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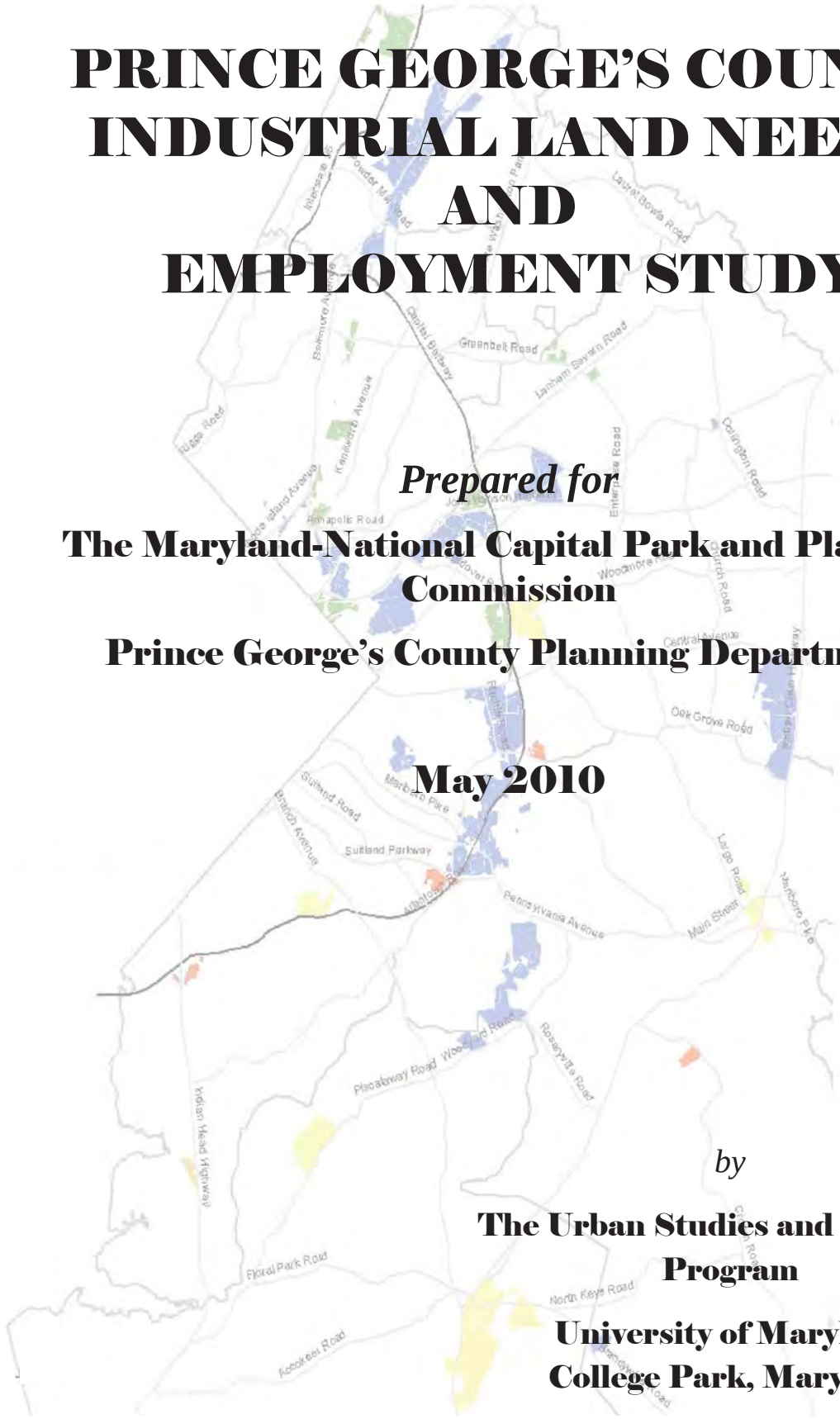
PRINCE GEORGE'S COUNTY INDUSTRIAL LAND NEEDS AND EMPLOYMENT STUDY



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Executive Summary

PRINCE GEORGE'S COUNTY
INDUSTRIAL LAND NEEDS AND EMPLOYMENT STUDY

In the spring of 2007, The Maryland-National Capital Park and Planning Commission (M-NCPPC), Prince George's County Planning Department asked 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 aggregate supply and demand for industrial land countywide and by local area was examined within the county. The analysis identified locations where there is an excess of industrially zoned land, where land is in contention between industrial and competing uses, where industry is economically thriving, and where there is potential for the county to attract activities that make up the emerging high technology sectors. Based on two years of research, it was concluded that the county's industrially zoned land is a valuable asset that can position the county to become an active participant in the region's and nation's high-technology, information economy. The county has many assets, including its industrially zoned land. The county is in a position to attract the higher paying jobs and emerging firms that comprise the new economy.

For this study, industrial land uses are defined as "Production, Distribution, and Repair" (PDR) activities, which has been adopted by many previous industrial land use studies in the U.S. The activities included in PDR are described in more detail below on pages 11 and 12.

Overview of Prince George's County Industrial Land Use

A healthy regional economy, now and in the future, includes a mix of jobs for county residents and a tax base that supports quality public schools, infrastructure, and public services. A high quality of life for residents includes a clean environment, access to services, public safety, and public spaces for recreation and community activities. Industrial establishments, and the land on which they are located, are critical to achieving these goals. The term "industry" does not carry the same meaning today as it did in the past. Less and less is the national and regional industrial sector comprised of smokestacks and assembly lines; increasingly, it is made up of high-technology, information-based businesses.

Although the nation's and region's economic base has shifted away from the heavier industrial activities and into service based industries, activities, such as construction, transportation

and warehousing, wholesaling, and manufacturing, continue to be important for Prince George's County. A healthy economy and good land use planning requires that these activities continue to be protected and encouraged. However, the county should also be preparing for the direction the national economy is headed—toward high technology, information-intensive jobs. Some of the county's industrial sites should be developed to create attractive space for the biotechnology and other high technology activities growing in the region.

A strong industrial land use policy:

- Protects and promotes good jobs for county residents.
- Encourages private investment and a strong tax base.
- Enforces environmental laws and maintains a clean physical environment.
- Balances jobs and housing.
- Provides the infrastructure that fosters economic growth and regional competitiveness.
- Maintains flexibility in land use planning to allow smooth changes from obsolete uses to new uses.
- Reduces risks and uncertainty for businesses.
- Reduces land use conflicts to promote high quality of life for residents and commercial owners.
- Encourages cleanup and reuse of environmentally contaminated areas.

Definition of Industrial Land Uses

The study's definition of industrial sectors includes PDR. This definition includes construction, manufacturing, transportation and warehousing, wholesaling, and some services, such as auto repair services, data processing, waste management, internet providers, printing services, and laundry services. These are all activities compatible with industrial zoning.

Importance of the Industrial Sector in Prince George's County

Despite the growth and strength of the service sector, industrial activities continue to be critical to the county's economic health. There are a number of reasons.

1. The industrial sector continues to be an important source of county jobs. Regardless of how the industrial sector is defined, this sector is important to county employers. Industry accounted for 83,735 jobs, 38 percent of county employment in 2007.[1]

2. The study showed that the manufacturing sector is more likely to hire county residents than any other sector. Not only does manufacturing provide jobs for county residents, it also reduces cross-county commuting and traffic congestion[2].

3. Many industrial activities are critical to the operation of the county government. Industrially zoned areas house government services, such as waste hauling and transfer, street cleaning, plowing, road construction and repair, recycling, and government printing.

4. No matter what the economic base of the local economy, industrially zoned areas house back-office activities critical to other sectors. Even in locations dependent on information and high technology, tourism, and finance and insurance industrially zoned areas house such back-office activities as warehousing supplies, laundries, printing operations, and high technology manufacturing and startups.

5. Industrially zoned areas are home to many of the activities that support the local population, such as auto repair shops, household repair services, and warehousing of consumer products.

6. Industrially zoned areas provide low cost space that is critical for startups and innovation. Even in the high technology sectors, industrially zoned areas often are locations of incubators for new startups. Thus, industrially zoned areas are important to an overall healthy and vital economy in the long run.

7. Employment in industrial-code categories provides relatively good jobs for workers with lower levels of formal education than is the case for the service sector. Jobs

[1] U.S. Bureau of Labor Statistics (2009).
[2] See Appendix 7.

in the industrial categories are more likely to be high wage with good benefits and provide more upward mobility for workers with less formal education than are jobs in the service categories.

8. After years of industrial activity, some parcels carry a legacy of contamination. Under current economic conditions and technological know-how, these parcels are often unsuitable for residential and commercial developments. For many of those properties, industrial activity is often the highest and best use.

Supply of Industrial Land

In 2007, the supply of industrially zoned land in Prince George's County was 12,350.4 acres. This excludes the acreage for Andrews Air Force Base and Chalk Point. Of these 12,350.4 acres, 6,371.8 are developed with industrial uses, 4,605.5 are vacant, and 1,373.1 are occupied with nonindustrial uses.[3] The acreage in each use was calculated utilizing both the county's GIS database and county tax records. The county tax records show that 1,373.1 acres of industrially zoned land have businesses on the site that are taxed as nonindustrial uses.

Each industrial-zoned land was assigned to one of five categories: (1) areas where there never was demand for industrial land; (2) areas where there is evidence of historical demand for industrial land, but that demand has waned, and there is no evidence of demand by alternative uses (i.e., commercial and residential); (3) areas where there is historical evidence of demand for industrial use, but industrial demand has waned, and new uses, i.e., commercial and residential, are evident; (4) cases where industry is healthy, and there is evidence of encroachment by alternative uses; and (5) economically healthy industrial areas.

Major Findings

1. Approximately 2,000 to 2,700 acres may reasonably be rezoned out of industrial use. These sites tend be located in the southern portion of the county away from major transportation hubs. These are sites where there never was demand by industrial users or where demand has disappeared with the evolving economy.

[3] Prince George's County's 2008 GIS dataset and county tax records. See Appendix 7 for a detailed discussion of the methodology. The numbers reported here are updated with the 2008 data.

2. About 7,374 acres of industrially zoned land fell into Category 5—economically healthy industrial areas. These Category 5 areas are home to 34,793 PDR jobs.[4] Evaluation of the characteristics of these jobs (e.g., wage levels, opportunities for workers with relatively low educational attainment, etc.), reinforces the continued importance of PDR jobs to the county. Interviews with firm managers in these areas indicate that they are generally satisfied with county services and public infrastructure.

3. Industrial lands on another seven sites, totaling an additional 1,382 acres, were placed into Category 4, exhibiting more complicated issues. In New Carrollton, for example, land uses are evolving out of industrial uses to office activities. The county is already undertaking planning efforts to create a greater density of commercial and office uses at the New Carrollton site.

4. On other Category 4 sites, friction between residential neighbors and PDR activities is evident. As population grows and residential density increases, these issues will become increasingly common. The county needs to enforce environmental laws and ensure that industrial enterprises operate in an environmentally responsible manner. Moreover, the county should be prepared to invest in urban design solutions to minimize friction, such as buffering and road rerouting, to increase PDR business, residential, and commercial compatibility.

5. County officials should rethink what the term "industry" means now and for the future. How should Prince George's County use its industrial land to attract its share of the emerging high-technology economy? Extensive interviews revealed that many of the issues holding the county back from capturing its share of high-technology jobs are not primarily land use planning or zoning issues.

6. Finding Number 5 is reinforced by the results presented in Appendix 6, and repeated in Chapter 2 herein, where industrial and flex building markets in the three Washington, D.C. metro counties of Prince George's, Fairfax and Montgomery were compared. Vacant buildings in Prince George's County remain on the market slightly longer than those in Montgomery County and more than twice as long as those in Fairfax County. Average building sizes and ages are comparable across the counties,

[4] Quarterly Census of Wages and Employment, 2007.

and square foot rents are significantly lower in Prince George's County, suggesting that factors other than cost and availability are influencing the location decisions of firms. These factors were not investigated, however, during this study.

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If the county proceeds to encourage the development of several sites as high technology parks, as recommended herein, new zoning categories may be required. The county's current evaluation of its industrial zoning categories is, therefore, very timely. Creating a business environment that attracts high technology development and jobs requires more than reducing uncertainty with a predictable review process. There are a host of economic development tools and techniques that the county could use or could be used more effectively. These tools and techniques will be essential if the county is to achieve its desired vision. Discussion of these tools and techniques is, however, beyond the scope of this report and beyond the jurisdiction of the planning commission.

January 2010

Introduction

Just as the nation made the shift from an agricultural- to a manufacturing-based economy in the late eighteenth and early nineteenth century, the national economy is moving away from traditional manufacturing to service and information intensive activities in the twenty-first century. The Prince George's County economy reflects these national shifts away from mining and manufacturing to a service-based economy. Here, as well as in jurisdictions across the country, planners face questions of how to adjust to this transition. Should industrial land be protected? Under what conditions should industrial lands be allowed to convert to other uses? How much industrial land should be kept? Where should such lands be preserved and in what configuration? How is it integrated with other land uses? What are appropriate processes for protecting or converting industrial land?

Prince George's County asked the Urban Studies and Planning program at the University of Maryland to address these questions and to assess the status of the county's industrially zoned land. Specifically, the study examined the aggregate supply and demand for industrial land countywide and by local area within the county. The study's analysis identifies locations where there is an excess of industrially zoned land, where land is in contention between industrial and competing uses, where industry is economically thriving, and where there is potential for the county to attract activities that make up the emerging high technology sectors.

The county's industrially zoned land is a valuable asset that can position the county to become an active participant in the region's and nation's high-technology information economy. The county has many assets, including its industrially zoned land, and is in a position to attract the higher paying jobs and emerging firms that comprise the new economy.

Chapter 1 of this report is a review of prior industrial land use studies conducted in the U.S., defines "industrial land uses," provides an overview of the county's industrial land uses, and underscores the importance of these uses to the county. Chapter 2 is an analysis of demand for industrial land in the county, while Chapter 3 examines the supply of industrial land in the county. Chapter 4 reports the findings about the supply of, and demand for, industrial land at the subcounty level. In Chapter 5 the results of the study of the economic importance of industrially zoned areas to the county's tax base is presented together with suggested strategies for preserving industrially zoned areas threatened by encroachment. Chapter 6 presents strategies to maintain healthy industrial areas (classified in this study as Category 5 areas). In Chapter 7, the results

of interviews with firms located in economically healthy, industrial areas are presented. Finally, Chapter 8 contains conclusions and a summary of recommendations.

The report incorporates four prior reports (Appendices 6, 7, 8, and 9) that were provided to the county over the course of the study. The main conclusions and recommendations are included in Chapters 1 through 8 herein. The chapters contain highlights of the full research reports that were submitted earlier as deliverables (Appendices 6 through 9).

Chapter 1: The Importance of Industrial Land Uses in the Post Industrial Economy

A Review of Previous Industrial Land Use Studies

A review of industrial land use studies across the U.S. turned up approximately 20 studies for jurisdictions that, similar to Prince George's County, are faced with challenges about how to deal with industrial land. [5] These studies all recognize the vital role of industrial land in the urban system. In rapidly growing cities, like San Francisco, Seattle, San Diego, and Washington, D.C., planners and city officials are challenged by the rapid loss of prime industrial land to residential and mixed-use development. In the slower growth areas like Baltimore, Chicago, and Rhode Island, the studies' foci are on the potential of industrial areas as part of regional economic development strategies. This study established that both cases exist in Prince George's County. Some areas in the county are facing pressure to transition, while others are largely vacant and can be used by the county as part of strategic planning for economic growth.

For the most part, industrial land uses have always been incompatible with residential and commercial uses. It was this type of incompatibility in the early twentieth century that led to the acceptance of zoning. The environmental movement of the 1960s and 70s and the emergence of federal, environmental regulations, drew this basic incompatibility in stark relief. With the economic shift to services and increasing development came increasing conflict and the emergence of localized anti-industrial sentiment. Many residents and service workers did not view the displacement of industry as a bad thing. However, as industries were lost and as planners began to approach land use at a finer grain, the recognition that many industrial land uses were integral to daily life became apparent. Prior land use studies find that if prime industrial land is not protected, marginal demand for residential and mixed-use development can crowd out industrial uses, negatively affecting all users.

From the planning perspective, the understanding of what industrial users require and value in industrial land has most often come from surveys. Based on these surveys, the following key characteristics have consistently emerged as important.[6]

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[5] Dempwolf, Scott (2009a) reviewed the methods, issues, findings, and recommendations of over 20 industrial land use studies.

[6] An example is Seattle (WA) Department of Planning and Development (2005).

Accessibility to customers, suppliers, workers, and road networks were primary concerns. Access to ports, rail, and transit were secondary and highly dependent on location and industry.

Affordability of land and buildings was consistently among the top criteria. Traditional, industrial users are highly sensitive to rent levels and are, therefore, vulnerable to displacement if not protected.

The clustering of similar industries and their supplier networks was a common occurrence in industrial districts. This is consistent with agglomeration effects discussed in the theoretical literature.

Compatibility (or the lack thereof) with nonindustrial users was often cited as an issue and a reason why industrial users preferred exclusive industrial districts.

Characteristics of sites and buildings were also important. Industrial users often needed open yards for storage and material handling. Buildings with large bays and high ceilings were also desirable.

Many other characteristics were cited with less frequency.

Evaluating Industrial Land: Preservation/Conversion Criteria

In the evaluation of 20 land use studies across the country, the City of San Diego (2008) was clearly the leader in developing criteria and a methodology for evaluating industrial land. However, many insights were pulled from other studies as well. The following table provides a brief summary of the criteria used by other jurisdictions and, ultimately, by this study in its assessment of each industrial area in Prince George's County. Table 1-1 lists the criteria, describes each criterion, indicates whether the condition was justification for protection or conversion of industrial land, and lists the jurisdictions that used those criteria in planning. For this study, industrial land uses are defined as PDR activities, a definition that was adopted by many previous studies. The activities included in PDR are described in more detail in Appendix 2.

Table 1-1. Criteria for Evaluating Industrial Land, Defined as Production Distribution, and Repair*

Factor Impacting Industrial Land	Criteria	Justifies Protection of PDR?	Enables Land Conversion	Source**/ Where Used
Zoning	Does zoning allow for non-PDR uses?	No	Yes	SD, SJ, SC
Transit	Within 1/3 mile of existing or proposed metro station?	No	Yes	D.C., SD, SJ, SC
Physical Characteristics & Marketability	Site characteristics, parcel size, building size, age and configuration, surrounding development patterns, transportation access (freight), etc.	Area is attractive to PDR, given market trends in site selection	Area is difficult or expensive to develop, given site selection criteria	D.C., SD, SC
Separation of Uses	Are the uses within the area predominantly PDR, and are such uses well separated from non-PDR uses?	Yes	No	D.C., SD, SJ, SC
Impact of Non-PDR Development on Adjacent PDR	Would non-PDR development significantly impact the adjacent PDR uses?	Yes	No	SD, SJ
Rent	Are rent levels in the area stable and affordable for PDR?	Yes. Average rents fall within the range of county averages.	No. Rents have escalated and negatively affected PDR operations.	SD, SF
Industry Linkage	Are there significant linkages among PDR industries in the area?	Yes	No	SF, D.C.
Existing and Projected Employment	Does the area employ a significant number of residents with family sustaining wages? Are PDR firms demonstrating competitive advantage?	Yes	No	SC
Employment Transition	Will conversion to other uses create more jobs at family-sustaining wages than it displaces?	No	Yes	SC
Public Facilities	Are existing public facilities (schools, etc.) adequate to service new development due to conversion, or will the development provide additional facilities?	No	Yes	SD, SJ, SC
Environmental/ Public Health Impact	Do the environmental impacts (contamination, noise, air pollution, etc.) adversely impact the surrounding area "sensitive receptor" land uses?	No	Yes	SD, SC
Brownfield Impacts	Would cleanup to the standards required for residential or mixed use be prohibitively expensive?	Yes	No	D.C.

Economic Impact of PDR Uses	Are the PDR uses significant economic-based sector uses? Do PDR uses employ a significant number of local residents and/or generate (economic) export activity?	Yes	No	SF, SJ, SC
Critical Uses	Are the PDR uses critical in supporting economic-based sector uses or municipal functions?	Yes	No	SF, SJ
Land Use Succession	Has significant conversion to other uses already happened, either through market forces in permissive zoning areas or through text amendments?	No	Yes	SJ, SC
Potential for PDR Expansion	Would protection create realistic opportunities for expansion of existing firms as an alternative to relocation?	Yes	No	SF
Building type/ Context Alignment	Is there good alignment between PDR buildings and the surrounding context?	Yes	No	SF, D.C.
Proximity to Resources of Extraordinary Value	Is the area close to important human resources or specific infrastructure (such as rail, highways, etc.) where such proximity is essential to the operation?	Yes	No	SD
*Many of the criteria in this table may also be found in Andrews (1980). **Source Codes: SD= San Diego, SF= San Francisco, SJ =San Jose, D.C.= District of Columbia, SC= Santa Clara				

The Industrial Potential of Prince George's County

A healthy regional economy, now and in the future, includes a mix of jobs for county residents and a tax base that supports quality public schools, infrastructure, and public services. A high quality of life for residents includes a clean environment, access to services, public safety, and public spaces for entertainment and community activities. Industrial activities, and the land on which they are located, are critical to achieving these goals.

The term "industry" does not carry the same meaning today as it did in the past. Less and less is the contemporary national and regional industrial sector comprised of smokestacks and assembly lines; increasingly, it is made up of high-technology, information-based businesses.

Although the nation's and region's economic base has shifted away from the heavier industrial activities and into s-ervice-based industries, activities, such as construction, transportation, warehousing, wholesaling, and manufacturing, continue to be important for Prince George's County. A healthy economy and good land use planning requires that these activities continue to be protected and encouraged. However, the county should also be preparing for the direction the national and international economy is headed—toward high technology, information-intensive jobs. Some of the county's industrial sites should be developed to create attractive space for the biotechnology and other high technology activities growing in the region.

Prince George's County has advantages that are the envy of counties across the country. The county is home to the University of Maryland, a world-class research university. The county has 15 Metro stations connecting it with the nation's capital. The county is also home to 12 federal agency facilities including National Aeronautics and Space Administration (NASA)-Goddard; the National Archives; the U.S. Department of Agriculture's (USDA) National Agricultural Library; Henry A. Wallace Beltsville Agricultural Research Center; Plant Protection and Quarantine; National Plant Germplasm and Biotechnology Laboratory; Center for Plant Health Science and Technology; Natural Resources Conservation Service; the Census Bureau; Andrews Air Force Base; the U.S. Army Research Laboratory; the Food and Drug Administration; the Center for Veterinary Medicine; the U.S. Secret Service; the Employment Standards Administration's Wage and Hour Division; and the National Laboratory Center for the Bureau of Alcohol, Tobacco, Firearms, and Explosives. The county is located in the Baltimore-Washington, D.C. corridor and adjacent to Montgomery County, with strengths in such growing global sectors as biotechnology, aeronautics, nanotechnology, and computer technologies. The county has tremendous potential to strengthen its economy and can use some of its industrially zoned areas to promote the emerging high-technology sectors.

A strong industrial land use policy protects and promotes good jobs for county residents, encourages private investment and a strong tax base, enforces environmental laws; and maintains a clean, physical environment, balances jobs and housing, provides the infrastructure that fosters economic growth and regional competitiveness, maintains flexibility in land use planning to allow smooth changes from obsolete uses to new uses, reduces risks and uncertainty for busi-

nesses, reduces land use conflicts to promote high quality of life for residents and commercial owners, and encourages cleanup and reuse of environmentally contaminated areas.

Definition of Industrial Land Uses

During the study, the definition and nomenclature were revised from "industrial sectors" to PDR.[7] The reason is that the definition of "industrial sector" used earlier included only construction, manufacturing, transportation and warehousing, and wholesaling and excluded a number of activities that are pervasive, important, and appropriate in Prince George's County industrial districts.

From visual inspection and interviews, it became clear that auto repair services, data processing, waste management, internet providers, printing services, and laundry services are just some of the important jobs and industries missing from the prior definition of industrial uses—construction, manufacturing, transportation and warehousing, and wholesaling—and are activities that are clearly compatible with industrial zoning.

Moreover, the term PDR is currently used in several other influential industrial land use studies. Therefore the results are now more consistent and comparable to the industrial land studies conducted in Washington, D.C., San Francisco, and Seattle. [8] These cities determined that the term PDR more accurately described the activities associated with industrial land in a way in which citizens could relate. The activities included in this definition are shown in Table 1-2. See Appendix 2 for more detail.

Table 1-2. Industries Included in the PDR Definition of Industrial Land Users

NAICS*	Industry
23	Construction
31–33	Manufacturing
48–49	Transportation and Warehousing
42	Wholesale Trade
221	Utilities
444	Building Material, and Garden Equipment, and Supplies Dealers
511	Publishing Industries (except Internet)
517	Telecommunications
518	Internet Service Providers, Web Search Portals, and Data Processing Services

[7] See Appendix 10.

[8] San Francisco Planning Department (2003); Seattle Department of Planning and Development (2005); District of Columia Office of Planning (2006).

562	Waste Management and Remediation Services
811	Repair and Maintenance
812	Personal and Laundry Services
* North American Industrial Classification System codes	

Source: www.census.gov, U.S. Census Bureau

Significance of the Industrial Sector in Prince George's County

Despite the growth and strength of the service sector, industrial activities continue to be critical to the county's economic health. There are a number of reasons.

1. The industrial sector continues to be an important source of county jobs. Regardless of how the industrial sector is defined, this sector is important to county employers. Presently, nearly 29 percent of jobs in the county are in the four North American Industrial Classification System (NAICS) code categories, including construction (NAICS 23), manufacturing (NAICS 31–33), wholesale trade (NAICS 42), and transportation and warehousing (NAICS 48–49). The number of county jobs in these four sectors totaled 64,970 in 2007. If the industrial sector is defined as PDR activities, then industry accounted for 83,735 jobs and 38 percent of county employment in 2007.[9]

2. The study found that the manufacturing sector is more likely to hire county residents than any other sector. Not only does manufacturing provide jobs for county residents but reduces cross-county commuting and associated traffic congestion.[10]

3. Many industrial activities are critical to the operation of the county government. Industrially zoned areas house government services, such as waste hauling and transfer, street cleaning, plowing, road construction and repair, recycling, and government printing.

4. No matter what the economic base of the local economy, industrially zoned areas house back-office activities critical to other sectors. Even in locations that are dependent on information and high technology, tourism, and finance and insurance, industrially zoned areas house such back-office activities as warehousing supplies,

[9] U.S. Bureau of Labor Statistics (2009).
[10] See Appendix 7.

laundries, printing operations, and high-technology manufacturing and startups. Several federal agencies also have substantial facilities located in industrially zoned areas, and these facilities often support front office operations. For example, there is a cluster of aerospace and communications manufacturers located in multiple, industrially zoned areas within five miles or so of NASA-Goddard. The new facilities for National Oceanic and Atmospheric Administration in M-Square are likely to induce and require development of private sector manufacturing and research and development (R&D).

5. Industrially zoned areas are home to many of the activities that support the local population, such as auto repair shops, household repair services, and warehousing of consumer products.

6. Industrially zoned areas provide low cost space that is critical for startups and innovation. Even in the high technology sectors, industrially zoned areas often act as incubators for new startups. Thus, industrially zoned areas are important to an overall healthy and vital economy in the long run.

7. Employment in industrial code categories provides relatively good jobs for workers with lower levels of formal education than is the case for the service sector. Jobs in the industrial categories are more likely to be high wage, with good benefits, and to provide more upward mobility for workers with less formal education than are jobs in the service categories. For example, as Figure 1-1 shows, the four industrial categories of construction (NAICS 23), manufacturing (NAICS 31–33), wholesale trade (NAICS 42), and transportation and warehousing (NAICS 48–49), pay higher average wages than most service and agricultural sectors.[11] However, the services sector has a lower proportion of its work force with less than a high school education and a higher proportion with four years or more of college. See Table 1-3.

[11] For more detail, see Appendix 7, page 83.

Table 1-3. Educational Attainment for Employees Working in Four Major Sectors in the Washington, D.C.-Maryland-Virginia Metropolitan Area, 2005			
Sector	**High School Degree or Less Educational Attainment**	**Some College**	**College Grad or More**
Construction	61.3%	21.3%	17.4%
Manufacturing	32.7%	24.2%	43.1%
Transportation and Warehousing	44.4%	31.7%	23.9%
Wholesale Trade	37.8%	28.6%	33.5%
Services Sector	26.6%	23.2%	50.2%

Source: American Community Survey, 2007: Public Use Microdata Samples, U.S. Census Bureau.

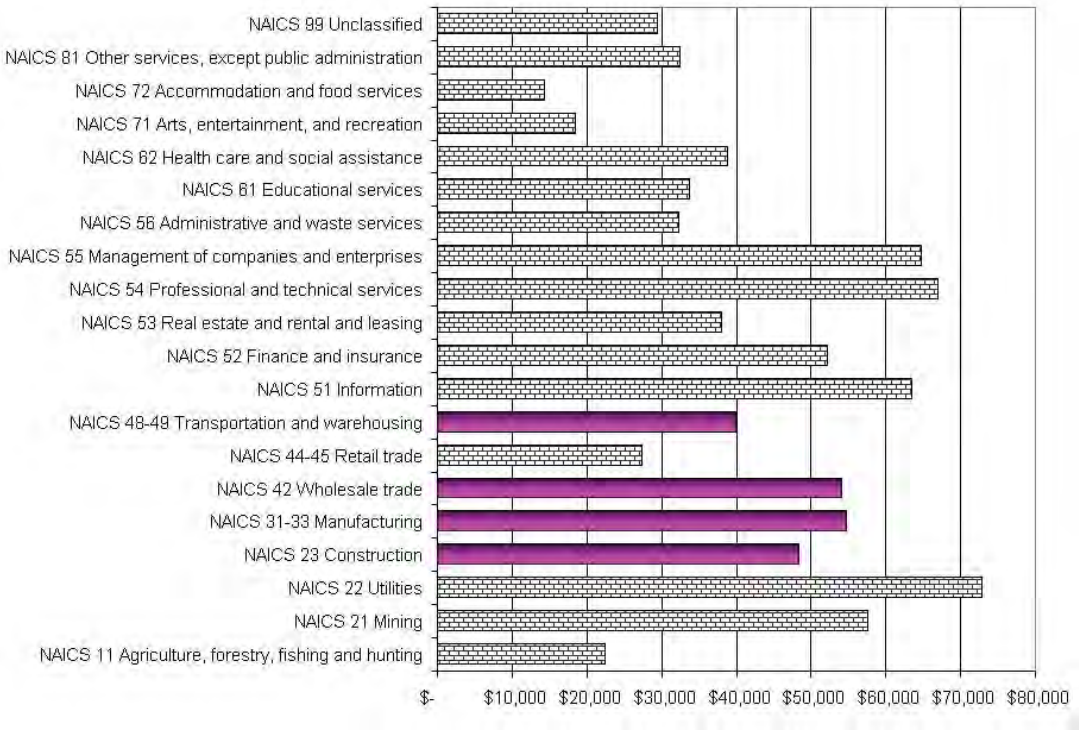

Figure 1-1. Comparison of Average Annual Pay per Employee in 2005 Across All Industrial Sectors in Prince George's County

Source: QCEW, 200, Bureau of Labor Statistics.

In Appendix 6, Research Design, Industrial Land Policy, Current Industrial Sector, and Inventory of Industrial Lands, the study analyzed commuting patterns among residents and workers in Prince George's County and the Washington, D.C. metro area in an effort to determine the relationship between industrial land uses, job creation and employment within the county. The private sector in Prince George's

County employs just 32 percent of the total workforce living in the county. This percentage is lower than in either Fairfax or Montgomery counties. In all, more than half the Prince George's County residents in the workforce are employed outside the county. The analysis also revealed that manufacturing land uses are more likely to employ county residents than other uses, particularly transportation and warehousing, services, and construction. Higher wages, lower education requirements, and local hiring highlight the importance of preserving healthy manufacturing areas and continuing to attract manufacturing where appropriate.

8. After years of industrial activity, some parcels of land carry a legacy of contamination. Under current economic conditions and technological know-how, these parcels are often unsuitable for residential and commercial developments. For many of such properties, industrial activity is often the highest and best use. Figure 1-2 shows that 9 percent of county land has a history, suspicion, or evidence of contamination.

A comparison of industrial and flex buildings in Prince George's, Fairfax, and Montgomery Counties was done to show the differences in types, conditions and performance. Appendix 8, Assessing the Industrial Area by Subregion in Prince George's County, contains details of the analysis. The analysis showed that vacant industrial and flex buildings in Prince George's County remain on the market slightly longer than those in Montgomery County and more than twice as long as those in Fairfax County. Average building sizes and ages are comparable across the counties, and square foot rents are significantly lower in Prince George's County, suggesting that factors other than cost and availability are influencing the location decisions of firms. Thus, it appears that firms are locating industrial operations in both Fairfax and Montgomery counties faster than in Prince George's County and paying a premium in both rent and labor costs to do so. This finding requires further investigation.

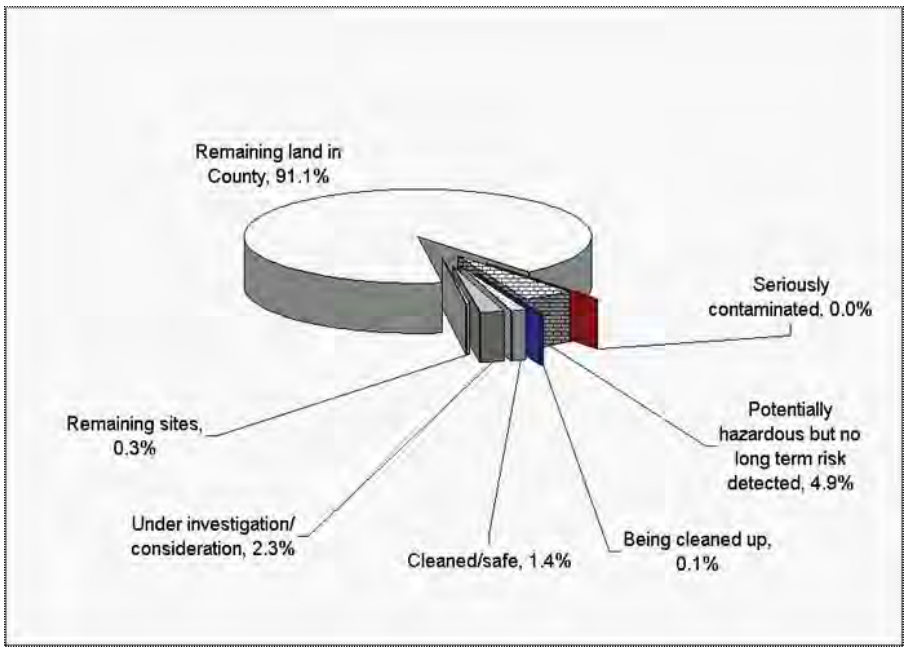

Figure 1-2. Share of County Land with a History of Contamination

Source: Maryland Department of the Environment (MDE), 2007

In conclusion, data shows that industrial land uses are a vital component of the Prince George's County economy. As this study will demonstrate, however, some industrially zoned acreage could be allowed to transition to nonindustrial usage without negatively impacting the county's industrial sector. In addition, there will be discussion about how the county can use some of its industrially zoned land to expand into high technology industry. The study's goal is to assist the county to ensure the industrially zoned areas are used in a way that keeps the county's economy competitive globally.

Chapter 2: Demand for Industrial Land in Prince George's County

This chapter gives an overview of the demand for industrial land in the county. From 1990 to 2007, job growth rates in the industrial sector—the primary users of industrially zoned land—have been slower than was predicted in the Prince George's County 1985 industrial land use study (M-NCPPC 1985),[12] slower than the growth rate of service sector employment, and slower than the county's population growth rate. Not only was the growth of industrial land users relatively slow, the composition of demand from industrial land users changed from heavy industry, such as mining and heavy manufacturing, to lighter manufacturing.

From 1990 to 2007, Prince George's County service sector employment and population growth outpaced total job growth in the aggregated categories of manufacturing, wholesaling, construction and warehousing. There was an overall annual average decline in manufacturing (-2.0 percent) and wholesaling (-0.1 percent) employment over this period. Two other industrial sector activities, construction (1.7 percent) and transportation and warehousing (2.6 percent), grew slowly over the same period. Combining growth in these four industrial sector activities and comparing it with growth in the service sector shows that service sector employment growth outpaced county growth in the industrial sector. See Figure 2-1. Using the alternative definition of industrial land users—PDR—reveals a similar pattern of stagnating growth and some employment decline among industrial land users after 2000. Consistent with national trends, the growth of services outpaced industrial growth. See Figure 2-2. The national employment slow-downs in the industrial sectors, the shift away from employment- intensive production processes to more capital-intensive processes, and the decentralization of land-intensive, industrial activities away from cities and inner suburbs to rural and off shore locations explain this slowdown.

[12] See Cohen, et al., (2007) for a lengthier discussion of these data.

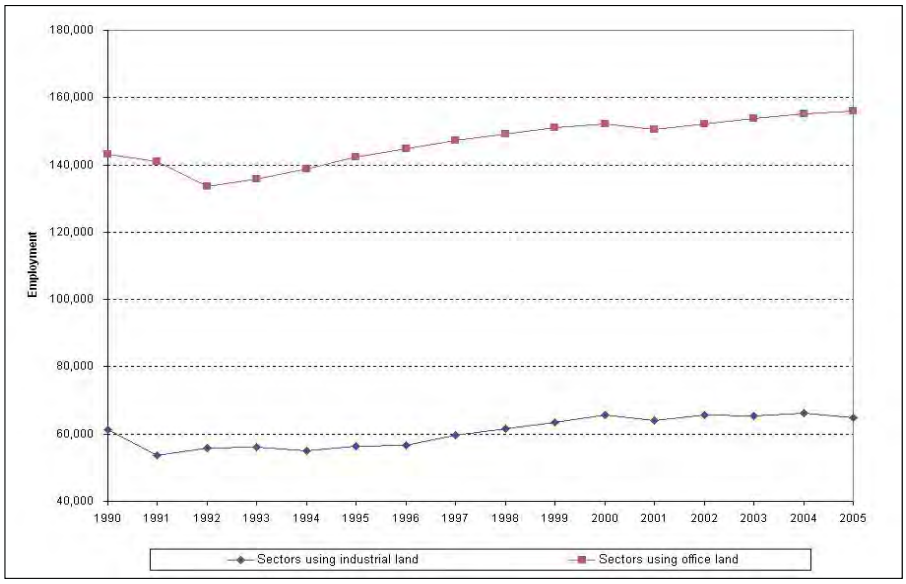

Figure 2-1. County Employment Growth in Industrial Land Users (Construction, Manufacturing, Warehousing, Transportation, and Wholesaling) versus Growth in the Service Sector

Source: U.S. Bureau of Labor Statistics, QCEW, 2007

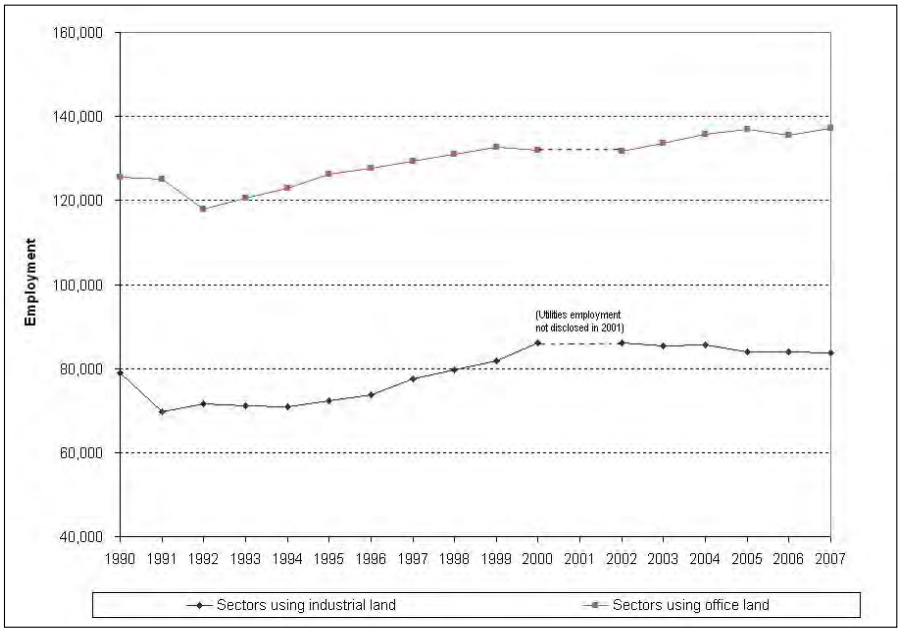

Figure 2-2. County Employment Growth of Industrial Land Users (PDR) Compared to Growth in the Service Sector

Source: QCEW, Bureau of Labor Statistics

Aggregate trends mask growth in some industrial activities, though. Analysis of the industrial sectors at a more disaggregated level shows strength in some construction, transportation, warehousing, and selected manufacturing activities in Prince George's County. Economic vitality in these sectors demonstrates the continued importance and demand for industrially zoned land. Specialty trade contractors (NAICS 238), construction of buildings (NAICS 236), and merchant wholesalers for nondurable goods (NAICS 424) show continued strong growth over the 1990 to 2007 period, primarily because of the strong national growth in these industries. Overall, the county's employment growth is stronger locally than the nation in warehousing and storage (NAICS 493), printing and related support activities (NAICS 323), computer and electronic product manufacturing (NAICS 334), textile product mills (NAICS 314), plastics and rubber manufacturing (NAICS 326), transit and ground transportation (NAICS 485), and support activities for transportation (NAICS 488).[13] In the Washington, D.C. region, transportation and warehousing activities are attracted to sites along major highways, particularly I-95 and its interchanges. Access to the nation's capital, a strong regional economy, and a location on I-95 midway up the Atlantic coast explains the attraction to and expansion of these activities in Prince George's County.

According to the Quarterly Census of Wages and Employment (QCEW) of the Bureau of Labor Statistics (2009), the county is home to a total of 64,970 employees in the construction, manufacturing, wholesale, transportation, and warehousing industries. This is 29 percent of the county's total employment. Also according to the QCEW, total County PDR employment is 83,735 or 38 percent of total county employment. No matter how industrial land users are catalogued, the industrial sector emerges as a critical source of employment in Prince George's County.

Another important finding of this study is that the type of industrial activity is shifting from heavier industrial uses to lighter industrial activities. Industrial activities are less likely to involve smokestacks, large-scale assembly, and mining, and more likely to involve light assembly. Figure 2-3 shows that, not only is nondurable manufacturing a larger share of the county's manufacturing employment base than durable manufacturing, nondurable manufacturing is also declining at a slower rate.

[13] See Appendix 7 for a detailed description of these conclusions.

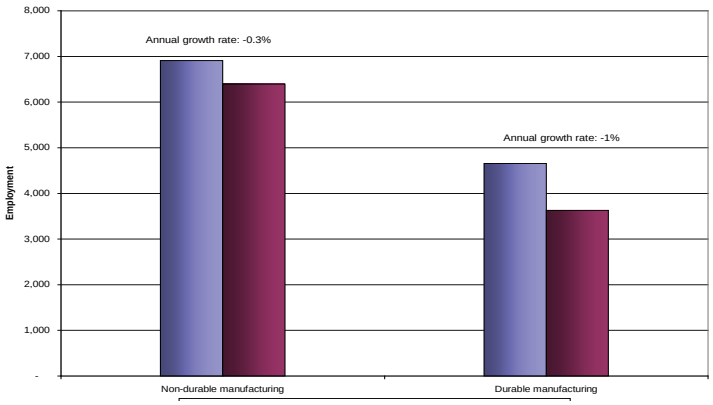

Figure 2-3. Comparison of Nondurable and Durable Manufacturing Employment in Prince George's County, 1990 and 2005[14]

Source: QCEW, U.S. Bureau of Labor Statistics

[14] The industries defined as durable and nondurable industries are shown here.

