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Kenilworth Avenue and Town of Cheverly Industrial Study

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

14741 Governor Oden Bowie Drive, Upper Marlboro, MD 20772
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ABSTRACT

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Abstract: The Kenilworth Avenue and Town of Cheverly Industrial Study provides an implementation strategy for revitalizing this older industrial area. It offers recommendations on what industries or businesses may be appropriate for the area, how to attract these uses, and what infrastructure and environmental improvements may be required.

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INTRODUCTION

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

1 Introduction

1.1 Study Area

The Kenilworth Avenue and Town of Cheverly Industrial Study area is comprised of approximately 888 acres located in northwest Prince George's County (Map 1-1). The study area is located partly within the Town of Cheverly and adjacent to the Town of Bladensburg and the District of Columbia. The Cheverly Metrorail Station is located in the southeastern corner of the study area.

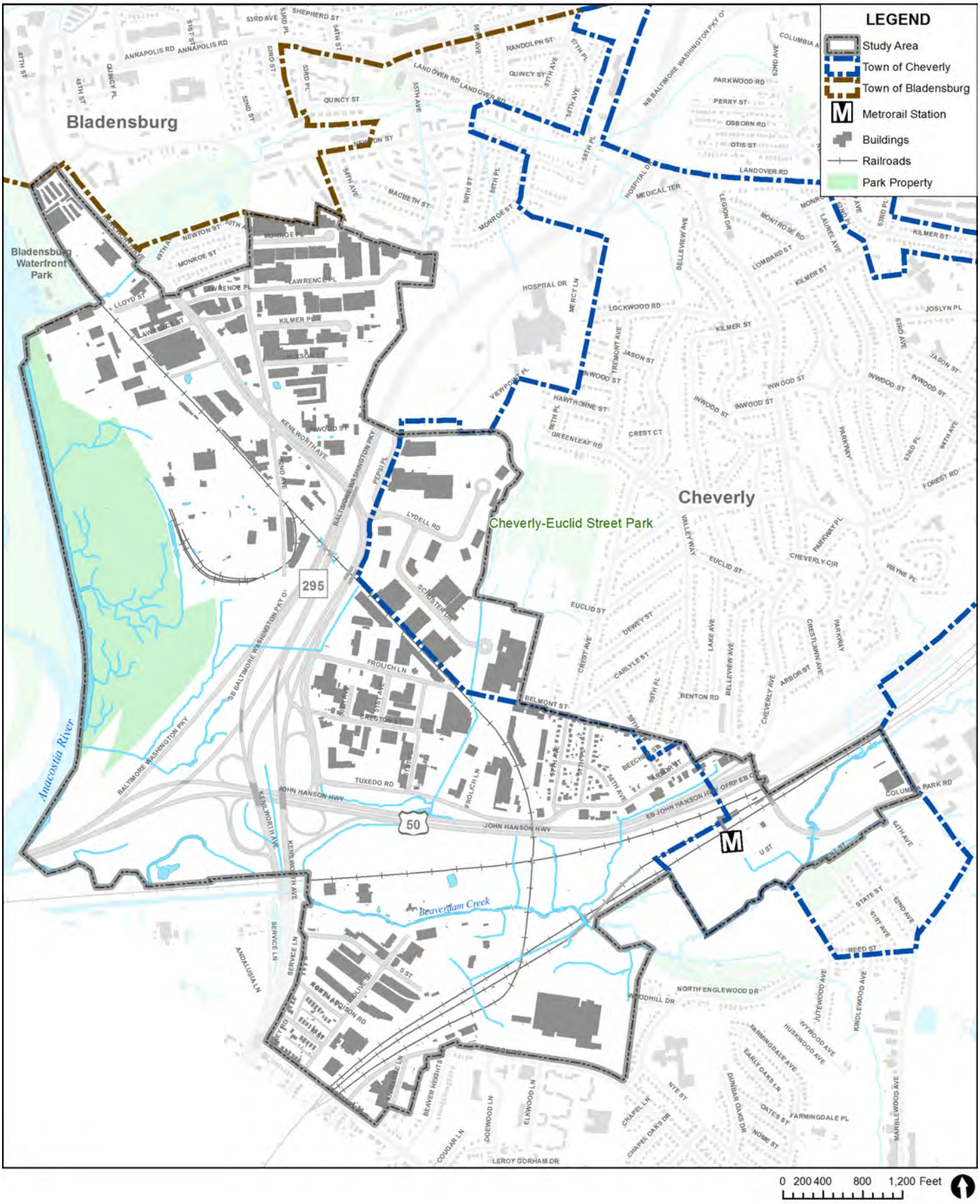
The study area is bisected by two limited-access highways—the Baltimore-Washington Parkway (MD 295) and US 50 (John Hanson Highway)—as well as multiple major rail lines, including CSX, Amtrak, and Metrorail. While these transportation corridors provide excellent connections regionally, they serve as barriers within the study area and limit connectivity within the area.

The Cheverly Industrial Park, which is located entirely within the Town of Cheverly, lies in the east-central portion of the study area, east of the intersection of Kenilworth Avenue (MD 201) and Lydell Road. The Tuxedo Industrial Park is located in the southeast part of the study area, north of Tuxedo Road and east of the CSX tracks.

The study area features a wide range of uses, including heavy and light industrial, residential, commercial, and parkland. In many cases, these uses are located adjacent to one another, with limited buffering between unrelated uses.

The Anacostia River, which forms the western border of the study area, is a significant but highly underutilized environmental resource. There is a sizeable swath of parkland, with connections to a regional trail system, on the west side of the study area adjacent to the Anacostia River. Bladensburg Waterfront Park is located just to the north of the study area along the river. Lower Beaverdam Creek, a tributary of the Anacostia River, is located in the southern portion of the study area, south of US 50.

Map 1-1: Map of the Kenilworth Avenue and Cheverly Industrial Study Area



1.2 Study Purpose

The Kenilworth Avenue and Town of Cheverly Industrial Study area has long served as a key piece of Prince George's County's industrial base and plays a vital role in supporting the economic vitality of the County and the region. However, as a result of ever increasing economic competition, the factors that contributed to the area's past economic success may not be sufficient to ensure economic growth in the future. Although the area includes a variety of uses that are important economic generators to the County, they have developed in a manner that does not serve to preserve the environmental assets of the area and is not sensitive to the surrounding context.

The objective of the Kenilworth Avenue and Town of Cheverly Industrial Study is to assess the areas and determine how they can be positioned to meet the needs of future industrial and employment trends while also leveraging the area's substantial environmental assets and being sensitive to other adjacent uses. To that end, this study assesses the existing industrial uses and their viability, explores what industries or businesses may be appropriate for the area in the future, and offers strategies for infrastructure and physical improvements that may help move the area toward its vision of a more resilient and sustainable next generation of uses.

1.3 Relationship to Area Plans

The project team reviewed a number of existing studies and plans that inform the planning efforts related to the Kenilworth Avenue and Town of Cheverly Industrial Study.

1994 Approved Bladensburg, New Carrollton and Vicinity Master Plan and Sectional Map Amendment

The master plan identifies many of the same issues that continue to be of concern to the current Kenilworth Avenue-Cheverly Industrial Areas planning effort, including challenging transportation connections, poor visual quality, lack of buffering between unrelated and incompatible uses, and protection of environmental resources. The plan encourages the provision of new job opportunities and the effective utilization of existing industrial sites and use of the Metrorail station as a focal point of commercial, office and community activities. The plan recommends prioritizing Maryland Industrial Development Financial Authority (MIDFA), Industrial Revenue Bonds (IRB), and other county, state and federal financial assistance programs to businesses seeking to locate within or undertake revitalization within designated areas. The plan also promotes the concept of an environmental envelope in the area, including a proposed open space network, in conjunction with Anacostia River restoration efforts.

2005 Approved Sector Plan and Sectional Map Amendment for Tuxedo Road/Arbor Street/Cheverly Metro Area

The sector plan envisions a neighborhood shopping street along Tuxedo Road/Arbor Street, from the intersection of Kenilworth Avenue, the Baltimore-Washington Parkway, and US 50 to Columbia Park Road. This revitalized activity center would serve residents' and employees' needs through provision of pedestrian connections to the Cheverly Metrorail station, mixed-use transit-oriented development, and an attractive and efficient industrial community at Tuxedo Road and Kenilworth Avenue. The plan proposes flexible land use and zoning regulations to encourage revitalization and redevelopment. The sector plan rezones the Metro station area from R-55 (One-Family Detached) to M-X-T (Mixed Use-Transportation Oriented) to allow for higher density, mixed-use development of office, retail and residential uses. The plan introduces a Development District Overlay Zone to regulate noxious uses in the industrial area north of US 50, with accompanying development district standards to regulate uses and design in the Arbor Street area.

2005 Approved Countywide Green Infrastructure Plan

The plan's purpose is to preserve, enhance, and/or restore an interconnected network of significant environmental features countywide. Such a network would retain ecological functions, maintain or improve water quality and habitat, and support the desired development patterns of the General Plan. The plan identifies a contiguous network of environmentally sensitive areas throughout the County and sets forth a goal, objectives, policies and strategies to preserve, protect, and enhance key environmental features by the year 2025. The plan identifies the Anacostia River as a special conservation area and recommends careful review of development proposals in the vicinity of the river to ensure that the area's ecological functions are protected or restored and critical ecological connections are established and maintained in the area.

2009 Approved Port Towns Sector Plan and Sectional Map Amendment

The northern portion of the Kenilworth Avenue Town of Cheverly Industrial Study is located in the Port Towns sector plan area, although the plan's recommendations do not specifically address any locations within the Kenilworth Avenue and Town of Cheverly Industrial Study area. The Port Towns Sector Plan envisions green healthy and pedestrian-friendly communities; celebrates the area's diversity, strategic location, industrial base, and historic, recreational and environmental resources; and provides a fully integrated multimodal transportation network. The plan promotes the Anacostia River as a recreational and environmental asset for the area and establishes a strong link between the four Port Towns municipalities and the waterfront. The plan includes recommendations for improvements to elevate the visibility and connectivity of Bladensburg Waterfront Park, located just north of Kenilworth Avenue and Town of Cheverly Industrial Study area, to the surrounding areas.

2009 Approved Countywide Master Plan of Transportation

The master plan improves the transportation network in order to reduce congestion and vehicle miles traveled, incorporates and reconciles the transportation recommendations of 31 master plans approved since 1981 into one complete and up-to-date document, and to provide strategic transportation, particularly transit, guidance that reflects the major changes that have occurred since 1982. The plan also recommends upgrades to the highways serving the area. Tuxedo Road/Arbor Street between the Baltimore-Washington Parkway and Cheverly Avenue is designated as an Industrial Road, which provides access to and between developed areas. The master plan explicitly embraces the concept of Complete Streets to serve the needs of all road users, and identifies seven Complete Streets policies to support this approach.

2010 Prince George's County Industrial Land Needs and Employment Study

The study was conducted by the University of Maryland's Urban Studies and Planning Program to assess the status of the County's industrially zoned land and to make policy recommendations related to industrial land use. The study found that Subregion 2, of which the Kenilworth Avenue and Town of Cheverly Industrial Study area is part, has very low vacancy rates. The study recommends maintaining and improving the area's infrastructure and assisting firms, as necessary, in ensuring that the aging building stock continues to meet industrial needs.

2013 Economic Drivers and Catalysts: A Targeted Economic Development Strategy for Prince George's County, Maryland

The strategy report presents the results of a year-long effort to create a targeted economic development strategy that will maximize the generation of new jobs in Prince George's County and diversify and grow the tax base that supports the County government's services and quality of life. Transportation, Distribution, and Logistics is one of 11 broad industry clusters assessed as part of the strategy. The strategy identifies this industry as declining – the County lost 27 percent of its jobs in this cluster from 2001 to 2011—and does not recommend targeting the cluster for economic development. The strategy identifies a number of the County's competitive advantages, including relatively low real estate prices, central location and transportation infrastructure. The strategy recommends creating "By Right Zoning" to speed the implementation of Transit Oriented Development projects in the County.

2010 Approved Subregion 4 Master Plan and Sectional Map Amendment

The master plan implements the goals and policy recommendations of the 2002 *Prince George's County Approved General Plan* to improve the quality of life within the County's established communities, promote mixed-use development along transportation corridors at targeted centers and notes, encourage local economic development, and protect environmentally sensitive areas. Subregion 4 includes the portion of the Kenilworth Avenue and Town of Cheverly Industrial Study area located south of US 50, including the Cheverly Metrorail station. The master plan identifies the industrial area along Olive Street, south of US 50, as being "100 percent healthy and vibrant," and recommends protecting existing industrial structures because of their viability. One of the plan's stated land use and urban design goals is to improve the character, environmental quality and marketability of the subregion's industrial and employment areas to attract higher quality development and users. The plan also recommends maintaining and protecting the subregion's industry, while providing improved buffering between industrial and residential uses. The master plan embraces Complete Streets concepts and promotes alternative transportation modes, with a focus on improving connectivity for all modes in the vicinity of Metrorail stations.

Anacostia Watershed Restoration Plan

The plan was developed by the Anacostia Watershed Restoration Partnership, with the purpose of providing a vision statement and targets for restoration within the Tidal River subwatershed of the Anacostia River by the year 2020. The Anacostia waterfront north of Beaverdam Creek is included in the northernmost portion of the Tidal River subwatershed. The plan notes that the subwatershed has suffered changes to hydrology, degradation of aquatic habitats, and poor water quality due to intense development and a high percentage of impervious surfaces in the surrounding areas. Three of the 20 potential stormwater retrofit projects identified in the plan are located in the Kenilworth Avenue and Town of Cheverly Industrial Study area: the industrial area along 52nd Avenue south of Kenilworth Avenue; the Salvation Army property at 3304 Kenilworth Avenue; and the Peoples Supply property at 3200 Kenilworth Avenue. The plan also identifies Quincy Run as a candidate for stream restoration and blockage removal, and the entirety of the Kenilworth Avenue corridor north of the MD 295 intersection as a candidate for trash reduction.

Lower Beaverdam Creek Subwatershed Action Plan

The action plan was developed by the Anacostia Watershed Restoration Partnership, with the purpose of providing a vision statement and targets for restoration within the Lower Beaverdam Creek subwatershed of the Anacostia River by the year 2020. The subwatershed includes the portion of the Kenilworth Avenue and Town of Cheverly Industrial Study area located south of US 50. Like the Tidal River Subwatershed Action Plan, this action plan notes that the subwatershed has suffered changes to hydrology, degradation of aquatic habitats, and poor water quality due to intense development and a high percentage of impervious surfaces in the surrounding areas. The plan identifies multiple sites in the vicinity of the US 50/ MD 295/Kenilworth Avenue interchange as candidates for wetland restoration, reforestation, and blockage removal. The plan specifically identifies an area in the vicinity of the Cheverly Metrorail station as a candidate for wetland restoration and trash removal.

Cheverly Green Infrastructure Plan

The plan was developed by the Town Of Cheverly's Green Infrastructure Committee, which was created at the behest of the Friends of Lower Beaverdam Creek and in response to deteriorating environmental conditions and habitat loss in the town and its vicinity. The plan provides a framework for protecting green space, managing water resources, and making land use decisions in the town. The plan recommends: providing incentives to land owners for increasing stream buffers; adopting on-site stormwater management and reducing impervious surface area from 23 percent to 18 percent; daylighting stretches of currently piped streams; developing a bicycle facility system with connections to existing trails nearby; revising transportation and streetscape standards to improve conditions for tree growth and increase tree canopy; and promoting green infrastructure principles and green building techniques in commercial and industrial areas.

Anacostia Trails Heritage Area

This management plan describes the heritage tourism program for a special area of northern Prince George's County known as the Anacostia Trails Heritage Area (ATHA). The name is derived from the Anacostia River watershed and associated recreational greenway that exists in much of the area. This area has been targeted for a new state program to invest in heritage areas. It was selected because of its interesting history, with many well-developed interpretive sites and intact historic resources reflecting the area's more than 300 years of settlement; because of its beautiful urban greenway, the Anacostia Tributary Trails System; and because of its extensive green spaces beyond the Beltway and along the Patuxent River. As this management plan explains, ATHA has the potential to become a new tourist destination and gateway to Washington, D.C. A key focus of this Heritage Area is Bladensburg Waterfront Park, which is located just north of the Kenilworth Avenue and Town of Cheverly Industrial Study area. Today, the heritage tourism program is managed by Maryland Milestones.

Anacostia Waterfront Park Bike Access Study

The purpose of the Anacostia Waterfront Bike Access Study is to evaluate multiple possibilities for the expansion of the Anacostia Tributaries Trails System; specifically to connect the Town of Cheverly and surrounding residential areas to the Anacostia River Trail. The Maryland-National Capital Park and Planning Commission Prince George's County (M-NCPPC-PG) Countywide Planning Division seeks to further develop the 2009 *Approved Countywide Master Plan of Transportation* (MPOT) and various sector plans. This access study provides additional evaluation and detailed recommendations to advance the broader recommendations in the MPOT and sector plans towards implementation.

Plan Prince George's 2035

According to the adopted *Plan Prince George's 2035 Approved General Plan*, "expanding the industrial sector into promising new fields, such as the green and high-tech, information-intensive subsectors, and leveraging its potential as an economic engine are essential to maintaining a diverse and healthy county economy." Important policies in the adopted General Plan include maintaining stable residential neighborhoods.

An important economic prosperity policy in the *Plan Prince George's 2035 Approved General Plan* is to "maintain and promote the economically healthy industrial areas identified in the 2010 Prince George's County Industrial Land Needs and Employment Study." The General Plan seeks to target resources to help facilitate economically healthy industrial districts for infrastructure improvements and incentives programs.

1.4 Study Preparation Process

The Kenilworth Avenue and Town of Cheverly Industrial Study evolved from a series of conversations between County planning staff and officials of the Town of Cheverly and the Town of Bladensburg regarding the industrial areas within and immediately adjacent to their municipalities. Town officials expressed concerns that many of the current industries on either side of MD 295 (Baltimore-Washington Parkway) do not meet the needs of the surrounding residents and are not positioned to benefit from emerging 21st century industrial trends. Officials noted their interest in positioning the area to take advantage of any changes to the use of the Prince George's Hospital Center, which is located immediately north of the industrial area and is slated to move to a new location in five to seven years.

The study was conducted over a seven-month timeframe and included the following key tasks:

- Analysis of Existing Physical Conditions.
- Analysis of Environmental Existing Conditions.
- Analysis of Market Conditions.
- Interviews with key stakeholders including residents, businesses, elected officials, and town, County, and state staff
- Assessment of the area including a market analysis and strengths, weaknesses, opportunities, and threats (SWOT) analysis.
- Review of case studies.
- Conducted two community meetings to engage stakeholders during the process
- Recommendations for the area
- Implementation strategy

2.0
SUMMARY OF STRENGTHS AND CHALLENGES

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

2 Summary of Strengths and Challenges

The existing conditions analysis includes descriptions and maps illustrating a wide range of physical and market conditions in the area. This analysis also includes a summary of stakeholder feedback that was provided during the process, as well as a summary of opportunities and constraints.

2.1 Land Use

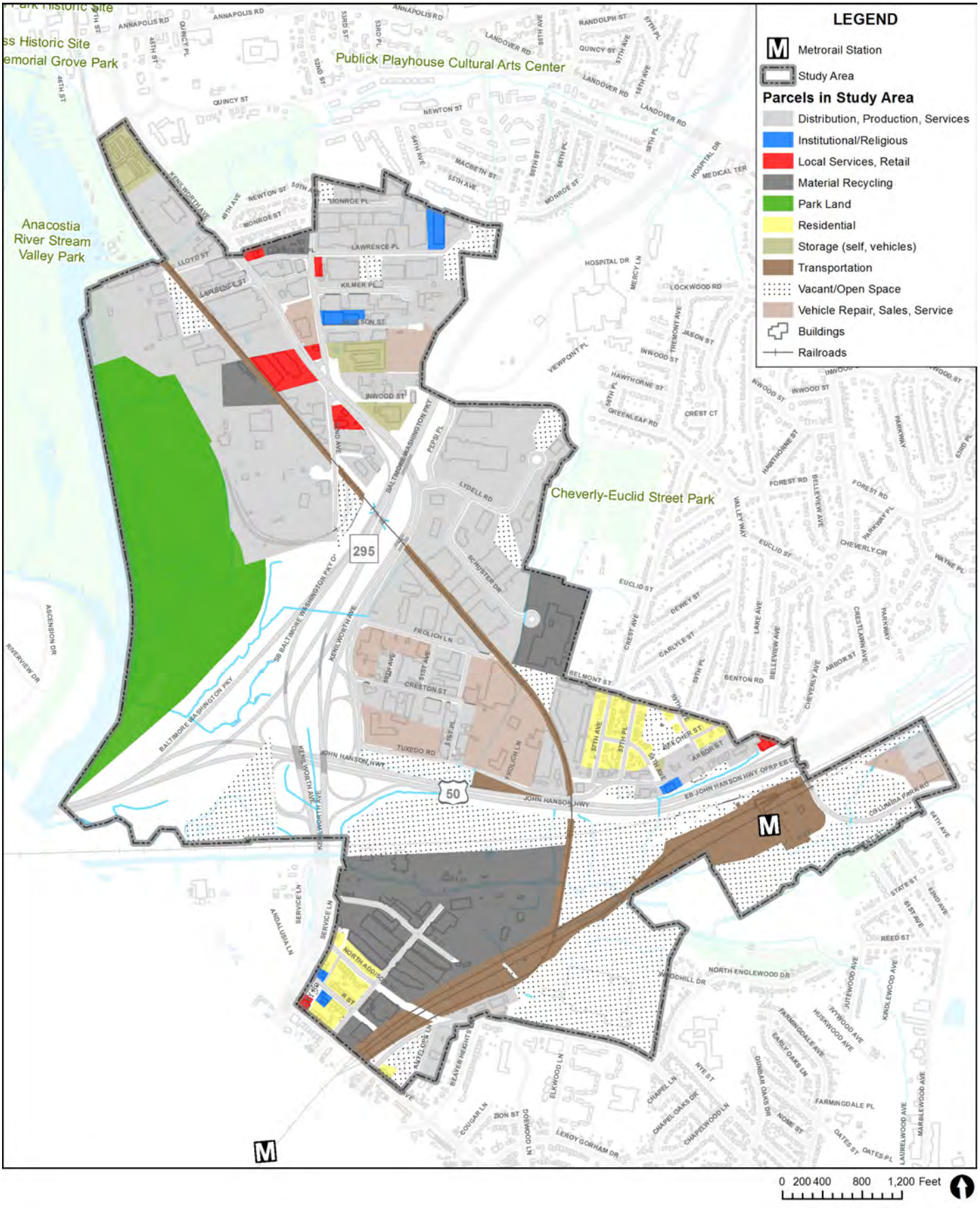
To support this existing conditions documentation, a more detailed existing land use analysis was completed (see Map 2-1). This analysis is based on existing mapping, property ownership, and a visual survey of the area. Land uses have been categorized by the following:

- Distribution, Production, and Services
- Institutional/Religious
- Material Recycling
- Public/Government
- Storage
- Residential
- Retail
- Vehicle Repair and Sales
- Vacant

These categories provide a designation of each land use by type of business or activity occurring on the site. This analysis has informed specific recommendations and strategies for the area, which are discussed in a later chapter of this report. The following is a description of each use type.

- Distribution, Production, and Services: This category includes a range of business types such as food and material distribution; printing, electronic, or other production that supports businesses; and services such as home repair companies or moving companies.
- Institutional or Religious: This category includes churches or related religious functions, and nonprofit agencies such as food banks and the Salvation Army.
- Local Services or Retail: This category includes local services such as grocery, cleaners, gas stations, or stores.
- Material Recycling: This category has been separated from the Distribution, Production, and Services use because there is a concentration of recycling activities within the study area; this includes Smith Industries, Recycle One, and Metro Re-Uz-It.
- Park Land: This category includes publicly owned property designated as a park that faces the Anacostia River.
- Storage: This category includes rental facilities for public storage and bus storage yards.
- Residential: This category includes all residential types including apartments, condominiums, single-family homes, or other similar residential uses.
- Vehicle Repair and Sales: This category includes facilities that repair and sell any type of vehicle, truck, bus, or similar equipment.
- Vacant or Open Space: This category includes any parcels that are currently vacant or available for lease or purchase at the time of this study, and includes wooded, undeveloped areas and areas in a floodplain that may not be developable.

Map 2-1: Land Uses within the Study Area



More than half of the study area is categorized as Distribution, Production, and Services or Public/Government (Table 2-1). A considerable proportion of the study area is dedicated to uses related to Material Recycling and Vehicle Repair and Sales. Approximately 13 percent of the land in the study area is categorized as Vacant.

Table 2-1: Distribution of Land Uses in the Study Area

Land Use Type	Parcels	Acreage	% of Study Area
Distribution, Production, Services	322	235.1	35
Institutional/Religious	16	4.21	1
Local Services, Retail	19	7.31	1
Material Recycling	60	74.89	11
Park	6	89.1	13
Residential	144	16.64	2
Storage (self, vehicle)	6	11.94	2
Transportation	17	48.94	7
Vacant/Open space	228	144.41	22
Vehicle repair, sales, service	24	38.25	6
Total	842	670.79	100

When comparing land use to zoning there is only a small amount of the total study area that has land uses that are not consistent with the zoning; most notably, the area along Arbor Street that is planned for mixed use, but continues to support Distribution, Production, and Service uses.

2.2 Zoning

The area is currently zoned across 10 categories, including industrial, open space and recreation, residential, and mixed use. Map 2-2 provides an illustration of the study area zoning categories. A brief description of each category follows. For a full description of each zoning category, please see the Prince George's County on-line Zoning Ordinance.

- **I-1**: Light Industrial—Light intensity manufacturing, warehousing, and distribution uses; 10 percent green area required.
- **I-2**: Heavy Industrial—Highly intensive industrial and manufacturing uses; 10 percent green area required.
- **I-3**: Planned Industrial/Employment Park—Uses that will minimize detrimental effects on residential and other adjacent areas; a mixture of industrial, research, and office uses with compatible institutional, recreational, and service uses that will retain the dominant industrial/employment character of the zone; standard minimum tract size of 25 adjoining gross acres; standard minimum lot size of 2 acres; conceptual and detailed site plan approval required; 25 percent green area required; outdoor uses restricted; and warehousing/wholesaling uses limited.
- **R-O-S**: Reserved Open Space—Provides for permanent maintenance of certain areas of land in an undeveloped state, with the consent of the property owners; encourages preservation of large area of trees and open space; designed to protect scenic and environmentally sensitive areas and ensure retention of land for nonintensive active or passive recreational uses; provides for very low-density residential development and a limited range of public, recreational, and agricultural uses.
  - Minimum lot size: 20 acres
  - Maximum dwelling units per net acre: 0.05
  - Except for public recreational uses, for which no minimum area is required

- **O-S**: Open Space—Provides for areas of low-intensity residential (5 acres) development; promotes the economic use and conservation of land for agriculture, natural resource, large-lot residential estates, and nonintensive recreational use.
    - Standard lot size: 5 acres
    - Maximum dwelling units per net acre: 0.20

- **R-55**: One-Family Detached Residential—Permits small-lot residential subdivisions and promotes high-density, single-family detached dwellings.
    - Standard lot sizes: 6,500 sq. ft.
    - Maximum dwelling units per net acre: 6.70
    - Estimated average dwelling units per acre: 4.2

- **R-T**: Townhouse—Permits one-family detached and attached, two-family, and three-family dwellings, promotes the maximum amount of freedom in the design of attached dwellings and their grouping and layout, and detailed site plan approval required for attached dwellings.
    - Standard lot size per attached dwelling: 1,800 square feet
    - Maximum dwelling units per net acre:
        - Three-family dwellings: 9
        - Two-family dwellings: 8
        - Other attached dwellings: 6
    - Minimum area for development: 2 acres

- **M-X-T**: Mixed-Use Transportation-Oriented—Provides for a variety of residential, commercial, and employment uses; mandates at least two out of the following three use categories: Retail Businesses; Office/Research/Industrial; and Dwellings and Hotel/Motel; encourages a 24-hour functional environment; must be located near a major intersection, a major transit stop, or a major station, and will provide adequate transportation facilities for the anticipated traffic at a location for which the applicable master plan recommends mixed uses similar to those permitted in the M-X-T Zone.
    - Lot size and dwelling types: No Restrictions
    - Maximum floor area ratio: 0.4 without optional method; 8.0 with optional method (provision of amenities)

- **M-U-I**: Mixed-Use Infill—Promotes Smart Growth principles by encouraging the efficient use of land, public facilities, and services in areas that are substantially developed. These regulations are intended to create community environments enhanced by a mix of residential, commercial, recreational, open space, employment, and institutional uses in accordance with approved plans. The Infill Zone may only be approved for property located in a Transit District Overlay Zone or a Development District Overlay Zone.

- **C-S-C**: Commercial Shopping Center—Retail and service commercial activities generally located within shopping center facilities; size will vary according to trade area.

In addition to the above zoning categories, there are three overlay zoning districts within the study area. Overlay zoning is a regulatory tool that creates a special zoning district, placed over an existing base zone(s), that identifies special provisions in addition to those in the underlying base zone. Typical purposes for establishing overlay zones include helping manage development in or near environmentally sensitive areas, or to encourage specific types of development such as areas near a Metro station. The overlay zones that occur within the study area include:

- **D-D-O**: Development District Overlay—Intended to ensure that development in a designated district meets the goals established in a master plan, master plan amendment or sector plan. Development districts may be designated for town centers, Metro areas, commercial corridors, employment centers, revitalization areas, historic areas and other special areas as identified in approved plans.

- **R-C-O**: Resource Conservation Overlay—Provide adequate breeding, feeding, and wintering habitats for wildlife; protect the land and water resources base necessary to support resource-oriented land uses; and conserve existing woodland and forests for water quality benefits along the tributaries of the Chesapeake Bay.
    - Maximum residential density: .05 du/gross acres

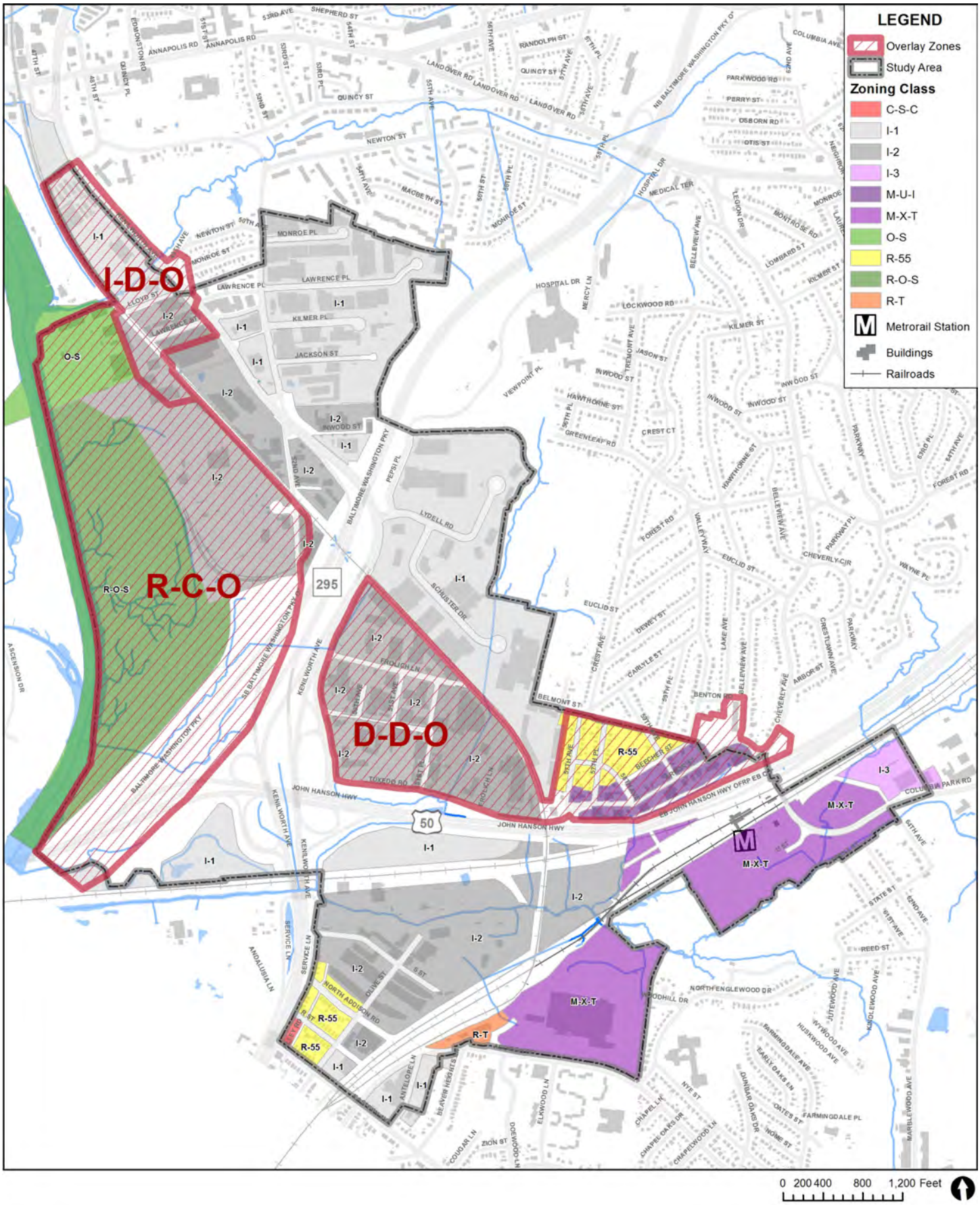
- **I-D-O**: Intense Development Overlay—Conserve and enhance fish, wildlife, and plant habitats and improve the quality of runoff that enters the Chesapeake Bay, while accommodating existing residential, commercial, or industrial land uses; and promote new residential, commercial, and industrial land uses with development intensity limits.
    - Maximum residential density is the same as the underlying zone.

Of the 604 acres within the study area that are zoned, the largest percentage is zoned as industrial. A majority of the land between the CSX rail line and the Anacostia River is zoned I-2 for heavy industrial uses.

The open space categories are generally located along the Anacostia River, while the mixed-use and residential uses are located near the Cheverly metro rail station and the Prince George's County and Washington, D.C. border.

- **Map 2-2: Zoning within the Study Area Distribution, Production and Services:** This category includes a range of business types such as food and material distribution, production of products such as printing, electronics, or other products to support businesses and services such as home repair companies or moving companies.
- **Institutional or Religious:** This category includes churches or related religious functions, and non-profit agencies such as food banks and the Salvation Army.
- **Local Services or Retail:** This category includes local industries such as food services, cleaners, gas stations, or stores.
- **Material Recycling:** This category has been separated from the Distribution, Production and Services since there is a concentration of recycling activities within the study area. This includes Smith Industries, Recycle One and Metro Re-Uz-It.
- **Park Land:** This category includes publicly owned property designated as a park, fronting the Anacostia River.
- **Storage:** This category includes uses such as rental facilities for public storage and bus storage yards.
- **Residential:** This category includes all residential types, including apartments, condominiums, single-family homes or other similar residential uses.
- **Vehicle Repair and Sales:** This category includes facilities that repair and sell any type of vehicle, truck, buses or similar equipment.
- **Vacant or Open Space:** This category includes any parcels that are currently vacant or available for leasing or purchase at the time of this study, as well as wooded undeveloped areas and areas in floodplain that may not be developable.

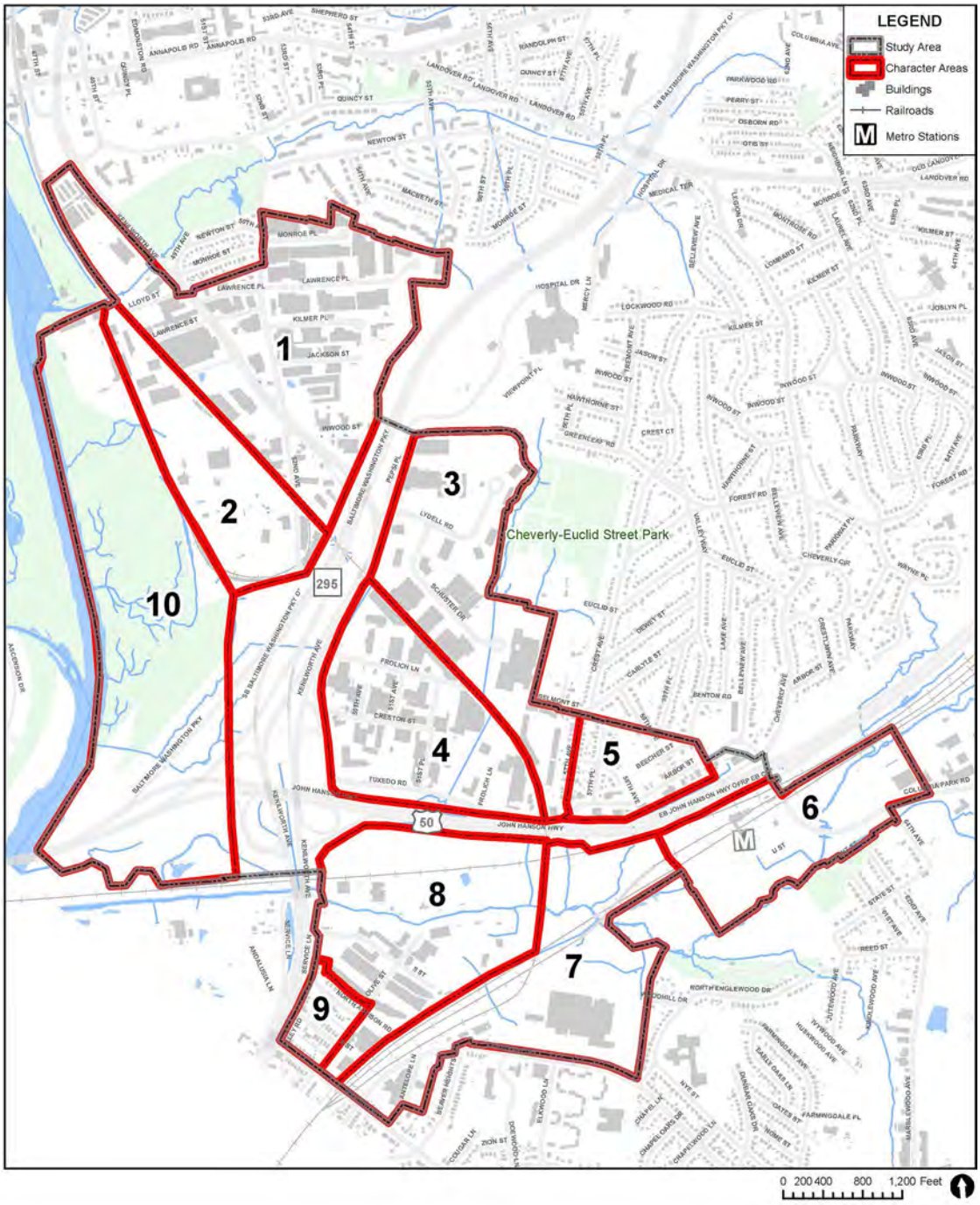
Map 2-2: Zoning within the Study Area



2.3 Character Areas

As part of the existing conditions analysis, the physical condition of the study area was evaluated. This condition analysis has been organized into 10 character areas that relate to the configuration of the study area, key transportation corridors, existing building stock, and natural resources. The character areas are illustrated in Map 2-3 and are described in the following pages. A summary of strengths, weaknesses, and opportunities is included following the description of the 10 character areas.

Map 2-3: Kenilworth/Cheverly Character Areas



Character Area 1: 52nd Avenue Area

This area is north of MD 295 and east of the CSX rail line. Two key corridors, 52nd and Kenilworth Avenues, bisect it. There are a mix of uses in the area including Distribution, Production and Services, Retail, and Storage. The building stock in the area includes a number of utilitarian brick buildings, typically one to two stories that were built in the 1960s. These buildings are generally good for supporting a wide range of uses including administrative, shops, and warehouse activities.

The area has few sidewalks and parking occurs in various locations around the buildings or along some streets. In many cases, sidewalks, curbs, and gutters are in poor condition due to a lack of maintenance and heavy truck traffic in the area. Vegetation occurs in spots around the area, either in leftover yard areas or along property boundaries. The vegetation is generally overgrown and not well maintained. There is a wide range of visual elements that include solid fences, chain link fences, signage, and above-ground utilities.

