Approved by the Planning Board

May 2010

greenspace

Green Space Guidelines for the Silver Spring Central Business District

montgomery county planning department
the maryland-national capital park and planning commission
MontgomeryPlanning.org

Silver Spring CBD Green Space Guidelines

abstract

This document contains guidelines for identifying and developing large green open spaces in accordance with the vision of the 2000 Silver Spring CBD Sector Plan.

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Approved by the Planning Board
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table of contents

tables and figures

maps

how to use these guidelines

The Silver Spring Green Space Guidelines provide a framework to create the green downtown recommended in the Silver Spring CBD Sector Plan. The guidelines identify potential sites that could accommodate large green public spaces and provides general design guidelines for developing the sites.

The planning process is structured as a hierarchy of decisions:

- Master and sector plan recommendations provide the vision for a specific area.
- The Zoning Ordinance and other codes establish standards and regulations for development.
- Design guidelines illustrate the Plan's vision.

The guidelines are approved by the Planning Board for use in evaluating proposed building projects and other applications. They guide the implementation of public use space and improvements generated by the Public Use Space and Amenity Fund, and inform CIP decisions. The research and analysis that inform these guidelines could provide a transferrable methodology for other County CBDs faced with similar issues. The Guidelines will be revised to reflect new technologies or field conditions and updated comprehensively at least once every six years.

These guidelines do not mandate specific forms and locations for buildings, retail uses and open space, but rather are intended to provide developers and the public a sense of the types of open spaces that the Board might look for when reviewing projects in the Silver Spring CBD. They illustrate how Sector Plan recommendations and principles might be met, and encourage applicants and public agencies to propose designs that create an attractive and successful public realm. The precise open space designs that will be appropriate in any particular project will depend on the specific circumstances of the project and the surrounding area.

The County's current legislation, guidelines, and plans for open spaces, parks, and urban areas make long-range and site-specific recommendations, Countywide or for specific communities.

- General Plan Refinement of the Goals and Objectives for Montgomery County (1993)
- Park, Recreation, and Open Space (PROS) Master Plan (2005)
- Countywide Park Trails Plan (1998)
- The Approved and Adopted Silver Spring CBD Sector Plan (2000)
- Recreation Guidelines (1992)
- Parks for Tomorrow (1998)
- Legacy Open Space (LOS) Functional Master Plan (2001)
- Urban Park Planning Guidelines (under development by the Department of Parks)

These guidelines should be used to implement the Silver Spring CBD Sector Plan. They are intended to:

- Create a Green Downtown – Identify potential sites for large green spaces in accordance with the Green Downtown theme and the Parks, Recreation, Open Space Recommendations of the Sector Plan.
- Clarify Design Expectations – Establish design guidelines for green spaces, in accordance with the Sector Plan, that recognize the need for flexibility and creative solutions in community building.
- Address the need for large green spaces – Enable the creation of large green spaces throughout the CBD that are comparable in size and function to the artificial turf that that was replaced by the Silver Spring civic building.
- Address implementation – Identify possible spaces and improvements required by the zoning ordinance or created by amenity funds received in lieu of the required onsite public use space.

Existing County policies are the starting point for the guidelines, together with a thorough review of the CBD's existing open space infrastructure.

Case studies from around the world inform the opportunities in Silver Spring including green spaces on top of parking garages, urban stream restoration, property assemblage, and redevelopment of public property through public-private partnerships.

The guidelines recommend priority sites in the CBD:

- public-private redevelopment of Parking Lot 3 in Fenton Village
- private redevelopment of the Giant Food parking lot
- public-private redevelopment of land surrounding existing Progress Place in the Ripley District
- private renovation of the stream valley at Falklands Chase, located between East-West Highway, 16th Street, and Colesville Road
- private redevelopment of land between Kennett Street and MD 410.

The guidelines will be implemented with a variety of existing tools, including:

- optional method development
- off-site transfer of open space
- Public Use Space Amenity Fund
- Leadership in Energy & Environmental Design (LEED)
- Recreation Guidelines
- Environmental Guidelines
- stormwater management regulations.

As the largest CBD in Montgomery County, Silver Spring must balance intense urban development with green space for recreation, visual amenity, and environmental quality. Balancing growth and green space has the potential to generate economic growth, contribute to social well-being and quality of life, and provide recreational opportunities in a high-quality urban environment.

However, green space competes with development for available land and has a less direct return on investment. Urban development with retail, office, and residential uses has easily quantified, short- to medium-term returns while green space creation has long-term benefits that are more difficult to quantify.

Sector Plan Recommendations

The Sector Plan's recommendations for potential open spaces, major links, and opportunities for urban recreation have been incorporated into these guidelines. These spaces are intended to vary in size and ownership, respond to their urban surroundings, and accommodate a wide range of activities associated with urban life.

The Plan also highlights the importance of green spaces in the Green Downtown theme, recognizing the economic, environmental, and aesthetic benefits of open spaces. It calls for vehicular and pedestrian links that connect green open spaces of varied size and character.[1]

These guidelines were developed with property owners, residents, institutions, and public interest groups. Staff coordinated with the following groups:

- Silver Spring Urban District Advisory Committee
- Silver Spring Chamber of Commerce
- Commercial & Economic Development Committee, Silver Spring Citizens Advisory Board
- South Silver Spring Neighborhood Association
- East Silver Spring Citizen's Association
- Silver Spring residents, property owners, and developers
- Councilmember Valerie Ervin
- M-NCPPC Park Development

Coordination with property owners, developers, and other interested parties will be ongoing as development projects are submitted.

Existing Conditions

The CBD's existing open space network only partly fulfills the Plan's vision. Environmentally friendly green spaces, which are pervious and landscaped areas, are limited and not likely to increase since no new parks have been identified.

The CBD does have many smaller, mostly hardscape, public spaces developed as part of the public use space requirement of optional method projects, in which at least 20 percent of the net site area is required as on-site public use space. Unfortunately, this is often achieved by pulling the building back from the street, creating unnecessary interruptions in the street wall that are perceived not as public space, but as the building's private front yard or entryway. The recently approved amenity fund legislation allows such spaces to be provided off-site within the CBD boundaries.

The demand for spaces that give relief from the urban fabric and provide opportunities for enjoyment and relaxation continues to be greater than the supply. At the public hearing for the Silver Spring civic building, the community expressed the desire for green spaces comparable in size to the former artificial turf site. As build-out continues on increasingly smaller sites, the gap between open space opportunities and demand will increase. Thus, the need to provide significant green space becomes ever more pressing.

The existing green spaces are also distributed unevenly. In most cases, evenly distributed parks tend to be accessible to more people and contribute to healthier air and water. The CBD's largest park, Jesup Blair Park (14 acres), at the southernmost end of the CBD, is not conveniently located for most residents or employees. Large optional method projects provide the potential for large green spaces (e.g. Discovery Garden), but not all large projects have provided large spaces (e.g. Downtown Silver Spring).

Lastly, the existing spaces are unconnected; they are isolated and disjointed rather than forming a part of a larger green open space network. Poor connectivity makes pedestrian access and circulation difficult.

The Silver Spring CBD is not fully built out, and opportunities remain to address these issues and improve the urban fabric through the design of streetscapes with well defined street walls and green, healthy, high-quality spaces. This document will provide guidelines for creating green spaces that provide visual, recreational, and environmental relief while encouraging pedestrian activities that add to the vibrancy and success of the CBD.

[1] Silver Spring CBD Sector Plan, February 2000, pp. 22-23

The following examples, local and national, have been chosen to illustrate Silver Spring's particular potential. As Silver Spring becomes denser, surface parking lots could be replaced by underground or above ground garages. Timely design and investment could create public amenities associated with these new parking structures. Reclaimed streams present another opportunity for green open spaces. Likewise, small, individual lots could be assembled for redevelopment that includes setting aside a large open space. Finally, public redevelopment projects can set a precedent to be followed by the private sector.

These examples reflect the need to maximize the use of urban land to achieve the greatest social, economic, and environmental benefits. The value of urban land requires innovative approaches to deal with the diminishing supply of land and the need to accommodate a multitude of uses.

Surface Parking Lots

Redeveloped surface parking lots can be used to create open space, either green urban spaces or hardscape plazas. Placing parking and other facilities underground frees up valuable urban land for public facilities and amenities that enrich the urban environment.

In Montgomery County, some private projects have placed open spaces over parking facilities especially in CBD locations where allowed densities and natural grade changes make it economically feasible. For example, the Discovery Gardens and the NOAA wave pool sit on top of parking facilities.

Union Square Park, San Francisco, California

Union Square Park, in the heart of San Francisco's downtown, is one of the first urban plazas built on top of an underground parking garage. In 1941, the space was reconstructed with a green urban park above an underground parking garage.

In 2002, the park was renovated to include:

- hardscape plaza with landscaped planters
- outdoor café with movable seating
- symphony-sized stage for concerts and theater performances.

Union Square Park, San Francisco, California

Market Square, Alexandria, Virginia

Market Square at the city hall was built in the mid-1960s over a parking garage.

The square includes:

- tree planters that also act as sitting walls
- central pool and fountain
- wide paved areas
- civic, residential, and retail uses on all four sides
- weekly farmers market.

Market Square, Alexandria, Virginia

Post Office Square, Boston, Massachusetts

In 1992, this 1.7-acre park in Boston's Financial District replaced an unsightly three-story parking garage with an open green space built over an underground 1,500-space parking garage. Post Office Square is a public-private partnership financed by a non-profit consortium of local businesses.

The park's features include:

- lawn surrounded by shade trees
- shrubs and flowers
- vine-covered pergola
- bench seating
- public art and fountains
- 100-seat, year-round restaurant.

Post Office Square, Boston, Massachusetts

Bryant Park, New York City

The almost 10-acre Bryant Park, next to the main branch of the New York City Public Library in midtown Manhattan, is built over underground library stacks. An extensive renovation in 1990 removed a tall hedge, created new entryways, and opened views into the park. A private partnership maintains and secures the park. Today the park attracts up to 4,000 visitors a day, and has increased the rental values of adjacent properties.

Its features include:

- easy access from surrounding streets and public transportation
- one-acre lawn
- fountain
- shade trees and flowers
- Bocce ball court
- four food and news kiosks
- restaurant and library adjacent to the park
- residential and retail uses surrounding the park.