Durable goods	**NAICS Code**
Wood products	321
Nonmetallic mineral products	327
Primary metals	331
Fabricated metals	332
Machinery	333
Computers and electronic products	334
Electrical equipment, appliances, and components	335
Transportation equipment	336
Furniture and related products	337
Miscellaneous products	339
Nondurable goods	**NAICS Code**
Food products	311
Beverages and tobacco products	312
Textile mills	313
Textile product mills	314
Apparel	315
Leather and allied products	316
Paper products	322
Printing	323
Petroleum and coal products	324
Basic chemicals	325
Plastics and rubber products	326

Comparing Industrial and Flex Space in Three Washington, D.C. Metro Counties

A second way of analyzing the county's industrial sector is through the CoStar data. The amount of existing industrial and flex space building square footage for rent in the three Washington, D.C. metro counties (Prince George's, Fairfax, and Montgomery) can be compared using the CoStar database. The size of the county's industrial building area in comparison to Montgomery and Fairfax is shown in Table 2-1. About 40 percent of all industrial and flex space in the three counties is located in Prince George's.

As the data in Table 2-1 also show, in terms of vacancy rate, average TOM (TOM), and rental rates, Prince George's County is not as competitive as it could or should be. While Prince George's County has about 40 percent of all industrial and flex space in the D.C. metro area, it has a slightly larger share (50 percent) of vacancies. Vacant buildings in Prince George's County remain on the market slightly longer than those in Montgomery County and more than twice as long as those in Fairfax County. Average building sizes and ages are comparable across the counties, and square foot rents are significantly lower in Prince George's County, suggesting that factors other than cost and availability are influencing the location decisions of firms.

As discussed in Appendix 6, wages are also typically higher in the other two counties. Thus, it appears that firms are locating industrial operations in both Fairfax and Montgomery counties faster than in Prince George's County and paying a premium in both rent and labor costs to do so.

Table 2-1. Comparison of Industrial and Flex Space in Three Counties in the D.C. Metro Area			
Industrial & Flex Space for Rent Comparison of Washington, D.C. Metro Counties			
County	Prince George's	Fairfax	Montgomery
Buildings	870	656	622
Rentable building area (RBA)	36,737,557	31,718,125	22,372,553
Percent of regional space	40%	35%	25%
Vacant (SF)	4,907,240	3,062,371	1,901,599
Vacancy rate	13%	10%	8%
Average building size (SF)	42,227	48,351	35,969
Average building age (yrs)	29.4	25.6	26.5
Average TOM* (months)	32.4	15.4	28.7
Average warehouse rent per square foot per year	$6.16	$9.10	$10.72
*TOM=Time on market8			

Source: CoStar, February 16, 200

Conclusions

Three important conclusions can be drawn from the analysis summarized here and what was presented in detail in the Appendices. First, although overall growth in the industrial sector is slow relative to service sector and population growth, some industrial sector activities are healthy and growing. Second, providing about one-fifth of the county's jobs,[15] industrial activities continue to be central to the county's employment and tax base. Third, the county's establishments are shifting from heavier industrial to lighter industrial activities, indicating that the sector is moving in a direction that is more compatible with population growth and residential land uses. The immediate policy implications are that prime industrial land should be protected, and the attendant infrastructure must be maintained. In Chapter 4 of this report, a summary of conclusions is presented regarding where in the county this prime industrial land is located.

[15] See, for example, Appendix 7, Table 1-4 which indicates that construction, manufacturing, warehousing, wholesaling, and transportation sectors provided nearly 21 percent of the county's jobs in 2007.

Chapter 3: Estimating the Appropriate Quantity of Industrial Land in Prince George's County

In 2007, the supply of industrially zoned land in Prince George's County was 12,350.4 acres. This excludes the acreage for Andrews Air Force Base and Chalk Point.[16] Of these 12,350.4 acres, 6,371.8 were developed with industrial uses, 4,605.5 were vacant, and 1,373.1 were occupied with nonindustrial uses.[17] The acreage in each use was calculated utilizing both the county's GIS database and tax records. The county tax records show that 1,373.1 acres of industrially zoned land have businesses on site that are taxed as nonindustrial uses. The study estimates that there is currently a 2,618 to 2,045 acre surplus in industrially zoned land.[18]

The calculation was done as follows: given the trends over the past 50 years, the county's growth in demand for industrial land averaged 112 acres per year. Over the past ten years, the annual absorption rate of industrial land was 127.8 acres per year. The county policy was to have a reserve of three times the amount of industrial land that became newly occupied over the past ten-year period—to accommodate future industrial demand. The county's 1984 Land Use Study (M-NCPPC 1984), concluded that too much land had been zoned industrial. Subsequently, there was a slow decline in the county's industrially zoned land, from 13,256.8 acres in 1983 to 12,350.4 acres in 2007.

Calculation of the demand for industrial land was done in two ways. First, the growth in demand for industrial land over the past ten years was calculated using the rate of growth in demand over the past 50 years, which is 112 acres a year, and the growth in demand over the past 10 years using the rate of growth in demand of industrial land over the past 10 years, which is 127.8 acres per year. In both cases, the acreage is multiplied by three to calculate the county's desired reserve.

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16 Chalk Point is a power generating plant located on the Patuxent River in Prince George's County.

17 Prince George's County's 2008 GIS dataset and county tax records. See Appendix 7 for a detailed discussion of the methodology. The numbers reported here are updated with the 2008 data.

18 This estimate includes the current 1,373.1 acres that are zoned industrial but occupied by businesses that are nonindustrial.

Table 3-1. Estimate of Prince George's County Surplus Industrial Land in 2009		
	Assuming 50 Year Growth Rate	Assuming 10 Year Growth Rate
Developed Industrial Acreage	6,371.8	6,471.8
Needed Reserve (acres)	3,360	3,834
Total Required Industrially Zoned Acreage	9,731.8	10,305.8
Acreage Zoned Industrial	12,350.4	12,350.4
Surplus Industrial Land	2,618.6	2,044.6

The ideal reserve of industrial land, assuming the 50-year rate of growth in demand, equals 3,360 acres.[19] The reserve, assuming the 10-year rate of demand growth, equals 3,834 acres. [20] Given that the total acreage zoned industrial in 2007 was 12,350.4 acres, leaves 9,732 to 10,306 acres as the optimal total in 2008. There is an estimated surplus of industrial land between 2, 619 and 2,045 acres. These estimates include the current 1,373.1 acres that are zoned industrial but occupied by nonindustrial businesses.

Another way to interpret these data is that, taking the higher estimate of excess land of 2,619 acres, 1,246 acres (2,619 minus 1,373) could safely be transferred out of industrial use and still provide the county with the planned reserve, and the nonindustrial uses located on industrially zoned land could remain. (See Figure 3-1.) The black-striped area shows the estimated surplus of industrial land, which followed the perceived shortage prior to the 1975 study, designated by the white-striped lines.

[19] 1120*3 = 3360.
[20] 1,278 *3 = 3834.

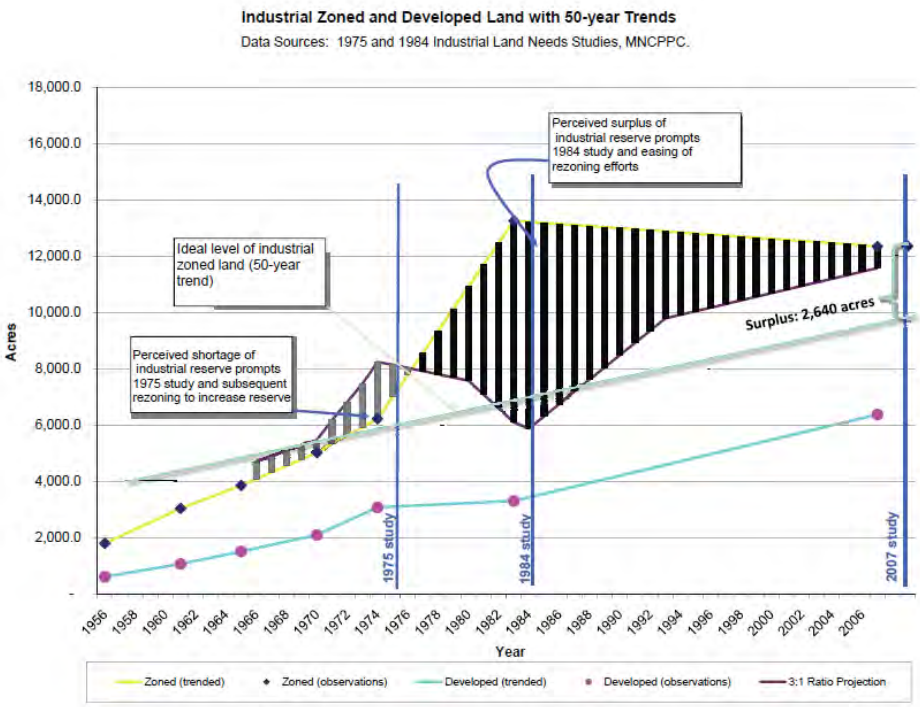


Figure 3-1. Zoned and Developed Land, Projected Land, and Estimated Surplus in Prince George's County Using the 50- Year Trend

Another way to look at the supply of industrial land is to estimate the year the county will run out of vacant industrially zoned land. Three different estimates were determined using different assumptions:

1. The study estimates that the county will run out of industrially zoned land between 2042 and 2046, using two assumptions. First, the demand for industrial land continues at the same rate into the future, as it has over the past 50 years. Second, the reduction in industrially zoned acreage continues at the same rate in the future, as it did over the 1983 to 2007 period. See Figure 3-2.

2. The county will run out of vacant, industrially zoned land in 2042, assuming that the slightly faster 1983 to 2007 growth rate in demand for industrially zoned land continues.

3. Assuming that current trends continue, the county will have an estimated 10,915 acres in 2042. (See Figure 3-2.) The 2042-2046 estimates are derived by assuming the non-industrial uses on industrially zoned land are part of the county's surplus.

There are several reasons to expect both the 1957–2007 and 1983–2007 growth rates of demand for industrial land to be higher than future demand. First, nationwide, the growth in the industrial sector has slowed, as reported in Appendix 6. This pattern is especially true in metropolitan areas. Second, as county land values rise, industrial land users will economize on land and consume smaller parcels or when this is not possible, businesses will move further from the metropolitan centers. Third, most industrial land users in Washington, D.C. decentralized into the suburbs after the 1950s. At present, most of Washington, D.C.'s industrial activities have already decentralized to the suburbs, so that the rate of business moving in from the district will slow. Future growth will be primarily dependent on local expansions and in-migration from other regions.

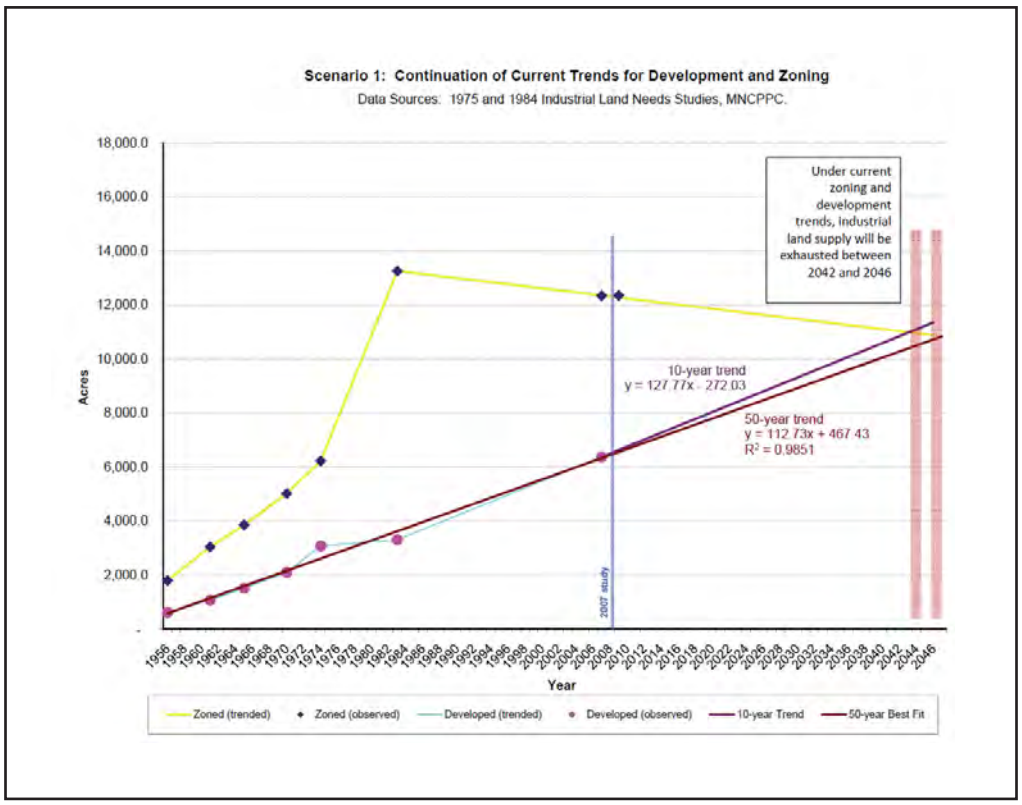


Figure 3-2. Zoned and Absorbed Industrial Acreage in Prince George's County Under Scenario 1

Source: 1953 data from M-NCPPC of Prince George's County (1975); Data for 1967 and 2007 from M-NCPPC Prince George's County GIS

Industrial Land Development and Reserves—Revisited

The primary finding in the 1975 Industrial Land Use Study was that there was an insufficient reserve of industrial land to meet the projected absorption for the next 10 years. The 1975 study examined trends in other comparable counties and developed a formula for determining the appropriate reserve for industrial land. It established a desired reserve level as three times the amount of land expected to be absorbed over the next ten years. However, it did not specify how that expectation was to be determined. Absent specific knowledge about future development, a reasonable procedure would be to look at absorption rates over the previous years and extrapolate forward to estimate what the reserve should be. The total amount of industrial zoned land should thus be the amount of developed, industrial land plus the reserve. Reserve levels of three times the projected ten-year absorption of industrial land were adopted as planning policy by the Prince George's County Planning Board in resolution 75-14.[21] The white-striped area shown in Figure 3-1 shows the perceived shortage of industrial land leading up to the 1975 study.

The need to build an industrial reserve followed a decade of rapid industrialization that came to an end just as vast amounts of county land was being rezoned to industrial. Beyond the required reserve, the county created a substantial surplus of industrial land. That surplus peaked at about 7,000 acres in 1984—denoted by the black striped section in Figure 3-1. Through continued industrial development and periodic rezoning of industrial land for other uses, that surplus declined to 2,640 acres in 2007, as shown in Figure 3-1.

From the few data points, the zoning and development trends for the past 50 years appear to have been remarkably linear over the long term, with an absorption rate of 112 acres per year. Even the rapid expansion in the decade prior to 1975 was followed by a correction—a decade of relatively slow growth. A linear development curve leads to a constant reserve level, in this case 3,360 acres, denoted by the green line in Figure 3-1.

Fixing the Reserve and Alternative Build-Out Scenarios

The reserve formula established in resolution 75-14 has, at times, led to confusion and reserve levels that are inconsistent with long-run absorption trends. Given these observations, it seems appropriate for the county to amend resolution 75-14 with a simpler reserve requirement. For example, the county could establish a fixed reserve level of, say, 3,360 acres, which would

[21] M-NCPPC (1975), and M-NCPPC Prince George's County (1984).

be revisited every five or ten years as necessary. Of course, replenishing the 3,360-acre reserve will eventually require rezoning from other uses to industrial. County planners should consider the longer-term implications. At some point, such rezoning will become impractical, and this will lead to the build-out of a constant level of industrial land.

Projecting current trends into the future suggests two scenarios that arrive at the build-out of roughly the same level of industrial land within roughly the same time frame. The difference between the two scenarios reflects two different planning and political philosophies.

Scenario 1 is shown in Figure 3-2. This scenario continues existing piecemeal rezoning practices based on market demand for industrial land for other uses. Under current rezoning trends and industrial development trends, and precluding any rezoning into industrial use, the county will reach industrial build-out of between 10,500 and 11,000 acres sometime between 2042 and 2046. Figure 3-2 reports trends in demand based on the previous 10-year trend and the previous 50-year trend. Taking the county's 10-year trend in demand and the current pace of rezoning out of industrial, the county will reach build-out in 2042.

Scenario 2 is shown in Figure 3-3. This scenario considers the possibility that the county would take rapid and decisive action to rezone and release the surplus industrial land but would then hold the level of industrially zoned land constant at about 10,000 acres. This would lead to industrial build-out sometime between 2033 and 2035.

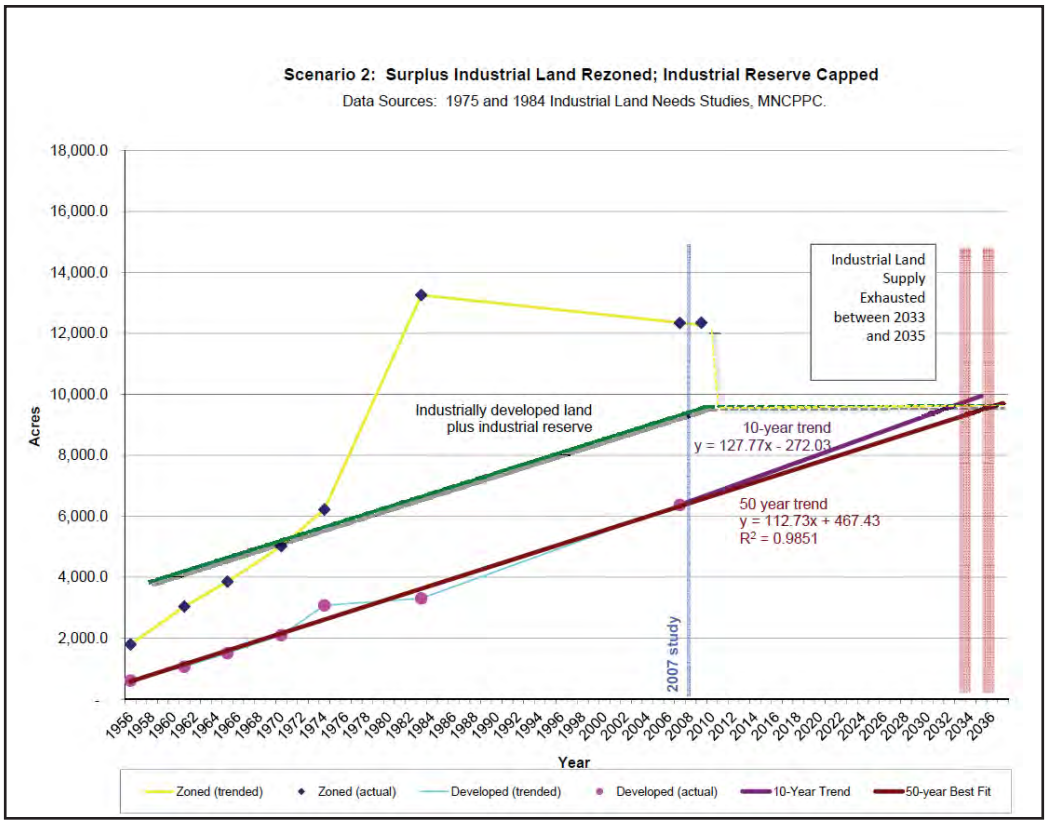


Figure 3-3. Zoned and Absorbed Industrial Acreage in Prince George's County Under Scenario 2

Each scenario has specific benefits and tradeoffs. Scenario 1 requires no immediate action and maintains maximum political flexibility. However, what is viewed by elected officials as flexibility may be viewed by developers as uncertainty, and this issue may have hurt Prince George's County in recent decades, contributing to significantly lower levels of development than other D.C. metro area counties. Continuation of these policies may drive new development toward surrounding counties.

Pursuant to Scenario 2, both require and signal a new approach by the county. It is an approach that opens up significant amounts of new land for mixed-use development, while preserving prime industrial land for future development. It would provide a clear policy shift that would signal the end of piecemeal rezoning except in extreme cases. It would strengthen planning and provide greater certainty for developers, both of which could lead to more and better development. Regardless of which scenario the county chooses, improving the permitting process to make it faster and more certain for developers is essential if the county wants to participate in the next construction boom in a substantial way.

The aggregate amount of industrially zoned land does not address what "industry" means for the twenty-first century. It does not mean this land should be preserved for assembly manufacturing and smokestacks. Instead, the uses of the twenty-first century in this region will include high-technology R&D and prototype development, including biotechnology, nanotechnology, and aeronautics, along with many of the existing uses such as construction, transportation and warehousing, light manufacturing, and back office functions. How the county attracts and accommodates these activities is an integral part of planning industrial land policy. This issue is addressed in later chapters of this report in relation to several specific industrially zoned areas. The county has an opportunity to use some of this industrially zoned property to attract and accommodate the growing high-technology sectors of the national economy.

Summary

In this chapter, the appropriate reserve of industrial land for the county is estimated. Using the county's own formula of maintaining a 3:1 ratio of surplus land to accommodate projected growth over the next ten years, the study finds that the county could safely release between 2,640 and 4,013 acres from industrial use.

Chapter 4: Assessing Industrial Economic Health at the Subregional Level

This phase of the study uses the countywide analysis as a basis for a more detailed subregional analysis of market demand.[22] Using CoStar data and interviews with businesses and county officials, the study assessed the economic strength of every industrial district in the county, ranking each area in one of five categories. The five categories of industrial areas are described here and summarized in Table 4-1. Each industrial district in the county is assigned to a category.

Categories of Industrial Districts

Category 1: Weak or Nonexistent Industrial Demand

These are areas where the land is zoned industrial, but there is no evidence of demand for industrial space in this location. "No industrial activity" means there is no evidence of either industrial buildings from the CoStar data, no tax paying, industrial enterprises from the county's tax records data, nor industrial activity revealed in the satellite images. The satellite images came from CoStar, www.maps.live.com, MSN, and Google. In these areas, large parcels are zoned industrial but remain largely vacant.

[22] Appendix 7 - Inventory of Industrial Land and Appendix 8 – Assessing the Industrial Sector in Prince George's County.

Table 4-1. Land Demand Categories and Measures of Industrial Health

	1	2	3	4	5
Industrial Demand	Never	Weak	Weak	Strong	Strong
Industrial Land Vacancy Rate	High	Low	Low	Low	Low
Number of Industrial Buildings	None	High	High	High	High
Industrial Building Vacancy Rate	No or Few Buildings	High/Above Average	High/Above Average	Low/Below Average	Low/ Below Average
Industrial Rents	Low/Below County Average	Low/Below Average	Low/Below Average	High/Above Average	High/Above Average
New Industrial Construction	None	None	None	Yes	Yes
Industrial Building TOM	No or Few Buildings	Long/Above Average	Long/Above Average	Short/Below Average	Short/Below Average
Other Demand from Office/Commerce Residential	Maybe	Weak	Strong	Strong	None

Category 2: Deindustrializing and Abandoned

Category 2 includes industrial areas where there is a history of industrial activity, but according to the CoStar data, overall industrial building vacancy rates are high. In addition, these areas show no evidence of any recent construction, and the industrial/flex rental rates are below the average regional rental rates. High vacancies combined with long periods on the market and low rents indicate deindustrialization. In these areas, the trend data show an increase in industrial/flex vacancy rates and a drop in industrial/flex rental rates. Furthermore, in this instance, there is no evidence of economic health in the retail or commercial sectors. In other words, there is no evidence of recent construction for retail or commercial space, and if these activities are present or proximate, their rental rates are low and the vacancy rates are above average. The study defined "weak" demand as a building vacancy rate that was above the county's 13.4 percent vacancy rate for rentable industrial and flex space. Table 4-2, below, shows the county average industrial/flex vacancy, rental rates, and other statistics.

Table 4-2. Averages for Industrial and Flex Space in Prince George's County	
RBA, SF	36,737,557
Vacancy Rate	13.4%
Average Warehouse Rent per SF per yr	$ 6.16
Average Building Age (yrs)	29.4
Average Time on Market (months)	32.4

Source: CoStar Data February 2009

Category 3: Deindustrializing and Transitioning

Similar to Category 2, this category includes industrial areas where there is a history of industrial activity and evidence of weak current industrial demand. Industrial building vacancy rates are above average, there is no recent industrial construction, and rents are below the county average. In addition, industrial/flex rental rates are stagnant or falling. The difference between Category 2 and Category 3 areas is that, in the latter, there is evidence that retail, commercial, and/or residential activities are healthy (as indicated by new construction, low office or retail vacancy rates, and/or high or rising rental rates for office and retail space).

Category 4: Competitive Land Use Succession

Earlier in this study, the Category 4 areas were classified as those districts that indicate evidence of healthy industrial activity. Those areas were considered as showing evidence of "en-

croachment," with such characteristics as new industrial/flex construction, above average rental rates, low vacancy rates (as defined as below the county average of 13.4 percent), and short periods on the market when rentals come available. In this case, there is evidence that, although the industrial activity is healthy, there is also evidence that retail, commercial, and/or residential activities are healthy as well. Both Category 3 and Category 4 industrial areas are facing competing uses and pressure for transition. The difference is that, in Category 4 industrial areas, industrial/flex activity is strong rather than declining.

Upon more detailed study of the Category 4 areas, the study found that they presented a more complex set of issues than first understood. The seven Category 4 sites fall into four types or groups. In group 1, the sites indicated evidence of healthy industrial activity but also encroachment from, or conflict with, nonindustrial land users. Kenilworth and Bladensburg fell into the "encroachment/conflict" group. Another group of sites had a mix of uses, with healthy industrial and healthy commercial/office and little evidence of conflict among them. In this case, the CoStar data showed that industrial/flex uses were of the same age as office/retail uses, and interviews with firm managers indicated that neither set of landowners had an issue with the other. For example, the office building owners had no issues or conflicts with the light manufacturing that was nearby. The Landover industrial area was placed into this category.

In a third group of Category 4 sites, with both healthy industry and healthy office/retail, there is opportunity for the county to initiate high quality development that takes advantage of the growing regional strengths in high technology industries. MD I-95 Corporate Park, Goddard Industrial Area, and M Square in College Park fall into this category. In a fourth type of case, the New Carrollton area, industrial uses have already been pushed out of the Metro site. The county has efforts underway to plan for the latter area.

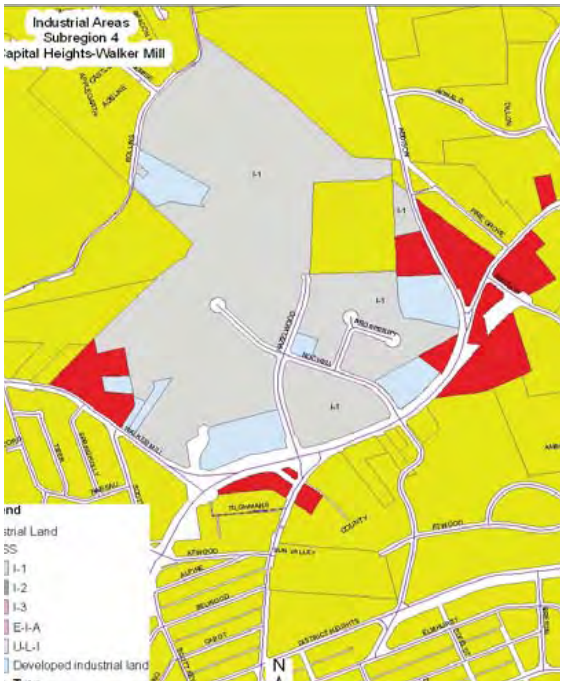
Category 5: Healthy Industrial Areas

Category 5 industrial areas are those that are economically healthy. These areas exhibit new construction, low industrial/flex vacancy rates, and above average industrial/flex rental rates. When an industrial property comes on the market, it does not stay on the market long. New or proposed construction, in areas with developable land, is characteristic of the areas defined as healthy. In these cases, there is little evidence of encroachment from alternative land uses, differentiating it from Category 4. Category 5 industrial areas are those that are currently economically healthy with low land and building vacancy rates, stable or rising rents, and short periods of

rental TOM when vacancies become available. These areas should be continued in the "I" (Industrial zones. In Chapter 5, details of findings from personal interviews with managers/owners of several firms located in the Category 5 industrial areas are presented.

Map 4-1. Washington Executive Airport

Source: CoStar data



Map 4-2. Walker Mill Area Zoning

Source: M-NCPPC GIS data, 2007

Method of Categorizing Each Industrial Area

Table 4-1 summarizes criteria for designating the industrial sites, Table 4-3 indicates the number of each category located in each subregion, and Map 4-3 presents the locations of the industrial land categories. In Appendix 2, the final map is presented in a format that can be reproduced in black and white. There is further elaboration on this process in Appendix 8.

Not all industrial areas fit neatly into a category. For example, in Subregion 5, at Steed Road and Piscataway Road, there were no buildings located on the industrially zoned land according to CoStar, but the satellite image showed an airport. (See Map 4.1.) This industrial district was included in Category 1 because there were no buildings on the site and no data in the CoStar file to indicate the airport's economic health (i.e., rents, vacancies, etc.). Since the analysis, this landowner's request for rezoning has been granted.

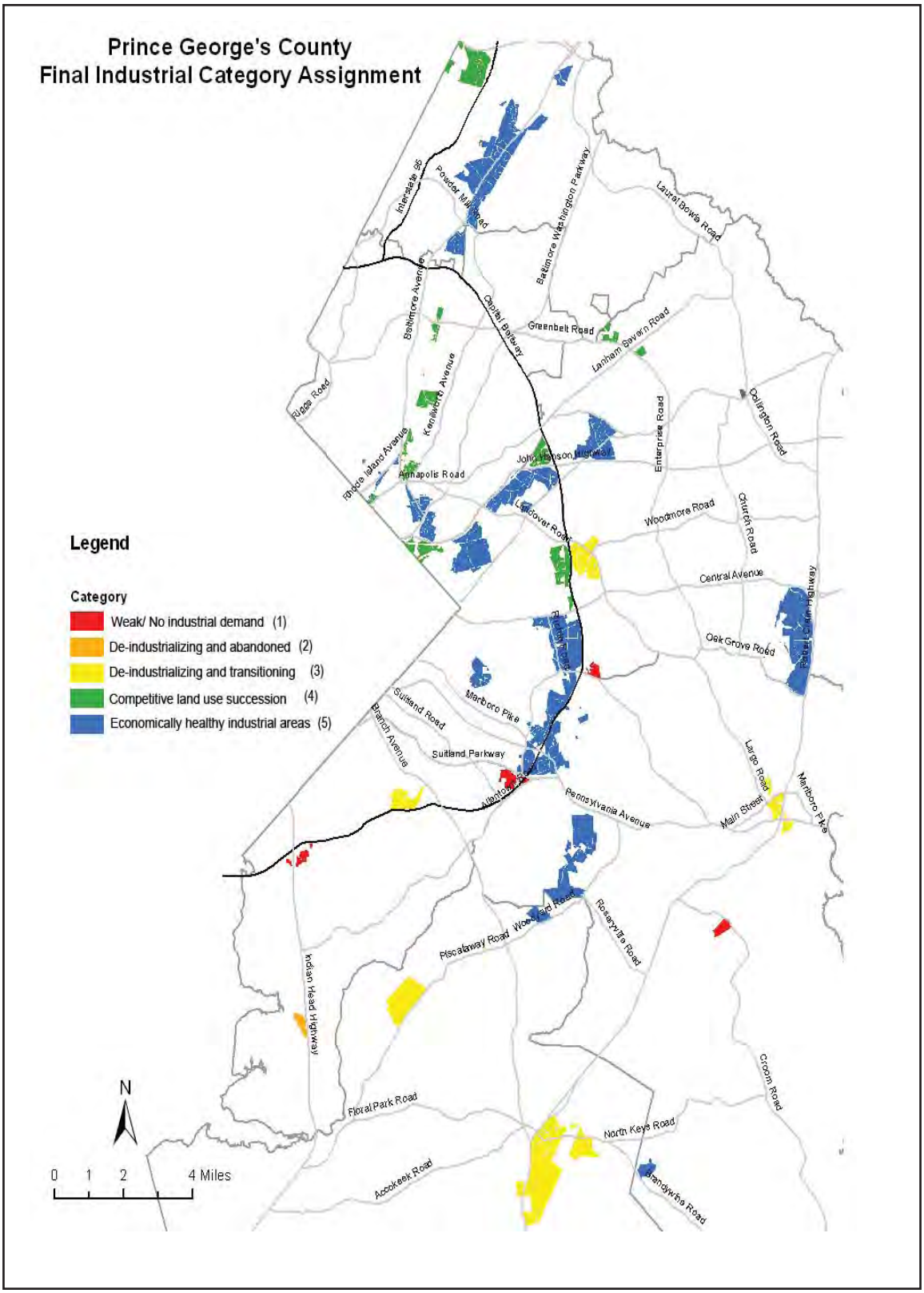
Table 4-3. Categories of Industrial Health for 35 Industrially Zoned Areas in Prince George's County						
Category Subregion	1	2	3	4	5	Total # of Areas
	Weak/ No Industrial Demand	Deindustrializing & Abandoned	Deindustrializing & Transitioning	Competitive Land Use Succession	Economically Healthy Industrial	
1				1	3	4
2				2	2	4
3	1		1	1	4	7
4				3	6	9
5			1		1	3
6	1		2		2	4
7	2	1	1			4
Total	4	1	4	7	19	35
Condition	Past / Present weak demand	Past industrial demand; present weak demand for all uses	Industrial demand has weakened; other uses competing	Healthy industrial and strong/growing demand from other uses	Healthy industrial demand	
General Recommendation	Consider rezoning as part of next plan update	Address legacy issues (brownfields); consider rezoning as part of next plan update	Consider case-by-case for text amendments; address legacy issues (brownfields); consider rezoning as part of next plan update	Evaluate on case-by-case basis; allow transitions to office/mixed use where appropriate; focus on transportation (transit) and communications infrastructure	Protect industrial uses; maintain/improve infrastructure; encourage industrial development	

Another area that does not lend itself to a clear-cut classification is Walker Mill Industrial Area. This area has a substantial amount of vacant land with rough terrain, which suggests weak industrial demand. However the few trucking and construction businesses in the Walker Mill Industrial area appear to be economically healthy. See Map 4-2. Ultimately this area was placed into Category 5 but with mixed opinions among its members.

The mixed assessment of Walker Mill as a future industrial area is consistent with the M-NCPPC (2009b) Subregion 4 Comprehensive Master Plan. The plan recognizes the "difficulty of redeveloping the site for other uses, but the market analysis indicates that this site is not ideal for future industrial development and projects that only marginal industrial uses would locate there, ultimately to the detriment of the surrounding community. It is recommended that the majority of the properties north of Rochell Drive that front on Addison and Walker Mill Roads to M-U-I be rezoned to meet available commercial demand in the area and, hopefully, improve the overall physical appearance of the area. The Subregion 4 plan also recommends a future study at the site to explore redevelopment potential and funding sources to rehabilitate portions of the site for future use. Traditional industrial uses are believed to be inappropriate for this area." There is, however, no strong basis for disagreement with the conclusion of this Subregion 4, Master Plan (2009b).

The numbers in Table 4-3, along with Map 4-3, reflect the latest updates (as of March 2009) to the map of industrial land developed during this study. The updates include putting Brentwood area to Category 5 and leaving the Walker Mill site in Category 5.

The Ft. Washington-Livingston site was also not clear-cut. Although industrial/flex demand appears weak, there appears to be a successful commercial, retail area. While it is placed in Category 2, it could also probably fall into Category 3. In either case, it is an area ready for rezoning out of "I."



Map 4-3. Location of Industrial Land Categories in Prince George's County

Source: M-NCPPC GIS data, 2007 and Appendix 6

Recommendations for Industrial Sites and the Impact on County Employment

In general, the study recommends that the county release the sites categorized as Category 1, 2, and 3 and retain the Category 5 areas for industrial use. The Category 4 sites require more challenging solutions, which are addressed in more detail in Chapters 6 and 7 of this report.

Using the QCEW 4th Quarter 2007 data and Prince George's County GIS data, the number of workers and acreage in each industrial area were counted, and then, the totals were computed by categories 1 through 5. See Table 4-4. If Category 1, 2, and 3 areas were rezoned out of "I" zones, the county would lose an estimated 3,050 acres of industrially zoned land and approximately 1,600 PDR workers, or about 3.6 percent of the county's workers in industrially zoned land and 1.7 percent of total county employment. These first three categories of industrial use areas are located in 24.7 percent of the county's industrially zoned land, yet have only 3.6 percent of the county's PDR employment on industrially zoned land. (See Table 4-4.) Thus, it is concluded that rezoning these Category 1, 2, and 3 sites out of industrial use would have minimal impact on the county tax and employment base.

The QCEW is a confidential database that was obtained through the University of Maryland's National Center for Smart Growth Research and Education. It provides employment totals for each month of the last quarter of 2007, street addresses and x-y coordinates, and NAICS for establishments. The advantage of these data is that employment and number of establishments at the subcounty level can be counted in geographical areas that the study designates. The disadvantage is that, when the total number of employees in a NAICS code category at any geographical level is small enough to identify specific firms, the results cannot be reported publicly, due to confidentiality protections for individual establishments. Upon working with the establishment level data, the study found that some addresses were not correct (i.e., reported as a Maryland establishment but with an address out of state); some x,y coordinates were not correct (i.e., the establishment's x,y location coordinates put the establishment in the middle of a highway); and some addresses were missing.

The Category 4 sites comprised 1,407 acres and, as stated above, present more complex cases. These are cases where: (1) there are healthy PDR activities that require protection (e.g., Bladensburg); (2) there are areas that have transitioned out of industry and require zoning and planning that better reflects the current uses (e.g., New Carrollton); or (3) there are areas that provide opportunities for the county to transition into high-technology and nationally and inter-

nationally competitive sites of production (specifically, I-95 Corporate Park and the Goddard Industrial Area). About 13.2 percent of total employment on industrially zoned land and nearly 8 percent of total county PDR employment is located on Category 4 parcels. (See Table 4-4.)

A total of 7,374 industrially zoned acres can be characterized as economically healthy Category 5 areas. See Table 4-4. These areas are home to 79.8 percent of the county's PDR employment on industrial land, nearly 47 percent of the county's total PDR jobs, and 16 percent of total county employment. Therefore, these areas should be retained and protected if they become threatened by encroachment.

In summary, the QCEW data indicate that if the county let Category 1, 2, and 3 areas transition out of PDR activities, approximately 2 percent of the county's PDR jobs would be affected and 98 percent of the PDR jobs would remain unchanged. A review of Map 4-3 indicates that many of the Category 1, 2, and 3 areas are more remote and distant from major transportation routes.

Table 4-4. PDR Employment and Acreage by Category

	PDR Employment QCEW, 2009		Acreage M-NCPPC GIS Data, 2007	
Category	Employment	Percent	Acres	Percent
1	1	0	335	2.7**
2	26	0.1	76	0.6**
3	1,513	3.5	2,639	21.4**
4	5,761	13.2	1,382	11.2**
5	34,793	79.8	7,374	59.8**
Other	1,514	3.5	518	4.2**
Total	43,608	58.3*	12,349	100.0**
County Total	74,841	100*	220,518	5.6
Categories 1, 2, and 3	1,540	2.1*	3,050	

Source: QCEW 4th Quarter 2007, Bureau of Labor Statistics and GIS database
* = percent of the county PDR job total
** = percent of industrially zoned acreage

It is important to note that, if the county let the Categories 1, 2, and 3 be rezoned, there will be a total 3,050-acres loss in industrial land area. This number is very close to the study's estimated surplus of industrial land (from 2,640 to 4,013 acres)[23] reported in Chapter 3 herein,

[23] This larger number includes the 1,373.1 acres where the land is zoned industrial, but the businesses on the land are taxed as nonindustrial. These 1,373.1 acres could be rezoned out of an "I" use without negatively impacting the

using the county's formula of retaining in reserve three times the acreage that will be needed for the next ten years. The next critical step after these findings is to determine where this excess industrially zoned land is located.

Industrial Land Users by Industry

The QCEW (4th Quarter 2007), is used to provide a more detailed picture of which industries are industrial land users in the county. (See Table 4-5.) Column II of Table 4-5 shows, for each NAICS category, the total employment in the industrially zoned areas of the county. Column III and IV report the share of that employment that is located in Categories 4 and 5. The last column shows the percentage of total county employment located in the industrially zoned areas of Prince George's County. For example, 73.2 percent of utilities employment is located on industrially zoned sites, with 100 percent of that on Category 5 land. In contrast, only 25.5 percent of jobs in personal and laundry services industry is located inside industrially zoned areas, of which 34.9 percent is on Category 5 land and 64.8 percent on Category 4 land.

A number of conclusions can be drawn from Table 4-5. First, not all PDR sectors are present in the county. For example, there is no county employment in leather and allied product manufacturing. Second, most PDR activities take place on Category 5 industrially zoned land. Exceptions are electrical equipment, appliance and component manufacturing, transportation equipment manufacturing, publishing industries (except internet), internet service providers, web search portals, and data processing services and personal laundry services. These businesses are more likely to be located in Category 4 areas. Third, some activities had a low percentage of their employment in industrially zoned areas. Examples include construction of buildings (34.2 percent), repair and maintenance (36.6 percent), nonmetallic mineral products (18.1 percent), plastics and rubber products (20.7 percent), and publishing (17 percent). Fourth, and not surprisingly, heavier industrial activities including transportation equipment (99.7 percent), chemicals (92.5 percent), paper (94.6 percent), primary metal (100 percent), furniture and related products (87.9 percent), and beverage and tobacco products (95.6 percent) are concentrated in industrially zoned areas.

industrial sector.

Table 4-5. Employment by Industrial Category and NAICS Classification				
I	II	III	IV	V
NAICS Category	Total Employment in Industrial Areas	Percent of Employment in Category 5 Areas	Percent of Employment in Category 4 Areas	Percent of County Employment in the Same Sector
Utilities	501	100.0		73.2%
Construction of Buildings	1,410	82.1	2.3	34.2
Heavy and Civil Engineering Construction	1,290	85.7	12.5	53.4
Specialty Trade Contractors1	16,512	85.1	9.9	67.0
Food Manufacturing	690	99.1	0.0	79.6
Beverage and Tobacco Product Manufacturing	632	96.8		95.6
Textile Mills	20-99	92.9		
Textile Product Mills2	72	100.0		42.9
Apparel Manufacturing	0-20	100.0	0.0	
Leather and Allied Product Manufacturing	0	0	0	0
Wood Product Manufacturing	114	98.2	1.8	75.2
Paper Manufacturing	20-99	96.3	3.7	
Printing and Related Support Activities*	1,737	82.3	12.5	74.1
Petroleum and Coal Products Manufacturing	0-19	0.0	0.0	
Chemical Manufacturing	192	95.8	0.0	92.5
Plastics and Rubber Products Manufacturing*	20-99	100.0	0.0	
Nonmetallic Mineral Product Manufacturing	40	55.0		18.1
Primary Metal Manufacturing	0-19	100.0	0.0	
Fabricated Metal Product Manufacturing	651	69.7	26.9	66.5
Machinery Manufacturing	46	76.1	0.0	84.1
Computer and Electronic Product Manufacturing*	854	99.4	0.0	44.2
Electrical Equipment, Appliance, and Component Manufacturing	21	0.0		78.8
Transportation Equipment Manufacturing	500-999	0.1		99.7
Furniture and Related Product Manufacturing	396	98.7	0.8	87.9
Miscellaneous Manufacturing*	277	79.8	14.4	72.4
Merchant Wholesalers, Durable Goods1	4,190	76.3	16.2	64.8
Merchant Wholesalers, Nondurable Goods	3,095	95.1	2.6	77.2
Wholesale Electronic Markets and Agents and Brokers	377	69.0	5.0	58.5
Building Material and Garden Equipment and Supplies Dealers	1,109	78.8	4.4	29.2
Air Transportation	0	0.0	0.0	0.0
Water Transportation	0	0.0	0.0	0.0
Truck Transportation	1,128	77.6	16.1	66.2
Transit and Ground Passenger Transportation	451	94.0	0.0	69.2
Pipeline Transportation	6	0.0	0.0	60.0

Scenic and Sightseeing Transportation	46	84.8	0.0	95.8
Support Activities for Transportation*, 2	553	22.6	0.5	69.3
Postal Service	0-20	100.0	0.0	37.5
Couriers and Messengers	552	57.8		65.6
Warehousing and Storage*, 2	1,006	96.5		45.1
Publishing Industries (except internet)	137	40.9	55.5	17.0
Telecommunications	703	87.5		39.6
Internet Service Providers, Web Search Portals, and Data Processing Services	500-599	18.7		59.8
Waste Management and Remediation Services	1,180	66.7	15.5	80.7
Repair and Maintenance	1,142	70.3	13.9	36.6
Personal and Laundry Services	1,084	34.9	64.8	25.5

Source: QCEW (2007), Bureau of Labor Statistics

Note: *Industries gaining competitive advantage (1990-2005); 1Industries in county's top ten employers (2005); 2 Industries with highest growth (1990-2005).

