartment-Hotel for the area bounded by Jefferson Davis Highway, South Eads Street, Army Navy Drive and a line level with the northeast corner of Eads Park.
- Add 26 triangle symbols, used to symbolize the general locations of open space, to the GLUP, to reflect the planned open spaces within the Crystal City Coordinated Redevelopment District.
- Change the street network on the GLUP within the Crystal City Coordinated Redevelopment District to reflect the planned street configuration.
- Amend the boundary of the Crystal City Metro Station Area on the back of the GLUP map to include the properties between South Eads Street and South Fern Street that front the south side of 23rd Street South.

ZONING ORDINANCE ACTIONS

Action 4: Amend the Zoning Ordinance to include a new district, "C-O Crystal City," and determine an applicable framework for addressing community benefits associated with additional density permitted under this new district.

This new Zoning district will be specifically designed to implement the recommendations of the Plan and to encourage a mix of office, hotel residential and retail uses within the Crystal City Coordinated Redevelopment District. At the time of final Phased Development Site Plan application, owners or developers of property within the redevelopment district may request a rezoning of their properties to "C-O Crystal City" in order to develop through the special exception site plan process to achieve the planned additional density and height by proposing projects that meet the goals, policies and recommendations of the Plan. Elements anticipated for inclusion in this



LEGEND	
PROPOSED CHANGES	
A	DESIGNATED CRYSTAL CITY COORDINATED REDEVELOPMENT DISTRICT ¹
B	CHANGE TO LOW O-A-H
C	CHANGE TO HIGH O-A-H
▲	OPEN SPACE ¹
NOTE: 1. THIS AREA IS DESIGNATED AS THE CRYSTAL CITY COORDINATED REDEVELOPMENT DISTRICT (CCCRD). FOR MORE DETAILED RECOMMENDATIONS ON LAND USE, BUILDING HEIGHTS AND FORM, TRANSPORTATION, OPEN SPACE, AND OTHER RECOMMENDATIONS IN THE CCCRD, PLEASE REFER TO CHAPTER 3, CRYSTAL CITY SECTOR PLAN.	
	

Land Use Category**	Range of Density/Typical Use
Residential	
Low	1-10 units per acre
Low-Medium	16-36 units per acre
Medium	Up to 37-72 units per acre
High-Medium	Up to 3.24 F.A.R. (Floor Area Ratio) Residential
High	Up to 4.8 F.A.R. Residential Up to 3.8 F.A.R. Hotel
Commercial and Industrial	
Service Commercial	Personal and business services. Generally one to four stories, with special provisions within the Columbia Pike Special Revitalization District.
Service Industry	Wholesale, storage, and light manufacturing uses, including those relating to building construction activity.
Public and Semi-Public	
Public	Parks (local, regional, and federal), Schools (public), Parkways, major improved rights-of-way, Libraries and cultural facilities.
Government and Community Facilities	County, state and federal administration and service facilities (police, fire, property, etc.), Hospitals, nursing homes, and institutional housing, Utilities, military reservations, airports, etc.
Office-Apartment-Hotel	
Low	Office Density: Up to 1.5 F.A.R. Apartment Density: Up to 72 units/acre Hotel Density: Up to 110 units/acre
Medium	Office Density: Up to 2.5 F.A.R. Apartment Density: Up to 115 units/acre Hotel Density: Up to 180 units/acre
High	Office Density: Up to 3.8 F.A.R. Apartment Density: Up to 4.8 F.A.R. Hotel Density: Up to 3.8 F.A.R.

FOR COMPLETE LEGEND, SEE ARLINGTON GLUP MAP AT WWW.ARLINGTONVA.US/DEPARTMENTS/CPHD/PLANNING/DOCS/CPHDPLANNINGDOCSGLUP.ASPX

Figure 4.2.1

new zoning district include requirements regarding use mix, base densities, building heights, bulk-plane angles, tower coverage, affordable housing and off-street parking. Projects will be expected to be consistent with the general vision established in the Plan.

The Zoning Ordinance amendment to create this district should be structured to implement the ultimately selected approach for handling the provision of community benefits associated with redevelopment.

Redevelopment should be organized at the block level, or at a scale that does not preclude achieving the Plan improvements. The landowner(s) on each block should submit and gain approval for a joint Phased Development Site Plan (PDSP) for the block on which their site or sites are located before or concurrent with the first site plan application for an individual development project. In all cases, applicants should meet with staff at the beginning of the project design process to refine and agree upon the appropriate boundaries for a PDSP on a case-by-case basis. In cases of significantly fragmented property ownership, the County may facilitate all parties involved in initiating conversations around a joint PDSP. Where a PDSP is proposed for less than a full-block, the applicant must demonstrate how such an approach would not preclude planned improvements. Generally, establishing full-block PDSPs are a lower priority for blocks that do not address critical common infrastructure elements, such as: reconfigured street network, new or enhanced public open space, combined parking facilities, new transit infrastructure, major utility relocations, or segments of the Underground. PDSP submissions linking development across multiple contiguous blocks (or only separated by a public right-of-way) should be explored to the extent that such linkages help balance economic feasibility issues for projects that would expedite the achievement of planned improvements.

Administrative Regulation 4.1 Governing the Submittal of Site Plans should be referenced for additional information on the

requirements regarding PDSP submissions.

OTHER PLANNING FRAMEWORK ACTIONS

Action 5: Establish the recommended Build-to Lines throughout the Crystal City planning area with redevelopment.

The build-to lines recommended in this plan will largely define Crystal City's public realm and will effect future development for the better. Given the conceptual character of the build-to lines recommended in the plan and the absence of any intent to codify the build-to lines through the County's regulations, some flexibility is needed in establishing exactly where build to lines are located, and will largely be done in a consistent manner on a case-by-case basis.

Build-to lines should be located and registered when either private redevelopment projects or public street improvements are proposed within Crystal City. At the time of such proposals, staff should review the preliminary project plans for consistency with the street cross-sections recommended in the Plan. Based on these cross-sections and existing conditions, projects would provide a build-to line that accommodates (or does not preclude) the desired right-of-way widths in coordination with existing conditions,

For certain locations, a centerline could be used as a reference point. In other locations, such as along 23rd Street South between Crystal Drive and Jefferson Davis Highway, the centerline is expected to shift. In these instances, the build-to line may need to be referenced from other existing elements. Using this example, one recommended approach would be to establish the south build-to line based upon the location of the north façade of the Buchanan House apartment building, and establish the north build-to line by off-setting the south line by 110 feet (the recommended right-of-way width).

In instances where streets are fully realigned or new streets are to be created, establishment of the build to lines should occur as part of the Phased Development Site

Plan (PDSP) and final Site Plan review process. (Indeed, a primary reason for including a PDSP process is to ensure that major street relocations or the construction of new streets through a block are planned in a coordinated fashion, notwithstanding property ownership patterns.) In such instances, the PDSP submission should be reviewed by staff to ensure the correct street alignment and location that provides for functioning streets and intersections, and build-to lines could then be determined correspondingly based upon desired right-of-way dimensions. The street locations and build-to lines determined through the PDSP process should be affirmed in subsequent tasks related to final Site Plan reviews and approval.

4.2.3 AFFORDABLE HOUSING

Affordable housing is a key policy interest throughout Arlington County. Within Crystal City and other Metro Station Areas, there is a particular need for new affordable housing options. Existing and new programs should be utilized to ensure that the creation of affordable housing is part of the next generation of redevelopment in Crystal City. Based on existing tools and practices employed by the County, below are a series of recommendations directed at increasing the quantity of affordable housing in this area. If additional tools are developed in the future, they should be evaluated to determine if they, too, can be effective in helping to achieve the affordable housing goals of this Plan.

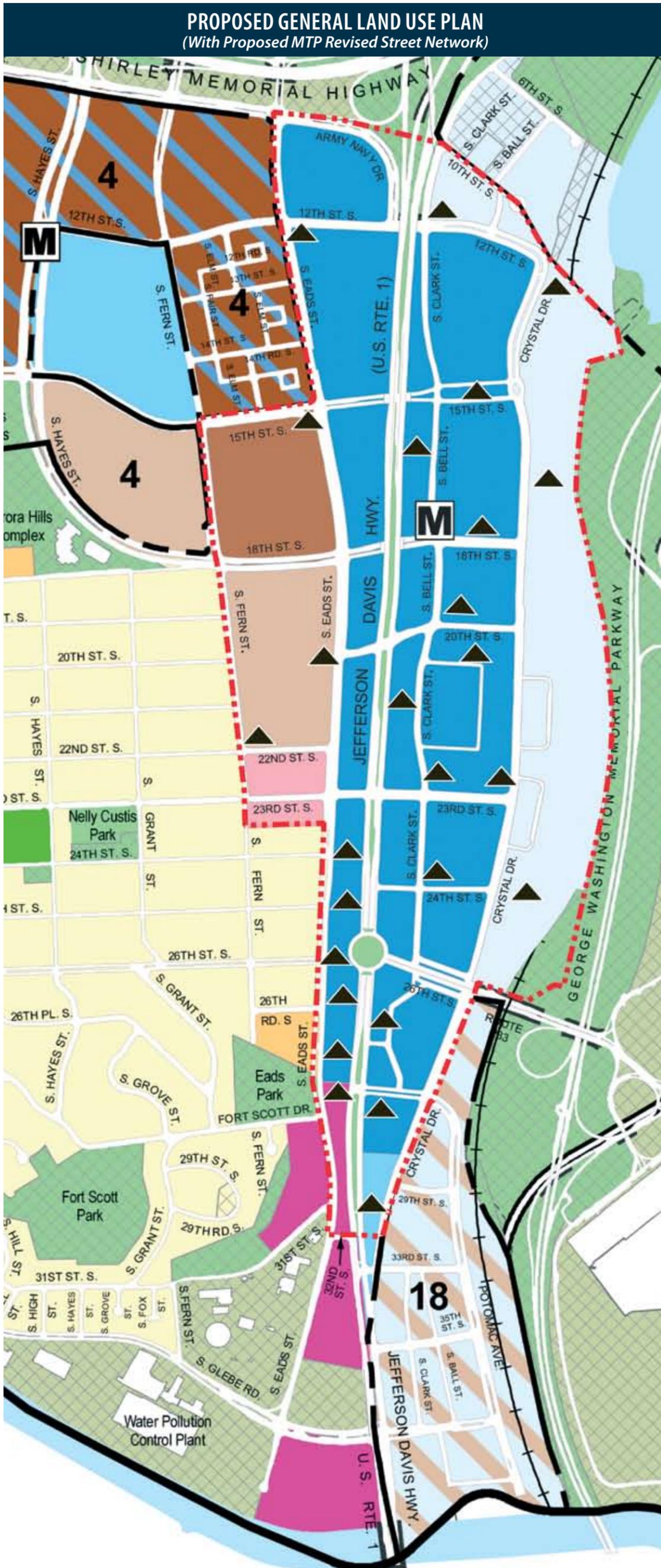
Action 6: Employ Policy Directive H5 of this Plan, in addition to the Affordable Dwelling Unit (ADU) Ordinance, to achieve committed affordable housing units through the realization of bonus density.

The affordable housing requirements for site plan projects outlined in the Zoning Ordinance (commonly referred to as the "Affordable Housing Ordinance") apply to all site plan projects with a density greater than 1.0. The Ordinance allows developers to choose whether to provide a cash contribution or to provide units using a percent of the increased gross floor area (GFA) above 1.0 Floor Area Ratio (FAR) for the density up to the General Land Use Plan maximum.

In addition, this Plan recommends that with the creation of the Crystal City Coordinated Redevelopment District, a policy be established whereby the achievement of additional committed affordable housing units will be negotiated for projects that are approved above the base densities outlined in this Plan. For residential projects that exceed the maximum standard site plan base density, the goal is that 20 percent of the gross floor area above the standard site plan base density be provided as units affordable up to 60% of the area median income (AMI) on-site; affordable ownership units would target households up to 80% of AMI. Applicants may submit an alternative affordable housing plan for consideration by the County as part of the site plan to be considered by the County Board. For commercial projects that exceed the maximum standard site plan base density, an additional contribution will be negotiated based upon the amount of bonus density, subject to the County policy at the time of the site plan application.



Multifamily Housing in Crystal City



LEGEND

PROPOSED CHANGES

- DESIGNATED CRYSTAL CITY COORDINATED REDEVELOPMENT DISTRICT¹
- ▲ OPEN SPACE

NOTE:
1. THIS AREA IS DESIGNATED AS THE CRYSTAL CITY COORDINATED REDEVELOPMENT DISTRICT (CCRD). FOR MORE DETAILED RECOMMENDATIONS ON LAND USE, BUILDING HEIGHTS AND FORM, TRANSPORTATION, OPEN SPACE, AND OTHER RECOMMENDATIONS IN THE CCRD, PLEASE REFER TO CHAPTER 3, CRYSTAL CITY SECTOR PLAN.