Map 2-3.1: Character Area 1 - 52nd Avenue

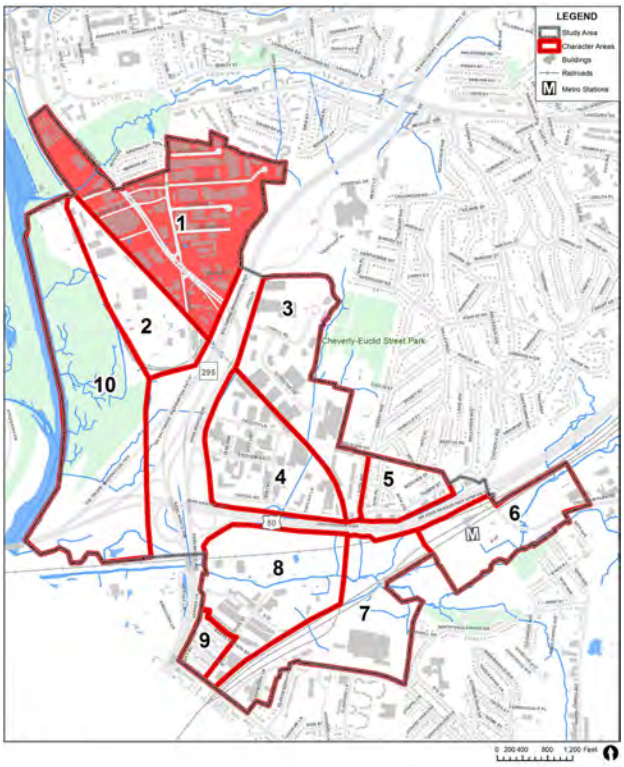


Figure 2-1: Industrial uses on Lawrence Street with no sidewalk and perpendicular parking

Figure 2-2: Example local serving retail use

Figure 2-3: Example good quality industrial buildings

Figure 2-4: Example good quality industrial buildings

Character Area 2: Industrial Waterfront

The industrial waterfront area is bounded by the CSX rail line on the east and the Anacostia River Park areas on the west. This area contains several large industrial users, including the Washington Suburban Sanitary Commission (WSSC), Airgas Inc., Recycle One, and Aggregate Industries. The WSSC maintenance facility is characterized by several low-rise buildings for servicing WSSC trucks or other equipment. The other parcels within this area are generally characterized by large storage yards for recycled materials, aggregate stone piles, and small-scale retail gas storage and transport. There are several unique structures that support Aggregate Industries, including water towers and large structures for moving aggregate within the site. The parcels are, for the most part, individually accessed from streets that cross the rail tracks with limited interparcel connections. The area has a heavy industrial character and is actively supporting heavier equipment and related activities.

There are no sidewalks or "streetscape" environment in this area and the uses directly abut the park areas along the Anacostia River.

Map 2-3.2: Character Area 2 - Industrial Waterfront

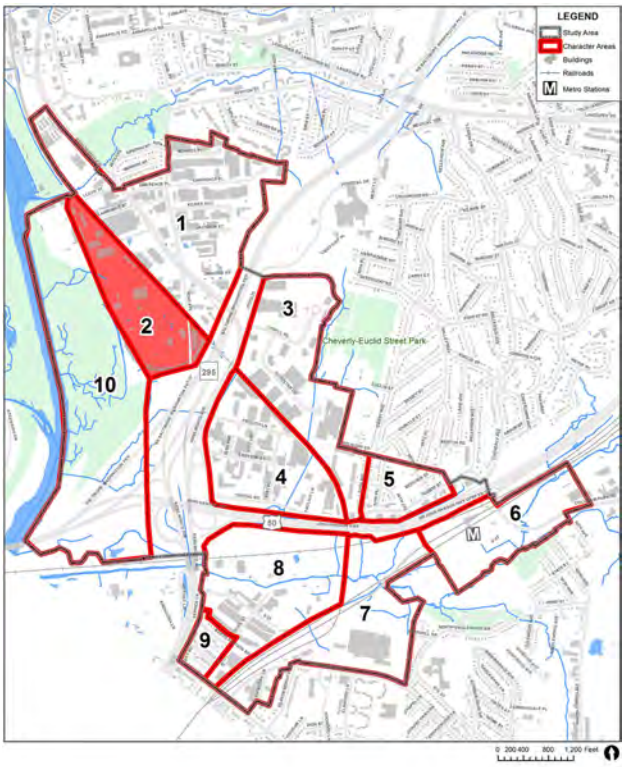


Figure 2-5: Entrance to the Aggregate Industries property, which features highly visible heavy industrial uses.

Figure 2-6: Industrial areas require truck access across existing rail lines.

Character Area 3: Tuxedo and Town of Cheverly Industrial Parks

The Town of Cheverly Industrial Park is characterized by rolling topography and typical suburban-style buildings on individual parcels. The buildings in this area are generally of good quality and utilitarian low-rise masonry buildings, with tree-lined streets and formal parking areas adjacent to the buildings. The industrial park is, on the whole, attractive, well maintained, and visually very different from many other places within the study area. Sidewalks are not prominent in this area. Other visual elements include building signage, some free-standing signs, and above-ground utilities. Most of the parcels within the industrial park have been developed and there appear to be few vacancies. One of the largest parcels in the Cheverly Industrial Park has been purchased by Smith Industries, which is investing in the Craftsman Press Building to convert it into an electronics recycling facility.

The Tuxedo Industrial Park is a self-contained area just southeast of the Cheverly Industrial Park; there is no direct access between the two parks. The Tuxedo Industrial Park has a relatively small footprint and is characterized by single-story attached buildings ringing a landscaped parking lot. Like the Cheverly Industrial Park, the Tuxedo Industrial Park is attractive and well maintained. Below are some example photographs of this area.

Map 2-3.3: Character Area 3 - Tuxedo and Town of Cheverly Industrial Parks

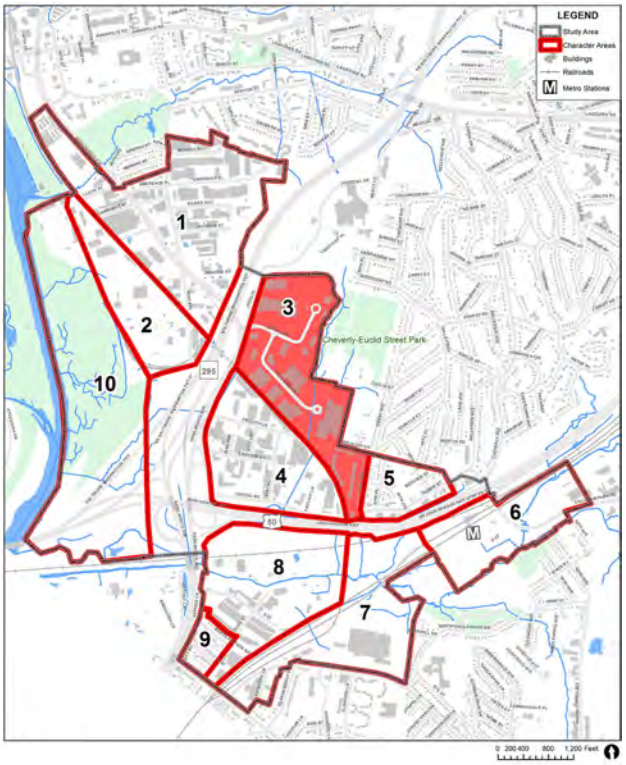


Figure 2-7: Example of high-quality light industrial building.

Figure 2-8: Example of low-density industrial uses.

Figure 2-9: Example of a high-quality light industrial building.

Figure 2-10: Example of high-quality light industrial building in Tuxedo Industrial Park.

Character Area 4: Kenilworth Junction

This area includes a mix of uses within a very tight configuration of buildings, small parking and loading areas, and narrow streets. There is a mix of building types from metal, prefabricated panels to masonry buildings. Many facilities are purposefully designed to support specific functions such as repair, storage, maintenance, or other shop-related activities. Many have large rolling doors to allow for the movement of large equipment or the storage of materials.

There are few sidewalks and parking occurs either along the street, perpendicular to the street, or in limited small lots. Some businesses have signage or clearly mark their entrances; however, many are less formally marked or signed. There is very little remaining vegetation in the area. This area, on the whole, has a poor visual quality.

Map 2-3.4: Character Area 4 - Kenilworth Junction

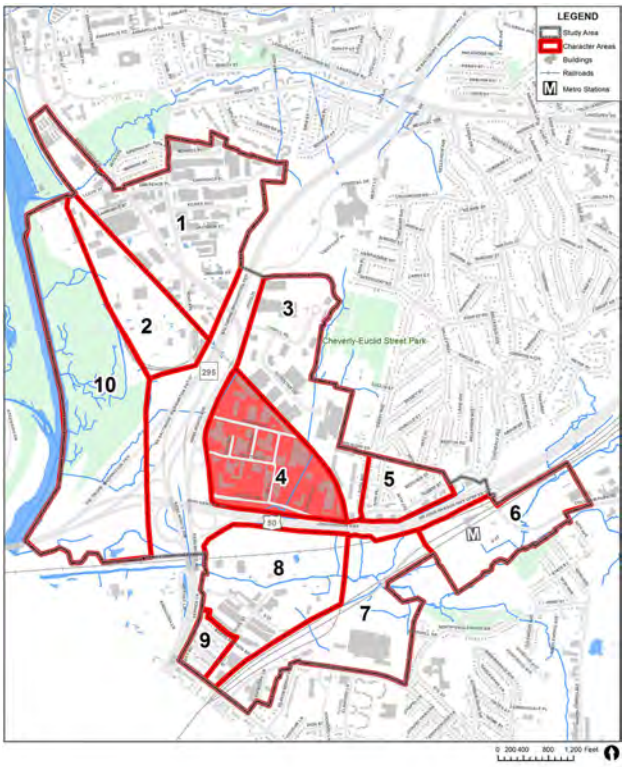


Figure 2-11: Lower quality light industrial uses fronting Kenilworth Avenue

Figure 2-12: Lower quality light industrial uses fronting Kenilworth Avenue.

Character Area 5: Arbor Street

This area features a mix of light industrial uses along with residential and undeveloped parcels located north of Arbor Street. Portions of the undeveloped sites are overgrown with vegetation. The buildings along Arbor Street are a mix of older residential units that have been converted into commercial buildings, single-story industrial buildings, and other commercial buildings. The street through this area is limited to two lanes with no sidewalks and there are above-ground utilities along both sides of the street.

Most of this area lacks formal curb and gutter facilities, and parking occurs in a variety of places including formal parking lots as well as informal gravel lots in front and on the side of the buildings. There is also signage on some buildings, and in some places there are freestanding identification signs.

The area is a gateway between the Industrial Area and the Cheverly Metro Station. Portions of the area have frontage on US 50, which lies just to the south. The area has a poor visual quality.

Map 2-3.5: Character Area 5 - Arbor Street

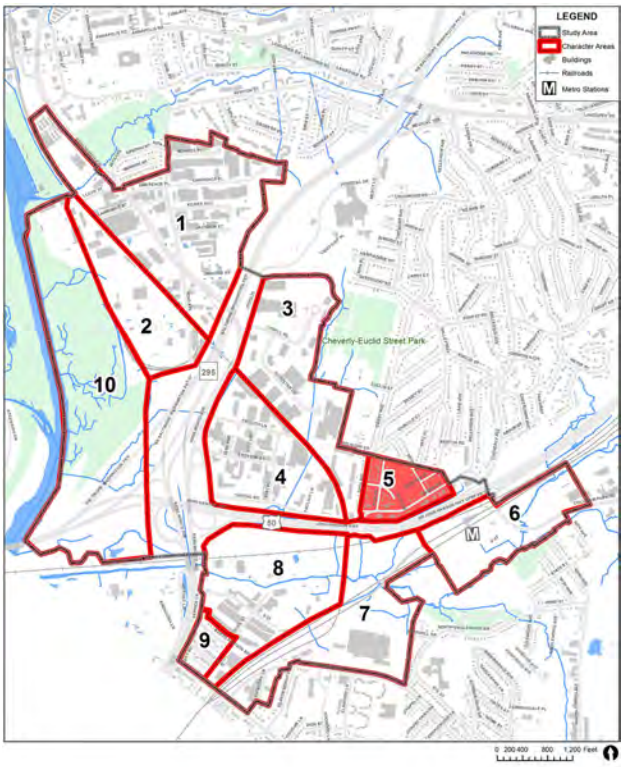


Figure 2-13: Arbor Street's lack of sidewalks and poor-quality existing buildings.

Figure 2-14: Arbor Street's lack of sidewalks and informal parking.

Figure 2-15: Example of good-quality light industrial building.

Figure 2-16: Columbia Park Road bridge.

Character Area 6: Cheverly Metro Station

The Cheverly Metro Station includes a kiss-and-ride drop-off area, bus stops, and a large parking area, along with the at-grade rail station, which includes enclosed escalators to access an elevated walkway connecting to platforms for each direction. The character of these facilities, signage, and other site elements are typical of the Washington Metropolitan Area Transit Authority (WMATA), following the design style of the system implemented in the 1970s. Immediately adjacent to the station—to the east and south—are undeveloped parcels that are characterized by woodland. Portions of this area are within the 100-year floodplain.

Map 2-3.6: Character Area 6 - Cheverly Metro Station

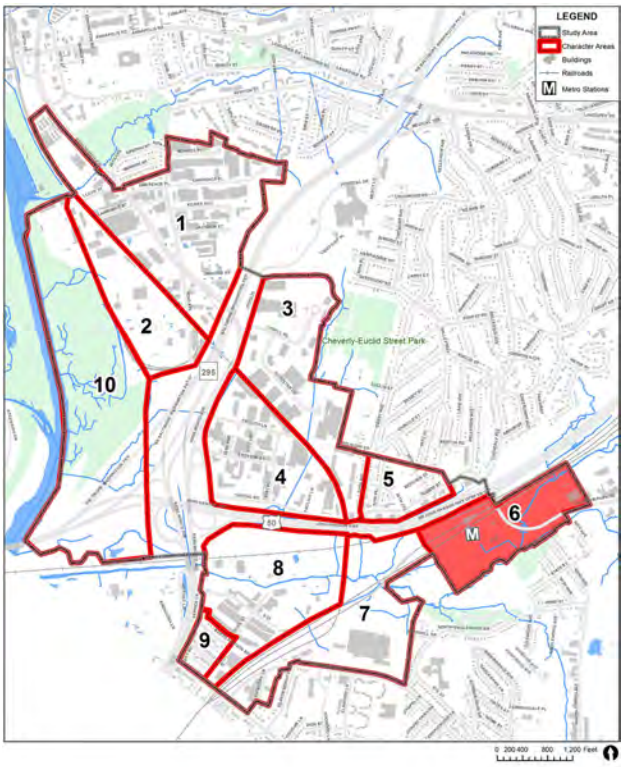


Figure 2-17: Entrance to the bus turnaround at Cheverly Metro Station.

Figure 2-18: The Cheverly Metro Station commuter lot.

Figure 2-19: The Columbia Park Road bridge over the Metro and CSX tracks and US 50.

Character Area 7: Southeast Industrial and Undeveloped Land

This area is located at the southeastern edge of the study area, south of the Metro and CSX tracks, and just southwest of the Cheverly Metro Station. There is a small residential area located near the intersection of Addison Road and Eastern Avenue, with a vacant parcel adjacent to the residential area. A relatively large vacant parcel lies on the eastern edge of the area, closest to the Cheverly Metro Station. Lower Beaverdam Creek flows through this parcel. Both vacant parcels feature forested areas. Between these vacant parcels is a short stretch of low-rise buildings on Addison Road dedicated to light industrial uses. Portions of this area are within the 100-year floodplain.

Map 2-3.7: Character Area 7 - Southeast Industrial and Undeveloped Land

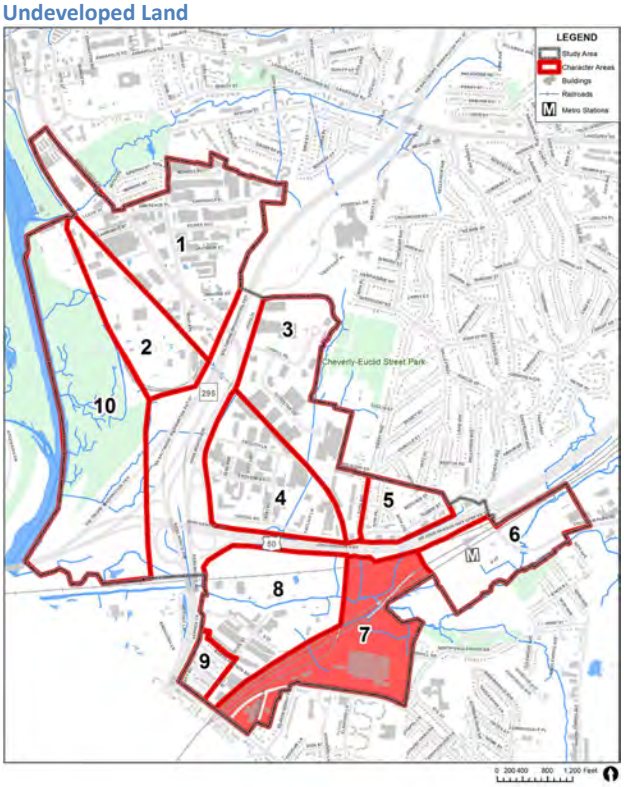


Figure 2-20: Vacant site on Addison Road.

Figure 2-21: Existing business on Addison Road.

Character Area 8: Olive Street Industrial Area

This area is south of US 50, east of MD 295 (Baltimore-Washington Parkway), and north of the CSX rail line. The area consists primarily of industrial uses, with Smith Company Recycling occupying a large portion. The area includes metal and masonry industrial buildings, many with large rolling doors to allow easy movement of large equipment and materials. Outdoor storage for recycling material or other equipment and vehicles can be found as well. Some of the outdoor storage areas have solid fencing around them to limit the view from outside.

The streets have some sidewalks, on-street and perpendicular parking, and above-ground utilities. There are small pockets of vegetation in areas that are not utilized. There is limited signage in the area. The visual character of the area is poor. Portions of this area are within the 100-year floodplain.

Map 2-3.8: Character Area 8 - Olive Street Industrial Area

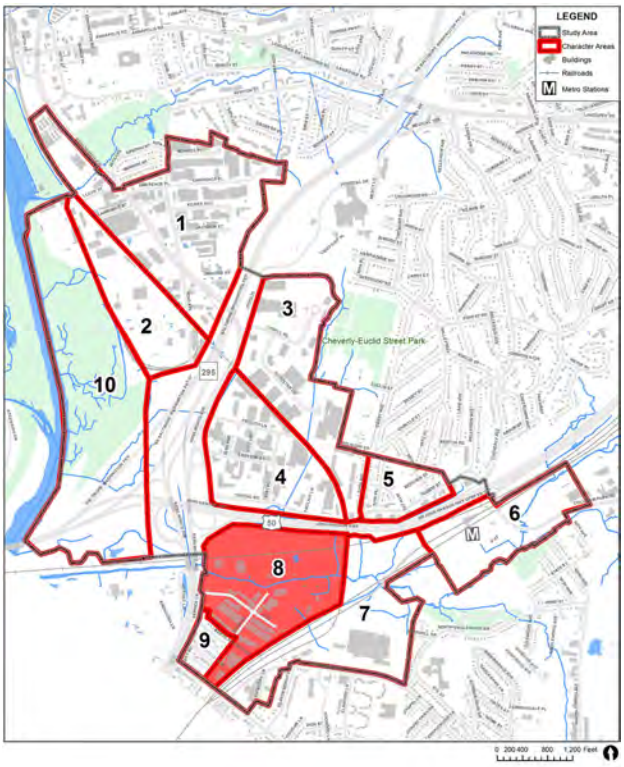


Figure 2-22: View along Olive Street.

Figure 2-23: View of industrial site.

Figure 2-24: Poor-quality existing visual environment.

Figure 2-25: Existing buffered view using concrete walls.

Character Area 9: Eastern Avenue Residential

This is a small area just south of Character Area 8 that is residential. The parcels are mostly single-family, wood frame, and modestly scaled units. Sidewalks are generally provided along these residential streets. The units do not have parking on their lot, so parking occurs along the streets in front of the houses.

Map 2-3.9: Character Area 9 - Eastern Avenue Residential

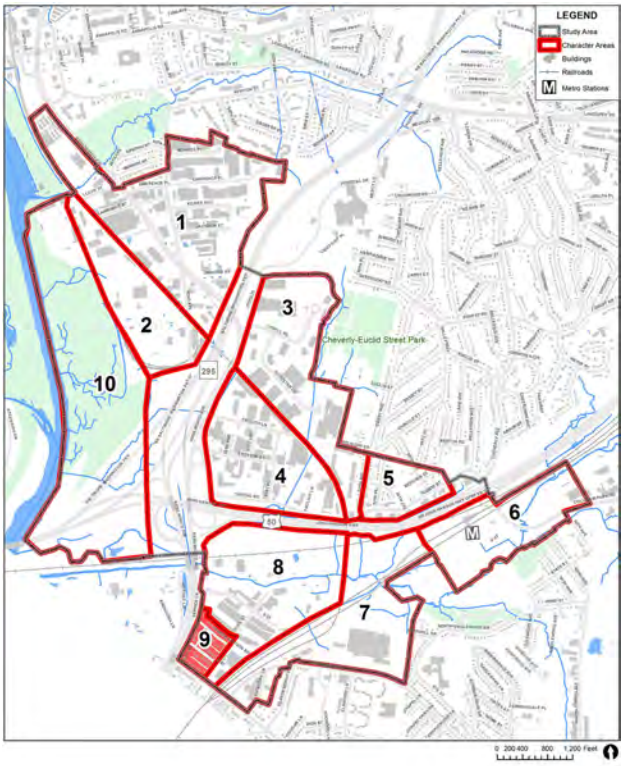


Figure 2-26: Existing residential area on R Street.

Figure 2-27: Existing residential area on R Street.

Character Area 10: Anacostia Waterfront Open Space

This area includes the parklands associated with the Anacostia River. Large wetlands exist that were created from an unregulated sanitary landfill on the site in the reforested areas. The Anacostia River Trail runs in this area; a planned extension of the trail will connect this area to Nationals Park and areas beyond into the Washington metropolitan area. Along the trail, the visual experience is very remote, with only vegetation or the river visible. In other areas, some of the industrial uses along the riverfront are visible. Recently a small boat landing was added on the river to provide opportunities for environmental education.

Map 2-3.10: Character Area 10 - Anacostia Waterfront Open Space

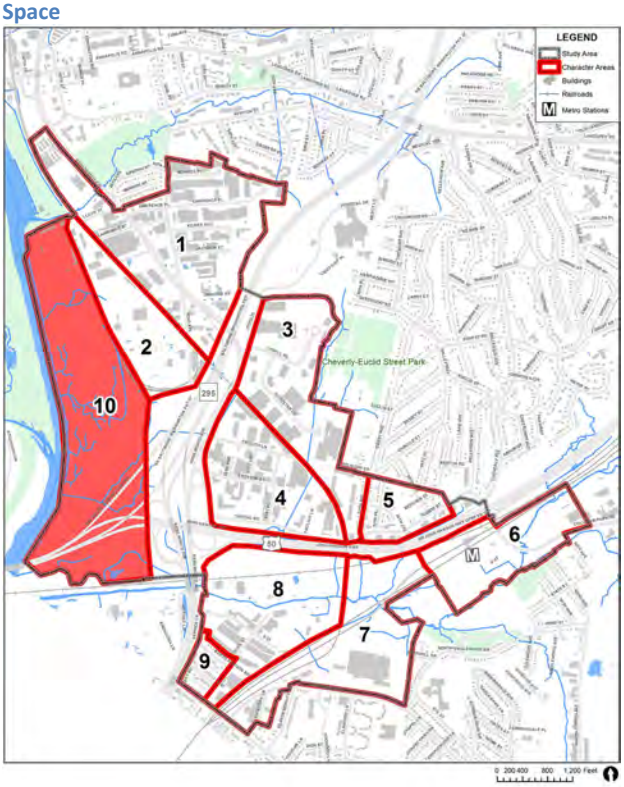


Figure 2-28: View of existing trail system.

Figure 2-29: View of natural areas along Anacostia River.

Figure 2-30: View of Bladensburg Park.

Figure 2-31: View of Industrial Area adjacent to natural areas along Anacostia River.

The following provides a summary of the strengths, weaknesses, and opportunities for each of the Character areas as described in Section 2.3.

Character Area 1: 52nd Avenue Area

Strengths

- Good-quality existing building stock.
- Flexible, simple building types that can be used for a variety of uses.
- Good access from parcels to a major transportation corridor (Kenilworth Avenue).

Weaknesses

- Limited existing parking.
- Limited space for building loading.
- Lack of existing sidewalks.
- High imperviousness with inadequate provision for stormwater control.
- Limited urban tree canopy.

Opportunities

- Intersection of 52nd and Kenilworth Avenues offers a high visibility development site.
- Construction of bioretention facilities and stormwater retrofits to address water quality issues.
- Planting trees to improve air quality and help cool stormwater flowing through the area.
- Trail linkages to Anacostia Riverfront.

Character Area 2: Industrial Waterfront

Strengths

- Several larger parcels.
- Near the Anacostia Riverfront.
- Direct access to a rail line.

Weaknesses

- Poor visual quality related to heavy industrial uses.
- Challenging access to portions of this area due to rail crossings.

Opportunities

- Potential connections to Anacostia River Trail and associated park areas.
- Stormwater retrofits to address water quality.

Character Area 3: Tuxedo and Town of Cheverly Industrial Parks

Strengths

- Two self-contained existing business/industrial parks.
- Good-quality existing buildings.
- Appropriate parking and service access.

Weaknesses

- Limited access into the Tuxedo Industrial Park.
- Limited buffer between Tuxedo Industrial Park and existing houses.

Opportunities

- Continue to maintain and incrementally improve Industrial Parks.

Character Area 4: Kenilworth Junction

Priority 3

Strengths

- Good visibility and access from key vehicular corridors: Route 50, MD 295, Kenilworth Avenue, and Tuxedo Road.

Weaknesses

- Poor visual quality.
- Lack of sidewalks.

Opportunities

- Capitalize on visibility of key parcels.
- Improve visual quality through upgrades to streetscape and improved fencing or other visual buffers.

Character Area 5: Arbor Street

Strengths

- Near existing Cheverly Metro Station.

Weaknesses

- Poor visual quality.
- Lack of sidewalks.
- Lack of buffer between industrial and residential areas.

Opportunities

- Gateway and transition area between industrial uses to the west and residential neighborhoods to the east.
- Potential for future transit-oriented development related to the Cheverly Metro Station.

Character Area 6: Cheverly Metro Rail Station

Strengths

- Proximity to Metro station.
- Proximity to Route 50.

Weaknesses

- Wetlands and 100-year floodplain cover large portions of this area.

Opportunities

- Joint development of the Metro station parking lot for mixed-use development.
- Some adjacent areas have the potential for additional mixed-use development.

Character Area 7: Southeast Industrial and Undeveloped Land

Strengths

- Large vacant site available for development.

Weaknesses

- Access from Eastern Avenue limits marketability of property.
- Northern portion of this area contains floodplain and wetlands.

Opportunities

- Planned redevelopment of several vacant parcels on the eastern edge of the area, closest to the Cheverly Metro Station.

Character Area 8: Olive Street Industrial Area

Strengths

- Access to the existing rail line.
- Access in the area from both Kenilworth and Eastern Avenues.

Weaknesses

- Poor visual quality.
- Lack of buffer between residential and industrial uses.

Opportunities

- Improve buffer of residential areas.
- Increase urban tree cover.
- Stormwater retrofits and stream buffer planting to improve water quality.
- Limit truck traffic adjacent to residential uses.

Character Area 9: Eastern Avenue Residential

Weaknesses

- Isolated residential area.
- Lack of buffer from adjacent industrial uses.
- Truck traffic adjacent to residential uses.

Opportunities

- Improve buffer of residential areas.
- Limit truck traffic adjacent to residential uses.

Character Area 10: Anacostia Waterfront Open Space

Strengths

- Extensive area of open space.
- Trail access to existing park areas.

Weaknesses

- Adjacent heavy industrial uses.

Opportunities

- Connection to Anacostia River Trail linking area to Washington, D.C. and regional trail network.

In addition, a priority has been assigned to each character area.

- Priority 1: short-term opportunity for improvements
- Priority 2: mid-term opportunity for improvements
- Priority 3: long-term opportunity for improvements

Character Area 1: 52nd Avenue Area	**Priority 1**
Character Area 2: Industrial Waterfront	**Priority 3**
Character Area 3: Tuxedo and Town of Cheverly Industrial Parks	**Priority 3**
Character Area 4: Kenilworth Junction	**Priority 1**
Character Area 5: Arbor Street	**Priority 1**
Character Area 6: Cheverly Metro Rail Station	**Priority 3**
Character Area 7: Southeast Industrial and Undeveloped Land	**Priority 2**
Character Area 8: Olive Street Industrial Area	**Priority 3**
Character Area 9: Eastern Avenue Residential	**Priority 3**
Character Area 10: Anacostia Waterfront Open Space	**Priority 3**

2.4 Environment/Natural Resources

The Kenilworth Avenue and Town of Cheverly Industrial Study area is a highly developed area of an established community inside I-495 (Capital Beltway) as identified in the *Plan Prince George's 2035 Approved General Plan*. Aerial photographs of the area in 1938 show large areas of wetlands, agricultural fields, scattered patches of woodland, and some developed areas already established east of 52nd Avenue. MD 295, US 50, and Kenilworth Avenue had already been built throughout the study area by 1965. Development was primarily industrial and commercial along these major roadways. Many of the area's watersheds were developed in the 1960s prior to the adoption of environmental regulations regarding woodland conservation; stormwater management; or stream, wetland, and floodplain protections. In general, the study area has a very high percentage of impervious surfaces (nearly 44 percent) and a low percentage of forest and tree canopy coverage (24 percent).

Although the physical environment in the study area has been affected by many years of development, some environmental assets remain, including 82 acres of known wetlands, more than 300 acres of floodplain, and approximately 45,000 linear feet of known streams. Some of the streams originate within the study area boundaries, making them "headwaters" streams within their respective watersheds. Forested areas are present, including some of the wooded floodplain of the Anacostia River mainstem along the study area's western boundary, and portions of Lower Beaverdam Creek south of US 50.

Parts of the study area are within the designated network of the 2005 *Countywide Green Infrastructure Plan* and the Chesapeake Bay Critical Area. The Maryland Department of Natural Resources has identified habitats suitable for forest interior dwelling species (FIDS) within the study area.

2.4.1 Environmental Characteristics

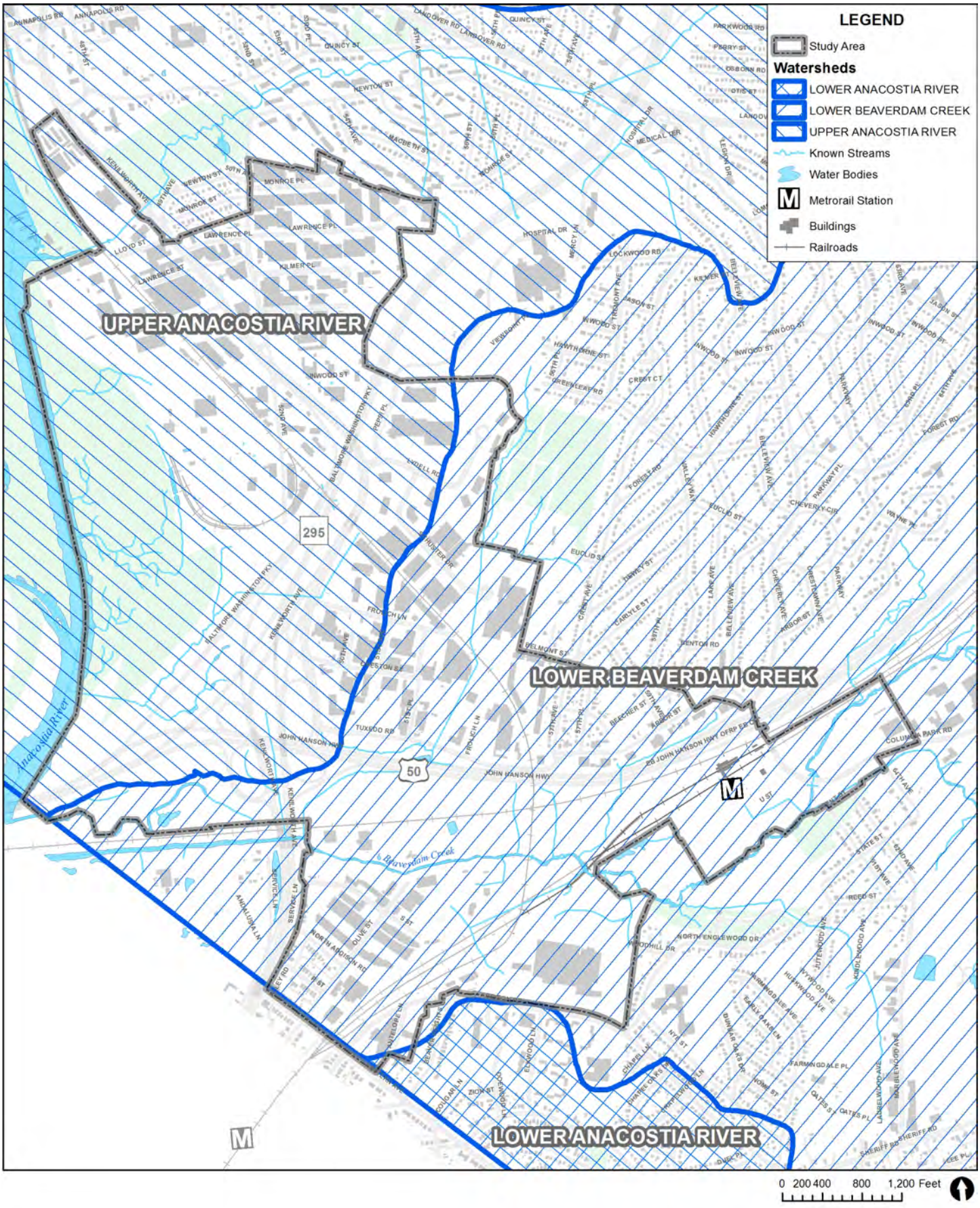
Watersheds

The study area is located within the Anacostia River watershed within the Upper Anacostia River and Lower Beaverdam Creek subwatersheds. A very small portion of the area's southern tip is within the Lower Anacostia River watershed (see Table 2-2 and Map 2-4). The Anacostia River watershed is a tributary to the Potomac River, which flows to the Chesapeake Bay. It is one of the most densely populated of the Chesapeake Bay watersheds and many of its tributaries are highly urbanized. Consequently, the Anacostia River received large amounts of sediments, toxins, excess nutrients, trash, and debris. High levels of bacteria, sediment and nutrients, mainly from untreated stormwater, contribute to the degraded habitat conditions that are typical of urban streams. The Anacostia River is subject to state and federal pollution reduction programs aimed at addressing its declining water quality and restoring its ecosystem.

Table 2-2: Watersheds Countywide and within the Study Area

Watershed	Total watershed area within the county (acres)	Percentage of county land area	Watershed Area Within the Study Area Boundary (acres)	Percentage of Study Area
Lower Anacostia River	1,572.21.40	0.51	0.37	0.04
Lower Beaverdam Creek	9,759.16	3.14	418.12	47.18
Upper Anacostia River	1,873.92	0.60	467.76	52.78

Map 2-4: Watersheds within the Study Area



Water Quality and Stormwater Management

Alteration of the natural landscape and significant increase in impervious area (surfaces that do not allow water to pass through them) that accompanied the study area's development and population growth have degraded the quality of the Anacostia River. Impervious surfaces include buildings, roads, asphalt and concrete parking lots, sidewalks, and other nonporous surfaces. In many areas, large volumes of stormwater are channeled, untreated, from these surfaces to the receiving streams either directly or via a system of storm drains. Inadequate urban tree canopy coverage and channelization of some of the streams increases the temperature, volume, and velocity of the stormwater, further degrading the receiving streams. Multiple studies have shown degradation of receiving streams occurs when imperviousness exceeds 10 percent in a watershed. With nearly 44 percent imperviousness, and more development anticipated in the future, the area's water quality is an issue that will need to be addressed immediately and as development occurs.

Table 2-3 shows the percentage of impervious surfaces and the water quality ratings based on water quality sampling done by the Prince George's County Department of Environmental Resources (1999–2003), while Map 2-5 features a map of impervious surfaces in the study area.

Table 2-3: Impervious Surfaces and Water Quality Within the Study Area

Watershed	Impervious surfaces (acres)	Impervious surfaces (%)	Water Quality Rating (IBI score)	Watershed Rating (Habitat score)
Upper Anacostia River	202.33	43.26	Very Poor	Very Poor
Lower Beaverdam Creek	187.02	44.73	Very Poor	Very Poor
Lower Anacostia River	0.35	93.66	Very Poor	Very Poor
All watersheds in the study area	389.69	43.97		

The Environmental Protection Agency (EPA) and jurisdictions within the watersheds place degraded streams on a national 303(d) List of Impaired Waters that may then be subjected to total maximum daily loads (TMDLs) for the pollutants responsible for the poor water quality. The Anacostia River is on the 303(d) list. The overall objectives of the TMDLs developed for the Anacostia River are to limit the amount of pollutants that jurisdictions in the watershed can release into their streams that flow to the Chesapeake Bay, and to increase the levels of dissolved oxygen or biochemical oxygen demand (BOD)[1] to levels that will help meet the water quality criteria to support the Anacostia River's designated uses. The Anacostia River is designated as a Use 1 waterway (i.e., suitable for water contact recreation and protection of aquatic habitat) throughout most of Prince George's County, except for the Northwest Branch and the Paint Branch along the border with Montgomery County, that are designated as a Use 4 waterway (i.e., can be stocked with trout for recreational fishing) and as a Use 3 waterway (i.e., can support natural trout populations), respectively. According to the Maryland Department of the Environment (MDE), the Anacostia River is impaired by nutrients such as nitrogen and phosphorus, fecal coliform bacteria, trash and debris, sediments, impacts to biological communities, and manufactured organic chemicals such as polychlorinated biphenyls (PCBs) and the pesticide Heptachlor.

Jurisdictions within the affected watersheds created watershed implementation plans (WIPs) to reduce pollution to their waters in order to meet these standards. The WIPs created a framework for guiding water quality restoration efforts. Prince George's County developed a WIP for the portion of the Anacostia within its boundaries that is being implemented by various County agencies with the Department of the Environment taking the lead. Details of this plan can be found at the following web site link: http://www.anacostia.net/. A list of priority projects within the Kenilworth Avenue Town of Cheverly Study area can be found in Section 3.6 of this report. Table 2-4 summarizes the annual TMDL loading caps for two pollutants in the tidal and nontidal sections of the Anacostia River in Maryland.

1. The biochemical oxygen demand or BOD is the amount of dissolved oxygen that aerobic biological organisms in a body of water need to break down organic material that is present in a given water sample at a given temperature, over a specific period of time. Sanitary sewer overflows and broken sanitary lines are major sources of low BOD levels.

Table 2-4: Annual TMDL Loading Caps for Nitrogen and Phosphorus in Tidal and Nontidal Portions of the Anacostia River in Maryland

Pollutant	Nontidal Anacostia (lbs./year)	Tidal Anacostia (lbs./year)
Nitrogen	154,107	143,871
Phosphorus	15,408	14,007

The Anacostia River has a multitude of restoration opportunities. A partnership of several federal, state, and local environmental agencies, private stakeholders, and nongovernmental organizations, released the 2010 *Anacostia River Watershed Restoration Plan* (ARP) addressing actions to be taken to protect the Anacostia River and its tributaries from further degradation. The ARP has identified projects as targets for restoration within the subwatersheds by 2020. Future development or redevelopment of the study area should give high priority to ARP projects within or near the study area's boundaries.