A number of PDR activities are located only in Category 5 industrial areas, including textile product mills, apparel manufacturing, plastics and rubber product manufacturing, primary metal manufacturing, and computer and electronic product manufacturing. The fact that these are some of the industries with highest growth rate over the 1990-2005 again highlights the importance of industrial activities to the county's economic future. Appendix 2 reports the share of county employment found in the Category 5 industrially zoned areas. Appendix 3 (Figures 3-1, 3-2, and 3-3) present the locations of certain important industrial sectors in the county, including Printing and Related Services, Computer and Electronics, and Telecommunications. The first two sectors were shown to gain competitive advantage during the period of 1990-2005 (Cohen et al. 2007). Telecommunications is the newly added PDR sector that has the largest employment share located in industrial areas.

Strategies for PDR Land of Category 1, 2, and 3

Strategies for Category 1 PDR Land

Category 1 PDR lands have historically weak or nonexistent market demand from PDR uses. As reported in Table 4-4 above, there are 335 acres of Category 1 PDR land, with one industrial area in Subregion 3, one in Subregion 6, and two in Subregion 7. Future PDR demand in these areas seems highly unlikely based on their location and transportation access characteristics. These areas are low priority for planning action. They may be considered for rezoning during the next regular plan update or rezoned when private sector requests arise.

Strategies for Category 2 PDR Land

There is only one Category 2 area in the county, comprised of 76 acres located in the vicinity of Livingston and Ft. Washington in Subregion 7. This was a site that did not fall neatly into any category and, upon further study, should probably be placed into Category 3. According to the CoStar data, there is little industrial activity here, but it is not abandoned. Commercial uses and a hospital were confirmed during site visits. This area may be considered for rezoning to match current uses during the next regular plan update.

Strategies for Category 3 PDR Land

There is a total of 2,170 acres of Category 3 PDR land in four areas, located in Subregions 3, 5, 6, and 7. Category 3 lands are characterized as deindustrializing and transitioning. This means that, at least, some of the former industrial uses have left, and some of the available space is being converted to other uses. Demand for available space among PDR uses is weak and appears likely to remain so. Category 3 areas are high priority for planning action, due to their transitional nature and succession of land uses. Planning strategies for Category 3 land will be highly dependent on local conditions but will most likely involve a range of community and economic development interventions to facilitate a smooth and coherent transition. They are often brownfield redevelopment sites. Recommended strategies include the following.

- Engage community and economic development stakeholders and intermediaries early in the planning process.
- Identify within the industrially zoned area, any healthy PDR uses that are likely to remain; identify any PDR uses that could use the space effectively (i.e., governmental uses).
- Initiate the planning process to revise the sector plans, protecting PDR land where appropriate and rezoning for other uses as necessary. Encourage a mix of uses and include housing for a mix of incomes.
- Identify areas where public/private partnerships are likely to be necessary in order to achieve the desired outcome. Prepare redevelopment area plans for these areas. Engage the county redevelopment authority as necessary to facilitate such development.

- Identify and seek available funding to facilitate redevelopment planning and implementation activities, including federal brownfield assessment and cleanup funds (EPA) and economic development planning and infrastructure funds Economic Development Administration.

Category 3 lands represent the county's best opportunity for economic development with the least amount of conflict between land uses. They also represent the county's best opportunity for active involvement in shaping the form and vitality of its communities through incentives, regulation, and redevelopment activities.

Although Category 3 areas offer significant redevelopment opportunities, those areas are also at risk for rapid decline, if planning and economic development assistance is not forthcoming. This could push more land into Category 2 (abandoned) and lead to community instability, loss of businesses and residents, and concentration of poverty, requiring substantial public resources both to maintain the area and to redevelop it. Failing to address Category 3 areas may also cause increasing pressure in Category 4 areas, because Category 4 areas would then be considered comparably more stable.

Recommendations for Category 4 and 5 Industrial Land are discussed in detail in Chapters 5 and 6.

Summary

The appropriate reserve of industrial land for the county was estimated. The study shows that, using the county's own formula of maintaining a 3:1 ratio of surplus land to accommodate projected growth over the next ten years, the county could safely release between 2,640 and 4,013 acres out of industrial use. This chapter identified where this excess land is located. Not surprisingly, most of the land with weak industrial demand is in the remote areas of the county, away from the major transportation networks. Summing acreage with little evidence of current market demand for industrial uses, it is concluded that a total of 3,050 acres could be released to alternative uses without jeopardizing the economic health of the county. Analysis of the 2007 QCEW data at the establishment level further indicates that, if the Category 1, 2, and 3 areas transition out of PDR activities, about 2.0 percent of county jobs in PDR industries would be affected. In the next chapter, recommendations for Category 5 lands are explored in greater detail.

Chapter 5: Strategies for Preserving Industrial Land

Based on the foregoing analysis, it is proposed that healthy industrial areas—Category 5—and several of the Category 4 industrial areas faced with encroachment (i.e., Bladensburg and Kenilworth) should be retained and supported. The following strategies are proposed for supporting healthy industrial areas.

Definition, Education, and Public Relations

Because the words "industry" or "industrial" often conjure up images of activities such as chemical plants and toxic waste, citizens sometimes have strong and often negative reactions to them. The first strategy is to reframe the discussion using terms that do not evoke prejudicial responses and educate citizens and elected officials about what really happens on industrially zoned land, why it is important, and why, at least, some of it needs to be preserved.

San Francisco and other Bay Area communities have been at the forefront of the industrial preservation movement among major United States cities. Those communities coined the phrase PDR to both lessen the negative connotation of "industrial" and to begin the education process. They have since defined PDR precisely using a set of NAICS codes. Washington, D.C. adopted this approach in their study and used it very effectively, modifying the definitions somewhat to fit existing unique circumstances. San Jose took a similar approach (Rabinovitz & Alschuler, 2004; Elmer, Vicki Elmer, Abigail Thorne-Lyman, and Dena Belzer, 2006). The San Jose plan refers to "employment lands," which include both industrially and commercially zoned land. Boston developed the "Backstreets" program to reframe the discussion and show why the protection of typically small support industry businesses located off the main retail and commercial streets were vital to the functioning of the city (Boston Redevelopment, 2001; Perez, Y., J. Avault, et al., 2002). The common thread among all of these is that "industrial" is redefined in more friendly terms and demonstrates how old economy businesses are vital to the functioning of new economy cities, thus invoking self-interest among constituents and establishing the basis for protection.

Connect with PDR Business Owners

Many cities have built a solid constituency among PDR business owners, enlisting their support in protection efforts. In the face of political pressure to rezone, existing business owners have an important voice and can provide politicians with the political cover needed to protect

industrial land. Many cities have conducted extensive surveys of PDR business owners. Seattle's survey is among the best. Boston's Backstreets program takes this concept much further by establishing a specific entity to organize and support such businesses. Pressure to rezone comes from developers in response to actual or anticipated market demand for other types of space—mainly commercial and residential. Such pressure comes with visually appealing architectural renderings and a strong "new economy" vibe. Without a solid constituency and strong rationale, industrial preservation can appear backward looking and out of touch, and this can be politically problematic.

Understand the Features of Industrial Districts and Preserve Strategically

Acceptance of the fact that some conversion from industrial to other uses is appropriate is another common thread throughout all of the studies. Deciding which areas need to be protected and which can be allowed to convert requires a clear understanding of what is important to stable PDR districts. San Francisco again leads the way in identifying the features that are important to stable industrial districts. Key among these are low rents, business-to-business linkages, transportation infrastructure, and compatibility with the surrounding neighborhood. In addition, San Francisco takes a very fine-grained approach to physical compatibility through its industrial design guidelines, matching building types and context for industrial, commercial, and residential uses. Chicago has been successful in the creation of Planned Manufacturing Districts and Industrial Corridors. Defining industrial preservation districts has an important impact on rent levels. If the prospect of rezoning industrial land is good, its speculative value will increase, thereby increasing rent levels that are critical to industrial stability.

Develop Clear Criteria for Rezoning

Developers are a fairly practical lot. Ask them what they want from plans and planners, and their first response is likely to be "clarity." They typically do not spend a lot of time pursuing projects they do not think have a chance of succeeding. Recent history in most of the major cities has convinced some developers that the prospects for rezoning industrial land are often favorable, and they exploit the lack of published criteria and rezoning precedent to make their case. Publishing clear criteria for rezoning makes it clear to everyone which industrial lands are off the table and which parcels or areas may be rezoned and under what conditions. Such criteria establish a clear. regulatory framework that protects public interests and improves the efficiency

of the land market.[24] San Jose has led the way in terms of developing conversion criteria and many other cities have followed, adopting criteria of their own, often modified from the San Jose document.

San Jose's criteria recognize that every situation is different, and therefore, its document establishes a framework for decision-making. The expressed purpose of the document is as follows:

The framework should be used as a guideline to evaluate proposed conversions of employment lands to other uses. The intent of the framework is to create more certainty and predictability in the review of employment land conversion proposals, while retaining flexibility to respond to changing conditions, information, and policy considerations.

The plan identifies three "elements" of the framework, which are in many ways similar to the "types" of industrial areas (1 through 5) identified for Prince George's County. The elements of the framework may also be considered the context in which various criteria are evaluated. The framework then considers roughly a dozen criteria under two scenarios: (1) conversion to residential or mixed use; and (2) conversion to commercial or other household serving industries. Finally, the document establishes guidelines for the application of the framework.

Santa Clara, California took a slightly different approach, developing a scoring instrument that evaluates each site proposed for rezoning using 20 criteria in five categories: General Plan and Zoning Compatibility, Residential Attributes, Environmental Compatibility, Availability of Services, and Other Planning Considerations (Santa Clara Planning, 2004). The scoring instrument is used to evaluate the site's suitability for conversion as part of the overall decision process, not as a definitive threshold for rezoning. The following statement is at the top of the document:

The following evaluation is designed to address findings of suitability for the conversion of property from industrial/commercial use to a residential use for an area or specific site. While individual responses may vary, the assignment of a ranking to each of the criteria provides a

[24] The consultants note that the Prince George's County Planning Department is currently completing a comprehensive review of its zoning and subdivision regulations and is drafting several amendments intended to better position the county, from a regulatory perspective, to attract and create employment centers. Although the researchers have not reviewed the proposed amendments, it encourages such activity consistent with the recommendations herein.

measurable and comparable analysis of the given area/site. Subtotals for each of the five categories below allow for weighting of criteria where some subjective factoring may be arguably crucial to evaluation of a site. A higher total score in the ranking, more than 50 points of a possible 80, generally means the area/site is a positive candidate for conversion. Comments and supporting information may be attached. The results of this evaluation should then be considered along with any required, thorough fiscal/economic evaluation of the proposed land use change.

This instrument allows developers to perform a quick self-evaluation when considering a site and will quickly steer them away from prime PDR areas where they know they will be fighting an uphill battle. This improves clarity and efficiency for the developer, while allowing public officials an appropriate level of oversight and decision-making.

Establish Explicitly Protected PDR Districts

Prince George's County has a significant advantage over many of the jurisdictions that are grappling with industrial preservation in the structure of its zoning ordinance. Most of the jurisdictions that have published industrial land use studies have hierarchical zoning, where uses are classified in a hierarchy with single-family housing at the top and industrial at the bottom. "Higher" uses are permitted in their own zones and in any "lower" zone, so there is no protection in industrial areas from encroachment by other uses. This is not the case in Prince George's County, where uses are established exclusively for each zone. So, as a practical matter, most industrial land in Prince George's County is protected from encroachment through the zoning ordinance. Still, there may be public relations and economic development value in establishing certain overlay districts where PDR uses are not only protected but also promoted. This may also help in targeting certain incentive programs that require geographic definition, which usually include the word "zone" or "district" in their titles.

Chicago has used this approach successfully in creating industrial corridors and targeted manufacturing zones. Regardless of the underlying zoning, such designation sends a clear signal to developers about the city's intent for these areas and goes a long way in shaping public opinion concerning their future uses. It also sends a clear message to existing and potential firms that the city is attentive to their needs and is taking steps to meet them.

While the Backstreets program in Boston is not exclusively a "district" program, it nonetheless identifies certain districts and targets attention, technical assistance, and financial support in those areas.

Target Protected PDR Districts for Infrastructure Improvements and Incentive Programs

Maintenance has become a dirty word in contemporary politics, but for most businesses in healthy industrial districts, this is what they want most from government. Catastrophic infrastructure failures in the past decade, such as the levees in New Orleans or the bridge collapse in Minneapolis, may change the political dynamic as more voters and politicians recognize that, while maintenance lacks glamour, it has real value in protecting lives, investment, and jobs. Infrastructure maintenance issues are huge throughout the United States, and aside from increasing the overall budget for maintenance, municipalities are faced primarily with the task of allocating scarce resources effectively. Inasmuch as the net fiscal benefits derived from PDR lands in terms of tax revenue and job creation are proportionately higher than other uses for most municipalities, it makes sense to prioritize these areas for infrastructure improvements and capital reinvestment incentives to ensure their continued health and financial contribution. From an economic development perspective, retention and expansion of existing businesses is easier, more certain, and less expensive than chasing new plants with big incentives.

Chicago and Boston are again the cities that have been most deliberate in linking planning and economic development in targeted PDR areas. Chicago is using Tax Increment Financing (TIF) extensively in these areas to finance infrastructure improvements. TIF pledges the increase in future tax revenue (the "tax increment"), due to new private sector capital improvements, to securitize municipal bonds that pay for infrastructure and public improvements within the district. During the term of the bond, the municipality continues to receive the tax revenue it received before the improvements. Once the bond is retired, the municipality receives the full amount of tax revenue.

Summary

The areas that have been identified as Category 5 areas should be retained in "I" zones. This chapter outlined "best practice" strategies used by other jurisdictions for preserving and protecting industrial areas. These strategies include such initiatives as informing the public about

the role industrial areas play in healthy economies, investing in infrastructure in industrial areas, creating networks of communication with business owners, and mitigating conflict where industry and residential uses collide.

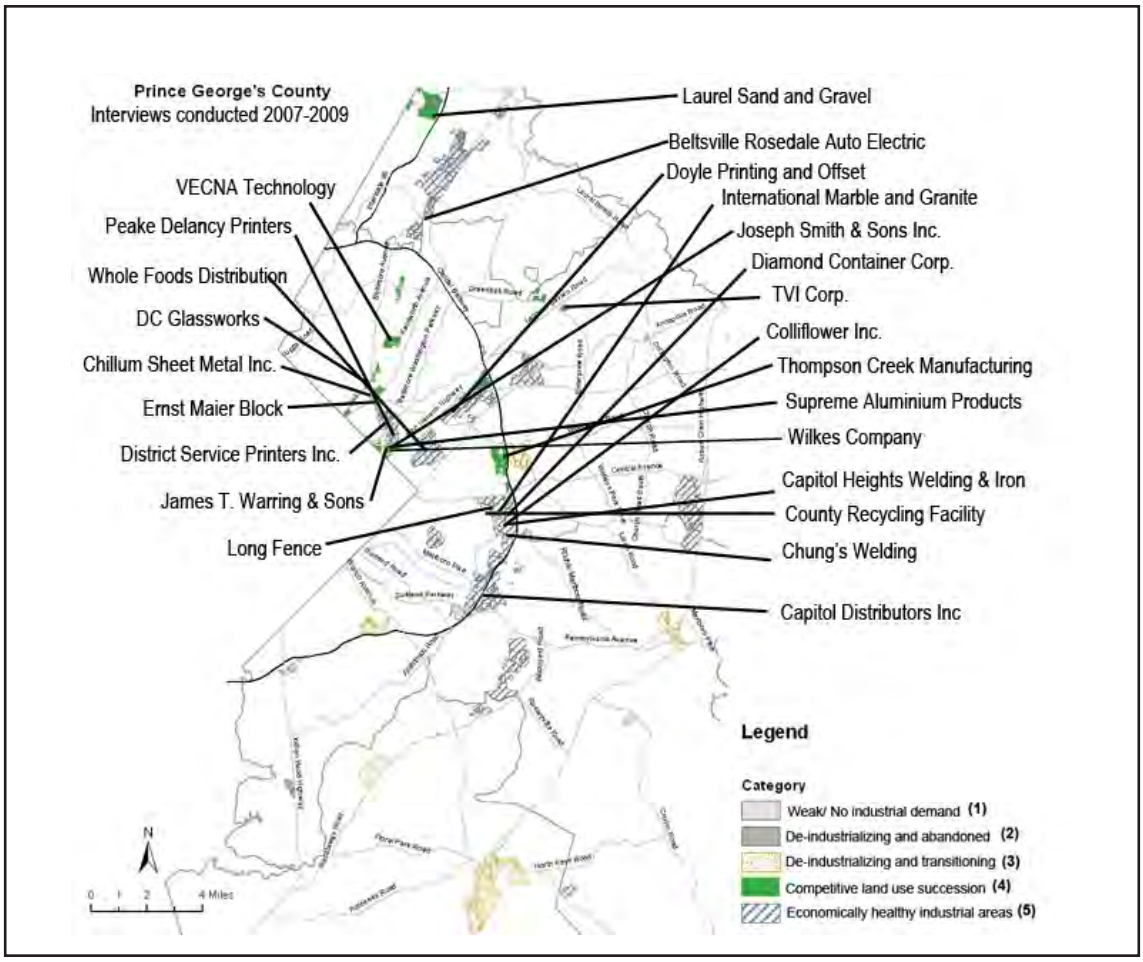
Chapter 6: Maintaining Healthy Category 5 Industrial Areas — Results of Analysis and Interviews

QCEW was analyzed to identify which PDR activities, as defined by North American Industry Classification System (NAICS) codes, generated the most employment within Prince George's County in the 4th Quarter of 2007. For each NAICS code class, the numbers of PDR firms and jobs located in Category 5 areas (healthy industrial areas with no competition or conflict with other uses) were determined. There were also interviews with managers and owners of several of the Category 5 area firms.

One of the interesting conclusions from the analysis is that, even when firms are classified in a NAICS code other than construction, many of them are closely associated with construction—the strongest of the county's industries. For example, a textile firm makes awnings for buildings; a warehousing firm sells carpeting to builders.

The analysis and interviews reveal that, for a great number of these Category 5 area firms, the main attraction to Prince George's County is easy access to markets, including final consumers, other producers, and the federal government. For example, two printing firms in Category 5 areas (both union shops) indicated that being located so close to the nation's capital provides a large market. One printer's major clients are the national offices of unions and associations located in Washington, D.C. A large electronic product manufacturing firm supplies products to NASA. Similarly, the manager of a large supermarket food distribution firm described how the national company used sophisticated, logistical software to calculate optimal siting of distribution facilities based on location and product volume of its stores in the mid-Atlantic region.

The presence of I-95's proximity (midway on the Atlantic seaboard) to a strong regional market, access to the nation's capital, and access to federal government facilities, all contribute to and explain the regional strength of warehousing, construction, and transportation employment in the county. The interviews revealed that business owners were generally satisfied with the county's services to these traditional industrial activities. The names and locations of firms included in the on-site and phone interviews are shown in Map 6-1. This figure also displays which of the firms included in the interviews are located in Category 4 industrial areas.



Map 6-1. Location of Businesses Interviewed

Source: M-NCPPC GIS data, 2007

PDR Employment in Healthy Industrial Areas

Healthy industrial areas are characterized by low industrial building vacancy rates, high average rents, and a high proportion of industrial buildings. Those areas face little or no pressure from other uses, indicating the presence of high demand for industrial land.

Table 6-1 shows PDR employment in Category 5 areas by sector. The table shows that PDR firms in Category 5 areas employ 34,793 workers or 46.5 percent of total county PDR employment and 16 percent of total county employment. The third and fourth columns of the table show employment and the share of the county's employment in each NAICS category located in Category 5 industrial areas. The last column shows the percentage of county jobs in each NAICS class that is located on industrially zoned land (across all industrial area categories). For example, Food Manufacturing has 684 workers in healthy industrial areas, accounting for 79 percent

of total county employment in that NAICS class. The last column shows that 99 percent of total employment in Food Manufacturing is located in the county's industrially zoned areas.

Among large industrial employers in Category 5 areas are Specialty Trade Contractors, an NAICS class that accounts for approximately 40 percent of total PDR employment in Category 5 areas. The table shows that 57 percent of the county's Specialty Trade Contractors jobs are located in Category 5 areas. The two sectors, printing and related support activities and computer and electronic product manufacturing, emerge as significant manufacturing employers that together hire 6.5 percent of total PDR employment in category 5 industrial areas. Table 6-1 also shows that a high proportion of the jobs in printing and related support activities (61 percent) and computer and electronic manufacturing (44 percent) are located in Category 5 areas.

The last column of Table 6-1 also shows that, as would be expected, very high proportions of PDR activities are located on industrially zoned land in the county. Only the service-oriented PDR activities (e.g., personal and laundry services) and those without trucking and/or heavier production/supply activities (e.g., internet service providers) have low proportions of their employment located on industrially zoned land.

The data in Table 6-1 are from the Quarterly Census of Employment and Manufacturing, 4th Quarter (2007) data. As explained in Chapter 4, to prevent risk of exposing firms' identities, the results cannot be reported in categories with small numbers of firms. In analyzing the establishment level data, it was found that some addresses were not correct (i.e., reported as a Maryland establishment but with an address out of state); that some x,y coordinates were not correct (i.e., the establishment's x,y location coordinates put the establishment in the middle of a highway); and that some addresses were missing.

Table 6-1. PDR Employment in Healthy (Category 5) Industrial Area

NAICS Class	Industry	Employment in Category 5 Areas	% of NAICS Class Jobs Located in Category 5 Areas	% of NAICS Class Jobs Located on Industrially Zoned Land
221	Utilities	501	73.2	100
236	Construction of Buildings	1,158	28.1	82
237	Heavy and Civil Engineering Construction	1105	45.7	86
238	Specialty Trade Contractors	1,4045	57.0	85
311	Food Manufacturing	684	78.9	99
312	Beverage and Tobacco Product Manufacturing	612	92.5	97

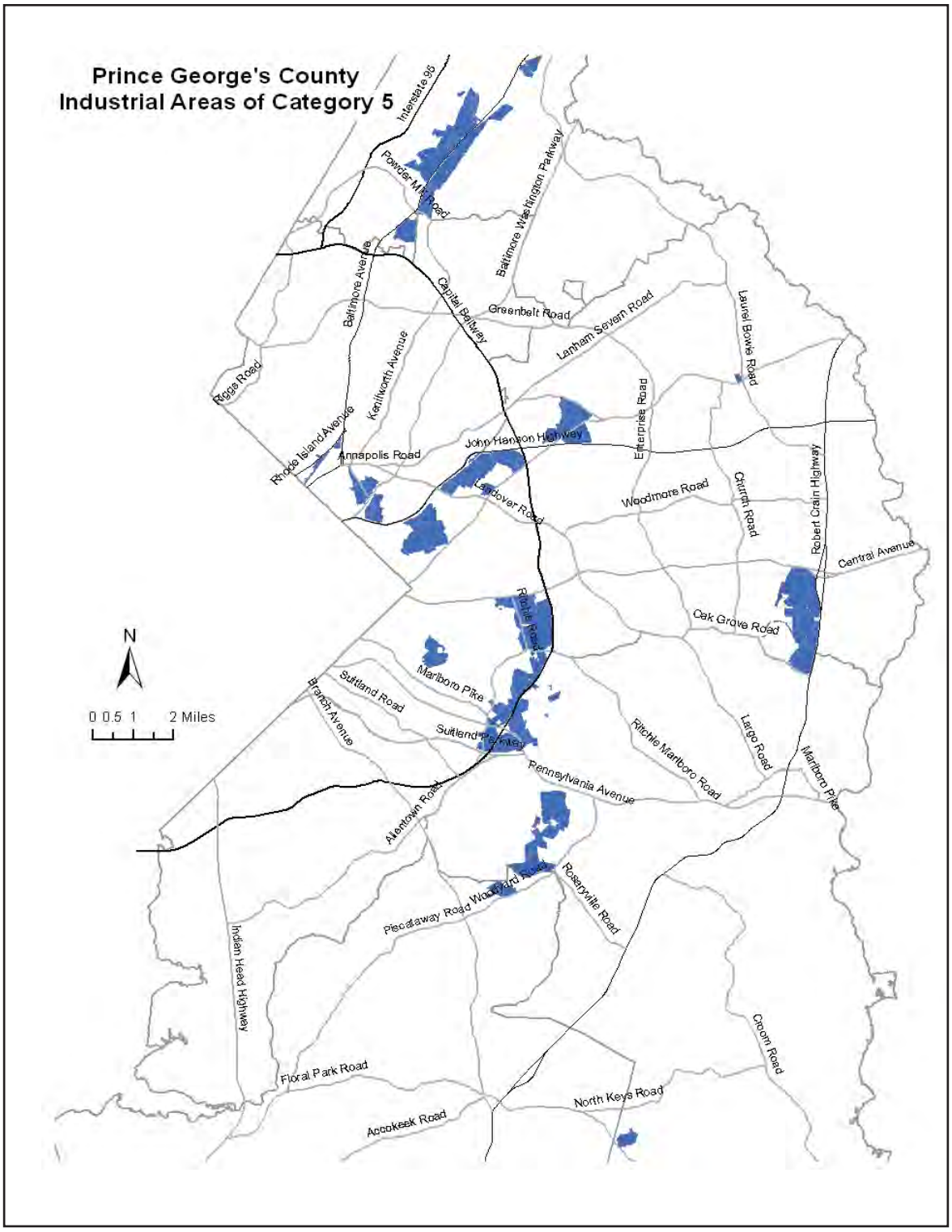
313	Textile Mills	20-99		
314	Textile Product Mills	72	42.9	100
315	Apparel Manufacturing	0-19		
321	Wood Product Manufacturing	112	73.8	98
322	Paper Manufacturing	20-99		
323	Printing and Related Support Activities	1,429	61.0	82
325	Chemical Manufacturing	184	88.6	96
326	Plastics and Rubber Products Manufacturing	20-99		
327	Nonmetallic Mineral Product Manufacturing	22	10.0	55
331	Primary Metal Manufacturing	0-19		
332	Fabricated Metal Product Manufacturing	454	46.4	70
333	Machinery Manufacturing	35	64.0	76
334	Computer and Electronic Product Manufacturing	849	43.9	99
336	Transportation Equipment Manufacturing	0-19		
337	Furniture and Related Product Manufacturing	391	86.8	99
339	Miscellaneous Manufacturing	221	57.8	80
423	Merchant Wholesalers, Durable Goods	3,195	49.4	76
424	Merchant Wholesalers, Nondurable Goods	2,944	73.4	95
425	Wholesale Electronic Markets and Agents and Brokers	260	40.4	69
444	Building Material and Garden Equipment and Supplies Dealers	874	23.0	79
484	Truck Transportation	875	51.3	78
485	Transit and Ground Passenger Transportation	4,528	65.1	94
487	Scenic and Sightseeing Transportation	20-99		
488	Support Activities for Transportation	125	15.7	23
491	Postal Service	184	37.5	100
492	Couriers and Messengers	319	37.9	58
493	Warehousing and Storage	996	43.5	97
511	Publishing Industries (except Internet)	56	6.9	41
517	Telecommunications	615	34.6	87
518	Internet Service Providers, Web Search Portals, and Data Processing Services	95	11.2	19
562	Waste Management and Remediation Services	787	53.8	67
811	Repair and Maintenance	1,044	25.7	70
812	Personal and Laundry Services	378	8.9	35
	Total	34,793	46.5	79.8

Source: QCEW 4th Quarter 2007, Bureau of Labor Statistics

As reported in Chapter 4 and illustrated in Table 6-1, a number of PDR sectors, when using industrially zoned land for operations, choose to locate exclusively in Category 5 industrial areas. Those sectors include utilities, textile product mills, apparel, plastics and rubber product

manufacturing, primary metal manufacturing, and especially computer and electronic product manufacturing—one of the industries with the strongest growth during 1990-2005 (See Appendix 6: Research Design, Industrial Land Policy, Current Industrial Sector, and Inventory of Industrial Lands). The healthy industrial areas house heavy warehousing and distribution related activity, as evidenced by the very high numbers and percentage of workers in merchant wholesalers, durable goods (49 percent) and merchant wholesalers, nondurable goods (73 percent) that are located in Category 5 areas. In addition, high proportions of the county's employment in trucking (54 percent) and warehousing and storage (44 percent), are located in Category 5 areas (see Table 6-1). It is apparent that convenient access to major highways of the Washington, D.C. metropolitan area supports those activities.

In contrast to Category 4 areas, areas identified as Category 5 are thriving and facing little or no pressure from other uses. Map 6-2 identifies the locations of those healthy industrial areas. The map shows some interesting patterns in the location of healthy industrial areas, along major arteries, such as I-495, US 1, and near the Andrews Air Force Base. Category 5 areas, such as these, should be preserved and protected for current and future industry.



Map 6-2. Map of Industrial Areas of Category 5

Source: M-NCPPC GIS data, 2007

Chapter 7: Conclusions and Policy Recommendations

The analysis of land uses on industrially zoned land in Prince George's County led to the following conclusions.

1. Some industrial land may be rezoned. Approximately 2,000 to 2,700 acres may reasonably be released from industrial zoning. These sites tend be located in the southern portion of the county away from major transportation hubs. These are sites where there never was demand by industrial users or where the demand has disappeared with the evolving economy.

2. Category 5 industrial land should be protected. About 7,374 acres of industrially zoned land fell into Category 5—economically healthy, industrial areas. These Category 5 areas are home to 34,793 PDR jobs. Evaluation of the characteristics of these jobs (e.g., wage levels, opportunities for workers with relatively low educational attainment; etc.) reinforces the continued importance of PDR jobs to the county. Interviews with firm managers in these areas indicate a general satisfaction with county services and public infrastructure.

3. Category 4 industrial lands require intensive planning attention. Industrial land on another seven sites, totaling an additional 1,382 acres, is classified as Category 4 and exhibits more complicated issues. In New Carrollton, for example, land uses are evolving out of industrial uses to office activities. The county is already undertaking planning efforts to create a greater density of commercial and office uses at this site.

4. Regulatory enforcement and/or urban design may mitigate friction in category 4 areas. On other "Category 4" sites, friction between residential neighbors and PDR activities is evident. As population grows and residential density increases, these issues will become increasingly common. The county needs to enforce environmental laws and ensure industrial enterprises operate in an environmentally responsible manner. Moreover, the county should be prepared to invest in urban design solutions to minimize friction, such as buffering and road rerouting to increase PDR business, resident, and commercial compatibility.

5. Align planning and politics to attract high-technology industries. County officials should rethink what the term "industry" means in 2009 and for the future. How should

Prince George's County use its industrial land to attract its share of the emerging high-technology economy? After extensive interviews, it was concluded that many of the issues holding the county back from capturing its share of high-technology jobs are not primarily zoning or planning issues. Rather, in large part, they involve parochial county and municipal bureaucracies that sometimes stifle private investment with cumbersome and, at times, capricious development review practices. Such practices present high-technology businesses and developers with unacceptable levels of uncertainty, which do not exist in neighboring counties.

The Prince George's County Planning Department recently commissioned a study of biotechnology R&D potential and strategy for the county (Angle Technology Group, 2009). Interestingly, this report selects three county sites for biotechnology research and development centers (BRDC). Independently, and without collaboration, this study of industrial lands recommends two of the same sites; Konterra (I-95 Corporate Park) and M-Square, as ideal areas for high-technology development. The third site recommended in the biotechnology study (2009) is not industrially zoned and, therefore, did not fall into the purview of this study. The Goddard industrial area was identified as an ideal location for high-technology aerospace R&D. Like the Angle study (2009), this research also highlights the county's assets and potential for attracting high technology sectors, including biotechnology and aerospace.

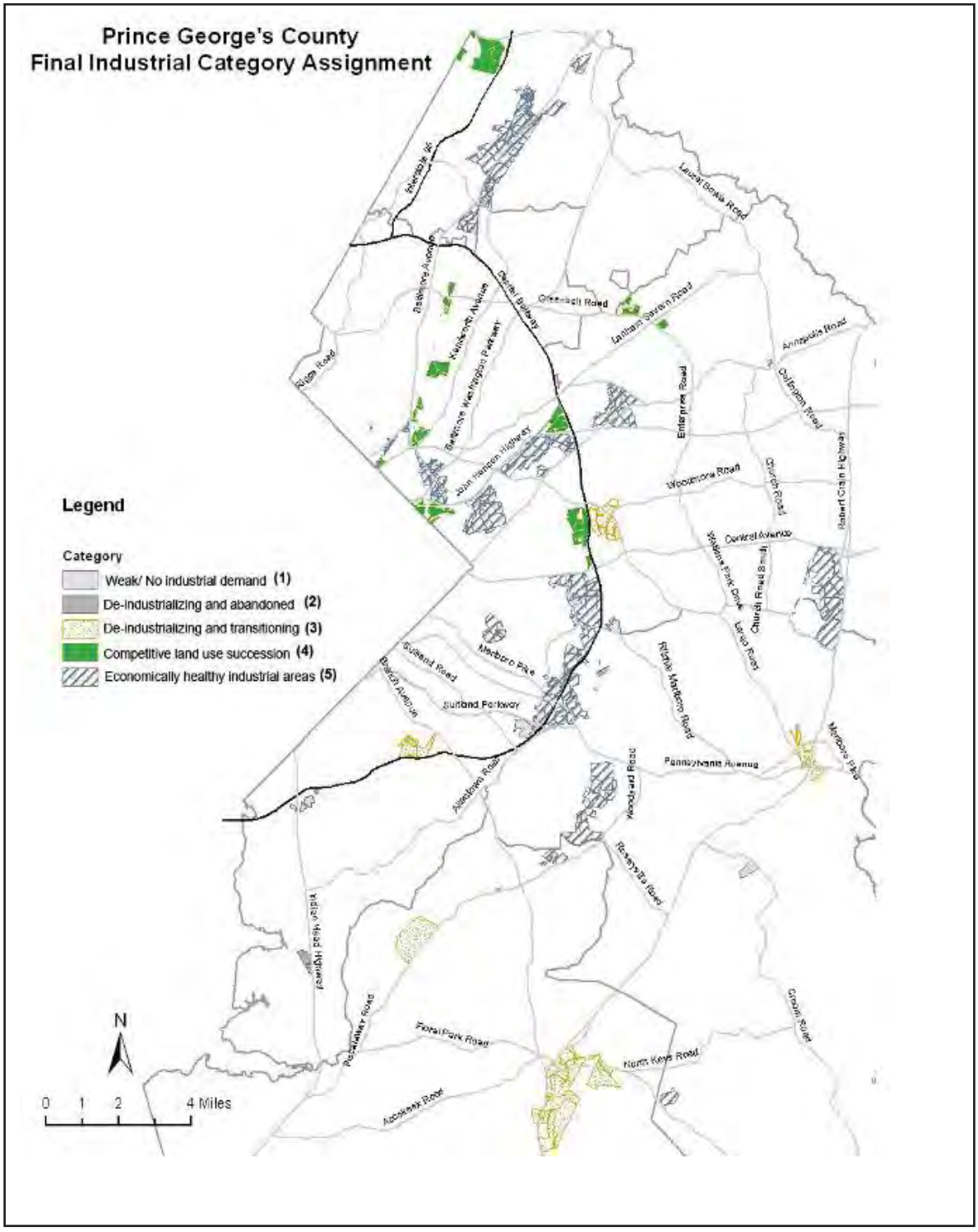
6. Be competitive by coordinating planning, politics, and economic development to create a business-friendly environment. Conclusion 5 is reinforced by the results contained in Appendix 6 and repeated in Chapter 2 herein, where the industrial and flex building markets in the three Washington, D.C. metro counties Prince George's, Fairfax, and Montgomery, are compared. Vacant buildings in Prince George's County remain on the market slightly longer than those in Montgomery County and more than twice as long as those in Fairfax County. Average building sizes and ages are comparable across the counties, and square foot rents are significantly lower in Prince George's County, suggesting that factors other than cost and availability are influencing the location decisions of firms. Thus, it appears that firms are locating industrial operations in both Fairfax and Montgomery counties faster than in Prince George's County and paying a premium in both rent and labor costs to do so. Developer and

realtor interviews suggest that Howard County is also luring business development away from Prince George's County.

These trends are likely to continue until Prince George's County is perceived by developers and businesses to be at least as "business-friendly" as neighboring jurisdictions. Planners can do their part, and there are clear signs that such efforts are underway in the county's planning department. However, planning alone is not sufficient. Strong political leadership and coordinated economic development are also essential for Prince George's County to close the competitiveness gap with its neighboring counties. Creating a business environment that attracts high-technology development and jobs requires more than reducing uncertainty with a predictable review process. There are a host of economic development tools and techniques that the county could use or could use more effectively. These tools and techniques will be essential if the county is to achieve its desired vision. Analyzing these tools and techniques was, however, beyond the scope of this study.

7. Revise zoning and subdivision regulations to create a clear and predictable review process. If the county proceeds to encourage the development of several sites as high technology parks, as recommended in this study, adjustments to zoning categories may be required. For example, many jurisdictions have wrestled with the definition and classification of R&D activities. Depending on the industry, R&D may require anything from basic office space to BSL-4 biological labs. It is noted that the Prince George's County Planning Department is currently completing a comprehensive review of its zoning and subdivision regulations and is drafting several amendments intended to better position the county, from a regulatory perspective, to attract and create employment centers. Although the proposed amendments have not been reviewed, such activity is consistent with the recommendations herein. To assist in this effort, a comparison of the industrial zones' texts in Montgomery and Prince George's Counties has been included in Appendix 5. As shown in the tables, Montgomery has established both a Technology and Business Park zone and a Life Sciences Center (LSC) zone that support high-technology development.