Land Use Category**	Range of Density/Typical Use
Residential	
Low	1-10 units per acre
Low-Medium	16-36 units per acre
Medium	Up to 37-72 units per acre
High-Medium	Up to 3.24 F.A.R. (Floor Area Ratio) Residential
High	Up to 4.8 F.A.R. Residential Up to 3.8 F.A.R. Hotel
Commercial and Industrial	
Service Commercial	Personal and business services. Generally one to four stories, with special provisions within the Columbia Pike Special Revitalization District.
Service Industry	Wholesale, storage, and light manufacturing uses, including those relating to building construction activity.
Public and Semi-Public	
Public	Parks (Local, regional, and federal). Schools (public). Parkways, major unimproved rights-of-way. Libraries and cultural facilities.
Government and Community Facilities	County, state and federal administration and service facilities (police, fire, property yard, etc.) Hospitals, nursing homes, and institutional housing. Utilities, military reservations, airports, etc.
Office-Apartment-Hotel	
Low	Office Density: Up to 1.5 F.A.R. Apartment Density: Up to 72 units/acre Hotel Density: Up to 110 units/acre
Medium	Office Density: Up to 2.5 F.A.R. Apartment Density: Up to 115 units/acre Hotel Density: Up to 180 units/acre
High	Office Density: Up to 3.8 F.A.R. Apartment Density: Up to 4.8 F.A.R. Hotel Density: Up to 3.8 F.A.R.

Figure 4.2.2

In the context of all desired community benefits potentially achievable through the realization of this Plan, affordable housing is a high-priority. The goals described above can be viewed as aspirational, and establish general benchmarks to constantly aim for while recognizing they may not be achieved in all cases. Given existing conditions, economic feasibility challenges, and other factors, the ability that committed affordable housing may be achieved as part of an individual site plan will vary on a project by project basis. Furthermore, as is already recognized in the County Zoning Ordinance, in instances where the County Board determines that there are other compelling public priorities that may best be addressed by a particular site plan application, the County Board may approve the total or partial substitution of the ADUs that could have otherwise been achieved as part of the project. The future evolution of Crystal City in accordance with the Plan will require such flexibility in order to realize both the preferred vision for Crystal City as well as additional ADUs in the area. Without redevelopment, the ability to achieve any new ADUs in Crystal City is severely limited, and so a balanced and flexible approach is needed to best respond to the specifics of an individual project at the time of its application.

Action 7: Assist in developing long-term affordability plans.

Conducting outreach to property owners with market-affordable units and those with committed affordable units approaching expiration is recommended to develop a long-term affordability plan, which could include use of Low Income Housing Tax Credits and/or County funding to rehabilitate the units and preserve affordability.

Action 8: Prioritize use of site plan cash contributions for projects within the planning area.

Prioritize use of affordable housing contributions received through new site plan projects in the Crystal City Coordinated Revitalization District for Affordable Housing Investment Fund (AHIF) loans for projects in Crystal City to commit additional affordable units and to extend the affordability term of existing committed affordable units approaching expiration.

Action 9: Use the County's Goals and Targets for Affordable Housing.

Review and evaluate proposals in the context of Arlington's Goals and Targets for Affordable Housing and ensure that projects meet a variety of the housing targets.

Action 10: Utilize affordable housing financing tools.

Utilize an array of financing tools to achieve the Plan's Policy Directives for housing, including:

- Low Income Housing Tax Credit (LIHTC) & other rental financing tools;
- Moderate Income Purchase Assistance Program and (MIPAP+) financing tool to help moderate income households purchase new or renovated for-sale units.

Action 11: Incorporate Occupancy Guidelines.

Incorporate occupancy guidelines into affordability agreements in order to require best efforts from owners/management, with the assistance of the County, to ensure that all bedrooms in family-sized units are occupied and to ensure that accessible units are leased to households in need of accessible features.

Action 12: Encourage construction and utilization of accessible units.

Continue development emphasis on the provision of affordable accessible units in numbers beyond the minimums required by construction/renovation codes. Implement leasing and marketing guidelines which maximize the possibility that such units are leased by households which need the accessible features, upon both initial and subsequent lease-ups.

4.2.4 TRANSPORTATION

This Plan's transportation elements will influence the travel access and options that people will have in the Crystal City area. Improvements to the multimodal transportation network will focus on ensuring safe, comfortable access for everyone. Achieving these improvements will necessitate both public and private commitment towards funding a renewed infrastructure system for Crystal City (to be discussed further in the Economic Development section of this chapter). The County's approach to achieving complete streets and a robust transit system will be applied to give greater priority to transit users, pedestrians and bicyclists. Effectively managed vehicular volumes and driver behavior will also ensure safe passage for those in surrounding residential neighborhoods. Encouraging everyone in Crystal City and surrounding neighborhoods to utilize transit, walking, bicycling, and other alternative forms of transportation will help increase connectivity while minimizing adverse impacts on the road network. To this end, off-street pedestrian and bicycle facilities will be improved to strengthen critical non-motorized connections to local and regional facilities such as the Mount Vernon Trail and Four Mile Run Trail. With these efforts, a typical rush hour commute in the future Crystal City will exhibit people getting around by almost every available mode, strengthening Crystal City's position as a truly multimodal community.

In the realm of transit, Crystal City will see enhancements to existing Metrorail and VRE service. A new surface transitway system (streetcar) will be a great addition to the transportation network, providing local mobility within Crystal City while also connecting with the planned Columbia Pike system and Alexandria's planned network. Even though a substantial focus on transportation improvements for this Plan will be within Crystal City and Pentagon City, the performance of the larger system surrounding these areas will also be examined. As Crystal City grows and matures, ongoing monitoring will continue to assess whether resulting traffic impacts are occurring in the local street network, and if so, appropriate mitigation will be identified. As part of these efforts, the County will continue to analyze

development proposals in the context of a project's transportation impacts and proposed mitigating strategies, including Transportation Impact Assessments (TIAs), sidewalk improvements, and other measures. Transportation Demand Management (TDM) programs will continue to minimize unnecessary impacts on the transportation network in and around Crystal City, and traffic calming opportunities will continue to be implemented for qualifying areas. Wayfinding improvements can be made to establish community entrances at neighborhood boundaries involving identifiable landscape, public art, or architectural features to reinforce neighborhood identity and aesthetics.

TRANSPORTATION ACTIONS

Action 13: Amend the Master Transportation Plan (Streets Typology Map) to illustrate the recommended future street network in Crystal City and re-designate the typology of select street segments as needed. (See Figure 4.2.2 and 4.2.3)

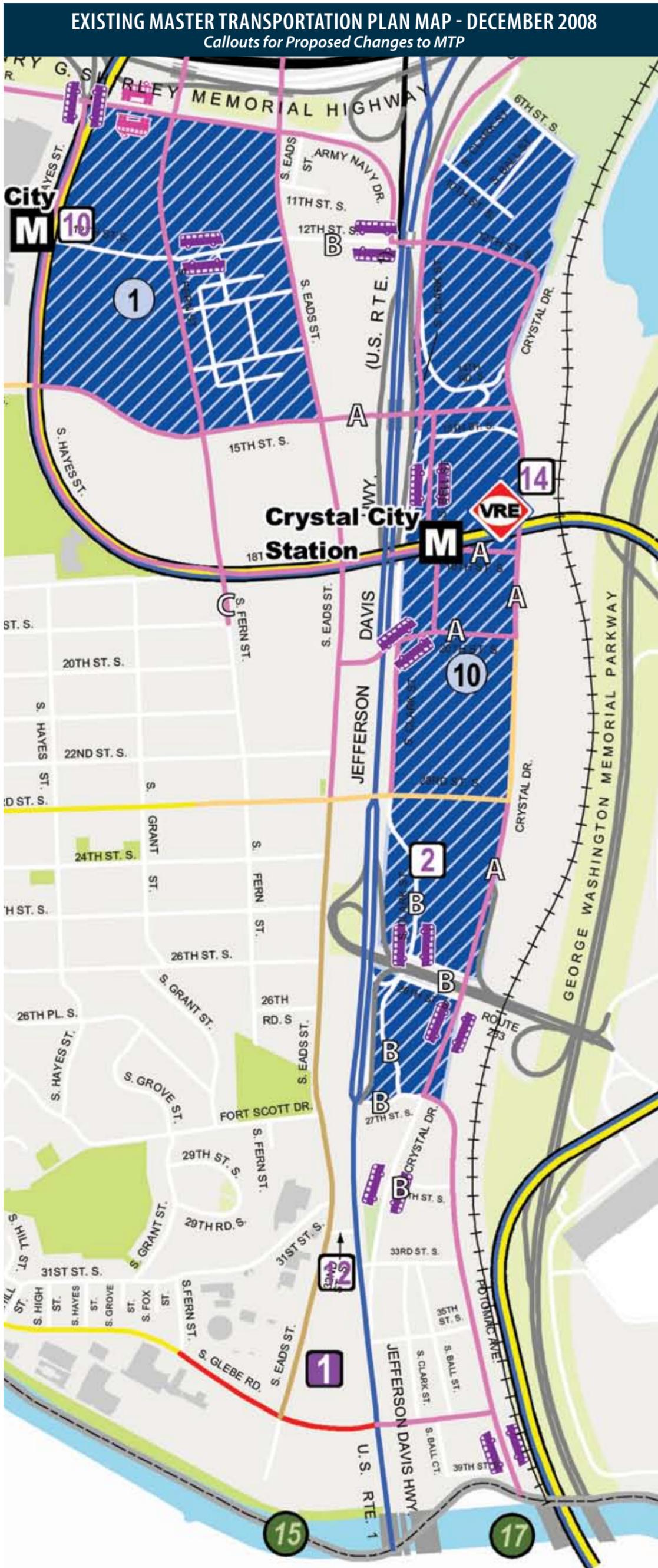
The purpose of the Master Transportation Plan (MTP), a component of the County's Comprehensive Plan, is to guide those who make or explain decisions that affect Arlington's transportation network, help the public understand the rationale behind the decisions, and assist stakeholders who choose to advocate for better implementation of County transportation policy. The role of the MTP is to promote effective travel and accessibility for the County's residents, workers, and visitors through the year 2030, and it provides a policy framework to guide the development of projects and programs, advance the County's goals and objectives, and help direct investment.

To help accommodate planned growth in Crystal City, the MTP should be amended to adopt the reconfigured street network envisioned in this Plan. In the future, as areas of Crystal City are proposed for redevelopment, staff, residents, and other stakeholders should refer to the MTP when forming decisions relating to the street network.

In 2008, the MTP was updated to establish a new arterial street typology to augment the existing functional classification system. The purpose of using a new typology is to better address the broader aspects of street function, such as framing building lots, setting block lengths, providing public space, and accommodating public transit and bicycle and pedestrian travel. For additional detail on the impact of the re-designations proposed below, please refer to the County MTP.

The following are locations where the existing street typology does not match the typology recommended in this Plan, and therefore their typologies should be redesignated in accordance with this Plan's recommendations:

- 12th Street between Eads Street and Army Navy Drive; from Urban Center Local (non-arterial) to Type B-Primarily Urban Mixed-Use;
- 15th Street between Eads Street and Crystal Drive; from Type B-Primarily Urban Mixed-Use to Type A-Primarily Retail Oriented Mixed-Use;



LEGEND	
PROPOSED CHANGES	
A	CHANGE TO TYPE A - PRIMARILY RETAIL ORIENTED MIXED-USE
B	CHANGE TO TYPE B - PRIMARILY URBAN MIXED-USE
C	CHANGE TO NEIGHBORHOOD MINOR

Arterial-Street Typologies

- Type A
- Type B
- Type C
- Type D
- Type E
- Type F

Neighborhood Streets

- Residential or Commercial Local Street

Limited-Access Routes



High-Occupancy-Incentive Corridors

- I-66, I-395, VA Rte. 110, VA Rte. 27

Public Transportation Facilities

- Metro Blue Line
- Metro Orange Line
- Metro Yellow Line
- Railroad

Bicycle/Pedestrian Trail Network

- Existing Major Trails
- Planned Major Trail Projects

Public Parks



Federal-Owned Lands



FOR COMPLETE LEGEND, SEE ARLINGTON MTP MAP AT WWW.ARLINGTONVA.US/DEPARTMENTS/ENVIRONMENTALSERVICES/DOT/PLANNING/MPLAN/MTP/MTP_DRAFT.ASPX

Figure 4.2.3

- 18th Street between Eads and Crystal Drive; from Type B-Primarily Urban Mixed-Use to Type A-Primarily Retail Oriented Mixed-Use;
- 20th Street between Eads and Crystal Drive; from Type B-Primarily Urban Mixed-Use to Type A-Primarily Retail Oriented Mixed-Use;
- Crystal Drive between 20th Street and 15th Street; from Type B-Primarily Urban Mixed-Use to Type A-Primarily Retail Oriented Mixed-Use;
- Crystal Drive between 23rd Street and 26th Street; from Type B-Primarily Urban Mixed-Use to Type A-Primarily Retail Oriented Mixed-Use;
- Clark-Bell Street between 23rd Street and 27th Street; from Urban Center Local (non-arterial) to Type B-Primarily Urban Mixed-Use;
- 26th Street between Clark-Bell Street and Crystal Drive; from Urban Center Local (non-arterial) to Type B-Primarily Urban Mixed-Use;
- 27th Street between Jefferson Davis Highway and Crystal Drive; from Urban Center Local (non-arterial) to Type B-Primarily Urban Mixed-Use;
- Crystal Drive between 27th Street and 33rd Street; from Urban Center Local (non-arterial) to Type B-Primarily Urban Mixed-Use;
- Fern Street between 18th Street and 19th Street; from Type B-Primarily Urban Mixed-Use to Neighborhood Minor (non-arterial).