Bryant Park, New York City, in the spring

Reclaimed Streams

Natural stream valleys in urban environments are rare and often degraded but, if restored, can provide a natural respite to urban dwellers. A natural stream valley exists within the Falklands Chase apartment complex, designed according to Garden City Movement principles. The designers made an effort to respond to the land's character by preserving the existing stream valley while fitting the apartment buildings around the existing topography with minimal disturbance.

Four Mile Run, Alexandria, Virginia

Four Mile Run and its watershed is a heavily urbanized drainage basin that was channelized in the late 1970s to control endemic flooding. The flooding was controlled, but the engineered channel was cut off from surrounding neighborhoods and eliminated most of the stream valley's natural features. Its restoration plan would return the stream to a more natural state by redesigning the channelized portion to restore aquatic and riparian habitat and open the stream to public access through pedestrian paths, bridges, and overlooks, creating a public amenity and naturalized green space.

Four Mile Run, Alexandria, Virginia, before restoration and proposed restoration

Donaldson Run Stream Restoration, Arlington, VA

This stream, located in an area of intense urban development, suffered the effects of runoff that destroyed stream habitat, eroded stream banks, and carried sediment and other pollutants to the Potomac River. In 2001, the Donaldson Run Civic Association received Neighborhood Conservation Funding to study the stream and identify potential improvements. In 2006, improvements were made, including stabilization of eroded stream banks and creating new meanders and step pools to slow flow during heavy rains and high runoff. This restoration saved existing vegetation and trails from stream bank erosion and created pools that will provide habitat for stream organisms. This tributary has become an attractive neighborhood amenity, offering respite from the surrounding urban environment.

Donaldson Run, Arlington, Virginia, before restoration and the newly installed step pools

Property Assembly

Assembling properties can create larger, unified open spaces. For example, the approved Galaxy project in Silver Spring, a public-private partnership, assembled eight parcels and a public parking facility, which enabled the creation of a 20,000 square foot plaza through optional method development. Several sites in the Silver Spring CBD, characterized by multiple ownership, could benefit from property assembly. The challenge is to find and acquire these limited and expensive urban parcels.

The approved Galaxy Project in South Silver Spring

Public Redevelopment Projects

Public projects can set the standard for the private sector to follow by implementing the latest policy, guidelines, and results sought by Montgomery County. For example, the new library at the Rockville Town Center was built as part of a public-private partnership; the project includes a central open space, surrounded by retail uses with residential units on upper floors. The open space is activated by the library patrons as well as residents and shoppers.

The defined open space at the Rockville Library is activated by a mix of surrounding uses

Urban parks can bring economic benefits to surrounding neighborhoods and increase property values. The qualitative effects of urban space are visible and experienced by users everyday: respite, recreation and socializing. Even land that seems to generate no direct revenue through development spins off quantitative economic benefits. "An analysis of approximately 30 studies found a positive impact of 20 percent on property values abutting or fronting a passive park area."[2] In contrast, many property owners consider a large green open space in central business districts to be a "waste." Examples from around the country, however, demonstrate that urban green spaces do indeed add economic value to their neighborhoods.

The phenomenon of higher land values for properties near parks is not new. In 1873, Frederick Law Olmsted observed that real estate values adjacent to Central Park in New York City were significantly higher than similar properties in other neighborhoods. To the present day, research supports the assertion that real estate values are consistently higher for properties within walking distance of a park.[3] In Dallas-Fort Worth, a study indicated that property value increases with proximity to parks.

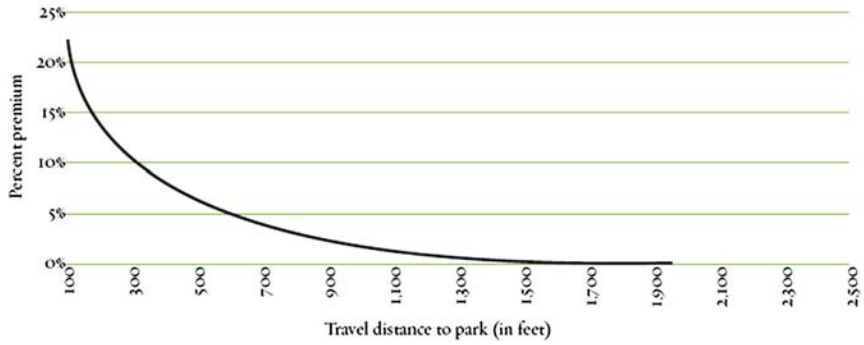


Figure 1: Impact of Parks on Neighborhood Property Values, Dallas-Fort Worth

Replacing a parking garage with a park above underground parking in Boston's Post Office Square increased adjacent land values while providing a graceful green center to a crowded commercial district[4]. "It's as if the buildings were pulling up to the park like campers around a bonfire."[5] According to architect and city planner, Alex Garvin "...businesses want to be located where people want to be and as a result the value of that property goes up."[6]

Post Office Square: before and after

2 *Sunshine, Soccer and Success: An Assessment of the Impact of Municipal Parks and Recreation Facilities and Programs on Business Activity in Texas*, The Perryman Group, Waco TX, 2006

3 *The Economic Benefits of Land Conservation*, John L. Crompton, edited by Constance T.F. DeBrun, The Trust for Public Land, 2007

4 *Open Space Investments Pay Big Returns*, Steve Lerner and William Poole, , Land and People, Spring, 1999, pg. 1

5 Boston Globe Architecture Critic Robert Campbell, quoted in *The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line*, Will Rogers, Trust for Public Land, 1999, pg. 17

6 Lerner and Poole, pg. 1

Bryant Park has also been an economic engine for the surrounding neighborhood. Its $18 million renovation has sparked economic growth along Sixth Avenue where "rents in the area are climbing, and office space is hard to come by."[7]

Bryant Park: before and after

Likewise, in Spartanburg, South Carolina, the Flagstar Corporation included a traditional park with flower gardens, lawns, and benches in their corporate headquarters. The park spurred a downtown renewal and CBD property values were found to have increased 325 percent between 1983 and 1993.[8] Even in a small town setting with relatively low densities, public open space can have economic benefits.

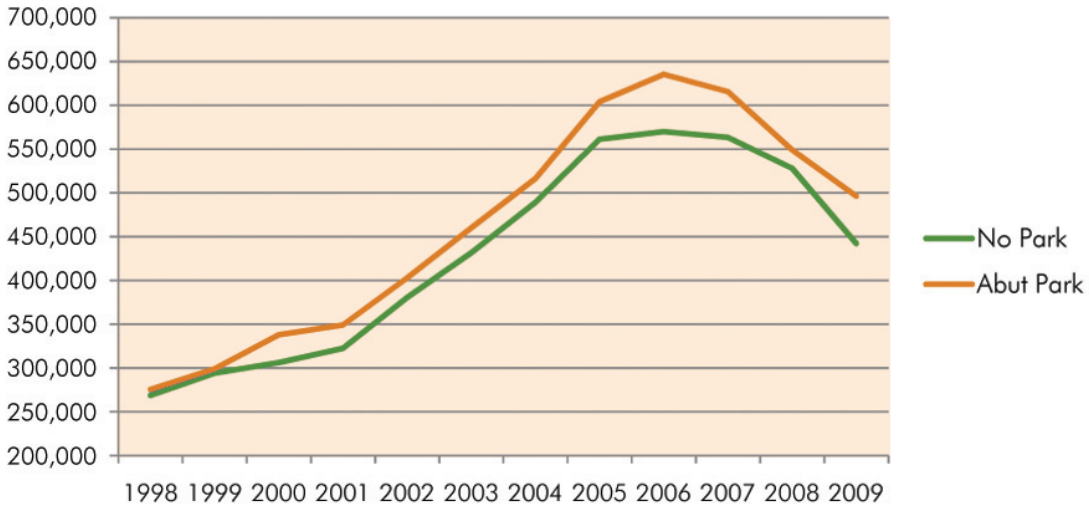
Daniel Morgan Square, Spartanburg, South Carolina

[7] Lerner and Poole, pg. 1
[8] Rogers, pg. 18

Parks proximity has also increased land values in Montgomery County. For example, between 2001 and 2006, Montgomery County single-family detached properties that were near parks had sales prices on average 6.8 percent higher than those that were not next to parks and other open space.

Average Sales Values (in dollars) for Single-Family Detached Properties

	Does Not Abut Park	Abuts Park	Difference
1998	268,810	275,597	2.5%
1999	294,208	299,100	1.7%
2000	306,249	338,026	10.4%
2001	322,534	349,159	8.3%
2002	380,390	402,849	5.9%
2003	431,611	460,072	6.6%
2004	489,275	516,424	5.5%
2005	561,175	604,012	7.6%
2006	569,983	635,244	11.4%
2007	563,312	615,498	9.3%
2008	528,063	548,992	4.0%
2009	442,174	496,110	12.2%



In the Kentlands, properties surrounding the Kentland Park have a higher per square foot dollar value. A similar correlation is observed for the large open space recreation area in the King Farm.

Parks and green open spaces may also attract tax-paying businesses and residences to communities by creating a higher quality of life.[9] When choosing a business location, quality of life is ranked as one of the top priorities by corporate CEOs and small business owners.[10] The success of businesses in technology, R&D, corporate headquarters, and service sectors is often "dependent on their ability to attract and retain highly educated professional employees. The deciding factor of where these individuals choose to live is often the quality of life in the geographic vicinity of the business."[11]

Parks and green open spaces play a vital role in establishing quality of life in central business districts, which in turn can attract and help maintain the businesses and employees critical to economic vitality. When Boeing Corporation chose to relocate their headquarters to Chicago rather than Dallas-Fort Worth or Denver, they cited Chicago's greater quality of life for their employees, including the city's open space system.[12]

Figure 2:
Land Assessment (dollars per square foot)

Land Assessment (dollars per square foot)

9 *The Benefits of Parks: Why America Needs More City Parks and Open Space*, Paul M. Sherer, Trust for Public Land, 2006, pg. 17

10 *Economic Impacts of Protecting Rivers, Trails and Greenway Corridors*, National Park Service, Rivers, Trails, and Conservation Assistance, Washington, D.C. National Park Service, 1995, 4th edition, pgs. 7-3

11 The Impact of Parks and Open Space on Property Values and the Property Tax Base, John L. Crompton, Texas A&M University, 2004, pg.110

12 Sherer, pg.17

Even though hardscape paving has to be installed once and the maintenance is minimal, lawns that are resodded every season can be cost-effective.