Appendix 1
Location of Industrial Categories



Source: QCEW 2007, Bureau of Labor Statistics and M-NCPPC GIS database

Appendix 2. PDR Employment in Healthy (Category 5*) Industrial Areas

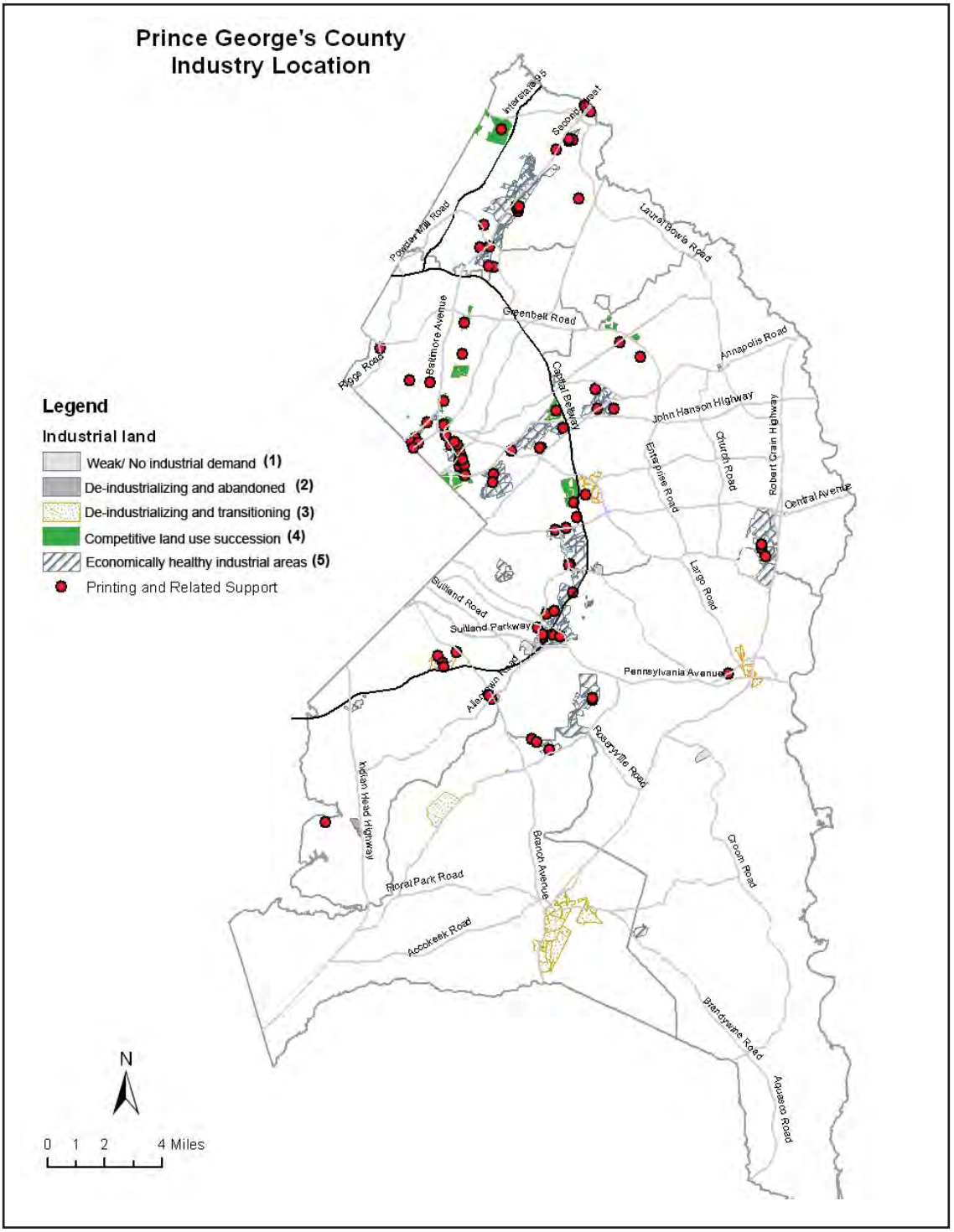
NAICS	Industry	Employment in Category 5 Areas	Establishments in Category 5 Areas	Percent of County Employment in NAICS Class	Percent of County Establishments in NAICS Class
221	Utilities	501	3	71	33
236	Construction of Buildings	1,158	68	26	12
237	Heavy and Civil Engineering Construction	1105	26	45	27
238	Specialty Trade Contractors	1,4045	286	53	24
311	Food Manufacturing	684	9	75	26
312	Beverage and Tobacco Product Manufacturing	612	5	93	71
313	Textile Mills	20-99	2		50
314	Textile Product Mills	72	3	43	33
315	Apparel Manufacturing	0-19	1		33
321	Wood Product Manufacturing	112	3	74	50
322	Paper Manufacturing	20-99	2		50
323	Printing and Related Support Activities	1,429	38	59	38
325	Chemical Manufacturing	184	5	89	45
326	Plastics and Rubber Products Manufacturing	20-99	1		20
327	Nonmetallic Mineral Product Manufacturing	22	3	9	21
331	Primary Metal Manufacturing	0-19	2		50
332	Fabricated Metal Product Manufacturing	454	15	46	44
333	Machinery Manufacturing	35	4	14	40
334	Computer and Electronic Product Manufacturing	849	7	44	30
336	Transportation Equipment Manufacturing	0-19	1		13
337	Furniture and Related Product Manufacturing	391	16	87	57
339	Miscellaneous Manufacturing	221	10	57	28
423	Merchant Wholesalers, Durable Goods	3,195	163	47	38
424	Merchant Wholesalers, Nondurable Goods	2,944	70	71	38

425	Wholesale Electronic Markets and Agents and Brokers	260	19	38	20
444	Building Material and Garden Equipment and Supplies Dealers	874	40	22	30
484	Truck Transportation	875	35	47	17
485	Transit and Ground Passenger Transportation	4,528	13	95	23
487	Scenic and Sightseeing Transportation	20-99	1		25
488	Support Activities for Transportation	125	12	15	16
491	Postal Service	184	4	6	10
492	Couriers and Messengers	319	9	7	18
493	Warehousing and Storage	996	12	41	32
511	Publishing Industries (except Internet)	56	6	5	12
517	Telecommunications	615	14	22	13
518	Internet Service Providers, Web Search Portals, and Data Processing Services	95	9	11	20
562	Waste Management and Remediation Services	787	32	36	39
811	Repair and Maintenance	1,044	100	28	18
812	Personal and Laundry Services	378	21	8	5

Source: QCEW 2007, Bureau of Labor Statistics

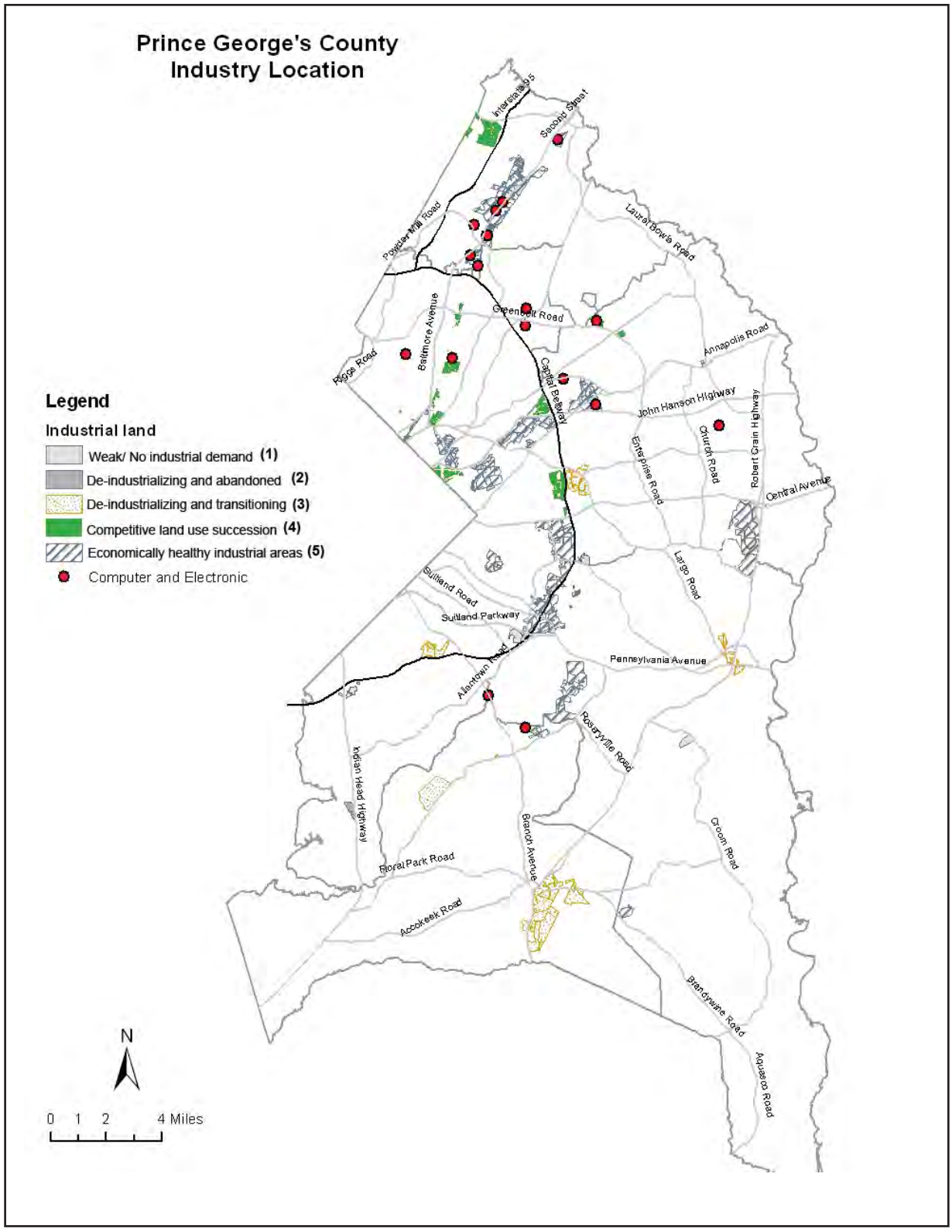
**Category* 5 Industrial Areas are those assessed to be thriving and facing little or no pressure from other uses.

Appendix 3. Location of Important Industries in Prince George's County



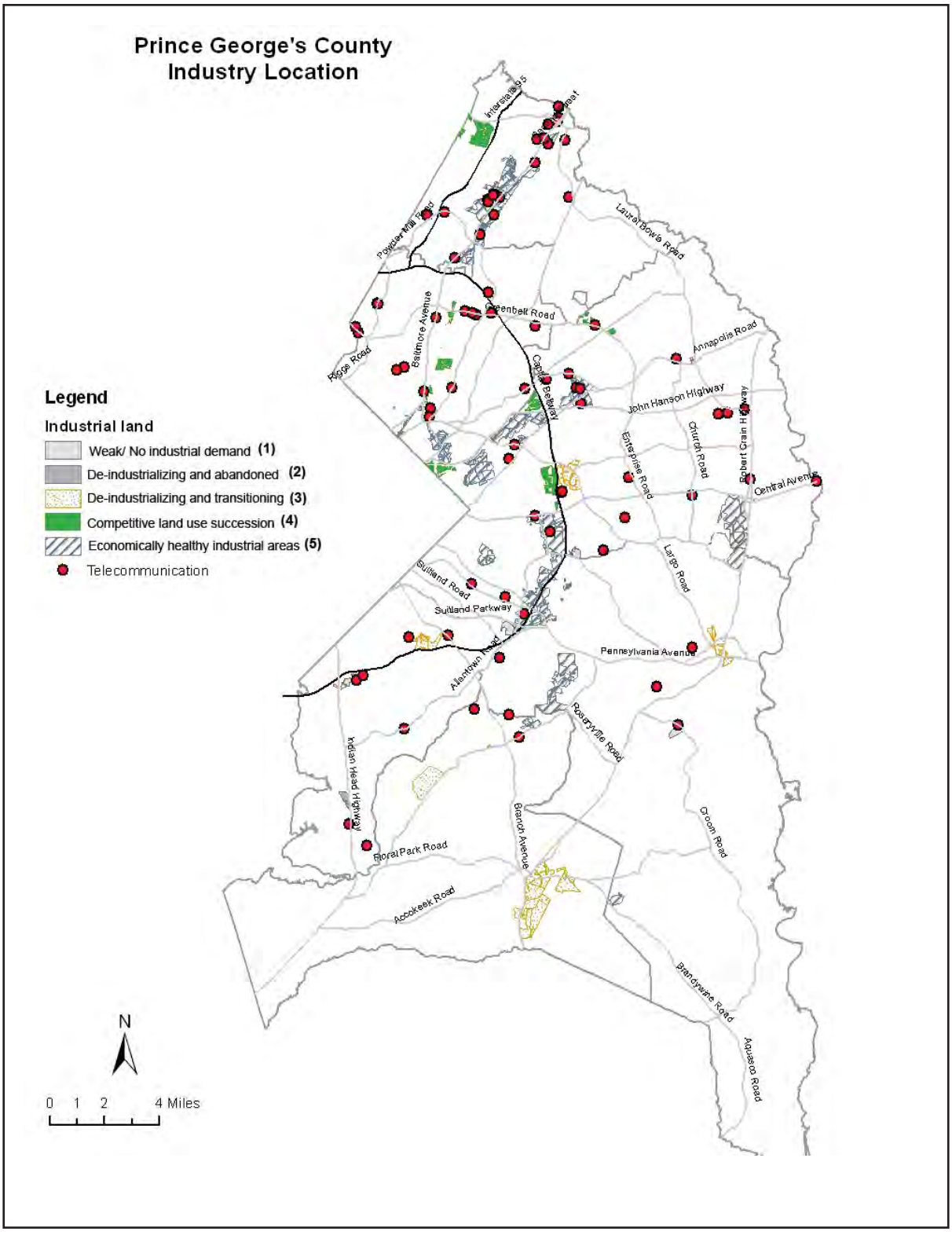
Map A3-1. Location of Printing and Related Support Establishments

Source: QCEW 2007, Bureau of Labor Statistics and M-NCPPC GIS database



Map A3-2. Location of Computer and Electronic Manufacturing Establishments

Source: QCEW 2007, Bureau of Labor Statistics and M-NCPPC GIS database



Map A3-3. Location of Telecommunication Establishments

Source: QCEW 2007, Bureau of Labor Statistics and M-NCPPC GIS database

Appendix 4. Rental Rates of Industrial & Flex Space (Washington, D.C. Metropolitan Area)

Flex	Direct			Sublet			Total	
	Spaces	Average	Range	Spaces	Average	Range	Spaces	Average
Electrical & Cleaning	1	$18.00	$18.00	0	-	-	1	$18.00
Double Net	4	$11.06	$10.00-$12.75	0	-	-	4	$11.06
Full Service Gross	14	$20.46	$13.00-$25.00	3	$12.48	$7.00-$21.00	17	$17.52
Industrial Gross	34	$13.48	$4.00-$20.00	0	-	-	34	$13.48
Modified Gross	10	$12.01	$8.00-$18.00	0	-	-	10	$12.01
Negotiable	214	$15.39	$11.25-$15.50	11	-	-	225	$15.39
Net	1	$11.00	$11.00	0	-	-	1	$11.00
Plus All Utilities	14	$13.40	$8.50-$16.00	0	-	-	14	$13.40
Plus Electric	1	$18.50	$18.50	0	-	-	1	$18.50
TBD	14	$13.55	$10.00-$14.50	0	-	-	14	$13.55
Triple Net	374	$12.52	$2.50-$32.00	13	$9.10	$7.00-$20.00	387	$12.22
Off/Med	**Direct**			**Sublet**			**Total**	
	Spaces	**Average**	**Range**	**Spaces**	**Average**	**Range**	**Spaces**	**Average**
Full Service Gross	1	$20.00	$20.00	0	-	-	1	$20.00
Modified Gross	1	$22.00	$22.00	0	-	-	1	$22.00
Off/Ret	**Direct**			**Sublet**			**Total**	
	Spaces	**Average**	**Range**	**Spaces**	**Average**	**Range**	**Spaces**	**Average**
Industrial Gross	1	$12.00	$12.00	0	-	-	1	$12.00
Plus All Utilities	1	$16.00	$16.00	0	-	-	1	$16.00
Triple Net	21	$14.34	$10.00-$22.00	1	$20.50	$20.00-$21.00	22	$14.55
Retail	**Direct**			**Sublet**			**Total**	
	Spaces	**Average**	**Range**	**Spaces**	**Average**	**Range**	**Spaces**	**Average**
Industrial Gross	2	$15.00	$15.00	0	-	-	2	$15.00

Negotiable	6	$23.50	$23.50	1	-	-	7	$23.50
Plus All Utilities	1	$22.00	$20.00-$24.00	0	-	-	1	$22.00
Triple Net	14	$17.80	$10.00-$30.00	0	-	-	14	$17.80
Office	**Direct**			**Sublet**			**Total**	
	Spaces	**Average**	**Range**	**Spaces**	**Average**	**Range**	**Spaces**	**Average**
Electrical & Cleaning	12	$15.69	$12.50-$21.00	0	-	-	12	$15.69
Full Service Gross	72	$18.25	$8.00-$27.50	16	$18.16	$12.00-$37.24	88	$18.22
Industrial Gross	20	$12.31	$4.00-$18.20	3	$11.69	$9.40-$14.00	23	$12.16
Modified Gross	14	$14.22	$10.00-$24.62	0	-	-	14	$14.22
Negotiable	38	$14.09	$11.25-$15.00	8	$10.00	$10.00	46	$13.34
Net	0	-	-	1	$15.00	$15.00	1	$15.00
Plus All Utilities	14	$28.28	$7.50-$158.52	0	-	-	14	$28.28
Plus Cleaning	23	$16.41	$13.75-$21.00	1	$14.50	$14.50	24	$16.28
Plus Electric	0	-	-	1	$22.40	$22.40	1	$22.40
Triple Net	162	$12.78	$3.00-$42.00	15	$12.05	$5.95-$19.50	177	$12.69
Warehouse	**Direct**			**Sublet**			**Total**	
	Spaces	**Average**	**Range**	**Spaces**	**Average**	**Range**	**Spaces**	**Average**
Electrical & Cleaning	1	$11.50	$11.50	0	-	-	1	$11.50
Double Net	3	$8.90	$4.50-$12.00	0	-	-	3	$8.90
Full Service Gross	21	$10.51	$5.00-$24.50	1	$6.95	$6.95	22	$10.23
Industrial Gross	103	$9.45	$2.54-$21.75	5	$11.10	$9.27-$12.00	108	$9.56
Modified Gross	15	$9.67	$5.76-$18.46	1	$12.00	$12.00	16	$9.99
Negotiable	228	$8.23	$4.95-$14.40	8	-	-	236	$8.23
Net	1	$9.00	$9.00	0	-	-	1	$9.00
Plus All Utilities	34	$12.00	$5.00-$22.34	1	$14.67	$14.67	35	$12.03
Plus Cleaning	1	$18.50	$18.50	0	-	-	1	$18.50
Plus Electric	3	$12.94	$9.24-$15.91	0	-	-	3	$12.94
TBD	8	$14.42	$6.42-$21.50	0	-	-	8	$14.42
Tenant Electric	1	$10.00	$10.00	0	-	-	1	$10.00
Triple Net	607	$7.97	$1.50-$25.00	24	$7.54	$4.15-$21.39	631	$7.95

Total	Direct			Sublet			Total		
	Spaces	Average	Range	Spaces	Average	Range	Spaces	Average	Range
Electrical & Cleaning	14	$15.62	$11.50-$21.00	0	-	-	14	$15.62	$11.50-$21.00
Double Net	7	$10.12	$4.50-$12.75	0	-	-	7	$10.12	$4.50-$12.75
Full Service Gross	108	$16.32	$5.00-$27.50	20	$16.49	$6.95-$37.24	128	$16.37	$5.00-$37.24
Industrial Gross	160	$10.37	$2.54-$21.75	8	$11.27	$9.27-$14.00	168	$10.43	$2.54-$21.75
Modified Gross	40	$11.97	$5.76-$24.62	1	$12.00	$12.00	41	$11.97	$5.76-$24.62
Negotiable	486	$11.30	$4.95-$23.50	28	$10.00	$10.00	514	$11.27	$4.95-$23.50
Net	2	$9.98	$9.00-$11.00	1	$15.00	$15.00	3	$11.36	$9.00-$15.00
Plus All Utilities	64	$14.49	$5.00-$158.52	1	$14.67	$14.67	65	$14.49	$5.00-$158.52
Plus Cleaning	24	$16.69	$13.75-$21.00	1	$14.50	$14.50	25	$16.56	$13.75-$21.00
Plus Electric	4	$16.08	$9.24-$18.50	1	$22.40	$22.40	5	$20.30	$9.24-$22.40
TBD	22	$13.63	$6.42-$21.50	0	-	-	22	$13.63	$6.42-$21.50
Tenant Electric	1	$10.00	$10.00	0	-	-	1	$10.00	$10.00
Triple Net	1,178	$9.76	$1.50-$42.00	53	$8.86	$4.15-$21.39	1,231	$9.70	$1.50-$42.00

Source: CoStar 2008

Appendix 5. Comparison of Prince George's County and Montgomery County Industrial Zone Texts

Table A5-1. Prince George's County Industrial Zones, 2009

Zoning	Intended Uses	Performance Standards	Conditional Uses	Excluded Uses	Other Requirements
I-1	Light Industrial	Light intensity manufacturing, warehousing, and distribution uses	10 percent green area required. Any landscaped strip adjacent to a public right-of-way is not considered part of the required green area.		Outdoor storage cannot be visible from street. A vehicle towing station shall be screened by a wall or fence at least six feet high,or by an evergreen screen, unless the adjoining property is used for a vehicle towing station or a vehicle salvage yard.
I-2	Heavy Industrial	Highly intensive industrial and manufacturing uses	10 percent green area required. Any landscaped strip adjacent to a public right-of-way is not considered part of the required green area.		Outdoor storage cannot be visible from street. A vehicle towing station shall be screened by a wall or fence at least six feet high or by an evergreen screen, unless the adjoining property is used for a vehicle towing station or a vehicle salvage yard.
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 in a manner that will retain the dominant industrial/ employment character of the zone; required. Includes very specific building and design guidelines.	Standard minimum tract size of 25 adjoining gross acres; standard minimum lot size of two acres; 25 percent green area required.	Outdoor uses restricted; warehouse and wholesaling uses limited.	Conceptual and detailed site plan approval required. Normal buffering required, but additional buffering and screening may be required to protect the park-like setting of the planned industrial/ employment park from adjoining or interior incompatible land uses.
I-4	Limited Intensity Industrial	Limited intensity (0.3 Functional Area Requirement (FAR)) commercial, manufacturing, warehousing, and distribution uses	25 percent green area required.		Development standards extended to assure limited-intensity industrial and commercial development and compatibility with surrounding zoning and uses.

U-L-I	Urban Light Industrial	Establishes a flexible regulatory process with appropriate standards to promote reinvestment in, and redevelopment of, older urban industrial areas as employment centers, in a manner compatible with adjacent residential areas.			Designed to attract and retain a variety of small-scale, light-industrial uses in older, mostly developed industrial areas located close to established residential communities
E-I-A	Employment and Institutional Area	A concentration of nonretail employment and institutional uses and services, such as medical, manufacturing, office, religious, educational, recreational, and governmental.	Minimum tract size—generally five adjoining gross acres. Minimum open space improved by landscaping 20 percent of net lot area.		May include a mix of residential, employment, commercial retail, commercial office, hotel or lodging, civic buildings, parks, or recreational uses, meeting all requirements in the definition of the use. The development shall meet all Mixed Use Transit (M-X-T) Zone requirements in Part 10.

Table A5-2. Montgomery County Industrial Zones

Zoning	Intended Uses	Performance Standards	Conditional Uses	Excluded Uses	Other Requirements
I-1	Light Industrial	Generally involve small- to medium-scale industrial activities including, but not limited to, R&D, warehousing and storage activities, light manufacturing and assembly of products, and other similar uses. Light industrial uses usually generate less heavy truck traffic and have fewer adverse environmental effects on surrounding areas, as compared to heavy industrial uses.	In addition to the minimum green area required, green area shall be provided in an amount not less than 5 percent of the net lot area for each story over 3 stories.		
I-2	Heavy Industrial	Require larger sites to accommodate activities that often involve a variety of concurrent industrial processes on one site. Generally involve larger volumes of heavy truck traffic and are located near specialized transportation links, such as rail and major highways. In addition, heavy industrial uses are often noisy, dusty and dirty, as compared to other types of industrial and commercial activities.			Heavy industrial uses are restricted to land classified in the I-2 zone because the large scale nature of such uses, the traffic impacts, and environmental effects could be disruptive to lighter-intensity industrial and commercial areas.

I-3	Technology and Business Park	The purpose of the I-3 zone is to provide a medium-density, industrial zone for park-like development of high-technology industries, R&D facilities, corporate and business offices, and uses that have similar location, site development, and use requirements. The I-3 zone is intended to be at locations within the county that can be served by transit. The optional method permits a mixed-use development in the I-3 zone at locations that have convenient access to transit and are recommended in the master plan. Under the optional method, commercial uses that maintain an employment emphasis must be mixed with residential uses. It is the purpose of the I-3 Mixed-Use Option to promote mixed-use, transit, and pedestrian-oriented centers, which include housing and a commercial component with an employment emphasis. It is also the purpose to promote development that follows sound environmental principles and maximizes preservation of natural features.	Specific buffers required depending on adjoining use. Must be at least 20 acres. Must be located adjacent to and readily accessible from an existing or planned major highway or arterial road with a pavement width of at least four lanes.		Orderly clustering of buildings arranged and designed to promote internal compatibility. To reduce traffic congestion by encouraging the clustering of buildings near internal streets, the provision of service commercial uses, and the development of pedestrian networks to reduce dependence on single-occupant automobiles and to better accommodate bus service, carpooling, and vanpooling within a project in the zone. To protect I-3 zoned areas from the encroachment of incompatible employment uses, and to prevent industries within the I-3 zone from adversely affecting surrounding nonindustrial uses by increased setback and landscaping requirements
I-4	Low-intensity, light industrial	It is intended that the I-4 zone be located in areas designated for low-intensity, light industrial uses on adopted and approved master or sector plans. The I-4 zone is also appropriate as a transitional industrial zone between residentially zoned areas and land classified in the I-1 and I-2 zones	Specific buffers required depending on adjoining use—100 feet if next to residential area. Must be at least ten acres. The total floor area of buildings, not including parking areas, shall not exceed FAR 1.0.		

R&D	R&D	Smaller parcels for specific R&D uses.	Each parcel must be at least two acres. Specific buffers required depending on adjoining use. Buildings, sidewalks, parking, and vehicular access areas should be suited to promote an attractive, active, and safe pedestrian-oriented environment within the project and to facilitate use of carpooling and vanpooling by employees of the project.		
LSC	LSC	A LSC is a major R&D park for facilities of companies specializing in the life sciences and related fields, at a location as recommended in a master or sector plan. The goals of an LSC are to: provide a unique reinforcing focus for the life sciences industry; promote the successful expansion of the industry in Montgomery County; expand the educational and research resources available for Montgomery County residents, employers, and work force; and serve the health care needs of the region. It is the intent that LSCs be developed in a manner that makes a positive contribution to the quality of life in the county. The facilities, landscaping, and open space will create an attractive setting and environment conducive to high-technology research, development, production, and related uses.	The minimum green area on the site is 25 percent of the lot area. Roofs of below grade parking may be counted as green space if developed for passive or recreational use.		

Appendix 6. Research Design, Industrial Land Policy, Current Industrial Sector, and Inventory of Industrial Lands [25]

Introduction and Importance of an Industrial Lands Study to the County

Because of pressure on industrial land in metropolitan counties and cities and the importance of industrial activities to Prince George's County, M-NCPPC is developing a comprehensive strategy for the county's industrial lands. This study report to M-NCPPC (1) recommends where industrial lands should be maintained and protected and strategies to protect those areas; (2) recommends where industrial areas need to be modernized, service delivery improved, and strategies for modernization and creating environments that sustain existing industrial activity and attract emerging industrial activities; (3) identifies where industrial uses are increasingly obsolete and provide a strategy to smoothly transition away from industrial to residential, commercial, and mixed uses; and (4) identifies training and educational needs to maintain and enhance the base of industrial employment. The proposed strategies relate both directly to land issues, such as zoning, and to social policy, such as job training. This report is to start addressing these four questions.

The 1984 study, Industrial Land Needs in Prince George's County: Employment Growth and Associated Land Requirements, projected employment and land issues to 2005. For this reason, where possible, the 1985 to 2005 data are used to measure employment and population trends. Because of the change from Standard Industrial Codes (SIC) to the NAICS system in 1997, a 1985 to 2005 analysis is not always possible. Consequently, the research was based on 1990 to 2005 employment data. In other instances, this report has to rely on the available data; for example, the data on land use consumption per resident was available for 1973 and 2002.

Why the County is Experiencing Pressures on its Industrial Land

The expansion of office-based, commercial, and retail activities; the growth in population; and the county's rising incomes levels are leading to greater than ever demands on county land. The expanding need for residential, commercial, retail, and office space land uses puts pressure on industrial areas to both convert out of industrial uses and/or operate in a manner compatible with residential and commercial activities.

[25] Completed on November 16, 2007

In the county, industrial employment and output have remained stable, while employment in the service sector continues to expand. In this report, industrial land users are defined as the construction, manufacturing, transportation and warehousing, and wholesaling sectors. Trends in these four sectors approximate closely, but not precisely, to industrial land demand. According to the 2005 zoning and land use data for the county, 7 percent of county land zoned industrial is used by other uses, such as retail activity; while 8 percent of county land is used as industrial, although zoned for another use.[26] Service sector uses are defined as finance, insurance, and real estate; retail trade; professional and personal services; entertainment, food, recreation and accommodations. Figure A6-1 shows employment in both industrial and service activities. Industrial employment exhibits slow growth, .4 percent per year annual average rate, while employment in the services is expanding at a more rapid pace, 1.5 percent annual average rate, 1990 to 2005. This pattern reflects national trends. In addition to demands for land from the growth in service employment, the growth in population puts additional demands on county land. Figure A6-2 shows the county's growth in population. Not only is the population growing, but the average land parcel size per household is rising. In 1973, the average land consumption per capita was .076 acre. In 2002, the average was .104 acre per capita. See Table A6-1.

Table A6-1. Land Use Consumption in Prince George's County in 1973 and 2002

Description	July 1973	July 2002
Acres in Low Density Residential	8,182	24,110
Acres in Medium Density Residential	37,680	46,495
Acres in High Density Residential	6,674	16,079
Total Acres Developed Residential Land	52,535	86,685
County Population	693000	833084
Acres per Capita	0.076	0.104

Source: Population Estimates Program, U.S. Census Bureau and Maryland Department of Planning. These data could only be found for 1973 and 2002.

[26] DAMS file, M-NCPPC (2005)

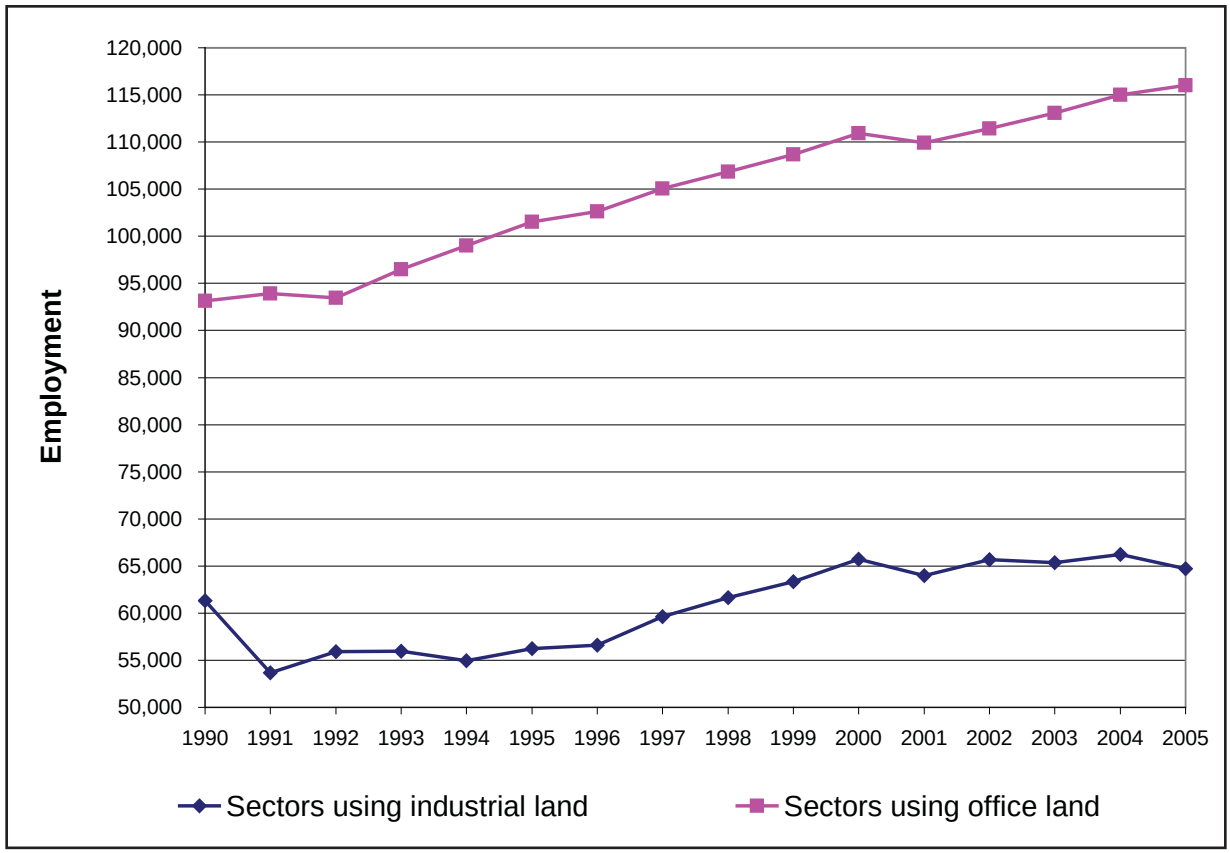


Figure A6-1. Employment Trend 1990–2005 in Industrial and Services Sectors in Prince George's County

Source: QCEW, Bureau of Labor Statistics

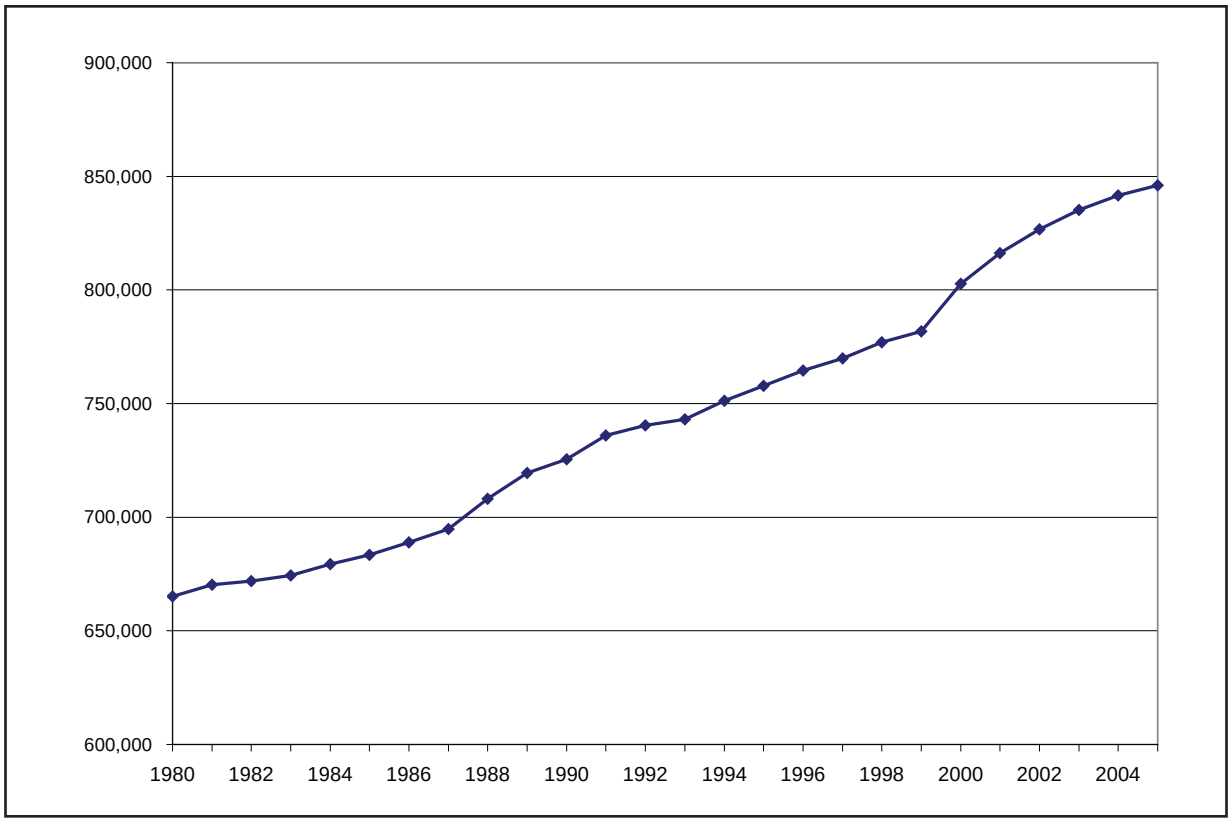


Figure A6-2. Prince George's County Population Trend 1980–2006

Source: The Population Estimates Program, U.S. Census Bureau

As the demand for service sector and residential developments expands, the pressure on industrial land can be intense. Industrial land is generally less expensive and often available in large parcels. Relatively lower real estate values have made it both easy to dismiss the value of industrial activities to local economies and make industrial land a target for redevelopment when residential and commercial pressures grow. Moreover, since industrial land is generally in large parcels, subdivision is less problematic, making industrial parcels an attractive target for land use changes.

Why Should the County Care About Industrial Areas?

The loss of some industrial land is probably inevitable. However, even in the most urban locations, industrial activities are critical to local government operations and a healthy private economy. Therefore, planners should deal with the modernization and transition of industrial areas in a strategic manner.

1. Industrial areas provide jobs for residents and tax revenues for county coffers. Presently, nearly 21 percent of jobs in the county are in the four industrial categories, including construction (NAICS 23), manufacturing (NAICS 31–33), wholesale trade (NAICS 42), and transportation and warehousing (NAICS 48–49). The total of jobs in these four sectors totaled 64,200 in 2005.[27]

2. Many industrial activities are critical to the operation of county government. Industrial areas house government services, such as waste hauling and transfer, street cleaning, plowing, road construction and repair, and government printing.

3. No matter what the economic base of the local economy, industrial areas house back-office activities critical to other sectors. Even in locations dependent on information and high-technology jobs or finance and insurance offices, industrial areas house such back-office activities as warehousing, supplies, and printing operations.

4. Industrial areas are home to many of the activities that support the local population, such as auto repair shops, household repair services, and warehousing of consumer products.

5. Industrial areas provide low-cost space that is critical for startups and innovation. Even in the high-technology sectors, industrial areas often act as incubators for new startups. Thus, industrial areas are important to an overall healthy and vital economy in the long run.

6. Industrial areas provide high-wage jobs important to county residents. Jobs in these industrial areas are more likely to be high wage, with good benefits, and upward mobility for workers with lower education levels. Figure A6-3 shows the average wages across economic sectors. Of the 20 economic sectors in the county, the four industrial categories of construction (NAICS 23), manufacturing (NAICS 31–33), wholesale trade (NAICS 42), and transportation and warehousing (NAICS 48–49) pay higher average wages than eight other service and agricultural sectors. (See Figure A6-3.)

   Table A6-2 shows that four industrial sectors require lower levels of education than the services sector. The services sector hires relatively few employees, 26.6 per-

[27] Source: QCEW, Bureau of Labor Statistics

cent, with less than a high school education and more employees, 50.2 percent, with four years or more years of college. This table reconfirms that construction, manufacturing, transportation and warehousing, and wholesaling are important to the health of the county because those sectors provide good jobs for the region's residents with less education.

Table A6-2. Educational Attainment for Employees Working in Four Major Sectors in Washington, D.C.-Maryland-Virginia Metropolitan Area

Sector	High school or less	Some college	College graduate or more
Construction	61.3%	21.3%	17.4%
Manufacturing	32.7%	24.2%	43.1%
Transportation and Warehousing	44.4%	31.7%	23.9%
Wholesale Trade	37.8%	28.6%	33.5%
Services Sector	26.6%	23.2%	50.2%

Source: American Community Survey, 2005: Public Use Microdata Samples, U.S. Census Bureau

7. After years of industrial activity, some parcels carry a legacy of contamination. Under current economic conditions and technological knowhow, these parcels are often unsuitable for residential and commercial developments. For many of those properties, no matter the county's economic base, industrial activity is often the highest and best use. Figure A6-4 shows that 9 percent county land has a history, suspicion, or evidence of contamination.

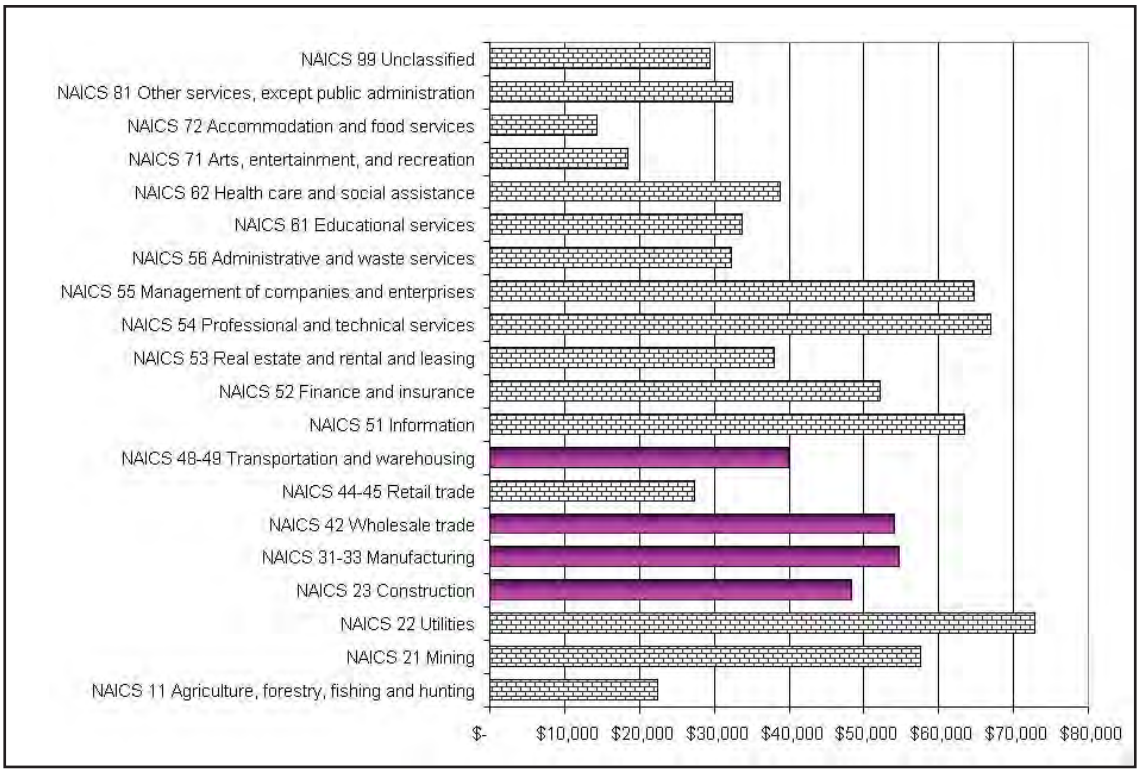


Figure A6-3. Comparison of Average Annual Pay per Employee in 2005 Across All Industrial Sectors in Prince George's County

Source: 2005 QCEW, Bureau of Labor Statistics

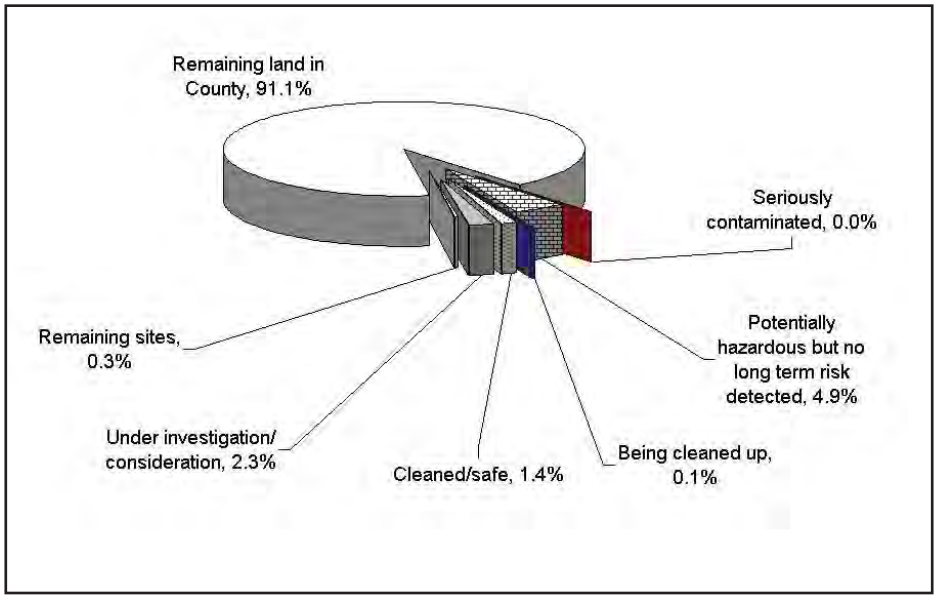


Figure A6-4. Share of County Land with a History of Contamination

Source: MDE, 2007

Why Industrial Land is Often a Target for Displacement

The relatively low cost of industrial parcels, combined with relatively cheap demolition costs, make industrial areas a target for transition. There can be a secondary effect of speculation, rising rents, displacement, and vacancies as speculators wait for a transition and a future windfall. Once change begins to occur, industrial firms, important to the county economy, may be pushed out because nearby nonindustrial users complain about the noise, dirt, and truck traffic. When important industrial firms are pushed out and leave the county, county workers and public tax coffers may suffer. Negative impacts can reverberate through the local economy, as other nonindustrial sectors cannot find the back office functions and suppliers needed to run an efficient business and compete. For these reasons, the county should think strategically about which areas should remain industrial and which areas should be allowed to transition to other uses. Where industrial activities are critical to the county's industrial health, government should do its part to help ensure those industrial activities remain viable in an increasingly competitive national and international environment, thereby, providing quality services efficiently and ensuring surrounding compatible land uses are critical to keeping industrial areas regionally, nationally, and internationally competitive.

Current Share of Land in Industrial Use

When compared with the counties for which data are available, Prince George's County's share of land in industrially zoned areas is higher than that of the surrounding suburban counties and Washington, D.C. Prince George's County's share of industrially zoned land is substantially larger than that of Montgomery County and larger than that of Arlington and Fairfax counties and Washington, D.C. The share for Seattle, another city for which data are available, but which has large aerospace and high-technology industries, exceeds that of Washington, D.C. and the suburban D.C. counties. (See Table A6-3.)

Table A6-3. Share of Land in Industrial Use

Location	Share	Year	Source
Prince George's County, MD	5.6%	2007	GIS data from Prince George's County Planning Department
Montgomery County, MD	.04%	2000	Montgomery County Planning Department, Memo to the Planning Board from Claudia Konsoulis, 7/18/2007
Washington, D.C.	5.0%	2006	Mt. Auburn Associates, Inc.
Arlington, VA	3.0%	2000	Montgomery County Planning Department, Memo to the Planning Board from Claudia Konsoulis, 7/18/2007

Fairfax, VA	4.1%*	2004	Phone conversation with Mubariah Shah at the Fairfax County Planning Commission
City of Seattle	12.0%	2007	City of Seattle, Industrial Lands Study, 2007
* Zoned Industrial			

Prince George's County has a total of 318,720 acres, with 17,925 in industrial use. The larger share of land in industrial use in Prince George's County, as compared to Montgomery and Fairfax Counties, is consistent with its larger share of employment in industrial activities. In terms of percentages of total employees, Prince George's County has a higher percent of employees in the industrial sector, nearly 21 percent, versus about 12 percent to 13 percent in the other two suburban counties. (See Table A6-4.)