Action 14: Manage the reconstruction and reconfiguration of Crystal City's recommended Street and Transit Networks over time by strategically sequencing projects based on levels of priority as identified in the County Capital Improvements Program (CIP) and the ability to execute such projects with or without the redevelopment projects necessary to physically accommodate such construction.

Redevelopment in Crystal City will offer the opportunity to modify the transportation system to better serve all transportation modes – walking, transit use, bicycle riding, and driving. This Plan is premised on the expectation that over the next 50 years, buildings will be renovated, reconfigured, or demolished and replaced. Amid this change among private real properties, an improved system of public streets, intersections, trails, and transit services will need to emerge in phases to attract and support new development conditions. Specific details on how each recommended improvement could be sequenced over time in relation to existing or anticipated surrounding conditions are provided in the Crystal City Multimodal Transportation Study supporting document to this Plan.

The Crystal City Sector Plan includes enhanced transit infrastructure, new streets, the realignment and reconfiguration of existing streets, major intersection reconfigurations, and a variety of improvements to non-motorized travel

facilities. It will not be possible to implement recommended transportation network modifications in a single phase. Rather, the phasing of these transportation improvements is largely dependent upon the pace and timing of redevelopment and the phased implementation of the transitway, although anticipated phasing plans are provided for general guidance in the Multimodal Transportation Study.

Action 15: Establish the proposed enhanced surface transitway system ultimately with streetcar technology and amend the Master Transportation Plan (Transit Network Map) to reflect the phased alignment recommended in this Plan.

The Crystal City/Potomac Yard Transitway is a joint project by Arlington County and the City of Alexandria with the goal of providing a high capacity and high quality surface transit system in the five-mile corridor between the Pentagon and Pentagon City and the Braddock Road Metrorail Station. The proposed system would connect the proposed Columbia Pike Streetcar in Pentagon City and the Crystal City Metrorail Station, and serve the new development in Potomac Yard. As recommended in this Plan, streetcar is the preferred technology for the transitway and should be implemented in a phased approach as facilitated by the timing of specific redevelopment projects.

Action 16: Establish the new second entrance to the Crystal City Metro Station as recommended at the intersection of Crystal Drive and 18th Street.

Access to the Crystal City Metrorail Station will be significantly improved by the creation of a second entrance, located in the vicinity of Crystal Drive and 18th Street. Given the significant cost of this improvement and the existing situation of mid-platform fare gates at the Crystal City station, an interim solution to improved access could be achieved via a covered connection to the mezzanine level of the station as part of planned improvements to the development located along the north side of 18th Street. However, the ultimate vision includes a new second direct entrance to the Metro station from the sidewalk or plaza environment around this intersection.

Action 17: Amend the Master Transportation Plan (Bike and Trail Network Map) to reflect an enhanced pedestrian and bicycle network in the Crystal City area, and provide additional pedestrian and bicycle connectivity to public transit and the adjacent neighborhoods.

This Plan includes enhanced pedestrian facilities within the sector plan area and connectivity to the adjacent commercial and residential areas. The Plan also highlights pedestrian travel from both the Metro and the proposed street car system to existing buildings and proposed redevelopment. As part of the implementation of this Plan a second entrance to the Metro Station will be needed at 18th Street and Crystal Drive because of the pedestrian connectivity between the Metro system and the proposed

streetcar facility to the existing and future buildings.

The Plan also focuses on an expanded bicycle network both within Crystal City and linking regional and local activity centers to the sector plan area. North/South bicycle travel will be on a revised one-way pair with travel southbound on Crystal Drive and travel northbound on Clark-Bell Street. New or improved access to Long Bridge Park, Potomac Yards, Mount Vernon Trail, Four Mile Run Trail, and National Airport will also be top priorities within the Plan.

Action 18: Employ Parking and Transportation Demand Management (TDM) Strategies for future redevelopment in Crystal City.

In general, the Parking and Curb Space Management Element of the County's Master Transportation Plan provides guidance in developing Crystal City Sector Plan recommendations. Specifically within Crystal City, the Plan recommends a parking ratio minimum of 1 space per 750 square feet to a maximum of 1 space per 1,000 square feet for office uses, and between 1 and 1.125 spaces per residential dwelling unit to support redevelopment and provide a better street and curbside environment. The curbside areas will provide locations for safety features, bus stops, taxi stands, car sharing places, deliveries, valet parking, and tour bus parking, with the balance accommodating short term parking spaces.

The Transportation Demand Management (TDM) Strategies will be based on the County's Master Transportation Plan – TDM Element. In Crystal City, TDM is both a set of guiding principles underlying Arlington's development policy, and a set of services provided by Arlington County Commuter Services (ACCS) which together reduce demand for travel by single occupant vehicles (SOVs). The pedestrian-friendly, multi-modal design of Crystal City and the provision of many transportation options are intrinsic parts of the County's TDM policy which are complemented by the services of ACCS to make sure that people understand and use the available alternatives to SOV travel. The Transportation Demand Management strategies outlined in the Sector Plan will enable more commuting trips into Crystal City to be made by non-sov modes of travel. The plan recommends a decrease in the sov mode share of the office worker commute trips. The mode split shifts will happen over the life of the plan as transit and non-motorized transportation options increase and parking ratios are readjusted with new development. The future land use mix will also support additional non-sov travel as new residents will be within walking distance of frequent high quality transit for travel within Crystal City into the District of Columbia and regionally within Northern Virginia.

Action 19: Continue regular periodic monitoring of transportation impacts that may occur in Crystal City and surrounding neighborhoods, and implement mitigation measures as needed.

Periodic monitoring of vehicular traffic volumes, speeds, and accidents in Crystal City and adjacent neighborhoods should be continued into the future as part of

the County's regular traffic data collection program to monitor any potential changes in travel patterns that may occur over time. In instances where traffic pattern changes significantly reduce safety, mitigation and other necessary improvements will be considered for implementation. Respecting the Plan's measures to direct traffic to major arterials and multi-modal network elements and to avoid street designs that increase cut through traffic into adjacent single-family neighborhoods should prevent or limit any resulting notable changes in traffic patterns.

4.2.5 PUBLIC OPEN SPACE

The public open space elements of this Plan will provide for a network of high-quality and well-distributed parks and plazas to meet the growing demands for active and passive recreational facilities in and around Crystal City. Given the limited amount of vacant land available for additional public open space uses in the local area, the Plan focuses on improving and increasing the quantity and quality of public open spaces in Crystal City, through either: 1) Preservation of and enhancements/improvements to an existing open space; or 2) Provision of new open space. These options support the plan's goal of ensuring that over the course of redevelopment the quality and quantity of public open space is improved and the planned public open space network is achieved. Achieving these goals will necessitate both public and private commitment towards funding and implementing an improved open space network in the Crystal City area (to be discussed more in the Economic Development section of this chapter).

While people often frequent the open spaces closest to them, they also travel the lengths necessary to enjoy spaces programmed to meet their own specific interests. It is anticipated that parks outside the Crystal City planning boundaries will be used by the new residents in Crystal City. Parks such as Eads Park and Virginia Highlands Park should be examined for needed improvements to ensure adequate recreational facilities are available for the adjacent neighborhoods and the new Crystal City residents. As new open spaces such as Long Bridge Park, Center Park in Potomac Yards, and Metropolitan Park are opened they will expand the recreational resources significantly and become components of an active and vital Crystal City community.

PUBLIC OPEN SPACE ACTIONS

Action 20: Create, improve, and or maintain public open spaces in Crystal City at the locations and general target sizes indicated in the Public Open Space Map (Figure 3.7.2.) and Open Space Design Concepts Table (Table 3.7.1).

With each redevelopment proposal, there will be opportunities to reconfigure the sidewalk and open space systems of the public realm in Crystal City. Figure 3.7.3 shall be used as a guide when making future decisions about proposed development that has an impact on the geography of the overall open space network. Likewise, the general open space sizes and park design recommendations

noted in Table 3.7.1 shall also inform the configuration of future development that facilitates the achievement of these spaces. It is critical that the spaces not only meet the recommended sizes, but that they are also designed free of any non-recreational facilities, structures, or access that would inhibit the recreational use of the space (such as large utility boxes, storage facilities, etc.).

Open spaces that are noted as being defined by build-to lines have locations that are generally fixed, while spaces not defined by build-to lines have greater flexibility in their exact location. In all cases, their size should achieve the target size listed in Table 3.7.1. Some of the spaces included in the map exist today and should be targeted for physical improvements and new assurances of public access. In addition, as individual site plans are proposed for Crystal City, opportunities should be pursued to increase the public open space beyond what is shown in Figure 3.7.3.

Action 21: Phase the displacement of any existing public open space with the creation of new public open space or with commensurate physical improvements to an existing public open space. Ensure either public access easements or public ownership in all instances.

In 2009, Crystal City has approximately 10.6 acres of existing public open space, much of which is located east of Crystal Drive. As the plan envisions the infill of some of these open spaces in order to allow for the creation of new public open spaces more equally distributed throughout the area, the relative timing of the loss of existing public open spaces and creation of new such spaces, or major physical improvements to existing spaces, will require careful attention. To this end, redevelopment proposals that will result in the loss of an existing public open space that is widely used by and accessible to the general public should only be approved when the proposal includes a viable strategy for concurrently achieving a new public open space as outlined in the Plan. Or, when no new public open space is envisioned for a particular area, timely execution of physical improvements to existing public open spaces can also fulfill the requirement. With regard to the proposed infill development at the existing public open space in front of 2121 Crystal Drive, Policy Directive P3 was established to ensure that this space that is highly valued by the community is not lost prior to the creation of Center Park. In all cases, new and or improved public open spaces will require public access easements or public ownership when they are addressed as part of a development proposal.

Action 22: Ensure that a balance between active and passive recreational opportunities is achieved in the Crystal City public open space network.

The park design concepts and recommendations presented in this Plan should serve as a starting point for future discussions on the appropriate design and development of each individual park. As land becomes available through the redevelopment timeline, the County should initiate a formal master planning process for significant public open spaces that will be publicly owned.

Action 23: Encourage the inclusion of a diverse mix of active recreational facilities within residential and commercial developments to help meet the needs of Crystal City's future populations.

Site plan applications should include active recreational facilities within the development that will contribute toward meeting the recreational needs of their residents and employees. A new development could include rooftop pools, indoor and outdoor and courts, outdoor Petanque courts, as well as other innovative designs that are ideal for urban areas. The potential for public access to these facilities should be explored on a project by project basis.

Action 24: Adequately maintain and improve, as needed, recreational facilities in surrounding areas that directly service the needs of the Crystal City and neighboring populations.

For purposes of this planning effort, the identification of new public open spaces was correlated geographically with the extents of the planning area for redevelopment. However, the planning area boundaries, as discussed elsewhere in this plan, often do not function as actual boundaries in terms of the daily lives of workers, visitors, and residents of the area. In the future as occurs today, it's envisioned that people will utilize the existing open space facilities outside of but easily accessible to Crystal City. As the population in the area increases the County will strive to meet additional demands on the parks with additional or upgraded facilities as funding becomes available.

Action 25: Maximize opportunities to increase tree canopy coverage throughout Crystal City

Public open spaces should be designed with increased tree canopy coverage in mind while balancing the specific programmatic needs of the site. Site plan applications should include landscape plans that incorporate schemes for robust tree plantings as part of streetscapes, courtyards, and surrounding landscape areas. Furthermore, the County should pursue near-term street tree planting opportunities in areas where near- or mid-term redevelopment is not envisioned, especially as part of local roadway improvement projects.

Action 26: Develop a more detailed strategy for ensuring the creation of Center Park.