Over time, the costs of installing a lawn every season is comparable to installing paving. Seasonal resodding also minimizes the expense and environmental damage of chemical maintenance. Managed sites, like Bryant Park, make the annual resodding an event, which can generate income through vendor sales.

Property owners are often concerned about the cost of maintaining and securing a park. In Bryant Park, local business owners, who contribute to the park's upkeep, observed that rents in adjacent buildings increased dramatically after the park was redesigned and secured. As one of the organizers of the Bryant Park revitalization said, "If building owners and their agents help protect urban open space they will be more than paid back for their efforts, both in increased occupancy rates and in increased rent—all because their building has this attractive new front yard."[13]

Environmental Benefits

Urban green spaces also have value as parts of an interlinked environmental system and can be designed to provide environmental benefits. Their environmental function can offset the cost of providing some of those functions through other means.

Stormwater treatment slows and filters water before it enters nearby streams to:

- reduce flooding and erosion
- reduce pollution and recharge groundwater
- water landscape planting and trees

Air quality treatment filters particles and produces oxygen

Climate protection functions include:

- capturing and storing carbon
- reducing urban heat island effect

Providing wildlife habitat supports biodiversity

Urban green space design can realize these environmental benefits by including:

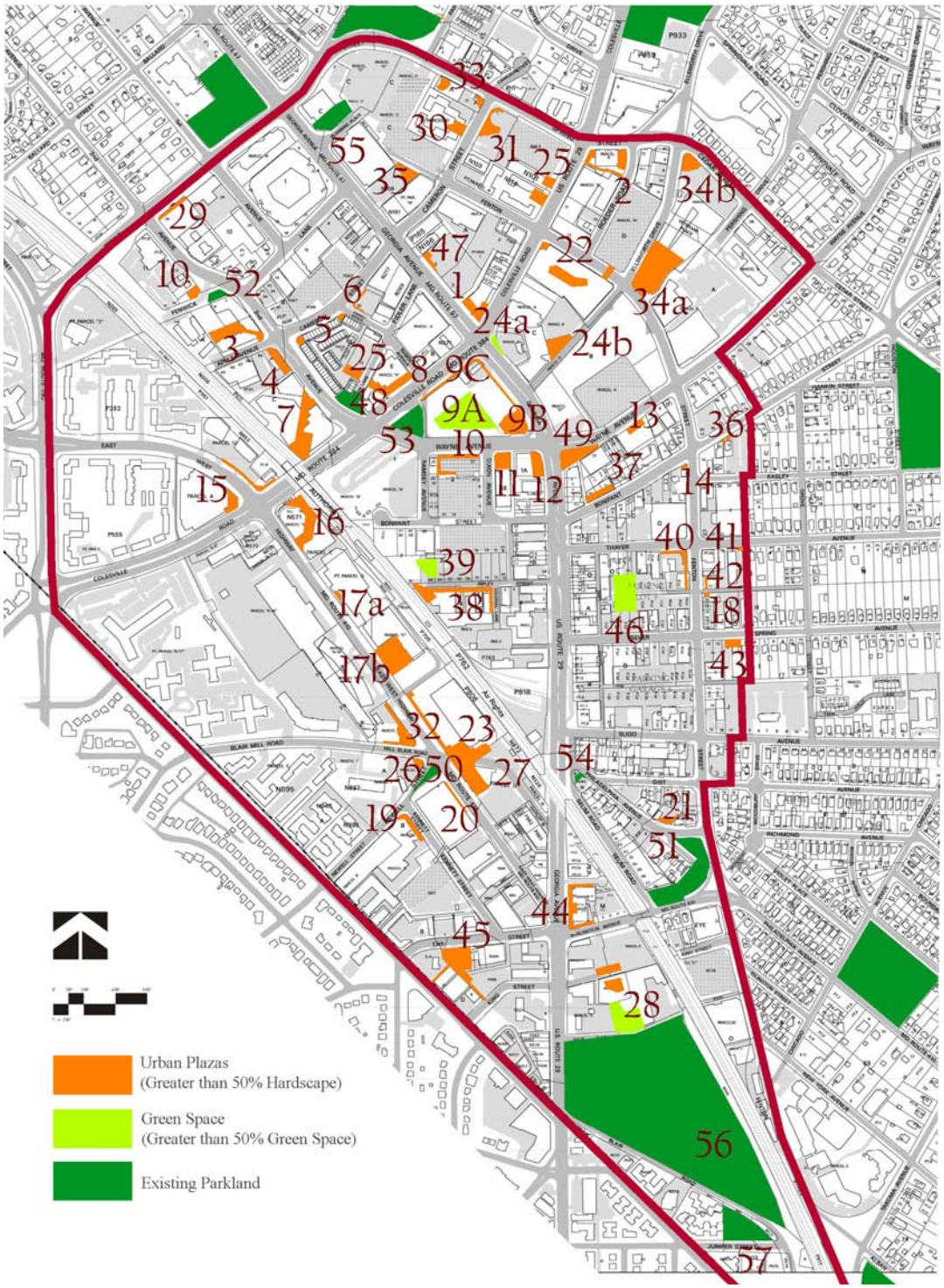
- rain gardens
- landscaped swales
- constructed wetlands
- planting beds
- porous pavement
- vegetated roofs and walls
- native vegetation as habitat for birds and pollinator insect species.

[13] Dan Biederman quoted in Rogers, pg. 19

Approach

An inventory of Silver Spring CBD's public open spaces shows that they vary in size, character, location, and amenities (Appendix 1). A distinguishing characteristic of green spaces is their lawn and landscape areas. Some serve obvious recreational purposes while others are more decorative. The inventory shows that the number of recreational green spaces in the CBD is limited.

Map1: Public Use Spaces and Parks in the Silver Spring CBD



The inventory for the guidelines focused on open space and parkland, dividing them into urban plazas and green spaces based on the amount of hardscape (or impervious surface) versus green space (or pervious surface) in each site. Not all public use spaces are green spaces.

Urban plazas are mostly paved. In the Silver Spring CBD, examples of urban plazas include the Silver Plaza (Number 24b on Map 1), and Silver Spring Metro Plaza (Number 7 on Map 1).

For the purposes of the guidelines, the green spaces are consolidated areas of greenery, such as lawn, of at least one half acre. Depending on their size, they can host active recreational activities, and provide relief from the urban fabric. In the CBD, there are only a few green spaces larger than a half acre. The largest is Jesup Blair Park (Number 56 on Map 1), located at the southern tip of the CBD.

Public Use Spaces are privately developed, privately maintained open spaces for public use, as required by zoning.

Findings and Analysis

The inventory is more than a list, it is a tool to understand the types of open spaces that exist in Silver Spring, their character, and distribution.

For example, in Silver Spring:

- 57 open spaces cover 32.61 acres
- 47 public use spaces were developed by the private sector versus 10 publicly-owned parks
- 15.30 acres of public use space (existing, under-construction, and approved) were created by the private sector versus 17.31 acres of public parkland
- the average size of the open spaces is 0.57 acres
- the average public use space created by private development is 0.32 acre, while public parks average 1.73 acres
- the median size of all open spaces is 0.24 acres
- the median size of public use space created by private projects is 0.24 acres , while the median for public parkland is 0.26 acres.

Two factors skew the average size of open spaces. First, the 14-acre Jesup Blair Park is much larger than any other public use space in the CBD.

Second, the Planning Department records all public use space approved with a given application, not the plaza or green space alone. Generally, applications receive credit for all combined public use space provided onsite including streetscaping and scattered open space.

To obtain a more realistic value, the outlier Jesup Blair Park was eliminated and the average becomes 0.33 acres. Also, the results were less distorted when the median size was calculated rather than the average. The median size is closer to 1/4 acre or 10,000 square feet, which reflects the trend toward smaller, scattered public use spaces instead of large, consolidated green spaces in Silver Spring.

Green area versus hardscape plazas:

- Most public use space is hardscape rather than green (47 versus 10).
- The largest consolidated area of public green space is Jesup Blair Park (14 acres).
- The largest consolidated area of private green space is at Discovery Headquarters (70,295 square feet).

Location and distribution of public use spaces:

- Most public use spaces are west of Georgia Avenue and in the Core area.
- Fenton Village has no significant public open space.

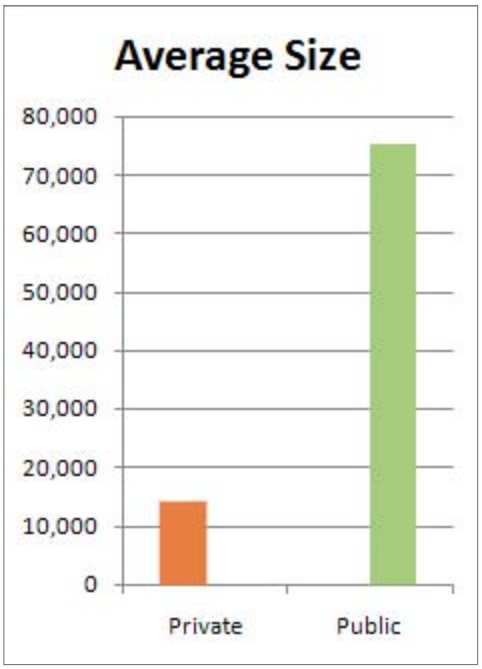


FIgure 3: Average Size of Private and Public Open Spaces

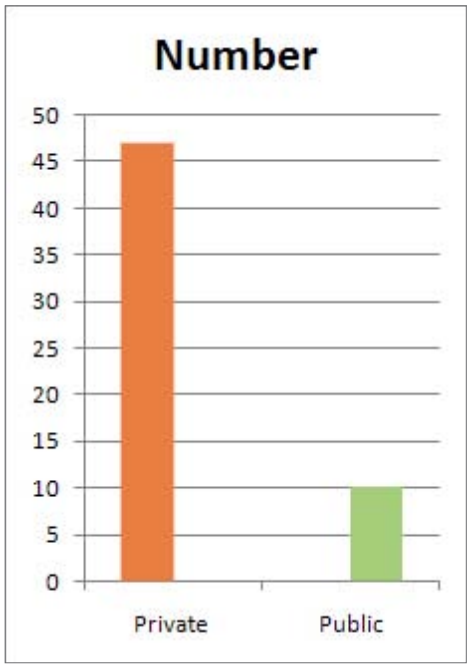


Figure 4: Number of Private and Public Open Spaces

An inventory of Silver Spring CBD's public open spaces shows that they vary in size, character, location, and amenities (Appendix 1). A distinguishing characteristic of green spaces is their lawn and landscape areas. Some serve obvious recreational purposes while others are more decorative. The inventory shows that the number of recreational green spaces in the CBD is limited.