Table A6-4. Share of Employment in the Industrial Sector, Including Construction, Manufacturing, Transportation and Wholesaling, and Warehousing, 2007

	Prince George's	Montgomery	Fairfax
Employment in firms using industrial land	64,702	58,761	68,954
Total employment (including government jobs) in all firms	312,819	458,809	565,720
Share of employment in firms using industrial land	20.7%	12.8%	12.2%

Source: QCEW, Bureau of Labor Statistics, 2007

History of Industrial Policy in Prince George's County, 1956–2006

Major Changes in Industrial Zoning, 1956–2006

The Scoping Memorandum of July 27, 2007, requires the consultants to "analyze past and present zoning policies, regulations, and practices, and impact on industrial land use categories and activities in Prince George's County." This is addressed here in Chapter 2. The chapter provides an overview of the county's industrial land and, thus, includes acreage for Chalk Point and Andrews Air Force Base.

Prince George's County has conducted two previous studies of industrial land use. In 1975 M-NCPPC published its Short-Term Industrial Zoning Needs Study, and in 1984 it published Industrial Land Needs in Prince George's County: Employment Growth and Associated Land Requirements. Both studies devoted significant attention to the development of an inventory of industrial land and to characterizing industrial employment in the county. The 1975 study examined industrial zoning and employment trends from 1956 through 1975 and projected land needs and employment growth through 1985. The second study examined the historical trends

through 1984 and projected land needs and employment through 2000. While the notion of what constituted an industrial land use was clear in 1975, the authors of the 1984 report were clearly wrestling with the changing nature of industry to "clean" manufacturing and information-age businesses.

Industrial Zoned Land Development and Reserves

The primary finding in the county's 1975 study was there was an insufficient reserve of industrial land in 1975 to meet the projected absorption for the next ten years.[28] The study examined trends in other comparable counties and developed a formula for determining the appropriate reserve for industrial land. It establishes a desired reserve level as three times the amount of land expected to be absorbed over the next ten years. This involves looking at previous absorption rates and extrapolating them forward to estimate what the reserve should be. The total amount of industrial zoned land should, thus, be the amount of developed industrial land plus the reserve. While the report did not elaborate on the rationale for selecting a 3:1 ratio, it appeared to be in the middle of the pack among those counties that had already developed ratios.[29] (The report did discuss the fact that several other counties had established ratio guidelines for industrial reserves, and it listed several. However, there did not seem to be any clear sense that there was a scientific rationale behind those ratios, only that they seemed about right.)

$$LQ = \frac{\frac{e_{ir}}{e_r}}{\frac{E_{ip}}{E_p}}$$

Where

e_{ir} = *industry employment in PG County*

e_r = *total employment in PG County*

E_{ip} = *industry employment in US*

E_p = *total employment in US*

Before examining the 50-year trends in industrial zoned and developed land, a brief discussion of the role of perceptions and expectations is in order. Topical studies like the county's 1975 and 1984 industrial land use studies are almost never commissioned out of sheer curiosity. Such studies may be undertaken in support of a comprehensive plan. Often, however, they are the logical response to a perceived problem or change in the status quo. It seems clear from the sense of urgency in the 1975 report, and

[28] M-NCPPC (1975), page 4.
[29] M-NCPPC (1975) pp 6–9.

the speed with which it was adopted and implemented, there was already a political awareness or perception that there was a shortage of industrially zoned land. Planners and political leaders most likely had a sense from the business community that it was becoming increasingly difficult to find suitable industrial land. In the decade leading up to the 1975 study, industrial development had been progressing at a much faster rate.[30] These were boom times for the county. The perception was that more industrial land was needed, and based on the rezoning that followed, the expectation appears to be that the rate of growth would continue as it had for the previous ten years. A study was needed to document what was intuitively obvious, but that also provided a rational plan for the rezoning of additional industrial land. The 1975 study provided just that.

Calculating Shift-Share Components

State (US) Share (Natural Economic Expansion)

$$SS_{ir}^{t} = E_{ir}^{t-1} \bullet \left(\frac{E_{us}^{t}}{E_{us}^{t-1}} - 1 \right)$$

Industry Mix Component

$$IM_{ir}^{t} = E_{ir}^{t-1} \bullet \left[\left(\frac{E_{ius}^{t}}{E_{ius}^{t-1}} \right) - \left(\frac{E_{us}^{t}}{E_{us}^{t-1}} \right) \right]$$

Regional Share (Competitiveness)

$$RS_{ir}^{t} = E_{ir}^{t-1} \bullet \left[\left(\frac{E_{ir}^{t}}{E_{ir}^{t-1}} \right) - \left(\frac{E_{ius}^{t}}{E_{ius}^{t-1}} \right) \right]$$

Net Employment Growth / (Loss)

$$N = SS + IM + RS$$

Where

IM = Industry Mix
SS = State (National) Share
E = Employment
RS = Regional Share
N = Net Job Growth
t = Current Period
t-1= Comparison Period
us = All US Employment
ir = Industry within Region
ius = Industry within US

By 1984, however, the situation had changed. The county had been through a decade of rapid rezoning, doubling the amount of industrial zoned land, while the pace of actual development had slowed considerably.[31] While the 1984 report addressed some new issues and looked toward the future, it also had the feel and tenor of a progress report. It generally lacked the focus and urgency of the 1975 report. It is not difficult to imagine, given the rate of rezoning and the slowed pace of development, that planners and political leaders had the perception, leading up to the report, that perhaps their objective had been achieved. Expectations in the 1984 report were

30 See Figure 2-1.
31 See Figure 2-1.

also less clear, and in fact, the report reflected general uncertainty about future development but some sense that office development would become increasingly important.

Roughly three decades after the 1975 study, the perceptions and expectations leading up to the 2007 study are different with respect to the type of development but remarkably similar in many ways to those leading up to the 1975 study. Development pressures have intensified in the past few years, and county planners and political leaders are faced with an increasing number of applications to rezone land—in this case from industrial to mixed use and residential. The expectations about the future character of development seem to have the same feel as those in 1975, although the focus now is on mixed-use development, rather than industrial. There appears to be a political perception that perhaps some rezoning is acceptable, based on recent rezoning approvals by the county council. However, the questions of whether this perception is accurate, and if so, how much land can be safely and legally rezoned, are fundamental to this 2007 report.

Changes in Zoning Categories

A review of both industrial zoning studies and county council records shows that Industrial Zones I-1, I-2, and I-3 existed prior to 1975. The I-4 zone was created between 1975 and 1984, and all of the land zoned I-4 is adjacent to Andrews Air Force Base. Discussions with the zoning officer revealed that the I-4 zone was created to allow for "industrial buffer" uses around Andrews Air Force Base.

The U-L-I zone was created in 1994 by the county council under CB-001-1994. It was intended to address the need for industrial-zoned land in urban centers to accommodate clean light industry and to provide a set of design guidelines unique to urban areas. Those design standards were adopted by County Resolution CR-030-1994.

The E-I-A zone, created in 1975, played a significant role in the rapid industrial rezoning. Over 3,000 acres of the 7,036 newly zoned, industrial acres accounted for in the 1984 report were in the E-I-A zone. It would appear from this fact and the lack of reference to this zone in the 1975 report that it was created sometime between 1975 and 1984. According to the zoning officer, Jimmy Jones, the E-I-A zone was created to accommodate office parks and light industrial/assembly type operations.

Employment and Output in the Industrial Sector

The Scoping Memorandum of July 27, 2007, calls for "a shift share and location quotient (LQ) analyses of industrial employment trends for the county, 1990 to 2005, by detailed four and five digit industrial categories. Industrial uses include warehouse, distribution, general heavy and light manufacturing, tech flex space etc." Chapters 3 and 4 report the results of this task. Chapter 3 analyzes the county's growth trends and the structure of the industrial activities, while Chapter 4 reports the LQ and shift share results and an analysis at a more detailed level of industrial activity. Also included in Chapter 4 is an analysis of the service sector. Strong growth in a service sector activity may shed light on cases where there is pressure on land uses, and in instances where the service sector is declining, a reduction in demand for land may be observed. However, the focus in Chapter 3 is on the industrial sector.

The construction industry is the largest employer in the Prince George's County industrial sector. In 2005, there were 31,270 employees in construction. Wholesale was the second largest category with 12,060 employees. Manufacturing had 11,037 employees, and transportation and warehousing had 9,855 employees in 2005. Manufacturing and wholesaling declined over the 1985 to 2005 period, while construction grew at an annual average rate of 2.1 percent and transportation and warehousing grew at an annual average rate of 3.1 percent. (See Figure A6-5.)

In the manufacturing sector, the major share of employment is in nondurable goods manufacturing. While both nondurable and durable goods manufacturing declined, 1990 to 2005, durable goods experienced the greatest loss in employment. (See Figure A.6-6.)

The importance of the four sectors, construction, manufacturing, transportation and warehousing, and wholesaling is similar across the Washington, D.C metro suburbs. The only noteworthy difference is the relatively small share of transportation and warehousing employment in Montgomery County. (See Figure A6-7.)

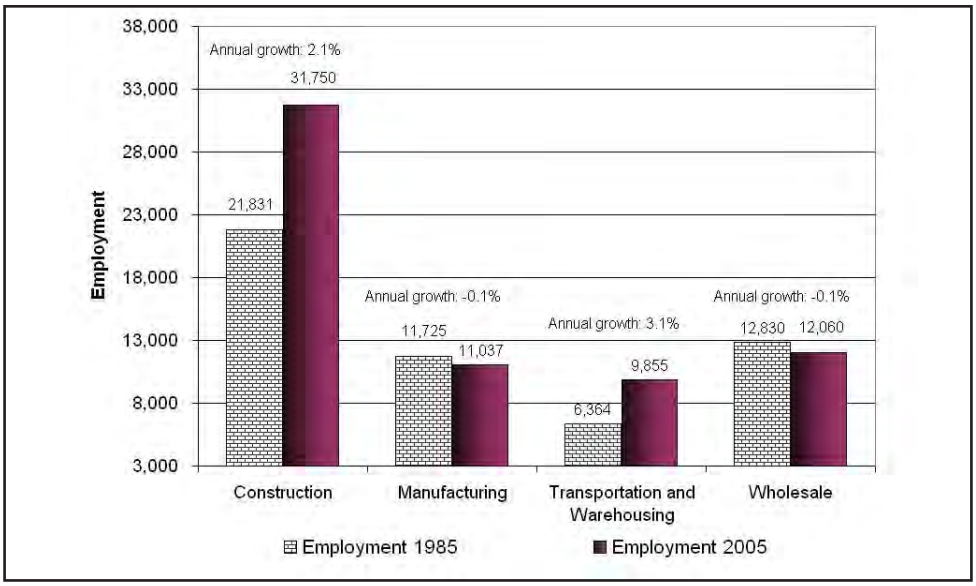


Figure A6-5. Annual Employment Growth for Construction, Manufacturing, Transportation and Warehousing in Prince George's County: 1985 and 2005.

Source: QCEW, Bureau of Labor Statistics

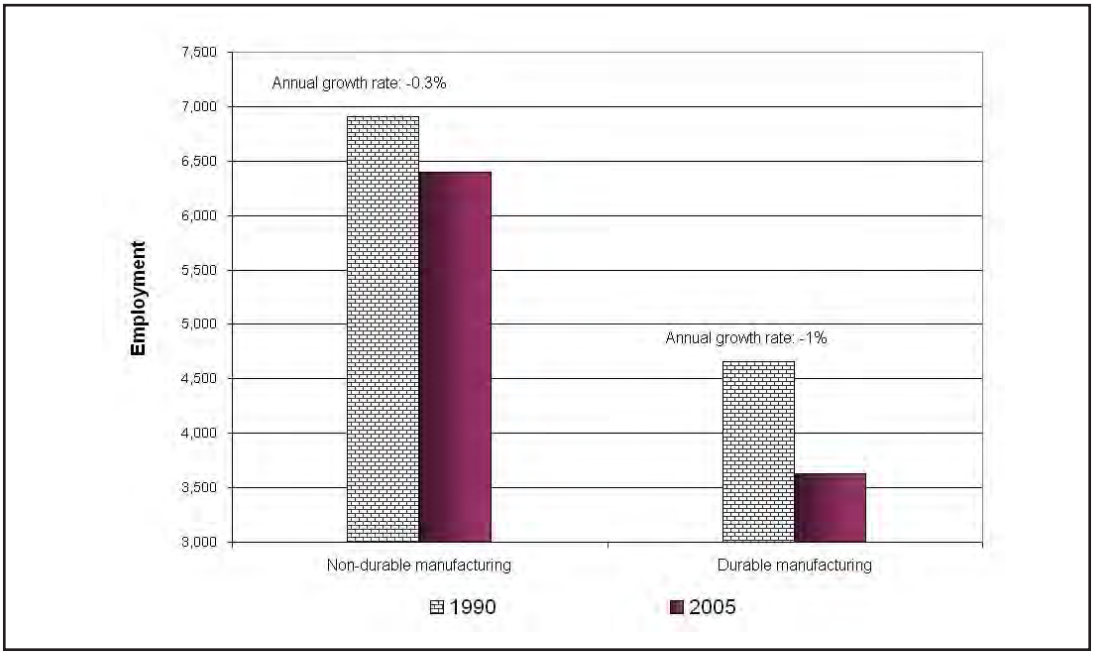


Figure A6-6. Nondurable and Durable Manufacturing Employment in Prince George's County in 1990 and 2005

Source: QCEW, Bureau of Labor Statistics

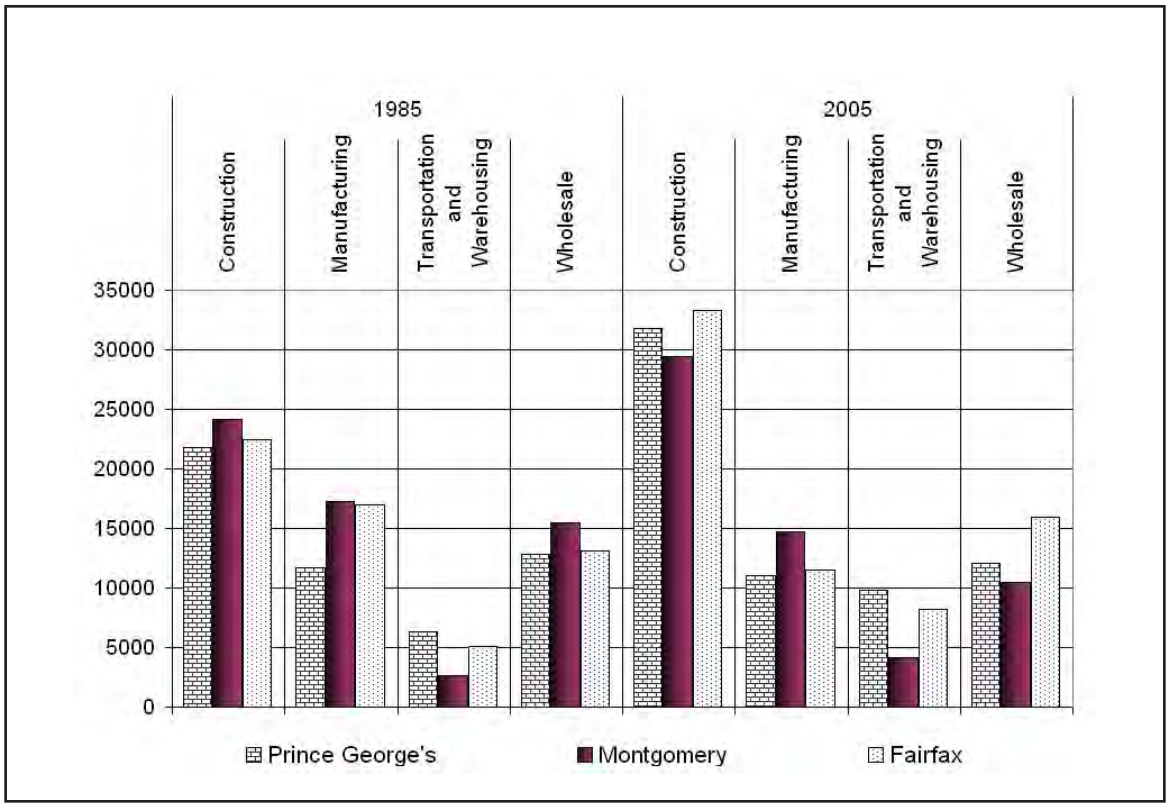


Figure A6-7. Cross County Comparison of Sector Size in 1985 and 2005

Source: QCEW, Bureau of Labor Statistics

Table A6-5 summarizes the growth rates for the four sectors across the three largest Washington, D.C. suburban counties and the United States. From 1985 to 2005, construction employment in Prince George's County grew slightly below that of the United States and Fairfax County but at a higher rate than that of Montgomery County. Manufacturing declined less in Prince George's County than in the surrounding jurisdictions, and the United States transportation and warehousing in the county grew faster than the nation as a whole, less than in Fairfax, but comparable to Montgomery County. Wholesaling employment declined in Prince George's County but increased in the nation and Fairfax. Wholesaling employment declined more in Montgomery County than in Prince George's County. In comparison to the nation, Prince George's County's strength appears to be in manufacturing and transportation and warehousing.

Table A6-5. Annual Employment Growth in Prince George's County, Montgomery County, Fairfax County and the United States, 1985-2005				
	Prince George's	Montgomery	Fairfax	U.S.
Construction	2.1%	1.3%	2.5%	2.3%
Manufacturing	-0.1%	-0.6%	-1.7%	-1.5%
Transportation and Warehousing	3.1%	3.1%	4.2%	2.3%
Wholesale	-0.1%	-1.5%	1.1%	0.1%

Source: QCEW, Bureau of Labor Statistics

Productivity

Over the 1985 to 2005 period, the average Prince George's County worker became more productive in wholesaling but less productive in manufacturing. Productivity is measured as the total value of output in the county in 2005 dollars, divided by the number of workers in the county. (See Table A6-6.) The Prince George's County manufacturing worker's productivity is not keeping pace with the national manufacturing worker. In Prince George's County, the manufacturing worker generated $188.373 in output per employee in 2002, down from $254,915 in 1987, while nationwide manufacturing workers became more productive, growing from $223,947 in 1987 to $279,526 in 2002. In contrast, Prince George's County's wholesaling appears more productive in recent years than the nation as a whole. In 2002, the average county worker was responsible for $913,085 in wholesaling output, while the comparable level for the nation was $895,691. Figure A6-8 reports the manufacturing and wholesaling productivity per worker in Prince George's County relative to the nation. When the ratio is above 1, the average worker in the county is more productive than the average worker in the nation. County data are not available for construction and transportation and warehousing.

Table A6-6. Value of Output per Employee in 2005 Dollars: Prince George's County				
	1987	**1992**	**1997**	**2002**
Manufacturing	$254,915	$178,698	$192,012	$188,375
Wholesale	$852,692	$906,244	$905,011	$913,085

Source: Economic Census, U.S. Census Bureau

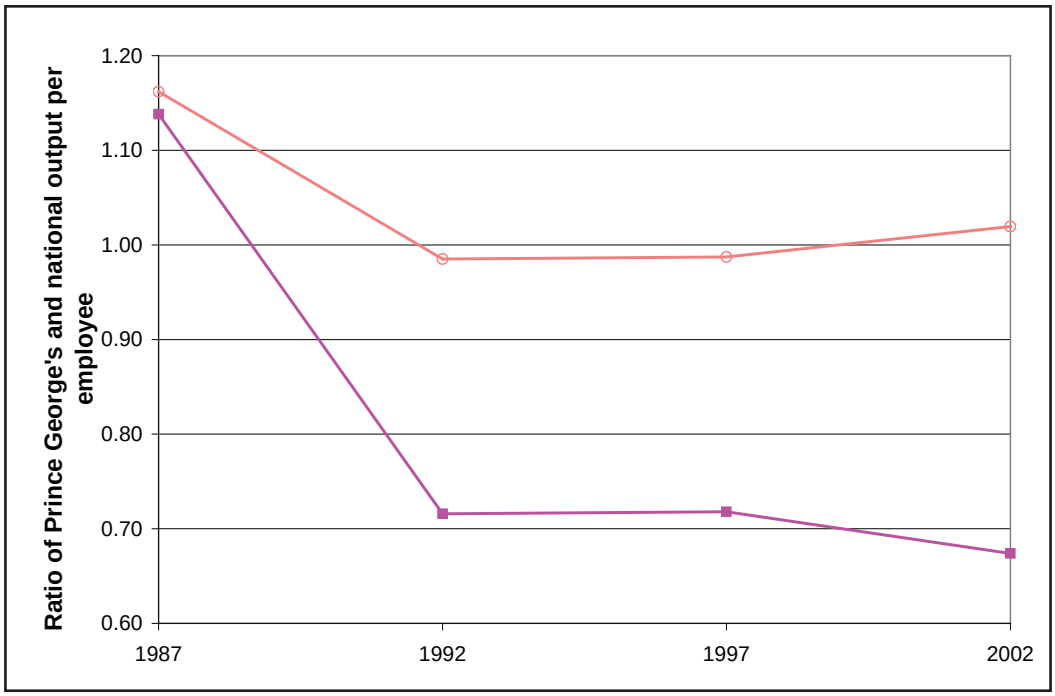


Figure A6-8. Output per Employee Ratio in 2005 Dollars

Source: Economic Census, Bureau of Labor Statistics

Salaries

Over the 1985 to 2005 period, real salaries, meaning salaries adjusted for inflation, rose, with the greatest percentage increase for manufacturing and wholesaling. Salaries grew by 1.3 percent in these two sectors. Construction salaries grew by 1.2 percent, while transportation and warehousing salaries grew by .4 percent. (See Figure A6-9.)

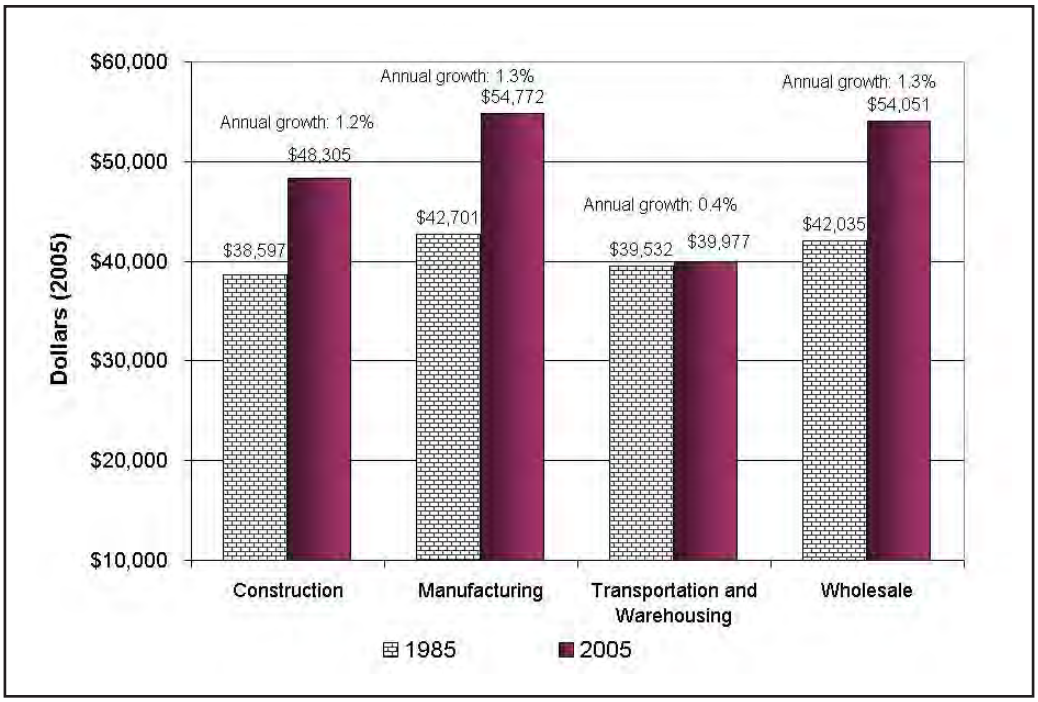


Figure A6-9. Growth Rates of Average Annual Pay per Employee in Prince George's County 1985-2005 (2005 dollars)

Source: QCEW, Bureau of Labor Statistics

The comparison cross counties in 2005 is only notable in the relatively high wages paid to manufacturing workers in Montgomery County and high, wholesaling wages paid to workers in Fairfax. (See Figure A6-10.) Higher than average wages can be due to either a concentration of employment in higher value manufacturing/wholesaling or workers are paid more for work in the same industry.

In terms of growth, wages in construction and manufacturing in Prince George's County have not kept up with the region or the United States. (See Table A6-7.)

Table A6-7. Growth in Average Annual Pay per Employee, 1985-2005 (in 2005 dollars)

	Prince George's	Montgomery	Fairfax	U.S.
Construction	1.2%	2.3%	1.8%	1.5%
Manufacturing	1.3%	3.5%	1.6%	1.6%
Transportation and Warehousing	0.4%	1.5%	0.2%	0.2%
Wholesale	1.3%	1.8%	2.6%	1.3%

Source: QCEW, Bureau of Labor Statistics

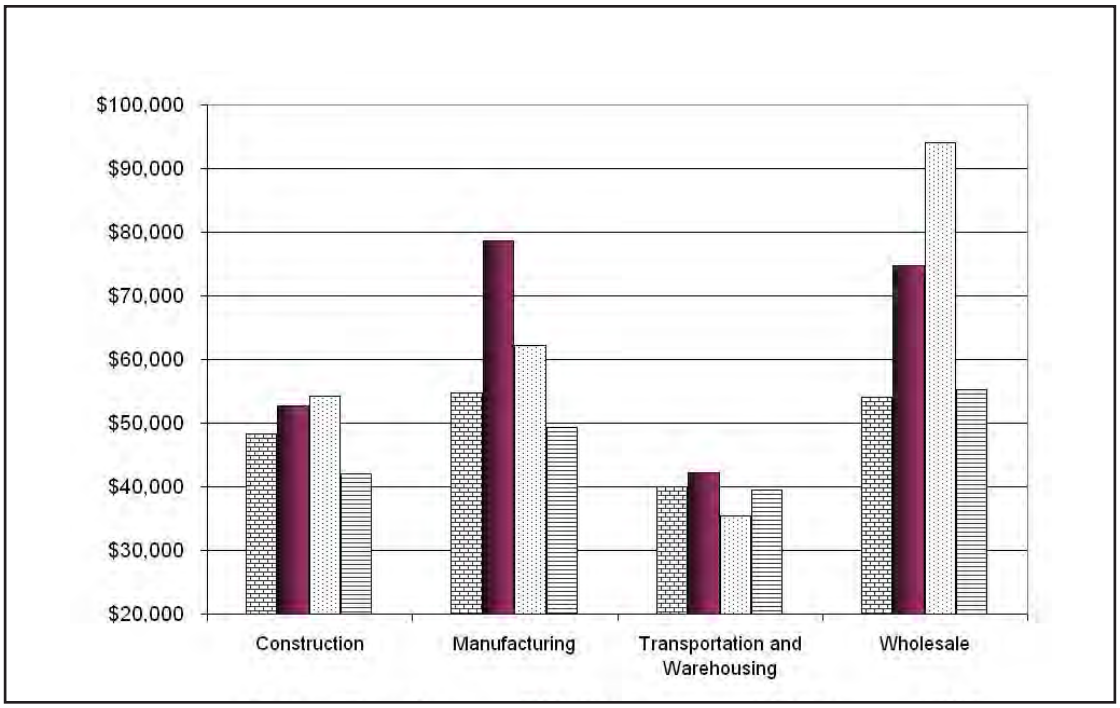


Figure A6-10. Comparison of Average Annual Salaries per Employee in 2005 Across Washington, D.C. Suburban Counties

Source: QCEW, Bureau of Labor Statistics

Size of Establishments

Across the industrial sectors in Prince George's County, the majority of establishments are in enterprises with 20 employees or less. (See Figure A6-11.) Manufacturing establishments are slightly larger than in the other three industrial land using sectors. Across the three suburban Washington, D.C. counties, Prince George's County has a slightly higher proportion of larger establishments than Montgomery or Fairfax counties. This is a pattern that holds across all four industrial land using sectors. See Figures A6-12-15. Larger establishments suggest the need for larger parcels.

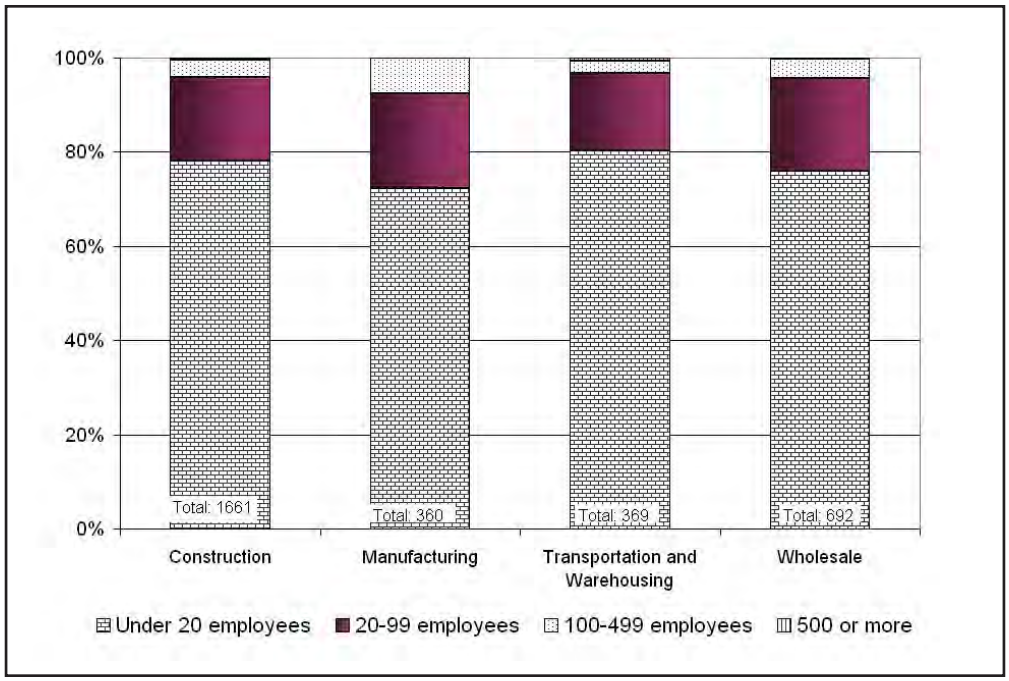


Figure A6-11. Establishment Sizes Across Four Sectors in Prince George's County

Source: County Business Pattern Data, U.S. Census Bureau and Geospatial & Statistical Data Center at University of Virginia

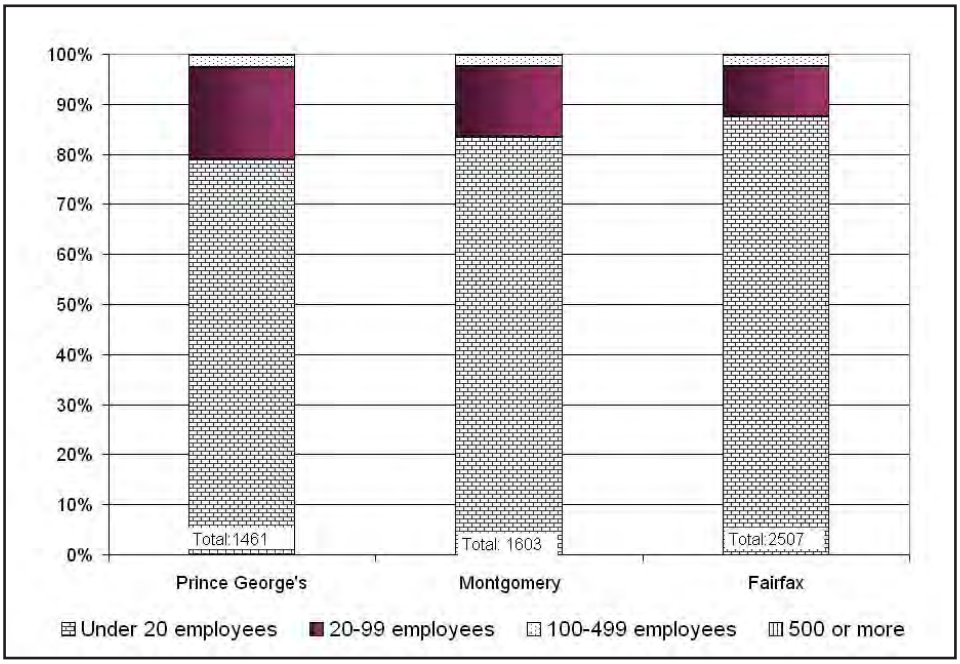


Figure A6-12. Comparison of Establishment Sizes in Prince George's County, Montgomery County, and Fairfax County in 2005 (Construction)

Source: County Business Pattern Data, U.S. Census Bureau

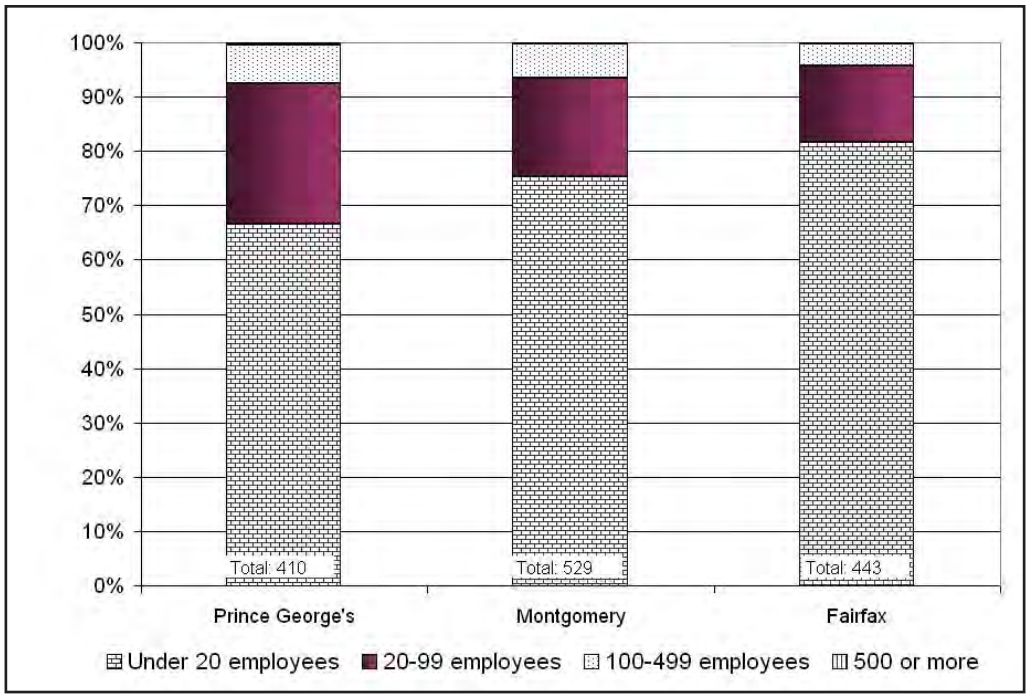


Figure A6-13. Comparison of Establishment Sizes in Prince George's County, Montgomery County, and Fairfax County in 2005 (Manufacturing)

Source: County Business Pattern Data, U.S. Census Bureau

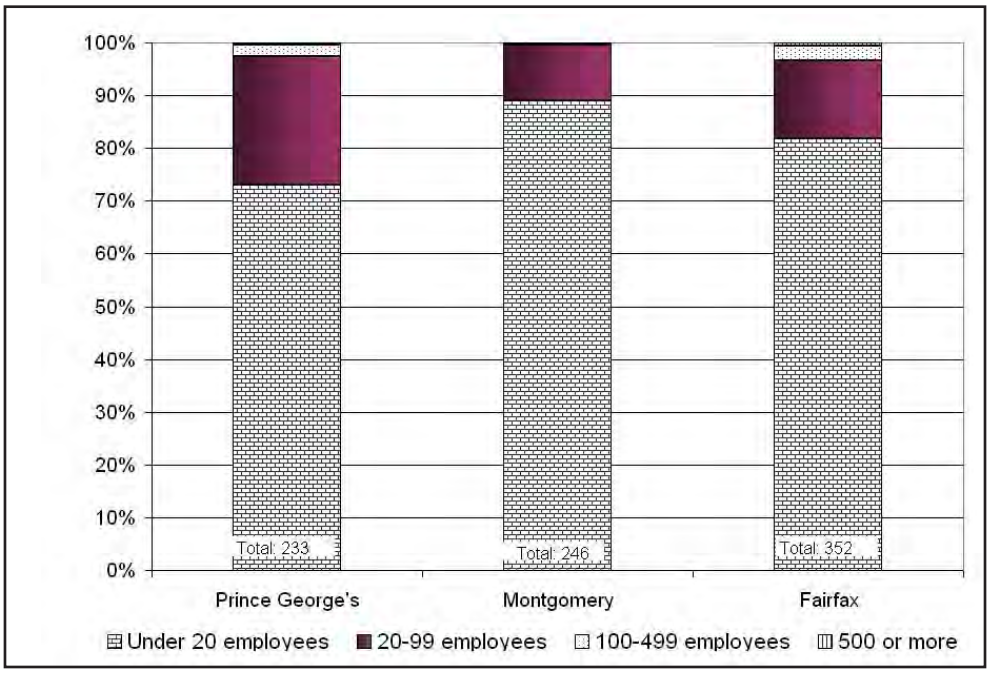


Figure A6-14. Comparison of Establishment Sizes in Prince George's County, Montgomery County, and Fairfax County in 2005 (Transportation and Warehousing)

Source: County Business Pattern Data, U.S. Census Bureau

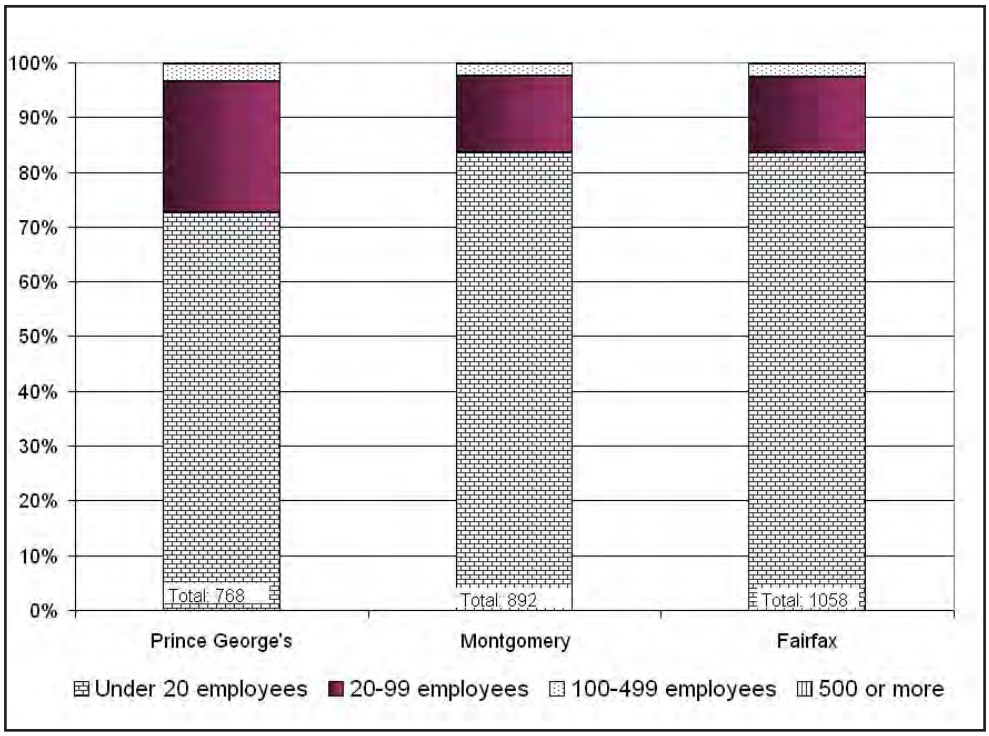


Figure A6-15. Comparison of Establishment Sizes in Prince George's County, Montgomery County, and Fairfax County in 2005 (Wholesale Trade)

Source: County Business Pattern Data, U.S. Census Bureau

The Industrial Sector: Detailed Analysis for Construction, Manufacturing, Transportation and Warehousing, and Wholesale Trade

This section reports on industry data at the more detailed level of analysis and includes the LQ and shift share analyses. The focus is mainly on the industrial sectors, but then, the service sector is also discussed. Displaying growth in the service sector will assist in understanding the pressures on industrial land.

Growth in Industrial Land Using Sectors

Table A6-8 shows the overall growth rates and job change, 1990 to 2005, in the four sectors that demand industrial land at the 2-digit NAICS level. Across the four sectors, growth in the county was slower than in the nation. Table A6-9 shows the data at the 3-digit NAICS level. At the most disaggregate industry level where data is available, overall, the county's employment growth is slower than that of the nation, with the exception of printing, transportation, warehousing and storage, textile mills, plastics and rubber manufacturing, and computer and electronic product manufacturing activities. These findings should not be interpreted as a weak county

economy. Rather, much of these results are typical of metropolitan counties across the country because land-intensive uses tend to move to fringe suburban and rural counties, as land values in inner metropolitan counties increase.

Table A6-8. County Employment Between 1990 and 2005 for Four Major Industrial Sectors

	1990 Employment	2005 Employment	Prince George's Annual Growth Rate	U.S. Growth Rate
Construction	25,747	31,750	1.4%	2.3%
Manufacturing	14,537	11,037	-1.8%	-1.5%
Transportation and Warehousing	8,817	9,855	0.7%	1.8%
Wholesale	12,199	12,060	-0.1%	0.7%

Source: QCEW, Bureau of Labor Statistics

Table A6-9. County Employment Between 1990 and 2005 for Subsectors in Four Major Industrial Sectors

	1990 Employment	2005 Employment	County Annual Growth Rate	U.S. Growth Rate
Construction of Buildings	3,840	4,883	1.6%	1.7%
Heavy and Civil Engineering Construction	4,531	2,448	-4.0%	0.8%
Specialty Trade Contractors	17,376	24,419	2.3%	2.9%
Food Manufacturing	1,588	943	-3.4%	-0.2%
Beverage and Tobacco Product Manufacturing		902	N/A	-1.0%
Textile Mills	N/A	N/A	N/A	-5.4%
Textile Product Mills	87	209	6.0%	-1.9%
Apparel Manufacturing	N/A	15	N/A	-8.4%
Leather and Allied Product Manufacturing		0	N/A	-7.6%
Wood Product Manufacturing	250	178	-2.2%	0.1%
Paper Manufacturing	N/A	89	N/A	-2.0%
Printing and Related Support Activities	2,916	2,656	-0.6%	-1.7%
Petroleum and Coal Products Manufacturing		N/A	N/A	-2.1%
Chemical Manufacturing	1,115	568	-4.4%	-1.0%
Plastics and Rubber Products Manufacturing	232	300	1.7%	0.2%
Nonmetallic Mineral Product Manufacturing	440	265	-3.3%	-0.4%
Primary Metal Manufacturing	N/A	18	N/A	-2.5%
Fabricated Metal Product Manufacturing	1,854	998	-4.0%	-0.3%
Machinery Manufacturing	246	199	-1.4%	-1.3%
Computer and Electronic Product Manufacturing	1,780	1,926	0.5%	-2.4%

Electrical Equipment, Appliance, and Component Manufacturing	144	19	-12.6%	-2.3%
Transportation Equipment Manufacturing	N/A	N/A	N/A	-1.4%
Furniture and Related Product Manufacturing	633	471	-2.0%	-0.9%
Miscellaneous Manufacturing	284	269	-0.4%	-0.6%
Merchant Wholesalers, Durable Goods	8,057	7,871	-0.2%	0.9%
Merchant Wholesalers, Nondurable Goods	3,463	3,618	0.3%	1.1%
Wholesale Electronic Markets and Agents and Brokers	679	571	-1.1%	-1.1%
Air Transportation	N/A	99	N/A	-0.1%
Water Transportation	N/A	N/A	N/A	-0.2%
Truck Transportation	2,495	2,283	-0.6%	1.2%
Transit and Ground Passenger Transportation	444	657	2.6%	2.0%
Pipeline Transportation	N/A	N/A	N/A	-3.5%
Scenic and Sightseeing Transportation	N/A	N/A	N/A	1.5%
Support Activities for Transportation	168	832	11.3%	2.6%
Postal Service	N/A	7	N/A	1.7%
Couriers and Messengers	N/A	4,015	N/A	3.1%
Warehousing and Storage	518	1,951	9.2%	4.1%

Source: QCEW, Bureau of Labor Statistics

Shift Share Analysis to Evaluate the Competitiveness of Prince George's Economy

Shift-share analysis dissects an industry's growth or decline into three components: growth due to overall national employment growth (i.e., is the national economy growing or declining?); growth due to the industry's growth (i.e., is the regional economy made up of industries that are growing or declining nationally?); and a local component (i.e., is an industry doing better or worse locally than nationally?). First, the results for the four industrial land-using sectors; construction (NAICS 23), manufacturing (NAICS 31–33), wholesale trade (NAICS 42), and transportation and warehousing (NAICS 48–49) sectors are reported. Then these four industrial activities are disaggregated into a more detailed analysis at the three-digit NAICS level.