Map 2-5: Impervious Surfaces in the Study Area (for guidance purposes only, field verification required)

Known Streams and Wetlands

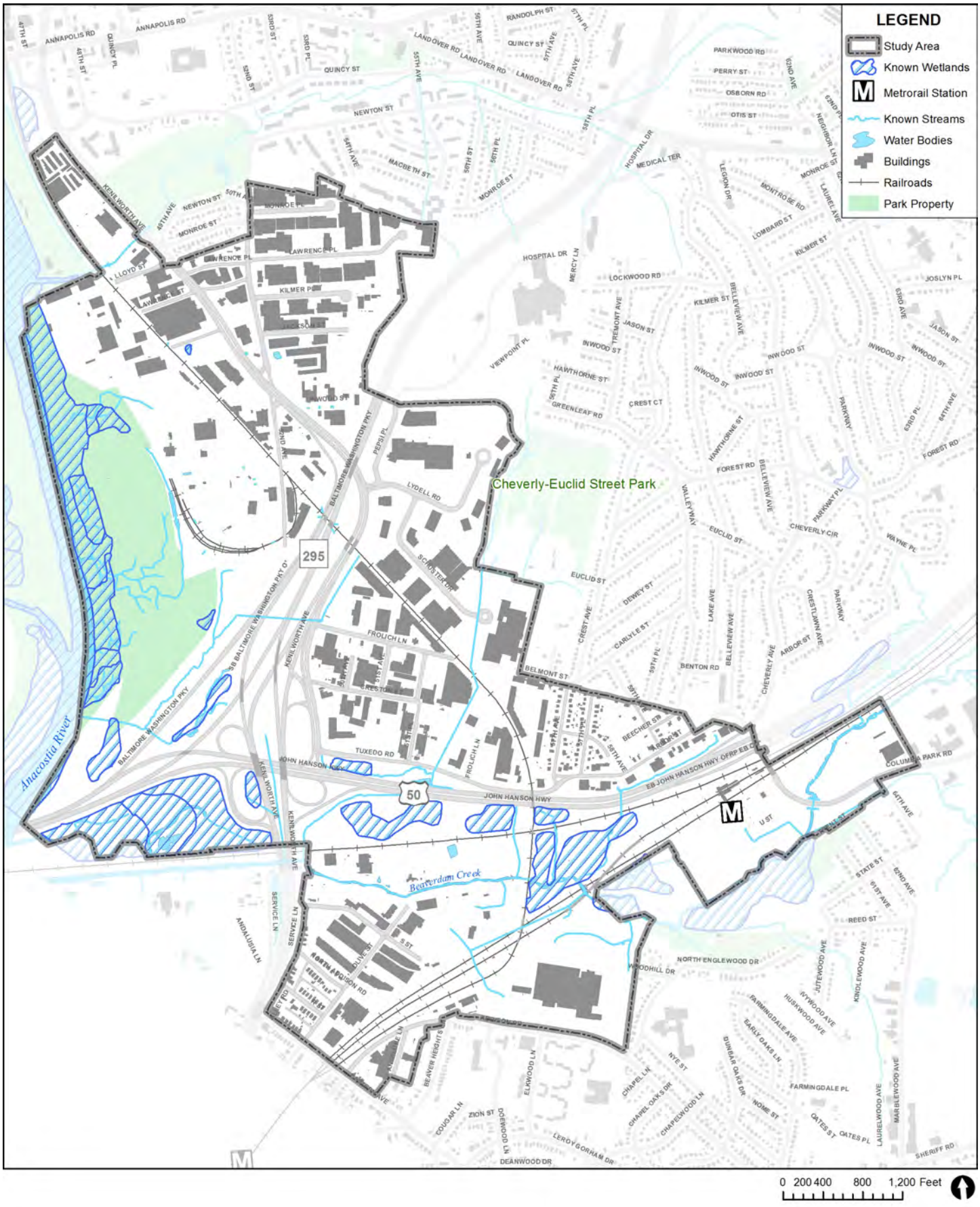
There are nearly 45,000 linear feet (8.4 miles) of mapped streams within the study area (see Table 2-5). For the purpose of this study, all stream features found in the GIS layer (single line streams, headwall, connectors, etc.) have been included in the total calculation of linear feet of streams; therefore, some of these stream centerlines may represent piped, channelized, or otherwise hidden streams. The information in Map 2-6 is from mapping data provided by the Maryland Department of Natural Resources and has not been field checked; it should be treated as conceptual and for planning purposes only. More detailed information on environmental features will be provided during the Natural Resource Inventory review and approval process for specific development applications.

Table 2-5: Known Streams, Wetlands, and 100-year Floodplain within the Study Area

Watershed	Linear feet of known streams*	Acres of known wetlands*	Acres of 100-year floodplain (County study)	Acres of 100-year floodplain (FEMA)
All watersheds in the study area	44,702.55	81.99	314.20	218.09

**Data have not been field verified. Use for planning purposes only.*

Map 2-6: Known Streams and Wetlands in the Study Area



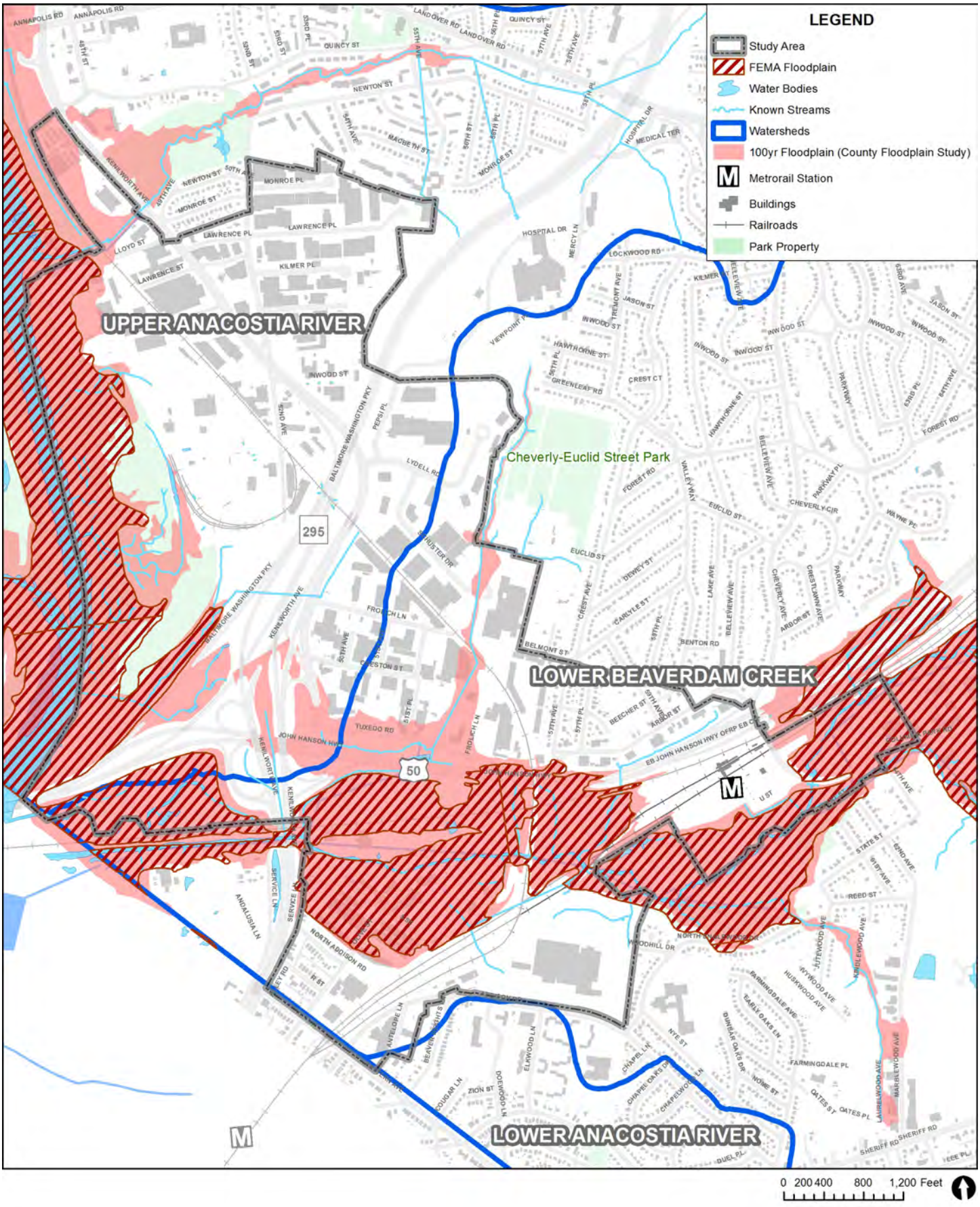
100-year Floodplain

Floodplains are low, flat lands immediately adjacent to streams, rivers, lakes, or oceans that are subject to periodic flooding. The 100-year floodplain represents such areas with a one percent or greater probability of flooding in any given year. Theoretically all lands within reach of a 100-year flood (i.e., a flood event with a one percent chance of occurring in any given day) are considered to be inside of the 100-year floodplain. Most streams with a catchment area of 50 acres or more may have some area of floodplain associated with them.

Floodplains are delineated in two ways. The Federal Emergency Management Agency (FEMA) produces floodplain maps defining areas that are in or out of the 100-year, or "regulatory," floodplain in order to implement the National Flood Insurance Program. FEMA's determinations are based on the existing conditions within the floodplain and do not account for future development. The second method, the one that is used for development purposes, models future development within the 100-year floodplain based on zoning. These are called "floodplain studies" and are either completed by the County, or are completed by an engineer and submitted to the County for approval. County floodplain studies usually result in a larger area of floodplain designation than the FEMA floodplain, because they take into account the additional impacts that may result from future development through to final buildout. For example, FEMA has defined 218 acres of 100-year floodplain within the study area, while the County floodplain study identifies 314 acres (see Map 2-7). The County 100-year floodplain study used for the Kenilworth Avenue and Town of Cheverly Industrial Study should be used for analysis in the future.

The approximate floodplain boundary, based on the County study, is described in Map 2-7. At the time of land development application review, a floodplain study may be required to determine the ultimate limits of the 100-year floodplain based on existing and proposed development.

Map 2-7: 100-year Floodplain within the Study area based on County Floodplain Study

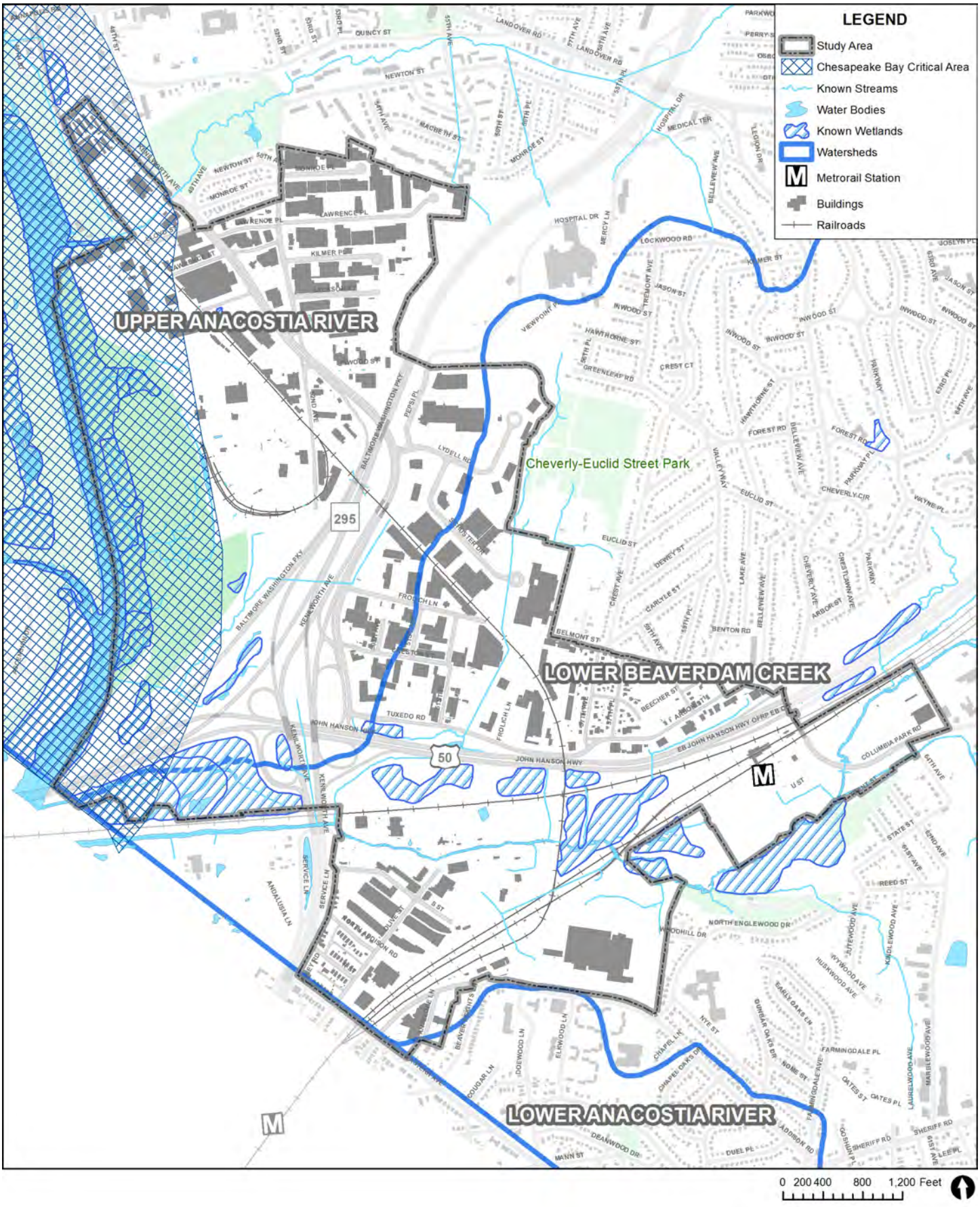


Chesapeake Bay Critical Area

The Chesapeake Bay Critical Area (CBCA) applies to any area within 1,000 feet of the high mean tide (HMT) of the Potomac, Anacostia, and/or Patuxent Rivers. Properties within the CBCA are subject to strict laws regarding development that vary depending upon which overlay zone applies: Intense Development Overlay (IDO), Limited Development Overlay (LDO), or Resource Conservation Overlay (RCO) (see section 2.2 of this report for further information on these overlay zones). The objective is to improve the water quality of the Chesapeake Bay by promoting more sensitive, sustainable, and consistent development and redevelopment of lands within shoreline areas of the Chesapeake Bay and its tributaries. To achieve this, the overlay district is divided by Prince George's County into the IDO, LDO, and RCO, which have varying degrees of review (Map 2-8).

Approximately 100 acres along the Anacostia River on the study area's western boundary are within the RCO zone, while 66 acres, west of MD 201 and Lloyd Street, are within the IDO zone. Development or redevelopment of the areas within the IDO zone must conform to the underlying zone and the CBCA 10 percent stormwater rule for that zone. For instance, stormwater management practices on parcels in the area must seek to reduce stormwater pollutant loads by 10 percent below the load previously generated by the same site. Therefore, this will require development or redevelopment projects to include stormwater management facilities within the property boundary to meet the 10 percent requirements.

Map 2-8: Chesapeake Bay Critical Area (CBCA) boundaries within the Study Area



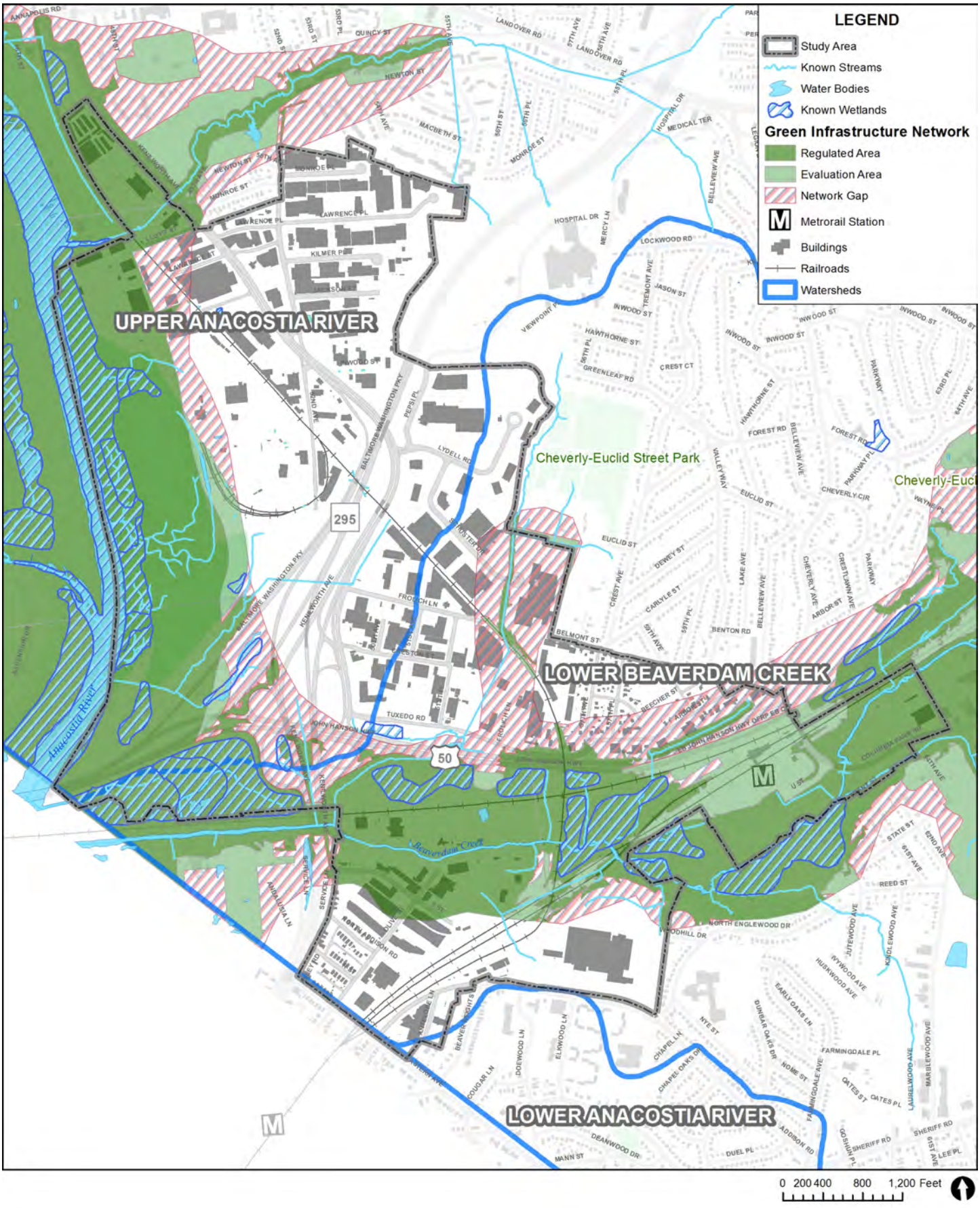
Green Infrastructure Network

The 2005 *Countywide Green Infrastructure Plan* identifies a network of waterways, woodlands, wetlands, and other sensitive habitats of countywide significance, and contains a comprehensive vision for conserving, preserving, and enhancing these resources. The network is divided into Regulated Areas, Evaluation Areas, and Network Gaps.

Regulated Areas are environmentally sensitive features such as streams and wetlands, with their regulated buffers;100-year floodplains; and severe slopes, which are protected during the land development process by laws, guidelines, or regulations at the county, state, or federal level. Evaluation Areas are areas outside the regulated areas that may contain sensitive environmental features or the environmental settings of cultural resources. These areas must be examined during the development review process to determine whether any resources need protection or whether there are areas where mitigation should be directed to expand existing or adjacent environmental resources. Network Gaps are breaks in the natural areas within the network that can potentially connect Regulated and Evaluation areas and significantly expand the network if protected and restored.

About 470 acres of the study area are within the designated network (Map 2-9). The Regulated Areas shown as part of the network are conceptual only. Field work is needed to specifically delineate the regulated environmental features and their associated regulated protection buffers before development applications can be approved. More detailed analysis would be required during studies such as master plans and site development plans, or specifically as part of development proposals for the area. Given the study area's location within a highly developed portion of the Established Communities policy area, the countywide green infrastructure network in the study area includes Evaluation Areas and Network Gaps that are already developed and unlikely to be available for protection and restoration.

Map 2-9: Green Infrastructure Network Within the Study Area, in the Watershed Context



Forest and Tree Canopy Cover

Although the study area lost much of its forest and tree canopy early in the development process, it still retains more than 200 acres of forest and tree canopy. Tree canopy serves several important functions by supporting certain species, providing shade and wind protection, absorbing carbon dioxide, and helping prevent soil erosion.

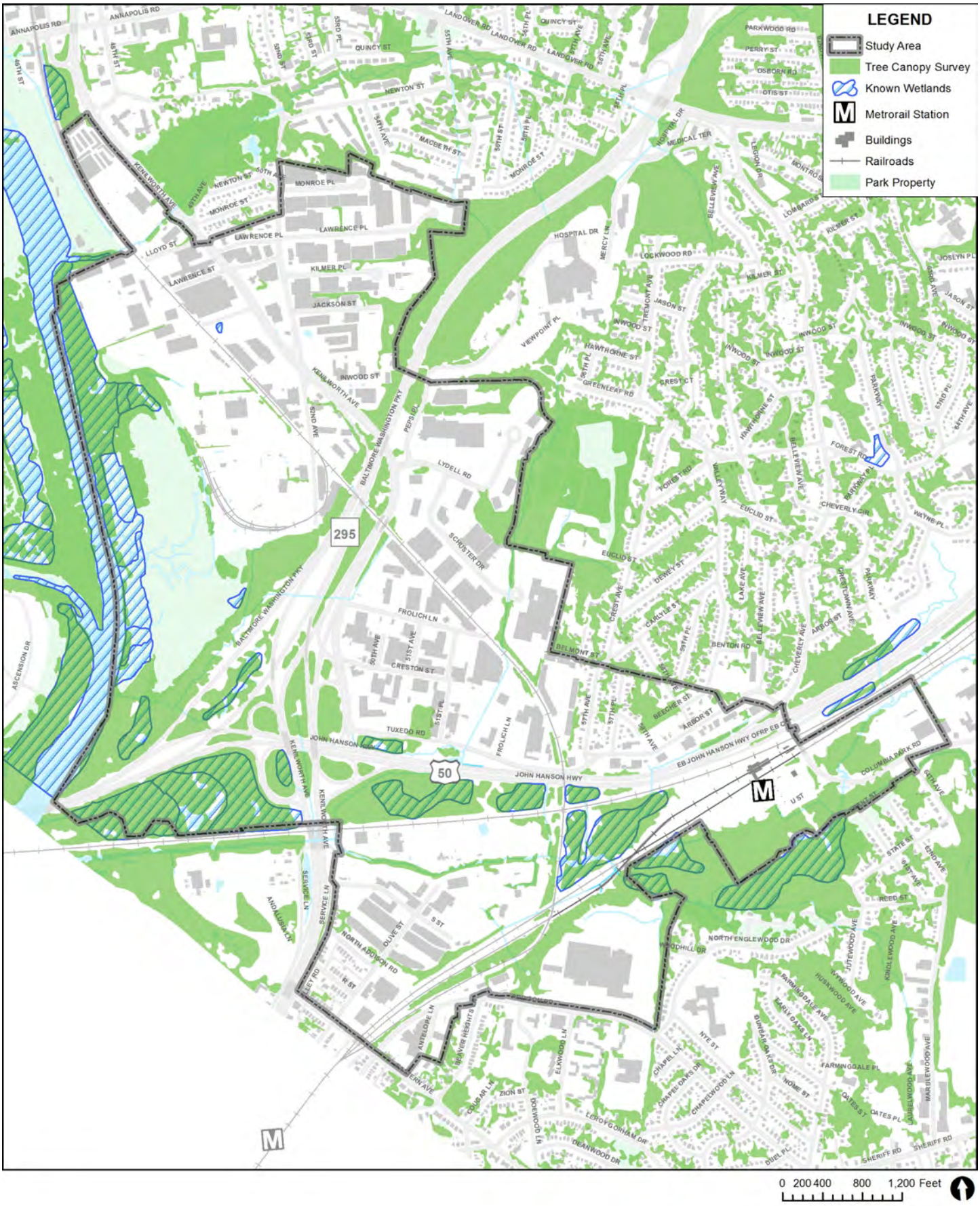
Table 2-6 points to trends in the area's forest and tree canopy coverage between 1938 and 2009, showing a marked increase (13.74 percent) in forest and tree canopy; however, the area's canopy coverage has always been patchy and limited to a few areas, such as the Anacostia floodplain along the western portion of the study area and the Lower Beaverdam Creek tributary south of US 50. There are approved tree conservation plans on some parcels that may contain woodland conservation areas (with preserved or planted woodland) that were the requirements under the state's Forest Conservation Act and the County's Woodland and Wildlife Conservation Ordinance.

The low level of canopy coverage (24 percent) and the high percentage of impervious surfaces (44 percent) contribute to degraded water quality in the receiving streams, resulting in the "very poor" ratings shown in Table 2-3.

Table 2-6: Study Area Forest and Tree Canopy Coverage Trends 1938–2009

Watershed	Canopy Coverage 1938 (Acres)	% of Study area	Canopy Coverage 2009 (Acres)	% of Study area	% Change in Canopy Coverage
All watersheds in the study area	92.21	10.40	213.91	24.14	13.74

Map 2-10: Existing Forest and Tree Canopy in the Study Area



Air Quality

The study area is part of the Washington metropolitan area, which does not currently meet the federal standards for ground-level ozone. Ground-level ozone is a harmful air pollutant that is not emitted directly into the air, but created when oxides of nitrogen and volatile organic compounds react in the presence of sunlight. Ground-level ozone creates health (mainly respiratory) issues for vulnerable populations such as children and the elderly. According to the University of Maryland, motor vehicles account for 30 to 40 percent of the pollutants that form ground-level ozone in the Washington and Baltimore metropolitan areas. Although regulation of air quality is done at the federal level, instead of the local level, a sector plan could encourage people to walk and bicycle, use transit, and carpool, all of which would reduce vehicle use. It may also promote an increase in urban tree canopy, which would reduce contributing sources of pollutants that cause ground-level ozone.

Noise

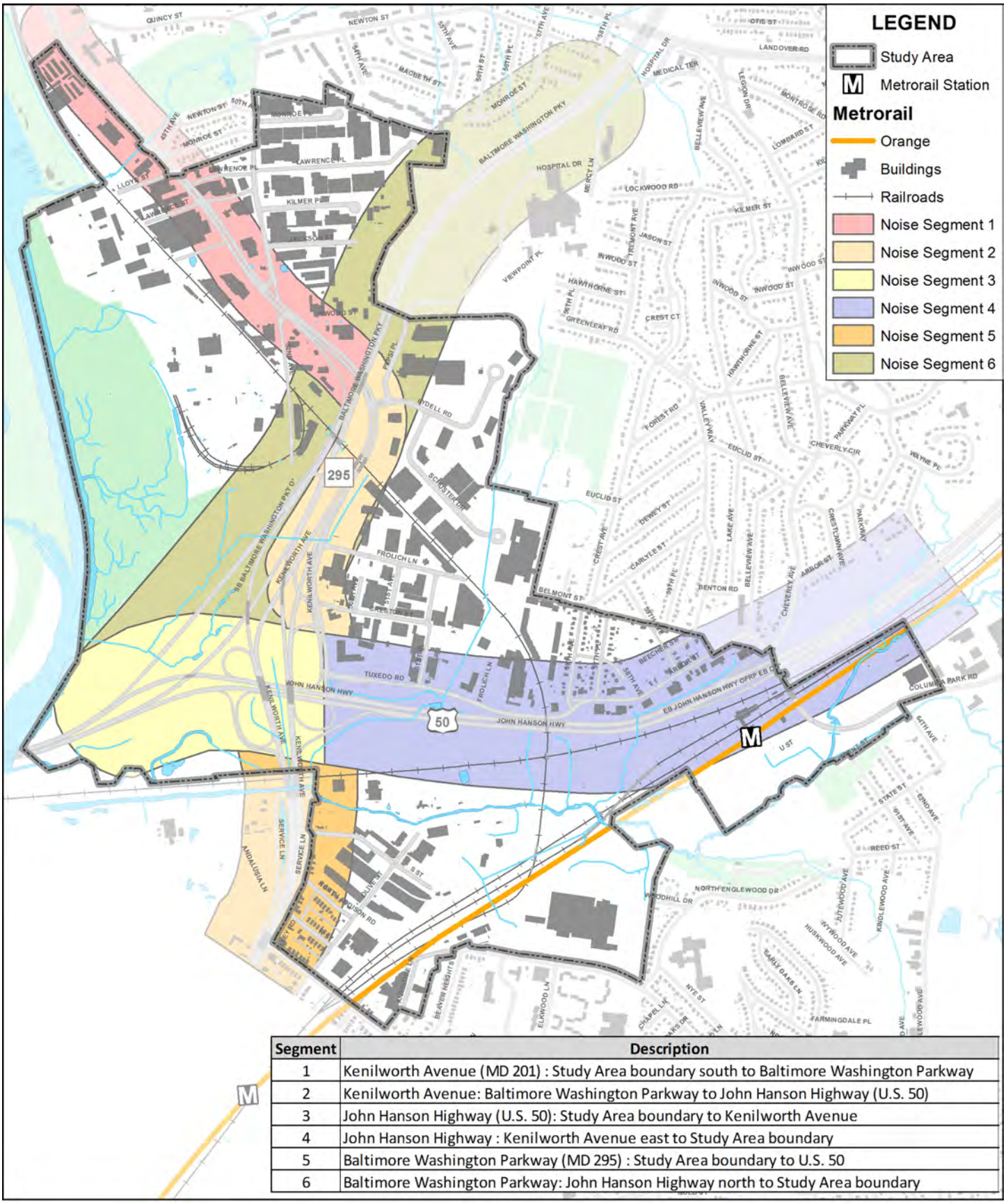
Noise is defined as unwanted sound from constructed and natural sources. Excessive noise significantly affects the quality of life of any community. It is usually the most obvious and common problem for people who live and work near a noise source such as a busy road, port, railway, airport, or airfield. Noise levels are measured in decibels (dBA) averaged for day and night (Ldn). The accepted maximum decibel level for outdoor activity areas is 65 dBA Ldn.

Traffic noise issues are limited to noise from roadways classified as arterial, freeway, and expressway that generate enough traffic to result in unsafe noise levels (i.e., above 65 dBA Ldn) for outdoor activity areas. Kenilworth Avenue is classified as an arterial roadway, while MD 295 and US 50 are classified as freeways. Metrorail and the CSX railway have been identified as additional noise generators that will reach or exceed 65 dBA Ldn. Table 2-7 and Map 2-11 provide information regarding transportation-generated noise levels that are modeled and projected 10 years into the future. When uses such as residential homes, hotels, or day care centers are planned within the 65 dBA Ldn noise contour (i.e., lines on a map that connect points of equal noise exposure) measures must be taken to ensure that noise levels are reduced to 65 dBA or less in outdoor activity areas and 45 dBA or less for indoor areas.

Table 2-7: Projected 65 dBA Noise Contour for Major Roadways in the Study Area

Road Segment	Contour Distance (feet)
Segment 1 - Kenilworth Avenue (MD 201): Study Area boundary south to Baltimore Washington Parkway	330
Segment 2 - Kenilworth Avenue: Baltimore Washington Parkway to John Hanson Highway (US 50)	330
Segment 3 - John Hanson Highway (US 50): Study Area boundary to Kenilworth Avenue	629
Segment 4 - John Hanson Highway: Kenilworth Avenue east to Study Area boundary	629
Segment 5 - Baltimore Washington Parkway (MD 295): Study Area boundary to US 50	462
Segment 6 - Baltimore Washington Parkway: John Hanson Highway north to Study Area boundary	629

Map 2-11: Projected 65 dBA Noise Contour from Traffic-generated Noise in the study area



Segment	Description
1	Kenilworth Avenue (MD 201) : Study Area boundary south to Baltimore Washington Parkway
2	Kenilworth Avenue: Baltimore Washington Parkway to John Hanson Highway (U.S. 50)
3	John Hanson Highway (U.S. 50): Study Area boundary to Kenilworth Avenue
4	John Hanson Highway : Kenilworth Avenue east to Study Area boundary
5	Baltimore Washington Parkway (MD 295) : Study Area boundary to U.S. 50
6	Baltimore Washington Parkway: John Hanson Highway north to Study Area boundary

2.4.2 Identified Environmental Sites

A desktop survey of existing environmental conditions was prepared for this study by accessing the Environmental Protection Agency (EPA) website for brownfields; Federal Resource Conservation and Recovery Act (RCRA) Hazardous Waste Generators and Superfund Sites; EPA Facility Registry System for Prince George's County; State of Maryland Department of the Environment (MDE) for Land Restoration Program sites, voluntary cleanup program sites, site assessments, permitted solid waste acceptance facilities and oil program remediation sites along with United States Geologic Survey (USGS) mapping resources and other cultural documents. As evidenced by the historical mapping resources, the study area has been the site of various industrial activities, particularly given the presence of the Baltimore and Ohio rail lines.

MDE administers the Land Restoration Program (LRP) for brownfield assessments. There are presently five sites that currently are, or have been, in the LRP (see Map 2-12). A summary of each site is provided below:

Capital Wire & Fence, 3334 Kenilworth Avenue, Hyattsville, Maryland
The approximately 6.91-acre site was used for manufacturing and galvanizing fence materials starting around 1976. In the early 1980s the site was sold and used as a recycling center for demolition debris. A preliminary assessment report was prepared for EPA relative to the disposal of waste pickle liquor (10 percent sulfuric acid) used in the process of cleaning fence materials prior to galvanizing. A site inspection report was prepared in 1987 and indicated that there were elevated levels of organic and inorganic compounds detected, although the toxicological evaluation concluded that the contamination posed no threat to human health. In the early 1990s a subsequent purchaser of the property, Metrex, reclaimed the site by removing PVC piping and waste debris left over from previous Capital Wire & Fence operations.

After a Level 1 Site Inspection was performed by the MDE, both the state and EPA concurred that the site should be granted a site status of No Further Remediation Planned.

Bladensburg Acetylene Plant, 2900 52nd Avenue, Hyattsville, Maryland
The site has been used for manufacturing purposes going back to World War II. It has historically been used as a gas filling and distribution facility, which included holding tanks, a disposal pit, an overflow lagoon, and five underground storage tanks (three fuel tanks, a waste oil tank, and an acetylene tank).

Available records indicate that in 1983 an on-site tanker ruptured and released approximately 5,000 gallons of diesel fuel; the spill was subsequently remediated by the removal of the contaminated soil. It is noted that during construction activities in May 1990, solvents were uncovered in the soil and remediated through excavation and removal of material. In 1991, EPA prepared a final site inspection report, which gave the site a designation of No Further Remedial Action Planned. It is noted that this designation by EPA does not necessarily mean that MDE has reached the same conclusion relative to further investigation at the site. In fact, the site is on the State Master List that identifies potential hazardous sites and that further evaluation would need to be completed and provided to MDE.

Mid-Atlantic Finishing, Inc., 4656 Addison Road, Capitol Heights, Maryland
Operations at this site were initiated in February 1976 as a metals electroplating facility operated by Mid-Atlantic Finishing, Inc. The electroplating process generates hazardous waste solids and liquid sludge and, as a consequence, has been designated as an RCRA large quantity generator. As of February 2011, the facility had been inspected by MDE Hazardous Waste Program and was found to be in compliance. Given the regular inspection program administered by MDE, the site has been given a No Further Remedial Action Planned status.

Beaverdam Creek PCB 0.5± mile off of Kenilworth Avenue Capitol Heights, Maryland; from upper Metro crossing to the confluence of Cabin Branch and Beaverdam Creek
The Beaverdam Creek flows through the southern portion of the study area in a section that has historically been used for commercial/industrial uses. Environmental investigations were initiated in 1994 to evaluate sediment samples collected from the Beaverdam Creek watershed. Analysis of the sediment samples indicated elevated levels of PCB contamination associated with industrial and nonpoint source discharges into the watershed. The sampling could not determine the source of the contamination.

Given the potential effects to the environment, MDE recommended that further investigation of surface water be conducted. In 2005, MDE's Science Services Administration (SSA) conducted an investigation of water quality in impaired watersheds in Maryland, including the Beaverdam Creek watershed. MDE continues to sample and is conducting an EPA-sponsored site inspection of the watershed that concentrates on sampling sediment and surface water.

Joseph Smith & Sons, Inc., 2001 Kenilworth Avenue, Beaver Heights, Maryland

Joseph Smith & Sons, Inc. is part of Smith Industries, Inc., a firm founded in 1898 with a long history in the study area dating back to 1952, when operations started. The Capitol Heights facility is one of the firm's two mega-shredder plants that collect, recycle, process, and transport scrap metal. In addition, the facility has direct access to rail service for shipping and owns approximately 400 rail cars used for shipping. On average, approximately 20 rail cars of scrap metal go out every day. The facility will typically take magnetic and nonmagnetic metals including cast iron, rebar, automobiles, galvanized metals, appliances, copper, brass, die-cast metals, stainless steel, and aluminum. Materials can be picked up and brought to the site in roll-off containers or flatbed trailers.

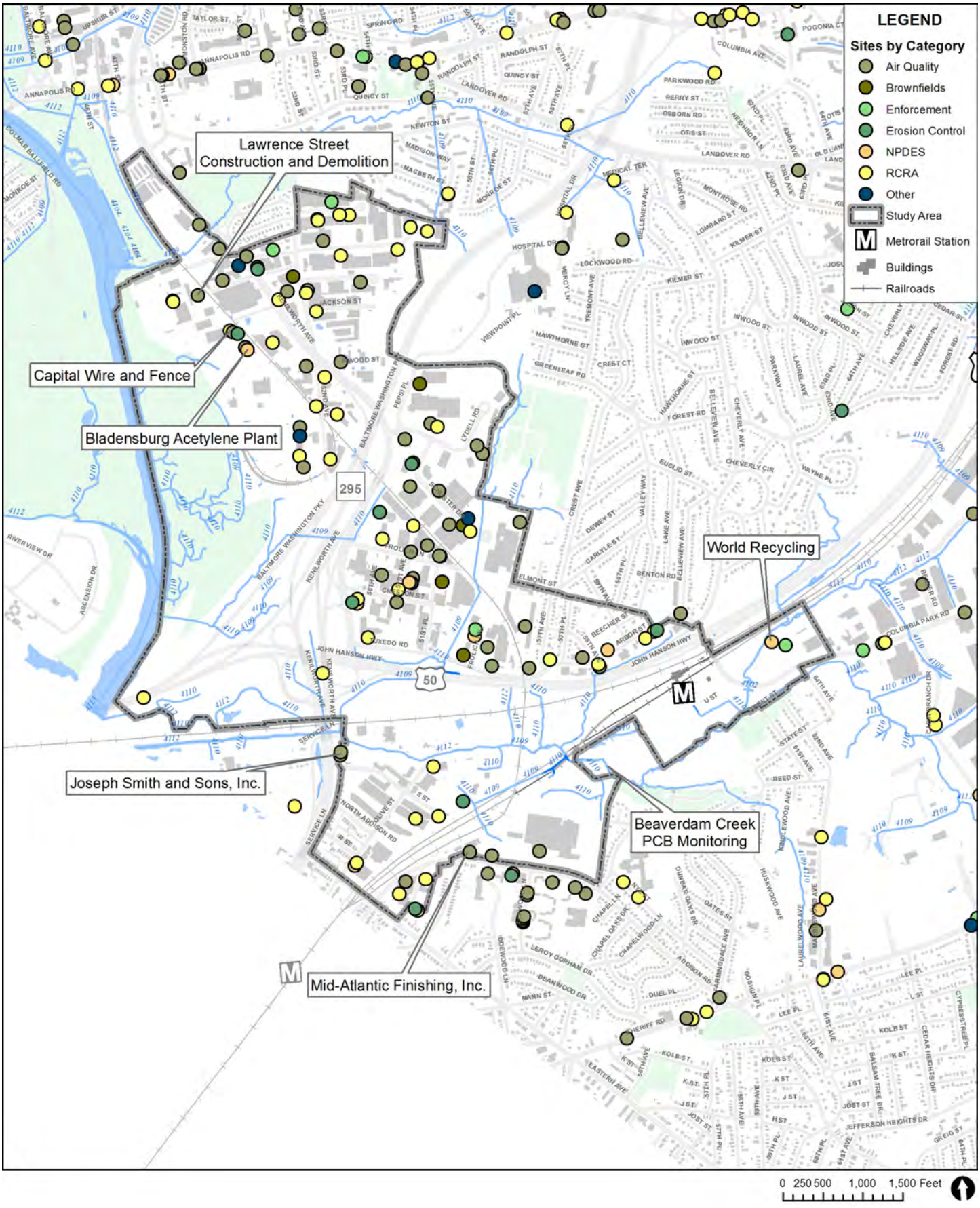
In August 2001, Joseph Smith & Sons, Inc. was issued an administrative complaint for alleged violations of MDE's General Stormwater Permit for Discharges Associated with Industrial Activity. In November 2002, Joseph Smith & Sons, Inc. agreed to implement a stormwater pollution plan and pay $15,000 to the Maryland Clean Water Fund. The case was closed in 2002. The operators of the facility now have an extensive water quality testing program in place.