A more detailed strategy or set of strategies for achieving Center Park should be developed following plan adoption. Any such strategies should be developed with consideration for broader County open space policies, practices, and tools and may involve linkages or trigger mechanisms that connect the timing of potential future redevelopment projects with the provision of Center Park.

4.2.6 COMMUNITY BUILDING

Along with reinvestment in existing and investment in future civic services, the quality of life in Crystal City envisioned in this plan will benefit from a strong focus on community and on activities that strengthen the local sense of community. One of the most effective ways to further these efforts is through an active civic association presence and regular and ongoing participation in the County's Neighborhood Conservation programs. Following completion of the Aurora Highlands update to its Neighborhood Conservation Plan in 2008, the Arlington Ridge Civic Association is now in the earliest stages of updating its Neighborhood Conservation Plan. Through the ongoing monitoring of local conditions and the progress on desired improvements, neighborhoods can continue to ensure that a high quality of life is maintained and strengthened.

For most of the Crystal City Planning Area, there is no existing civic association (as of 2009). While Crystal City has a Business Improvement District (BID), the lack of a formal civic association has often been addressed to date by condominium associations working together as needed to address relevant concerns and interests. To ensure the same level of importance and priority with respect to Arlington's other civic associations, residents within Crystal City could benefit by pursuing the formation of their own civic association. Interested parties from Crystal City's residential population could work with appropriate County departments to pursue this idea and the benefits it may bring.

COMMUNITY BUILDING ACTION

Action 27: Encourage the formation of a new civic association(s) in Crystal City.

East of Eads Street, the area within Crystal City does not fall within the boundaries of an existing civic association. As Crystal City's residential population continues to expand through the build out of this plan, the potential need or desire for a civic association to help organize the local community may also grow. If there is interest at the local level, efforts to organize a new civic association should be directed through the appropriate channels, and would be supported by groups such as the Civic Federation, County staff, and the County Board.

Action 28: Continue working with the Crystal City Business Improvement District (BID) and other parties to maintain event programming and branding as a high priority and help contribute to the neighborhood's overall vitality.

While the Plan establishes a framework for developing a physically improved Crystal City, ongoing efforts have been underway for several years to help improve Crystal City's attractiveness, customer appeal, marketability, profitability, and ultimately its asset values. Established in April 2006, the Crystal City Business Improvement District (BID) is a public-private partnership that is committed to promoting and showcasing the area as a world-class destination for visitors,

employees and residents. In this way, the BID has been one tool used to date to improve the County's local and regional competitiveness by managing an array of activities, particularly marketing (branding/promotion/place-making) and the staging of community events.



Community Participation in Planning the Future of Crystal City

Action 29: In areas adjacent to Crystal City, employ the Neighborhood Conservation program as a means of achieving desired capital improvement projects.

The Neighborhood Conservation program is a unique grassroots initiative that utilizes County bond funds for capital improvement projects in neighborhoods. The program ensures that neighborhood improvements are tailored to the needs of participating Civic Associations through extensive public outreach and staff support in planning, design and construction. Improvements typically include the installation of sidewalks, curbs, gutters, traffic management solutions, park improvements, street lighting and other similar capital improvement projects.

Through the Neighborhood Conservation Program, residents commit to conserve and improve their neighborhoods' character by preparing and regularly updating a Neighborhood Conservation Plan that reflects community needs; participating in the Neighborhood Conservation Advisory Committee (NCAC); and by nominating plan-based improvement projects for bond funding. Once a Neighborhood Conservation Plan is accepted by the County Board, the neighborhood is qualified to seek Neighborhood Conservation funds to implement specific projects. Citizens of Aurora Highlands and Arlington Ridge and County staff should continue to work collectively to find mutually acceptable solutions to neighborhood goals.

Action 30: Provide Community Amenities

In order for Crystal City to become a sustainable and self-sufficient "urban village," various community amenities must be provided. Residential, office, retail, hotel and entertainment development are not enough. Daycare facilities, grocery stores, community meeting spaces, elder care facilities, adult leisure/learning centers, civic centers, urgent and general healthcare facilities and the like are integral components of a complete

community where residents, workers and visitors may live, work and play. As Crystal City redevelops, demand for such amenities will increase. Through the site plan process, County staff will encourage developers to provide such amenities as part of their community benefits packages.

Action 31: Provide Civic Services

In addition to community amenities and infrastructure, polling places, a school, a fire station, a police sub-station, a recreation center, a library and other civic services are also necessary to building a truly mixed-use community that is safe, secure, self-reliant and vibrant. These civic services will be provided as a matter of course by the County government as Crystal City redevelops and defined service need benchmarks are reached. The County will closely monitor population numbers and proactively plan for future needs, including services and facilities. Plans will be developed in the context of the surrounding area and overall service network. For example, the number of school age children currently living in and projected to live in Crystal City will be monitored and interim and long-term plans will be developed to ensure adequate bus routes, facilities, and the like. As space is limited, creative opportunities to incorporate these program elements into larger development projects or joint-facilities will be explored and encouraged.

4.2.7 ENVIRONMENTAL SUSTAINABILITY

The theme of environmental sustainability is woven throughout the vision, principles, and recommendations of this Plan. Basic traditional neighborhood planning principles of harmoniously mixing uses in close proximity and the application of urban design strategies that balance the needs of all users will result in a neighborhood that is inherently more attractive for walking, bicycling, and using other modes of non-motorized travel – all activities that will help reduce the area's carbon footprint. Providing a variety of transportation options and providing a rich mix of uses within the neighborhood will also allow for increased resident and employee populations in an already developed area with existing infrastructure is a much more environmentally friendly practice than redirecting the growth in a sprawling fashion at the edge of the region. Furthermore, redevelopment of older buildings with outdated and inefficient building systems that are replaced with modern buildings consisting of state-of-the-art technologies and fixtures will provide the opportunities to be more environmentally friendly in a number of ways, including improvements in energy efficiency, water efficiency, and stormwater management, to name a few. Finally, as the County is currently undertaking an effort towards developing a Community Energy Plan, there is also the potential for environmental and energy benefits to be had from yet to be determined recommendations that may result from that process in a way that impacts energy provision in Crystal City in the future.

While environmental benefits are likely to inherently result from redevelopment,

continued focus is needed on development related actions that will influence the built environment in Crystal City and its overall environmental impacts. The actions specified below build off the recommendations in Chapter 3 and are aimed to help maximize Crystal City's environmental sustainability in the future.

ENVIRONMENTAL SUSTAINABILITY ACTIONS

Action 32: Determine District Energy Options

There are many different district energy system options and configurations that could be used in Crystal City. Conducting a feasibility study will help determine the most viable options that will improve Crystal City's economic competitiveness, energy supply, pricing, and reliability, and reduce greenhouse gas emissions related to Crystal City activities.

Action 33: Continue Green Building programs and other initiatives to ensure individual buildings are constructed to be as environmentally friendly as feasible.

Over the past decade, the County has established the common practice of encouraging the development of both private and public projects, particularly large office, high-rise residential, and mixed use projects, to be designed, built, and operated as environmentally responsible buildings. As of the writing of this Plan, the County typically uses the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) green building rating system as a standard for measuring the comprehensive green approach of each project. This Plan recognizes that over time, other rating systems may evolve and be adapted for use by the County, in order to ensure that development into the future meets the highest standards for environmental sustainability.

4.2.8 ECONOMIC DEVELOPMENT

Revenues Associated with Redevelopment, Improvements Necessary to Support Redevelopment, and Cost of Improvements

Following the BRAC action of 2005, Arlington County examined the fiscal implications of job losses, vacant space and older buildings left behind in Crystal City. The analysis demonstrated a substantial opportunity cost in maintaining the status quo in which BRAC-affected buildings would empty and then be re-leased. Following that analysis, the County decided to address the adverse economic impacts by initiating a plan to ensure the area's future sustainability for its residents, workers and businesses. The plan creates opportunities for new buildings, parks and transportation systems, and positions Crystal City to thrive in the post-BRAC era.

Achieving the plan's goals requires major infrastructure investment in transit, roadway, and open space improvements. This investment is expected to return to the County in additional tax revenues significantly above the current levels. An analysis of the estimated tax benefits from the master plan projects a cumulative net gain of \$772.9 million in tax revenues contrasted with \$233.7 million of investment in improvements over

the first twenty years. On an annual basis, tax revenues from Crystal City are projected to nearly double the current level by 2030.

This Plan establishes a vision and sets the stage for a qualitatively and quantitatively more valuable Crystal City community. Estimated tax revenues from redevelopment and costs of improvements to support this redevelopment were considered in determining recommended funding mechanisms to meet these costs. The following is an overview of the Crystal City plan costs and revenues to illustrate how investment in the early years yields returns in the future.

The tools associated with the proposed recommendations depend on redevelopment; and redevelopment depends on infrastructure, so it is important to 'seed' Crystal City in the initial years. This investment has already begun with \$7 million spent or committed to Crystal City (pre-plan) improvements. Use of traditional CIP funding sources will continue in Phase 1 (2011 – 2015), with a more diverse set of funding sources taking shape as redevelopment generates additional revenue.

Revenues Associated with Redevelopment

Net new tax revenues are expected to generally increase throughout the planning period, with some dips and climbs caused by the churning inherent in redevelopment. Tax base growth will be moderate in Phase 1 compared to other phases because it will take a few years for new buildings to come online. It also depends on when BRAC would hit the hardest. Tax base growth would pick up in Phase 2 (2016 – 2020), with BRAC behind and the opportunity for more infill and 'two-for-one' redevelopments (or projects where one existing building is being torn down and replaced with two new buildings).

Chart 4.2.1 shows both the challenge (paying up front costs) and the opportunity (future net new tax revenues exceeding costs) of this plan. Phase 1 is projected to have \$72 million in improvements costs and about \$32 million in net new tax revenue. Phase 2 is projected to have \$90 million in improvements costs and about \$167 million in net new tax revenue. In both phases, this illustration

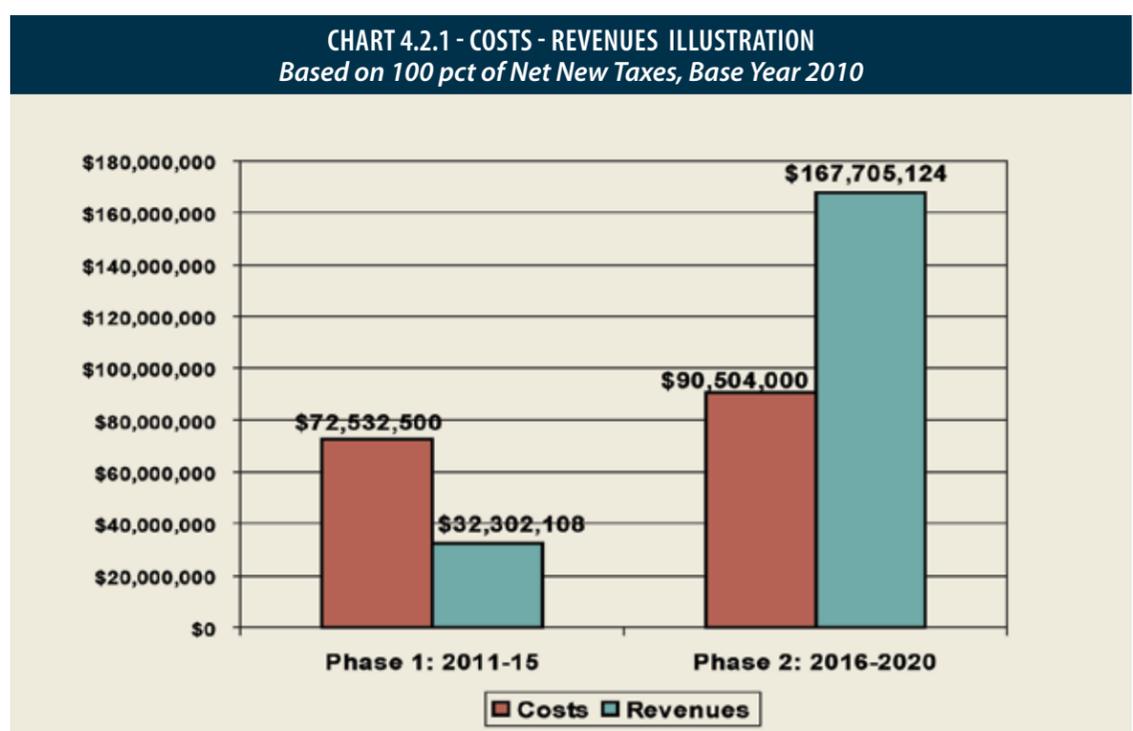
assumes that the revenue is unleveraged with bonds or debt. In other words, the revenues illustrated in Figure 1 do not account for other potential funds the County could access by executing bonds that could be paid off by this additional revenue stream.