The CBD has sites that could accommodate large green spaces. The spaces proposed in this report will help achieve the desired urban form for the Silver Spring CBD with a hierarchy of green spaces linked by green streets. They will complement the existing public use spaces and add variety to the CBD's predominantly hardscape plazas. These recommendations should guide the review of public and private projects, and direct the allocation of funds acquired through the Public Use Space and Amenity Fund.

Design Principles

The large green spaces should be developed following urban design principles that have emerged from current best practices, historic precedents, and field analysis of the CBD and its open spaces.

Size

The large green spaces recommended are at least one half acre, similar to the former artificial turf site (0.64 acres) at the intersection of Fenton Street and Ellsworth Drive. Although the artificial turf site was rejected in favor of civic center that includes a grand hall, landscaping, and outdoor skating rink, it was a popular space and its characteristics informed the guidelines' inventory, research, and recommendations.

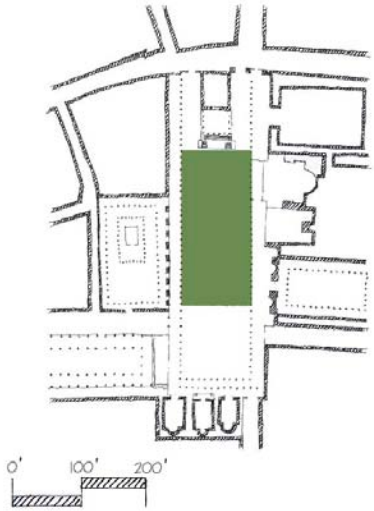
Historic urban spaces confirm that the turf site happened to have close to ideal proportions. Staff examined open spaces in Africa, Europe, and the United States (Appendix 2), and found a similarity in shape and size. They are often rectangular and between one half and one acre.

The European precedents, particularly Roman forums, were built following similar sizes and shapes. The forum at Pompeii is 0.61 acres, the Roman forum Timgad in northern Africa is 0.53 acres. The Piazza Novembre IV in Perugia, Italy, built over an original Roman forum, is 0.78 acres and is similar in building enclosure, size, and relationship to the street, as the former artificial turf field in Silver Spring.

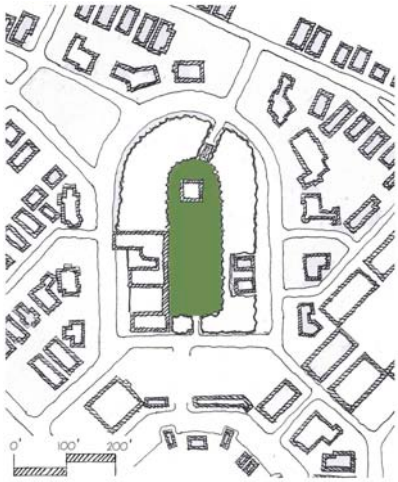
According to Camillo Sitte, the Roman forum was intended as a theater, where activity in the center space could be easily viewed. This supports the observation made about similarly sized contemporary spaces; they are large enough to allow individual anonymity but small enough to allow easy recognition of someone on the other side of the plaza. A space of this size also works for shows and activities.

In *Life Between Buildings*, Jan Gehl, a planner from Copenhagen, states that at about 325 feet people start to become recognizable as individuals, a range he refers to as the social field of vision. At 250 feet to 325 feet, it is possible to determine gender, approximate age, and activities. It is also possible to recognize people based on their clothing and manner of walking. 250 feet is the minimum distance for spectators to view sporting events. At 100 feet, one can begin to perceive people as individuals; facial features, hair styles, age, and persons only met infrequently can be recognized. Many of the open space precedents examined have dimensions that fall within this range of 250 to 100 feet, forming a space of about one half acre.

A review of successful green urban spaces in North America appears in Appendixes 2 and 3. Though their dimensions vary—from 1.90 acres at Mount Vernon Square, Baltimore to 7.85 acres in Washington Square, New York—there are green spaces similar in size and configuration to the forums and piazzas mentioned above. For example, the open space in Seaside, Florida is a close approximation of the forum in Pompeii in its size, shape, and the height of surrounding buildings. Other examples include Santa Fe Plaza in Santa Fe and O'Donnell Square in Baltimore (0.73 and 0.61 acres respectively), which are both well-used open spaces, activated by shops and restaurants around the edges.



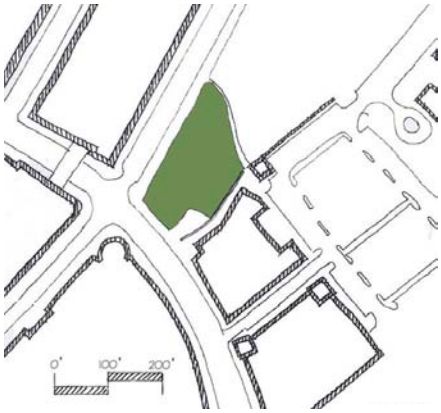
The Forum, Pompeii is approximately 0.61 acres



In Seaside, Florida, the neighborhood school overlooks the Lyceum, a space about the same size as the Forum at Pompeii.

Although there is no single size required for a successful green space, historic precedents indicate that plazas of a roughly rectangular shape between one half and one acre can be effective in urban settings. Human scale has not changed over time, validating the use of historic precedents to illustrate design principles relevant for today.

Piazza IV Novembre, Perugia, Italy, was built over original Roman forum and is about 0.78 acres



The former artificial turf in Silver Spring is about the same size, 0.64 acres

Enclosure

The green spaces proposed should have a degree of enclosure created by a building wall or street edge on at least three sides. Bryant Park's green lawn is enclosed by the library on one side and by a double row of London Plane trees. Building walls provide a second level of enclosure. These enclosures frame and contain the space. All of the examples discussed above have a high degree of enclosure.

Behind a more than 20-foot setback, this building does little to define the street or space

Continuous walls provide enclosure and a sense of comfort for pedestrians, and also help make the space distinct. People are attracted to places that have clearly delineated edges and limited openings, in other words, outdoor living rooms, well defined spaces characterized by street walls.[14]

When the continuous facades of the street walls are broken by too frequent openings, the enclosing and comfort-giving effect of the street wall is violated. Similarly, public use spaces are often designed without a sense of enclosure, but rather conceived as a foreground or entryway to a building. The net effect is a streetscape characterized by a sense of placelessness that derives from the lack of boundaries or definition.

Visibility

The green spaces need to be visible from surrounding streets for security and interest. A visible space is more likely to be used than a hidden one. The former artificial turf site in Silver Spring was highly visible from the surrounding streets and had no obstructions to the views into and out of the park. In a way, it was an extension of the sidewalk. In Bryant Park, visibility and access were improved by limbing up trees, removing hedges, and adding new entryways to attract users and discourage illegal activities.

Connection

Any successful green space must be connected and easily accessible with multiple access points to surrounding streets and sidewalks, mid-block connections, and proximity to transportation. New York City's Central Park exemplifies this principle by having numerous access points on every side of the park, and by efficiently accommodating various transportation modes including cars, buses, bikes, and pedestrians. This park is within walking distance to various transit and bus stops, which helps make it accessible to a larger community.

Activation

Activating a site with surrounding uses and planned activities integrates it into community life. Union Square Park is surrounded by retail, hotel, and theater uses that draw people to the area and encourage them to use the park as a destination or as a cut through. Bryant Park hosts numerous events and activities throughout the year. The Post Office Square benefits from the restaurant and coffee shop within the park, which complements activities at the park. As well as surrounding and programmed uses, artwork and water features that draw the eye and create ambient sound can also activate a space.

[14] *Suburban Nation: the Rise of Sprawl and the Decline of the American Dream, Duany, Plater-Zyberk, Speck, North Point Press, New York, 2000, pgs. 74-75*

A new park in a blighted community will not, on its own, renew that neighborhood. Green spaces are only as successful as the neighborhoods they are located in. Jane Jacobs noted that successful parks are characterized by surrounding residential, retail, and office uses, which generate a mix of park patrons at different times of day. In addition, parks should be located where focal points of city life "...cry out for close-by neighborhood parks or public squares." She adds that successful sites are common meeting places that add character to their neighborhoods. The sites recommended in these guidelines fulfill these goals.

Green

A portion of the public use space, ranging between one half and one acre, should be consolidated green area, such as lawn. Greenery is important for several reasons. First, lawn allows certain activities, such as picnicking, sun-bathing or kicking a ball that the same area paved will not accommodate. It is hard to imagine the activities listed above taking place at Post Office Square if the lawn were replaced with asphalt.

Without its green lawn, Post Office Square would create a different environment for users

Second, greenery has a beneficial effect on physical and psychological health and surgical patients have been shown to recover quicker.[15] A Dutch study found that green space plays a positive role in reducing stress and restoring a sense of physical and mental well being.[16] The health benefits of nature—living near a city park, an agricultural area, or a forest had an equally wholesome effect.[17]

Third, environmental benefits of green space include ameliorating the heat island effect, helping filter rainwater that would otherwise run off into storm drains, and providing wildlife habitat.

[15] *The Benefits of Park:, Why America Needs More City Parks and Open Space,* Paul M. Sherer, Trust for Public Land, 2006
[16] *Morbidity is Related to a Green Living Environment*, Maas, Verheij, de Vries, Spreeuwenberg , Schellevis, Groenewegen, Journal of Epidemiology and Community Health, December, 2009, Vol. 63, No. 12
[17] Sherer, pg. 15

Site Analysis and Recommendations

Various sites in the Silver Spring CBD could accommodate the principles described above and have been prioritized based on their potential to provide a large green space. Prioritized sites are accompanied by conceptual illustrations that are not meant to show or restrict how the sites will be developed. As the CBD is built out, these priorities will change.