In addition to the site listed above, the following are also sites of environmental concern/impact:

Lawrence Street Construction & Demolition processing facility is an, approximately, 2.85-acre facility located at 4700 Lawrence Street, Hyattsville, Maryland. The facility accepts construction, demolition, and land clearing debris. The facility is located adjacent to the Anacostia River.

World Recycling, 5600 Columbia Park Road, offers a comprehensive array of recycling programs for office, warehouse, shredding, pallets, electronics, and food waste disposal. The facility was cited in 2000 for alleged stormwater violations, which have since been corrected.

Map 2-12: Identified Environmental Sites in the Study Area



2.5 Transportation

Existing transportation conditions in the Kenilworth Avenue and Town of Cheverly Industrial Study area were evaluated through observations collected during site visits to the study area, available traffic and transit operations data, and stakeholder feedback. Existing conditions and issues observed in the planning area are summarized by transportation mode in this section.

2.5.1 Roadways, Vehicle Mobility, and Parking

The Kenilworth Avenue and Town of Cheverly Industrial Study area is largely defined by the network of freeways, arterial streets, and industrial streets that provide mobility for commuter and regional traffic through the area and that represent a considerable asset for commercial and truck traffic generated by the industrial properties in the study area. Two major, limited-access freeways (US 50 and MD 295) provide regional access to the planning area. Two state highways, MD 201 (Kenilworth Avenue) and MD 295 (Baltimore-Washington Parkway), and Tuxedo Road provide arterial and collector mobility within the study area.

The local roadway network provides access to numerous industrial, residential, and institutional land uses. The sector is dominated by the US 50/MD 295 interchange, including a convoluted, weaving, merging, and diverging freeway ramp configuration in the northeast quadrant of the interchange. The interchange provides access between US 50, MD 295, Kenilworth Avenue, Tuxedo Road, and several local streets; however, the ramp configuration also contributes to constrained sight distance issues, limited merge distances, and the potential for wrong-way driving movements. Trucks and other commercial traffic are required to use Kenilworth Avenue to both cross and merge with MD 295 exiting traffic in order to access US 50 westbound. Another interchange providing access to US 50 is located on Tuxedo Road and Columbia Park Road.

Figure 2-32: Heavy truck traffic on Columbia Park Raod.

Figure 2-33: Limited sight distance at Kenilworth Avenue and Lawrence Place due to minimal building setback.

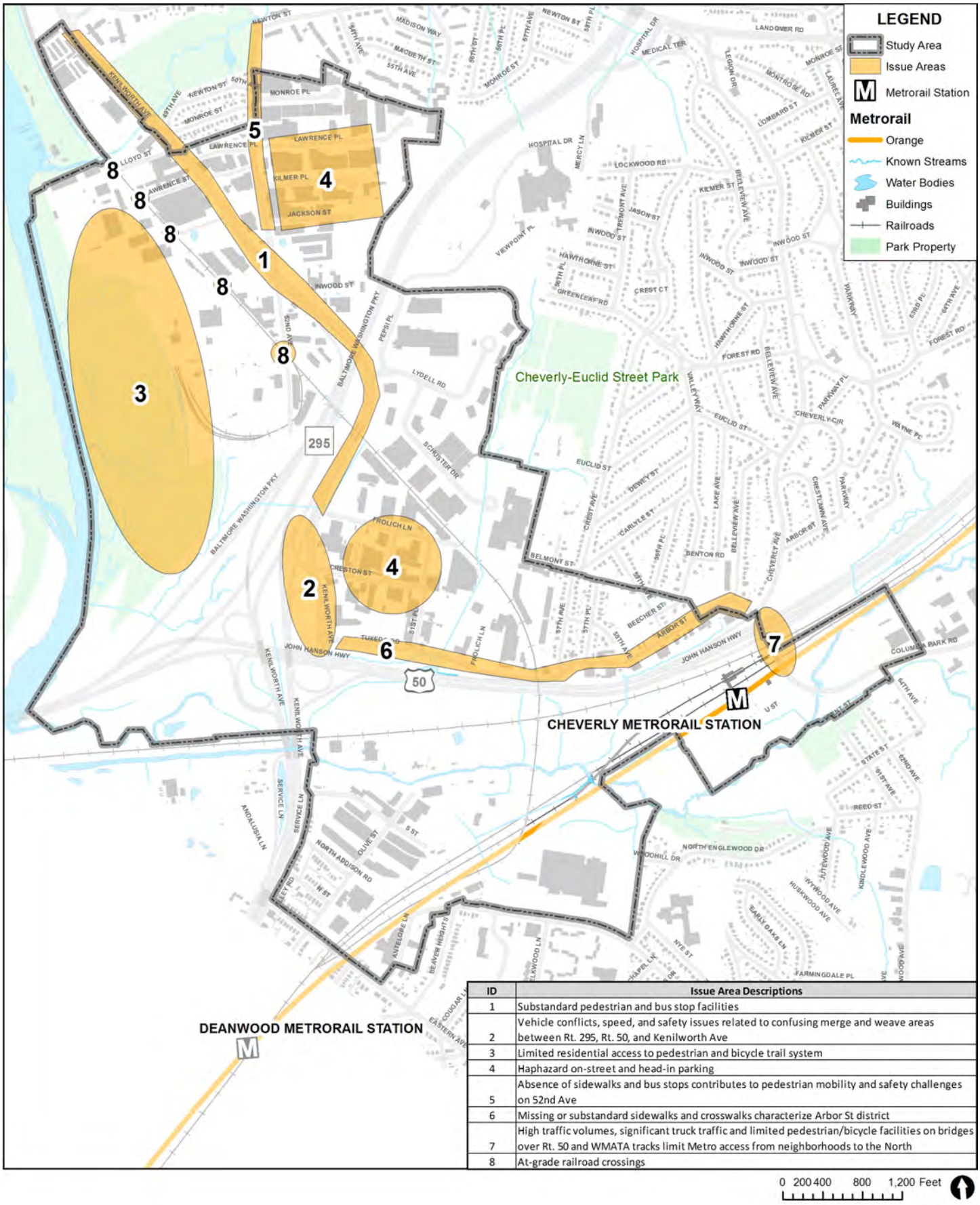
Figure 2-34: Cars parked on the sidewalk on Olive Street.

Figure 2-35: A car backs into the travel lane after parking head-in.

Significant traffic volume on Kenilworth Avenue contributes to congestion during peak periods. Minimal building setbacks in proximity to multiple unsignalized intersections on Kenilworth Avenue contribute to sight distance limitations. The traffic and sight distance issues on Kenilworth Avenue, particularly in the vicinity of the MD 295 and US 50 interchange, as well as the limited pedestrian infrastructure in the southern portion of the study area, present significant challenges for pedestrian mobility and safety. Significant truck and commercial traffic was observed in the study area, particularly along Tuxedo Road, Columbia Park Road, and 52nd Avenue (south of Kenilworth Avenue). State Highway Administration traffic count data in the study area indicates the current maximum weekday daily traffic volumes are approximately 35,850 vehicles per day on Kenilworth Avenue and 6,600 vehicles per day on Tuxedo Road. These daily traffic volumes are within a generally acceptable volume range for arterial and industrial state highways. The operational capacity of urban roadway corridors is determined by the peak hour performance of individual intersections and defined in the Prince George's County Approved Master Plan of Highways.

The local street network is generally comprised of two-lane streets, often without marked centerlines, shoulders, curb/gutter, or sidewalks. On-street parking is permitted on most local streets in the study area. Haphazard on-street parking activity, including double-parking and vehicles partially or fully parked on the roadside, was observed in several areas. However, minimal use of on-street parking, which contributes to wider effective roadways and elevated vehicle speeds, was observed in the Cheverly Industrial Park area. Property access throughout the study area is often provided via wide driveways, and head-in parking along the roadside is allowed in front of many buildings. Head-in parking maneuvers require vehicles to back out into the travel lanes, which contributes to conflicts with traffic in the roadway.

Map 2-13: Transportation Issue Areas in the Study Area



ID	Issue Area Descriptions
1	Substandard pedestrian and bus stop facilities
2	Vehicle conflicts, speed, and safety issues related to confusing merge and weave areas between Rt. 295, Rt. 50, and Kenilworth Ave
3	Limited residential access to pedestrian and bicycle trail system
4	Haphazard on-street and head-in parking
5	Absence of sidewalks and bus stops contributes to pedestrian mobility and safety challenges on 52nd Ave
6	Missing or substandard sidewalks and crosswalks characterize Arbor St district
7	High traffic volumes, significant truck traffic and limited pedestrian/bicycle facilities on bridges over Rt. 50 and WMATA tracks limit Metro access from neighborhoods to the North
8	At-grade railroad crossings

2.5.2 *Transit Facilities and Operations*

The Cheverly Metro Station is located in the study area. The Cheverly Metro Station is on the Metro Orange Line, connecting New Carrollton in Prince George's County with downtown Washington, D.C., Arlington and Fairfax Counties in Virginia. The Cheverly Metro Station is a commuter station, providing 500 parking spaces in a surface lot for daily commuter parking, and is a destination for regional bus service. The station also provides several Zipcar car sharing vehicles, which highlights the station's importance as a hub for trips of all purposes.

Figure 2-36: Bus bays at the Cheverly Metro Station.

Figure 2-37: WMATA bus service on Arbor Street.

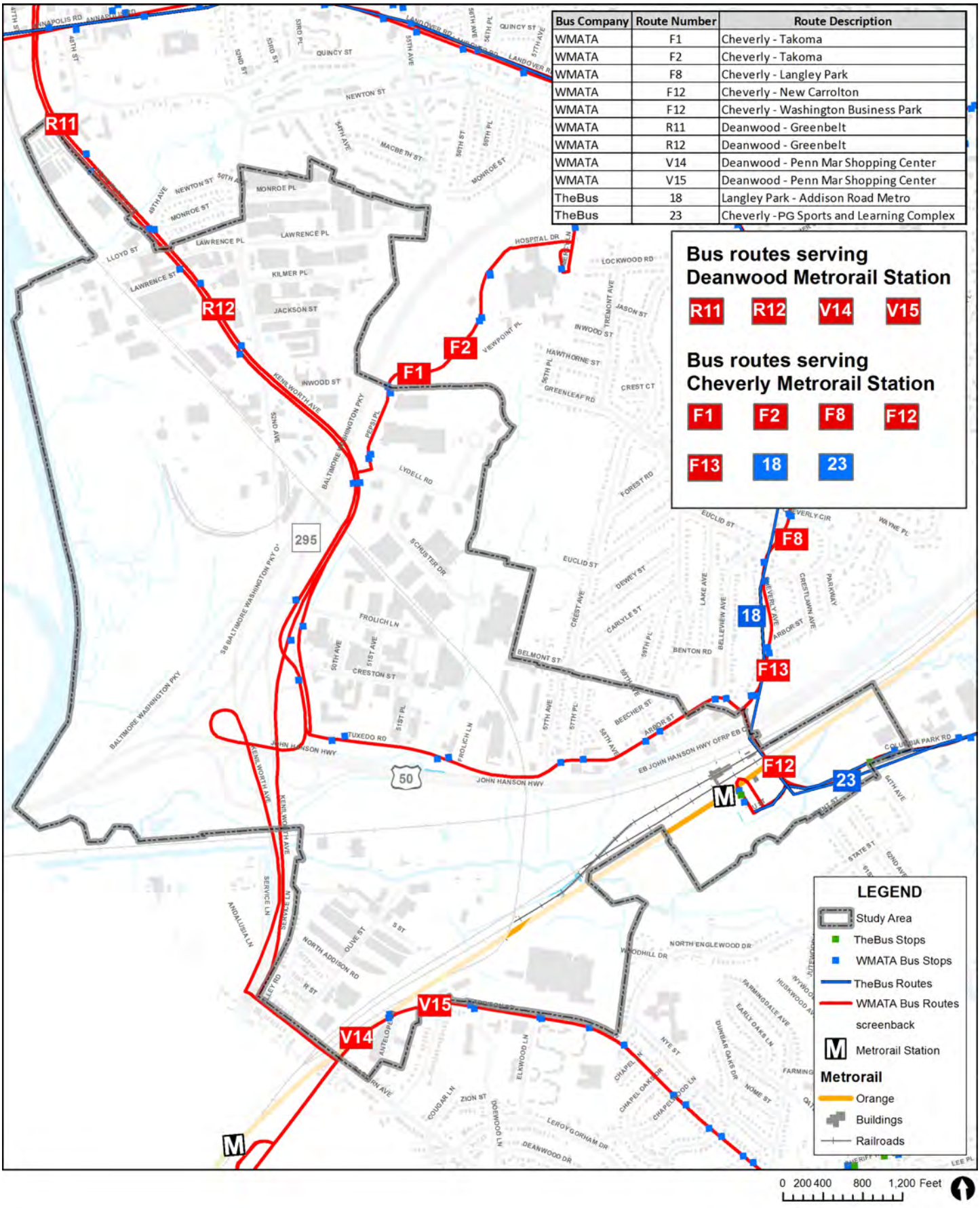
Figure 2-38: Bus stops with inadequate access and passenger landing area.

Figure 2-39: A bus stop on Tuxedo Road with no connection to pedestrian facilities.

WMATA and Prince George's County both operate public bus services in the study area. WMATA operates the Metrobus and Prince George's County operates TheBus. Within the study area, public bus service is provided on Kenilworth Avenue, Tuxedo Road, Addison Road, and Pepsi Place. Primary destinations of the public bus system in and around the area include the Cheverly Metro Station, Deanwood Metro Station, Prince George's County Hospital, Prince George's Sports & Learning Complex, the Plaza at Prince George's County, Addison Road-Seat Pleasant Metro Station, College Park-UMD Metro Station, Greenbelt Metro Station, and Landover Metro Station. No public bus service is provided on the 52nd Avenue Corridor, which is an active industrial district and might benefit from services in the future.

The condition of bus stops throughout the study area is poor. Bus shelters are virtually absent throughout the study area, except at the Cheverly Metro Station. Adequate passenger landings and pedestrian accessibility to bus stops are absent at many stations, particularly along Kenilworth Avenue and Tuxedo Road. Many bus stops consist of a signpost mounted in a grassy roadside swale along the road shoulder or on a raised asphalt island without wheelchair ramps or sidewalk facilities. For instance, bus stops located along Kenilworth Avenue in proximity to the US 50/MD 295 interchange are located in traffic islands within the interchange ramp network, without any accessible facilities for passengers.
Map 2-14 shows the WMATA Metrobus and the Prince George's County TheBus routes that serve the study area.

Map 2-14: Transit Service in the Study Area



Bus Company	Route Number	Route Description
WMATA	F1	Cheverly - Takoma
WMATA	F2	Cheverly - Takoma
WMATA	F8	Cheverly - Langley Park
WMATA	F12	Cheverly - New Carrolton
WMATA	F12	Cheverly - Washington Business Park
WMATA	R11	Deanwood - Greenbelt
WMATA	R12	Deanwood - Greenbelt
WMATA	V14	Deanwood - Penn Mar Shopping Center
WMATA	V15	Deanwood - Penn Mar Shopping Center
TheBus	18	Langley Park - Addison Road Metro
TheBus	23	Cheverly -PG Sports and Learning Complex

2.5.3 Pedestrian and Bicycle Facilities

Regular pedestrian and bicycle activity was observed in several locations throughout the study area, particularly in proximity to residential neighborhoods along Tuxedo Road and 52nd Avenue, and in proximity to the Cheverly Metro Station. However, much of the study area is characterized by the absence of adequate pedestrian and bicycle facilities.

Sidewalks are absent, for the most part, along Kenilworth Avenue, Tuxedo Road, Arbor Street, 52nd Avenue, and most local streets in the planning area. Where present, sidewalks and crosswalks are often in deteriorating condition or fail to maintain compliance with the Americans with Disabilities Act (ADA) standards. These conditions force many pedestrians, including those with mobility impairments, to travel in the street or in narrow shoulders along the roadside. Informal trails, or "people's choice trails," where pedestrians walk in the grass along the roadside, are visible along Arbor Street and 52nd Avenue. The limited roadway width, vertical curvature, lack of shoulders, and significant side slopes along 52nd Avenue, north of Monroe Place, are extremely constraining for pedestrians, who have blazed a trail on a steep slope along the east side of the roadway, and renders this segment, which borders a residential neighborhood, completely inaccessible to pedestrians with mobility impairments.

The Anacostia Tributary Trail System (ATTS), including a dedicated shared-use pathway for pedestrians and bicycles, is located along the Anacostia River in the western portion of the planning area. This trail system provides a number of miles of uninterrupted trails along the tributaries of the Anacostia River. Beyond the trail system, bicycle facilities are virtually absent from the planning area. Wide shoulders are provided on Kenilworth Avenue but are not marked for bicycle activity and, without sidewalks, the shoulder is shared between pedestrians and bicycles without providing a form of separation for the two. Bicycle parking is provided at the Cheverly Metro Station, but appeared very limited in other parts of the planning area.

Poor pedestrian and bicycle connectivity between the Cheverly Metro Station and residential neighborhoods north of US 50 was cited by stakeholders as a significant issue. With access to the station provided exclusively from Columbia Park Road, US 50 and the WMATA tracks represent a significant barrier between the station and much of the planning area. A sidewalk is provided only along the west side of Columbia Park Road where it bridges over US 50 and the WMATA tracks, and wide shoulders on Columbia Park Road that support bicycle travel end abruptly at the bridge over US 50. Additionally, significant truck activity on Columbia Park Road and Arbor Street, in combination with the limited pedestrian and bicycle facilities, contributes to a hostile environment for pedestrian and bicycle activity in this area. Bicyclists were observed riding on the sidewalk to avoid conflicts with automobiles in this area.

Figure 2-40: A pedestrian walks along an informal "social" trail on a steep slope along 52nd Avenue.

Figure 2-41: Lack of pedestrian facilities along Arbor Street.

Figure 2-42: Bike racks at the Cheverly Metro Station.

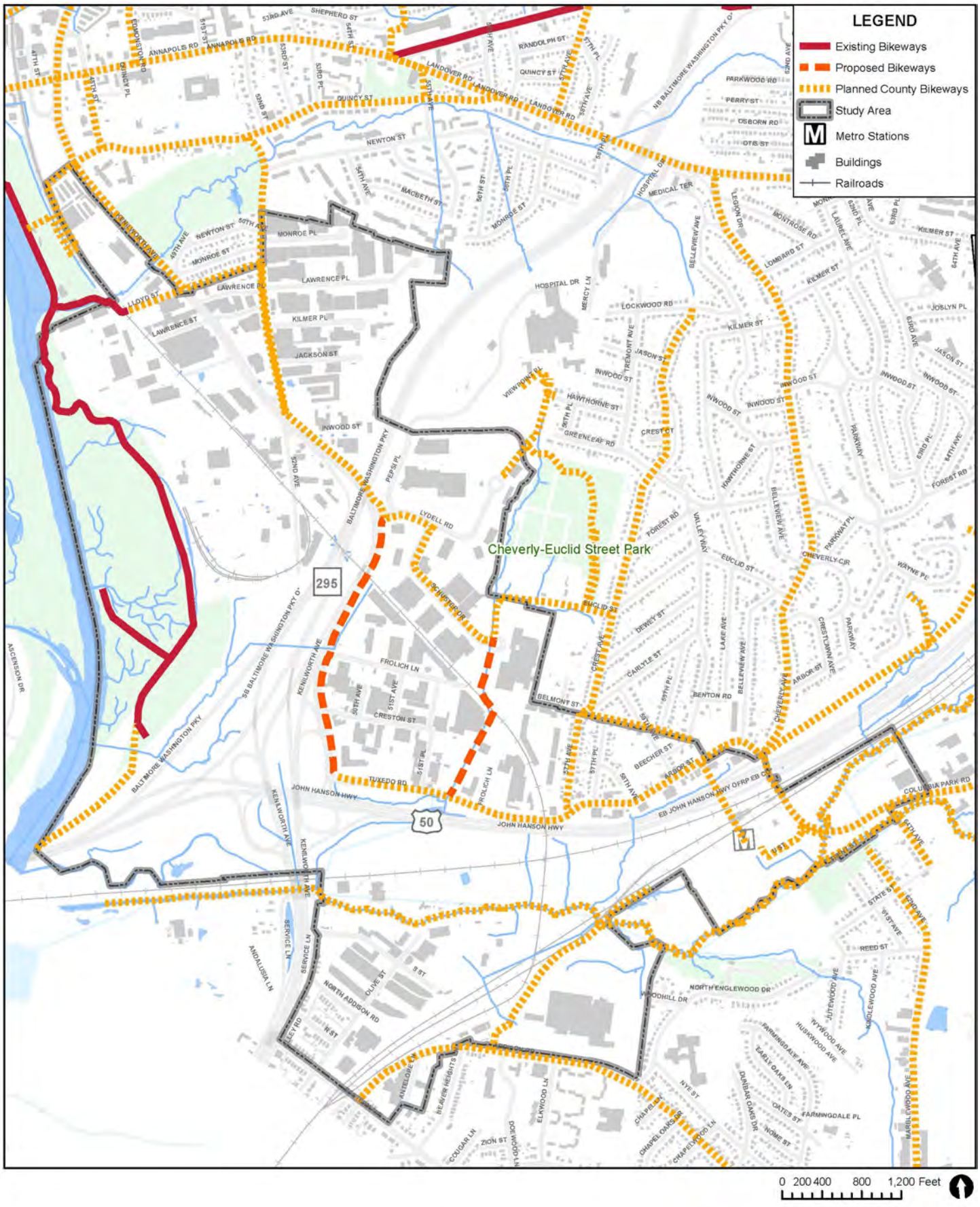
Figure 2-43: A bicyclist rides on the sidewalk on Columbia Park Road.

Existing Trails

The vicinity of Kenilworth Avenue to the south and west of Cheverly and south of Bladensburg supports an existing area of industrial land uses bordered by largely established residential communities. This industrial area is generally supported by truck traffic from US 50 and Kenilworth Avenue, as well as other surrounding local roadways. Much of the area's transportation network is designed to get the industrial truck traffic into and out of the study area, and facilities for nonmotorized modes, such as walking or bicycling, are fragmented or missing in most of the study area. However, the existing ATTS runs through the study area, along the Anacostia River and its associated tributaries, and provides an excellent trail network for both recreation and some transportation trips in the area.

The ATTS provides an extensive system of stream valley park trails throughout the Port Towns and surrounding communities. The concept of the Anacostia Trails Heritage Area Management Plan was inspired in part by the ATTS. Built by The Maryland-National Capital Park and Planning Commission (M-NCPPC) along the Anacostia River and its tributaries, the system encompasses 26 miles of off-road trails, generally via an 8-foot-wide paved path. The potential exists to expand the system to Beltsville, Laurel, and back to Greenbelt, greatly increasing the size of the current system.

Map 2-15: Master plan trail and bikeway facilities in the study area



The existing trails of the ATTS run along the Anacostia River south of Bladensburg and extend into both northern Prince George's County and Montgomery County along various tributaries of the Anacostia River. The trail segment that connects Prince George's County to Washington, D.C. will be completed in 2016. With this connection the region will boast one of the nation's largest urban trail systems stretching from downtown Washington and into both Montgomery and Prince George's Counties.

M-NCPPC's Department of Parks and Recreation has completed many recent improvements to the Bladensburg Waterfront Park, including a promenade walkway along the river, playground equipment, visitor's center, community boathouse, and a picnic shelter. A pedestrian bridge connecting the ATTS with the waterfront park was opened in 2006. This bridge links Bladensburg with Colmar Manor and provides access to the 26-mile ATTS. This trail will run along the eastern side of the Anacostia River from Bladensburg Waterfront Park south into Washington, D.C., where it will link to the Kenilworth Aquatic Garden and the Anacostia Riverwalk.

Both Bladensburg and Cheverly have identified the need to have better bicycle and pedestrian access into the trail system during previous planning studies. Opportunities for new trail connections are limited, but there are some opportunities for trails that may be feasible in the short- and long-term. Also, the provision of Complete Streets, as proposed in the 2009 *Approved Countywide Master Plan of Transportation*, will be crucial for providing a community where residents and employees can safely walk or bicycle to the area's trail network, as well as make short trips by walking or bicycling.

Major Master Plan Trails and Bikeways Within the Study Area

The 2009 *Approved Countywide Master Plan of Transportation* and the 2009 *Approved Port Towns Sector Plan and Sectional Map Amendment* included numerous recommendations for trails, on-road bicycle facilities, and sidewalk construction. Major facilities within or in the vicinity of the study area include:

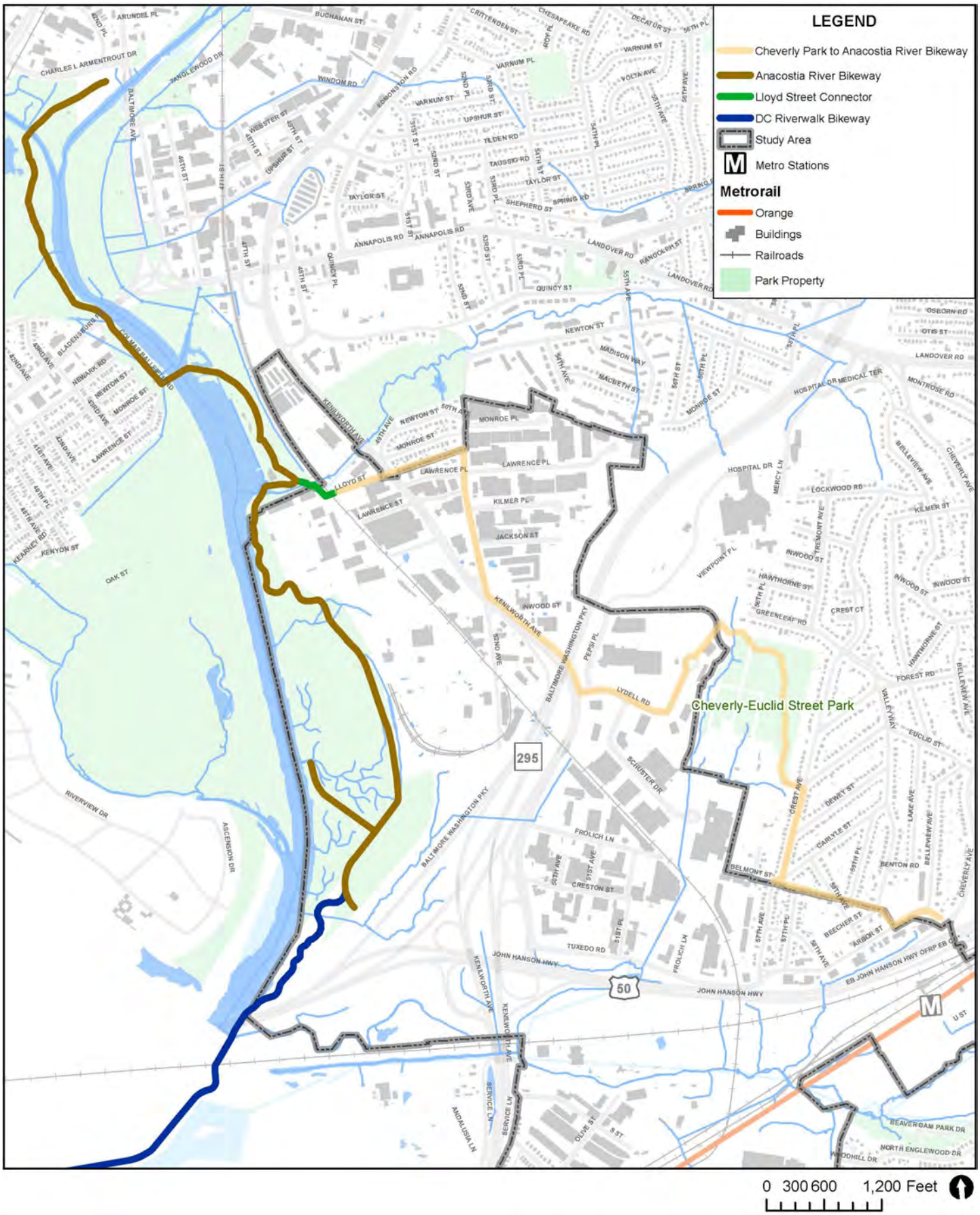
- **MD 201 Shared-Use Side Path (US 50 to I-495):** This trail will improve bike and pedestrian safety along a high-volume and high-speed roadway.
- **Tuxedo Road/Arbor Street Continuous Sidewalks and On-Road Bicycle Facilities (Kenilworth Avenue to Cheverly Avenue):** Provide continuous facilities for pedestrians and bicyclists to improve access to the Cheverly Metro Station. Continuous standard or wide sidewalks should be provided, as well as accommodations for bicyclists.
- **Cheverly Metro Station Area Pedestrian Bridge (Arbor Street to Cheverly Metro):** Provide a pedestrian bridge connecting the Cheverly Metro Station to the Arbor Street mixed-use area. This long-term recommendation will provide safe and convenient pedestrian access between a revitalized Arbor Street and the Cheverly Metro Station.
- **Cheverly Shared-Use Bikeways; Cheverly Avenue (MD 202 to US 50) and Crest Avenue (Cheverly Nature Park to Belmont Street):** These roads are recognized as important bicycle and pedestrian corridors through the Town of Cheverly.
- Lower Beaverdam Creek Stream Valley Trail (Anacostia River Park to Pennsy Drive): This trail will utilize a park trail corridor as well as some on-road improvements along Pennsy Drive to provide nonmotorized access to the Cheverly and Landover Metro stations. It will also provide access from Subregion 4 to the ATTS. This planned trail along the entire length of Lower Beaverdam Creek within Subregion 4 will be a substantial addition to the existing ATTS and will provide needed urban greenspace within an industrial corridor. This is a long-term recommendation as significant land acquisition and stream restoration will be required. Evaluate the feasibility of extending the Lower Beaverdam Creek to New Carrollton Metro Station. Where trails need to cross streams, they should be constructed using bridges and boardwalks.
- Columbia Park Road Sidewalks and Designated Bike Lanes (MD 704 to US 50): Provide continuous standard or wide sidewalks with designated bike lanes. These facilities will improve access to the Cheverly Metro Station, Kentland Community Center, South Columbia Community Park, and Columbia Park Elementary School.

Cheverly to Bladensburg Waterfront Park Trail (Cheverly Euclid Street Park to Bladensburg Waterfront Park): Both the MPOT and the sector plan recommended a trail connection linking the Town of Cheverly and the Cheverly Industrial Area with Bladensburg Waterfront Park and the Anacostia River Trail. This trail will link Cheverly with the larger stream valley trail system and provide needed bicycle and pedestrian improvements within the industrial area. The alignment recommended in these plans is reiterated below:

- A side path along Lloyd Street that will connect to the existing M-NCPPC trail at the WSSC facility.
- A continuation of a trail along the unbuilt portion of Lloyd Street to 52nd Avenue.
- Five-foot sidewalk and bike lanes along 52nd Avenue.
- Side path along MD 201, including under MD 295.

More detailed design work, meetings with private property owners, and community meetings have continued regarding this trail connection. This connection should be implemented as outlined in the approved plans or as amended by subsequent meetings and design work.

Map 2-16. Planned Cheverly Park to Anacostia River Bikeway



2.5.4 State Highway Administration Transportation Projects

The Maryland State Highway Administration (SHA) lists one project in the study area. The project involves the provision of ADA-compliant pedestrian facilities and bicycle lanes along MD 201, starting from the location of the Kenilworth Towers residential building to MD 410. The project was funded in 2010 and is currently listed as under design. This project overlaps only with the very northernmost extents of the Kenilworth Avenue and Town of Cheverly Industrial Study area.

2.6 Market Analysis

The study area's industrial supply is healthy and serves a critical role in housing a diverse mix of production, distribution, and repair (PDR) businesses that support the regional economy. PDR uses encompass a range of activities vital to the economic functioning of a region and its business core, and extend beyond the large-scale manufacturing, warehousing, and transportation businesses that have often located towards the metropolitan fringe, or outside of the metropolitan region altogether. PDR uses support the full spectrum of industries important to a metropolitan region, including tourism, real estate and finance, health care, education, and professional services.

This market analysis first examines the business and market conditions within the study area. The analysis then evaluates the regional context of the study area's condition and trends impacting the longer term sustainability of the industrial supply found in the Washington metropolitan area—in particular, the industrial supply found inside the Beltway, which is labeled in this analysis as the "regional core" inventory. The market analysis reviews supply trends for the regional core inventory, as well as employment and industry trends that might suggest the direction of future demand from traditional PDR users' industrial space in the study area. Subsequent chapters of this study assess market-based opportunities for revitalization. Opportunities examined include the potential for a broader mix of compatible uses, including retail that can allow the area to maintain its competitiveness and better serve the needs of nearby workers and residents. A market assessment of site conditions informs the overall concept plan and planning area recommendations.

2.6.1 Study Area Characteristics

The study area's inventory of industrial properties is old but in demand. The study area offers 186 industrial buildings, providing more than four million square feet of industrial rentable building area (RBA) in the study area, as well as a small amount of office space in stand-alone facilities. Data on the inventory of industrial and commercial properties within the study area are furnished by CoStar, a company that provides real estate information to commercial and industrial brokers and developers. The study area spans two industrial submarkets identified by Costar; most of it is in the Cheverly-Hyattsville submarket, however, a small portion of the southern study area is within the Landover/Largo submarket (Map 2-17). The study area comprises a substantial subset of the Cheverly/Hyattsville submarket, and closely mirrors that submarket's characteristics.

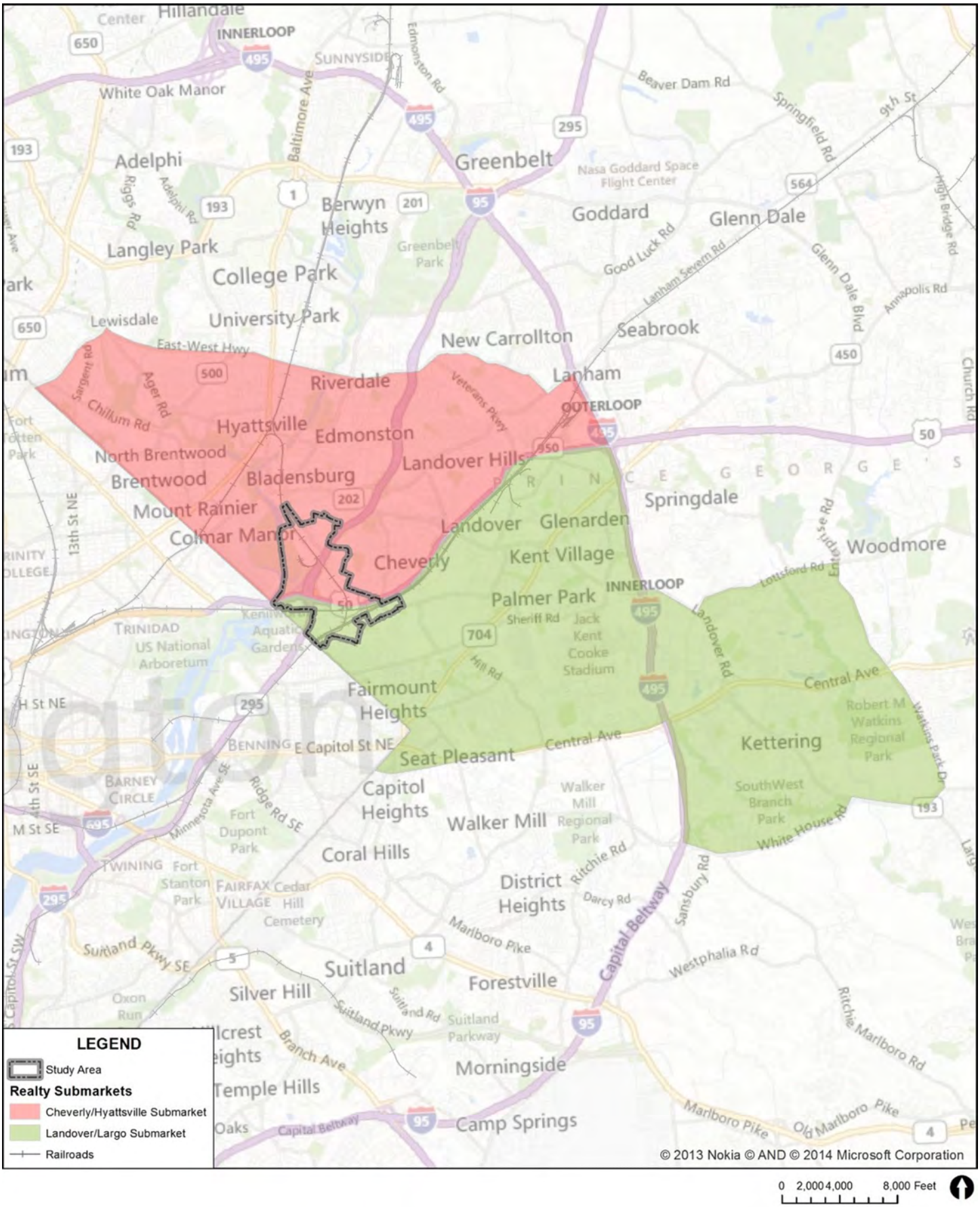
- Nearly all of the study area's industrial and office space is characterized as Class C[2] industrial and office space—no-frills, low-amenity space that competes in the market on the value it offers.
- It is also old, with the vast majority of buildings constructed in the 1950s and 1960s. The area is very stable, with no buildings added or removed from the building inventory since the mid 1990s.
- Despite its age and quality, the study area inventory demonstrates its desirability through its low vacancy rates—3.5 percent for manufacturing and warehouse space, and 2.4 percent for office space as of the second quarter of 2013.
- Most of the properties are relatively small, under 20,000 square feet of RBA. Only 10 buildings are more than 50,000 square feet in size, with only 2 buildings—the Craftsman Press building and the Pepsi bottling facility—larger than 100,000 square feet.

Businesses found in the study area employ more than 4,000 workers. Buildings in the study area are occupied by a mix of businesses, mostly in the PDR industry subsectors (identified subsequently in the market analysis). Construction, waste management, and wholesale trade establishments employ the largest share of study area employees, with a notable number of study area jobs also found in retail trade (which includes establishments that provide retail goods to other businesses). According to a dataset available from the U.S. Census Bureau (the Longitudinal Employment and Household Dynamics dataset, or LEHD)[3], study area businesses employed more than 4,000 workers in 2011, the last year that data was available. Since 2009, when the region saw the lowest employment levels of the recession, employment continued to decline in the study area. Nearly 40 percent of workers live within 10 miles of the study area, and about 85 percent reside in Maryland.

2. Commercial buildings are classified as A, B or C. Class A is the highest quality, with Class B being the next notch down and Class C being the lowest quality. These classes are subjective but generally reflect the building's age, condition, configuration, and amenities.

3. OnTheMap is a web-based mapping and data application made available by the Center for Economic Studies of the U.S. Census Bureau. The data come from the Longitudinal Employer-Household Dynamics (LEHD) program's Origin Destination Employment Statistics (LODES), which bring together federal, state, and Census Bureau data on employers and employees. Employment data includes primary jobs only. Employment data may exclude some jobs not captured by the data collection, including self-employed persons and some Federal employees.