In the phases beyond 2020, net new tax revenues continue to outpace improvements costs. The net increase in revenues over 20 years is projected to be \$772.9 million, which would exceed the expected improvements costs over that period (\$233 million) by more than three times.

Improvements Necessary to Support Redevelopment:

Improvements vary in size, scope and cost, and have relationships to specific sites and Crystal City as a whole. For the purposes of this discussion, site-level improvements are physically or functionally linked to a development project, which are typical improvements common in site plan projects in Arlington. Neighborhood-level improvements are part of systems in Crystal City and beyond, which are more typical of public infrastructure to support a geographical area or the community overall. Table 4.2.1 shows examples of site-level and neighborhood-level improvements.

The County typically achieves site-level improvements through Special Exception provisions of the Zoning Ordinance. Neighborhood-level transit, roadways, and open space often require dedicated, multi-year funding sources supported through the County's CIP process. These financing tools are discussed in the next section. While there are instances where typical site plans have provided elements such as construction of a new street segment or plaza, the significant scale of existing development to be redeveloped in tandem with the major scope of infrastructure improvements planned for Crystal City push these categories of elements into neighborhood-level improvements. However, in addition to the multi-year funding sources supported by the CIP, development contributions towards achieving these neighborhood-level improvements will allow such projects to achieve densities above those outlined in the base densities map. The following



Source: RCLCO and AED

provides examples of neighborhood-level improvements, and a project representing each type.

Cost of Improvements:

Staff estimated costs for neighborhood-level transit, roadway and open space improvements during the first twenty years (2011 – 2030) of redevelopment. Estimates include construction of transit components, major roadway improvements, and construction of physical improvements to open spaces. Estimates do not include site-level improvements such as utility relocations, Leadership in Energy and Environmental Design (LEED) elements, public art installations, streetscape improvements, land area for roads, land area for parks and Transportation Demand Management elements, as such costs would be addressed during the redevelopment of specific sites.

Table 4.2.2 summarizes estimated costs by type and by phase for neighborhood-level transit, roadway, and open space improvements. The costs depicted herein reflect order of magnitude cost estimates for planning purposes, are will be subject to refinement as these projects are advanced.

Project-by-Project Implications:

Implementing the Crystal City plan has two main barriers: (1) building the infrastructure, and (2) persuading property owners to choose a more risky and time-consuming redevelopment option over a safer renovation option. Renovation does not serve the plan well because it fails to realign building footprints and, by extension, the street, open space, and transit networks. It also generates less tax revenue than redevelopment. Therefore the County needs redevelopment to be the economically viable choice, and is encouraging redevelopment through potential increases in density recommended in this Plan. By responsibly planning for additional development as well as identifying and funding the costs of public infrastructure needed to support future development in Crystal City, the County is poised to turn this Plan into an investment that over time results in substantial revenues returned to the County from the initial investment. Actual results will vary on a project-by-project basis.

The returns, shown as tax revenues gained, from three projects are illustrated in Chart

TABLE 4.2.1 - IMPROVEMENTS	
SITE-LEVEL IMPROVEMENTS	NEIGHBORHOOD-LEVEL IMPROVEMENTS
AFFORDABLE HOUSING ¹	TRANSIT NETWORK
LEED RATING ¹	ROADWAY NETWORK
UTILITY RELOCATIONS ²	OPEN SPACE PHYSICAL IMPROVEMENTS
PUBLIC ART FUND	
STREETScape IMPROVEMENTS	
LAND AREA RESERVED FOR ROADS / PARKS / PLAZAS / PED AREAS	
TDM MEASURES	
<p>NOTES:</p> <p>1. PROJECTS COULD EARN ABOVE THE SITE PLAN BASE DENSITIES BY PROVIDING MORE THAN THE STANDARD REQUIREMENTS OR EXPECTATIONS FOR AFFORDABLE HOUSING AND LEED RATINGS. OTHERWISE, PROJECTS CAN EARN ABOVE THE SITE PLAN BASE DENSITIES THROUGH CONTRIBUTIONS TOWARDS ACHIEVING NEIGHBORHOOD LEVEL IMPROVEMENTS.</p> <p>2. TREATMENT OF UTILITY RELOCATIONS WILL DEPEND ON SPECIFIC SITE PLAN FILINGS, WHEN IT CAN BE BETTER DETERMINED WHETHER SUCH RELOCATIONS ARE TYPICAL OF THOSE ACHIEVED THROUGH STANDARD SITE PLANS OR WHETHER THEY SHOULD BE TREATED AS PART OF BASIC COUNTY INFRASTRUCTURE.</p>	

4.2.2, which shows the difference between existing and future tax revenues from three projects proposed in the Crystal City plan. The three different projects represent high, medium and low density replacement. The high is an instance where two new buildings replace one existing building (Crystal Plaza 5); the medium density level represents the plan’s typical density replacement factor of 2.5, with one new building replacing an existing building (Crystal Mall 1); the low density level is a case where a medium-sized new building replaces an existing building (Crystal Square 3). In these instances, the annual tax revenue increase for redevelopment ranges from \$1,728,928 to \$5,896,240.

Providing a Set of Tools to Fund and Facilitate Implementation of the Crystal City Plan

To pursue the funding of plan level projects to achieve the public infrastructure critical to the Crystal City Plan in a timely fashion, the County should consider the

TABLE 4.2.2 - IMPROVEMENTS EXAMPLES		
NEIGHBORHOOD LEVEL IMPROVEMENT	EXAMPLES	KEY PROJECT
TRANSIT	STREETCAR, METRO STATION, ENTRANCES, STREET FACILITIES.	STREETCAR FROM COUNTY LINE TO PENTAGON CITY.
ROADWAYS	STREET RECONSTRUCTION, RECONFIGURATION, EXTENSION, RAMPS, INTERCHANGES.	REALIGNMENT AND RECONSTRUCTION OF CLARK-BELL STREET.
OPEN SPACE IMPROVEMENTS	BUILD-OUT OF PARK AND PLAZA SPACES.	CONSTRUCTION OF CENTER PARK BETWEEN 18TH - 20TH STREETS.

following recommendations to facilitate implementation of the Crystal City Plan. As outlined below, a varied combination of funding sources is recommended given the public-private partnership nature of achieving planned infrastructure improvements. While the list below includes the recommended set of tools at the time of plan adoption, it is possible that other funding sources and tools may become available throughout the life of the plan and consideration of such tools is not precluded.

Action 34: Create a special section of the Arlington County Capital Improvements Program (CIP) for Crystal City Plan improvements. Evaluate the six-year plan every two years, as part of the biennial update to the CIP, to identify priority projects and best align infrastructure with redevelopment goals.

Funding for the Crystal City Plan CIP items will come from a combination of sources including Transportation Investment Funding, state and federal transportation dollars, pay-go funds, debt financing, and tax increment or other tax sources. All of the County’s normal financing mechanisms to support public improvements should be used in Crystal City. Among these are the following:

- Federal and state- transit funds may operate on a matching basis, or they may be obtained as initiatives arise. Federal programs meriting special attention include Small Starts and New Starts. State programs may match local investments in transit at 25 percent of the local commitment. Federal and state highway programs are included as applicable for road work. The County will continue to aggressively pursue state and federal grants for Crystal City transportation projects.
- County sources include the Transportation Investment Fund and the pay-go and debt financing functions. The Transportation Investment Fund is currently supported by a countywide commercial real estate tax of 12.5 cents per \$100 of assessed value. It could be short-term funding or security on longer-term obligations. For debt financing the County issuance options include IDA annual appropriation bonds and general obligation bonds. General obligation bonds are backed by the County’s general taxing power and are the lowest cost financing option. They are included in the County’s debt limitations and subject to referenda. IDA appropriation-backed bonds typically bear a slightly higher interest rate than general obligation bonds. However, the interest rate would be several percentage points lower than those in the non-rated (i.e. Tax Increment Finance, Community Development Authority (CDA)) bond markets, which do not have County credit support. In the process of developing biennial CIP programs for Crystal City public infrastructure, staff will evaluate how the proposed financing mechanisms and level of debt will impact the County’s debt capacity.

In many cases, planned public infrastructure improvements cannot be implemented until adjacent redevelopment is undertaken, and vice versa. As an example, the planned redevelopment along the north side of 23rd Street between Jefferson Davis Highway and Crystal Drive cannot occur without the reconfiguration of 23rd Street. Similarly, the full realignment of Clark-Bell Street between 20th and 23rd Streets cannot be achieved until the existing Crystal Plaza 1 and Plaza 6 buildings are redeveloped. Therefore, discussions surrounding the biennial review of the CIP should include conversations with major property owners/developers in Crystal City to ensure that the timing of planned improvements reflected in the CIP are accurately aligned with the intended timeframes for construction of pertinent redevelopment projects.

Action 35: Utilize Tax Increment Funding (TIF) to support the implementation of planned public infrastructure improvements in Crystal City.

The proposed TIF approach provides a mechanism to collect incremental tax revenue to support public infrastructure improvements, either as a revenue stream for issued bonds or in a pay-as-you-go fashion. TIF is a tool that is associated with a specific

geographic area within which a portion of the incremental tax revenues are directed to carry out improvements. As currently conceived, the boundaries of the proposed district would include the Crystal City Metro Station area (inclusive of Potomac Yard), and may also include the Pentagon City Metro Station area.

Once the district is created and the geographic area defined, a baseline should be established immediately so that during the first CIP cycle (FY2011-16), incremental tax revenue growth could be tracked above the baseline. In the process of developing a TIF mechanism, a specific percentage of the tax increment will be identified as the relative amount of new tax revenue that will be placed into a TIF fund to support the cost of infrastructure projects within the district, with the remaining balance going into the General Fund to support Countywide services. Once put into effect the district would allow financing as needed. Additionally, a service district would likely be established as a supplemental tool and also to function as a back-up in case growth lags and the TIF district is not generating the amount of funds anticipated or needed to support the infrastructure.

Throughout the process, staff also considered CDA financing for inclusion among the recommended funding tools. A CDA is a quasi-governmental authority with the power to issue bonds to pay for infrastructure improvements in a targeted area. The Virginia Code authorizes CDAs under the Virginia Water and Waste Authorities Act, Title 15.2, Chapter 51.

Ultimately the CDA is not part of this package because it does not offer meaningful functions beyond those the County can execute through a TIF district or other mechanisms. Moreover where financing options between CDA and County overlap, the County is often in a position to achieve a lower cost. For example, CDA bonds are unrated, which means they would have a much higher borrowing cost and may be harder to sell than County-issued bonds, which carry top ratings. Application of County credit support to a financing mechanism that is supported by a TIF district offers the County greater control. Lastly, the CDA could present unintended consequences with respect to governance and repayment responsibility. Regardless, creation of a CDA would require a substantial amount of legal, financial and public policy analysis, which would take six to twelve months to complete. A TIF district can be created much more simply and does not preclude consideration of a CDA at any point in the future.

Action 36: Establish a Crystal City Fund

The proposed Crystal City Fund would function like the existing Rosslyn Fund. Where negotiated community benefit contributions

result from redevelopment projects, such contributions could be cash payments into a fund dedicated to public improvements or other community enhancements with public purposes within Crystal City.

OTHER ECONOMIC DEVELOPMENT ACTIONS

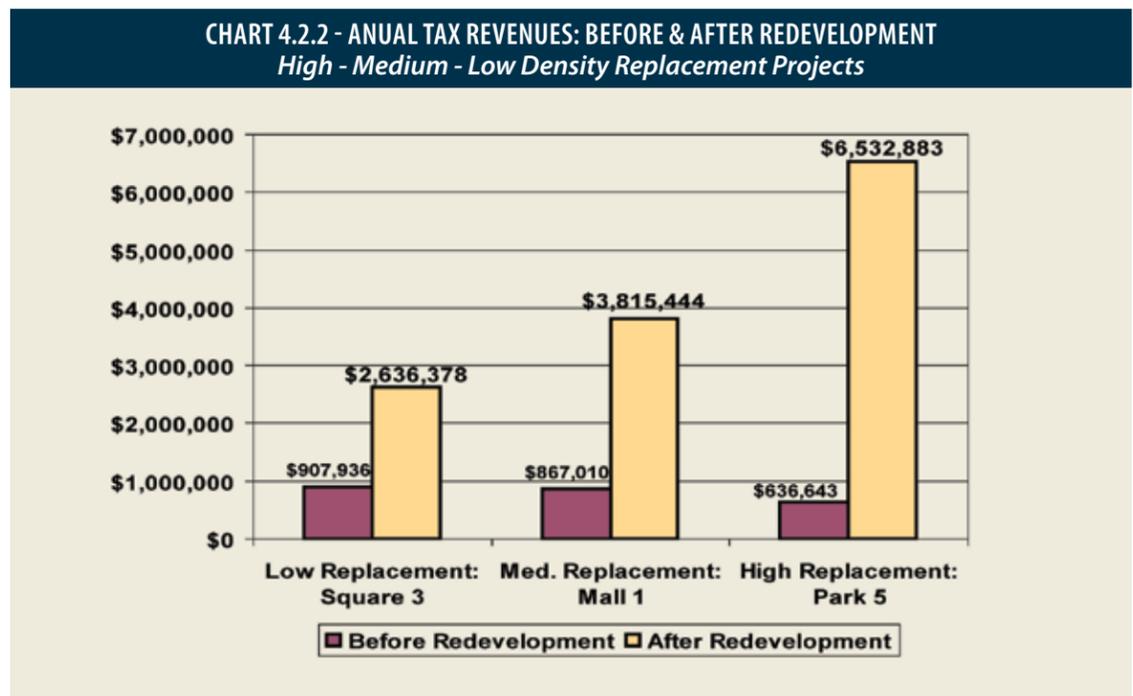
Action 37: Employ Density Exemptions for Priority Community Oriented Services.