Table 1 Strengths, Weaknesses, Opportunities, and Threats (SWOT Analysis) of Recommended Sites

Map Key	Site Description	Potential Users	Strengths	Weaknesses	Opportunities	Threats (Challenges)
1	Parking Lot 3, between Thayer and Silver Spring Avenues	Fenton Village residents, employees, and visitors	Large consolidated area, County ownership, core of Fenton Village	Creating a public-private partnership may be difficult; locating successful retail on interior street	Mixed-use development around a large green space with underground parking; retail fronting the green space; public-private partnership	Parking needs during construction of parking facility; financial investment required; economy not conducive to large developments at this time
2	Parking Garage 4, between Silver Spring and Sligo Avenues	Fenton Village residents, employees, and visitors	Large consolidated area; County ownership; core of Fenton Village; County is seeking a partnership to redevelop large dilapidated parking structure	Creating a public-private partnership may be difficult; existing parking structure would be demolished to create green space	Mixed-use development around a large green space with underground parking; retail fronting the green space; public-private partnership	Parking needs during construction; financial investment required; economy may not be conducive to large developments at this time
3	Giant Parking lot on East-West Highway	Residents, employees, and Metro users	Large consolidated area; surface parking–no structures to demolish; surrounded by large numbers of existing residential units; close to the Silver Spring Metro	Underused land in prime location; limited street access and visibility; no existing street frontage, though new streets will provide both visibility and street frontage	Dense, transit-oriented, mixed-use development; central green space framed by buildings with ground floor retail and residential/ office above; underground parking or aboveground structured parking	Parking needs of shopping center during construction; Financial investment; land assembly; Giant recently renewed 30-year lease

Table 1 Strengths, Weaknesses, Opportunities, and Threats (SWOT Analysis) of Recommended Sites

Map Key	Site Description	Potential Users	Strengths	Weaknesses	Opportunities	Threats (Challenges)
4	Whole Foods Market Parking Lot	Residents, employees, and visitors in the CBD Core	Surface parking – no structures to demolish; large consolidated area in CBD Core; adjacent to Civic Building	No street frontage except for Wayne Avenue; additional street access will have to be incorporated into design; Privately owned	Underground parking and above-ground green space; complement recreational uses at adjacent Civic Building; transition between residential neighborhoods and CBD ; retail fronting the green space	Parking needs during construction; financial investment required
5	Parking Lot on Lee and Cohen properties	Employees, Metro users	Located a block away from Core; aligned with Fidler Lane; access points to Fenton Street and Georgia Avenue	Cost of land may prohibit acquisition of site; parcels under separate ownership	Mid-block green connector aligned with Fidler Lane; pedestrian connection to Metro; retail fronting the green space	Parking needs during construction; financial investment required
6	Existing stream valley at the Falklands	CBD, D.C., and adjacent communities' residents	Natural stream valley; last vestige of natural environment in the CBD	Streambed erosion due to stormwater runoff from existing impervious surfaces must be mitigated; enclosure by existing garden apartments may create perception of a private park	Stream valley restoration and preservation; a truly natural park in a dense urban environment	Creation and maintenance of a public park on private land; historic designation may prevent redevelopment
7	Discovery Garden	Residents, employees, and Metro users	Large public green space; located at the core of the CBD; a block from the Silver Spring Metro; southern exposure	Enclosed by a fence with gates; no activating uses; not perceived as public	Edge treatment to activate street and increase the perception of public space; removal of fence to open the garden to the public	Owner concerns for safety and maintenance if fence is removed
8	Land between Kennett Street and East-West Highway	South Silver Spring residents, Discovery employees, and visitors	Total site is 1.75 acres; plans on DHCA-owned parcel to build a pedestrian street with possible vehicular access; over 800 new residential units in immediate vicinity	Multiple ownerships	A green park could be incorporated with a mixed street as an amenity; retail fronting the green space	M-NCPPC to negotiate land purchase from multiple owners; requires land assemblage

Table 1 Strengths, Weaknesses, Opportunities, and Threats (SWOT Analysis) of Recommended Sites

Map Key	Site Description	Potential Users	Strengths	Weaknesses	Opportunities	Threats (Challenges)
9	Existing self-storage facility on Newell Street	Residents of South Silver Spring, and D.C.	Adjacent to D.C. boundary line; single ownership; good street frontage, access and visibility	CBD periphery; existing structures to be demolished and businesses relocated	Gateway to South Silver Spring; gathering area for D.C. and CBD	Business relocation; availability of compatible space
10	Land at the intersection of East-West Highway and Fenton Street	Residents of Fenton Village and adjacent residential community	Edge of the CBD; across from Fenton Urban Park	Multiple-ownership; existing structures to be demolished	Gateway to the CBD and Fenton Village; addition to the existing park; adjacent lots can be assembled to form large park; transition to adjacent residential communities	Multiple-ownership and land assembly
11	Land surrounding Progress Place	Future residents of the Ripley District and users of surrounding retail	Direct access and frontage off Georgia Avenue; centrally located in the CBD; M-NCPPC and private ownership	Existing structures to be demolished; single access point from Georgia Avenue otherwise bound by CSX tracks and buildings; noise from tracks	In the Ripley District; potential site of a large mixed-use development; retail fronting the green space	Large site with single access from Georgia Avenue may compound traffic; relocation of Progress Place
12	Silver Place	Residents of adjacent communities, M-NCPPC employees	Site mostly owned by M-NCPPC located at the northern edge of the CBD	Existing structures to be demolished and businesses accommodated during construction; peripheral location in the CBD; proximity of two existing parks (Fairview and Woodside)	Underground parking and above-ground green space as the central element of a mixed-use development with office, retail, and residential; state-of-the-art LEED facility; setting the standard for new development in the County; public-private partnership; northern gateway to CBD	Financial investment; community resistance to a large mixed-use project on the edge of the CBD and adjacent to residential neighborhoods
13	Jesup Blair Park	students, residents, commuters	Large size; recently renovated; programmed uses	Regional draw; potential captive audience; proximity to future potential metro stop; southern gateway to CBD	Regional draw; potential captive audience; proximity to future potential Metro stop; southern gateway to CBD	Lack of existing adjacent retail; edge of CBD; poor access due to existing barriers (Rt. 29, railroad, fences)

Criteria developed to prioritize the thirteen recommended sites reflect the design principles and include:

- number of residential units within 800 feet of the site or a three-minute walk
- proximity to existing parks
- ease of access and connectivity
- ease of implementation
- proximity to transit
- whether it serves the district.

Some the criteria considered additional factors. For example, ease of access and connectivity considered existing or proposed barriers such as fencing, busy streets, or dramatic grade changes; views into and out of the site; number of access points to the site and mid-block connections; and adjacency to existing or future trails.

Each site was ranked from one to five on each category, with one fulfilling the category to the least extent and five to the greatest. The sites with the highest total points are designated the top priorities.

Several assumptions are established with this ranking system. The higher the number of residential units within 800 feet of the site (less than a three-minute walk), the greater the demand and need for a green space, and the ranking would be five. Proximity to another park is ranked one, since the desired urban form calls for evenly distributed green spaces, and two green spaces close to each other might compete. Ease of implementation takes into account factors like ownership, current uses, estimated costs, and current market conditions. This factor is the most volatile and difficult to estimate.

Table 2 Ranking of the potential sites for large green spaces

Map Key	Green Space/District	No. residential units within 800 feet (existing and approved)	Proximity to existing parks	Existing and Potential Connections	Ease of Implementation	Transit proximity	Serves district	Score
1	**Parking Lot 3**	1,626	**No**	5	5	**< 800'**	1	25
	Fenton Village	4	5			5		
3	**Giant Food Parking Lot**	2,150	**No**	4	2	**< 800'**	1	21
	West Silver Spring	5	4			5		
11	**Progress Place parking lot**	716	**No**	4	3	**800'**	2	20
	Ripley District	2	4			5		
6	**Falklands Stream Valley**	1,382	**No**	3	5	**1,400'**	1	19
	West Silver Spring	3	4			3		
8	**Lots between Kennett Street and East-West Highway**	1,776	**No**	5	1	**2,500'**	1	17
	South Silver Spring	4	4			2		