Map-2-17: CoStar Realty Submarkets in the Study Area



2.6.2 Industrial Space at the Region's Core

This section examines the supply of industrial space available in and around the study area, and the region-wide characteristics of the industrial space at the region's core. The analysis incorporates CoStar data to assess absorption trends for the geographic area of Maryland, Washington, D.C., and Virginia that is inside of I-495 (Capital Beltway). The analysis seeks to understand the dynamics of the supply of property that houses PDR uses and serves the dense core of the region, the extent to which industrial inventory in the study area and similar locations is meeting demand, and whether the lack of new product in the most developed part of the region is constraining supply

Inventory Overview: Prince George's County, Washing, D.C., and Inner Suburban Jurisdictions

Table 2-8 describes the industrial inventory in the inner portion of the Washington metropolitan region—Prince George's County; Washington, D.C.; and the inner suburban jurisdictions of Montgomery, Arlington, and Fairfax Counties and the City of Alexandria. This area is home to over 150 million square feet of industrial space as of the third quarter of 2013. Geographically, Maryland and Virginia inner-ring jurisdictions have an amount of space that is roughly equivalent, with about 70 million square feet each, and an additional 12.5 million square feet at the center of the region in Washington, D.C. Approximately two-thirds of this space comprises industrial warehouse or manufacturing space and the remaining one-third is composed of flex space, which contains at least half of its space as office. The Northern Virginia jurisdictions identified contain about half of the flex space within this geographic area.

Table 2-8: Industrial Inventory in Inner Suburban Jurisdictions, Q3 2013 (in Millions of Square Feet)

Jurisdiction	Warehouse	Flex	Total
Maryland			
Prince George's County	38.2	10.5	48.7
Montgomery County	9.5	11.9	21.4
Washington, D.C.	**11.2**	**1.3**	**12.5**
Northern VA [a]	**42.5**	**27.3**	**69.8**
Total	**101.4**	**51.0**	**152.4**

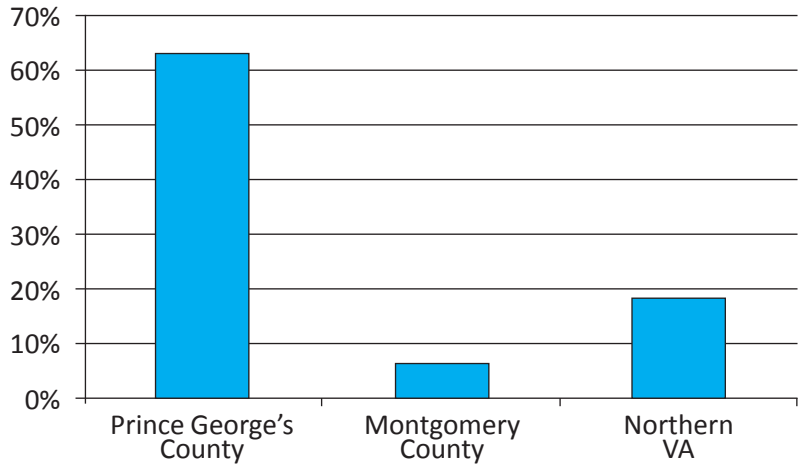
Note: a. includes Alexandria, Arlington, and Fairfax Counties.
Source: CBRE; BAE, 2013.

As of the third quarter of 2013, industrial vacancy in the inner suburban jurisdictions stands at 11.8 percent, with notably lower vacancy in the warehouse and manufacturing space market (10.0 percent) than in the market for flex space (14.5 percent).[4]

Prince George's County dominates the industrial market at the region's core. Within these inner region jurisdictions, about 40 percent of the industrial space is found inside of I-495, according to CoStar data obtained from M-NCPPC. Seventy percent of Prince George's County's industrial inventory is in this regional core, compared to only 18 percent of Northern Virginia's inner suburban inventory, and 7 percent of Montgomery County's inventory. As a result, more than half of the industrial inventory at the region's core is within Prince George's County (Table 2-9).

4. Vacancy rates calculated from inventory statistics provided in CBRE market reports.

Table 2-9: Share of Inner Suburban Inventory Located Inside the Beltway

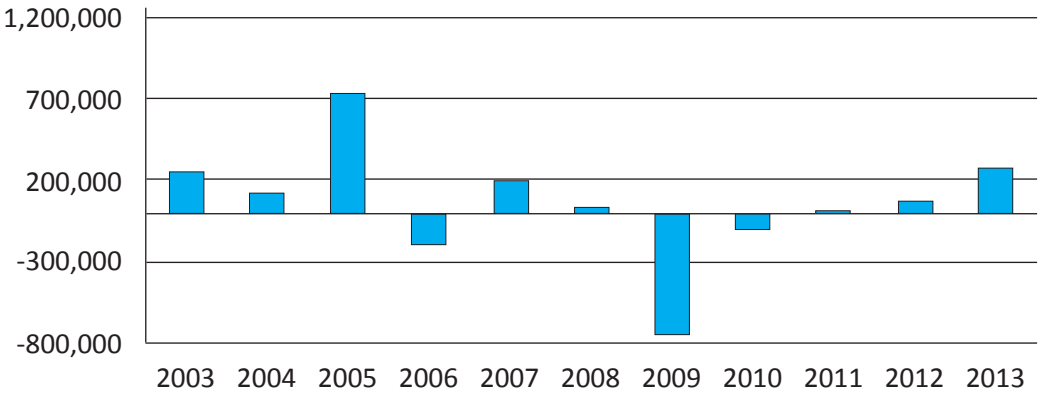


Sources: CoStar; M-NCPPC; CBRE; BAE, 2013.

Supply Trends at the Region's Core

The region is recovering from the economic downturn, but long-term absorption trends suggest modest demand. Land within the region's core is mostly built out. Land available for industrial use is not expanding, and to some degree it is contracting as industrial land is subject to pressure for redevelopment to other uses. Nevertheless, warehouse/manufacturing space at the region's core has seen a net absorption of 528,000 square feet since 2003, averaging about 48,000 square feet per year. Absorption measures the net gain or loss in occupied square footage over a period of time. Since 2009, the regional core's industrial warehouse and manufacturing market has experienced a negative net absorption of nearly 500,000 square feet, including 773,000 square feet of negative absorption in 2009 (Table 2-10). The flex market has performed slightly better, with the regional core absorbing a net of only 7,000 square feet since the recession began in 2009, and just under 150,000 square feet over the past decade.

Table 2-10: Absorption Trends, Regional Core, Warehouse/Manufacturing, 2003-2013 (in Square Feet)



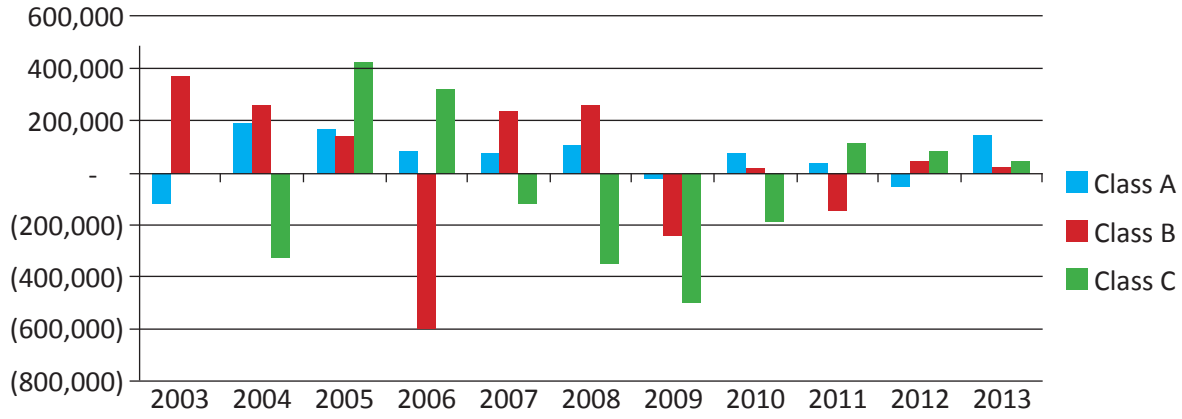
Sources: CoStar; M-NCPPC; BAE, 2013.

Higher quality space within the regional core has shown better absorption. Within the regional core, about two-thirds of all industrial warehouse and manufacturing space, and 60 percent of all flex space, is designated Class C. The amounts of Class A space in both the industrial warehouse and manufacturing and flex markets is minimal, comprising less than five percent of all space in the region's core. Nevertheless, the small Class A market for industrial warehouse and manufacturing space has seen the strongest absorption over the past decade, with a net of nearly 700,000 additional square feet occupied since 2003, with most occurring prior to the recession.

Though the Class B and Class C industrial warehousing and manufacturing space markets have posted positive net absorption since 2011 and 2010, respectively, they have not yet recovered from significant losses in 2009. Overall, the

Class C market has shown negative net absorption of over 500,000 square feet since 2003, and Class B space has seen a net positive absorption of about 350,000 square feet during the same time period. See Table 2-11.

Table 2-11: Absorption Trends, Regional Core, Warehouse/Manufacturing by Class, 2003-2013 (in Square Feet)

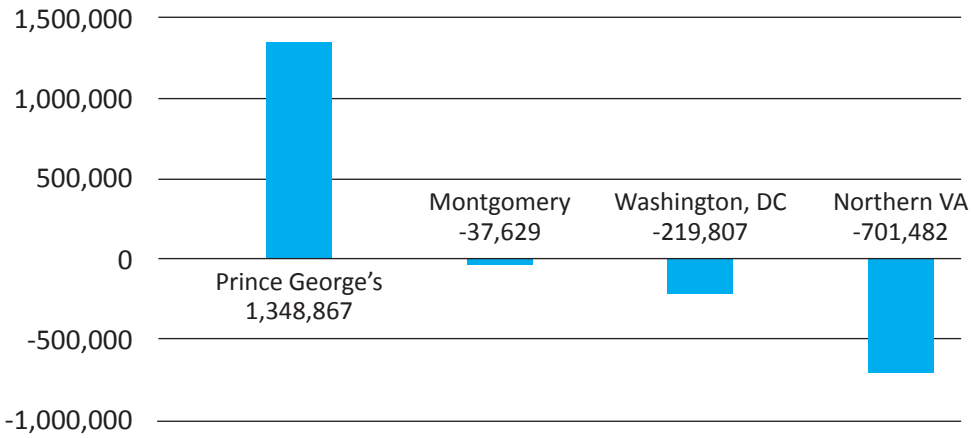


Sources: CoStar; M-NCPPC; BAE, 2013.

The market is absorbing higher quality space at the region's core as supply increases. Absorption corresponds with the availability of space. Nearly a million square feet of Class A space has been added to the industrial inventory at the region's core since 2006, all of it in Prince George's County, with vacancy rate fluctuations corresponding to the gap between absorption and new space delivered in each year. The overall negative absorption trend of Class C space at the region's core corresponds to a loss of space due to redevelopment, and/or a "flight to quality" as new inventory allows tenants to trade up to higher quality space (Table 2-11).

Within the inventory at the region's core, absorption gains in Prince George's County are more than offsetting losses in other jurisdictions. Within the regional core, the total industrial inventory in Prince George's County has seen significant positive net absorption over the past decade, with a net of over 1.3 million square feet of additional space as of the third quarter of 2013. In the portions of the regional core contained within Montgomery County, Washington, D.C., and Northern Virginia, the total industrial inventory has seen negative net absorption over the same time period. Northern Virginia's portion of the regional core has lost the greatest amount on net, with 700,000 fewer square feet of occupied industrial space in 2013 than in 2003. Net loss of space in jurisdictions outside of Prince George's County contributes to these trends. As a result, Prince George's County not only has the largest share of industrial space within the region's core, its share of space has expanded over time, making it the center of gravity for space within closest proximity to the dense business and residential markets in and around Washington, D.C. (Table 2-12).

Table 2-12: Total Net Absorption, Warehouse/Manufacturing Space, 2003–2013 (in Square Feet)



Source: CoStar, 2013; BAE, 2013.

Rents in Prince George's County submarkets are low compared to Washington, D.C. and other inner suburban jurisdictions. Asking rent information found in industrial real estate market reports shows rents for industrial space in Northern Virginia are substantially higher than those in suburban Maryland. In the flex market, average Northern Virginia asking rents are more than 10 percent above those in Maryland. In the industrial warehouse and manufacturing market, space in Virginia was asking roughly 40 percent more than in Maryland. Comparing Prince George's County directly to Fairfax County, flex space rents are 45 percent lower and warehouse and manufacturing space asking rents are 66 percent lower, in Prince George's County (Table 2-13).

Table 2-13: Comparison of Average Asking Rents, Maryland and D.C., Q3 2013

	Average Asking Rent [a]	
	Warehouse	Flex
Maryland		
Prince George's County	$7.02	$8.56
Cheverly/Hyattsville	$6.24	$6.24
Landover/Largo	$9.00	$8.78
Lanham	$6.75	$9.38
Montgomery County	$6.90	$12.75
Northern VA		
Alexandria	$9.60	$14.86
Arlington	$10.00	$21.56
Fairfax County	$11.69	$12.52

Notes: a. Annual rent per square foot, NNN.
Sources: CBRE; BAE, 2013.

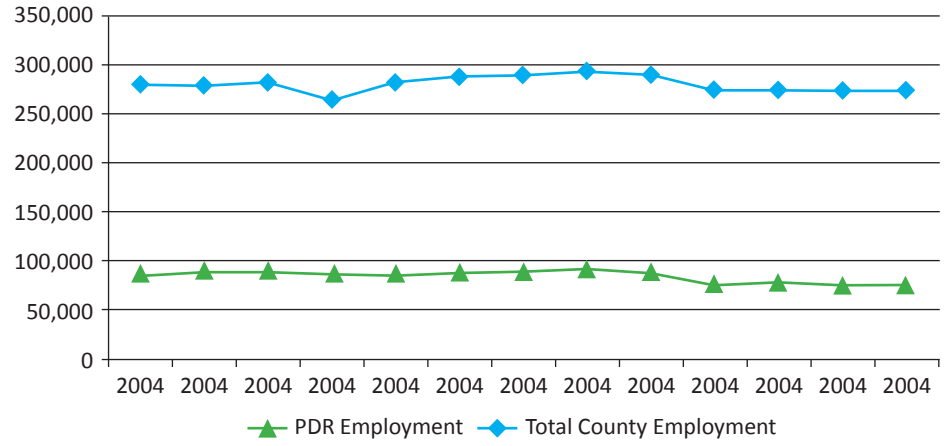
2.6.3 Demand for Industrial Space

Demand Overview

PDR Employment has shown net declines. The impact of the economic downturn and recovery seen in the absorption rates of industrial space in the area parallels employment trends in industry sectors that typically occupy industrial space. Employment in industries and industry subsectors that most typically use industrial space contracted in 2009 and has begun to rebound since that time, but has not regained pre-recession levels (Table 2-14).

Table 2-15 shows employment figures for 12 industry sectors and subsectors that use industrial space. There was a net loss of over 11,000 jobs in the PDR industries defined in Table 2-15 between 2004, the year in which employment levels were lowest prior to the economic downturn of the late 2000s, and 2012.

Table 2-14: County PDR and Total Employment, 2000-2012



Note: represents second quarter of each year.
Sources: Quality Workforce Indicators (QWI) dataset, U.S. Census Bureau; BAE, 2013.

Table 2-15: County Employment in PDR Industry Sectors, 2004 and 2012

				Change, 2004-2012	
Industry Sector	NAICS	2004	2012	Number	Percent
Utilities	22	756	756	-	0
Construction	23	27,827	23,346	(4,481)	-16
Manufacturing	31-33	11,602	7,776	(3,826)	-33
Wholesale Trade	42	13,140	10,777	(2,363)	-18
Transportation and Warehousing	48-49	15,102	15,033	(69)	0
Building Material, and Garden Equipment and Supplies Dealers	444	3,553	4,125	572	16
Publishing (Excluding Internet)	511	1,253	1,452	199	16
Telecommunications	517	1,752	1,580	(172)	-10
Internet Service Providers, Web Search Portals, and Data Processing Services	518	1,418	1,033	(385)	-27
Waste Management	562	1,944	2,597	(653)	34
Repair Services	811	4,078	3,099	(979)	-24
Personal and Laundry Services	812	4,224	3,885	(339)	-8
Total, PDR Employment		**88,649**	**75,459**	**(11,190)**	**-13**
Total County Employment		**281,019**	**273,907**	**(7,112)**	**-3**
PDR Share of County Employment		31%	28%		

Sources: Quality Workforce Indicators (QWI) Dataset, U.S. Census Bureau; BAE, 2013.

PDR employment is declining in its share of County employment. The decline in the share of PDR employment among the County's total employment, from 31 percent to 28 percent, suggests contributors to PDR job losses beyond the economic cycle. Decreasing PDR employment may be due to losses in specific industries, the need for fewer employees to meet the same productivity level, or other factors. Non-internet publishing is one of the sectors that saw employment growth in the County despite a national trend towards its decline; its increase in the County may be due to firms seeking lower cost space.

Area-specific data on establishments also shows some decline in economic activity. Specific industry-level data on establishments for the study area, available at a ZIP code level through 2011, shows more detail on business concentration and change in the study area and surrounding industrial zones. Table 2-16 shows industry subsector establishment data for the ZIP code covering much of the study area—20781—as well as ZIP codes that cover peripheral parts of the study area and nearby industrial areas. The analysis refers to the 20781 ZIP code as the study area.

Table 2-16: Number of Establishments in Study Area ZIP Codes for Selected Industry Subsectors

Selected Industry [a]	NAICS	2011 Establishments			Change in Establishments, 2004–2011		
		20781	Nearby Area [b]	County	20781	Nearby Area [b]	County
Construction: Buildings	236	26	19	395	(1)	5	(41)
Construction: Heavy & Civil	237	4	6	78	(2)	(2)	(7)
Construction: Specialty & Trade	238	58	54	914	(11)	6	(156)
Manufacturing: Food & Beverage	311-312	6	9	32	(3)	2	2
Manufacturing:Printing	323	9	10	85	(10)	(3)	(34)
Manufacturing:Fabricated Metal	332	7	1	41	(3)	(3)	(9)
Wholesale Trade: Durable Goods	423	36	46	385	0	0	(74)
Wholesale Trade: Nondurable Goods	424	13	25	177	4	(2)	(4)
Retail: Auto Dealers & Parts	441	4	9	205	(4)	(3)	(16)
Retail: Home Centers & Building Supply	444	5	3	113	4	(1)	2
Truck Transportation	484	9	13	151	0	2	(24)
Transit and Ground Passenger Transport	485	2	5	58	1	4	18
Scenic and Sightseeing Transportation	487	1	0	4	0	(1)	(1)
Support Activities for Transportation	488	5	5	256	1	1	(232)
Couriers and Messengers	492	1	9	45	0	4	(2)
Warehousing and Storage	493	3	11	32	1	5	4
Real Estate: Machinery & Equipment Leasing	532	2	3	37	(1)	2	3
Waste Management	562	6	11	60	0	1	(9)
Services: Repair & Maintenance	811	32	34	468	(18)	2	(93)

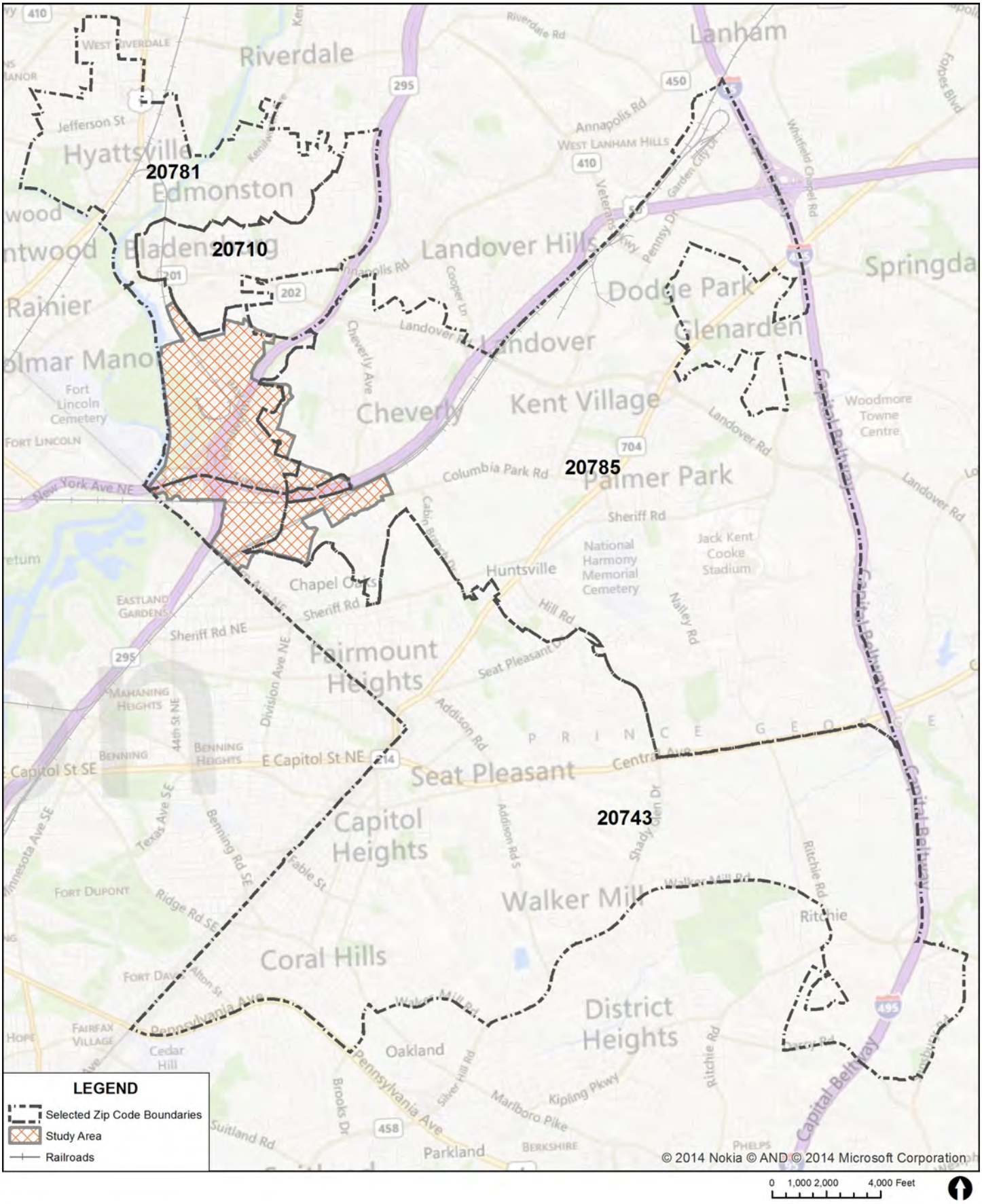
Notes:

a. Three-digit NAICS code industry subsectors were selected for analysis based on previous analysis of study area employment trends, and total establishments in 2011. They represent notable sources of potential demand for industrial space within the study area.

b. Nearby areas include ZIP Codes 20710 (Bladensburg) and 20785 (Cheverly, including the Ardmore Area industrial). Waste Management also includes 20743, representing the waste management companies in the Addison Road section of the Study Area

Sources: U.S. Census Bureau, ZIP Code Business Patterns*; BAE, 2013*

Map 2-18: Zip Codes in Vicinity of the Kenilworth Avenue and Town of Cheverly Study Area



Construction and wholesale trade establishments comprise the largest portion of industrial establishments in and around the study area. There were 167 construction businesses in the ZIP codes included above in 2011, with most in the specialty and trade subsector. The second largest industry concentration was in wholesale trade, with 121 total establishments, most in the nondurable goods subsector. Communication with brokers who lease property in the area confirms that these industries are predominant among those seeking space in the area. While the construction industries have seen considerable net decline in establishments through the recession, wholesale trade has remained more stable.

Although the waste management category included the largest share of employment within the study area in recent years, the number of establishments is small. Waste management businesses in the area represent about 28 percent of the County's establishments in this industry subsector.

The County's food and beverage manufacturing establishments show concentration in and around the study area. Although relatively small in number, 15 of the County's 32 food and beverage manufacturers (47 percent) were found in the area in 2011. Printers and metal fabricators have a presence in the area, although the net number of firms has declined, particularly for printers.

Transportation and warehousing industry subsectors have generally been stable or growing around the study area. The transportation/warehousing subsectors in Table 2-16 comprised 21 firms in the study area and 43 in nearby areas in 2011, about the same as the number of service and repair establishments. The small net increase in transportation firms in the area contrasts with losses in the County in most subsectors, indicating a possible location-specific advantage for firms located in (or that moved into) the area. A number of warehousing firms demonstrated net growth in the area and the County—the 15 area establishments in 2011 represented 44 percent of the County's total.

Demand Drivers

Given the above analysis, industries and industry groups with the potential to most significantly influence demand for study area industrial space and influence the economic character of the area are briefly profiled below.

Construction

The impact of construction firms on the demand for space is highly cyclical, but demand is expected to remain strong in Prince George's County over the long-term. Like the study area, Prince George's County holds a concentration of construction companies, contractors, and construction workers of all types within the region. The recent Economic Generators and Catalysts Study process for Prince George's County identified construction as a high-performing industry cluster based on its total County employment, its regional concentration, its level of productivity compared to national averages, and other factors.[5] The construction industry is a significant part of Prince George's County's, and the region's, economy, but is not an export or traded industry sector that drives economic growth. The health of the industry as a whole is dependent upon economic and real estate cycles, and, as employment and establishment analyses have shown, has shrunk substantially in connection with the economic downturn at the end of the last decade. Although employment is increasing, it has yet to return to pre-recession employment and business levels.

The State of Maryland projects a nearly 14 percent increase in construction industry employment in the state between 2010 and 2020, a net increase of nearly 20,000 jobs, although short-term declines in 2014 are projected. Within Prince George's County, the state projects nearly 7,000 openings for construction industry occupations during the same time period, created from new positions and the replacement of workers.[6]

Construction occupations offer living wage jobs and career mobility with minimal formal educational requirements. Most construction occupations are identified by state occupational statistics as requiring low levels of education (a high school education or less), but experience impacts wages. Entry level salaries in the County start at $20,000 ($9.50 per hour) for laborers, making up about 15 percent of all construction industry workers; experienced supervisors (comprising about 9 percent of all workers) can earn $90,000 or more. Trades workers and specialty contractors have wages between these ends.[7]

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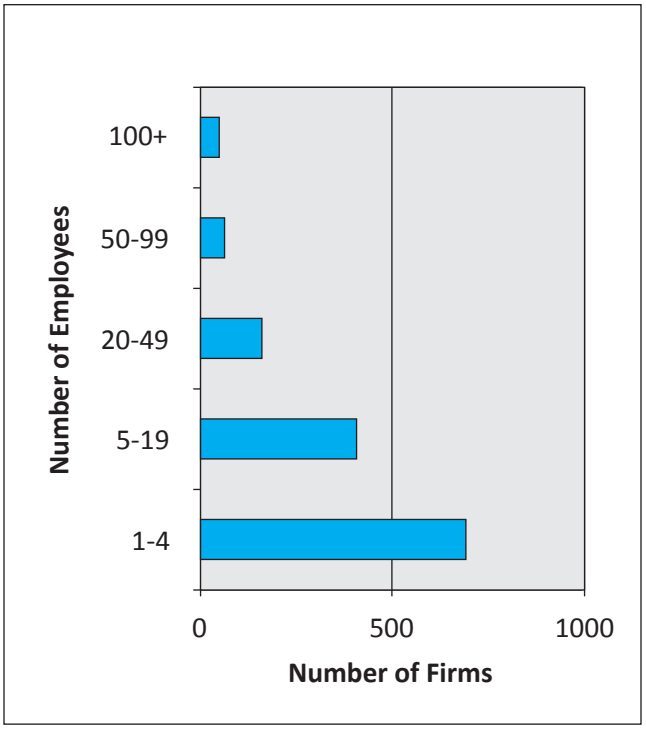
5. See the Interim Narrative Report: Industry Identification and Analysis of Economic Generators and Catalysts*, March 28, 2012.*

6. Maryland Department of Labor, Licensing and Regulation (DLLR), Division of Workforce Development and Adult Learning. Occupation and industry projections, accessed December 12, 2013.

7. Wage information from Maryland DLLR, Division of Workforce Development and Adult Learning. Occupational Wage Estimates for Prince George's County Workforce Investment Area, accessed December 12, 2013.

Small firms drive demand for smaller spaces. The vast majority of construction companies in the County have fewer than 20 employees, and about half have 4 employees or fewer (Table 2-17). Firms seek industrial space for storage of equipment and supplies more than housing office workers. Small, flexible spaces like those in the Tuxedo Industrial Park meet the needs of small contractors, as do spaces that offer outside storage and storefront spaces that might otherwise be used for retail services.

Table 2-17: Construction Industry Employment by Firm Size, Prince George's County



Recycling and Material Recovery

The waste management industry sector includes waste collection firms, disposal/treatment facilities, and waste recovery facilities. The collection and resale of scrap and recyclable materials businesses found in the area also includes firms classified as recyclable material wholesalers (NAICS 423930). These material recovery facilities, while not comprising a large number of establishments, contribute to the study area's character and economic profile. Joseph Smith & Sons, which employs hundreds of workers, and Metro Re-Uz-It, which employs fewer than 20, highlight the range of firm sizes in this industry sector. The rail line and access to a regional customer base, including its proximity to many construction firms and contractors, make the area attractive to firms in this industry sector. The establishment of an electronics recycling and processing facility within the vacant Craftsman Press building also speaks to the increasing financial viability and economic opportunity found in recovering a greater range of materials from waste, and the ability of this industry to support demand for space. Unlike many other industrial activities found in the area, scrap collection facilities are part of the region's export base, with proceeds from resold materials bringing revenue from beyond the region's and the nation's borders.

Material recovery is a growing industry. Documenting the increasing volume of recycled materials, the National Waste and Recycling Association reports statistics from the U.S. Environmental Protection Agency that recycled materials increased to 83 million tons in 2008, from 69 million tons in 2000, and 33 million tons in 1990.[8] The Institute of Scrap Recycling Industries (ISRI) reports 135 million tons of materials recycled in 2011.[9]

The industry boasts projected employment growth and potential for high wages. The industry sector as a whole is anticipated to see a 16 percent increase in employment in Maryland between 2010 and 2020, from 8,720 to 10,070 jobs statewide.[10] Research from ISRI reports 1,400 jobs in the scrap recycling industry in Maryland in 2013, with average wages of over $65,000.[11] On the low end of the occupational scale, Maryland DLLR reports median wage for refuse/recycling collectors at $15.50 per hour.

8. National Waste and Recycling Association.

9. The U.S. Scrap Recycling Industry Protects the Environment and Creates Good Jobs in Maryland*, ISRI, July 2013.*

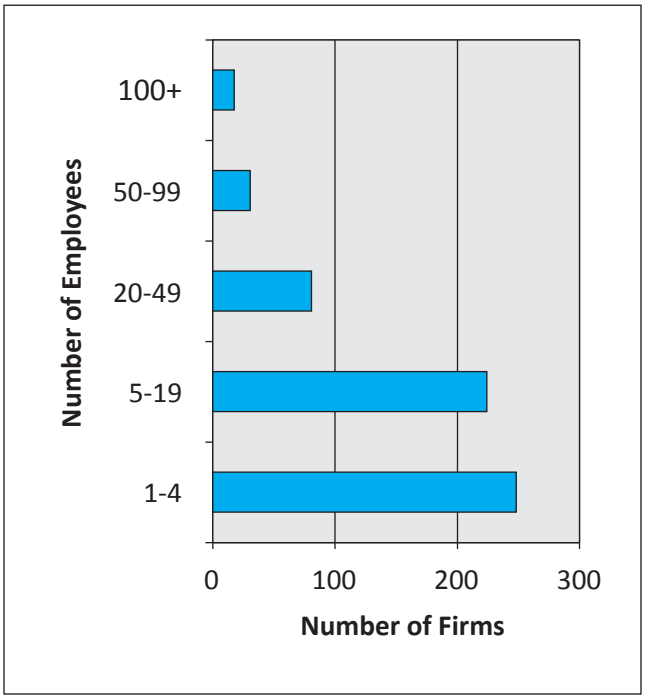
10. Maryland Department of Labor, Licensing and Regulation (DLLR), Division of Workforce Development and Adult Learning. Occupation and industry projections, accessed December 12, 2013.

11. The U.S. Scrap Recycling Industry Protects the Environment and Creates Good Jobs in Maryland*, ISRI, July 2013.*

Goods Production and Distribution

A diversity of wholesalers are predominate in the area. The area's transportation network and access to customers and markets makes it an attractive production and distribution point for goods that serve local consumption. In urban markets, proximity to businesses at the core can be critical to firms that responsively serve retailers, offices, and service providers on a frequent basis. Wholesale trade establishments are predominate among the area's PDR activity, with local firms providing a wide range of wholesale goods from fresh produce to construction equipment. Like the construction industry, wholesalers in the County are typically very small—40 percent have fewer than 5 employees, and 87 percent have fewer than 20 (see Table 2-18 for profile of firms by size). The small size of most wholesalers supports demand for the smaller, older buildings found in the study area.

Table 2-18: Wholesale Trade Employment by Firm Size, Prince George's County, 2011



Employment projections for manufacturing and wholesale operations are mixed. Table 2-19 shows the projected statewide change in employment to 2020 for manufacturing, wholesale trade, and selected subsectors found in the study area. While there are some manufacturing subsectors expected to gain employment, such as fabricated metal, most were expected to decline. Increased productivity and mechanization contribute to decreased employment. Even if economic activity remains stable or grows, the data in Table 2-19 suggest that the study area may see a shift toward nondurable goods wholesalers, a category that is anticipated to maintain stable employment while durable goods will contract slightly; gains in another wholesaling subsector (electronic markets, agents and brokers) will overcome the projected decline in durable goods employment. For industries maintaining stable employment, the retirement of older workers will create openings for those entering the labor market.

Table 2-19: Projected Statewide Change in Employment for Selected Industry Sectors, 2010-2020.

Industry Sector	Employment Change, 2010–2020	
	Number	Percent
Manufacturing	-8,480	-8
Food, Beverage, and Tobacco Products	-800	-16
Fabricated Metal	670	8
Wholesale Trade	2,455	3
Merchant Wholesalers, Durable Goods	-2,140	-5
Merchant Wholesalers, Nondurable Goods	415	2

Source: Maryland DLLR; BAE, 2013.

Food production and wholesale activity concentrated in the area can serve as a base for growth. Although trends show declining employment in manufacturing, the growing interest in locally produced food and the experience of other urban markets suggests potential growth opportunities for businesses serving local demand, opportunities which can build upon an existing base of food-related production and distribution in the area.

Wages in typical manufacturing and distribution occupations are high for the level of education required. On average, production occupations pay a median wage of $16 per hour ($33,000 per year) in Prince George's County, according to the Maryland DLLR. Hourly wages range from $8 to $9 for entry-level employment in certain occupations (assemblers, bakers, meat cutters) to $30 for experienced machinists. Maryland DLLR also reports that laborers and material movers earn a median wage of $12 per hour; workers who operate vehicles on a warehouse or factory floor earn a median wage of $17.75 per hour. Occupation information from DLLR indicates that these occupations require a high school diploma or less.

3.0

FUTURE OF KENILWORTH AVENUE AND TOWN OF CHEVERLY INDUSTRIAL AREA

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

3 Future of Kenilworth Avenue and Town of Cheverly Industrial Area

The following section describes recommendations for improvements to the Kenilworth Avenue and Town of Cheverly Industrial Area.

3.1 Objectives

In establishing the overall strategy and recommendations for the study area, a series of objectives were identified. These objectives have been developed based on the existing conditions analysis, market analysis, stakeholder meetings, and experience from other locations.

1. Build on existing assets.
    - Maintain and strengthen existing successful and appropriate industrial and commercial activities.
    - Support renovations of higher quality existing facilities.
    - Take advantage of high visibility areas from US 50 and MD 295 .

2. Improve the visual appearance of the area.
    - Encourage incorporation of attractive, consistent, opaque fencing along the border of properties.
    - Create appropriate parallel street parking or consolidated parking lots within private parcels.
    - Implement strategic streetscape improvements such as construction of consistent sidewalks, construction of consistent curbs and gutters, planting of street trees where feasible, and incorporation of standard signage throughout the study area.

3. Improve vehicle circulation.
    - Address problematic intersections such as the Kenilworth Avenue crossover to Tuxedo Road just north of the US 50 interchange with Kenilworth Avenue.
    - Conduct a study of allowing truck/commercial traffic on the ramp leading from southbound Kenilworth Avenue to MD 295.
    - Design and build all new roadways as Green and Complete Streets.

4. Provide strategies that support improved stormwater management.
    - Eliminate unnecessary impervious surfaces where feasible.
    - Incorporate bioretention areas or other low impact strategies as part of improvements in both the public right-of-way and private properties.
    - Integrate above-grade or underground cisterns into site plans for new development/redevelopment adjacent to Anacostia River tributaries (e.g., Character Areas 2, 6–8, and 10) to store stormwater on-site for landscape irrigation or to reduce the amount of stormwater flowing into the streams.
    - Roof gardens and green roofs.
    - Discourage the use of regional storage and drainage ponds, encourage the sharing of stormwater storage facilities where possible to reduce costs and increase capacity.
    - Construct all at-grade crosswalks with pervious materials.
    - Require new and infill development to incorporate innovative green building/ESD stormwater practices and adopt LEED or similar sustainability standards.

5. Buffer industrial areas from residential areas.
    - Manage truck traffic through the area by focusing it on the major commercial corridors to the extent possible.
    - Ensure industrial uses are set back and buffered from residential areas.

6. Improve collaboration among businesses, residents, and the local agencies.
    - Encourage creation of a forum or other group for dialogue between various stakeholders and interests.
    - Balance needs and interests of businesses, landowners, and nearby residents.

7. Develop a more detailed updated sector plan that includes the Kenilworth Avenue and Town of Cheverly Industrial Study area.

3.2 Opportunities for Transformation

Existing production, distribution, and repair (PDR) uses in the study area generate substantial economic activity, and their demand is expected to continue to drive the economic activity and character of the area moving forward. This section explores the potential for new uses that can broaden the character and diversity of the area to maintain and enhance its health in the future, serve economic development objectives, and potentially act as catalysts for physical change in parts of the study area where physical, aesthetic, and economic conditions are in need of improvement.

This section first explores potential industrial-related land uses that have potential to be introduced or expanded in the study area, based on economic opportunities seen in the County and the region. The subsequent analysis focuses on the potential for consumer-oriented uses that could provide needed amenities to area workers and residents.

Innovative Industrial Uses

Under the right conditions, older, smaller industrial space can be attractive to start-up businesses seeking inexpensive workspace. It is often flexible and inexpensive enough for entrepreneurial production firms of all types and for firms that do not need expensive fit outs, and it is better suited to testing, research and prototype development than office space. The aesthetic of older industrial buildings that are renovated and updated, while maintaining characteristics unique to the original space, holds appeal to the creative, knowledge-based workforce that drive start-ups and technology-oriented businesses.

Emerging trends in research, technology, and production help to define the potential for new uses in older industrial areas, even though the impact of that potential is not yet proven in places like the Kenilworth Avenue and Town of Cheverly Industrial Study area. There are identified challenges within the County in keeping start-ups, and the attraction of a knowledge base will require greater amenities and quality of place than currently found in the study area. Nevertheless, embracing the value of firms that make things in the study area recognizes the value of existing businesses while welcoming new technology and emerging business models as well.

Engineering, Research and Development

A cluster aligned with the County's development goals and potential demand for industrial space. A small segment of technology-related industries identified as targets in the Economic Drivers and Catalysts economic development process are among industries that might seek older industrial space. The analysis of target industries identified strength in research, development, and engineering services, a cluster that includes professional services in engineering (NAICS code 54133) and research in engineering, physical and life sciences (excluding biotechnology) (NAICS code 541712). The cluster shows signs of specialization in the County, evidenced by employment concentration and high productivity, as well as modest growth and high wages. It also can leverage relationships with local institutions such as the University of Maryland, and is high-performing regionally as well.[1] The Economic Drivers and Catalysts study included engineering, research, and development in the larger information, communications, and electronics (ICE) cluster that covers the County's strengths in information technology, aerospace/defense-related research, and communications equipment. Demand for industrial space could be driven by research activities, or by further development and production of technology products.