Location Quotient

The LQ is simply a measure of the concentration of an industry in a local economy, such as Prince George's County, relative to the concentration of that industry in a larger economy; say Maryland or the United States. Using employment data as a measure of an industry's concentration, the formula compares the ratio of industry employment locally to total employment locally, with the ratio of industry employment in the comparison economy to total employment in the comparison economy. In this analysis for Prince George's County, the comparison economy is the United States. If the ratios are exactly the same, the LQ will be 1. If local ratio is less than the comparison ratio, the LQ will be less than 1, indicating that the industry may not be as strong locally as it is in the comparison economy. If the LQ is greater than one, it suggests that the local industry is more concentrated locally than in the comparison economy, and there may be some competitive advantage. When comparing Prince George's County to Maryland or the United States, a LQ greater than 1 generally indicates an industry that is a net exporter from the local economy. It is also useful to compare LQs over time. An industry with an increasing LQ may be gaining competitive advantage, while a falling LQ might signify an industry in trouble. Changes in LQ may also signify industry consolidation.

$$LQ = \frac{\frac{e_{ir}}{e_r}}{\frac{E_{ip}}{E_p}}$$

Where

e_{ir} = *industry employment in PG County*

e_r = *total employment in PG County*

E_{ip} = *industry employment in US*

E_p = *total employment in US*

Shift-Share Analysis

To understand employment changes over time, it is necessary to determine how much of the change can be attributed to growth in the larger economy, how much should be attributed to statewide or nationwide changes within a particular industry, and how much can be attributed to some local competitive advantage. The tool for this is shift-share analysis. Shift-share analysis looks at the change in employment from one period to another and allocates job gains and losses to national, industry, and local components. Since the larger economy is generally expanding, the national (share) component is generally positive. The industry mix and regional share components may be positive or negative and reflect the competitive positions of the overall industry and the industry within the region. These three numbers may vary widely, but their sum is always equal to the net job gain or loss. Comparing the three components can reveal which industries are truly competitive and which ones are in trouble.

Calculating Shift-Share Components

State (US) Share (Natural Economic Expansion)

$$SS_{ir}^{t} = E_{ir}^{t-1} \bullet \left(\frac{E_{us}^{t}}{E_{us}^{t-1}} - 1 \right)$$

Industry Mix Component

$$IM_{ir}^{t} = E_{ir}^{t-1} \bullet \left[\left(\frac{E_{ius}^{t}}{E_{ius}^{t-1}} \right) - \left(\frac{E_{us}^{t}}{E_{us}^{t-1}} \right) \right]$$

Regional Share (Competitiveness)

$$RS_{ir}^{t} = E_{ir}^{t-1} \bullet \left[\left(\frac{E_{ir}^{t}}{E_{ir}^{t-1}} \right) - \left(\frac{E_{ius}^{t}}{E_{ius}^{t-1}} \right) \right]$$

Net Employment Growth / (Loss)

$$N = SS + IM + RS$$

Where

IM = Industry Mix
SS = State (National) Share
E = Employment
RS = Regional Share
N = Net Job Growth
t = Current Period
t-1= Comparison Period
us = All US Employment
ir = Industry within Region
ius = Industry within US

An industry is considered to be “gaining competitive advantage” if its local component is positive, i.e., if the industry grows faster locally than it does nationally. If the local component is negative, the local industry growth is slower than that of the national industry, and the activity is defined as “losing competitive advantage.” Figure A6-16 presents an overview of performance for the four industrial land-using sectors.

The data in Figure A6-16 show that Prince George’s County is losing its competitive advantage in all four sectors: construction, manufacturing, transportation and warehousing, and wholesale trade. For all four sectors, the local component is in the negative category. Even though construction and transportation and warehousing grew nationally over the period at 1.4 percent and 0.7 annually, and respectively, as indicated by the positive value for the industry component for these two sectors in Figure A6-16, growth in Prince George’s County did not keep pace with the nation, as indicated by the negative local components for both sectors. Manufacturing and wholesale trade declined by 1.5 and 0.1 percent annually/nationally, as indicated by the negative values for the industry components, and the decline in Prince George’s County were even greater, as indicated by the negative local component in Figure A6-16. See Table A6-10 for the local component growth rate percentages. Table 4-3 also compares the local factors from the shift share analysis and LQs for the four industrial land-using sectors in Prince George’s, Montgomery, and Fairfax Counties.

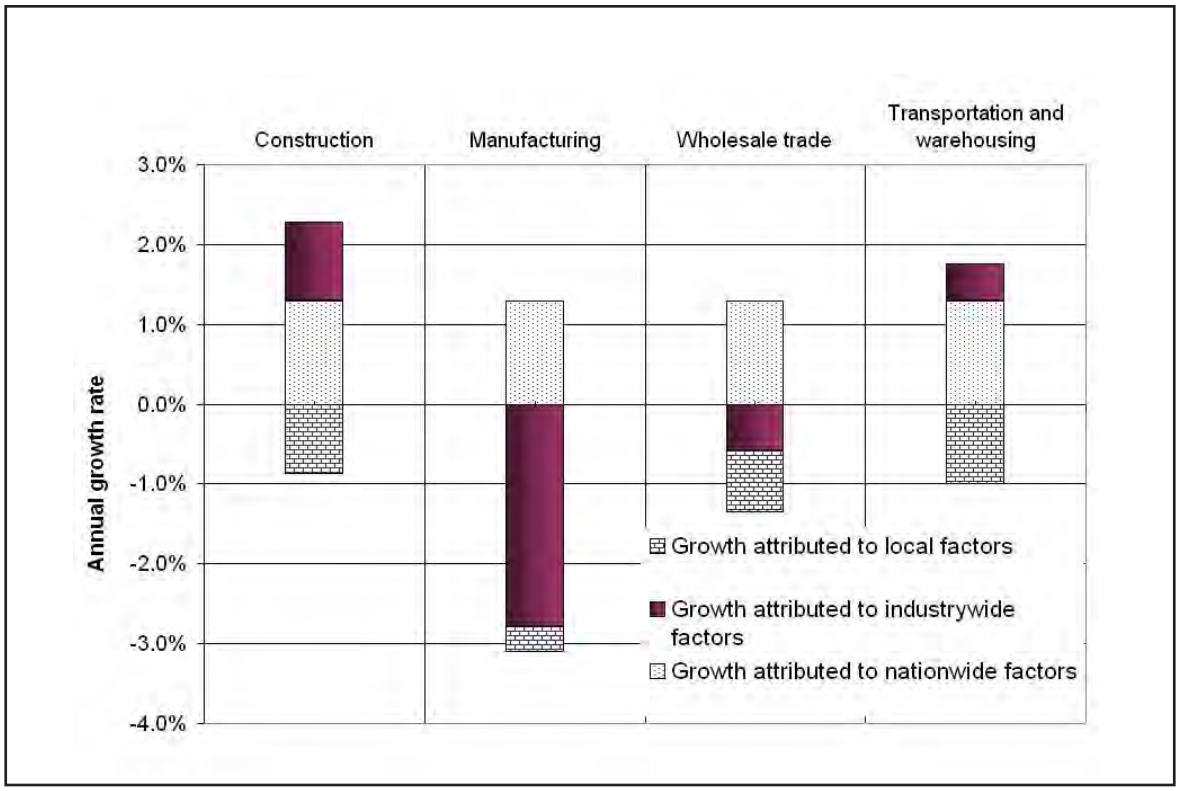


Figure A6-16. Components of Growth for Major Sectors in Prince George's County 1990–2005

Source: QCEW, Bureau of Labor Statistics

A LQ is the ratio of the share of county employment in a sector divided by the share of regional employment in a sector. The base is the share of employment in the region, including the District of Columbia, Maryland, and Virginia. So when the LQ equals 1, the county has the same share of employment in the sector as the region. When the LQ is above 1, the county has a larger share and vice versa. It is notable that construction, transportation and warehousing, and wholesale trade have LQs above 1 in Prince George's County, indicating higher concentration of county employment in those sectors, compared to the industry's regional share. Neither Montgomery nor Fairfax has as high an employment concentration in those sectors as Prince George's County does. However, the other two counties are gaining competitive advantage in transportation and warehousing with positive local factors (2.3 percent and 2.1 percent for Montgomery and Fairfax respectively).

In manufacturing, all three counties have LQs much less than 1. This indicates the local economies are less dependent on manufacturing than the region, which is defined here as Maryland and Virginia. This not surprising given the shift of manufacturing activities to more

rural locations. The next section will disaggregate the four industrial land using sectors into more detailed industry sectors and examine the performance of those sectors in the county economy.

Table A6-10. LQ and Local Factors Ranked by LQ for Four Major Industrial Sectors Across Three Counties in 2005

	Prince George's		Montgomery		Fairfax	
Sector	LQ 2005	Local factor, 1990 to 2005	LQ 2005	Local factor, 1990 to 2005	LQ 2005	Local factor, 1990 to 2005
Construction	1.6	-0.9%	1.0	-1.8%	0.9	-1.6%
Transportation and warehousing	1.2	-1.0%	0.4	2.3%	0.6	2.1%
Wholesale Trade	1.2	-0.8%	0.7	-0.7%	0.9	-0.4%
Manufacturing	0.5	-0.3%	0.5	1.1%	0.3	-0.4%

Source: QCEW, Bureau of Labor Statistics

Shift Share Analysis of Industrial Land Users at the Three-Digit NAICS Level of Industrial Detail

Table A6-11 reports the growth rates from 1990 to 2005 for the four industrial land-using sectors. Figures A6-17-20 show the shift-share components for the subsectors within construction, manufacturing, transportation and warehousing, and wholesale trade. The years 1990 to 2005 are used here because, prior to 1990, the Bureau of Labor Statistics reported industry data by SICs. This makes an earlier than 1990 time series analysis unreliable.

Each group of industrial land-using sector exhibits unique growth patterns. Figure A6-17 indicates that growth of the construction subsectors are due to national- and industry-wide factors, rather than local competitiveness. For all three subsectors, including construction of buildings (NAICS 236), heavy and civil engineering construction (NAICS 237), and specialty trade contractors (NAICS 238), these activities are growing slower in Prince George's County than in the nation.

Table A6-11. Annual Employment Growth 1990-2005

	Prince George's	Montgomery	Fairfax	US
Construction	1.4%	0.4%	0.7%	2.3%
Manufacturing	-1.8%	-0.4%	-1.9%	-1.5%
Transportation and Warehousing	0.7%	4.0%	3.9%	1.8%
Wholesale	-0.1%	0.02%	0.3%	0.7%

Source: QCEW, Bureau of Labor Statistics

Figure A6-18 reports the shift share results for the manufacturing industries. The figure shows that, across the board, the manufacturing industries in evidence in Prince George's County declined nationally. However, the performance in Prince George's County was stronger, generally meaning a slower decline in the county than the nation or outright growth, for textile product mills (NAICS 314), printing and related support activities (NAICS 323), plastics and rubber products (NAICS 326), and computer and electronics manufacturing (NAICS 334).

Figure A6-19 shows three subsectors within transportation and warehousing. Truck transportation (NAICS 484) is growing slower locally than nationally; however, both travel and ground passenger transportation (NAICS 485), and support activities for transportation (NAICS 488), are growing more rapidly, locally than nationally. Both industries are growing nationally.

Wholesale trade's subsectors are shown in Figure A6-20. All three subsectors are declining nationally and growing more slowly locally than nationally. Only merchant wholesalers, nondurable goods (NAICS 424) exhibits an overall positive, but slow, annual growth rate in Prince George's County of 0.3 percent annual growth, and this is due to the growth of the national economy. Wholesale trade in durable goods (NAICS 423) had a -0.2 percent annual average growth rate in the county.

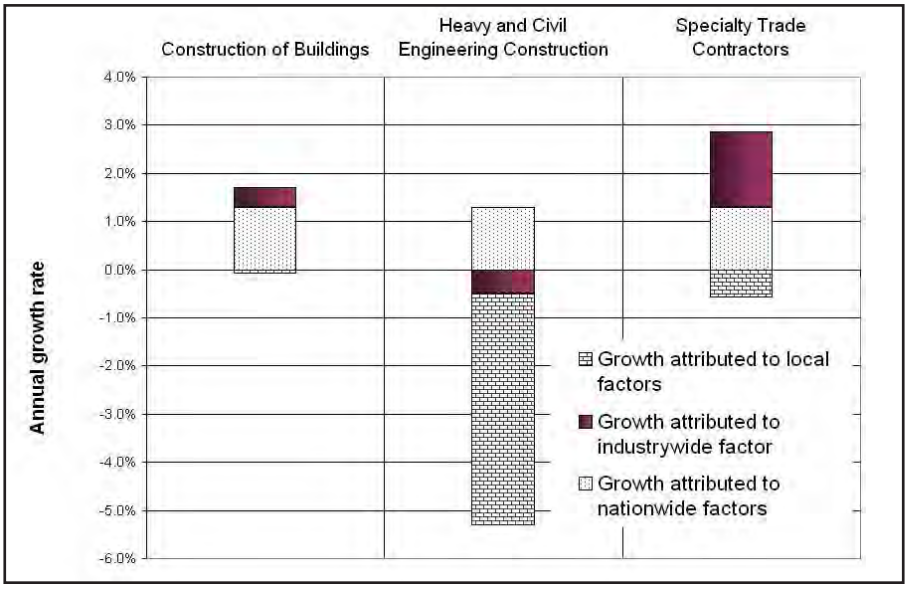


Figure A6-17. Components of Growth for Construction Subsectors in Prince George's County, 1990 to 2005

Source: QCEW, Bureau of Labor Statistics

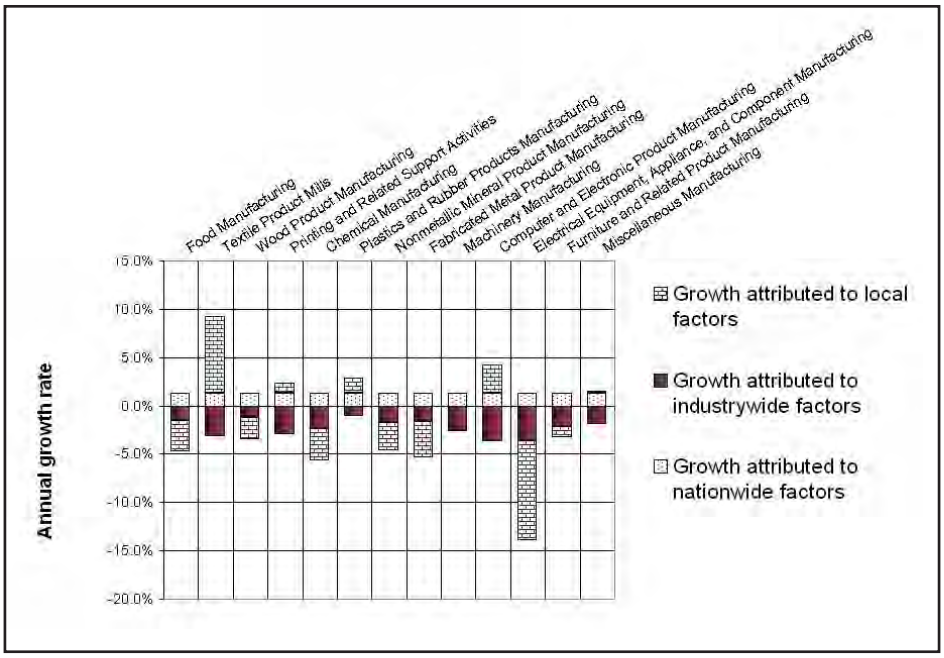


Figure A6-18. Components of Growth for Manufacturing Subsectors, Prince George's County 1990 to 2005

Source: QCEW, Bureau of Labor Statistics,

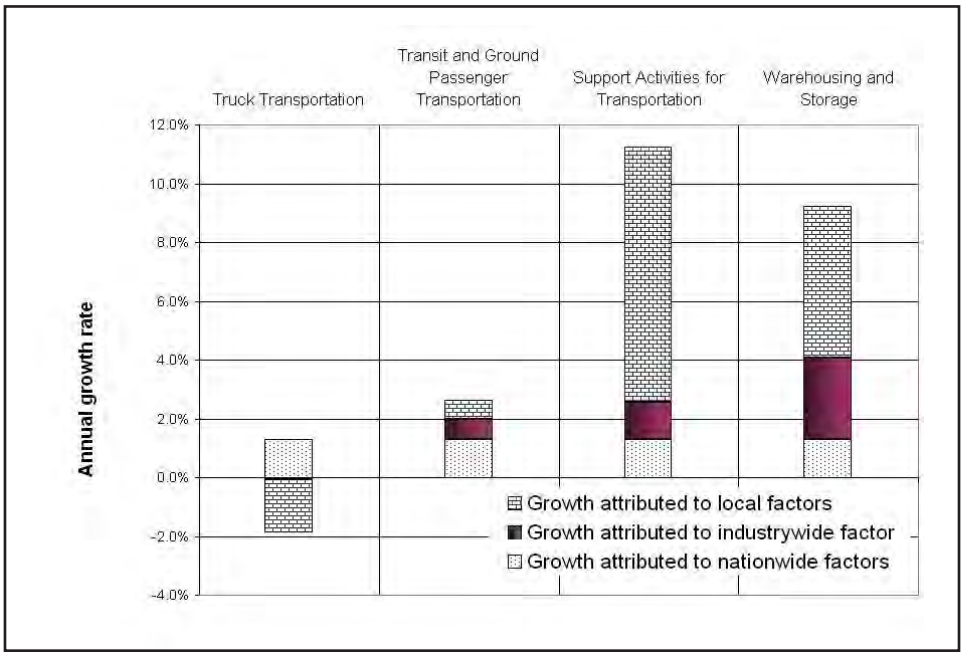


Figure A6-19. Components of Growth for Subsectors of Transportation and Warehousing, Prince George's County, 1990 to 2005

Source: QCEW, Bureau of Labor Statistics

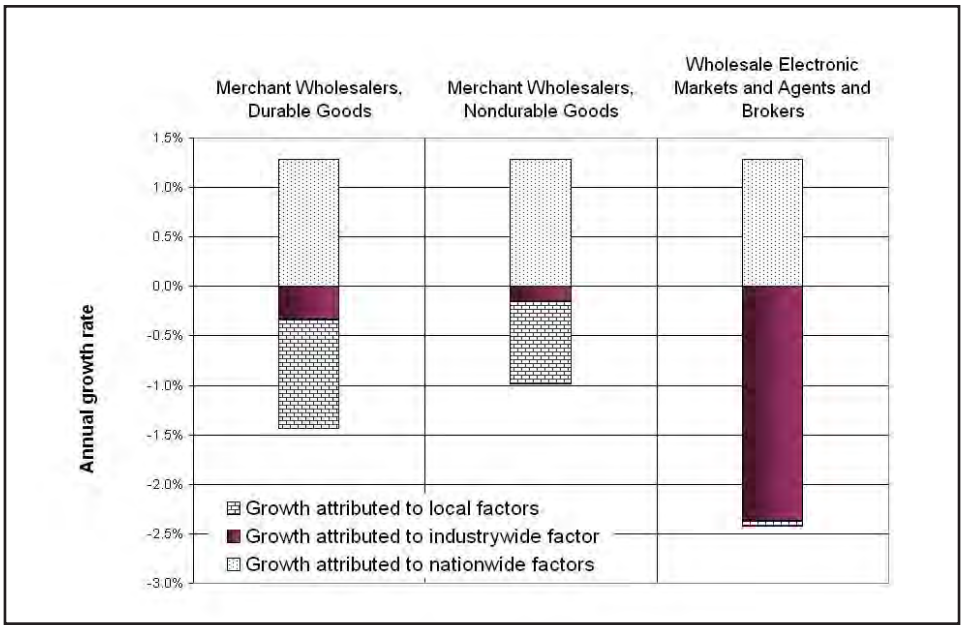


Figure A6-20. Components of Growth for Wholesale Trade Subsectors, Prince George's County, 1990 to 2005

Source: QCEW, Bureau of Labor Statistics

Not all subsectors could be included in the preceding analysis. Missing sectors include those whose data were suppressed in either 1990 or 2005 due to confidentiality. The census does not report data when there are so few firms that it might be possible to discern their identities. In other cases, firms may not have existed in the county in either one or both years.[32]

Table A6-12 combines the shift-analysis and the LQs and compares Prince George's County with the other two counties. The table includes the three-digit data for the four industrial sectors, dividing the industries into those gaining competitively with the nation and those lagging behind the industry nationwide. The industries are ranked by the LQ in Prince George's County. Despite the fact that manufacturing is declining and losing competitive advantage in the county, some of its subsectors are gaining competitive advantage and have high concentration in the county. Those subsectors include printing and related supported activities, computer and electronic products manufacturing (NAICS 334), textile products mills (NAICS 314), and plastic and rubber products manufacturing (NAICS 326).

[32] Data are not available for beverage and tobacco manufacturing, textile mills, apparel manufacturing, leather and allied product manufacturing, paper manufacturing, petroleum and coal product manufacturing, primary metal manufacturing, transportation equipment manufacturing, air transportation, water transportation, pipeline transportation, and scenic and sightseeing transportation.

Two issues to be aware of when deciphering this data are that (1) even though some industries have an overall negative growth rate in the county, the industry might have a positive local share component indicating the local industry is declining less rapidly than the industry is nationally; (2) the declining employment doesn't necessarily mean the industry is not healthy. When an industry modernizes and becomes more capital intensive, displacing labor, the result could be a negative employment growth rate but rising industry output.

The group of subsector industries with positive local component shifts, at the top of Table A6-12, accounts for a total of 8,146 jobs or 2.6 percent of total county employment—including government jobs—in 2005. The subsector activities with a negative local component, at the bottom of Table A6-12, accounts for 50,591 jobs or 16.1 percent of total county employment in 2005.

A comparison of local factors across three counties shows that Prince George's County is most successful in attracting and retaining jobs in printing and related support activities (NAICS 323), warehousing and storage (NAICS 493), computer and electronic product manufacturing (NAICS 334), and textile product mills (NAICS 314). Both Prince George's and Montgomery Counties show a strong advantage in computer and electronic product manufacturing, but Montgomery has a larger relative share of county employment in this industry. Both Montgomery and Prince George's Counties have a competitive advantage in printing and related support activities.

Specialty trade contractors (NAICS 238) account for 7.8 percent of total Prince George's County employment and are a larger share of the Prince George's County's economy than the region's. Specialty trade contractors are also more important in Prince George's County than in either Montgomery or Fairfax, as indicated by the LQ greater than 1 for Prince George's County but less than one in Montgomery and Fairfax Counties. The negative local factors indicate that growth in specialty trade contractors, while not keeping pace with the national industry, is still stronger in Prince George's than the other two comparison counties.

Durable and nondurable goods wholesaling hold a more important share of employment in Prince George's County than in the region, Montgomery County, and Fairfax County. However, the negative local factors for durable and nondurable wholesaling in Prince George's county signifies these activities are not keeping pace with the national growth rate.

Table A6-12. Location Quotients (LQ) and Local Factors Ranked by LQ for Subsectors of Four Major Industries Across Three Counties in 2005						
	Prince George's		Montgomery		Fairfax	
Sector	LQ 2005	Local factor, 1990 to 2005	LQ 2005	Local factor, 1990 to 2005	LQ 2005	Local factor, 1990 to 2005
Gaining competitive advantage						
Printing and Related Support Activities	1.9	1.1%	1.1	-1.8%	0.5	-2.3%
Warehousing and Storage	1.5	5.2%	0.2	N/A	0.2	-6.5%
Computer and Electronic Product Manufacturing	1.1	3.0%	2.5	2.9%	1.1	-2.9%
Textile Product Mills	0.8	7.9%	0.4	0.0%	0.4	4.8%
Support Activities for Transportation	0.7	8.7%	0.3	6.7%	0.4	0.1%
Miscellaneous Manufacturing	0.4	0.2%	0.7	0.6%	0.4	-0.9%
Plastics and Rubber Products Manufacturing	0.2	1.6%	0.0	N/A	0.2	N/A
Losing competitive advantage						
Specialty Trade Contractors	1.9	-0.6%	0.9	-2.3%	0.8	-1.4%
Merchant Wholesalers, Durable Goods	1.4	-1.1%	0.9	-1.4%	1.0	-0.1%
Merchant Wholesalers, Nondurable Goods	1.2	-0.8%	0.5	0.4%	0.4	-2.9%
Heavy and Civil Engineering Construction	1.0	-4.8%	0.6	-1.4%	0.9	-3.1%
Construction of Buildings	1.0	-0.1%	1.4	-1.3%	1.1	-1.0%
Truck Transportation	1.0	-1.8%	0.3	-0.9%	0.4	-1.9%
Transit and Ground Passenger Transportation	0.9	0.7%	0.6	9.5%	1.0	11.1%
Fabricated Metal Product Manufacturing	0.7	-3.7%	0.2	-0.5%	0.2	-0.3%
Wholesale Electronic Markets and Agents and Brokers	0.4	-0.1%	0.5	1.4%	1.4	1.6%
Furniture and Related Product Manufacturing	0.4	-1.1%	0.2	-3.7%	0.3	2.6%
Food Manufacturing	0.4	-3.2%	0.2	-2.2%	0.2	1.9%
Chemical Manufacturing	0.4	-3.4%	0.8	10.3%	0.2	6.0%
Nonmetallic Mineral Product Manufacturing	0.3	-2.9%	0.4	-2.3%	0.4	0.3%
Wood Product Manufacturing	0.2	-2.4%	0.1	-6.4%		-0.1%
Machinery Manufacturing	0.2	-0.1%	0.2	0.7%		1.3%
Electrical Equipment, Appliance, and Component Manufacturing	0.0	-10.3%	0.2	N/A	N/A	N/A

Source: QCEW, Bureau of Labor Statistics

The Services Sector

Services compete with the industrial sectors for land. Even though the county employment structure reflects the national trend of increasing service activities, not all services sectors have competitive advantage in the county. Figure A6-21 reports the shift share analysis for service industries in the county. Similar to the previous analysis of industrial sectors, the local factor component of annual growth rate indicates whether a specific activity performs better or worse

locally than nationally. According to Figure A6-21, real estate and rental and leasing; arts, entertainment, and recreation; and management of companies and enterprise have a competitive advantage in Prince George's. Again a competitive advantage is defined as a sector growing faster locally than in the nation as a whole. The majority of service activities are growing in the county but not as fast locally as nationally. Educational services grew 4.7 percent over the 1990 to 2005 period, health care and social assistance by 2.2 percent, information by 0.4 percent, accommodation and food services by 0.9 percent, administrative and waste services by 3.7 percent, and professional and technical services by 0.7 percent. In those sectors, most growth is attributable to nationwide and industrywide factors. Management of the companies and enterprises sector has the highest annual growth rate, of over 11 percent, and the shift-share analysis indicates that the county has strong local competitive advantage.

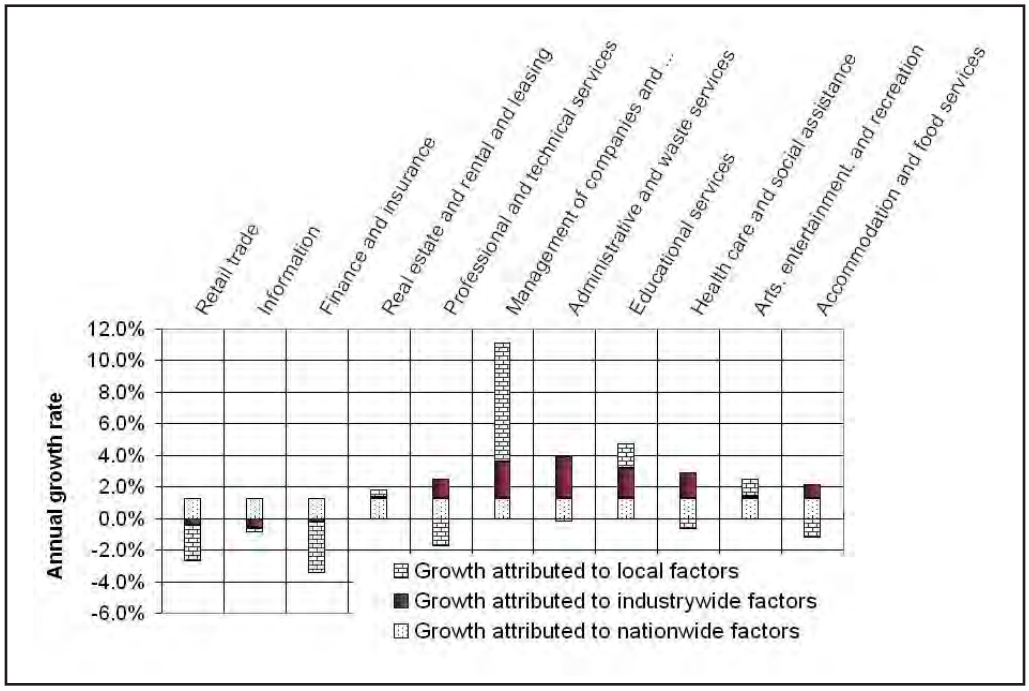


Figure A6-21. Components of Growth for Service Subsectors in Prince George's 1990–2005

Source: QCEW, Bureau of Labor Statistics

In general, the gaining sectors contribute a total of 14,000 employees to the county employment—nearly five percent of total county employment. Comparing the performance of the gaining sectors across the region suggests that the county is likely to see strong and continued service sector growth in the future. However, Montgomery County will compete for jobs in the gaining sectors as the two counties have similar local factors and LQs (Table A6-13).

Some sectors are losing competitive advantage. For example, Prince George's County is facing fierce competition from Fairfax County in information and professional and technical services. The LQ for the information sector reached 2.2 in Fairfax, compared to 0.8 in Prince George's County. In addition, the local factor shows growth in Fairfax compared to the negative values for Prince George's and Montgomery Counties. In 2005, Fairfax had over 30,000 employees working in information services, approximately five times Prince George's employment size in the sector. Similarly, Fairfax's labor force in professional and technical services is several times its counterpart in Prince George's County. Fairfax's LQ for professional and technical services is 2.5, compared to 0.8 in Prince George's County, and its local factor is 3.9 percent, compared to -1.8 percent in Prince George's County—again indicating that the industry is growing faster in Fairfax than in the nation but slower in Prince George's County than in the nation. The location of one of the four digital cable interchanges in the nation and the presence of Dulles Airport explains, in part, Fairfax's strength in information services.

Professional and technical services, health care and social assistance, and accommodation and food services activities contribute a significant number of county jobs—22 percent of county total employment. Moreover, all of these activities are growing in the county, primarily because of strong national growth in these activities. However, these three activities are growing slower in the county than in the nation as a whole. Continued growth in these activities will have an observable impact on land demand in the county. To ensure the continued strength of the economy, it is also important to identify reasons associated with negative local factors for those three sectors and take steps to resolve any problems that may inhibit future growth.

Table A6-13. Location Quotients (LQ) and Local Factors Ranked by LQ for Services Sectors Across Three Counties in 2005

	Prince George's		Montgomery		Fairfax	
Sector	**LQ 2005**	**Local factor, 1990 to 2005**	**LQ 2005**	**Local factor, 1990 to 2005**	**LQ 2005**	**Local factor, 1990 to 2005**
Gaining competitive advantage						
Real estate and rental and leasing	1.1	0.5%	1.7	-1.4%	1.0	0.0%
Arts, entertainment, and recreation	1.0	1.1%	1.2	2.6%	1.0	-0.5%
Management of companies and enterprises	0.7	7.5%	0.5	8.4%	2.4	0.7%
Educational services	0.4	1.6%	0.9	0.7%	0.6	1.3%
Losing competitive advantage						

Retail trade	1.2	-2.3%	1.0	-0.7%	0.9	-0.3%
Administrative and waste services	1.0	-0.2%	1.3	-0.3%	1.2	-0.2%
Accommodation and food services	0.9	-1.2%	0.9	-1.3%	0.8	1.4%
Information services	0.8	-0.3%	1.3	-2.8%	2.2	1.4%
Health care and social assistance	0.8	-0.7%	1.1	0.5%	0.7	1.4%
Professional and technical services	0.8	-1.8%	1.5	-0.6%	2.5	3.9%
Finance and insurance	0.6	-3.2%	1.3	0.8%	1.1	2.2%

Source: QCEW, Bureau of Labor Statistics

Chapters 3 and 4 show a growth in service employment, an increase in demand for residential land, and slow, steady growth in the industrial sector. Particular industrial activities show strength in the county. Printing and related support activities, computer and electronic product manufacturing, and specialty trade contractors (NAICS 238) are especially important sectors in the county. For example, specialty trade contractors account for 7.8 percent of total Prince George's County employment.

The strength in some construction, transportation and warehousing, and selected manufacturing activities in Prince George's County suggests a continued demand and need for industrially zoned land. Specialty trade contractors (NAICS 238), construction of building (NAICS 236), and merchant wholesalers for nondurable goods (NAICS 424) show positive employment growth over the 1990 to 2005 period, primarily because of the strong national growth in these industries. Overall, the county's employment growth is stronger locally than for the nation in warehousing and storage (NAICS 493), printing and related support activities (NAICS 323), computer and electronic product manufacturing (NAICS 334), Textile product mills (NAICS 314), Plastics and rubber manufacturing (NAICS 326), transit and ground transportation (NAICS 485), and support activities for transportation (NAICS 488).

Within the services sector, there is positive growth in professional and technical services (NAICS 54); administrative and waste Services (NAICS 56); management of companies and enterprises (NAICS 55); education services (NAICS 61); health care and social assistance (NAICS 62); arts, entertainment and recreation (NAICS 71); accommodation and food services (NAICS 72). For many of these sectors, local growth is explained by strong national growth in these sectors. The sectors showing stronger local than national growth are real estate and rental and leasing, educational services, and management of companies and enterprises. Management of companies and enterprises is growing 7.5 percent faster in Prince George's County than the nation. The growth of this and other service sector activities suggest a continuing and future need

for office and commercial space. In Chapter 5, a pattern consistent with these industry patterns emerges when the development activities monitoring system is used to analyze the county zoning amendments from 2000 to 2007

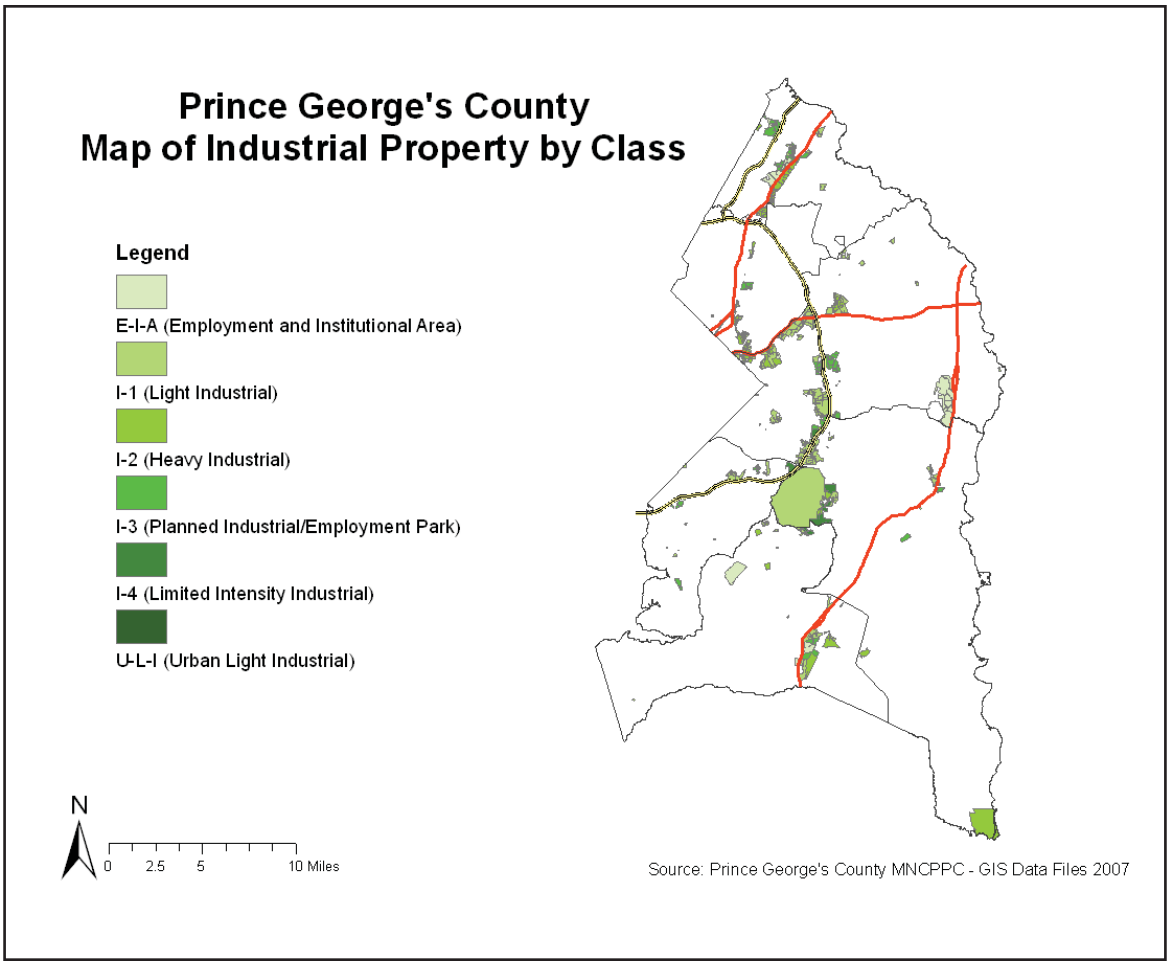
Inventory of Industrial Land and Nonconforming Uses

An inventory of industrial land was created from GIS data provided by M-NCPPC. Table A6-14 reports the acres of land per class of industrial zoning. The land in each zoning category across the county is shown in Map 6.1. Industrially zoned land by Transportation Analysis Zone (TAZ) is shown in Map 6.2. The analysis in this Chapter includes the acreage for Andrews Air Force Base and Chalk Point.

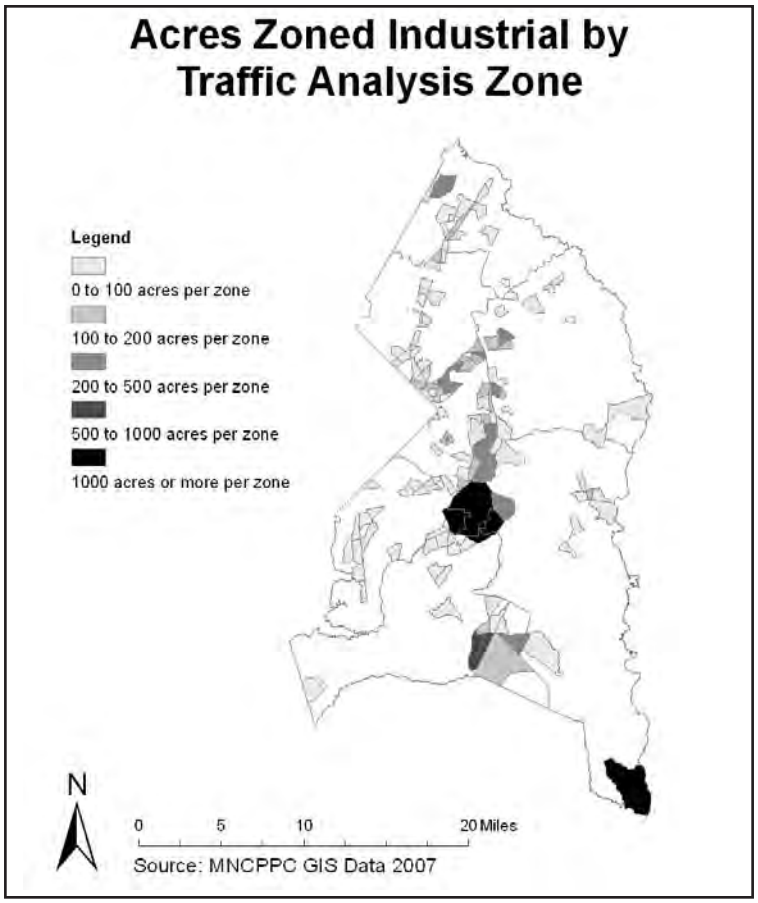
Table A6-14. Acreage Zoned for Industrial Use, by Type of Industrial Zone: Prince George' County

Class	EIA	I1	I2	I3	I4	ULI
Acreage	2,271	9,424	3,303	2,088	795	44
Percent of Total Zoned for Industry	11.2	46.7	16.4	10.3	3.9	0.2

Source: M-NCPPC GIS data, 2007



Map A6-1. Industrial Property by Class



Map A6-2. Acres Zoned Industrial by TAZ

Nonconforming Uses

The total acreage of land zoned for industry in Prince George's County is approximately 20,188 acres. Some land within the county is zoned for industry but not used as such. The inverse is true as well; some land not zoned for industry is not actually used by industrial firms. These properties are considered 'nonconforming.' The Development Activity Monitoring System (DAMS) database was first used to identify nonconforming land uses. Unfortunately, this database only reaches back seven years and contained just one reference to an industrial property that qualified as nonconforming. The Maryland State Assessor's Tax Code (AZC) was, therefore, used to identify nonconforming properties. Every property within the M-NCPPC database is identified by an AZC value. Those properties that received a score of '007' or '907' are taxed as industrial uses by the state of Maryland. These codes were used to identify both types of nonconforming land uses: nonindustrial uses situated on industrially zoned land; and industrial uses located on parcels not zoned industrial.

The following two graphs summarize the results from comparing these two datasets. Figure A6-22 indicates that 1,493 acres of land in Prince George's County is not considered in industrial land use by the tax code, though are in parcels zoned for industrial activity. In other words, the activities on these properties do not have '007' or '907' AZC codes, though they are located in parcels in one of the six industrial zoning categories identified above. These properties are nonconforming.