Table 2 Ranking of the potential sites for large green spaces

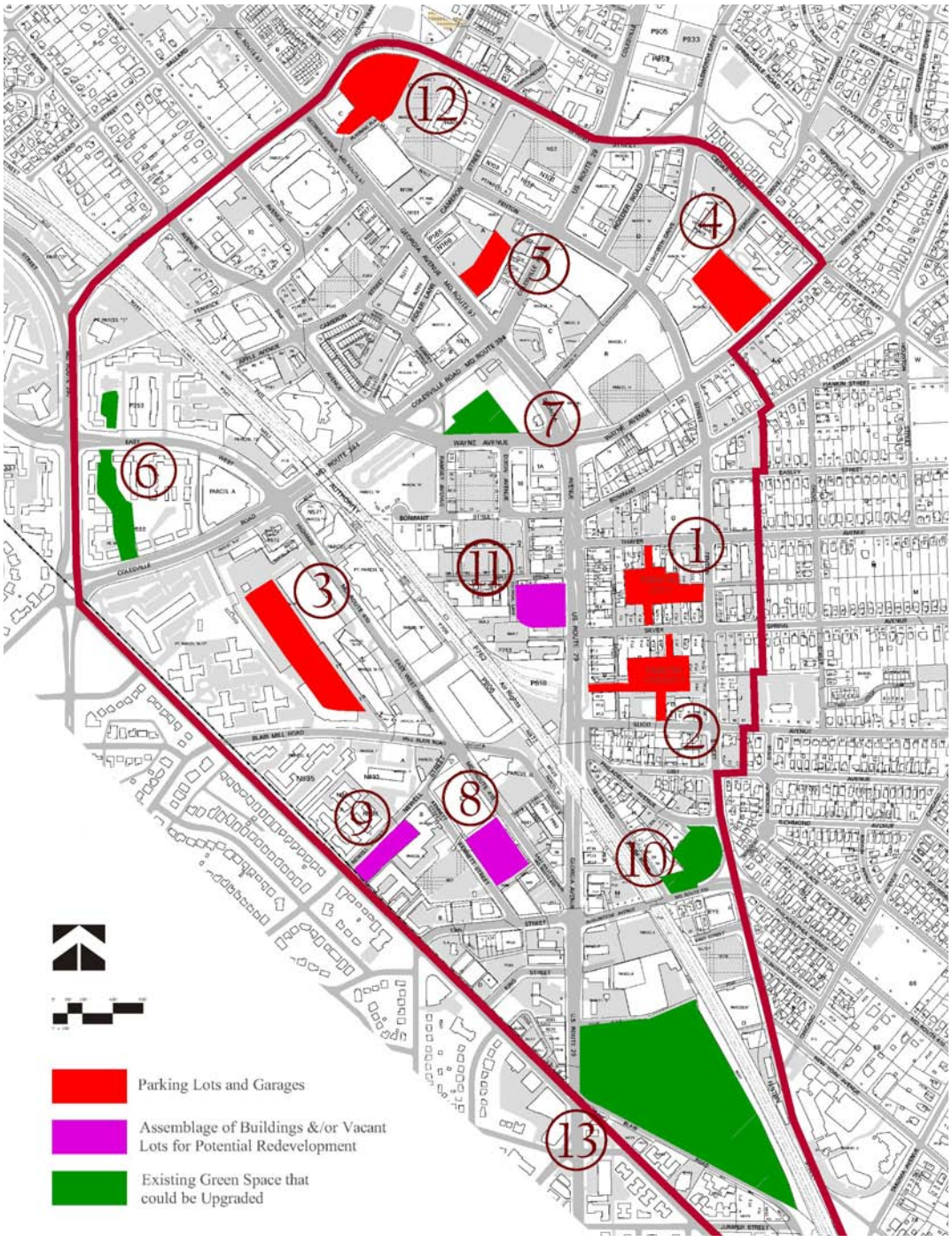
Map Key	Green Space/District	No. residential units within 800 feet (existing and approved)	Proximity to existing parks	Existing and Potential Connections	Ease of Implementation	Transit proximity	Serves district	Score
10	**Fenton Village Gateway Park**	550	**Yes**	5	5	**2,200'**	1	16
	Fenton Village	2	1			2		
12	**Silver Place**	1,605	**Yes**	4	4	**2,400'**	1	16
	North Silver Spring	4	1			2		
4	**Whole Foods Parking Lot**	835	**Yes**	5	1	**<800'**	1	15
	Core	2	1			5		
9	**Newell Street Self-Storage**	1,776	**No**	3	1	**2,600'**	1	15
	South Silver Spring	4	4			2		
7	**Discovery Gardens**	351	**No**	3	1	**<800'**	1	15
	Core	1	4			5		
5	**Lee and Cohen**	1,834	**Yes**	2	1	**1,300'**	1	13
	Core	4	1			4		
2	**Parking Garage 4**	867	**Yes**	4	2	**1,600'**	1	13
	Fenton Village	2	1			3		
13	**Jessup Blair Park**	200	**No**	2	1	**3,800'**	1	10
	South Silver Spring	1	4			1		

The top priority sites (Parking Lot 3, Giant Food parking lot, land surrounding Progress Place, the stream valley at Falklands, and lots between Kennett Street and Route 410) are large enough and well-located to meet the demand for a large green space in each of the CBD districts.

The lowest priority sites include Jesup Blair Park due to the recent renovations and low number of residential units within the immediate vicinity and Parking Garage 4 in Fenton Village due to the proximity of Parking Lot 3 and the difficulty of implementation. The Discovery Gardens has few residential dwelling units within 800 feet and has implementation challenges. The parking lot for the Lee and Cohen properties is too close to the intersection of Georgia Avenue and Colesville Road, where other more intense uses are appropriate. It is also near two existing parks (Fairview Park and Woodside Park) abutting the CBD's northern edge.

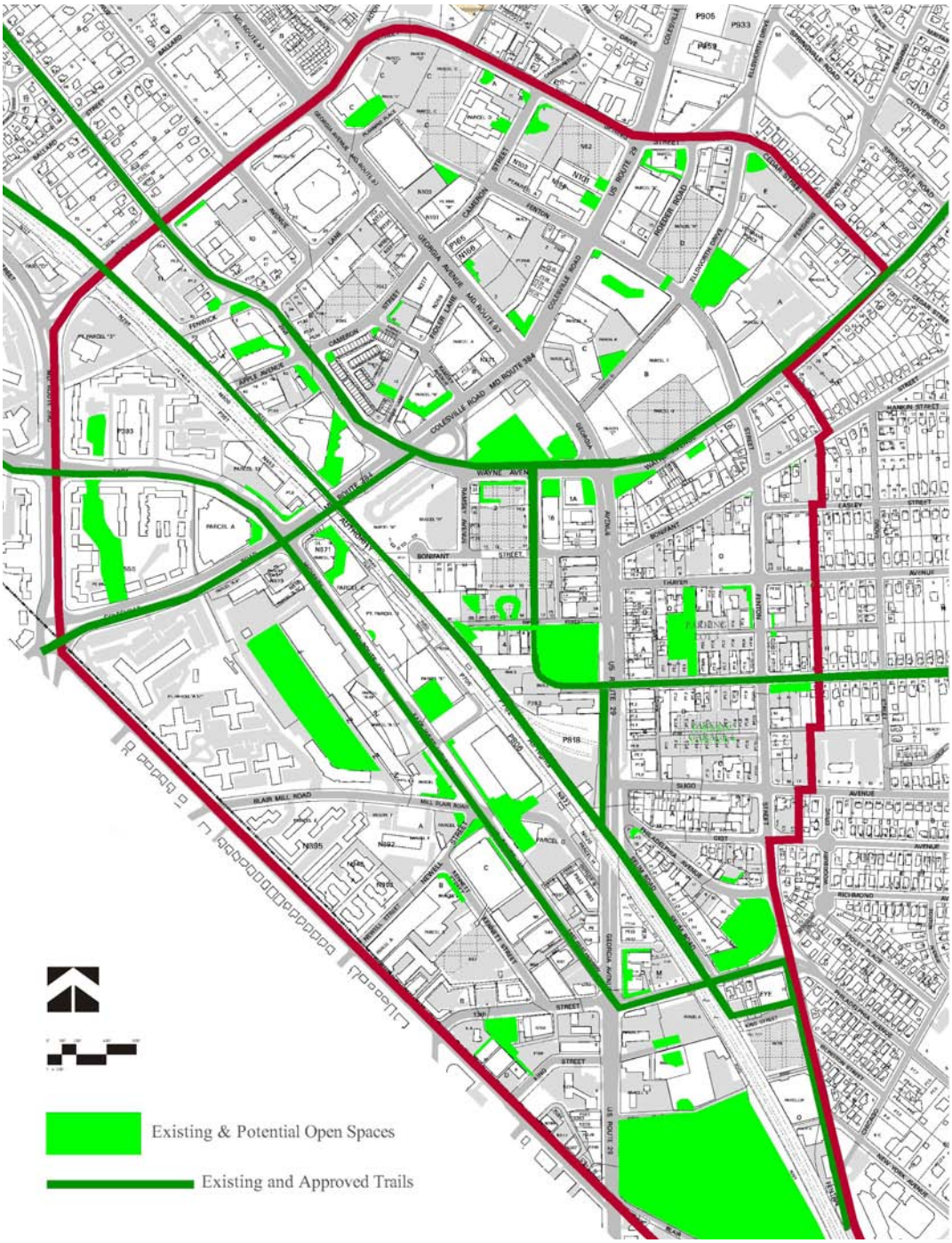
A separate ranking was also calculated without the ease of implementation criteria to eliminate the volatility of the results and separate the priorities from market conditions. But the ranking did not change dramatically; the five priority sites would still be the same. Only the stream valley at the Falklands ranked lower and tied with the Whole Foods parking lots, the Newell Street self-storage facility, and Discovery Gardens. The lowest priority sites would still be Jesup Blair Park, Parking Garage 4, Silver Place, and Fenton Village Gateway Park.

Map 2: Potential Green Space Sites



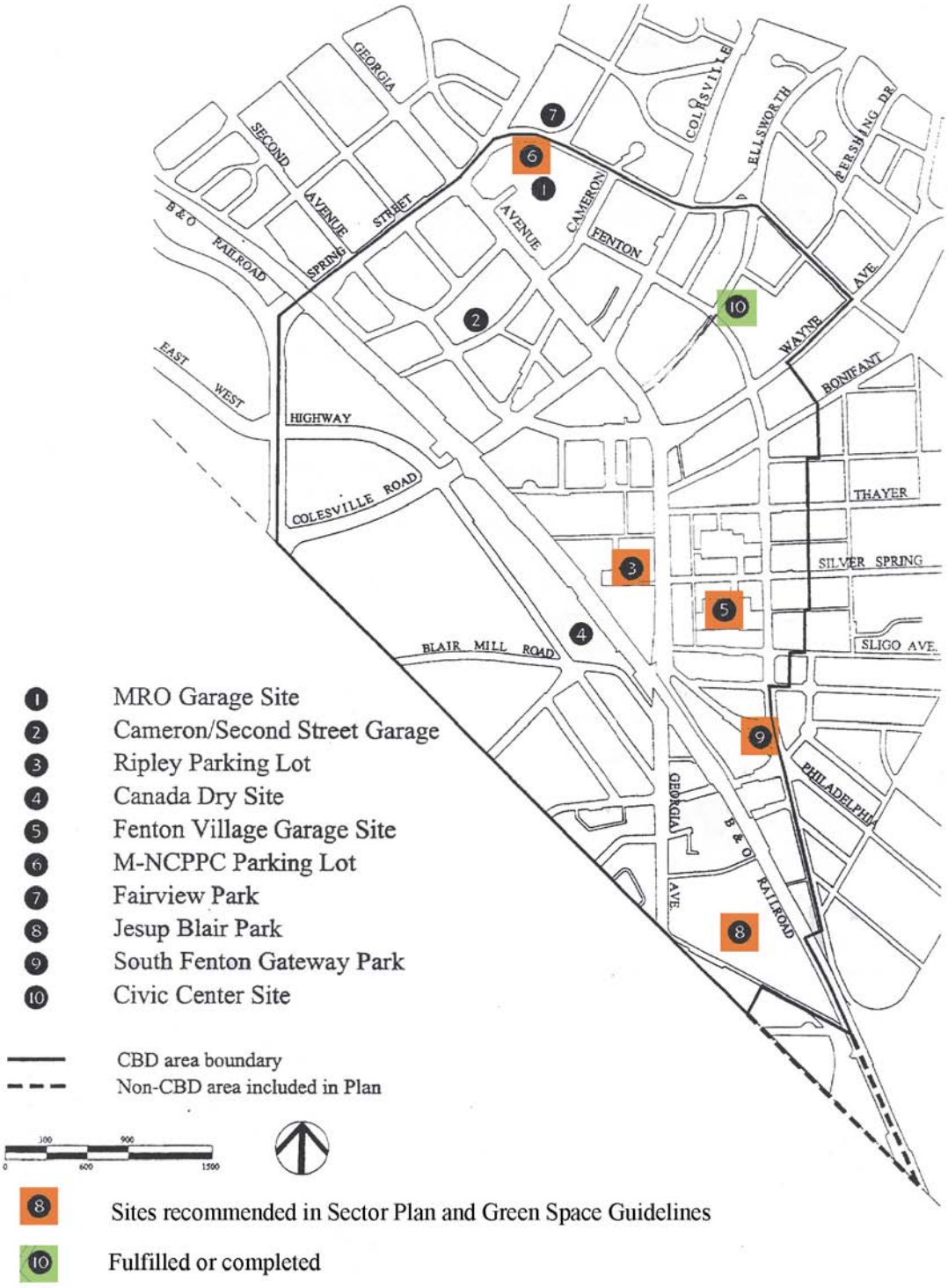
The recommendations and concepts for the top five sites are consistent with the Sector Plan's identified park sites, major links, and potential opportunities for urban recreation. When the priority sites are mapped with the CBD's existing open spaces, the resulting system becomes a hierarchy of well-distributed open spaces linked by existing and proposed bike trails (see Map 3).