Talent base is present in the County but needs to be more fully developed. Innovation in engineering and physical sciences is present in the County, as evidenced by the inventions identified by University of Maryland's Office of Technology Commercialization (OTC), which manages inventions created by University of Maryland faculty, staff, and students. The office reports 677 invention disclosures in the past five years, with nearly half (47 percent) within the physical sciences. However, life sciences and information sciences make up the bulk of inventions that are licensed through OTC, with inventions related to the physical sciences making up only 13 percent of licenses.[2] The Economic Drivers and Catalysts study identified a competitive weakness in the County's climate for business startups. Using data from the OTC, it found that of 21 new business ventures formed using university-generated technology, only five are currently located in Prince George's County.[3]

1. Interim Narrative Report: Industry Identification and Analysis of Economic Generators and Catalysts*, Battelle Technology Partnership Practice with The Jacob France Institute and Green Door Advisors, March 28, 2012.*

2. University of Maryland Office of Technology Commercialization: http://otc.umd.edu/index.htm. Accessed December 16, 2013.

3. Economic Drivers and Catalysts: A Targeted economic Development Strategy for Prince George's County*, Battelle Technology Partnership Practice with the Jacob France Institute and Green Door Advisors, May 2013.*

Small-Scale Production

An emerging trend. In the wake of a declining manufacturing base, a movement towards small-scale and innovative production is growing in the region and nationally. Contributing towards this trend are:

- New technologies, such as 3D printers, facilitate innovation in the design of new products through their low cost and ease of use.
- The rise of "maker culture," a movement that attracts a growing community with a do-it-yourself philosophy applied to technology, engineering, crafts, and food, and with a focus on learning and sharing experiences within the community.
- Increasing wealth at the urban core, with dollars to spend on artisan crafts and an interest in handmade, local, and customized items.

Recognizing the value of local production, food entrepreneurism is one example of economic development in industrial spaces that has been supported by local governments and institutions. A need for shared kitchen space that reduces costs and risk for individuals who want to develop a food business has led to several initiatives within Washington, D.C. Union Kitchen, a food incubator space, launched in an existing industrial space near Union Station in early 2013, offering a kitchen incubator to over 50 food entrepreneurs, as well as catering and venue rentals.[4] It also works in partnership with the Washington, D.C. government, hiring residents in the Department of Employment Services' (DOES) Project Empowerment as kitchen staff and incubating food businesses started by residents participating in a DOES entrepreneurial program.

Maker culture has the potential to redefine our perspective on industry and industrial space. Maker culture includes entrepreneurs but also enthusiasts who create as a hobby rather than an occupation. The interest of maker culture in the Washington, D.C. region has spurred the growth of several "maker spaces"—collaborative work spaces offering shared tools and shops, networking and community events, and classes that allow individuals and entrepreneurs physical space in which to create products, crafts, and inventions. Like office coworking spaces, members typically pay dues to support the space, and like other incubators, maker spaces open opportunities for entrepreneurs to develop an idea by minimizing the associated cost and risk.

While the impact of maker culture to fuel entrepreneurial activity in Washington, D.C. is still speculative, the creation of maker spaces themselves is an emerging use of industrial, or formerly industrial space in the region. Maker spaces currently operate in Reston and Herndon Virgina, and in Washington, D.C. New spaces continue to develop, including a space under construction in Crystal City and one in Washington, D.C., both set to open in 2015. IdeaSpace, a 16,000 square foot space in Washington, D.C., is set to open in early 2015. It is housed in the Boilermaker Shops, a former Navy Yard facility that has been restored as part of The Yards mixed-use redevelopment on the southeast waterfront. In order to spur early interest, IdeaSpace offered a first wave of 100 memberships that sold out in 5 days.

Retail and Consumer Services

Consumer Demand for Retail Establishments

There is a notable lack of establishments within or in close proximity to the study area that serve the day-to-day needs of area residents and workers. A survey in the neighborhood identified a total of seven retail establishments primarily providing consumer goods and services within the study area, excluding several auto repair and auto parts distributors, waste removal services, and establishments that offer sales and services to other businesses. Study area retail establishments include two gas stations, one bank branch, one fast food restaurant, the Salvation Army, and People's Supply, all on Kenilworth Avenue; a convenience store (7-Eleven) is located at the intersection of Arbor Street and the Columbia Park Road Bridge. CoStar's database of retail properties within the study area boundaries includes about 25 buildings, but outside the establishments identified above, they are occupied by commercial businesses such as construction companies, auto repair facilities, and retail outlets that do not primarily serve a consumer (nonbusiness) clientele.

The lack of retail services in part relates to the study area's location. The two major transportation corridors bisecting the study area, US 50 and MD 295, are both limited access highways. Broader retail offerings surround the area on commercial corridors such as MD 202, MD 450, and US 1 offer a diverse selection of goods and services. There is a Walmart on MD 450, a new Costco on US 50, a handful of grocery stores, pharmacies, banks, convenience stores, and a broader selection of fast food and casual restaurants within a two to five mile radius of the study area. However, this commercial pattern leaves

4. See Union Kitchen website: http://www.unionkitchenD.C..com/

the study area as a "doughnut hole" in the landscape of convenience and neighborhood-oriented retail offerings to serve the industrial and residential land uses within the area bounded by these commercial corridors. While smaller ethnic and nonchain restaurants exist in close proximity to the study area, they are also limited in relation to the residential and worker population that exists in the area.

Estimated demand from nearby residents and workers could support additional retail. In order to size the potential demand for retail, this analysis incorporates a methodology to estimate potential demand from area residents and workers, described more fully in Appendix B. This analysis yields a supportable square footage for select categories of retail ranging from 44,000 to 94,000 square feet. The summary of demand in four categories of retail most likely to be utilized by a wide variety of customers is found in Table 3-1. These retail categories are also most likely to attract customers in close proximity. The estimate ranges demonstrate sufficient demand to support several small fast food or casual sit-down restaurants, at least one pharmacy, and a small garden or hardware store, as examples. It is important to note that smaller stores will serve fewer needs and capture a smaller share of trade area household dollars. The sizing exercise suggests demand for a food store purely from the trade area households and workers, but insufficient demand to support a full-size supermarket. However, a retail store or specialty market placed within the study area could support many of the convenience needs of local consumers.

Table 3-1: Summary of Estimated Demand and Supportable Square Footage in Select Retail Categories

	Estimated Range of Resident and Worker Captured Expenditures [a]		Estimated Range of Supportable Square Footage [b]	
Spending Category	Low	High	Low	High
Food Service & Drinking Places	$6,264,000	$7,663,000	13,000	22,000
Food & Beverage Stores	$8,915,000	$14,756,000	18,000	42,000
Healh and Personal Cae Stores	$2,914,000	$5,827,000	6,000	17,000
Building Material, Garden & Equipment Stores	$3,313,000	$4,638,000	7,000	13,000
Total, Select Retail Categories	**$21,406,000**	**$32,884,000**	**44,000**	**94,000**

Notes:

a. Represents the total of current resident and worker expenditure estimates from previous tables. Building material, garden and equipment stores does not include worker expenditure estimates.

b. Supportable square footage estimates assume a target annual sales per square foot of retail space:

Low end of range: $500
High end of range: $350

Sources: Claritas/Neilsen; ICSC; BAE, 2013.

Additional consumers and expenditure types could also be attracted to the study area

Furthermore, additional retail square footage could be supported through expenditures outside the above retail categories, and from consumers coming from outside the study area. Services such as hair salons, fitness centers and yoga studios, banks, and realtors fall outside the above categories tracked by Nielsen (the private data provider that estimated consumer demand for the area) and represent additional opportunities to serve local needs. While there are constraints to the potential of Kenilworth Avenue and Tuxedo Road/Arbor Place to attract retail due to aesthetic concerns and lack of a concentrated retail presence, vehicle traffic on these roads is considerable. The visibility and accessibility of the area surrounding the interchange of MD 295 and US 50 would support retail that can attract a share of their vehicle traffic.

Additional development or employment expansion in the study area could also offer some limited support for additional retail. As the sizing exercise in Table 3-2 suggests, the supportable square footage associated with each additional 100 households requires significant expansion of the residential or worker population in order to support more retail establishments.

Table 3-2: Preliminary Retail Demand Estimate per 100 Additional Workers or Residents

	Residents	Workers
Assumption of Potential Expenditures Captured in Study Area		
Monthly	$500	$150
Annually	$6,000	$1,800
Increased Local Expenditure per 100 New Housholds/Workers	$600,000	$180,000
Supportable Square Footage Estimate Per 100 New Households/Workers [a]		
Low	1,200	400
High	1,700	500

Notes:
a. Supportable square footage calculations assume a target annual sales per square foot of:
Low end of range: $500
High end of range: $350

Source: BAE, 2013.

Economic and Site Conditions Related to Retail Development

Impediments to market attraction of retail

Despite the potential for additional retail, current site conditions offer a significant impediment to retail investment. Commercial corridors in the study area do not currently have the aesthetics or retail concentration to successfully compete for new retail and consumer-oriented services. Older industrial businesses, including heavy industrial land uses and vacant and underutilized properties, dominate the feel and character of Kenilworth Avenue and Tuxedo Road. A retail establishment requires the visibility and attractiveness that will allow customers to notice it, and invite them to easily park and enter. Therefore, a strategy to attract retail that can serve local, resident, and worker needs must focus on physical improvements that identify and support retail by encouraging areas for retail to cluster and offering attractive streetscaping and organizing signage.

Potential opportunities as an emerging commercial district

The study area does offer strengths as an emerging commercial district. In addition to the demand that could be captured from heavy vehicular traffic on Kenilworth Avenue, easy access from US 50 and MD 295 offers opportunities for retail supported by interchange traffic. Furthermore, the Tuxedo Road junction with Kenilworth Avenue has high visibility from US 50, visibility which diminishes but is still present in locations traveling eastward on Tuxedo Road. Opportunity can also be found in the growing influence of the Internet and social media in marketing businesses to target customers, to some extent diminishing the importance of superior locations in competing for a base of customers. In other words, many businesses can now take advantage of lower cost locations that do not benefit from a strong retail presence or high levels of traffic, and gain the awareness of a specialized customer base through online avenues such as Facebook, neighborhood blogs, and special interest communities with an online presence. This is particularly relevant for the types of businesses who want to attract customers who seek out dining, shopping, and entertainment experiences that they consider cutting edge and, to some degree, outside of mainstream tastes. The emergence of restaurants and small consumer-oriented businesses in older, revitalizing neighborhoods around the region's core can serve as examples of successful development of pioneering retail sites.

New retail will also need to attract sufficient rent to be viable. The feasibility of new retail development will also depend upon the rents that can be procured for retail spaces, and whether these rents can support new construction or the renovation of existing vacant or industrially occupied spaces. According to the second quarter 2013 NAI Michael Retail Market Outlook report for Prince George's County, asking rents for the overall study area for select retail submarkets

averaged $18.45 per square foot per year triple net lease (NNN) and were showing indications of continued growth. Average asking rents are higher in the northern and central County submarkets where the study area is located, were generally higher than the southern submarkets, and averaged around $20 per square foot annually for the Landover/ Largo/Capitol Heights and College Park submarkets. Retail space on the market in proximity to the study area showed rents ranging from about $19 to $25 per square foot per year, for spaces in good condition in high traffic retail areas. Representative samples are summarized in Table 3-3.

Table 3-3: Sample of Available Retail Spaces and Asking Rents

Address	Asking Price (per square foot)	Available Area (square feet)	Location Type
4821 Annapolis Road, Bladensburg	$22 NNN	3,352	Strip center
4802 Rhode Island Avenue, Hyattsville	$25 NNN	2,400	Renovated building on older retail strip
5126 Baltimore Ave, Hyattsville	$19 modified gross	4,100	Street-oriented, walkable retail
7501 Landover Road, Landover	$24–$25 modified gross	1,100 and 2,280	Strip center

Source: Loopnet.com, accessed November 20, 2013; BAE, 2013.

Conclusion: Analysis of Opportunities

This market analysis suggests that market-based opportunities have the potential to support revitalization in the study area, even as current PDR operations continue to support demand for the area as a predominantly industrial one. The following analysis discusses the viability of building repositioning and construction as a market-based initiative that supports and is supported by strategic public investments to support revitalization. A brief analysis of the site conditions in key areas most susceptible to redevelopment follows. General recommendations to enhance market-based revitalization activity are provided, for further consideration and development in the implementation plan.

Feasibility of Building Renovation and New Construction

Repositioning existing buildings is possible if rental income exceeds existing tenancy

Within the study area, the high levels of occupancy and the functionality of most buildings for their current users presents a challenge to renovation, rather than a lack of demand for these spaces. Long-term owners who are able to attract industrial tenants and rents that support the continued operation and maintenance of the building likely have little incentive to renovate or reposition a building unless it can garner increased rents that support the cost. There is a considerable difference in rents between submarkets in Prince George's County and Northern Virginia, which positions the study area as an attractive value option for PDR uses, but does not encourage investment in building upgrading. New technology-based uses may be willing to pay higher rents, but will also require a level of amenities in the area in order for the area to be marketed to them.

Example

Successful reuse of industrial buildings with compatible uses includes DancePlace in the Brookland neighborhood of Washington, D.C. A performing arts company and dance studio, DancePlace purchased and renovated its industrial building along the Metro and freight rail tracks in 1986 after being forced out of its previous location by rent increases. At this location, DancePlace enlarged its footprint to nearby rented buildings as it expanded its educational offerings and strengthened its connections to the residential neighborhood of Brookland. As the neighborhood has become attractive to new mixed-use development and revitalization, DancePlace has continued to invest in its building and has expanded its studio space into a new artists' loft project (Artspace Studios) next door.

Building rents need to support the costs of new construction

Successful development of vacant land must not only be responsive to market demand, but also to the economics of development. Current rent levels in the study area do not appear to support new construction of industrial space, although a business seeking to build its own facility may find feasible site opportunities within the study area, especially given potential public improvements resulting from the revitalization strategy and incentives that may be available.

Potential strategies to enhance viability of building renovation and construction

While not all properties in the study area display a need for renovation and reinvestment, the physical appearance of specific areas in the study area challenge revitalization efforts. Opportunities that could improve the feasibility of market-based, owner-initiated improvements to study area property are offered below for further consideration.

- Encourage minor aesthetic changes to bring in nominal rent increases. Building owners may be convinced to make cost-effective improvements to properties that improve their appearance and marketability.
- Attract higher paying tenants, such as retail; where conditions exist for retail repositioning within corridors of the study area, retail uses likely offer the best rent potential. Flexible retail buildings that can offer basic goods and services may also be adaptable to a variety of nonretail uses, such as medical offices or gyms. Certain underutilized buildings along commercial corridors may also be suitable to reuse as retail.
- Make targeted investments that encourage owners to reinvest and seek higher value tenants. Attraction of retail and higher value tenants will require interventions that assist in making the public realm more orderly.

Opportunities and potential strategies

The proximity of this area to the residential neighborhoods of Cheverly offer unique opportunities and greater potential for a predominantly nonindustrial transformation.

- **Short-term, creative use of small buildings.** Longer-term opportunities for larger-scale residential redevelopment are present along Arbor Street, and the area's zoning supports such redevelopment. Shorter term, smaller buildings could be creatively marketed for unique retail and service venues. New uses that could take advantage of the industrial features of the properties such as yard space and garage doors, landscape and garden centers, short-term seasonal sales (such as Christmas trees), and "pop-up" stores, restaurants, and bars.
- **Targeted investments to improve access to the Cheverly Metro Station.** Enhancing the connection to the Cheverly Metro Station will considerably shift the marketability and feasibility of mixed-use redevelopment in the area.

Development/redevelopment within the 100-year floodplain

Floodplains are considered to be nonbuildable portions of a parcel that must be protected to the fullest extent possible. The County floodplain study shows that several parcels within the 100-year floodplain in the study area are already developed. Additional development in the floodplain is not encouraged but it is also not prohibited if the required mitigation measures can be met. The required stormwater and floodplain impacts for any development within the 100-year floodplain will be determined by the implementing agencies prior to development of the area. As a general rule, where filling in the floodplain is unavoidable, the County Floodplain Ordinance requires an equal volume of compensatory storage (i.e., the provision of an equal volume of storage to compensate for the loss of flood storage due to the placing of buildings or fill dirt in the floodplain). In most locations in the study area, the provision of compensatory storage will be difficult if not impossible. Applicants considering impacts to the 100-year floodplain should seek the advice of the Department of Permitting, Inspections and Enforcement (DPIE) prior to applying for a permit.

According to DPIE, other conditions that apply to building in the 100-year floodplain include:

- Roadways should not be more than 8 to 10 inches under water in a 100-year storm. A waiver would be required where existing access roadways may be inundated to these levels by a 100-year storm.
- Redevelopment can occur keeping the same building footprint, but any improvements cannot increase building value by more than 50 percent.
- Section 32-203 (Definitions) of the Floodplain Ordinance defines “substantial improvements” as any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure (less land value) either (a) before the improvement or repair is started, or (b) if the structure has incurred substantial damage and has been restored, before the damage.
- Buildings in the floodplain cannot raise the limits of the floodplain to prevent flow through the property to the stream.
- Improvements must be elevated and/or flood proofed to the greatest extent possible. The elevation of the lowest floor must be at least one foot above the elevation of the 100 year flood. The parts of the improvement below the elevation of one foot above the 100 year flood must be dry and flood-proofed in accordance with the U.S. Army Corps of Engineers flood proofing regulations.
- Section 32-209 (Permit Requirements within the Floodplain) of the Floodplain Ordinance (specifically, paragraph 32-209(d)(3)) requires improvement plans to provide at least one vehicular access point that will permit safe vehicular ingress and egress from the new development during a 100-year flood.

3.3 Overall Concept Plan

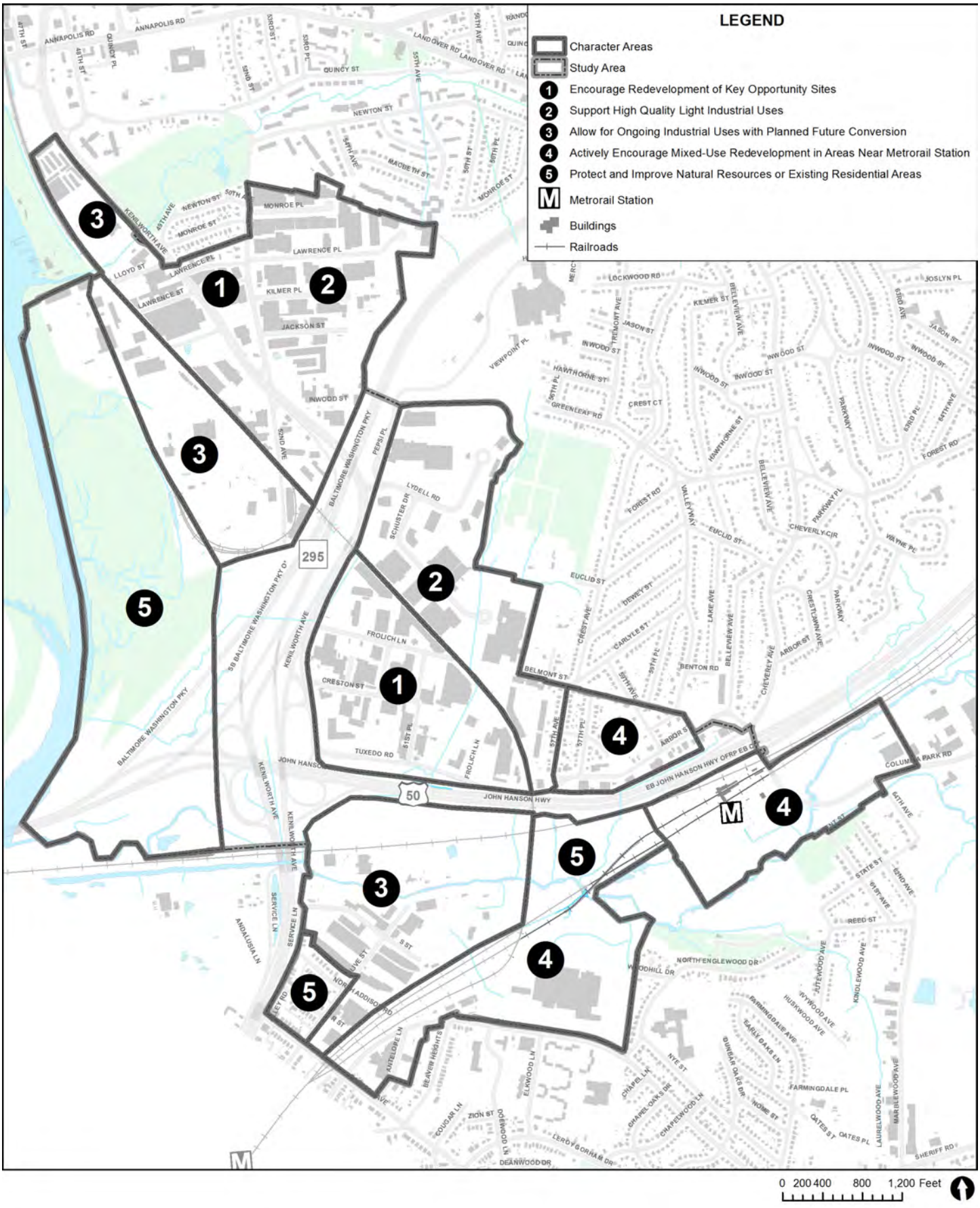
The Concept Plan provides a framework and general set of recommendations for the Kenilworth Avenue and Town of Cheverly Industrial Study area. The 888-acre study area consists of a number of distinct, and in some cases separate, planning areas. Based on the geography, land use, and access, it is recommended that the study area be divided into a series of areas that have specific recommendations related to these factors.

The strategy for these areas is described by the following strategies:

Area 1: Encourage redevelopment of key opportunity sites.
Area 2: Support high-quality light industrial uses, including improvements to existing active sites.
Area 3: Allow for on-going industrial uses with planned future conversion.
Area 4: Actively encourage mixed-use redevelopment in areas near Metro stations.

Map 3-1 shows where each of these recommendations applies. The following is a description of each area type.

Map 3-1: Planning Areas in Kenilworth Avenue and Town of Cheverly Industrial Study Area



Planning Area 1

There are two locations within the Planning Area 1 recommendations, one near the intersection of Kenilworth Avenue and 52nd Avenue, and the second near the intersection of Kenilworth Avenue and Tuxedo Road.

The Kenilworth Avenue and 52nd Avenue area is a highly visible intersection that includes an existing mix of retail, commercial, and industrial uses. This area is a gateway into the 52nd Avenue corridor as well as the industrial uses between Kenilworth Avenue and the Anacostia River. Since this is a key intersection within the study area and some of the existing buildings are lower scale in quality, it is possible that redevelopment of key sites within this zone could benefit the overall area. More detailed ideas for this area are included later in this study.

The Kenilworth Avenue and Tuxedo Road area is also highly visible from both US 50 and MD 295, and benefits from direct access to US 50. This area has many lower-scale quality buildings, unbuffered parking and storage areas, and a mixed streetscape environment with some sidewalks and on-street parking. Redevelopment or improvement of some key sites, particularly those facing Kenilworth Avenue and Tuxedo Road could have a significant impact on improving the visual quality of the area both for local users as well as vehicles passing by the area on the US 50 and MD 295 corridors.

Planning Area 2

These areas generally have good-quality existing building stock and support, in many cases, quality light industrial activities. The area along 52nd Avenue was primarily developed in the 1960s and early 1970s and is more urban in form, while the area along Lydell Road and Schuster Drive is slightly newer and was developed in the later 1970s and 1980s.

The Cheverly Industrial Park area is suburban in nature, having a business park quality in the layout of the roads and parcels with space between the buildings, parking within each parcel, and building service areas screened from the street.

The third area of note is the Tuxedo Industrial Park, which is smaller in scale and supports a number of small business and contractors. This facility is centrally managed and offers good-quality facilities.

While these areas differ physically, they offer good opportunities to support light industrial uses and flexibility to support a range of uses as the market continues to evolve. They also continue to need consideration of specific issues such as parking and screening of service areas in the 52nd Avenue area. Supporting pedestrian connections to the Cheverly and Tuxedo Business Parks are lacking and would benefit from improved connections.

Planning Area 3

This area is characterized by several larger, and in some cases heavier, industrial uses. These areas are likely to continue to be heavier industrial areas for the foreseeable future. Therefore the recommendations for this area is to allow for these uses to continue, while working closely with the businesses and property owners to improve buffering, increase stormwater management facilities, and other aesthetic improvements where feasible.

Planning Area 4

These areas are the subject of the Tuxedo Road/Cheverly Metro Sector Plan. There are a number of recommendations incorporated into that study that should continue to be the direction for redevelopment of these areas. Since this area is closer to the Metro station, it should be developed based on a TOD model as outlined in the sector plan.

Planning Area 5

These areas are characterized by sensitive natural resources or by existing residential uses. The goal for these areas is to protect or enhance the existing conditions. In the case of natural areas, they should be retained as part of the open space areas. Natural areas provide a buffer between existing rivers or streams and development. These areas provide opportunity for existing wildlife habitat and locations for appropriate trail connections. The residential area is directly adjacent to existing industrial uses and major roadway infrastructure. To the degree feasible, this area should be buffered from these adjacent uses and activities.

3.4 Supporting Plan Elements

With the existing conditions analysis and guiding principles as a basis, the recommendations for the study area are organized into the following major categories:

- Land Use
- Transportation
- Trail Network
- Public Realm Enhancements
- Environmental

3.4.1 Land Use

In support of the concept plan described above, the study area has been categorized into the following use categories to further describe the goals and recommendations for each of these areas (Map 3-2):

Commercial/Retail Redevelopment
These are areas that, due to their location, visibility, and access, offer the best opportunities for commercial- or retail-oriented development that would serve the local community and users passing through the area. Redevelopment of these sites would help to directly improve the visual quality of the area.

Mixed Commercial/Light Industrial
These areas are currently light industrial with some commercial uses. They are near major transportation corridors and should remain as mixed commercial or light industrial. Redevelopment or improvements are encouraged and should be consistent with these types of uses. Any improvements are encouraged to place open storage or less attractive activities toward the back of the property, or to incorporate fencing or walls to help buffer views of these activities.

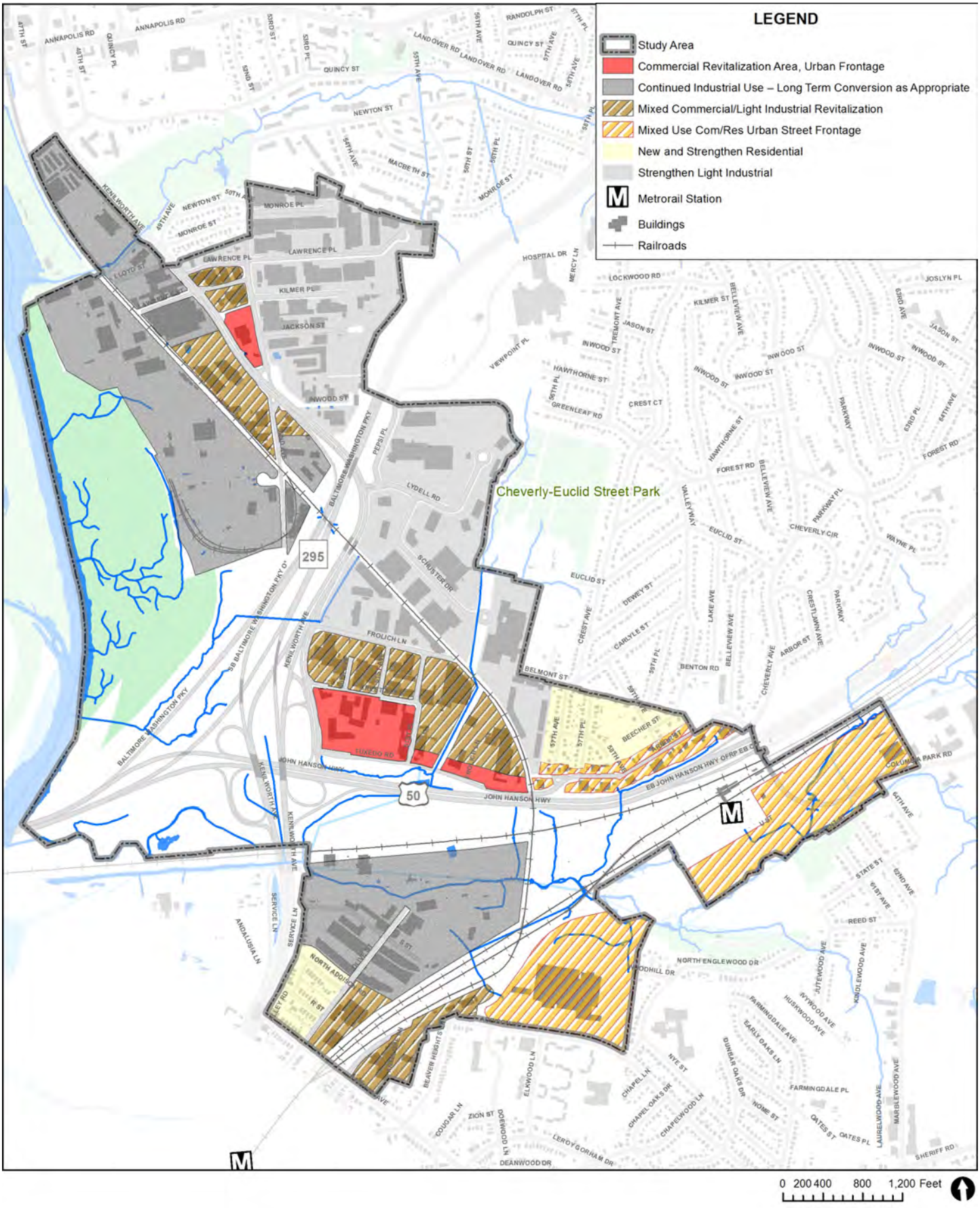
On-going Industrial/Future Conversion as Appropriate
These areas have active industrial uses and are unlikely to change in the near-term. They are encouraged to continue incorporating upgrades to their sites such as improved buffering, stormwater improvements, and improved technology in order to enhance air quality or limit noise. As appropriate, these areas should be considered for less intense uses due to their proximity to major park lands and streams.

Support On-going, High-Quality Light Industrial and Commercial Uses
These areas have active light industrial and commercial uses. They have good-quality existing buildings, including masonry, concrete, steel or similar heavier structures that offer excellent quality buildings to support industrial and commercial uses. In some areas there is limited space available for parking, storage, or loading dock facilities. These areas should retain their existing character and, as uses continue to evolve, facilities should be improved, including improvements to the site areas in order to support parking, storage, or loading dock facilities.

Continue to Support Mixed-Use Redevelopment
These areas were identified in the 2005 *Approved Sector Plan and Sectional Map Amendment for Tuxedo Road/Arbor Street/Cheverly Metro Areas* as areas that should be redeveloped with mixed uses, including retail, commercial, and residential. These areas are closest to the Metro station and continue to be appropriate for this type of redevelopment. There are some challenges, however, including wetland areas and 100-year floodplain, both of which create road blocks to development of the area near the Metro station. In addition, the Columbia Park Road Bridge offers limited pedestrian access, creating challenges for connections from the north side of US 50. Redevelopment continues to be encouraged and implementation of specific improvements to help support the redevelopment as outlined in the 2005 *Approved Sector Plan and Sectional Map Amendment for Tuxedo Road/Arbor Street/Cheverly Metro Area* is ongoing.

Strengthen Housing and Minimize Industrial Conflicts
This area is an older housing area in proximity to the industrial areas south of US 50, and has been impacted by the surrounding industrial activities. Issues facing this area include a lack of buffering between housing and the industrial activities and truck traffic passing through portions of the neighborhood. Improvements to this area are encouraged, such as incorporation of additional fencing, vegetation, or routing truck traffic to limit the impact to residential uses.

Map 3-2: Suggested Land Use



3.4.2 Transportation

Improvements to the transportation network includes both concepts for modifying a few streets to better or more safely support traffic along with pedestrian movement through the area, and concepts for supporting the implementation of Complete Streets, where feasible.

Traffic Circulation and Access Improvements

The primary goals of the plan with respect to traffic circulation and access include reducing vehicular conflicts, promoting highway safety improvements at the major interchanges, and simplifying vehicular access to each of the planning areas.

The configuration of the US 50/MD 295 interchange presents significant challenges for some drivers on southbound Kenilworth Avenue. The study explores opportunities to minimize traffic conflicts within the interchange area and to improve access to the Kenilworth Avenue and Tuxedo Road planning area. Specifically, the study seeks to address the following issues:

- The inability for southbound trucks to access US 50 westbound without navigating several unsignalized crossing and weaving conflicts.
- The unsignalized crossovers for southbound Kenilworth Avenue at both MD 295 northbound and MD 459 to access the Kenilworth Avenue and Tuxedo Road area.
- The unsignalized left turn from southbound Kenilworth Avenue across the US 50 westbound off-ramp to access Tuxedo Road, where limited sight distance contributes to potential vehicular conflicts.

The study identifies several roadway concepts that are intended to simplify the US 50/MD 295 interchange and improve highway safety. The County should explore opportunities with the National Park Service for trucks on southbound Kenilworth Avenue to use the direct access ramp to US 50 westbound, which is part of MD 295. This step would eliminate the need for trucks to use the southbound Kenilworth crossover to access US 50 westbound.

The potential roadway projects also include eliminating the unsignalized crossovers on southbound Kenilworth Avenue, eliminating the southbound traffic lanes on the Kenilworth Avenue frontage road (MD 459), and constructing a traffic signal at the Kenilworth Avenue/Frolich Lane intersection. These projects could provide a controlled crossing on southbound Kenilworth Avenue, eliminate potential sight distance and wrong way driving issues at the crossovers, and establish a new, highly-visible gateway to the Kenilworth Avenue and Tuxedo Road planning area. The potential traffic signal grants the additional benefit of providing new access to US 50 eastbound from the Kenilworth Avenue and Tuxedo Road planning area without requiring trucks to pass through the Arbor Street area to access another interchange.

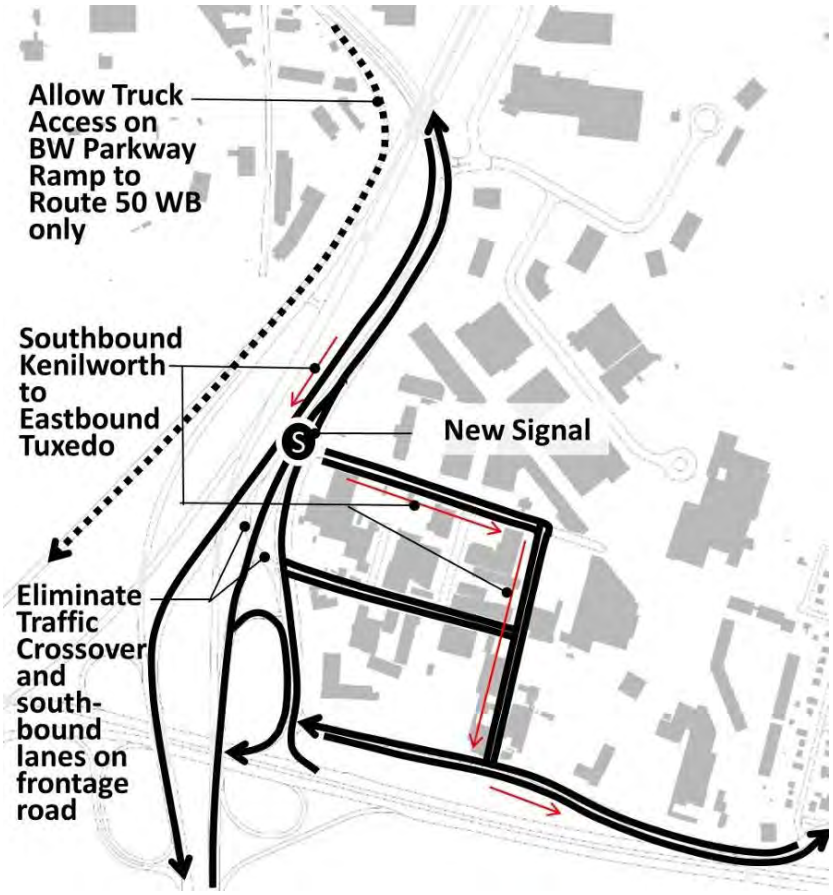
Map 3-3: Roadway Recommendations

Complete Streets Proposals

The study identifies roadway corridors and trail systems where streetscape and facility projects could better support pedestrian, bicycle, and transit activity consistent with Compete Streets principles. The intent of these recommendations is to encourage projects that will provide separate or dedicated accommodations for nonautomobile users in the planning areas. These measures may include some of the following types of facilities:

- New and wider sidewalks and shared-use pathways along roadway corridors.
- Crosswalk and wheelchair ramp improvements.
- Accessible pedestrian signals.
- High-visibility crossing treatments, including ladder-bar crosswalk markings, flashing beacons, and signalized crossings.
- Shared-lane markings or on-street bicycle lanes.
- Off-street trails and pathways.
- Transit stop upgrades, including appropriate landings, bus shelters, and access to sidewalks.

Map 3-4: Roadway Recommendations for Kenilworth Junction



- Appropriate on-street parking provision and enforcement.
- Traffic calming measures, including narrower travel lanes, raised crosswalks, and road diets.

3.4.3 Bicycle Network

The proposed bicycle network is based on the system developed in the *Countywide Master Plan of Transportation*. In addition, the latest route from the Cheverly-Euclid Street Park to the Anacostia River Trail has been incorporated into the overall trail plan. This bicycle network offers a mix of bike lanes, hard surface trails, natural surface trails, shared roadway paths (sharrows), and sidepaths, depending on the availability of space, traffic volumes, and other factors.

As part of the Kenilworth Avenue and Town of Cheverly Industrial Area Study, two other connections are suggested and are shown as proposed routes on Map 3-5. These two connections are along Kenilworth Avenue, connecting the planned Kenilworth Avenue route with the Tuxedo Road route, and a proposed trail along a potential restored stream that would connect from Tuxedo Road north to Cheverly-Euclid Park. This connection would offer a direct linkage from the park to the Kenilworth Junction area.

To implement the Tuxedo Road to Cheverly-Euclid Park trail connection will require the County to address two key challenges:

- The trail would cross the CSX tracks just south of Schuster Drive and the planned Smith Industries Electronics Recycling facility. It will require an agreement with CSX to allow for a crossing at that point. It is recommended that this be a bridge crossing above the tracks to separate rail activity from pedestrian activity.
- When the property between CSX and Tuxedo Road is redeveloped, the development includes restoring the stream that is currently located in a pipe below the site and will allow for public access along this stream. This will require an agreement with the property owner.

Map 3-5: Proposed Bikeways

3.4.4 Public Realm Enhancements

Improvements within the right-of-way and public spaces in the study area would have an impact beyond simply improving the visual appeal. Streetscape features and open spaces play a key role in defining a place's sense of place. Currently, the lack of sidewalks, and the poor quality of those that do exist; the lack of consistent street trees; and the generally inhospitable environment contribute to negative perceptions of the area.

Creating a more pedestrian-friendly streetscape to support pedestrian activity can help encourage further investment in the area. An improved streetscape can help encourage use of transit, offer places for employees to walk during lunch, and help connect the adjacent neighborhoods with these areas. Another important consideration is the existing utility poles in the study area. In a number of cases they limit the width of the sidewalk and contribute to aesthetic challenges. While it may not be feasible to place utility lines underground, where poles exist, sidewalks should be widened or moved to allow for pedestrians to pass. In key strategic locations, burying utilities should be considered.

In addition, improvements within the public right-of-way, or at the edge of the public right-of-way, can have an important impact by:

- Buffering views of storage areas and loading areas within operating sites.
- Incorporating sidewalks along at least one side of the street as feasible.
- Creating areas to incorporate low-impact development techniques such as bioretention areas within the public rights-of-way to support stormwater management goals.
- Supporting the use of parallel parking along street frontages to address parking needs in the area.
- Incorporating bike lanes or sharrows to allow for safe bike access into and through the area.