This Plan places a strong focus on facilitating Crystal City's maturation to facilitate the establishment of a complete, urban community. In developing this Plan, an array of specific community and neighborhood oriented uses and facilities were identified

To the extent that these facilities and services can be provided as part of future redevelopment projects, consideration should be given to exempting the density programmed for such spaces from the overall density calculations. Additionally, other creative public-private partnership opportunities should be explored whereby any of these facilities are not being wholly provided for by the public sector.

Action 38: Continue Coordination Efforts with FAA and Related Stakeholders.

The collaboration of the County and the FAA to evaluate potential impacts of increased building heights in the Plan on regional airspace and operations around



Source: RCLCO and AED

as critical to supporting the "complete community" vision for Crystal City. In order to encourage the provision of these types of uses and facilities as part of redevelopment projects whenever appropriate and feasible, the regulatory and policy framework should be tailored to recognize such facilities as potential community benefits. Examples of high priority uses and facilities that satisfy the "complete community" ambitions should include the following uses:

- Urgent Medical Care Facilities;
- Child/Adult day Care Centers;
- Community/Civic Centers, Cultural Facilities, Educational Facilities, or Meeting Spaces;
- Full Service Grocery Stores
- Police or Fire Stations
- Rehearsal or Performance Space for Arts/Culture Groups
- Polling Places

Reagan National Airport was a critical step in ensuring that Plan implementation would not adversely effect airport operations. The evaluation's results indicate no significant issues relating to buildings assumed for the first increment based on existing conditions. Approval of the buildings in the second and third increments would require a technology called radar track fusion between multiple radar installations in the region. While this technology is anticipated to be in place before the second increment buildings, ongoing coordination between the County and FAA would provide opportunities for regular information sharing and pertinent status updates. The County and FAA should reconvene on an annual or biannual basis to reassess the proposals and likely timing of redevelopment and implementation of new technologies (i.e. track fusion and GPS).

	PRE-PLAN (PAID)	PHASE 1 2011 - 15	PHASE 2 2016 - 20	PHASE 3 2021 - 30	TOTAL BY TYPE
USES					
TRANSIT	\$2,812,500	\$36,187,500	\$64,000,000	\$50,000,000	\$150,187,500
ROADWAYS OPEN SPACE	\$4,200,000	\$28,400,000	\$19,000,000	\$1,000,000	\$48,400,000
IMPROVEMENTS	\$0	\$7,945,000	\$7,504,000	\$19,688,000	\$35,137,000
TOTAL BY PHASE	\$7,012,500	\$72,532,500	\$90,504,000	\$70,688,000	\$233,724,500

4.3 IMPLEMENTATION MATRIX

ITEM NO.	IMPLEMENTATION ACTIONS	TIMING ¹	IMPLEMENTING AGENCY(S)	MECHANISM(S)	FUNDING SOURCE(S)
1.	Adopt the Crystal City Sector Plan	ST	County Board		
LANDUSE AND ZONING					
GENERAL LAND USE PLAN (GLUP) ACTIONS					
2.	Designate the "Crystal City Coordinated Revitalization District". (See Figure 4.2.1)	ST	CPHD		
3.	Change land use designations and other elements on the GLUP Map. (See Figure 4.2.1 and 4.2.2)	ST	CPHD		
	a.) Change from a mix of "Low" Office-Apartment-Hotel and "Medium" Residential to solely "Low" Office-Apartment-Hotel for the area east of Crystal Drive from 12th Street South to the Airport Viaduct.	ST	CPHD		
	b.) Change from a mix of "High" Office-Apartment-Hotel and "High" Residential to solely "High" Office-Apartment-Hotel for the area east of Jefferson Davis Highway and west of Crystal Drive, from 12th Street South to just south of 27th Street South.	ST	CPHD		
	c.) Change from a mix of "High" Residential and "Public" to "High" Office-Apartment-Hotel for the area bounded by Jefferson Davis Highway, South Eads Street, Army Navy Drive and a line level with the northeast corner of Eads Park.	ST	CPHD		
	d.) Add 26 triangle symbols to the GLUP to indicate the general locations of public open space, to reflect the planned open spaces within the Crystal City Coordinated Revitalization District.	ST	CPHD		
	e.) Change the street network on the GLUP within the Crystal City Coordinated Revitalization District to reflect the planned street configuration.	ST	CPHD		
	f.) Amend the boundary of the Crystal City Metro Station Area on the back of the GLUP map to include the properties between South Eads Street and South Fern Street that front the south side of 23rd Street South.	ST	CPHD		
ZONING ORDINANCE ACTIONS					
4.	Amend the Zoning Ordinance to include a new district, "C-O Crystal City", and determine an applicable framework for addressing community benefits associated with additional density permitted under this new district.	ST	CPHD		
OTHER PLANNING FRAMEWORK ACTIONS					
5.	Establish the recommended Build-to Lines throughout the Crystal City planning area with redevelopment.	O	DES CPHD	Special Exception	
AFFORDABLE HOUSING					
6.	Employ Policy Directive H5 of this Plan, in addition to the Affordable Dwelling Unit (ADU) Ordinance, to achieve committed affordable housing units through the realization of bonus density.	O	CPHD	Special Exception	
7.	Assist in developing long-term affordability plans.	O	CPHD		Low Income Housing Tax Credits; Other County
8.	Prioritize use of site plan cash contributions for projects within the planning area.	O	CPHD	Special Exception	AHIF Loans; Developer Contributions
9.	Use the County's Goals and Targets for Affordable Housing.	O	CPHD	Special Exception	
10.	Utilize affordable housing financing tools.	O	CPHD		Low Income Housing Tax Credits; Moderate Income Purchase Assistance Program; Other
11.	Incorporate occupancy guidelines.	O	CPHD		
12.	Encourage construction and utilization of accessible units.	O	CPHD		
TRANSPORTATION					
13.	Amend the Master Transportation Plan (Street Typology Map) to illustrate the recommended future street network in Crystal City and re-designate the typology of select street segments as needed. (See Figure 4.2.2 and 4.2.3).	ST	DES		
14.	Manage the reconstruction and reconfiguration of Crystal City's recommended Street and Transit Networks over time by strategically sequencing projects based on levels of priority as identified in the County Capital Improvements Program (CIP) and the ability to execute such projects with or without the redevelopment projects necessary to physically accommodate such construction.	O	DES	CIP	Local, State, Federal, and Other
15.	Establish the proposed enhanced surface transitway system ultimately with streetcar technology and amend the Master Transportation Plan (Transit Network Map) to reflect the phased alignment recommended in this Plan.	MT	DES	CIP	Local, State, Federal, and Other

ITEM NO.	IMPLEMENTATION ACTIONS	TIMING ¹	IMPLEMENTING AGENCY(S)	MECHANISM(S)	FUNDING SOURCE(S)
16.	Establish the new second entrance to the Crystal City Metro Station as recommended at the intersection of Crystal Drive and 18th Street.	LT	DES	CIP	Local, State, Federal, and Other
17.	Amend the Master Transportation Plan (Bike and Trail Network Map) to reflect an enhanced pedestrian and bicycle network in the Crystal City area, and provide additional pedestrian and bicycle connectivity to public transit and the adjacent neighborhoods.	O	DES		Local, State, Federal, and Other
18.	Employ Parking and Transportation Demand Management (TDM) Strategies for future redevelopment in Crystal City.	O	DES	Special Exception	
19.	Continue regular periodic monitoring of transportation impacts that may occur in Crystal City and surrounding neighborhoods, and implement mitigation measures as needed.	O	DES		
PUBLIC OPEN SPACE					
20.	Create, improve, and or maintain public open spaces in Crystal City at the locations and general target sizes indicated in the Public Open Space Map (Figure 3.7.2.) and Open Space Design Concepts Table (Table 3.7.1).	O	PRCR CPHD	Special Exception CIP	Local, Other
21.	Phase the displacement of any existing public open space with the creation of new public open space or with commensurate physical improvements to an existing public open space. Ensure either public access easements or public ownership in all instances.	O	PRCR CPHD DES	Special Exception	
22.	Ensure that a balance between active and passive recreational opportunities is achieved in the Crystal City public open space network.	O	PRCR		
23.	Encourage the inclusion of a diverse mix of active recreational facilities within residential and commercial developments to help meet needs of Crystal City's future populations.	O	PRCR	Special Exception	
24.	Adequately maintain and improve, as needed, recreational facilities in surrounding areas that directly service the needs of the Crystal City and neighboring populations.	O	PRCR		
25.	Maximize opportunities to increase tree canopy coverage throughout Crystal City.	O	PRCR DES	Special Exception	
26.	Develop a more detailed strategy for ensuring the creation of Center Park.	ST	PRCR CPHD AED		
COMMUNITY BUILDING					
27.	Encourage the formation of a new civic association(s) in Crystal City.	MT	CPHD		
28.	Continue working with the Crystal City Business Improvement District (BID) and other parties to maintain event programming and branding as a high priority and help contribute to the neighborhood's overall vitality.	MT	AED CPHD		
29.	In areas adjacent to Crystal City, employ the Neighborhood Conservation program as a means of achieving desired capital improvement projects.	O	CPHD		
30.	Provide Community Amenities.	O	CPHD	Special Exception; Other	
31.	Provide Civic Services.	O	CMO/County Board	Special Exception; Other	
ENVIRONMENTAL SUSTAINABILITY					
32.	Determine District Energy Options.	ST	DES CPHD		
33.	Continue Green Building programs and other initiatives to ensure individual buildings are constructed to be as environmentally friendly as feasible.	O	DES CPHD	Special Exception; Other	
ECONOMIC DEVELOPMENT					
34.	Create a special section of the Arlington County Capital Improvements Program (CIP) for Crystal City Plan improvements. Evaluate the six-year plan every two years, as part of the biennial update to the CIP, to identify priority projects and best align infrastructure with redevelopment goals.	ST; O	DES PRCR AED CPHD		
35.	Establish and Utilize Tax Increment Funding (TIF) to support the implementation of planned public infrastructure improvements in Crystal City.	ST; O	AED DMF		
36.	Establish a Crystal City Fund.	ST	AED DMF	Special Exception	
37.	Employ density exemptions for priority community oriented services.	O	CPHD	Special Exception	
38.	Continue coordination efforts with FAA and related stakeholders.	O	AED CPHD		

¹ C-Completed; O-Ongoing; ST - Short Term (1-2 years); MT - Mid Term (3-5 years); LT - Long Term (5 years or longer)

APPENDIX AND GLOSSARY



APPENDIX

A.1 FAA FEASIBILITY REVIEW OF BUILDING HEIGHTS

The County and the Federal Aviation Administration (FAA) joined efforts to evaluate potential impacts of the plan on regional airspace and operations around Reagan National Airport. County and landowner representatives approached the FAA to enlist the agency's participation in making sure the plan for Crystal City is coordinated with airport and airspace interests. Accordingly, the FAA convened an interagency working group to measure the impact of the proposed plan on airspace operations. The County provided the working group with building height and location data based on a phased build-out scenario, consistent with the Illustrative Plan, so that impacts could be modeled over time and thereby inform potential mitigation strategies.

The evaluation focused on three five-year build out increments through 2025, as this fifteen-year timeframe was agreed to be the most pertinent and helpful in identifying any potential impacts and mitigations. The group studied all impacts normally assessed by the FAA in reviewing a proposed building in the Washington D.C. area, including navigation, radar, flight procedures, radio communications, and review by the United States armed forces. Buildings were evaluated individually, and special consideration was given to the cumulative impacts of the buildings on radar coverage.