Map 3: Green Network



Map 4: Existing and Proposed Parks and Open Space, 2000 Silver Spring Sector Plan

Map 5: Potential Siting Opportunities for Urban Recreation, 2000 Silver Spring Sector Plan



Surface Parking Lots

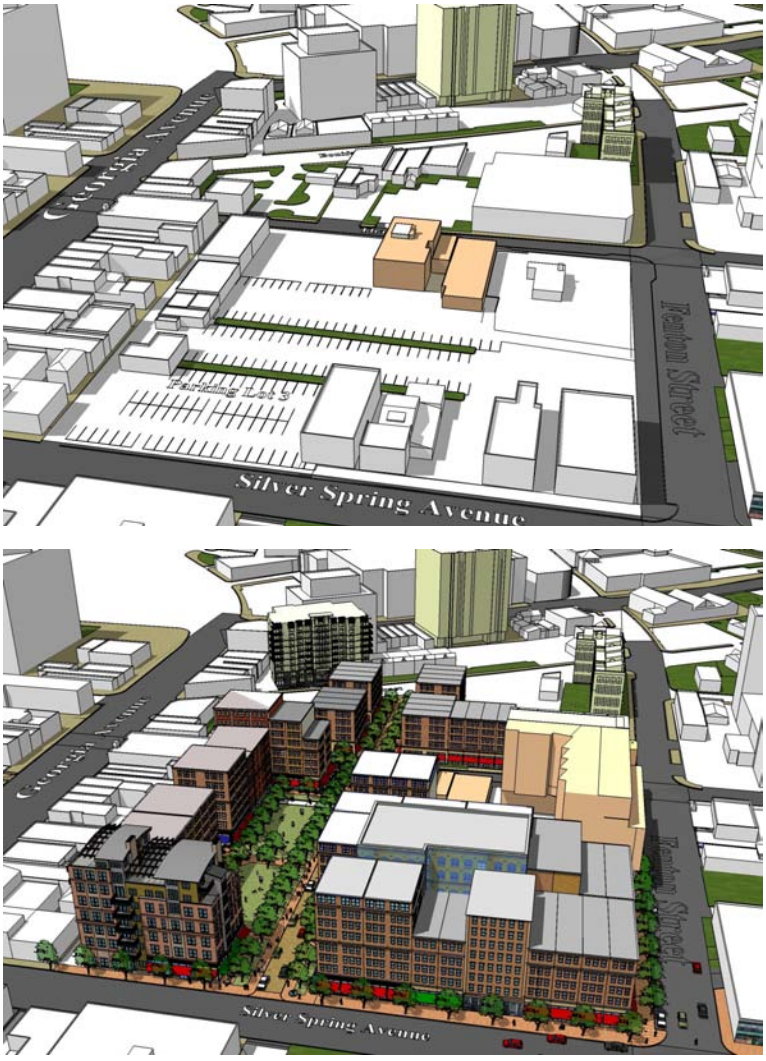
Parking Lot 3, Fenton Village

An approved optional method project plan, known as Studio Plaza, will redevelop this County-owned surface parking lot between Thayer and Silver Spring Avenues into a mixed-use development. This public-private partnership leverages publicly-owned land in exchange for a significant public amenity integral to the proposed development. The approved project plan conforms with these guidelines, and the future site plan application will be reviewed for conformance with the project plan approval. http://www.vimeo.com/13555934

The project's critical elements include:

- approximately one half-acre community green at street level
- activation by surrounding retail and by office/residential uses above
- midblock vehicular, pedestrian, and bicycle access, consistent with the Sector Plan
- all public and private parking will be placed below grade with a percentage of the green as pervious

Parking Lot 3, potential redevelopment



Giant Food Parking Lot, South Silver Spring

This strip mall is anchored by a Giant Food store, located on East-West Highway, very close to the Silver Spring Transit Center. Its large parking lot is shared by Giant Food, small retailers, and two nearby high-rise apartment buildings. The existing CBD-R2 zone allows up to 5 FAR of mixed-use development or a maximum of 450,000 square feet. One of the many challenges associated with the implementing this concept is satisfying the lease agreements with current tenants, including Giant Food. For these reasons, the green open space will likely occur only at the time of redevelopment of the commercial portions of the Blairs complex.
http://www.vimeo.com/13555163

The concept's critical elements include:

- a large green space (one half to one acre) at street level activated by surrounding retail and by office/residential uses above
- a new street grid that extends Draper Ave and divides this super block into a well-connected, walkable environment, as recommended by the Sector Plan
- below –grade parking that takes advantage of the existing grade. If above ground, parking should be hidden or "wrapped" by residential and retail space.

Giant Food Parking Lot, potential redevelopment

Reclaimed Streams

Falklands Chase Stream Restoration

The natural stream valley in the Silver Spring CBD located at the Falklands Chase apartments between East-West Highway and Colesville Road has been degraded by urban runoff. It is a candidate for stream-bed restoration that would include re-grading the stream floor, rock weirs to prevent erosion, and natural vegetation to replace invasive species. In addition, stormwater released into existing stream valleys would be controlled to minimize erosion.

The stream valley still exists today and is the last vestige of the natural environment that once existed throughout the area. It is a valuable natural asset in the CBD and should be preserved and restored, as the stream bed has become degraded over the years from deep scouring by excessive stormwater runoff.

The concept's critical elements include:

- large natural green space surrounded by garden apartments
- new connections to East-West Highway and Colesville Road
- expanding the stream valley renovation into the north parcel that will include an additional large green space.

Falklands Chase proposed stream restoration

Property Assembly

Land Surrounding Progress Place, Ripley District

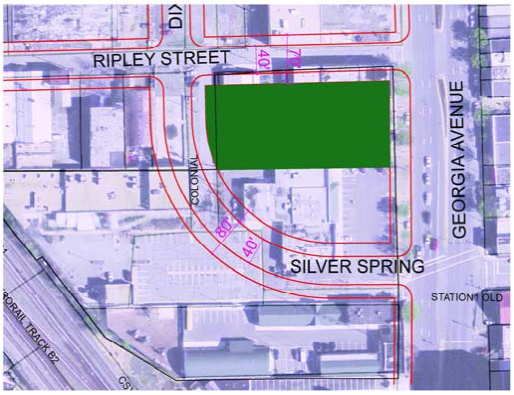
The Sector Plan envisions the Ripley District as a revitalized, mixed-use district with its primary focal point a high-density commercial development organized around an open space. It will connect Georgia Avenue and East-West Highway with bike trails and pedestrian routes. Currently this district does not have a large open space. Two mixed-use residential projects totaling more than 600 units are approved on Ripley Street just to the north. A park, which could be placed in various locations, would serve this immediate residential population as well as workers in the Ripley District. http://www.vimeo.com/13678157

The concept's critical elements include:

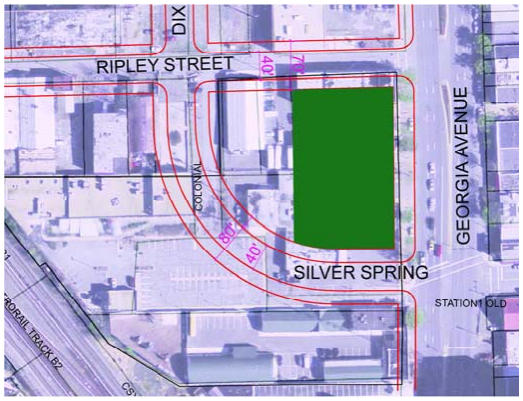
- large green space surrounded by mixed-use buildings
- new connections to surrounding streets
- excellent visibility from Georgia Avenue
- activation by ground floor retail.

Ripley District, potential redevelopment

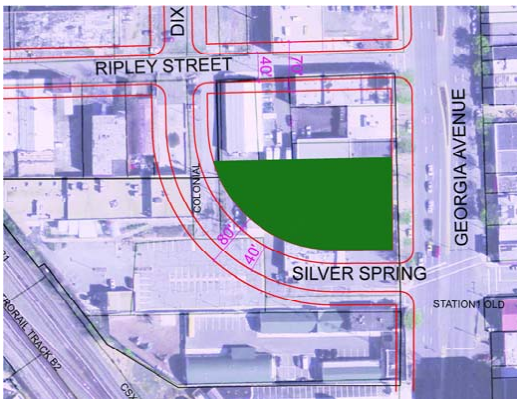
The potential configurations for a green space in the Ripley District vary in size depending on their location.