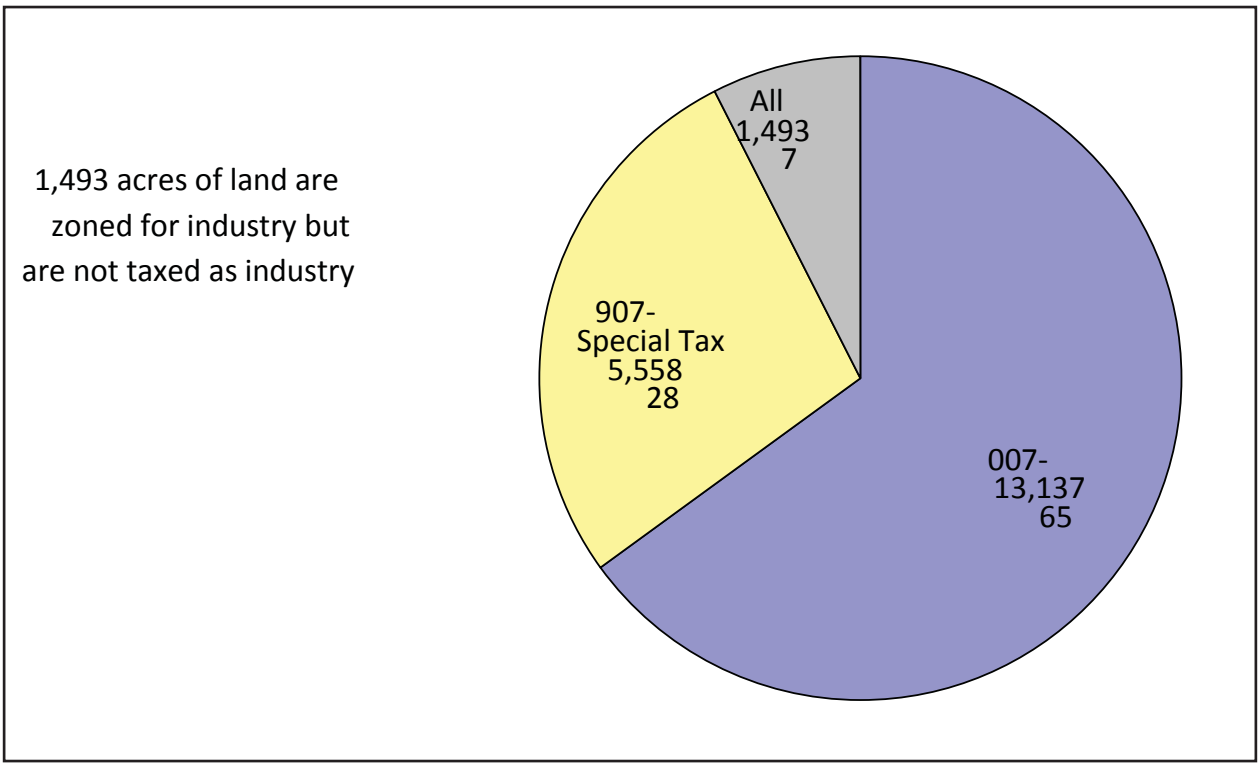


Figure A6-22. Land Zoned Industrial Use as Designated by the Tax Code

Figure A6-23 indicates that 637 acres of land in Prince George's County are actually being used for industrial activity according to the tax records, though the zoning does not support an industrial use. In other words, these properties do have '007' or '907' AZC codes, though they are not located in one of the six industrial zoning categories. These properties are also nonconforming. These two categories almost balance out, with a difference of 836 acres (1,493 acres minus 637 acres). Non-conforming uses amount to four percent of the industrially zoned land within Prince George's County. The discrepancy between the industrial activity, as measured by the two datasets, is relatively small and scattered around the county. (See Map A6-3 for the location of nonconforming uses.)

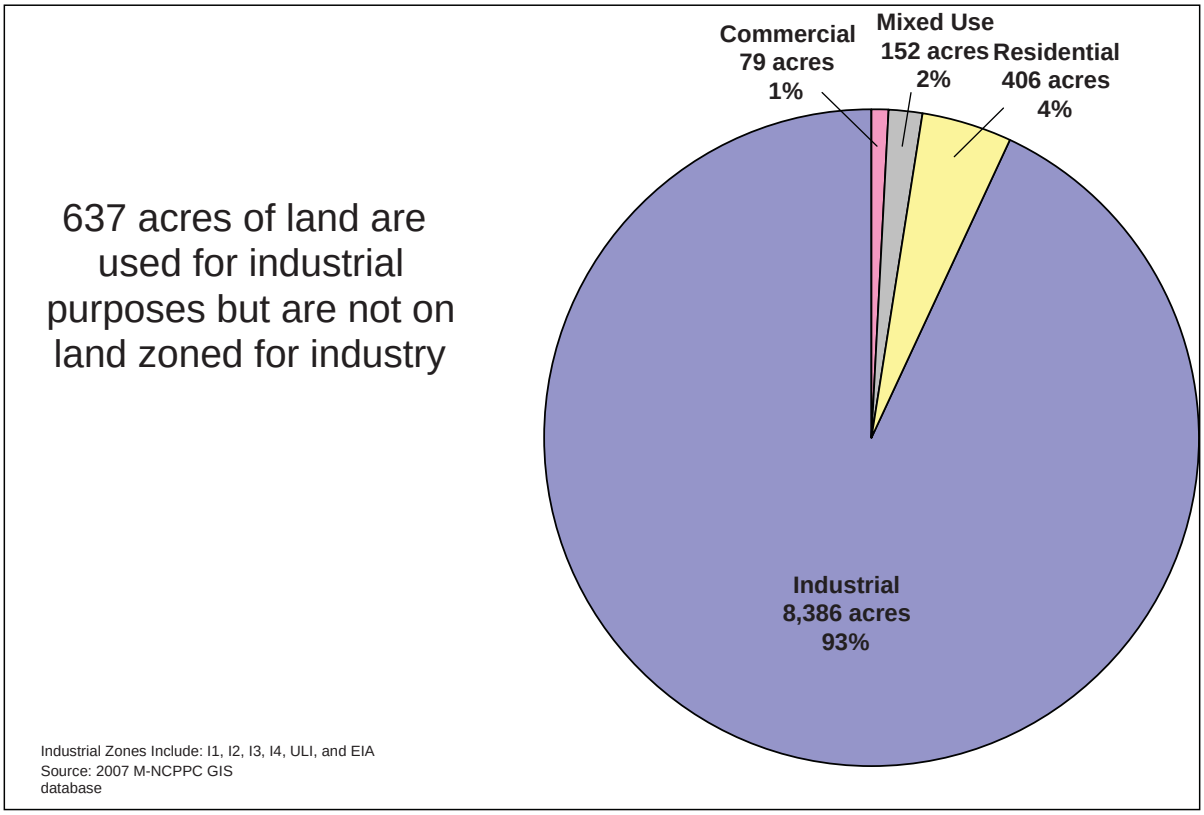
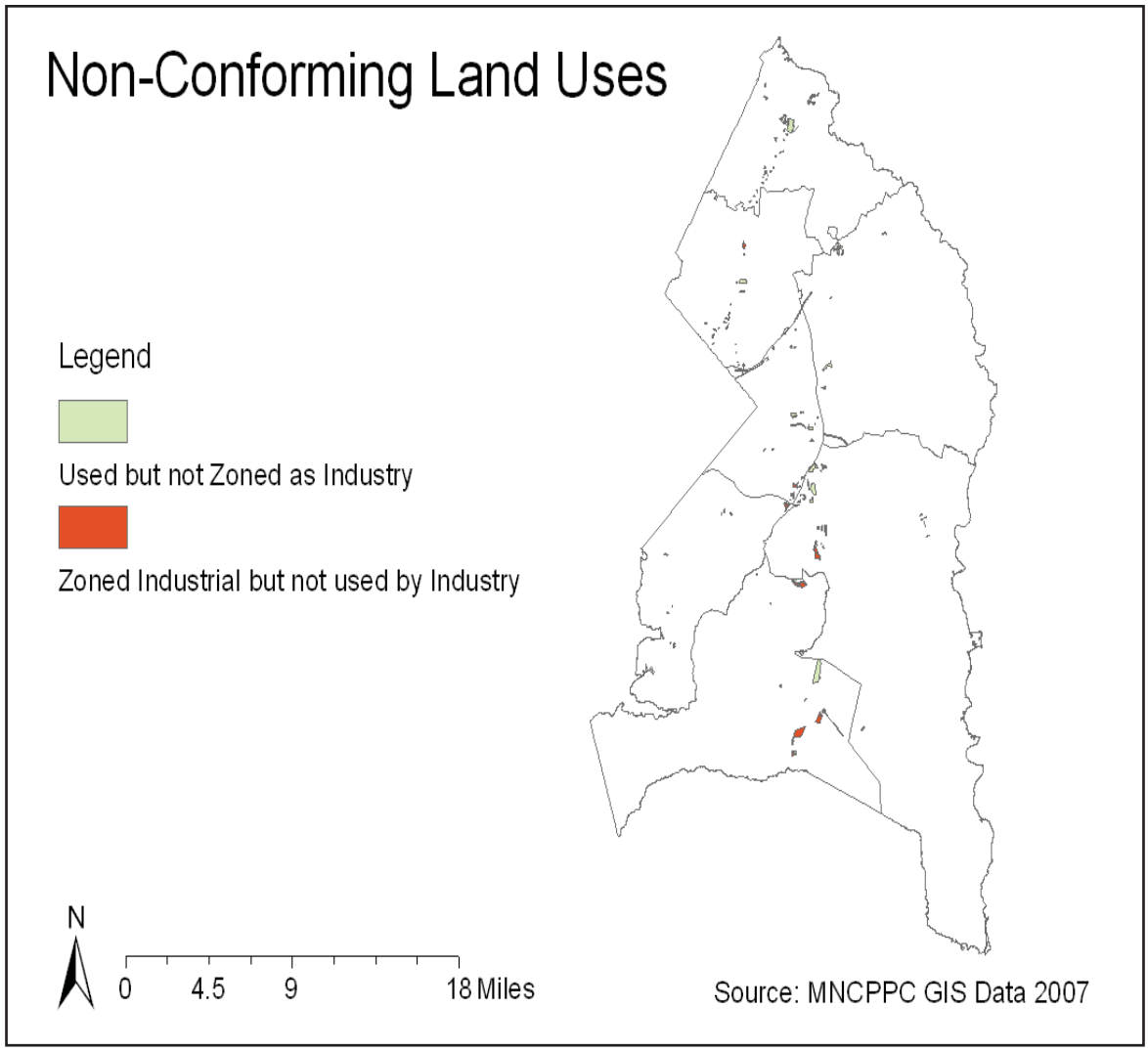


Figure A6-23. Activities Designated as Industrial by the Tax Code, Location According to the Zoning Code



Map A6-3. Nonconforming Land Uses

Requests for Zoning Change

The DAMS database monitors the location of new development in the county. The database contains applications accepted by the Development Review Division (DRD) from January 1, 2000 to July 1, 2007. There are three categories reviewed by the division: zoning, urban design, and subdivision. The first category, zoning, is the most relevant category for this study; therefore, only requests for 'Zoning Map Amendments' are included.

Between January 1, 2000 and July 1, 2006, there were 39 requests for zoning amendments in the DAMS system. Of those, ten were requests to change the zoning from one of the six industrial categories to a nonindustrial use. Six of the ten requests were approved by the DRD of the Prince George's County Planning Department.

Just one request was made to rezone from an industrial to a nonindustrial category. The property was 22.8 acres in size. The following tables summarize the information for Prince George's County provided by the DAMS database.

Table A6-15. Countywide Requests for Zoning Changes

Total Acreage in the County	Total Acreage Zoned Industrial	Total Acreage Considered for Zoning Map Amendment	Acreage Considered for Zoning Map Amendment from Industrial to Nonindustrial Use
318,720	17,925	4,107	876

Source: DAMS database, Prince George's County, MD, January 1, 2000, to July 1, 2007.

Currently, 5.6 percent of all land in Prince George's County is zoned industrial. If the entire 876 acres of industrial land being considered for a zoning map amendment are approved, then 5.4 percent of all land in Prince George's County would remain zoned for industrial. This is not a significant change but does indicate the direction of pressure, which is to release industrial land for residential and service sector uses.

Of all the acreage currently being considered for rezoning, 21.3 percent is currently zoned for industry. The remaining 79 percent are currently in all other zoning categories. This is significant, given that overall just 5.6 percent of all land in Prince George's County is zoned for industry. In other words, a disproportionate amount of land that is considered for rezoning is currently zoned as industrial. Of the applications for rezoning out of industrial use, 30 percent were in I-1, 2 percent in I-2, 41 percent in f I-3, and 28 percent in E-I-A. It is interesting to note that none of the land currently zoned U-L-I was up for rezoning. Most of this land is in the older industrial areas near the border with the District. This area might be of less interest for rezoning to residential and commercial use because it is generally in smaller parcels requiring infill development, in locations with older infrastructure.

Properties that are being rezoned from industry are converted into one of three categories. Half of the total acreage is being rezoned into residential land use, while 23 percent of the total acreage is being rezoned to commercial land use and 26 percent is being rezoned into mixed land use categories. These categories include M-X-T (mixed use transportation oriented) and local activity center (LAC). M-X-T permits industrial use, but it is not required. LAC does not permit industry.

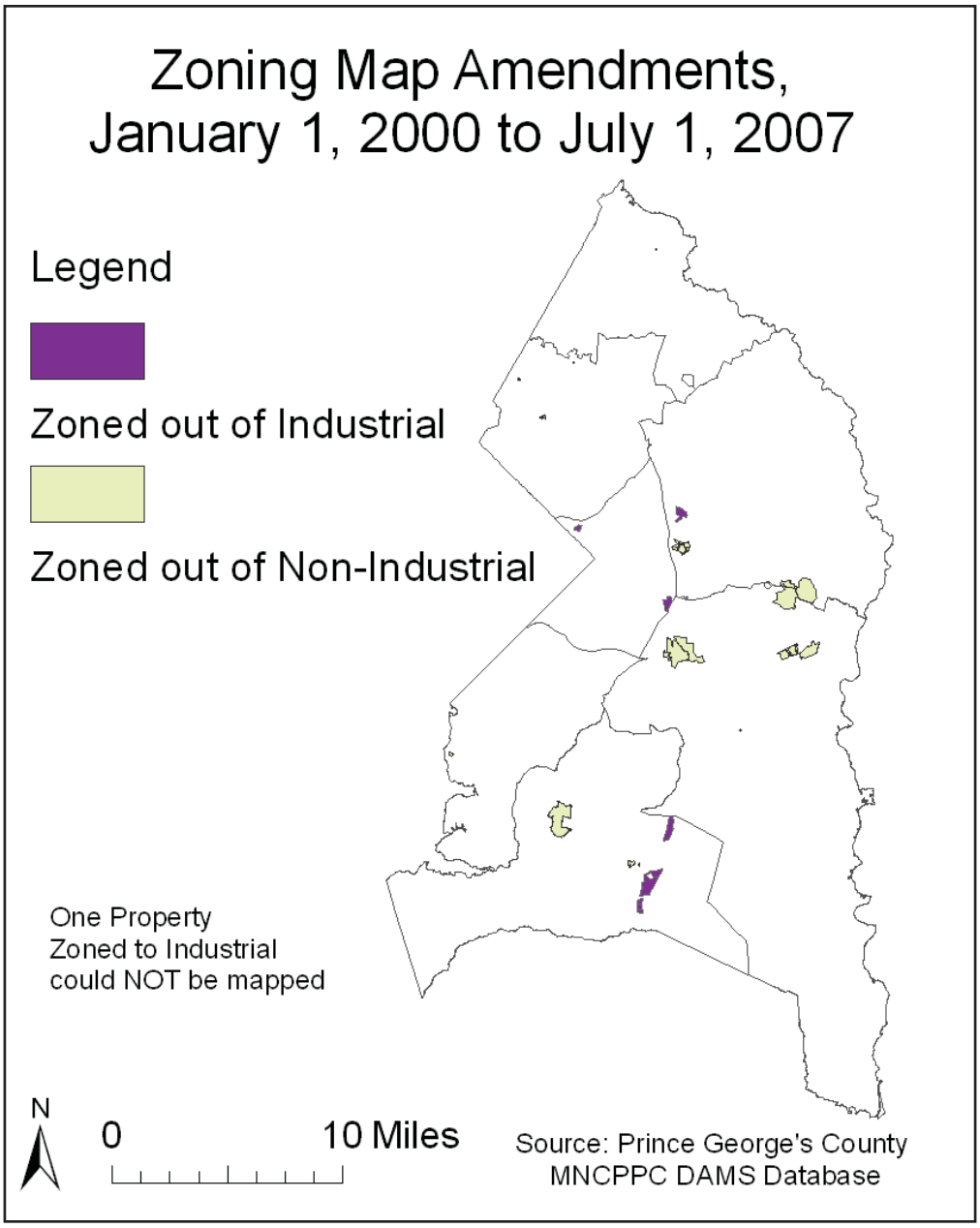
All of the properties that have been or are being considered for rezoning from an industrial category were located in just three planning subregions. Subregion 5, in the southern portion of the county, accounts for more than two-thirds of the total area with requests for rezoning out of industrial use. The majority of this property is in the Brandywine area, in Area 5 of Table A6-16. The location of each rezoning request is shown in Map 6.4. The darker areas are requests for rezoning out of industrial use. The lighter color areas are the remaining requests, such as single-family residential to multi-family residential.

Table A6-16. Requests in Acres for Zoning Change Out of Industrial by Subregion

Subregion	1	2	3	4	5	6	7
Requests for Rezoning Out of Industrial Use	0	0	138	136	592	0	0

Source: DAMS database, Prince George's County, MD, January 1, 2000, to July 1, 2007.

Recently, the Washington Post published an article about the many new developments occurring in Prince George's County (Wiggins, 2007). One example was a 'new urbanist' development in Laurel, called Konterra. It is supposed to include "a town center anchored by three department stores...single-family homes, a golf course, and a business campus." The town center will consume about half of the 1,447-acre property. The remaining property will be divided among the other land uses. This division of uses does not suggest that much of the new development will include industrial activity



Map A6-4. Location of Rezoning Requests

This case suggests that a complete accounting of declining demand for industrial land use in the county may not be easily conducted. The flexibility in the EIA zoning may overstate the share of county land in industrial zoning and mask some of the shift from industrial zoning to mixed and residential use. Although included in the analysis as industrially zoned land, much of the activity in EIA zones appears to be nonindustrial. The AZC code, mentioned above, was used to estimate how EIA parcels are actually being used. Approximately 553 acres of land are currently taxed in the '007' or '907' category. This is just 23 percent of all EIA property. More-

over, because changes in use in the EIA zone do not have to proceed through the county planning process, changes from an industrial to residential, office, or commercial use in EIA zones are not captured in the DAMS dataset and, therefore, not reported in this report.

However, as mentioned above, 28 percent of the zoning requests occurred in land currently zoned EIA. This suggests that developers do not want to comply with the design standards required by EIA. Approximately 87 percent of these zoning amendments involved a shift to residential use.

A similar case, Karington, is a "classic example of new urbanism, [with] a private school, a conference center, two hotels, a lake and estate homes" (Wiggins 2007). Some of this property is also zoned EIA, and there is little evidence of any industrial uses, even though EIA is considered an industrial category.

Land Contamination

Being able to identify contaminated land and designate appropriate use is important to the county, as pressures on the land inventory mounts. The following section summarizes important contamination databased on the Maryland Department of the Environment's (MDE) site reports.

The MDE lists and monitors a total of 112 sites in Prince George's County that were reported as contaminated or suspected to have contaminants. Those sites total 27,669 acres, account for approximately 8.9 percent of county land (310,675 acres), and are found in residential, commercial, and industrially zoned areas. Figure 5-3 categorizes contaminated properties into five primary types: (1) seriously contaminated; (2) potentially hazardous but no long-term risk detected; (3) currently under clean up; (4) cleaned and safe; and (5) under investigation/or consideration. The degree of contamination varies across sites in the county with different contaminants. Depending on activities conducted at the property, common contaminants can be chemicals used in dry cleaning process, oil, heavy metals, radioactive materials, pesticides, organics, and other inorganics. Common activities that generate contamination include landfill, dry cleaning, auto-repair, illegal dumping, manufacturing, agricultural experiments, and military activities. In some cases, the source of contamination can be small, such as a dry cleaning facility, but it can affect a much larger area, such as an entire shopping area. The two largest contaminated sites are the Patuxent Wildlife Research Center (12,800 acres) in Laurel and the U.S. Agricultural Center (6,600 acres) in Beltsville. Both of them have served as experiment facilities, which have used a

large amount of chemicals of different types. While the former is now considered as potentially hazardous, the latter is still under investigation.

There is only one seriously contaminated brownfield site in Prince George's County—filed under the name of Addison Development in Seat Pleasant—a 27-acre site that has contaminants, such as lead, arsenic, cyanide, PCB, pesticides, heavy metal, and other toxics. There are 33 sites in the county that can be considered to be potentially hazardous but on which no long-term risk has been detected. These sites account for 54.5 percent of total sites with a contamination issue and 4.9 percent of total county land. Sites listed in this category received the Maryland Department of Environment's (MDE) "No Further Requirement" determination status. Owners of those sites participated in the Maryland Voluntary Cleanup Program. Those sites have been cleaned up and possess no long-term health risk as long as their uses comply with MDE's specific land use requirements. Also included among sites in this group are the Comprehensive Environmental Response, Compensation, and Liability Act sites (aka SuperFund) that received EPA's "No Further Action" status.

There are six sites under current cleanup, accounting for 0.6 percent of total sites and about 0.1 percent of total county land. Those sites are in the process of implementing a Response Action Plan (RAP) approved by MDE. A RAP specifies a remedial approach and has a schedule to address environmental concerns at a property not qualified for "No Further Requirements" determination. "Cleaned/safe" sites are those reported by the MDE as cleaned up, contamination not found, deleted from the state master list or labeled as "Formerly Investigated Sites." There are 14 sites in this category in the county, accounting for 15.8 percent of total acreage with contamination issues and 1.4 percent of total county land. There are also 21 sites, accounting for 26 percent of acreage with contamination issues and 2.3 percent of total county land, that are still under investigation according to the latest site report from the MDE. Thirty-seven remaining sites lack information. Some of them are small and were reported by people outside the MDE as having some evidence of contamination, such as suspicious drums or dumping along a road. However, the MDE staff did not find any evidence necessary for further examination, or the evidence of contamination was removed from the scene. Some of those sites have been dropped off the MDE monitoring program. Data for the share of contaminated land in the county are sum-

marized in Figure 1-4 in Chapter 1 above. The location of the contaminated sites in the county is shown in Map 6.5.

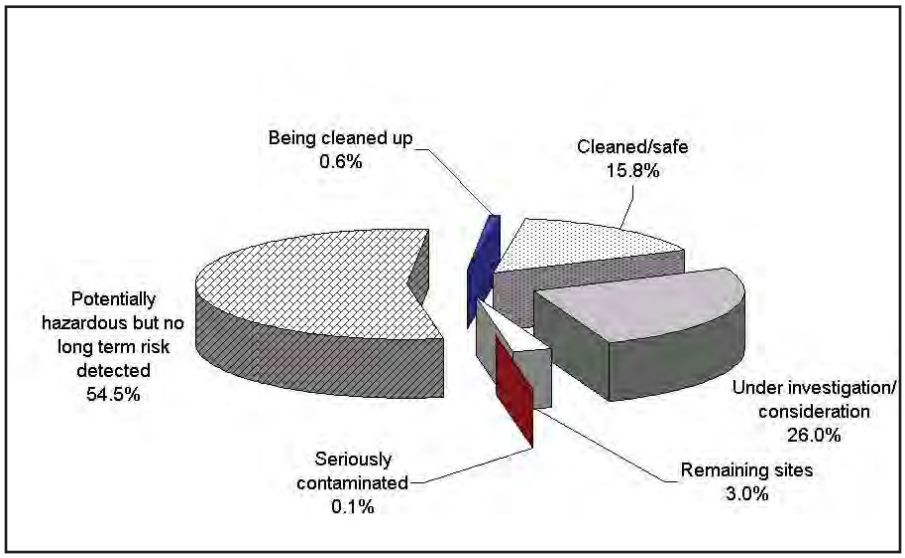
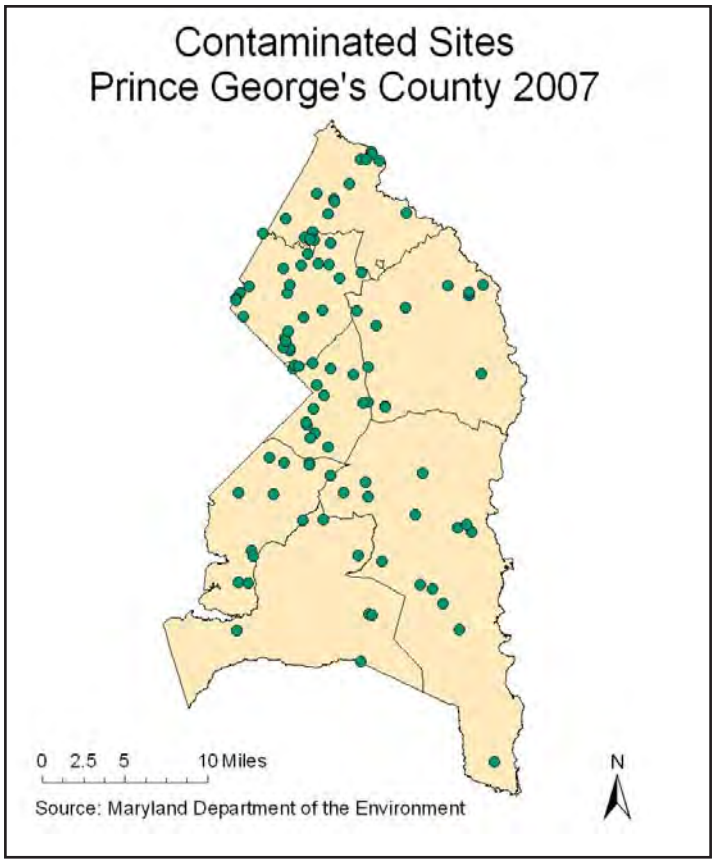


Figure A6-24. Distribution of Land That Has Been Contaminated in Prince George's County

Source: MDE, 2007



Map A6-5. Location of Contaminated Sites in Prince George's County

As was pointed out in Chapter 1, some contaminated industrial parcels will be unsuitable for residential and commercial development. Unless the cleanup of these properties is relatively inexpensive, contaminated parcels are unlikely to be converted to nonindustrial use.

Implications for Industrial Land Policy

Prince George's County appears to have an oversupply of industrially zoned land.[33] This conclusion is supported by the historical analysis in Chapter 2, the employment data in Chapters 3 and 4 and the rezoning request data reported in Chapter 5. The three analyses differ in the estimated surplus of industrially zoned land, but all agree that Prince George's County will need less industrial land in the future.

[33] This preliminary conclusion does not take into account industrial land acreage in Chalk Point and Andrews Air Force Base.

Chapter 2 examines the history of industrial zoning policy. Figure 2-2 in Chapter 2 indicates that, if the 3:1 ratio is really the appropriate level of industrial land reserve, then approximately 4,000 acres could potentially be rezoned from industrial to other uses without adversely affecting the availability of industrial land. This observation leads to a number of questions. Is the 3:1 ratio appropriate for the future? How much of the reserve is actually developable? Which industrial land is best suited for rezoning, and which land should remain industrial? These questions and others must be answered before conclusions may be drawn on the appropriateness of rezoning industrial land.

The industrial employment analysis in Chapter 3 shows slow growth, outpaced by growth in the service and residential sectors. Over the 1990 to 2005 period, employment in industrial activities grew at an annual average rate of .4 percent per year. The comparable growth rate for employment in the service activities was 1.5 percent. Manufacturing (-1.8 percent) and wholesaling (-.1 percent) declined over the 1990 to 2005 period. The two other sectors, construction (1.4 percent) and transportation and warehousing (.7 percent) grew slowly in the county. Their growth was slower locally than nationally. Comparing the growth rate over the 1985 to 2005 and 1990 to 2005 periods, the growth in the more recent period, 1990 to 2005, is slower than the longer period of 1985 to 2005. In other words, more recent years have seen a further slowdown in industrial employment growth than reported in the
M-NCPPC (1985) land use study. National employment slowdowns in these sectors, the shift away from employment intensive production processes to more capital intensive processes, and the decentralization of land intensive industrial activities away from cities and inner suburbs toward rural and offshore locations explains this slowdown.

However, the relative strength in some construction, transportation and warehousing, and selected manufacturing activities in Prince George's County suggests a continued demand and need for industrially zoned land. Specialty trade contractors (NAICS 238), construction of building (NAICS 236), and merchant wholesalers for nondurable goods (NAICS 424) show positive employment growth over the 1990 to 2005 period, primarily because of the strong national growth in these industries. Overall, the county's employment growth is stronger locally than for the nation in warehousing and storage (NAICS 493), printing and related support activities (NAICS 323), computer and electronic product manufacturing (NAICS 334), textile product mills

(NAICS 314), plastics and rubber manufacturing (NAICS 326), transit and ground transportation (NAICS 485), and support activities for transportation (NAICS 488). The transportation and warehousing activities are attracted to site along major highways, particularly I-95, I-495, and highway interchanges.

Printing and related support activities, computer and electronic product manufacturing, and specialty trade contractors are especially important sectors in the county. For example, specialty trade contractors account for 7.8 percent of total Prince George's County employment. These three activities are a larger share of the Prince George's economy than the surrounding comparison counties. Interviews conducted with industrial firm owners in these industries helped to define the reasons for their local strength, location preferences within the county, the other industries in the region that support them, labor force needs, and infrastructure needs.

Several issues could not be addressed yet. First, analysis of the DAMS file indicates that the greatest demand for rezoning out of industrial land to other uses is occurring in Subregions 3, 4, and 5 (see Table A6-16). Are these the areas where the county should relinquish industrially zoned land? An analysis of the CoStar data will help to further define the locations where there is a market demand for industrial land by providing data on vacancies rates and changes in land values. Above average increases in land values are a sign of market demand. The CoStar data was just obtained but has not yet been analyzed.

Second, it is too early to conduct a more detailed characterization of each of the planning areas. The study is currently in the early stages of (1) analyzing the differences between these locations in terms of transportation access, infrastructure availability and quality, and neighborhood characteristics; and (2) identifying the locations of large areas of undeveloped, industrial acreage and determining if they are in areas suitable for development based on zoning, market demand, topography, or land cover. This analysis has been started, but it is too early to reach any conclusions.

Third, information on infrastructure, aside from transportation networks, has been difficult to obtain due to concerns about national security. Therefore, on-site interviews were utilized as a key source, more than originally intended.

The next step is to determine where the important sectors are located in the county. Two options are being proposed. One is the confidential QCEW database (formerly known as ES202),

which is a source of information on all industrial firms in Prince George's County. This database is a comprehensive list of all business firms in the county, their locations, the number of employees, value of sales, and industry category. Because addresses for these firms are available, the information can be geocoded and mapped by GIS. These maps will make it easy to visualize where there are large concentrations of employment and identify industry clusters. These data will enable an analysis of the industrial makeup of the firms in each planning area of the county and begin to refine recommendations for policy.

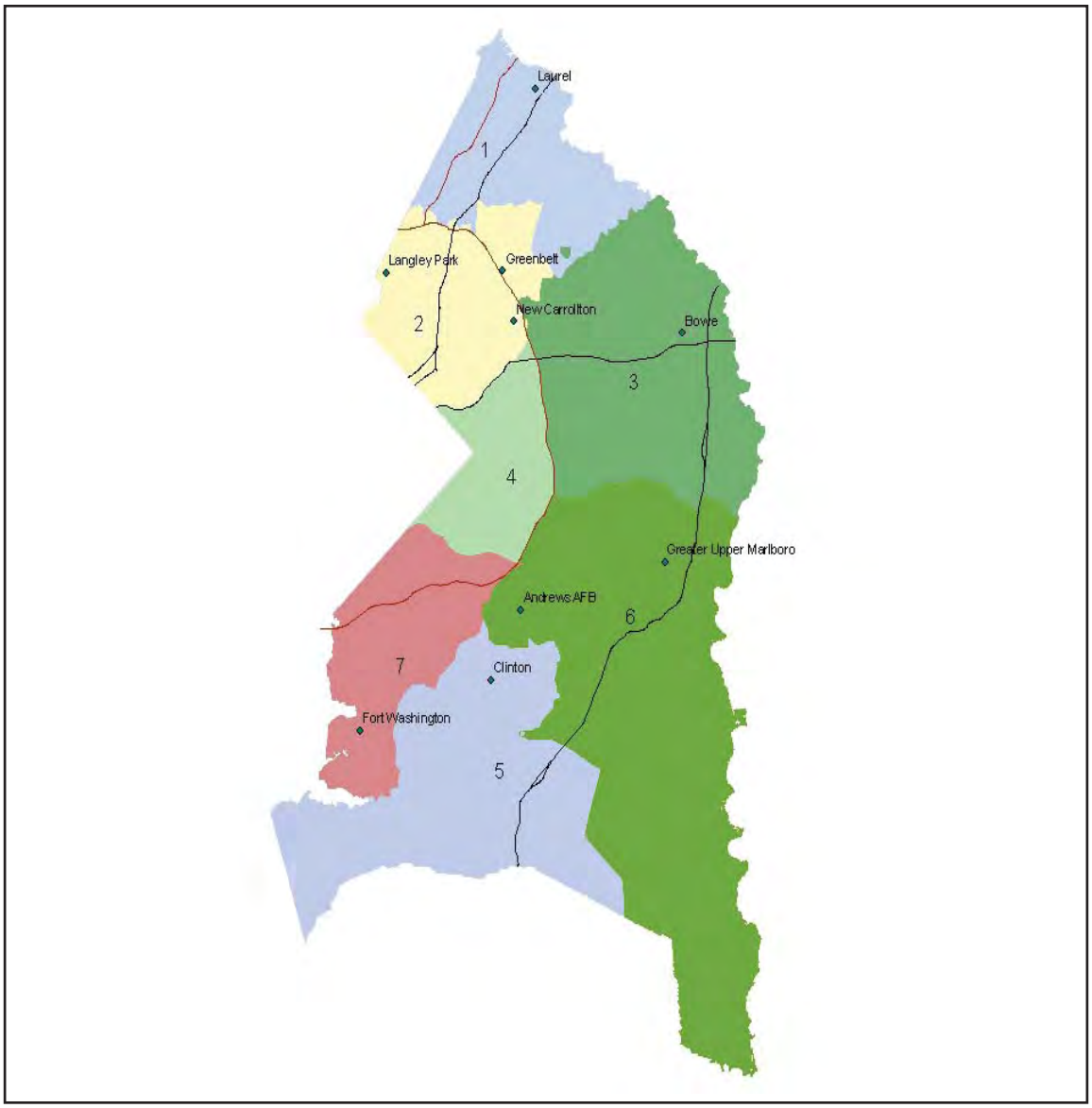
In conclusion, there is evidence that the county has an excess of industrially zoned land and that the greatest pressures for rezoning are in Subregions 3, 4, and 5. The industrial sector is growing very slowly, while the service and residential sectors are showing stronger growth. Further, the county's strongest and most important industries have been identified. However, the strengths and weaknesses of present policies, regulations, and practices, as well as recommendations of changes to planning policy, will be highlighted later.

Appendix 7. Inventory of Industrial Lands by Subregion, Analysis of Industrial Employee Commuting Patterns, Industrial Land Zoning, and Policies[34]

The following analyses indicate that, as of 2007, Prince George's County has zoned too much land for industrial use. The focus of this report is to begin identifying where this excess industrially zoned land is located, and identify the locations where (1) there never has been market demand for industrial land; and (2) there is evidence of market demand in the past, but current demand for industrial land is weak. In case (2), two subcategories are identified: (2a), where there is current weak industrial demand along with weak demand by other job creating uses; and (2b), where there currently is weak industrial demand but strong demand by other uses, including residential, retail, and/or office. In the (2b) instance, nonindustrial uses are encroaching on and competing for I-2, I-3, I-4, E-I-A, and U-L-I zoned land. In this task, a case (3), which includes locations where industrial uses are thriving, was identified.

Section I of this analysis addresses these four cases. The focus here is at the subregional level, which, in many cases, is too large a geographical scale to draw firm conclusions. (Map A7-1, below, shows the location of the county's subregions.) Further analysis will apply this same approach at finer levels of geographic detail and report findings later. Section II, herein, presents evidence that industrial uses are of continued importance to the county economy as a source of jobs for county residents. Based on this, the case is being made that planning for, and maintenance and improvement of, some specific industrial areas are critical to the county's economic health and future. Section III is a summary of the findings.

[34] Appendix 7, completed on February 22, 2008



Map A7-1. Subregions in Prince George's County

Source: M-NCPPC GIS data, 2007

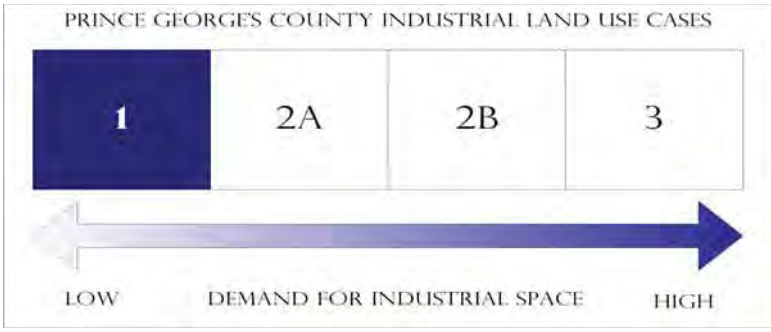
Identifying the Locations of Excess Industrial Land

The locations where there "never was demand" for industrial use (i.e., case (1)) are likely targets for rezoning out of industrial categories. The case (3), "thriving" districts, are likely targets for industrial zone protection and county investment in supportive infrastructure. Case (2) presents the more complicated issues. Case (2a) situations—"once healthy industrial areas now facing weak market demand"—will require county planning staff to identifying a future for the district and strategies to move in the new direction. Case (2b) "once healthy industrial districts

now facing strong market demand from nonindustrial uses" will require identification of strategies to allow rezoning in a manner that permits new uses to enter the district without pushing viable and important industrial enterprises out of the county. A range of research methods and datasets are used to identify these four cases. The cases and data are summarized in Table A7-1.

Table A7-1. Cases for Analysis of Industrial Land

	Situation	Data Used to Identify	Broad Range of Strategies	Example	Potential Complications
Case (1): Never was demand	High land vacancy rate and little evidence of industrial buildings	Prince George's County Tax Assessors Data, 2007; CoStar data 2007	Zone out of industrial use to residential, office, mixed, retail, open space, or agriculture.	Southwest Corner of Central Avenue and MD 301, Subregion 3	
Case (2): Evidence of Historical Demand for Industrial Use					
(a) Weak current industrial market demand and weak demand by any other use	Evidence of previous industrial investment but currently a weak market measured by high industrial property vacancy rates	CoStar Data, 2007	Identify new use for district and plan for new use.	Intersection of I-495 and MD 202 Landover Area in Subregion 3	Contamination
(b) Weak current industrial market demand but demand from alternate land uses	Evidence of previous industrial investment, high industrial vacancy rates, and encroachment by other uses	DAMS File and Text Amendments; CoStar Data, 2007	Plan to protect some industrial zones, while allowing new uses.	Goddard Corporate Park in Subregion 3	Contamination
Case (3): Thriving industrial area	Evidence of continued investment in industrial activity and low building and property vacancy rates	Tax Assessors Data, 2007 and CoStar Data, 2007	Protect industrial zone and plan for investments that make the district competitive	Industrial area at the intersection of US 1, MD 201 and MD 450 in Subregion 2	Contamination



Case (1): Areas of no market demand for industrial space

According to the 2007 tax records, 45.5 percent of the county's industrially zoned land is vacant or "unimproved," leaving 54.5 percent of the county's industrially zoned land occupied. Specifically, the tax records indicate that 49.4 percent of the county's industrially zoned land is occupied with an industrial activity and 5.1 percent is occupied with nonconforming uses. (It is important to note that a "nonconforming property" is defined as one that is zoned for industrial uses but is not taxed as an industrial use by the Maryland State Department of Assessments and Taxation (SDAT).) Table A7-2 shows that zoning Category I-3 has the highest vacancy rate, at 55.2 percent. The table also shows that vacancy rate for the U-L-I category is the lowest, at 25.4 percent.

Table A7-2. Acreage and Vacancy Rates of Industrially Zoned Land for Prince George's County*

	I-1	I-2	I-3	I-4	E-I-A	U-L-I	Total
Total	4845.5	2012.3	2059.9	296.8	2263.8	44.4	11522.7
Developed Acres	2787.1	1161.3	922.2	151.7	1222.0	33.1	6277.4
Vacant Acreage	2058.5	851.1	1137.6	145.1	1041.7	11.3	5245.2
Land Vacancy Rate	42.5%	42.3%	55.2%	48.9%	46.0%	25.4%	45.5%
* Table does not include acreage encompassed by Andrews Air Force Base and Chalk Point							

Source: Prince George's County Tax Records, 2007

Concentrations of industrially zoned, but vacant lands, in the subdivisions were identified in order to determine locations where the county has zoned excess industrial land and where there is little to no evidence of current or future industrial market demand. Land was considered vacant when it was "unimproved" as indicated in the tax records. Table A7-3 shows the share of vacant industrially zoned land by subregion. The greatest concentration of vacant, industrially zoned is in Subregion 7, where 62 percent of the industrially zoned land is vacant. The vacancy rates in both subregion 5, at 60 percent, and subregion 6, at 48 percent, exceed the county aver-

age of 46 percent. (See Table A7-3 for the land vacancy rates by subregion and Figure 1-1 for location of the subregions.) The more precise locations of developed and vacant industrial land are shown, by subregions, in Figures A7-4–10.

Table A7-3. Acreage in Industrially Zoned Land, Developed and Vacant

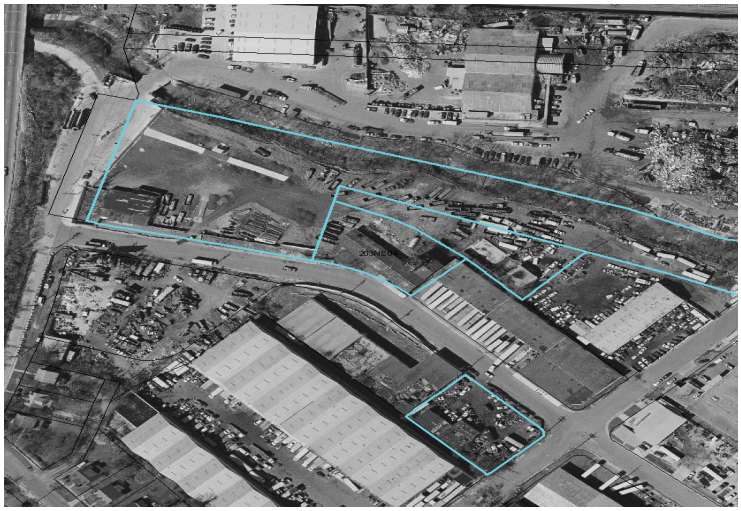
	I-1	I-2	I-3	I-4	E-I-A	U-L-I	Total	Percentage
Subregion 1 Total	235.6	604.3	610.9	-	482.3	-	1933.0	-
Developed	180.0	376.1	245.9	-	327.8	-	1129.9	58.5
Vacant	55.6	228.1	364.9	-	154.5	-	803.1	41.5
Subregion 2 Total	294.4	213.0	129.9	-	-	44.4	681.7	-
Developed	247.9	176.5	51.1	-	-	33.1	508.7	74.6
Vacant	46.4	36.5	78.8	-	-	11.3	172.9	25.4
Subregion 3 Total	492.0	161.8	413.3	1.1	1065.3	-	2133.5	-
Developed	357.0	118.1	262.8	0.3	483.6	-	1221.7	57.3
Vacant	135.0	43.8	150.5	0.8	581.7	-	911.8	42.7
Subregion 4 Total	2256.5	371.1	358.7	103.6	36.1	-	3126.0	-
Developed	1379.4	235.7	167.3	55.6	36.0	-	1874.1	60.0
Vacant	877.1	135.4	191.4	48.0	0.0	-	1251.9	40.0
Subregion 5 Total	622.7	565.8	275.4	74.6	680.1	-	2218.6	-
Developed	188.8	158.5	116.7	55.6	374.6	-	894.2	40.3
Vacant	433.9	407.3	158.7	19.0	305.6	-	1324.4	59.7
Subregion 6 Total*	593.2	96.2	97.7	-	-	-	787.0	-
Developed	295.3	96.3	15.4	-	-	-	407.0	51.7
Vacant	297.9	0.0	82.2	-	-	-	380.0	48.3
Subregion 7 Total	351.3		174.1	117.5	-	-	642.8	-
Developed	138.6		63.0	40.2	-	-	241.8	37.6
Vacant	212.7		111.1	77.2	-	-	401.1	62.4

*Does not include Andrews Air Force Base or Chalk Point Power Plant

Source: Prince George's County Tax Records, 2007

These preliminary results indicate the greatest demand for industrial land is in Subregion 2, where the vacancy rate is the lowest and in Subregions 1, 3, and 4, where the greatest share of the county's industrially developed land is concentrated at 1,129, 1,221 and 1,875 acres respectively. In Subregions 1, 2, 3, and 4, the land vacancy rates are below the countywide average of 45.5 percent.