The results of the analysis are chronicled in a Feasibility Study report from the FAA, which includes the effects that each building, and the buildings altogether, would have on regional airspace and operations around Reagan National Airport. The impacts on flight procedures (Terminal Instrument Procedures, or TERPS) from each building are noted in the report, along with direction for potential mitigations. The TERPS impacts would be addressed during the future aeronautical review process when a developer files a project with the FAA. The impacts to TERPS do not suggest a need to adjust planned building heights, provided the proposed mitigations are pursued when the project is filed.

In terms of radar coverage, the buildings analyzed for the first increment will not derogate radar services currently provided to air traffic operations in the region. Approval of the buildings in the second and third increments would require a technology called radar track fusion between the radar installations at Reagan National Airport and Potomac Tracon. This technology joins the capacity of multiple radar signals into one view, which would fill any gaps affecting a single installation. If radar track fusion is operational at this location and can resolve line-of-sight vertical shielding issues, the radar impacts from buildings in the second and third increments would be resolved.



Reagan National Airport

The FAA and the County will reassess the proposals in 3 to 5 years to update the status of redevelopment and new technologies (i.e., track fusion and GPS). The County has received a letter from FAA to formalize this as a planned next step. The County has Determination notices for each building feasibility case, documenting the findings from the Obstruction Evaluation process. These notices will be on record at FAA, and as actual projects arise, they will be tagged (via latitude and longitude) to the feasibility case completed during this process. This will provide context for the submittals and help expedite reviews. The full Feasibility Study report, a letter from the FAA, Determination notices, and a list that connects buildings in the Illustrative Plan to their FAA case numbers are all included as follows.



Reagan National Airport

**Crystal City Development Feasibility Study
FAA Summary for Increments 1, 2, 3
10/28/2009**

Reference Attachments:
Impact List_Crystal City.xls
Crystal City OE Division Responses.pdf

SUMMARY

INCREMENT # 1 2011-2015

Flight Procedures

Buildings M1, M2: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Building J1: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Impacts to LPV approach Runway 33 can be mitigated either by lowering the building by 15.5 feet AGL or by raising the approach minima with concurrence of local users through public circularization process.

Radar:

Buildings M1, M2, J1: Awaiting Potomac Tracon response for review of RADES radar coverage maps at higher altitudes.

11/13/09- Fred Ninger, Support Specialist – Procedures, Potomac TRACON
540-349-7515

Potomac TRACON has no objection to the proposed development by Arlington County, as presented to the FAA in the Crystal City Redevelopment Proposal - Increment 1 (for 2015).

We have reviewed pertinent documents and believe that the buildings proposed in this increment will not derogate radar services currently provided to air traffic operations in the Washington, DC Metropolitan area.

- Note: 1. DCA ATCT indicates no significant adverse effect at low altitudes.
2. Approval of Increment 1 Radar impact does not imply that buildings above 170 feet AGL can be constructed in future increments without future technology.

Nav aids

Buildings MVR, MVO, NTL:

FAA is requesting further modeling to evaluate these buildings and their impact to the Rosslyn LDA. These cases are not part of Crystal City analysis. However, there will be adverse operational impact to the Runway 19 SBR GS and we anticipate further restrictions right of course. Preliminary conclusion for Increment 1 limits the building heights as follows: MVO to 35' AGL, MVR to 43' AGL and NTL to 45' AGL pending further modeling.

INCREMENT # 2 2016-2020

Flight Procedures

Building M4: Impacts mitigated with 1A survey.

Building J2: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Building M3: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Building M5: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Impacts to LPV approach Runway 33 can be mitigated either by lowering the building by 23.5 feet AGL or by raising the approach minima with concurrence of local users through public circularization process.

Building M6: Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Impacts to LPV approach Runway 33 can be mitigated either by lowering the building by 21.5 feet AGL or by raising the approach minima with concurrence of local users through public circularization process.

Radar:

Buildings J2, M3, M4, M5, M6, M7, U5:

No impact to full filed AGL heights provided Radar Fusion tracking is operational at DCA/PCT to resolve line-of-sight vertical shielding. Otherwise, 170 feet AGL will be the Do Not Exceed height for these proposals.

Nav aids:

Buildings J2, M3, M4, M5, M6, M7, U5:

NAVAIDS impact to DCA VOR: ATC operational mitigation, i.e., no change to signal in space (impact).

Recognition that signals in space impacts is not operationally significant. The proposed heights filed create additional vertical screening to the VOR. It is predicted that these restrictions will increase to approximately 10K feet at 20 nautical miles to the west of DCA. Therefore, building heights were lowered to ensure existing VOR restrictions are not increased.

INCREMENT # 3 2021-2030

Flight Procedures

Building J3:

Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Impacts to LPV approach Runway 33 can be mitigated either by lowering the building by 73.5 feet AGL or by raising the approach minima with concurrence of local users through public circularization process

Building J4:

Impacts to circling minima can be mitigated by not allowing aircraft to circle to the west of DCA.

Impacts to LPV approach Runway 33 can be mitigated either by lowering the building by 26.3 feet AGL or by raising the approach minima with concurrence of local users through public circularization process.

1A Survey is required for this building.

Radar:

Buildings A1, G3, J3, and J4: No impact to full filed AGL heights provided Radar Fusion tracking is operational at DCA/PCT to resolve line-of-sight vertical shielding. Otherwise, 170 feet AGL will be the Do Not Exceed height for these proposals.

Nav aids

Buildings G3, J3, J4: NAVAIDS impact to DCA VOR: ATC operational mitigation, i.e., no change to signal in space (impact). Recognition that signals in space impacts is not operationally significant. The proposed heights filed create additional vertical screening to the VOR. It is predicted that these restrictions will increase to approximately 10K feet at 20 nautical miles to the west of DCA. Therefore, building heights were lowered to ensure existing VOR restrictions are not increased.

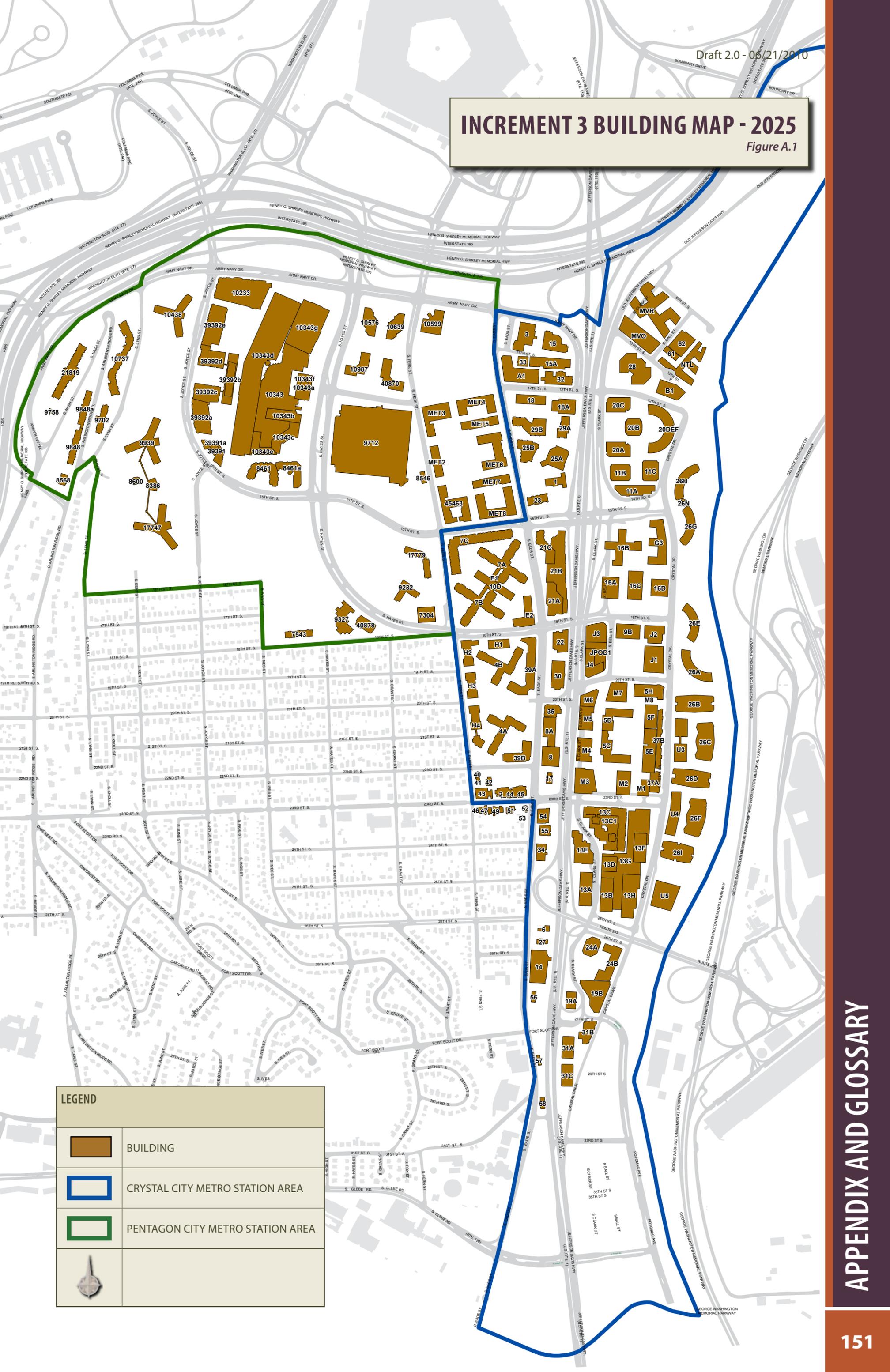
TABLE A.1 - FAA BUILDING ANALYSIS

	CRYSTAL CITY OE CASE NUMBER	BUILDING NAME	FLIGHT PROCEDURES IFR EFFECT		RADAR IMPACT	NAVAIDS IMPACT (19L GS)	PROPONENT FIELD HEIGHT
			1A SURVEY	4D	AGL (FEET)	AGL (FEET)	AGL (FEET)
INCREMENT #1 2011-2015	09-AEA-0157-OE	J1	284.5 AGL	233.6 AGL	NOTE 2	NO IMPACT	300
	09-AEA-0159-OE	M1	274.3 AGL	237.3 AGL	NOTE 2	NO IMPACT	300
	09-AEA-0160-OE	M2	274.3 AGL	237.3 AGL	NOTE 2	NO IMPACT	300
	09-AEA-0161-OE	U3	NO IMPACT		NO IMPACT	NO IMPACT	60
	09-AEA-0162-OE	U4	NO IMPACT		NO IMPACT	NO IMPACT	60
	09-AEA-0163-OE	MVR	62 MSL	43.5 AGL	NO IMPACT	43' RECOMMENDED NOTE 4	67
	09-AEA-0164-OE	MVO	56 MSL	19.0 AGL	NO IMPACT	35' RECOMMENDED NOTE 4	92
	09-AEA-0165-OE	NTL	45 MSL	28.2 AGL	NO IMPACT	45' RECOMMENDED NOTE 4	65
INCREMENT #2 2016-2020	09-AEA-0166-OE	B1	NO IMPACT		NO IMPACT	NO IMPACT	110
	09-AEA-0167-OE	E1	NO IMPACT		NO IMPACT	NO IMPACT	123
	09-AEA-0168-OE	E2	NO IMPACT		NO IMPACT	NO IMPACT	110
	09-AEA-0169-OE	H1	NO IMPACT		NO IMPACT	NO IMPACT	60
	09-AEA-0170-OE	H2	NO IMPACT		NO IMPACT	NO IMPACT	35
	09-AEA-0171-OE	H3	NO IMPACT		NO IMPACT	NO IMPACT	35
	09-AEA-0172-OE	H4	NO IMPACT		NO IMPACT	NO IMPACT	35
	09-AEA-0173-OE	J2	280.5 AGL	243.5 AGL	NOTE 3	142.5 NOTE 5	300
	09-AEA-0174-OE	M7	NO IMPACT		NOTE 3	178.4 NOTE 5	200
	09-AEA-0175-OE	M3	271.5 AGL	234.5 AGL	NOTE 3	156.5 NOTE 5	300
	09-AEA-0176-OE	M4	DNE 1A	234.5 AGL	NOTE 3	155.5 NOTE 5	250
	09-AEA-0178-OE	M5	226.5 AGL	N/A	NOTE 3	150.5 NOTE 5	250
	09-AEA-0179-OE	M6	228.5 AGL	N/A	NOTE 3	192.5 NOTE 5	250
	09-AEA-0180-OE	U5	NO IMPACT		NOTE 3	NO IMPACT	200
INCREMENT #3 2021-2030	09-AEA-0181-OE	A1	NO IMPACT		NOTE 3	NO IMPACT	200
	09-AEA-0182-OE	G3	NO IMPACT		NOTE 3	130.7 NOTE 5	200
	09-AEA-0183-OE	J3	226.5 AGL	N/A	NOTE 3	147.5 NOTE 5	300
	09-AEA-0184-OE	J4	223.7 AGL (NOTE1)	N/A	NOTE 3	181.7 NOTE 5	250
RADAR MITIGATION CASES	09-AEA-0360-OE						
	09-AEA-0361-OE						
	09-AEA-0362-OE						

Note 1: This building must have a 1A survey. Require all buildings to have a 1A survey.
 Note 2: ATC indicates no adverse effect. Does not apply to buildings above 170 feet AGL in future increments.
 Note 3: No impact only if Radar Fusion is in place to resolve line-of-sight shielding, otherwise 170 feet AGL. Do Not Exceed recommendation.
 Note 4: Further analysis by Ohio University to model and Flight Standards input.
 Note 5: NAVAIDS impact to DCA VOR: ATC operational mitigation, i.e., no change to signal space (impact). Recognition that signal in space impacts are not operationally significant, it is recognized that restrictions would be increased. Jim Caulfield will discuss mitigation with Obstruction Evaluation Service for navigational impact to VOR.