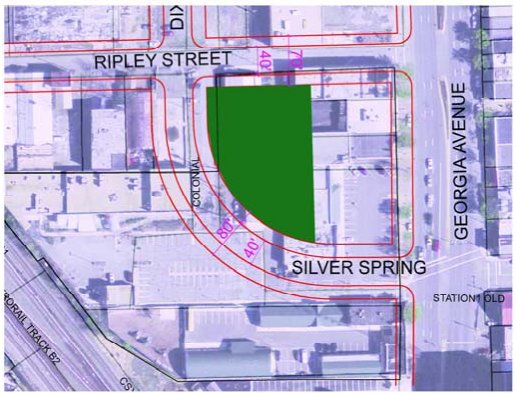
Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: .75 Acres



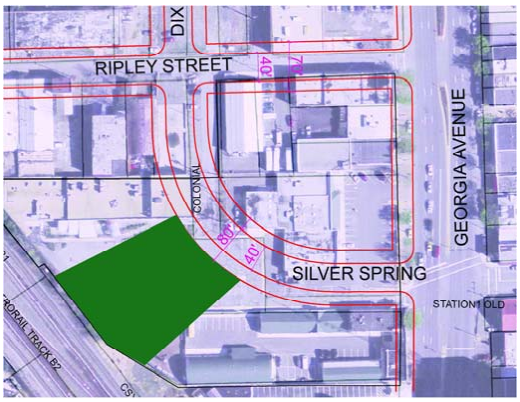
Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: .75 Acres



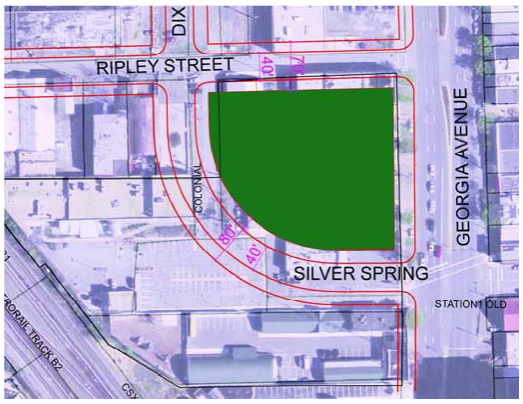
Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: .64 Acres



Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: .60Acres



Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: .70 Acres



Gross lot Area: 4.22 Acres Net Lot Area: 3.58 Acres
20% Net Lot = .70 Acres Green Space: 1.23 Acres

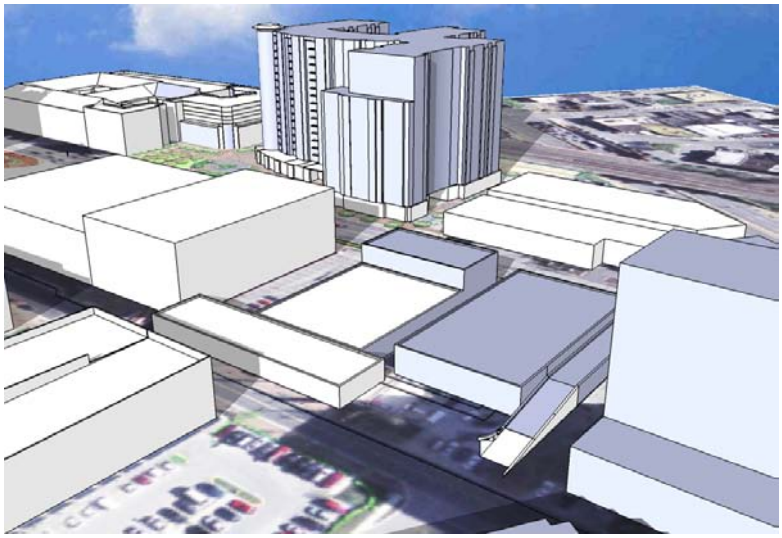
Land between Kennett Street and East-West Highway

Three properties located between East-West Highway (MD 410) and Kennett Street could be assembled into a total of approximately 1.75 acres. The southernmost parcel, which was acquired by DHCA, has a new pedestrian connection with vehicular access between East-West Highway and Kennett Street. http://www.vimeo.com/13678340

The concept's critical elements include:

- significant open lawn
- large green space surrounded by mixed-use buildings
- activated by street level retail and at least 1,100 new residential units (800 under construction and 300 approved)
- new pedestrian and vehicular connection between East-West Highway to surrounding streets
- connectivity to Arts Alley and retail uses in the Silver Spring Gateway project.

Land between Kennett Street and East-West Highway, potential redevelopment



Public Redevelopment Projects

Although public projects did not rank highest on the priority chart, they deserve attention because they can be examples of how to implement recommendations.

Silver Place, the Montgomery County headquarters of M-NCPPC at Spring Street and Georgia Avenue, is currently occupied by an office building and a large surface parking lot. The site could accommodate a mixed-use development of residential, office, retail uses, structured parking, and a large integral green space. Redevelopment would provide a community amenity and use urban land more efficiently by increasing the density. Because Fairview and Woodside Parks are across the street, the new park would have to be designed and programmed to complement these neighborhood parks.

proposed Silver Place redevelopment

The Fenton Gateway Park on Fenton Street and Philadelphia Avenue is owned by M-NCPPC and has recently been expanded through the acquisition of adjacent residential lots. Once the land is assembled, this park will act as a gateway to the CBD, a community gathering area, and a graceful transition between the CBD and the adjacent residential communities.

Creating large, green spaces in urban areas is a challenge given the scarcity of urban land, but there are tools in place that can help implement all the recommendations. They each have advantages and disadvantages and therefore, they should be used in combination.

Optional Method Development

The optional method of development has been the most significant tool in creating the CBD's existing public use space infrastrucutre. In exchange for density bonuses, developers provide increased public use space and other amenities. Whereas the minimum required open space for standard method projects is 10 percent, optional method projects are required to provide 20 percent of the net lot area. In addition, the applicant is also required to provide an additional amount of off-site amenity space, usually in the form of streetscape improvements.

Since June 1981, the total on- and off-site public space provided in the CBD through optional method development has averaged from 40 to 60 percent of the net lot area. While this method will continue to be a valuable tool for creating public use space, it should be used in concert with other tools to create large green spaces in the Silver Spring CBD.

Off-site Transfer of Open Space

The off-site transfer of open space allows the optional method-required open space to be transferred to another site in the CBD. This is a key tool for grouping several small open spaces into one large open space and would enable small sites that would otherwise be standard method to redevelop under the optional method and create a large, consolidated public use space.

Subsequent to the ZTA 07-10 approval, off-site transfer of public use space is allowed anywhere in the CBD. The challenge is to locate and work out the logistics of potential receiving sites, which are not owned by the M-NCPPC and often have multiple ownerships.

Public Use Space Amenity Fund

Used in conjunction with the transfer of public use space, the amenity fund allows standard or optional method projects to dedicate their entire net lot area to the building envelope without having any public use space on site. Instead of transferring the required public use space to another site within the CBD, the applicant pays into an Amenity Fund used to finance land acquisition and green space creation in the CBD.

Leadership in Energy & Environmental Design (LEED)

Montgomery County encourages the application of LEED by requiring that new commercial, non-residential, and multifamily residential developments of at least 10,000 square feet and at least four stories become LEED certified. This tool should be used in conjunction with the above mentioned tools to support and reward the incorporation of green spaces into a proposed project.

Recreation Guidelines

These guidelines help determine whether recreation facilities for a residential community will be adequate by calculating demand points for each population and housing type, and comparing those values to supply points for each recreational facility. If they are within 10 percent for each population category, the proposed facilities are considered adequate.

The guidelines encourage a range of active and passive recreational facilities and often incorporate a green space component. They also establish a framework for consistent and safe development of these facilities by addressing area, setbacks, activities, screening, landscaping, and design specifications.

The current Recreation Guidelines are tailored for suburban residential development; updating them will better address the needs for urban facilities. Revised criteria should address distance, credit of off-site facilities, and address maintenance costs for use of adjacent parks. They should become a tool for increasing the amount of green space in the Silver Spring CBD because they require turf and lawn open space for some of the facilities. For example, the green space recommendations in the recreation guidelines for an open play area with a minimum of 10,000 square feet can help meet the green space guideline recommendations. This type of facility provides supply points to all age groups, at the same time that it provides a large green space for the CBD. Other facilities that require 'green areas', turf or lawn areas include trails through natural areas, natural areas, and community gardens.

Environmental Guidelines

State law requires all local governments to protect sensitive areas during the planning and development process. The Environmental Guidelines cover the protection of the County's natural resources, such as streams and their buffers, wetlands, steep slopes, and floodplains. It also covers site imperviousness considerations that apply to specific parts of the county. The Guidelines are available online at: montgomeryplanning.org.

Stormwater Management

Stormwater laws and regulations require Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP). ESD involves a more integrated approach to site design and stormwater management. It is based on first minimizing development footprint and impervious surfaces, then managing stormwater as much as practicable using small-scale methods to treat and infiltrate water close to runoff sources. ESD to the MEP will apply to all new development (subject to grandfathering provisions) including creation of parks and open space.

Next Steps

These guidelines support the recommendations in the Silver Spring Sector Plan—the Wayne Avenue Green Trail, East-West Highway Promenade, and the Capital Crescent/Metropolitan Branch Bike Trail)—and supports the recommendations of the 1992 Silver Spring Streetscape Guidelines.

The next steps should include developing design guidelines for smaller hardscape public use spaces with the overall goal of enhancing the quality of spaces provided in the CBD. Currently, a significant number of public spaces in the CBD do not meet standards of design excellence and environmental goals. It is important to create a set of criteria to guide their design, development and implementation. It would also be useful to overlay these criteria on existing spaces and suggest re-development when needed. The result would be spaces that translate into a higher quality urban environment for the Silver Spring CBD.

appendices

The following background information is available online at
www.montgomeryplanning.org/community/ssgreenspace/index.shtm

Appendix 1	Private Projects (existing, under-construction, and approved) with Respective On Site PUS and Public Parks in the Silver Spring CBD (as of March 2010)
Appendix 2	Silver Spring On Site Public Use Space and Parkland
Appendix 3	Open Spaces in Africa, Europe, and the United States
Appendix 4	North American Green Spaces Comparison Chart
Appendix 5	Community Outreach, 2008 and 2010 meeting minutes
Appendix 6	Policy Background
Appendix 7	Bibliography

Acknowledgements

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Silver Spring CBD Green Space Guidelines

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