Figure 3-2 provides an illustration of a number of these ideas. The illustration shows standardized traffic lanes, sharrows, on-street parking, improved fencing to buffer views, signage, sidewalks, and some modest increase in street trees (where feasible).

Figure 3-1: Typical Existing Street.

Figure 3-2: Conceptual View of Existing Street with Streetscape Improvements.

3.5 Illustrative Focus Area Plans

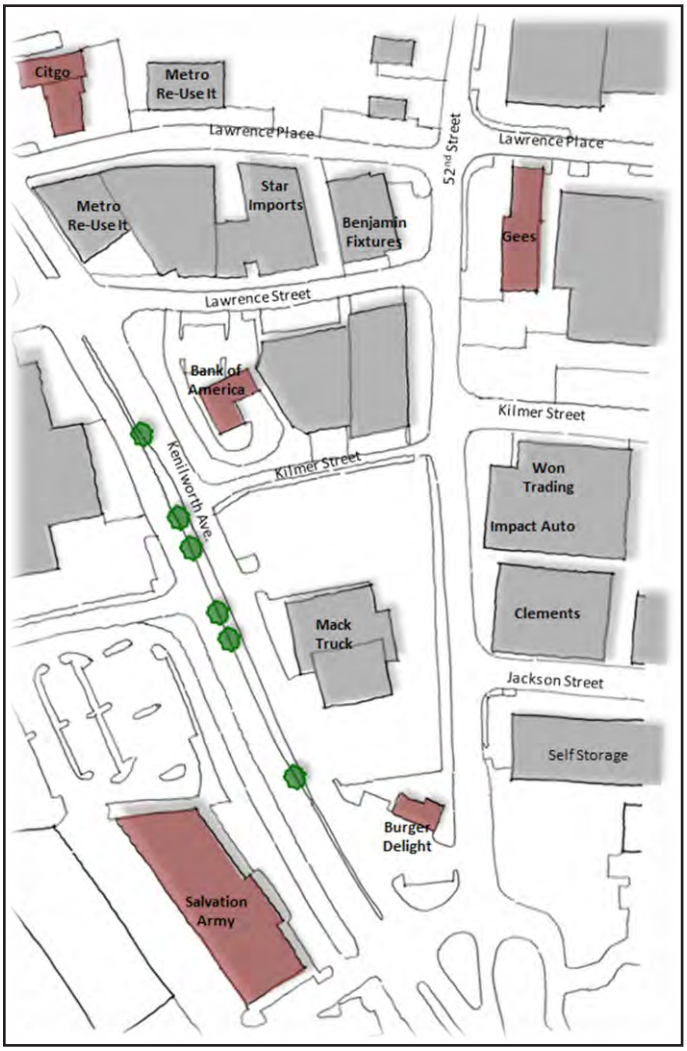
Several locations within the study area present potential opportunities for revitalization and redevelopment, given levels of vacant and underutilized properties, and conditions of buildings within the area. The following sections further evaluate the site conditions and marketability of three of the character areas to understand the market potential to drive their improvement. In addition, concept plans and illustrative graphics provide visuals to support these ideas.

Focus Area #1 – 52nd Avenue and Kenilworth Avenue

52nd Avenue Area

This character area has highly accessible and visible buildings (such as the Salvation Army) exposed to significant vehicle traffic along Kenilworth Avenue (Map 3-6 and Figure 3-3). Properties are mostly light and heavy industrial use. Buildings off of Kenilworth Avenue are mostly older industrial properties with character, although building quality ranges from well-maintained to those that appear to be vacant and in poor condition. CoStar reports some vacancy, but for the most part buildings appear to be partially or fully occupied; although, underutilization (for example, use as dead storage) may be occurring. In general, 52nd Avenue has better quality buildings and is more appealing than Kenilworth Avenue; however, 52nd Avenue's lack of connectivity to the north of the study area presents a challenge to retail attraction. Kenilworth Avenue frontage in the 52nd Avenue area is much less attractive, with large industrial buildings containing less potential for repositioning to other uses.

Map 3-6: Existing 52nd Avenue / Kenilworth Avenue Area



Opportunities and potential strategies

The physical characteristics of Kenilworth Avenue provide a challenge to initiating revitalization activities.

- Repositioning of high-quality buildings for more technologically oriented activities along 52nd Avenue and its side streets, in coordination with strategies to promote entrepreneurship and market the area's industrial character.
- Targeting investments to improve the visual character of Kenilworth Avenue in order to support revitalization efforts.

Map 3-7 and Figure 3-4 show an "after" view following implementation of a number of concepts, including redevelopment of the corner of Kenilworth Avenue and 52nd Avenue, incorporation of sidewalks and bike lanes along 52nd Avenue, and adding bioretention areas near the Kenilworth and 52nd Avenue intersection. The goal is to create a more pedestrian-friendly, visually appealing area that would attract additional users to the area.

Map 3-7: Conceptual View of 52nd Avenue/ Kenilworth Avenue Area

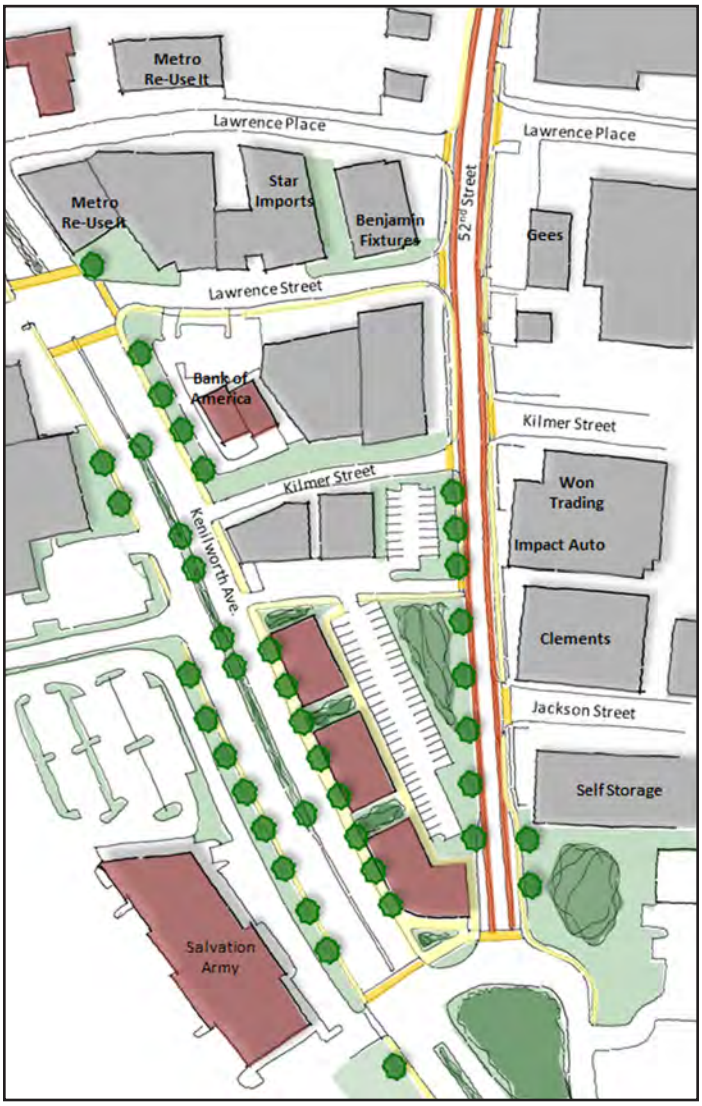


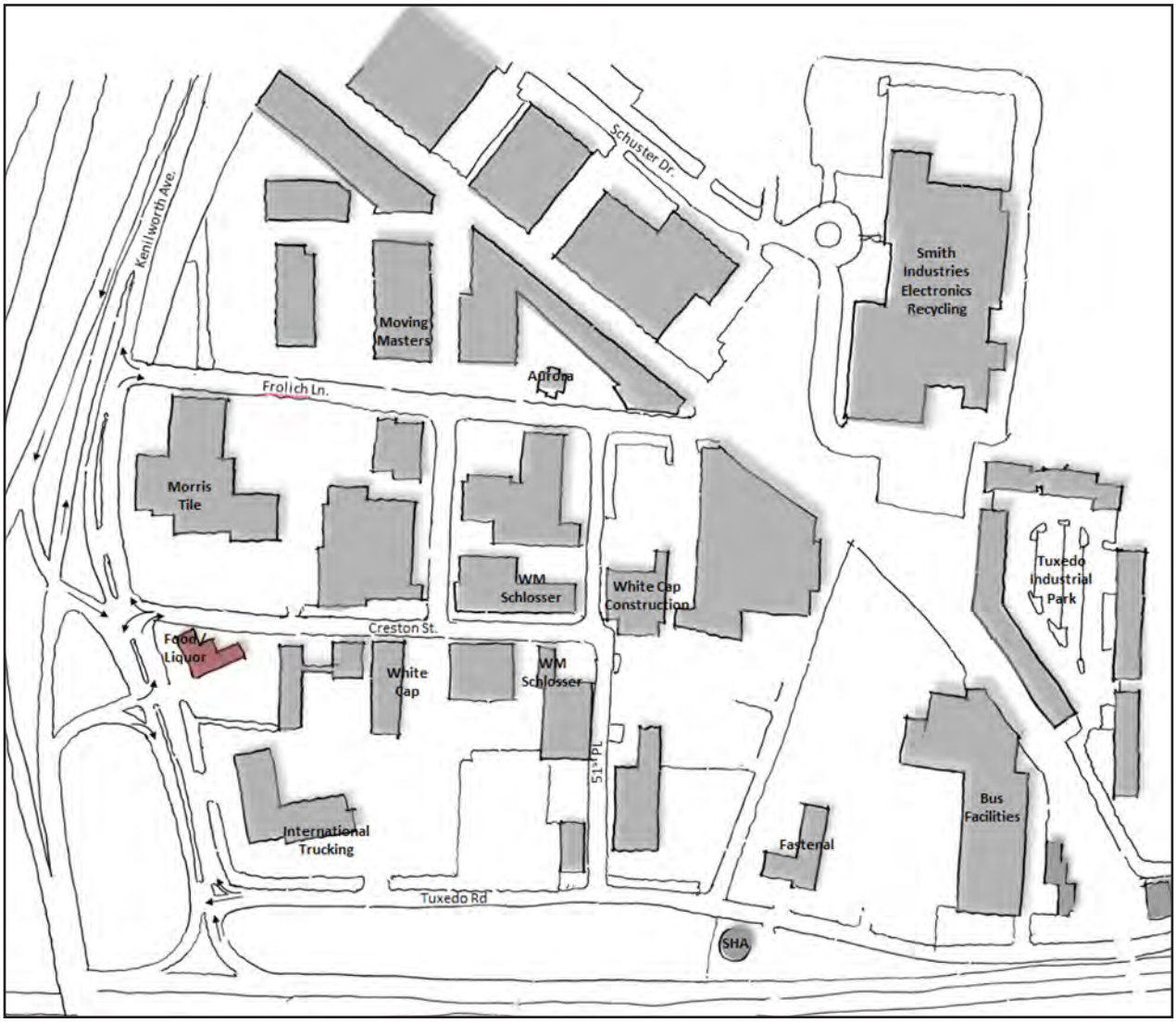
Figure 3-3: Existing view of 52nd Avenue/ Kenilworth Avenue Area

Figure 3-4: Conceptual View of 52nd Avenue/ Kenilworth Avenue Area

Focus Area #2 – Kenilworth Junction

This area provides the greatest accessibility within the study area, with the intersection of Tuxedo Road and Kenilworth Avenue served by on-ramps and off-ramps to both directions of traffic on US 50 and MD 295. In this area, Tuxedo Road offers good visibility to traffic on US 50, particularly at the intersection with Kenilworth Avenue. Although there are active businesses along Tuxedo Road, much of the land consists of deep parcels used for surface storage, including bus operations, maintenance, and storage. Along Kenilworth Avenue and on the streets within the character area, such as Frolich Lane, 51st Place, and Creston Street, properties are actively utilized and vary greatly in appearance, including well-maintained buildings with office space, surface storage, residential, and other small properties that hold a variety of uses. The streets themselves are heavily used, but not in a well-organized fashion, for parking and loading. Although there is some retail in the area, it generally does not serve the daily needs of residents or workers.

Map 3-8: Existing Kenilworth Junction Area



Opportunities and potential strategies

This area offers greater potential for short-term revitalization and redevelopment than the 52nd Avenue area due to its visibility, its accessibility, and the more fragmented character of the Tuxedo Road frontage. Improving the physical character of the area and providing retail opportunities for area residents and workers will also have a substantial impact on the character of the area overall.

- Short-term renovation or redevelopment at the corner of Kenilworth Avenue and Tuxedo Road. This site has the best potential for retail and could prime nearby sites for repositioning.
- New construction on vacant or substantially underutilized sites on Tuxedo Road east of the intersection with Kenilworth Avenue. These sites are a longer-term redevelopment opportunity, but offer large parcels suitable to a variety of light industrial, showroom, flex space, and retail/service uses that are compatible with the existing mix of industrial uses.
- Targeted investments to improve the character of Tuxedo Road in order to support revitalization efforts and integrate existing and new/renovated development.

The illustrations shown in Map 3-9 and Figure 3-6 are concepts of how improvements could be implemented at the Kenilworth Junction area. The key goals for this area include creating an urban retail or commercial frontage along Tuxedo Road and Kenilworth Avenue, which could include services, office, or other related uses. Where feasible, sidewalks and bike lanes should be incorporated on the streets to allow for safe pedestrian and bike movement, along with other streetscape improvements such as street trees, signage, and lighting. The concept shown in Map 3-9 is the recommendation to restore the stream that is currently in a pipe below ground south of the rail line. This could happen during future redevelopment of this area. An important component of this concept is to incorporate a trail connection that could ultimately connect to Cheverly-Euclid Park just north of this area. A key issue for this trail would be attaining an agreement with CSX to build a bridge over the rail tracks and building on a steep slope adjacent to Kenilworth Avenue.

Map 3-9: Conceptual View of Kenilworth Junction Area

Figure 3-5: Existing Kenilworth Junction Area

Figure 3-6: Conceptual View of Kenilworth Junction Area

Arbor Street Area

This area has a mix of small, older industrial and service-oriented buildings along the Arbor Street-Tuxedo Road corridor in varying states of use and condition. Many properties are poorly maintained in this area, or appear to be vacant. Buildings that flank this main street are often sparsely located, surrounded by parking and surface uses. An interchange with US 50 provides easy access to eastbound traffic on to Columbia Park Road and off-ramps in both directions. The area has already been rezoned to accommodate mixed-use redevelopment. Although the area's access to the Cheverly Metro Station is an asset, the capacity and location of the Columbia Park Road Bridge constrains the development potential of the areas closest to the station. There is convenience-oriented retail at the intersection of Arbor Street and Columbia Park Road, and the areas to the east and north of Arbor Street are strong residential neighborhoods.

3.6 Environmental

As described in Section 2.4, the Kenilworth Avenue and Town of Cheverly Industrial Study Area is a highly developed area that was largely developed prior to the adoption of many of the environmental regulations that are now in place. It is important as the area continues to evolve that the County, state, and federal regulations and policies help guide future redevelopment of this area to address historic issues related to degradation of water quality, floodplain, wetlands, and other environmental features.

Protecting and enhancing the natural environment will contribute to the long-term viability and success of the area. Key elements of this strategy include the enforcement of existing regulations and investment in upgrading and improvements to the area.

Enforcement of Regulations

There are a number of County, state, and federal regulations that relate to environmental quality and address a variety of key topics, such as:

- Stormwater management
- Floodplain protection
- Woodland and wildlife habitat protection
- The Chesapeake Bay Critical Area
- Wetlands
- Streams and their buffers
- Steep slopes
- Forest conservation

As part of the development review process, proposed improvements will be required to adhere to the appropriate County, state, and federal regulations. These regulations should not be viewed as a barrier to redevelopment, but as a way to improve the area in a more sustainable manner.

Investment in Improvements

In conjunction with the enforcement process, there are also a number of proactive actions that will help contribute to the long-term environmental quality. The Kenilworth Avenue and Town of Cheverly Industrial Study identifies a number of specific projects that should be considered in future improvements to the area. These include:

- Study and, as appropriate, construct bioretention facilities:
  - At the intersection of 52nd Avenue and Kenilworth Avenue
  - As part of the redesign of key streets
  - As part of the redevelopment of key sites
- Investigate the feasibility of daylighting the piped stream between the railroad and Tuxedo Road
- Reduce or remove impervious surface areas
- Plant street trees

In addition to the recommendations in this study, the Anacostia Watershed Restoration Plan includes a number of specific priority projects that are within the Kenilworth Avenue and Town of Cheverly Study Area. The following provides a summary of these priority projects, for more detailed information please go to www.anacostia.net/plan.html.

Table 3-1: Anacostia River Watershed Restoration Plan Priority Projects in the Study Area

Site Location	Site Size (acres)	Site Description	Project Description
3200 Kenilworth Ave	3.8	Commercial Property and Parking Lot	LID Bioretention, Undergound Pipe Storage, Sand Filter
3304 Kenilworth Ave	6.3	Warehouse and Parking Lots	LID Bioretention, LID Tree Box Filter
4881 Lydell Rd	1.3	Warehouse, Parking Lot and Green Space	LID Bioretention
4701 Lydell Rd	2.1	Office Building, Parking Lot and Green Space	LID Storm Filter and Underground Pile Storage
4849 Lydell Rd	1.0	Building, Parking Lot and Green Space	LID Storm Filter and Underground Pile Storage
4821 Lydell Rd	2.0	Warehouse, Parking Lot and Green Space	LID Bioretention
2300 Craftsman Cir	13.4	Warehouse, Parking Lot and Green Space	LID Downspout Disconnection, LID Green Roof, LID Bioretention
2421 Schuster Dr	3.0	Warehouse and Parking Lot	LID Storm Filter, Underground Pipe Storage
5400 Tuxedo Rd	2.9	Office Building and Parking Lots	LID Bioretention, Underground Pipe Storage, LID Storm Filter
5556 Tuxedo Rd	3.4	Warehouse and Parking Lot	LID Bioswale, LID Bioretention
5200 Tuxedo Rd	0.7	Building and Gravel Lot	LID Bioretention
5600 Tuxedo Rd	0.6	Building, Parking Lot and Green Space	LID Bioswale
2507 51st St	2.0	Buildings and Parking Lots	LID Storm Filter, LID Biorention
5106 Frolich Ln	5.1	Buildings and Parking Lots	LID Green Roof, LID Storm Filter
2507 51st Ave	2.0	Buildings and Parking Lots	LID Storm Filter, LID Bioretention
4811 Frolich Ln	1.4	Buildings and Parking Lots	LID Storm Filter, LID Bioretention
2529 Kenilworth Ave	1.5	Warehouse and Parking Lot	LID Storm Filter, LID Green Roof
Creston between 50th and Kenilworth Ave	2.2	Buildings and Parking Lots	LID Storm Filter, LID Bioretention
2502 51st Ave	1.9	Warehouse and Parking Lots	LID Storm Filter, LID Bioretention
5000 Tuxedo Rd	6.4	Buildings, Parking Lots and Green Space	LID Bioswale, LID Bioretention, Underground Pipe Storage, LID Storm Filter
5711 Tuxedo Rd	0.8	Fire Station and Parking Lot	LID Downspout Disconnection, Sand Filter
Pioneer Properties Tuxedo Rd	5.5	Trailer Office and Parking	LID Bioretention
2400 51st Pl	0.6	Warehouse and Parking Lot	LID Green Roof, LID Storm Filter
5600 Euclid St	3.4	Swim Club, Parking Lot and Green Space	LID Bioretention
2320 57th Ave	0.5	Building and Parking Lot	LID Storm Filter
2300 Arbor St	0.8	Building and Paved Area	LID Storm Filter

Site Location	Site Size (acres)	Site Description	Project Description
Arbor St between 59th and Belleview	8.8	Buildings and Parking Lots	LID Storm Filter and LID Bioretention
5951 Arbor Street	0.5	Warehouse and Parking Lot	LID Storm Filter
2300 Belleview Ave	4.3	Building, Parking Lot and Green Space	LID Bioretention, LID Downspout Disconnection
1223 Marblewood Ave	1.9	Buildings and Parking Lots	LID Curbside Planter, LID Storm Filter
1401 Nye St	14.6	Buildings, Parking Lots and Green Space	LID Downspout Disconnection, LID Bioretention, LID Green Roof
1808 Olive St	6.9	Industrial Building and Parking	LID Storm Filters, LID Bioretention
4401 South St	8.8	Industrial Building and Parking	LID Storm Filters
1797 Olive St	6.2	Industrial Building and Parking	LID Storm Filters
1701 Olive St	4.0	Industrial Building and Parking	LID Storm Filter
1701 Kenilworth Ave	0.8	Building and Parking Lot	LID Bioretention

4.0
IMPLEMENTATION

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

4 Implementation

Implementation of a revitalization strategy will rely on the efforts of all stakeholders, which includes both public sector entities and private businesses. Specific projects described in this chapter implement the key strategies identified in this study. Projects are divided among four paths that reinforce each other and are designed to be pursued concurrently. These paths are:

- Public street, roadway, and trail improvements
- Private development coordination and improvement opportunities
- Programmatic and organizational opportunities
- Green initiatives

Projects and funding strategies on each path are further described below. A guiding principle of implementation is to encourage private investment in property improvements, maintenance, and redevelopment. County efforts and resources are best directed to activities that catalyze and leverage private investment. In addition to funding strategic public investments, the County also has a critical role to play in convening, supporting, and coordinating activities among stakeholders to further revitalization, improve aesthetic and environmental conditions, and maintain economic vibrancy. Effecting change that nurtures a forward-looking local economy and builds greater environmental resilience will also improve quality of life, enhance property values, and increase the area's attractiveness as a place that draws businesses, workers and residents.

The projects and initiatives have been identified in one of three categories, short-, mid-, and long-term. Short-term activities are intended to be completed in the next 4 years, mid-term activities are intended to occur between 5 and 9 years, and long-term is 10 years and beyond.

4.1 Public Street, Roadway, and Trail Improvements

These projects fall into the traditional realm of County capital improvements that enhance the performance and aesthetics of the public right-of-way. These projects improve connectivity throughout the project area, offer the opportunity to incorporate stormwater retention improvements, enhance multimodal access, and create a more orderly environment for new development to occur. These projects require capital investment dollars and can significantly transform the experience of traveling to and through the area.

4.1.1 Priority Projects

Study Truck Access on MD 295 Ramp to US 50 West Bound

Description: Study the potential for allowing truck access to the MD 295 ramp that connects between Kenilworth Avenue south and US 50 west.

Purpose: By allowing trucks to make this connection, the current traffic crossover intersection near Kenilworth Avenue and Creston Street could be eliminated, and this will simplify and normalize the traffic pattern along Kenilworth Avenue in this area.

Timing: Study to be conducted in the short-term (one to three years). Once the study is completed, a more detailed implementation strategy can be identified.

Roles: The County leads the study and engages the National Park Service (NPS) and State Highway Administration (SHA), who must approve of (and allocate funding) for proposed changes.

Streetscape Improvements Along Arbor Street and Tuxedo Road

Description: The Tuxedo Road-Arbor Street Sector Plan identified street section concepts for these two streets. Arbor Street was identified as a Main Street and Tuxedo Road was identified as a Local Street. These concepts should be further refined as part of an implementation of streetscape improvements in the area.

Purpose: Improvements to these streets will provide a number of benefits, including better and safer pedestrian access between the Cheverly neighborhood/Cheverly Metro and the Kenilworth Avenue and Town of Cheverly Study area. These improvements will also help encourage redevelopment or upgrading of existing properties along this corridor.

Timing: Short- to mid-term. Initial priority should be Arbor Street.

Roles: The County could work with property owners to develop a strategy that coordinates and leverages private investment with public investment to implement streetscape improvements.

Continue Implementation of the Cheverly Park to Anacostia River Trails

Description: Design of this trail has been completed to 30 percent. This design should be finalized and constructed as proposed.

Purpose: This trail will provide additional connectivity for bicycling to business areas, the adjacent community, and the Anacostia River Trail.

Timing: Short-term.

Roles: The County should continue to lead the process of implementation.

Implement Trail Connection along Kenilworth Avenue between Tuxedo Road and Lydell Road

Description: Study and implement an additional trail connection as feasible along Kenilworth Avenue between Tuxedo Road and Lydell Road. It is anticipated that this trail will likely be an on-street bike lane

Purpose: This trail will provide additional connectivity for bicycling to business areas, the adjacent community, and the Anacostia River Trail.

Timing: Study to be conducted in the short-term (one to three years). Once the study is completed, a more detailed implementation strategy can be identified.

Roles: The County leads the study and engages SHA, who must approve of (and allocate funding for) proposed changes.

Support Improved Pedestrian and Bicycle Connection across US 50 to the Cheverly Metro Station

Description: Further refine and implement recommendations as developed in the Anacostia Park Bike Access Study.

Purpose: The goal of these connections is to improve accessibility and marketability of the properties north of US 50.

Timing: Near- to mid-term.

Roles: The County, in coordination with SHA, should continue to pursue funding for these improvements.

4.1.2 Funding Strategies

Capital funds typically come from the County's general fund as directed by the County's Capital Improvement Plan (CIP). In addition, there are state and federal funding opportunities that could be pursued for these projects, including those described below.

Sustainable Communities

The Sustainable Communities Program, offered by the State of Maryland, provides a package of incentives, funding, and resources available to older communities in need of revitalization. The study area does not currently have Sustainable Communities designation, but a county or municipal governmental entity can submit an application for funding, accompanied by an action plan that guides sustainable investment in the targeted area, on a quarterly basis. Sustainable Communities designation provides the following resources to businesses and municipalities:

- Funding for revitalization activities through the Community Legacy and the Strategic Demolition and Smart Growth Impact Fund

- Priority funding for improvements through MDOT (including sidewalks, streetscape, and bike paths).

Several defined geographic areas within Prince George's County—in Bowie, College Park, Hyattsville, Laurel, Mount Rainier, and along the Central Avenue/Blue Line Corridor (sponsored by the County)—have received Sustainable Communities designation.

Property Enhancement and Value Capture

In general, property value appreciation in the study area is relatively limited due to its already built out nature and the constraint of significant increases in property value through new development. Large, underutilized sites such as Fairfield Farms, or potential transit-oriented development near the Cheverly Metro Station, may have sufficient property value appreciation potential through development to warrant consideration of Tax Increment Financing (TIF) or similar value capture tools. Although the projects identified above are not likely feasible candidates for TIF, a recognition of the private investment that can follow from public investments, and an estimation of recurring impacts on tax revenues, can be used to guide the County's capital improvement decisions.

4.2 Private Development, Coordination, and Improvement Opportunities

Private property owners will drive the pace of redevelopment within the study area, but the County has an important role in encouraging development and reinvestment activity at key sites previously identified. The County can positively influence outcomes through proactive conversations with property owners, coordination of activities for adjacent property owners, technical assistance, and support in overcoming funding challenges. Timing is driven by property owners, but the County can seek opportunities to influence timing through more direct engagement with property owners.

4.2.1 Priority Projects

Coordinate Redevelopment/Improvements to Key Properties near the Intersection of Kenilworth Avenue and Tuxedo Road

Description: The County should work collaboratively with key property owners to help shape, support, and encourage redevelopment or improvements to their parcels.

Purpose: These properties are some of the most visible sites within the study area; they can be seen from both US 50 and I-295. They currently contribute to the poorer visual quality of the area. These sites should be improved or redeveloped to include building adjacent to the street edge, fencing or walls to help buffer views of the service areas, and improved signage. Another key issue for redevelopment of these areas will be the need to include stormwater management facilities. There may be an opportunity for the County, town, and property owners to work together to find solutions that address stormwater requirements.

Timing: Short-term.

Coordinate Redevelopment/Improvements to Key Properties near the Intersection of Kenilworth Avenue and 52nd Street

Description: The County should work collaboratively with key property owners to help shape, support, and encourage redevelopment or improvements to their parcels.

Purpose: These properties are some of the most visible sites within the study area; they can be seen from Kenilworth Avenue and are part of the gateway into the northern portion of the study area. They currently contribute to the poorer visual quality of the area and should be improved or redeveloped to include buildings adjacent to the street edge, fencing or walls to help buffer views of the service areas, and improved signage. Another key issue for redevelopment of these areas will be the need to include stormwater management facilities. There may be an opportunity for the County, town, and property owners to work together to find solutions that address the stormwater requirements.

Timing: Near- to mid-term.

Coordinate/Encourage mitigation of impacts from existing Industrial Development between the Anacostia River and Kenilworth Avenue

Description: The County should proactively work with property owners to identify opportunities to mitigate the impacts of these uses on the Anacostia River and nearby areas.

Purpose: Create partnerships with existing property owners and businesses in order to find ways of improving their existing facilities, which will help reduce the impacts on water quality or other environmental conditions.

Timing: Ongoing.

Encourage Daylighting (uncovering) of Existing Drainage between 51st Street and the CSX Rail Line and the Incorporation of a Trail Connection

Description: A pipe currently carries water from the north, near the cul-de-sac at the end of Shuster Drive, south to Tuxedo Road. Daylighting the water as a naturalized stream could support stormwater goals for the area and allow for a trail to be located adjacent to the stream.

Purpose: As part of a future redevelopment of these parcels, daylighting of the drainage below the site could offer a number of benefits for redevelopment by creating an amenity for the site, providing opportunities to support stormwater management, and allow for the location of a trail that could link north–south between Tuxedo Road and Shuster Drive to the north.

Timing: Mid- to long-term.

4.2.2 Funding Strategies

Property and business owners who are seeking to invest in the area have a package of incentives and funding sources available to them that may be of assistance in making a project financially feasible. The array of resources, summarized below, would be in addition to public funding streams that the County and other public entities could choose to dedicate to public improvements as part of redevelopment projects.

Enterprise Zone

Enterprise Zone designation offers new, relocating, and expanding businesses within its borders a package of County and state benefits. The County's Enterprise Zone incorporates much of the study area, including a Focus Area within the zone that receives enhanced benefits (See Map 4-1). The Prince George's County Economic Development Corporation administers the County's Enterprise Zone program. Benefits include:

- Credit on state income taxes for new employees (enhanced in focus area)
- Abatement of County real estate property taxes on property improvements (enhanced in focus area)
- Tax credit on business/property tax (focus area only)

Other Tax Credits

Revitalization Tax Credit

This property tax credit is available to property owners not within the Enterprise Zone, but within census tracts (including Tract 8043) where the median household income is lower than the County average. Projects receive an abatement of County real property taxes assessed on improvements, on a schedule that provides 100 percent abatement for the first year and gradually decreases to 20 percent in year 5. The program can be used for nonresidential projects (certain residential projects are eligible for a three-year abatement period).

High Tech Real Property Tax Credit

A similar property tax abatement is available without geographic restriction to projects that provide space for high tech enterprises (defined as any business entity, including a developer, who enters into a lease agreement with a high technology governmental agency that is primarily involved with the applications of engineering, life sciences, computer

sciences, research, and development, or produces materials, parts, or equipment used in the type of applications noted above), makes an investment of at least $500,000 on 5,000 square feet of space, and creates at least 10 new full time positions in 3 years.

Job Creation Tax Credit

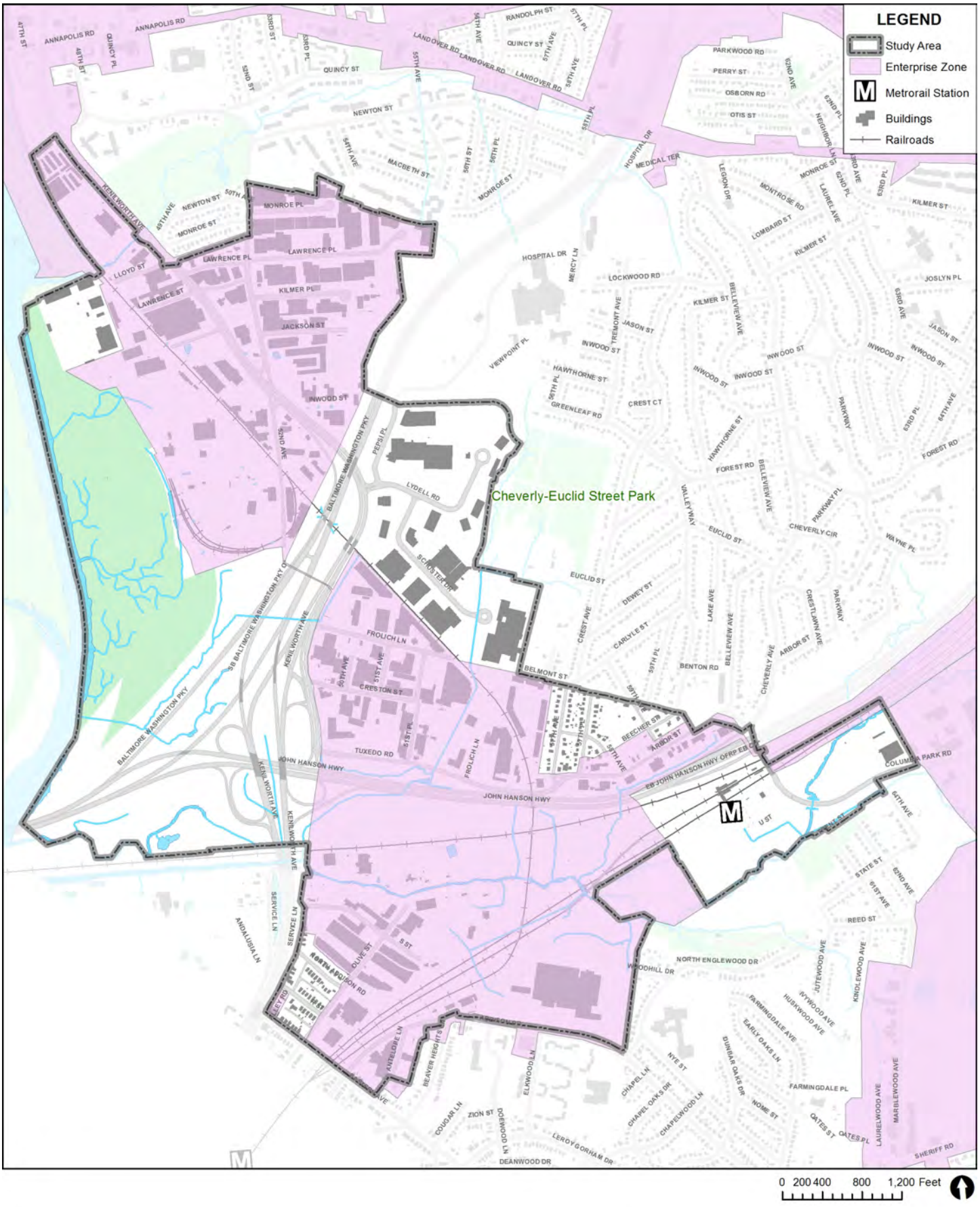
In addition to Enterprise Zone credits, this incentive targets employment-intensive businesses expanding employment within I-495 (Capital Beltway) and other designated locations. Businesses must create at least 25 new jobs within a 2-year period in order to claim credit. Businesses must be engaged in eligible activities, including manufacturing, transportation, warehousing, research, development, testing, computer programming, headquarters operations, and business services.

Economic Incentive Loan Fund

Capitalized with $50 million in County funds, this loan provides funds for business retention and attraction that will create new jobs, broaden the tax base, and support small and local businesses.

- Projects should produce significant economic impact through measurable outcomes such as job creation and retention, increasing the commercial tax base, industry and commerce, and promoting local, minority, and small business development.
- Minimum $250,000 loaned, must be leveraged with private and public funds.
- Eligible to be used for land and building acquisitions, building construction and improvement, equipment acquisition, and working capital.

Map 4-1: Enterprise Zones



New Markets Tax Credits (NMTC)

NMTCs provide a potential source of equity capital for economic development projects. Census Tracts 8042 and 8043, which cover over 90 percent of the study area, are qualified to receive Tax Credit funding. The NMTC program was established to spur new or increased investments in low-income communities. Community Development Entities (CDE) apply for allocations of tax credits and then attract investors, who receive a tax credit against federal income taxes. Funds can then be invested in economic development projects that generate returns at levels below what would be required to otherwise attract equity capital.

EB-5 Financing

The Employment-Based Immigrant Investor Program, also known as EB-5, is an emerging source of low-cost debt or equity for projects that create or preserve employment. Federally authorized entities pool and direct investment funds from immigrants and, because immigrants receive U.S. residency visas in exchange for a minimum investment of $500,000 that creates or preserves at least 10 jobs, they are willing to receive returns below a threshold of what other investors would require.

Maryland Community Investment Tax Credit (CITC)

501[c](3) organizations can apply to receive an allocation of these credits from the state. The nonprofit organization can then provide a 50 percent credit to the donor of real property, cash, or goods for community revitalization purposes; this is in addition to the state and federal tax deduction the donor is eligible to receive. Eligible donors include both businesses and individuals. For donors that are subject to high rates of taxation, the combination of the CITC and state and federal tax deductions can provide a powerful financial incentive to donate.

Other Financing Programs

Loan programs designed to spur business expansion and employment growth provide below-market interest rates and expand credit eligibility beyond what private, for-profit lenders will underwrite. Eligibility varies by program; programs describe those that are available within geographically restricted areas such as Sustainable Communities, or for businesses within a specific size threshold. Programs include the following:

- State Small Business Credit Initiative: Gap financing, up to 50 percent of costs, for property acquisition, building improvements, leasehold improvements, and other costs associated with opening or expanding a small retail, commercial, or manufacturing business. For designated Sustainable Communities and other Maryland community designations.
- Be SMART Business Program: Loans for energy efficiency improvements. For Sustainable Communities and other Maryland community designations
- Microenterprise Loan Program: Flexible financing through bank partners for start-up and emerging businesses (under $500,000 in revenue, fewer than 5 employees) for real estate, building improvements, leasehold improvements, or other purposes related to start up and expansion.
- Maryland Capital Access: Loans from participating banks to increase lending to small and emerging businesses that would not otherwise meet the bank's underwriting guidelines. Amounts range from $10,000 to $1 million.
- Linked Deposit: Below-market interest rates on business loans to MDOT-certified Minority Business Enterprises, accessed through participating private lenders.
- Neighborhood Business Works: Gap financing up to 50 percent or $500,000 for commercial revitalization projects in vacant or underutilized buildings generating street level activity in areas with Sustainable Communities designation.

4.3 Programmatic and Organizational Opportunities

This third set of projects does not focus directly on brick-and-mortar development, but instead addresses the organization, management and funding needed to provide continued, coordinated attention to revitalization activities. These are ongoing activities that require dedicated staffing. Projects are either funded in-kind from the County or the Town of Cheverly, or through ongoing support from outside entities, with the objective of finding self-sustaining methods of funding.

4.3.1 Priority Programs

Create Front-Office Function for Implementing Revitalization in Study Area

Description: Create a coordinated set of activities that can deliver "front office" services to the businesses and property owners in the study area and facilitate collaboration among public and private sector stakeholders. When fully funded, activities would be undertaken and coordinated by one person who would serve as a primary point of contact for the program, monitor progress on a more specific implementation work plan, undertake implementation activities not delegated to other public or private sector entities, and prioritize and coordinate activities of collaborating implementers. An example of this type of function is described in the Port Richmond Industrial Development Enterprise (PRIDE) Case Study found in Appendix B of this study.

Activities under this unit would include:

- Business organizing.
- Industrial area marketing, branding, and business attraction/retention.
- Technical assistance and portal to available funding for businesses and property owners interested in property improvements and tenant attraction.
- Relationship building with environmental and innovation/technology-focused entities to advance more sustainable and technology-focused land use in the area.
- Coordination and liaison among businesses, residents, and government agencies around issues of enforcement and redevelopment.
- Assistance and coordination with continued planning in the area.
- Marshalling resources to the area and implementing a funding strategy.

The program could be initially staffed with existing personnel, or positioned as an opportunity for lower cost staffing through a limited-duration fellowship or internship position (for example, using AmeriCorps).