INCREMENT 3 BUILDING MAP - 2025

Figure A.1



LEGEND

	BUILDING
	CRYSTAL CITY METRO STATION AREA
	PENTAGON CITY METRO STATION AREA
	

GLOSSARY

The definitions listed below are intended to serve as supporting information for this planning document. Where terms appear in both this glossary and in the Arlington County Zoning Ordinance (as of September, 2010), their definitions are consistent. However, as definitions may evolve, the Zoning Ordinance should be referenced for the most current official definitions at future points in time. Finally, in select instances, multiple definitions are provided for a term if it is used with a notably different meaning than how it is defined in the Zoning Ordinance. (Some of the Definitions are adapted from the Smart Code by Duany Plater-Zyberk and Company).

Standard Site Plan Base Density:

the maximum standard site plan densities planned for a particular area according to the GLUP designations as they exist in 2008. Base densities for the Crystal City Planning Area are recorded in the Base Density Map, Figure 3.8.2.

Block:

the aggregate of private lots, passages, rear lanes and alleys, circumscribed by thoroughfare rights-of-way.

Block Face:

the aggregate of all the building façades on one side of a block. The Block Face provides the context for establishing spatial clarity and architectural harmony along the course of a thoroughfare.

Boulevard:

a thoroughfare designed for high vehicular capacity and moderate speed. Boulevards are long-distance thoroughfares traversing urbanized areas.

BRAC (Base Realignment and Closure Commission) :

a commission chartered by Congress to provide recommendations for the reconfiguration of military base operations throughout the country; its 2005 recommendations to move a substantial quantity of military operations in Arlington (Crystal City in particular) out of the county and onto nearby military bases was the impetus for the current planning effort.

Buildable Area:

the area of a lot within which a structure can be placed after the minimum yard and open space requirements of the Zoning Ordinance have been met, less any area needed to meet the minimum requirements for streets, sidewalks, or other similar public improvements.

Building Footprint:

the area of a two-dimensional plane circumscribing the perimeter of a building as it engages the ground plane or another designated plane.

Building Configuration:

the form of a building, based on its massing, private frontage, and height.

Building Type:

a structure category determined by function, uses, disposition, and configuration, including frontage and height.

Build-To Line:

a line established along a street or open space frontage extending the full width of the lot, that defines the block face and establishes

building placement. Lines established between public open spaces and street rights-of-way represent the approximate demarcation between the public open space and sidewalk.

Bulk Plane Angle:

a virtual sloping plane, collinear with a Frontage Line, that begins at a specified height and slopes back at specified angle over the Buildable Area; used to control building setbacks with the objective of mitigating shadow impacts on public space.

Civic:

the term defining not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking.

Civic Building:

a building designed specifically for a civic function. The intensity of intended use by the public is a strong indicator of the prominence such a building should be given in the surrounding urban context.

Civic Space:

an outdoor area dedicated for public use. Civic Space types are defined by the combination of certain physical constants including the relationship between their intended use, their size, their landscaping and their fronting buildings.

COG (Metropolitan Washington Council of Governments):

a regional organization of Washington area local governments that address regional responses to such issues as the environment, affordable housing, economic development, health and family concerns, human services, population growth, public safety, and transportation. COG collects, analyzes, and disseminates a broad array of demographic and forecast data for the Washington metropolitan region.

Complete Streets:

a multimodal design configuration for streets that accommodate all users, including pedestrians, bicyclists, bus riders, transit users, and motorists.

Context:

surrounding built environment, principally defined by the massing, frontage, and architectural character of buildings, as well as the elements, character, and quality of the public realm.

Density:

a measure of the number of people occupying a standard measure of land area. By assigning increments of building area or dwelling units to each person, density can be expressed either as: 1) the gross floor area of all buildings on a lot (in square feet) occupying a lot; 2) the gross floor area of all buildings on a lot divided by the lot area, usually expressed as a Floor-Area Ratio; or 3) the number of dwelling units within a standard measure of land area, usually given as units per acre.

Easement:

a right granted to one property owner (often a public entity) to make use of the land of another property owner for a limited purpose, such as a Right-of-Way or Public-Use Easement. Easements may be specified for a fixed period of time, a fixed but renewable duration, or be set in perpetuity.

Elevation:

an exterior wall of a building not along a Frontage Line. See: Façade

Encroachment:

projection, extension, or placement of building elements beyond a regulating line controlling building disposition.

Enhanced Façade:

a podium garage façade that is elevated in material and design expression to mask the garage use behind.

Entrance, Principal:

the main point of access of pedestrians into a building.

Façade:

the exterior wall of a building that is set along a Frontage, typically a Build-To Line (see Elevation; Frontage).

FAR (Floor Area Ratio):

the gross floor area of all buildings on a lot divided by the lot area.

Frontage:

all the property fronting on one side of a street between the two nearest intersecting streets, or other natural barriers. Also, for the purposes of this Plan, the frontage comprises the zone between the facade of a building and the curb of the street on which the building fronts. Frontage typically includes street elements such as sidewalks, street trees, cafe seating, and similar elements. Frontage also includes elements of the building facade that directly impact the pedestrian experience.

Frontage Line:

those block or lot lines that coincide with a public frontage, right-of-way, and/or Build-To Line.

Frontage Occupancy:

Minimum percentage of the linear length of a building's façade that must engage the Build-To Line.

GLUP (General Land Use Plan):

the primary policy guide for land use and planning decisions in Arlington County. The primary instrument of the GLUP is a map color-coding each area of the county with a designated land use. It establishes the overall character, extent and location of various land uses, and serves as a way to communicate that policy to citizens, interested parties and to the Arlington County Board for guidance in development and preservation decisions. The GLUP is typically amended in response to new Sector Plans, other county-initiated planning efforts, or individual requests pertaining to specific property.

Illustrative Concept Plan:

a plan drawing illustrating in comprehensive form the primary conceptual ideas of a Master Plan. Such a plan only conveys a general intent of the Master Plan, and does not specify precise design outcomes for individual building sites.

Infill:

a development project constructed within existing urban fabric.

Lot Line:

a line of record bounding a lot which divides one (1) lot from another lot or forms a public or private street or any other public or private space.

Major Street:

for the purposes of this plan, a street with a Right-of-Way greater than 80 feet in width.

Massing:

a term used to describe the physical volume, shape, or bulk of a building.

Master Plan:

a comprehensive planning instrument that describes with narrative, policies, illustrations, and maps an overall development concept for a new or revitalized neighborhood or city.

Minor Street:

for the purposes of this plan, a street with a Right-of-Way 80 feet or less in width.

Mixed Use:

multiple functions within the same building through superimposition or adjacency, or in multiple buildings within the same area by adjacency. Mixed use is one of the principles of TND development from which many of its benefits are derived, including compactness, pedestrian activity, and parking space reduction.

Metro Station Area:

a designation for a geographic area surrounding a Metrorail station. When used in Arlington land-use planning, each area boundary is defined by a combination of major transportation routes, neighborhood boundaries, and Census geography, and generally includes the land within one quarter mile of the station entrance.

Multimodal Transportation:

transportation that includes more than one type of travel method, such as walking and bicycling.

Net Developable Area, Net Site Area:

see Buildable Area.

Party Wall:

a condition along a lot line where adjacent buildings abut, and may share a common wall.

PDSP (Phased Development Site Plan):

a site plan approval process in Arlington County (Administrative Regulation 4.1) available to sites greater than 20 acres in size, or a smaller area as authorized and accepted by the County Manager.

Plinth:

a story partially buried in a sloping grade with at least one frontage providing a walkout condition. Often provides a base for multiple structures residing above.

Podium:

a multi-story building base that may support one or more building towers above. Multiple podiums may occupy a single block frontage, and party-wall conditions between podiums is common. Any parking structure constructed above grade is located in a podium and screened from view on principal thoroughfares.

Podium Liner:

a portion of the building podium with occupiable program space specifically designed to mask a parking garage from a frontage.

Policy Framework:

the composite of the Vision Statement, Goals & Objectives, and Policy Directives; together

they provide a narrative of the community's aspirations, as well as recommendations and action-oriented policies for achieving their vision.

Private Frontage:

the privately held layer between the frontage or Build-To Line and the principal building façade. The structures and landscaping within the Private Frontage may be held to specific standards.

Public Frontage:

the area between the curb of the vehicular lanes and the frontage or Build-To Line. Elements of the Public Frontage include the type of curb, pedestrian clear zone, planters, street trees and streetlights.

Public Realm:

that area of the built environment dedicated to public accessibility and use, commonly composed of streets, sidewalks, and public open spaces such as parks, squares and plazas. The public realm is spatially defined by the buildings, both public and private, fronting its edges.

Retail Frontage:

Frontage that require the provision of shop fronts, causing the ground level of buildings to be available for retail use.

Right-of-Way:

a designation on the Build-To Lines Map (Figure 3.5.3) assigning a dimension, measured from Build-To Line to Build-To Line, that shall delineate the course and width of a street, inclusive of all travel lanes, parking lanes, and sidewalks; more generally, a public use easement, usually for a strip of land, that provides a path or route for public access or infrastructure.

Sense of Place:

the experiential quality of an urban setting that fosters a sense of authentic human attachment and belonging, making one feel that a place is special and unique.

Setback:

the distance which a building is required to be "set back" from a lot line or from the nearest building or structure.

Sidewalk Clear Zone:

the portion of the public sidewalk space provided expressly for accessible pedestrian mobility. It is usually located between the "landscape & utility" zone and the building shy or "café" zone. This space is unobstructed and is constructed of materials and patterns that provide a relatively smooth surface that complies with ADA accessibility standards.

Sidewalk Shy Zone:

a subzone of public and private frontage between the building façade and the sidewalk thoroughway furnished according to the public frontage program. For commercial frontages, it is usually paved and may include such elements as café seating or out-door retail displays. On residential frontages, it may include landscaping elements such as a door yard, raised planters, or seating areas.

Sidewalk Street Tree Zone:

a subzone of the sidewalk between the street curb and the sidewalk thoroughway, principally occupied by tree pits and street trees.

Street:

for purposes of this plan, a public thoroughfare defined by a right-of-way as delineated in the Build-To Lines Map (Figure 3.5.3).

Streetscape:

the urban element that establishes the major part of the public realm. The streetscape is composed of thoroughfares (travel lanes for vehicles and bicycles, parking lanes for cars), public frontage (sidewalks, shy zones) as well as the visible private frontages (building façades and elevations, yards, fences, awnings, etc.), and the amenities of the public frontages (street trees and plantings, benches, streetlights, etc.).

Structured Parking:

a means of providing parking above grade in building podiums containing two or more stories of parking. Also Parking Structure.

Tower:

a discrete, multi-story building component located above a podium base composed of stories that comprise the middle and top of the building's overall massing.

Tower Coverage:

area of tower footprint expressed as a percentage of a site's or block's buildable area.

Traffic Circle:

a road configuration at a street intersection that channels intersecting traffic around a circular openspace. The direction of traffic flow is one-way, with traffic entering the circle yielding to traffic in the circle. A traffic circle may be signalized or not; if not, it is often referred to as a Roundabout.

Transit:

any type of local public transportation (i.e., bus system, passenger rail, shuttle services, etc.).

Underground, The:

an internal pedestrian concourse system, often lined with retail, that connects most buildings on the east side of Crystal City, and a some buildings on the west side. The system provides access to shopping and transit in a climate-controlled environments.

Sector Plan:

the result of a detailed planning process which examines a Metro Station area, usually within a larger County planning area such as the Rosslyn-Ballston Corridor or Jefferson-Davis Corridor, and makes specific recommendations on land use, zoning, transportation, utilities, urban design and community facilities. Such plans, including this one, serve to guide development in the area under consideration and are used by citizens, property owners, the development community, staff, advisory groups and elected officials in the review of specific projects.





ARLINGTON
VIRGINIA