Purpose: Successful revitalization will be market-focused to the greatest extent possible, with implementation advanced through the decision-making of individual businesses and property owners. However, as illustrated through the successful business organizing and industrial neighborhood improvement example of PRIDE in Philadelphia, organizing and implementing actions need to be pursued by dedicated staff on an ongoing basis.

Timing: Initial coordination and organization efforts can occur in the short-term, with activity increasing over time as stakeholder engagement increases and a funding strategy is developed.

Roles: This activity would be championed by one entity (such as a county department or a nonprofit organization) that would convene this activity's initiation (through a task force, committee, or other means) and monitor its progress.

Prioritize continued Code Enforcement and Nuisance Abatement

Description: This activity advances a coordinated and timely response to abandoned vehicles, environmental hazards, building code violations, noise complaints, and other nuisances. The County's recent Property Standards Reform Action Plan tackles the complex and long-standing issues impeding compliance and enforcement, and offers a 25-point Action Plan for undertaking reforms. The benefits of this countywide effort can be implemented in the study area, and through coordination between the Town of Cheverly and the County to ensure consistency in enforcement across jurisdictions. Action can be expanded beyond enforcement activities towards further engagement of property and business owners through the front office program described above.

- Property standards enforcement and nuisance abatement can go hand-in-hand with efforts to support small businesses that need assistance to bring their property into compliance. Businesses can be notified in advance of enforcement, and business needs for technical assistance or even funding support can be identified and addressed.
- Through increased communication with owners, high-impact opportunities to enhance appearance and environmental performance beyond minimum standards can be identified. Partnerships between property owners, the County, and nonprofits can be used to implement and promote "best practice standards" that can be emulated in other locations.

- Capital improvements can be coordinated with owner-initiated improvement efforts, so that public investments support the initiative of private property owners who organize with their neighbors to improve private property conditions.

Purpose: The physical appearance of industrial and residential neighborhoods greatly impacts their perception as desirable and safe places where community standards are valued and upheld. Investments that enhance environmental performance and aesthetics will improve business conditions, attract new businesses and workers, and increase the value of properties. Business and property owners report improvements in the area's appearance and nuisance abatement, and continued action will facilitate increased investment.

Timing: Short-term.

Roles: DPIE continues to implement property standards enforcement reforms, coordinates activities with the Town of Cheverly, and communicates with other stakeholders (businesses and residents).

Refine Policies for Temporary and Land-Intensive Uses

Description: The County should undertake a review of its land use and permitting regulations to promote two objectives:

- Reduce regulatory barriers to establishment of creative, desirable temporary uses that advance the objectives and placemaking principles of this revitalization strategy.

- Establish appropriate standards, such as screening and mitigation of environmental impacts, which govern less desirable but permitted uses, allowing such uses to make a positive economic contribution for a limited duration.

Purpose: An interim land use policy recognizes that some land-intensive uses are acceptable or desirable in the short term, and allows the County to proactively address issues and opportunities associated with the land-intensive uses that are likely to be attracted to the study area. Even with successful revitalization activity, full utilization of all of the area's vacant and underutilized property will be a long-term endeavor. Temporary use policies recognize that minimally improved land can contribute economic benefits before it is ready for full redevelopment.

Timing: Mid-term

Roles: The County will undertake activity with review and feedback from other stakeholders.

Develop Long Term Funding and Institutional Support Strategy for Industrial Business District Enhancement

Description: This activity, coordinated with the front office program described earlier, will seek a strategy for funding and support for ongoing business organizing and business development activities in the area. The strategy will more fully consider ongoing budget needs, potential funding sources, and revenue generation potential from increased development in order to establish a sustainable plan for maintaining a viable, organized business district.

Purpose: Examples, such as PRIDE, demonstrate that successful industrial improvement districts need funding and institutional support to get started and to implement projects and programs. A district that improves quality of life and increases private investment will generate economic benefits through higher market values, more business activity, and increased employment.

Timing: Mid-term.

Roles: The County or a nonprofit entity will sponsor and lead the strategy, which could be undertaken and overseen by County staff or stakeholders.

4.3.2 Funding Strategies

The programs above require an ongoing funding commitment to maintain their consistency and impact. Although the County may be able to address some or all of the needed resources within its existing staff, it could also seek outside funding.

Philanthropic Entities
Foundations are another potential source of funding to municipal governments and nonprofits for further planning and implement of community revitalization, economic development, and stakeholder organizing activities. Foundations generally provide funding, as donations or investments, for specific projects that meet their funding criteria and result in measurable impacts. Funding initiatives may encompass community and industrial revitalization, or may have specific objectives that could align with the area's revitalization, such as workforce development, benefits to low-income households, support for entrepreneurship, or increasing environmental sustainability.

Special Assessments, Business Improvement Districts, and Other Earmarked Funding
Special assessments within a geographically targeted area, including supplemental property tax assessments for properties within Business Improvement Districts, provide a source of additional governmental revenue that does not rely upon significant increases in property value. Special assessments can fund infrastructure or can be used to provide ongoing support for "clean and safe" and other programmatic initiatives. However, funding from special assessments require that the property owners facing additional tax burdens see commensurate benefits in order to be politically feasible. Revenues generated from specific streams, such as fines, permits, or parking fees, can also be dedicated to fund ongoing costs of revitalization programs.

4.4 Complete Streets

The idea of Complete Streets involves adequately accommodating all modes of transportation along roadways. It places a priority on ensuring that all users, including automobiles, transit vehicles, pedestrians, and bicyclists, are safely, comfortably, and adequately accommodated along area roads. This concept is evolving through congressional legislation that is gaining support, and Maryland legislation that is being drafted for public review. The principles of Complete Streets should be incorporated into land use planning and urban design and also utilized during the review of development applications, road frontage improvements, and for more comprehensive multimodal capital improvements for roadways or intersections. It is crucial that all modes of transportation are incorporated into all phases of planning, design, and implementation.

The needs of pedestrians and bicyclists should be considered throughout the entire planning process, not only at the final phases of design or implementation after many of the major decisions have been made. Many jurisdictions across the region are deciding what constitutes a "complete" street and how to best ensure that Complete Streets principles are incorporated into the design of new developments and roadway improvements.

New developments should include roadway improvements that accommodate all users. According to Plan Prince George's 2035, an important transportation and mobility policy includes the use of Complete Street policies to design, operate, maintain, and retrofit the transportation network in order to improve travel conditions for pedestrians, bicyclists, transit riders, and vulnerable populations consistent with the surrounding area's character. In addition, Plan Prince George's 2035 notes that an important policy is to require physical connections—such as trail connections, bus-only streets, and roads—within new, and between new and existing, developments in our established communities, while making adequate provisions for the mitigation of privacy, noise, and cut-through traffic concerns.

It is most crucial near mass transit, within designated centers, and along designated corridors, where bicycling and walking can most effectively be utilized as modes for some transportation trips and to reduce automobile trips. Jurisdictions in the metropolitan region are attempting to identify how best to codify and implement the Complete Streets policies and principles. To be effective, Complete Streets principles have to be incorporated into new road construction, frontage improvements, and road improvement projects. However, it is important to determine ways to retrofit facilities for pedestrians and bicyclists along existing roads through already developed neighborhoods. Neighborhoods in the Established Communities policy area frequently need pedestrian facilities to provide multimodal access to Metro, safe routes to schools, and more walkable and livable communities. Right-of-way constraints and existing development, however, can be a barrier to providing the needed retrofit improvements for bicyclists and pedestrians.

Through MWCOG's Transportation and Land-Use Connections (TLC) Program, funding was acquired to develop a pedestrian plan for the Prince George's Plaza Transit District and to retrofit the existing roads to Complete Streets standards. Similar to the Kenilworth Avenue and Cheverly Industrial Study Area, the area around Prince George's Plaza currently has an extensive stream valley trail network, as well as enhanced streetscapes along several roads, and a

pedestrian bridge over MD 410. However, the sidewalk network remains fragmented and there are many pedestrian facility and safety needs that have to be addressed. Just as in the Cheverly area, many of the needed improvements around the Prince George's Plaza area need to be made along existing roadways within the pre-existing development and established road network. The Complete Streets principles developed for Prince George's Plaza are applicable around other transit areas and urban settings and can be utilized in the Kenilworth Avenue and Town of Cheverly Industrial Study area.

Originally developed as part of a pedestrian plan for a specific transit district, the following Complete Streets principles can be utilized around other transit stations and in other designated centers and corridors within Prince George's County.

Ten Complete Streets Principles for Retrofitting Existing Roads to Complete Streets Standards

1. **Encourage medians as pedestrian refuge islands.** Frequently, the single-most important improvement that can be made to increase pedestrian safety is a pedestrian refuge, particularly along multilane roads where it is often not possible for pedestrians to cross all lanes of traffic at once. A median or pedestrian refuge provides the pedestrian a safe and attractive place to stand while waiting to cross the remaining lanes of traffic.
2. **Design turning radii to slow turning vehicles.** Another common challenge for pedestrians in urban and suburban environments is relatively fast moving right-turning traffic. Most difficult for pedestrians are merge lanes or "free flow" right turns, where the motorist does not have to stop. Also problematic are right turns or intersections with wide turning radii that allow motorists to make the turning movement at a high rate of speed. Designing the turning radii to slow turning vehicles can be a very effective means of reducing speed and improving pedestrian safety.
3. **Find wasted space and better utilize it.** In some cases, space can be found within rights-of-way that is not necessary for through traffic or specific turning movements. This can be seen in many intersections with wide turning radii, but may also be present along roads with center turn lanes where no ingress/egress points exist. This "extra" space within the right-of-way can often be utilized to improve the pedestrian environment through the provision of sidewalk connections, pedestrian refuges, or traffic calming. Similarly, wide outside curb lanes can be striped for designated bike lanes.
4. **Modify traffic signal timings to function for all modes.** As part of the Complete Streets concept, and in addition to the issues raised relating to Complete Streets, it is recommended that the County modify traffic signals to stop all traffic, including turning traffic, while pedestrians have a green light. This will eliminate conflict between motorists making right turns and pedestrians in the crosswalk.
5. **Reduce crossing distances.** Another factor in pedestrian safety is the total distance a pedestrian must cross. Wide roads with multiple turning lanes require the pedestrian to cross a much longer distance with significantly more "exposure" time to oncoming traffic. Crossing distances can be minimized with medians, pedestrian refuges, reduced turning radii, curb extensions, and other measures. These features should be utilized where feasible to minimize the pedestrian's exposure to traffic.
6. **Increase crossing opportunities.** Large block sizes are another sign of a poor pedestrian environment. Large blocks provide few opportunities for pedestrians to safely cross busy roadways. Although pedestrians may prefer to cross at signalized intersections, the total space between intersections and controlled crossings may discourage pedestrians from utilizing these locations. Pedestrians tend to follow the shortest desire line between origin and destination and large block sizes and long distances between signalized intersections contribute to elevated levels of mid-block crossing activity. Smaller block sizes provide more frequent and proximate opportunities for pedestrians to cross roadways at controlled intersections, within a designated crosswalk, and generally with appropriate lighting, pavement markings, and signage.
7. **Encourage pedestrian-scaled land use and urban design.** Similarly, pedestrian-scaled development and amenities can be used to enhance the pedestrian environment. In many ways this is related to the block sizes noted above, but also involves a mixture of land uses; the provision of attractive streetscapes, building frontages, and pedestrian amenities such as benches, trash receptacles, and lighting; safe crosswalks; and comprehensive pedestrian facilities and connections.
8. **Acknowledge that pedestrians will take the most direct route.** Similar to motorists, pedestrians will use the most direct, efficient connection or route possible. It is important that connections are made to accommodate pedestrians heading to a variety of destinations. Direct routes should be provided. Long, circuitous pedestrian routes should be avoided. Due to the increased time and effort required to walk the extra distance, pedestrians

will frequently attempt the shortest connection or road crossing available, regardless of whether it has been provided for or not. Every effort should be made to accommodate these movements during the planning and design of road improvements and development projects.

9. **Promote universal accessibility.** All ages and user groups should be accommodated along area sidewalks and intersections, including the elderly, children, and disabled groups. All street crossings should include ADA-compliant curb cuts and ramps, and all pedestrian signal push buttons should be handicap accessible. Implementation of accessibility features should also include truncated domes for the visually impaired on access ramps and increased crossing times that are sufficient for elderly, disabled, or slower pedestrians. To the extent feasible and practical, all pedestrian connections (sidewalks, trails, plazas, etc.) should comply with the U.S. Access Board's proposed Trail Accessibility Guidelines (currently under review), the ADA Accessibility Guidelines, and the Federal Highway Administration's "Guide for Accessible Sidewalks and Trails." In general, these guidelines and standards support the "accessible routes" concept, which involves evaluating different segments and trouble points along a pedestrian route to determine where improvements for ADA compliance may be necessary to increase the overall usability of the facility or route.
10. **Pursue targeted education and enforcement efforts to reduce bicycle and motor vehicle crashes.** Many area bicycle clubs and organizations offer safe bicycling courses and seminars. The Washington Area Bicyclist Association (WABA) offers many courses aimed at safe bicycle operation, including bicycle rodeos for children and "Confident City Cycling" courses for adults. Additional information on these and other courses can be found on WABA's website at: http://www.waba.org/events/education.php#ccc.

In summary, the criteria that should be evaluated when providing an accessible route includes the following:

- Grade
- Cross-slope
- Width
- Passing space and passing space interval
- Vertical clearance
- Changes in level
- Grates and gaps
- Obstacles and protruding objects
- Surface
- Signage
- Edge protection (where appropriate)

The entire final report of the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas can be found online at http://www.access-board.gov/outdoor/status.htm. The ADA Accessibility Guidelines can be found online at: http://www.access-board.gov/adaag/html/adaag.htm.

The Council of Governments also has an ongoing Street-Smart Pedestrian and Bicycle Safety campaign that promotes safer streets for bicycling and pedestrians. This campaign also includes regionwide education programs regarding safer streets for all user groups. Additional information on the Street Smart campaign can be found at:

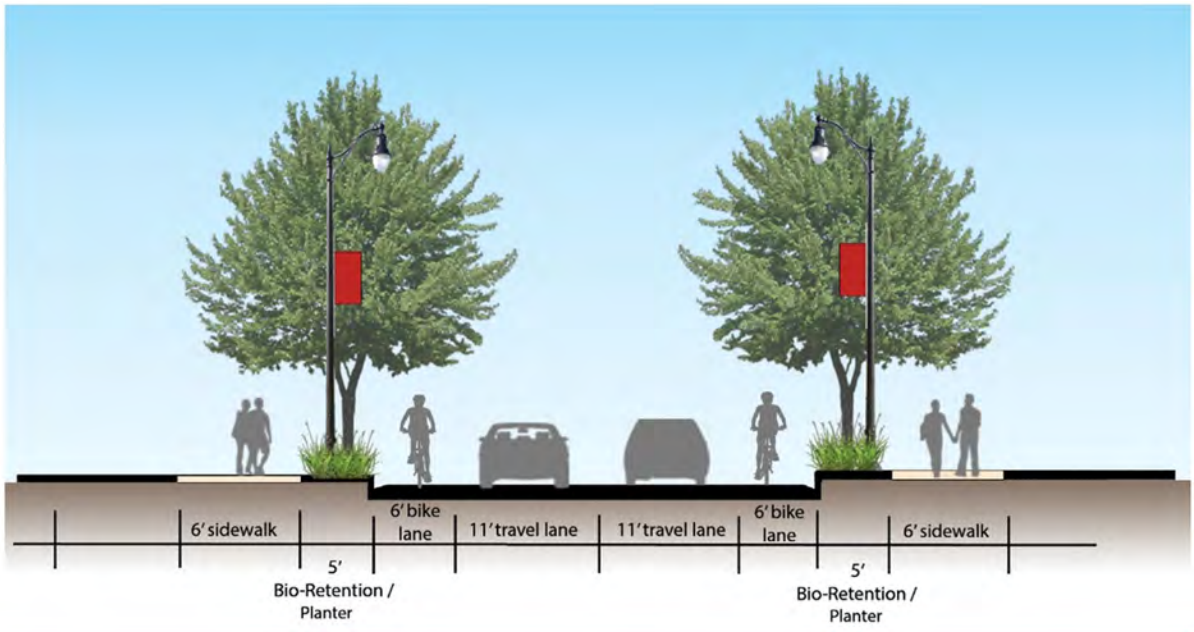
http://www.mwcog.org/transportation/activities/planning/safety.asp.

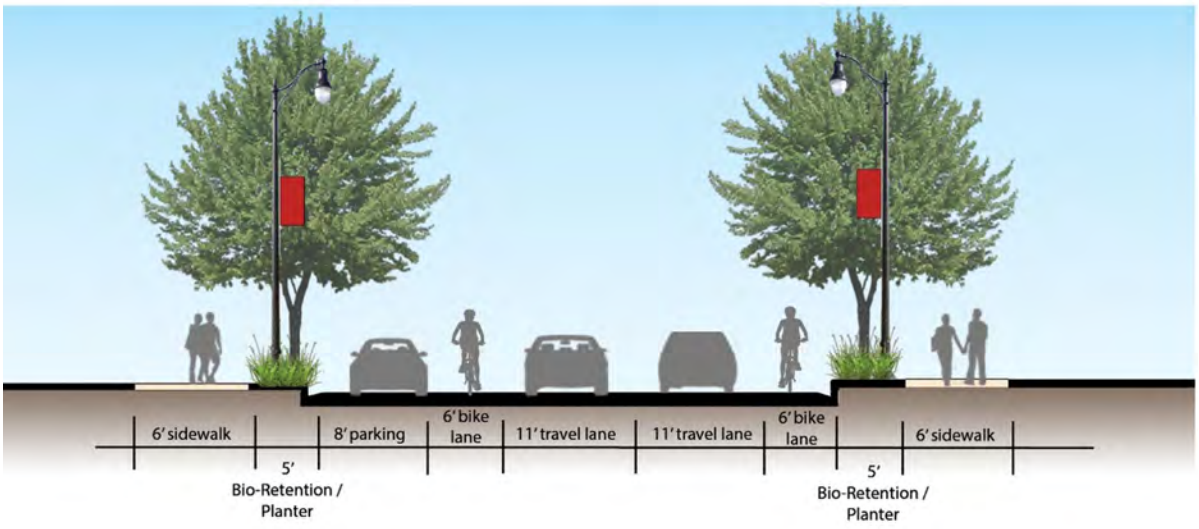
Complete Streets Policies

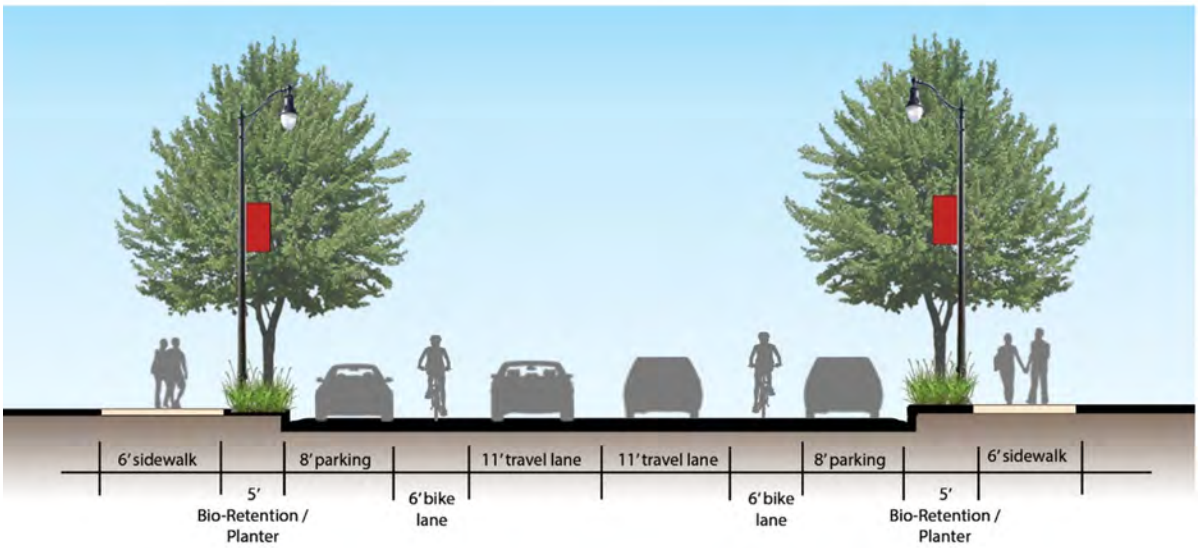
Prince George's County continues to work toward having roads that accommodate all modes of transportation. Recent plans have recommended extensive on-road bicycle improvements and identified sidewalk retrofit opportunities. Figure 4-1 provides examples of street sections illustrating complete street elements. The following Complete Streets policies from Plan Prince George's 2035 include:

TM4.1 Using context sensitive design, rebuild existing roads as Complete Streets when they are scheduled for reconstruction.

Figure 4-1. Example Complete Street Sections







TM4.2 Periodically reevaluate various codes and standards, including, but not limited to, the Road Standard and Zoning and Subdivision Regulations, to promote the implementation of Complete and Green Street principles and designs.

TM4.3 Coordinate the County Complete Streets policy with a school route analysis, planning and implementation by the Prince George's County Planning Department, the Board of Education, the Department of Public Works & Transportation, Maryland State Highway Administration, and municipalities (see the Public Facilities Element on the Safe Routes to School Initiative). This analysis should inform the prioritization of projects in the MDOT Consolidation Transportation Program (CTP), the County Capital Improvement Program (CIP), and grant applications.

TM4.4 Design new transportation systems to accommodate all modes of transportation. Continuous sidewalks on both sides of the road and on-road (bike lanes) bicycle facilities should be included, to the extent feasible and practical, based on the type and location of the facility proposed.

TM4.5 Enhance bike lanes and trail connections with key population and employment areas, historical sites and recreational areas. This includes the Priority Investment Districts and Primary Employment Areas shown on Map 2 [in Plan Prince George's 2035].

Several pieces of legislation were passed in Prince George's County during 2012 to ensure that Complete Streets are provided as new roads are constructed or road frontage improvements are made. CB-2-2012 requires the evaluation and provision of adequate bicycle and pedestrian facilities within designated Centers and Corridors at the time of subdivision with the goal of providing needed pedestrian and bicycle facilities as development occurs. Pursuant to CB-2-2012, in May 2013 the Planning Board adopted the Transportation Review Guidelines – Part 2. These guidelines outline how the Planning Board will determine bicycle and pedestrian adequacy for new subdivisions within Established Communities and how needed off-site improvements will be required. These guidelines also include an extensive amount of information on Complete Streets design treatments that can be incorporated into new development to ensure that school children and other residents and visitors can safely and conveniently walk to schools, parks, and other local activity centers.

CB-83-2012 established a Complete and Green Streets Policy that is consistent with and expands upon MWCOG's regional Complete Streets Policy; CB-83-2012 is applicable countywide on all County-financed and approved road, sidewalk, trail, and transit-related construction and reconstruction projects. The legislation was designed to ensure that the needs of automobiles, emergency vehicles, freight vehicles, transit, bicycles, and pedestrians be considered and accommodated as new facilities are planned, designed, and constructed. Furthermore, both CB-2-2012 and CB-83-2012 were written so as to specifically implement the Complete Streets policies, principles, and recommendations included in the 2009 *Approved Countywide Master Plan of Transportation*. New road construction and frontage improvements within the study area should meet the Complete Streets requirements and provisions of CB-83-2012 to the extent feasible and practical.

TM4.6 Encourage bike commuting by providing bike lockers and showering facilities at centers and employment areas. Evaluate zoning requirements for mixed-use developments.

4.5 Conclusion

The Kenilworth Avenue and Town of Cheverly Industrial Study provides a focused analysis and series of recommendations for the 888-acre study area. The study area contains a large percentage of industrial uses that support a wide range of local and national businesses ranging from recycling, to construction, to local services, and other related functions. These businesses support the local taxes and provide a wide range of employment opportunities, with over 4,000 jobs located within the study area.

While this area supports important economic activities, it is not necessarily providing a best quality environment for both the local businesses and surrounding neighborhoods. This plan provides a number of recommendations on how to improve the area, as well as providing a number of implementation strategies to support longer term improvements and success in the area. Moving forward, this study is intended to provide a foundation for next steps, including the preparation of a sector plan that includes the Kenilworth Avenue and Town of Cheverly Study area.

Appendix A
RETAIL DEMAND ANALYSIS METHODOLOGY

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

Appendix A: Retail Demand Analysis Methodology

The following analysis sizes the potential demand from households and businesses that could support retail within the study area. It considers basic categories of retail that can attract nearby consumers because of their proximity and convenience, rather than store types that would typically draw consumers from a much wider area who seek it out because it fills a specific niche or need not met by stores in a closer proximity. While consumer demand from existing residents and businesses is limited, it represents a relatively "captive audience" of consumers who would have to travel much further to reach the closest competitors.

Table A-1 estimates the aggregate expenditure potential of households in the Town of Cheverly and nearby areas as estimated by Claritas, a propriety provider of consumer and demographic data. This trade area is bounded by MD 295 (Baltimore-Washington Parkway) and MD 202 (Landover Road) on the north, Eastern Avenue and Sheriff Road to the south, and is bisected by US 50. The boundaries of this trade area are drawn conservatively to capture households that would likely patronize businesses in the study area's commercial corridors if they existed, rather than relying on corridors near the study area that also have retail offerings. While additional expenditures could come from households adjacent to the trade area, or from consumers passing through the study area, the purpose of this exercise is to first consider the core demand from local households that have minimal, if any, convenient options in these retail categories. A map of the trade area corresponding to the expenditure estimates in Table A-1 is found in Map A-1.

The table considers the major categories of Food Service and Drinking Places; Food and Beverage Stores; Health and Personal Care Stores; and Building Material, Garden, and Equipment Stores, with subtotals also provided for spending classifications within these major categories. This sizing exercise then estimates the potential expenditures/demand that could reasonably be captured by establishments within the study area by applying a conservative (low) and optimistic (high) percentage of expenditure capture to form a range. The capture rate assumption recognizes that households may make purchases in these categories at other convenient locations close to work, that they may be inclined to travel further for a variety of eating and drinking establishments, and that a small, local-serving store would not meet all of a household's needs within these retail categories.

Overall, each of the 3,182 trade area households identified by Nielsen are estimated to spend, on average, over $20,000 annually on the types of goods and services in Table A-1, yielding an aggregate demand that could potentially be filled in the study area ranging from $15 to $27 million.

Table A-1: Expenditure Estimates, Trade Area Residents

Spending Category	Estimated Annual Expenditures [a]		Expenditure Capture		Potential Expenditure Capture [c]	
	Per Household	Trade Area Total	Low (%)	High (%)	Low	High
Food Service & Drinking Places	$**4,395**	$**13,984,728**	**25**	**35**	$**3,496,000**	$**4,895,000**
Full-Service Restaurants	$2,049	$6,520,779				
Limited Service And Other Restaurants	$2,138	$6,803,285				
Drinking Places - Alcoholic Beverages	$208	$660,664				
Food & Beverage Stores	$**5,244**	$**16,686,741**	**35**	**70**	$**5,840,000**	$**11,681,000**
Grocery Stores (Supermarkets And Convenience Stores)	$4,525	$14,398,472				
Specialty Food Stores	$375	$1,193,165				
Beer, Wine, And Liquor Stores	$344	$1,095,104				
Health And Personal Care Stores	$**2,616**	$**8,324,987**	**35**	**70**	$**2,914,000**	$**5,827,000**
Pharmacies And Drug Stores	$2,065	$6,569,649				
Cosmetics And Beauty Supplies	$185	$588,823				
Optical Goods Stores	$133	$424,498				
Other Health And Personal Care Stores	$233	$742,018				
Building Material, Garden & Equipment Stores	$**4,164**	$**13,250,134**	**25**	**35**	$**3,313,000**	$**4,638,000**
Building Materials And Supplies	$3,766	$11,984,695				
Lawn And Garden Equipment Stores	$398	$1,265,438				

Notes:

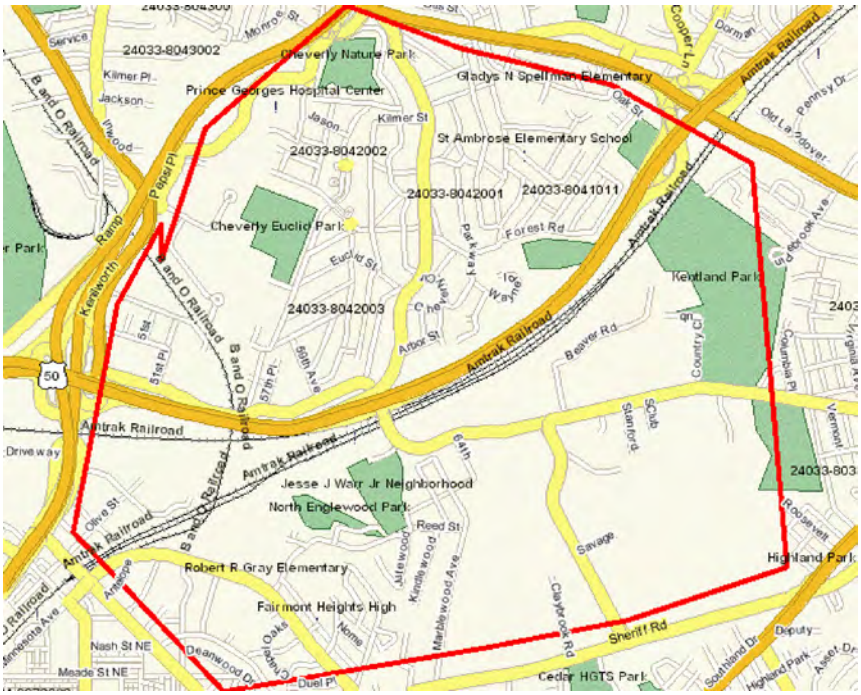
a. Total annual expenditures estimate from Neilsen/Claritas Retail Market Potential (RMP) report for the identified trade area. Household average is based on Claritas' estimate of 3,821 households in the trade area.

b. Capture potential is presented as a percentage of the range of sales that could reasonably be captured locally, based on BAE experience.

c. Potential expenditure capture applies the capture potential to the total expenditure estimate for the traded area, rounded to the nearest thousand.

Sources: Claritas/Neilsen; BAE, 2013.

Map A-1: Residential Trade Area Map



The large number of workers in the area could also support local retail businesses. Table A-2 presents a similar sizing exercise based on demand from study area workers. A recent survey by the International Council of Shopping Centers on office worker spending patterns lends support to reasonable estimates of what the average study area worker might spend during his or her work hours and commute. Assuming that the average worker spends $2,150 in these categories near his or her workplace, and that 75 percent of purchases could be captured from the estimated 4,100 study area workers, yields over $6 million that local customers could spend in study area stores annually.

Table A-2: Estimated Expenditures, Study Area Workers

	Estimated Per Worker Expenditures [a]		Estimated Annual Expenditure Potential		
Spending Category	Weekly	Annual	All Workers [b]	Capture Rate [c]	Captured Expenditures [d]
Eating Establishments	$18.00	$900	$3,690,000	75%	$2,768,000
Grocery Stores	$20.00	$1,000	$4,100,000	75%	$3,075,000
Drug Stores	$5.00	$250	$1,025,000	75%	$769,000

Notes:

a. BAE estimates. Estimates consider survey results from Office Worker Retail Spending in a Digital Age, by the International Council of Shopping Centers (ICSC), 2012. Annual expenditure based on 50 work weeks.

b. Based on an estimated 4,100 workers within the study area, based on data from the Local Employment and Household Dynamics dataset (LEHD) from the U.S. Census Bureau. Demand generated from additional workers outside study area would increase estimate.

c. BAE estimate. Estimate approximates the share of worker expenditures that would be captured in study area, given options outside the area and the potential for employees to work off-site.

d. Captured expenditure multiplies the estimated annual expenditures by all workers by the capture rate, and rounds to the nearest thousand dollars.

Sources: ICSC: U.S. Census Bureau; BAE, 2013.

Appendix B
CASE STUDIES

Prince George's County Planning Department
The Maryland-National Capital Park and Planning Commission

Appendix B: Case Studies

Project Name

Port Richmond Industrial Development Enterprise (PRIDE)

Location

Bounded by Alleghany, Amber, East Venango, and Tulip Streets in the Port Richmond neighborhood of Philadelphia

Size

Approximately 150 acres, including approximately 55 businesses

Overview of the Area and Program

The Port Richmond neighborhood is an area of northeast Philadelphia that fronts the Delaware River and is bisected by I-95. The neighborhood includes a mix of residential and industrial land. Although revitalization has been occurring recently, this neighborhood of Polish immigrants had been impacted by disinvestment over the past several decades, resulting in high crime rates, declining physical conditions, and a high proportion of households in poverty. The older industrial properties were relatively inexpensive and well located, but presented operating issues for modern businesses, such as parking and truck loading. These neighborhood and site challenges were driving out the industrial businesses that remained. In 2000, one in five businesses were considering a move from the area. In response to conditions, local businesses established PRIDE in the late 1990s as a nonprofit to improve conditions for member businesses and their neighbors. PRIDE developed as a project of the Philadelphia Industrial Development Corporation's (PIDC) Urban Industry Initiative (UII) to bolster the base of small manufacturers and industrial businesses in Port Richmond and surrounding areas. PIDC laid the groundwork through outreach to, and organization of, businesses in the PRIDE boundary, convincing them that they could work together to improve conditions. These businesses initiated the formation of PRIDE as a nonprofit organization, and the area received city designation as a Neighborhood Improvement District (NID) in 2002.

Ideas and Concepts

PRIDE identifies itself as the oldest urban industrial park in Pennsylvania, and is an early example of businesses organizing themselves into an improvement district that can offer member businesses a similar or more valuable environment in an urban neighborhood compared to the suburbs. PRIDE's mission is to strengthen the area's business environment by focusing on security, physical conditions and appearance, and relationships among businesses and between businesses and residents.

BAE to its website, PRIDE takes a new approach by:

- Seeking an ongoing collaboration between local businesses and government.
- Leveraging the collective strengths of area industrial businesses.
- Addressing those issues that are of greatest concern to businesses—security, neighborhood reinvestment, appearance, and cleanliness.
- Seeking to access the strengths of the local residential and commercial communities and will provide benefits for these communities.
- Targeting a neighborhood that still retains genuine business and residential vitality.

PRIDE and the Urban Industry Initiative have emphasized the building of social capital within the community, the network of rich social and business-to-business relationships that contribute to making an urban location desirable. Through events and opportunities that PRIDE organizes, businesses are able to find suppliers and customers within their community. Businesses also realize their collective interests through the organization, working together to implement desired improvements, advocating for their interests, and gaining the attention of city and state actors to better access the resources that the neighborhood needs. PRIDE is part of a larger network of industrial businesses in Philadelphia called the Manufacturing Alliance of Philadelphia (MAP). MAP is also a program of PIDC's UII, and serves as the trade association of manufacturers for the greater Philadelphia area. Through membership in MAP, PRIDE has access to greater

resources and a stronger voice advocating for its interests; MAP organizes and administers loan programs, group energy purchases, workforce development and job placement programs, networking, and access to political leaders, among other benefits.

PRIDE is funded by a combination of grants and a special tax assessment. The Urban Industry Initiative initially received a $1.4 million grant in 1997 to operate its programs, including the start up of PRIDE. Continued grant funding has supported planning and capital improvements for the PRIDE area, including lighting and security improvements, improved truck access, landscaping, and signage. PRIDE receives the funding collected from the special tax assessment of about $60,000 annually, equivalent to roughly 10 percent of each property's citywide tax assessment. In contrast to the capital funding received from UII, the special assessment is used for operational expenses, such as cleaning services, security services, and camera maintenance, and to pay a district manager. PRIDE is seeking funding to provide a truck staging area for the district.

Results

Since 2002, the PRIDE NID has been reauthorized in 2007 and again in 2012, demonstrating that the value the NID maintains for its members makes it worth the additional taxes paid. From its creation in 2000 through 2007, PRIDE has attracted $2.3 million in investment to its area according to a Philadelphia Business Journal interview with Stephen Jurash, president and CEO of the Urban Industry Initiative. The district has added hundreds of thousands of dollars worth of pedestrian lighting, replaced thousands of linear square feet of fence and sidewalk, created a park out of the former site of a vacant building, and installed a security camera system worth about $100,000. Reauthorization hearings attest to the impact that the NID has had on generating investment, business retention, and job growth, as well as benefits to neighboring residential areas.

Lessons Learned

- An industrial improvement district needs institutional assistance and resources to get started and to implement major projects. Its impact and benefits are magnified by its involvement in larger industrial retention, advocacy, and support initiatives.
- An industrial improvement district can work effectively with its residential and commercial neighbors and build strong relationships with them as it advances its own interests as an industrial community.
- Although a special assessment district may only fund a small portion of the budget needed to make and maintain improvements, organizing provides benefits to an industrial community; by allowing the community to more effectively seek resources from the public and philanthropic sectors, it gives them better access to local political leaders and it allows member businesses to strengthen their connections to other local businesses.
- Industrial businesses see the value in paying a special assessment if it provides services that improve the business climate and are cost effective.

Sources:

Athena D. Merrit. "Port Richmond is Proud of its PRIDE." Philadelphia Business Journal, November 5, 2005 (online version).

Elizabeth Bennett. "Three More Years of Aid for Manufacturers." Philadelphia Business Journal, February 21, 2000 (online version).

Aman McCleod. "The Port Richmond Industrial Development Enterprise: A Successful Model for Preserving Urban Industry." Drexel Law Review 3:1 (Fall 2010).

PRIDE website: http://www.uiiphilly.org/pride/

Urban Industry Initiative website: http://www.uiiphilly.org/

Manufacturers Alliance of Philadelphia website: http://www.manufacturingonline.org/

Exhibit A to city council resolution 120402 reauthorizing PRIDE, introduced May 10, 2012.

Project Name

Ford Plant River Rouge

Location

Dearborn Michigan

Size

600 Acres

Overview of the Area

The Rouge Ford Plant is a major industrial facility located on the Rouge River in Michigan. The Rouge River watershed drains 467 square miles. It has 4 major branches (main, upper, middle, and lower) with 126 river miles and numerous tributaries.

The Rouge River is a very flashy (water levels change drastically and quickly after it rains) system because of the hard clay soils and the large amount of paved surfaces. Runoff from paved surfaces carries fertilizers, oil, pet waste, and other pollutants into the river. Additionally, there are combined sewers that still overflow into the river at times, as well as illicit and illegal discharges.

The Rouge River is one of 43 "Areas of Concern" in the Great Lakes region. The 1978 Great Lakes Water Quality Agreement between the United States and Canada required the development of a Remedial Action Plan (RAP) to determine use impairments and actions needed to correct them.

The Ford Plant River Rouge is located within one of the industrial areas along the river.

Ideas and Concepts

Now called the Ford Rouge Center, the 600-acre site remains Ford Motor Company's largest single industrial complex, and a massive revitalization effort is under way to restore this icon's glory.

The new Ford Rouge Center will include one of the world's most advanced and flexible manufacturing facilities, capable of building up to nine different models on three vehicle platforms. The plan includes numerous pilots of advanced environmental concepts designed to balance the needs of auto manufacturing with social and environmental concerns—and to save money.

When Ford Motor Company Executive Chairman Bill Ford Jr. re-envisioned the Rouge, he was influenced by the pioneering environmental work of architect Bill McDonough. Together, they saw a site that could become healthy again over time, a home for birds and bees and thousands of trees, a site that could be a model of industrial production and environmental redesign.

Results

Today's Rouge features a Gold LEED Visitor Center, treats its stormwater with an all-natural system that includes one of the world's largest living roofs, has a paint plant that captures fumes to create fuel cells, has plants treating decades of soil pollution, is a better neighbor and a better place to work, and is now home to wildlife. The Rouge is not only being rebuilt, it's being reimagined as a model of sustainable manufacturing—a workplace that helps protect the environment for future generations while it inspires a new paradigm for economic growth.

Lessons Learned

- An active industrial area can be designed to work in tandem with the cleanup of a larger watershed area.
- Aligning initiatives through an environmental theme such as a larger watershed cleanup and reinventing a local industrial site to be a model of environmental sustainability can create focus and support for additional improvements and a group desire to achieve larger goals
- Creating a focus around environmental goals, involving a larger set of stakeholders and telling the story though awards and tours of the area can help continue to draw support and interest in the process and project.

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