A shortcoming of using industrially zoned land that is identified as "unimproved" by the tax assessor's records to identify areas with weak market demand for industrial use is that the definition of vacancy used in the research reflects properties without improvements or with improvements of less than $3,000. Such sites may actually be used for very low density, low investment activities—such as storage, parking, and sand and gravel operations—and to contribute to the county's economy. Maps A7-2 and A7-3 show examples of three parcels defined as vacant by the tax assessor's records but that appear from the satellite photos to contain some economic activity.



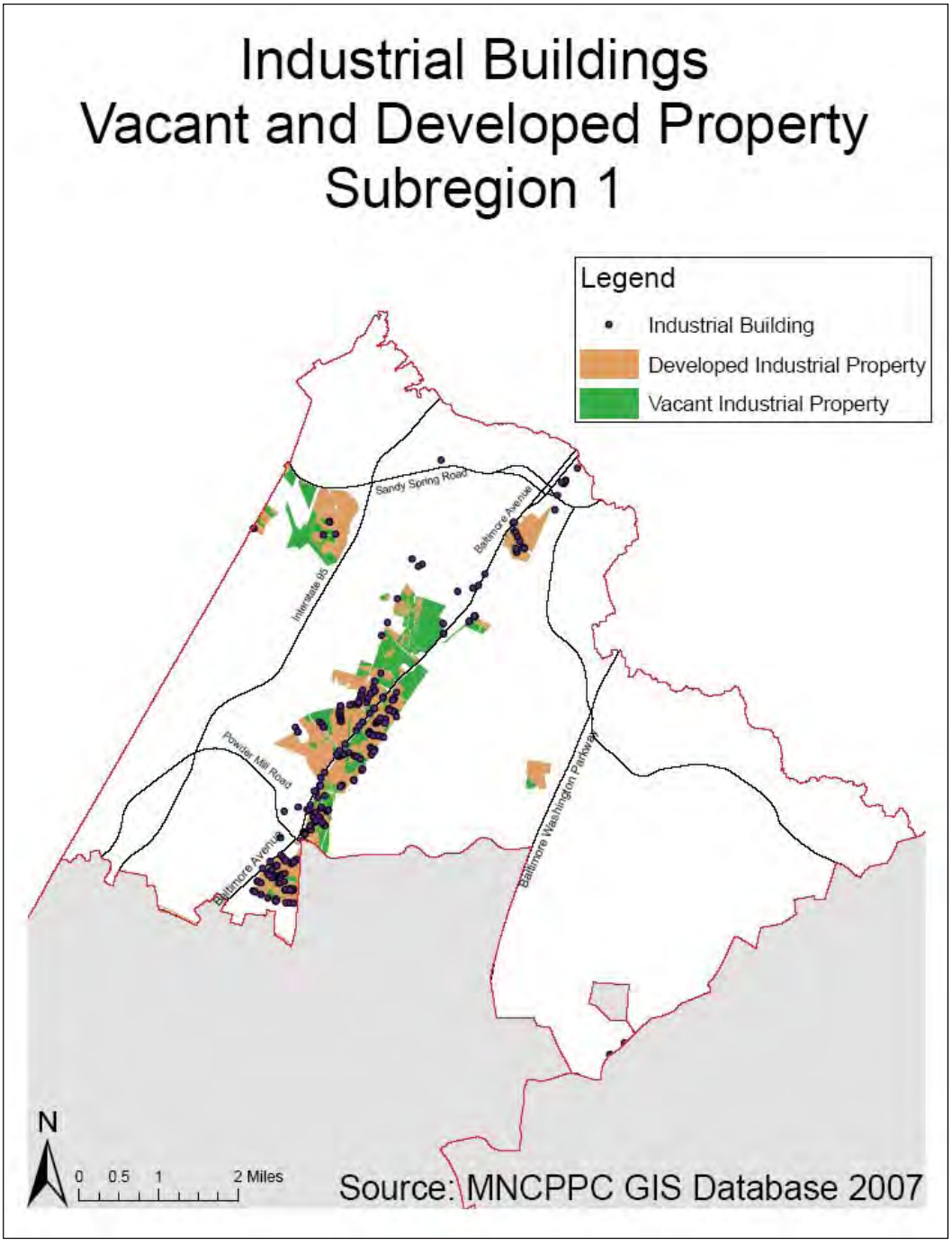
Map A7-2. Aerial Photo of Two "Unimproved" or Vacant Land Parcels

Map A7-3. Aerial photo of Another "Unimproved" or Vacant Parcel

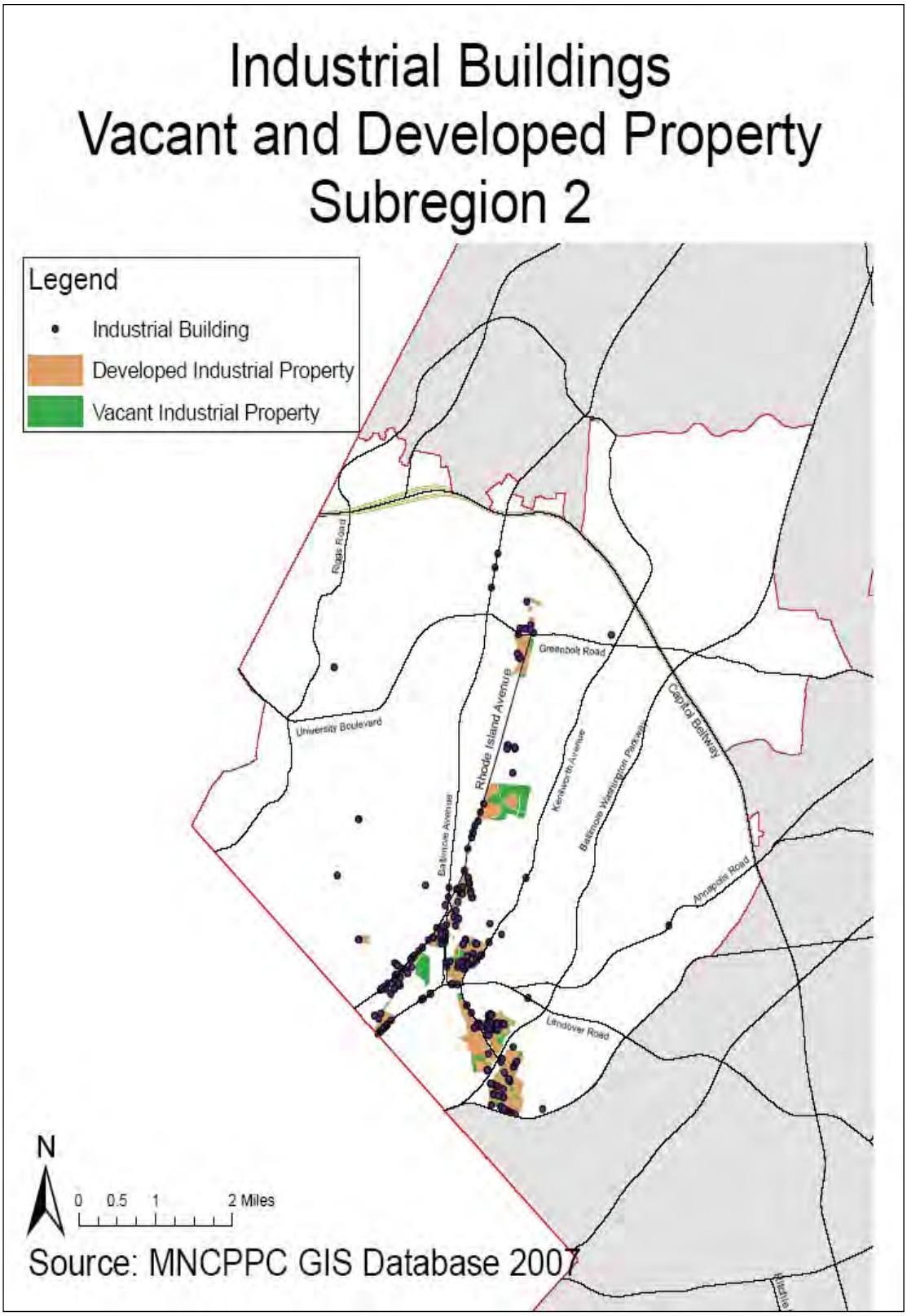
These three properties are examples of parcels labeled “undeveloped” or vacant, although it appears there may actually be some activity occurring on the site.

To attempt to further identify areas where there is weak market demand for industrial land, the zoning and tax assessor’s data were merged with the CoStar data. The CoStar data shows where industrial or flex space buildings are located. These industrial buildings were represented on maps showing vacant and developed industrial land. In locations where land is “vacant” or “unimproved,” as shown by the green areas, and there are no industrial buildings, there is further evidence that the land is not in use for industrial purposes. The absence of investment in industrial space on vacant land indicates further evidence of weak demand for industrial land. In total, CoStar shows 1,281 industrial or flex buildings, with 1,258 existing and 23 either proposed or under construction. Of the total 1,281 buildings, 333 (or 26 percent), are owner occupied.

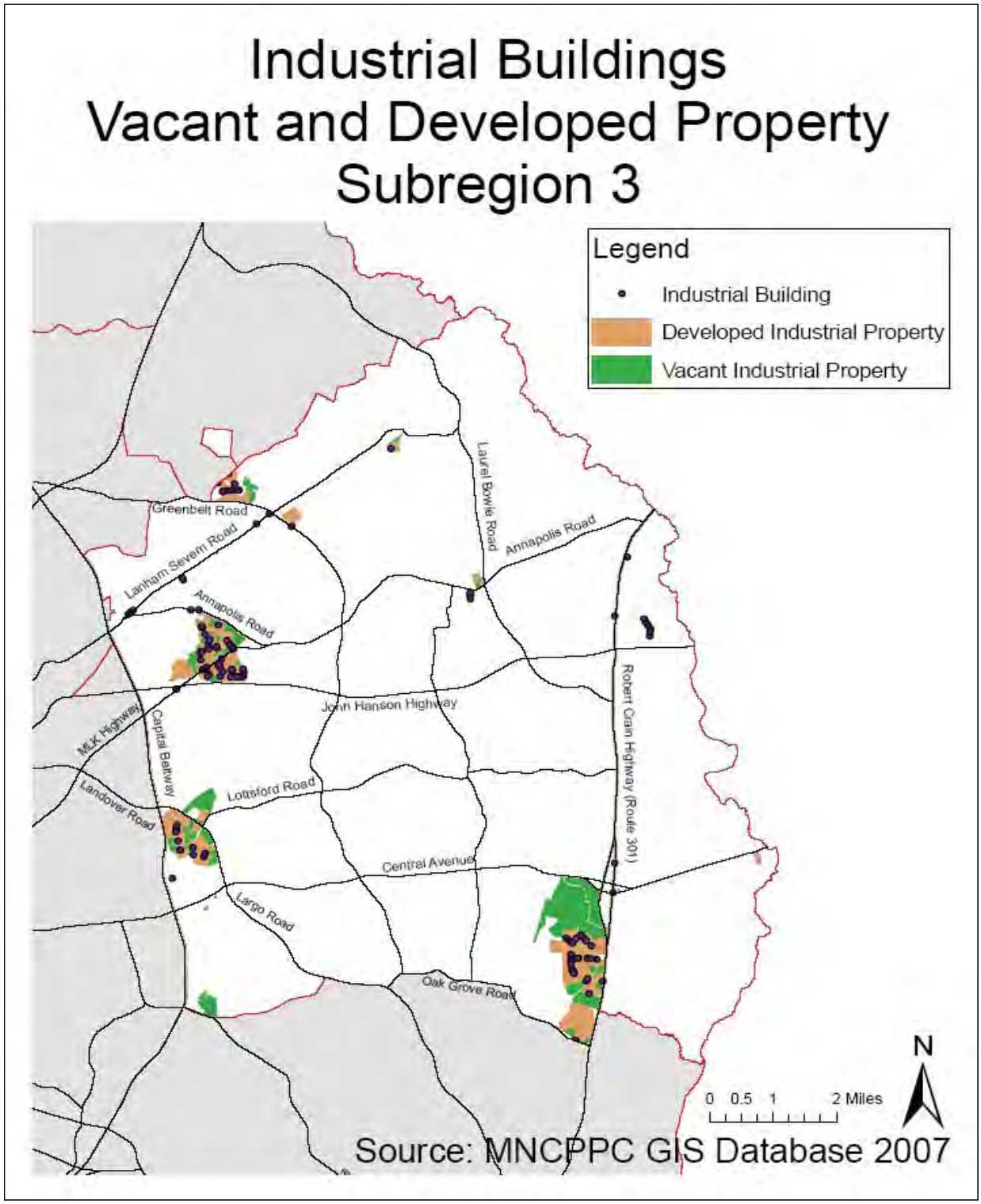
In Maps A7-4 through 10, where the land is highlighted in green (i.e., vacant) and there are no dots (i.e., no industrial or flex space), market demand appears to be nonexistent. Industrial buildings are, in nearly all cases, located on sites that the SDAT identifies as “developed.” There are parcels where land is identified as developed by the SDAT, but there are no industrial buildings. Examples of this are along the Baltimore Washington Parkway in Subregion 1 and the intersection of Suitland Parkway and the Capital Beltway in Subregion 7. Although the amount of undeveloped industrial land varies by subregion, all of the seven subregions show areas with vacant land, as recorded by the tax records, and unutilized land, as indicated by the absence of any industrial or flex space.



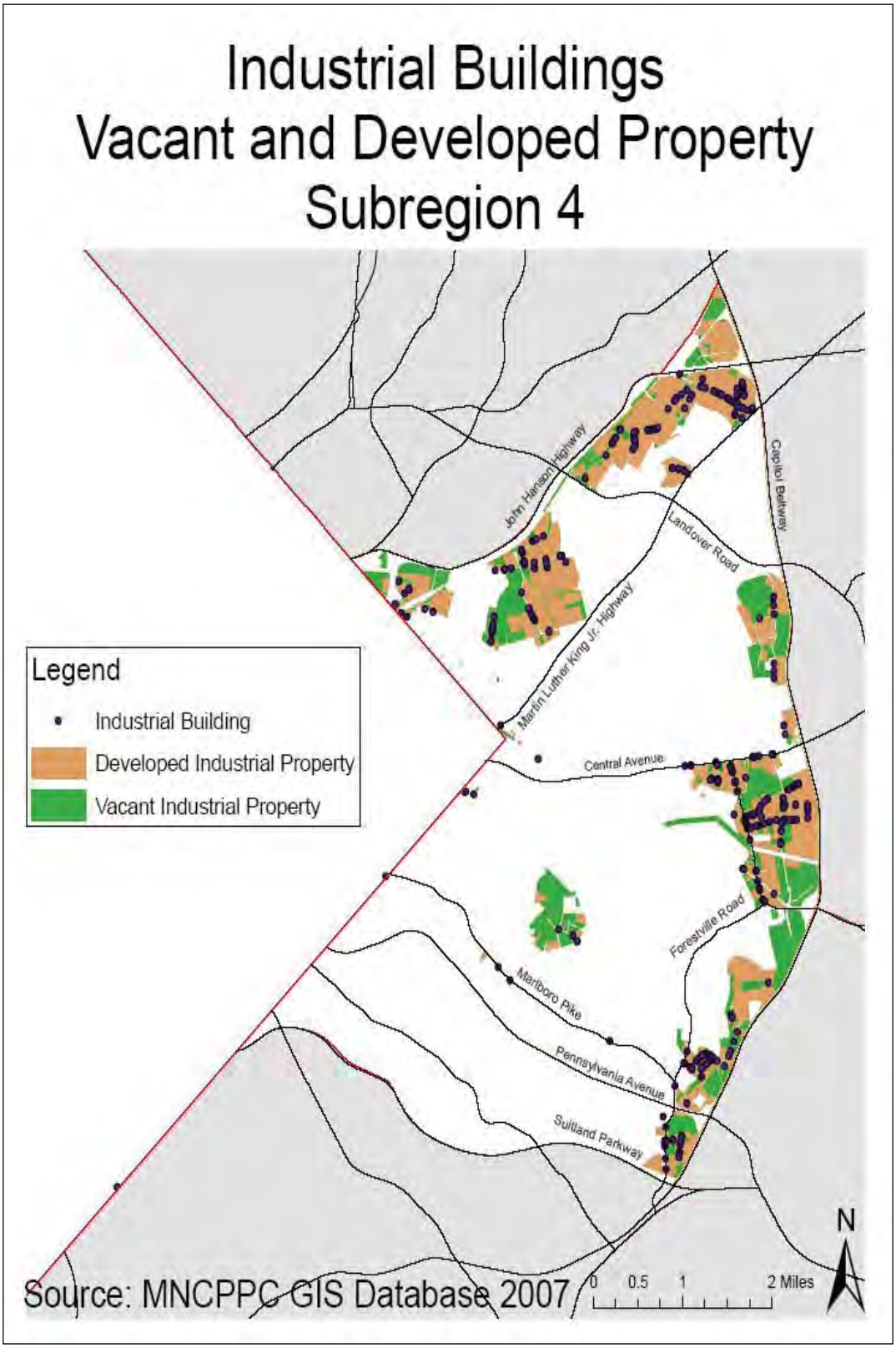
Map A7-4. Vacant or Underutilized Land and Industrial Buildings in Subregion 1



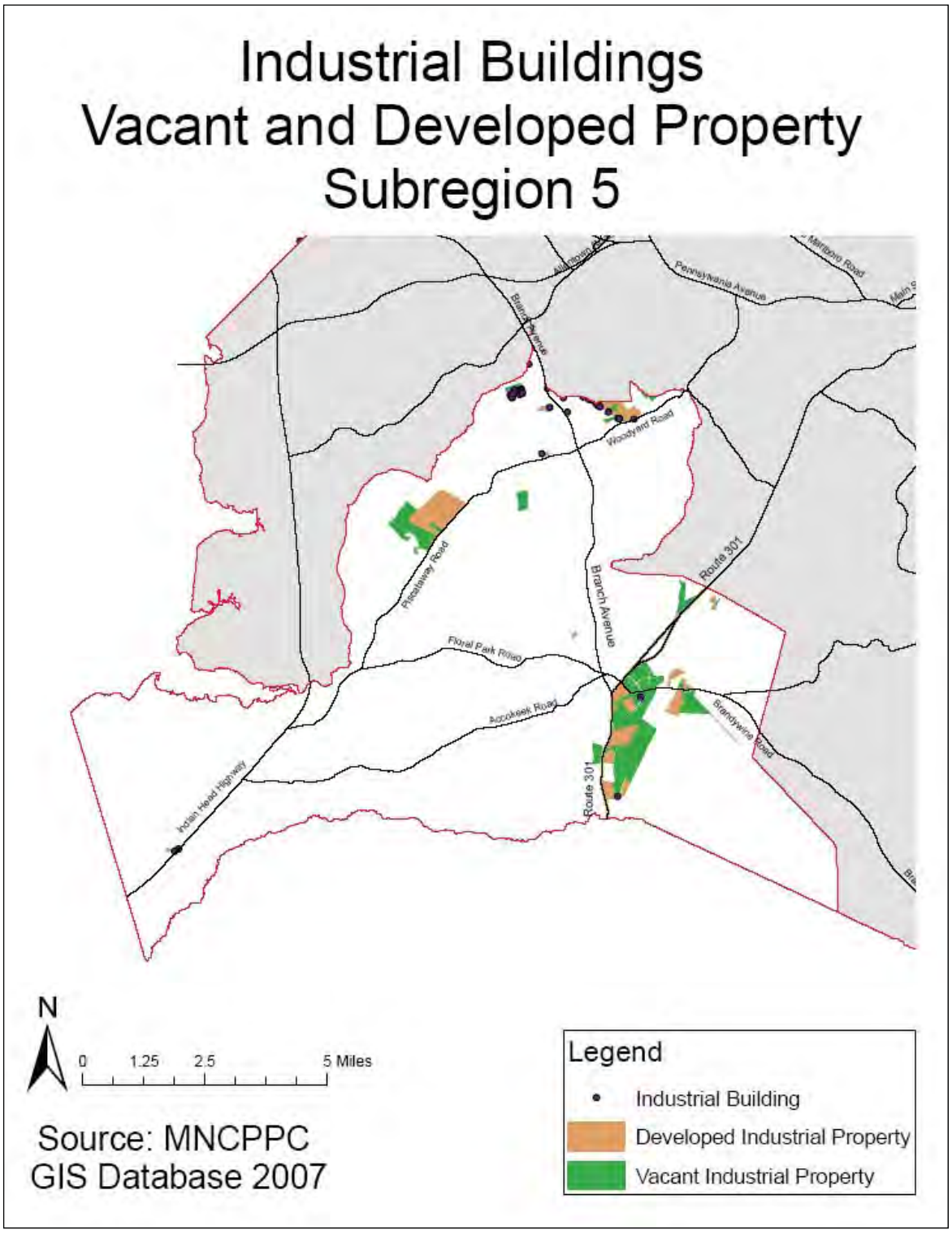
Map A7-5. Vacant or Underutilized Land and Industrial Buildings in Subregion 2



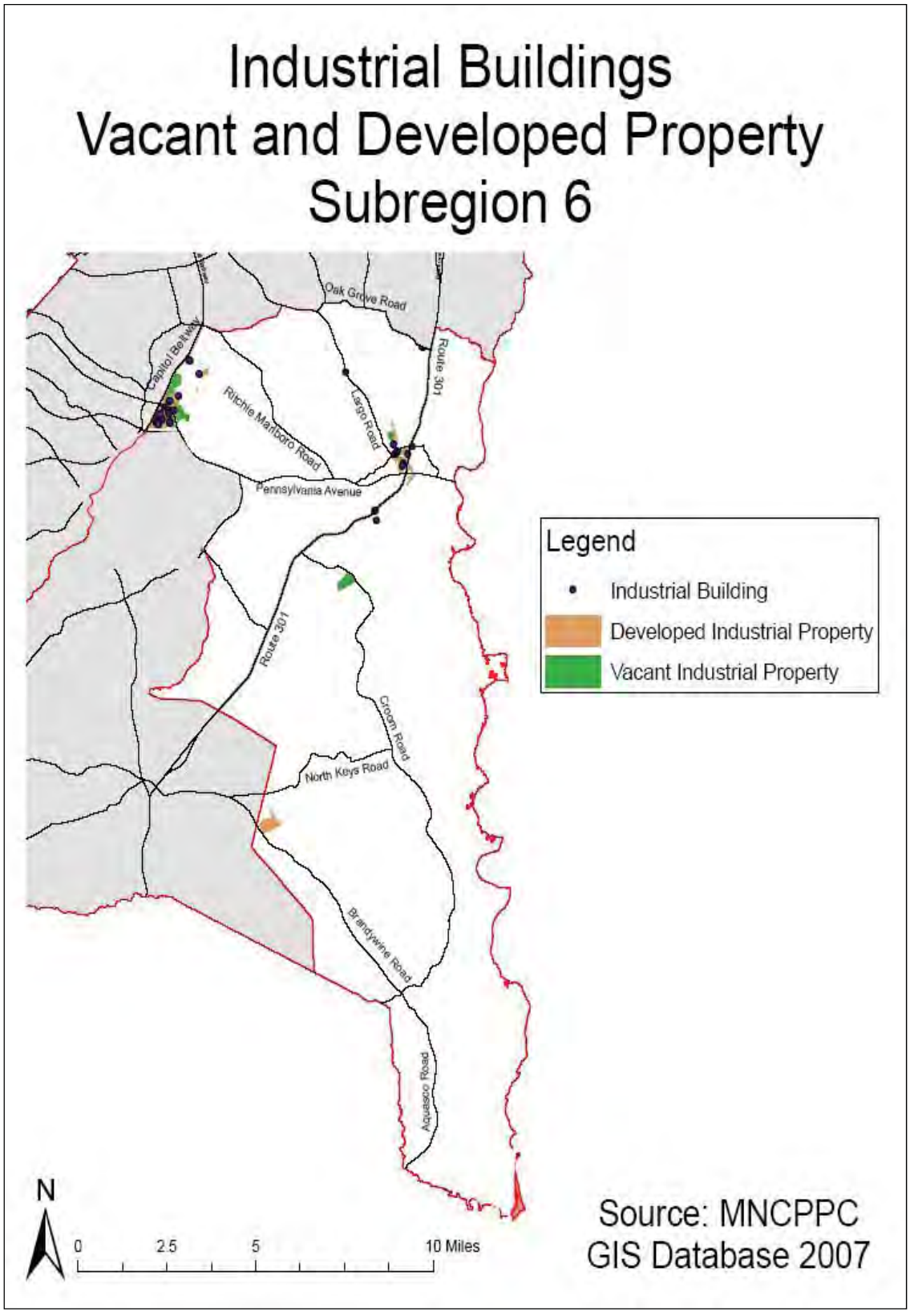
Map A7-6. Vacant or Underutilized Land and Industrial Buildings in Subregion 3



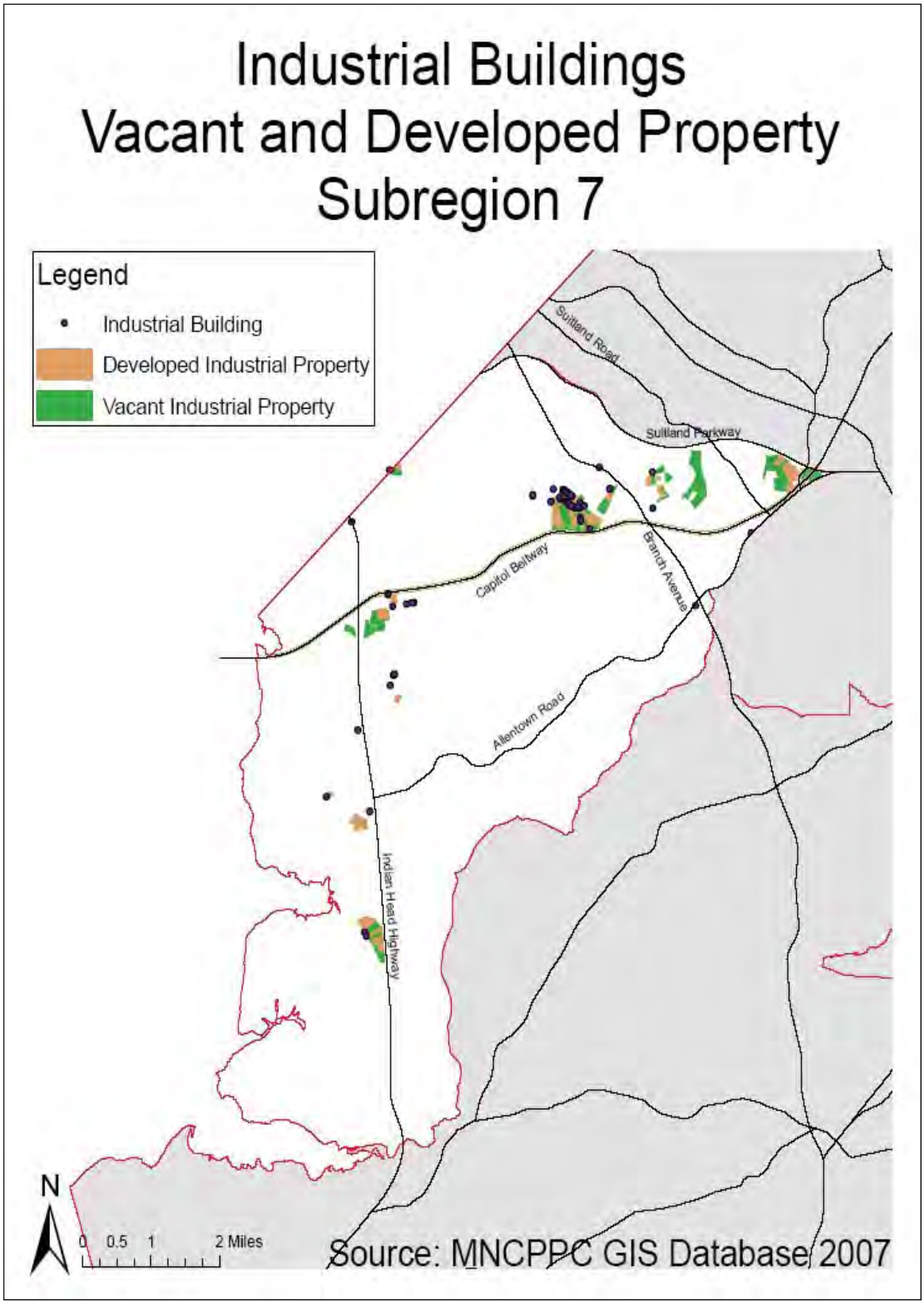
Map A7-7. Vacant or Underutilized Land and Industrial Buildings in Subregion 4



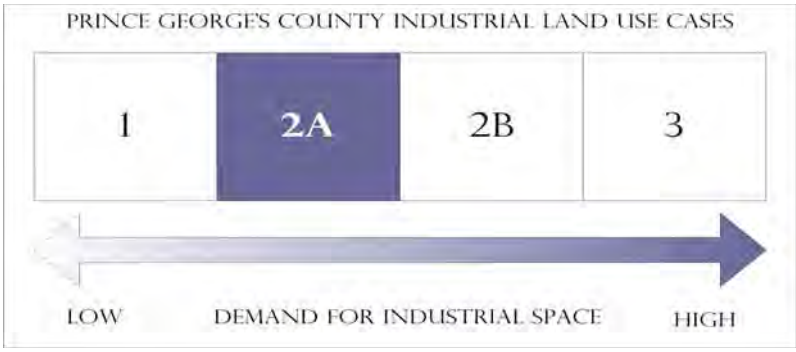
Map A7-8. Vacant or Underutilized Land in Subregion 5



Map A7-9. Vacant or Underutilized Land and Industrial Buildings in Subregion 6



Map A7-10. Vacant or Underutilized Land and Industrial Buildings in Subregion 7



Case (2a): Prior Market Demand for industrial Space, but Weak Current Demand for Industrial Uses

The second case identifies areas where there was, traditionally, demand for land for industrial use, but that demand has waned. This case is identified as locations with a large supply of industrial space and high industrial building vacancy rates. This case is broken into two possibilities: (2a) locations where current demand for industrial space is weak and demand for that land by alternative uses is equally weak; and (2b) areas where overall demand for industrial space is weak, but demand for land for alternative uses—such as residential, retail, and office space—is strong. Case 2(a), weak overall market demand, can be categorized as locations with high vacancy rates in industrial and flex building and equally high vacancy rates in alternative uses, such as office buildings and retail space. Case (2b) is identified as locations with high vacancy rates in industrial building but strong demand for industrial land by alternative uses, such as residential, commercial, retail, or mixed-use. In this instance (2b), market pressures are leading to nonindustrial use encroachment on industrial activities.

To analyze case (2), the team identified locations where the market has invested in improvements in industrial space but where there are currently high vacancy rates. Whereas, the previous case (1) analysis relied on data on land and the presence of industrial buildings, this section relies on occupancy of existing industrial buildings. In contrast to the "never was demand" case above; this is the "was demand but now industrial demand is weak" case. To measure this case, CoStar data was used to identify where industrial vacancy rates are high. Clearly, investors saw a market demand in such locations in the past but are currently having trouble filling the industrial space.

Table A7-4 reports the industrial vacancy rates in industrial and flex space by subregion. Subregion 4 has the most vacant industrial and flex space. Subregion 4 has more than one-third

of the total industrial space in the county. Of this total space, nearly 13.0 percent is vacant and available for rent. The overall county industrial space vacancy rate was 10.0 percent in 2007. Buildings in Subregions 3, 4, and 5 have above average vacancy rates. Demand for industrial space is highest in Subregion 2, where the vacancy rate is below 4.0 percent. Subregion 2 has not only the lowest industrial building vacancy rate but the lowest industrially zoned land vacancy rate (Table A7-3)—an indication of strong demand for industrial space in this subregion.

Table A7-4. Rental and Owner Occupied Flex and Industrial Space Vacancy Rates by Subregion in Prince George's County, 2007

Subregion	Data	Grand Total	Vacancy Rate	Percent of Total
1	RBA*	11,905,243		22.7
	Total Vacant SF	984,926	8.3%	
	Total Available	1,330,010		
2	RBA	7,118,384		13.6
	Total Vacant SF	258,621	3.6%	
	Total Available	302,778		
3	RBA	8,768,883		16.7
	Total Vacant SF	969,257	11.1%	
	Total Available	1,285,377		
4	RBA	19,074,383		36.3
	Total Vacant SF	2,455,344	12.9%	
	Total Available	2,713,314		
5	RBA	1,773,602		3.4
	Total Vacant SF	264,884	14.9%	
	Total Available	297,844		
6	RBA	2,171,804		4.1
	Total Vacant SF	232,890	10.7%	
	Total Available	403,290		
7	RBA	1,694,044		3.2
	Total Vacant SF	83,453	4.9%	
	Total Available	126,105		
Total Sum of RBA		52,506,343		100.0
Total Sum of Total Vacant SF		5,249,375	10.0%	
Total Sum of Total Available		6,458,718		
*RBA=Rental Building Area				

Source: CoStar, 2007

Consistent with the earlier analysis, Subregions 5, 6, and 7 are areas where there has been less construction of industrial space with only 3.4 percent, 4.1 percent, and 3.2 percent of the county's square feet of industrial space, respectively. However, even with a low level of sup-

ply, Subregion 5 has an above average vacancy rate, suggesting weak demand. Subregions 3, 4, and 5 have the highest vacancy rates, indicating there are some areas in these subregions where industrial demand is weak. In general, the areas with the strongest markets for industrial space are Subregion 1, with 11.9 million square feet of space, nearly 23.0 percent of the county's total, and a below average vacancy rate of 8.2 percent; and Subregion 2, with 7.1 million square feet of industrial space and a vacancy rate of 3.6 percent.[35]

When only industrial and flex space that is for rent is included, [36] which comprises about 74 percent of all industrial space in the county, the vacancy rate for industrial and flex space is 13 percent. Not surprisingly, owner-occupied buildings have low average vacancy rates, and their inclusion brings down the countywide average.

To identify locations where there is weak industrial market demand at a finer level of geographic detail than the subregion level, the location of buildings with space for rent with a space vacancy above 17 percent is mapped. For 2007, the search yields 97 such buildings. The average TOM for space in these high vacancy buildings is 38 months, while the countywide average is 32 months. Figures A7-11–17 report the high vacancy and low vacancy buildings by subregion. "Weak" demand is defined as a building vacancy rate that was 4.0 percentage points above the county's 13.0 percent space vacancy rate for rentable industrial and flex space, or 17 percent, while a "high" demand was a building vacancy rate that was 4.0 percentage points below the county's space vacancy rate, or 9 percent.

Maps A7-11 through 17 illustrates a number of locations where high vacancy buildings cluster, suggesting weak demand. Examples are Landover Road near the Capital Beltway in Subregion 3; the Goddard Corporate Park off of Greenbelt Road on Subregion 3; and the Southern portion of Branch Avenue in Subregion 5. Further analysis will examine the ages of the high demand and low demand buildings.

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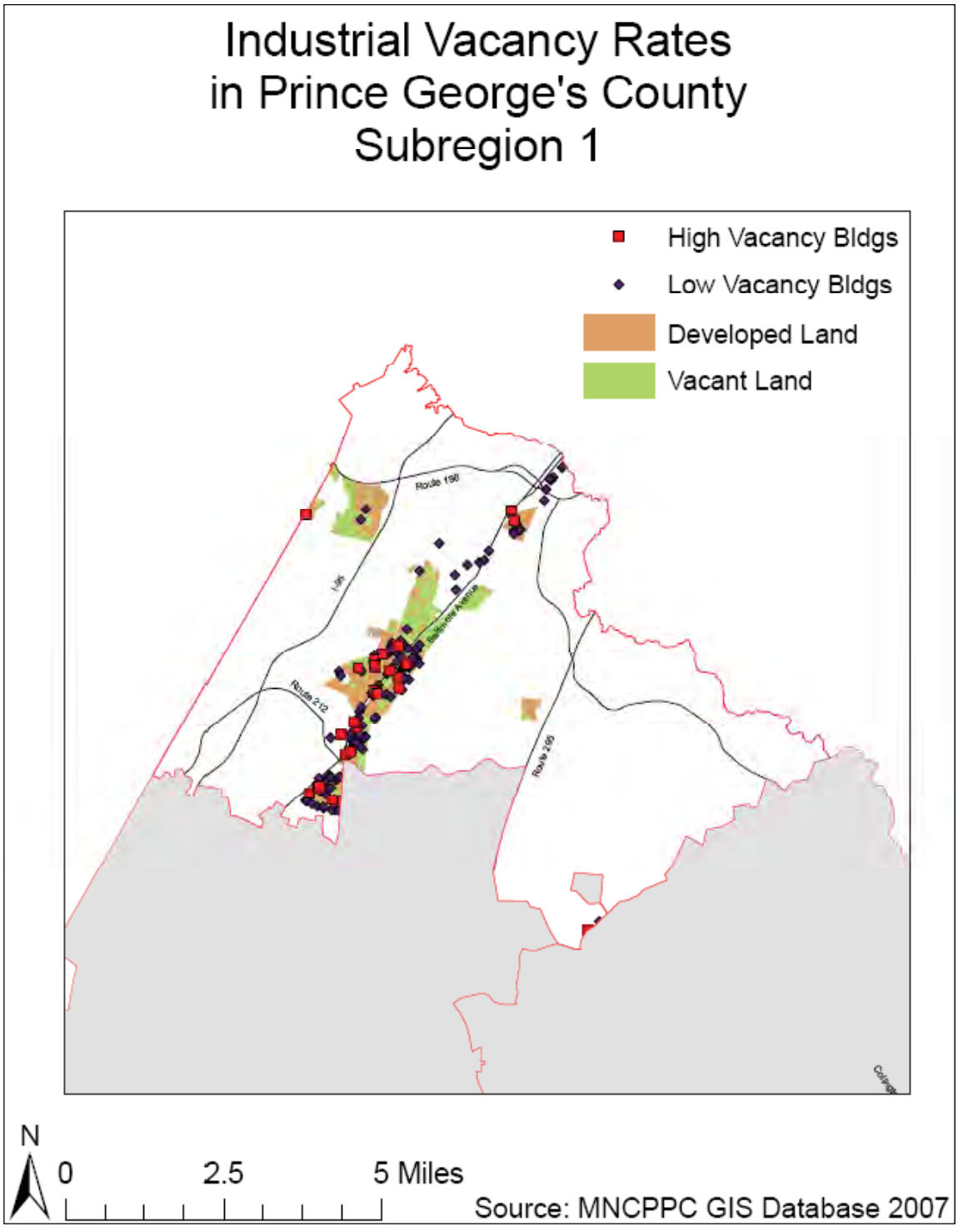
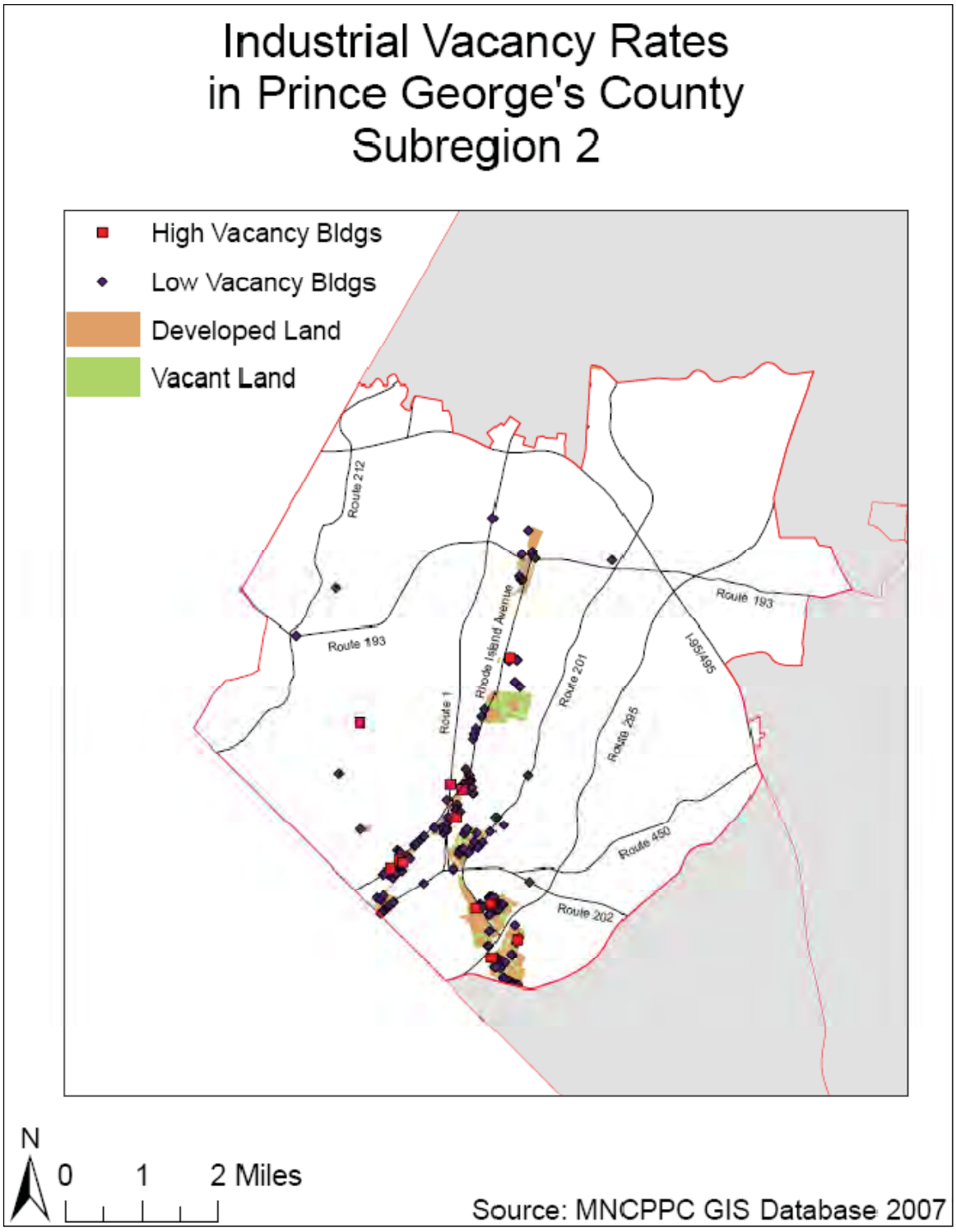
[35] The researchers intend to measure market demand by comparing rental rates by subregion. However, the initial results from the CoStar data were questionable and so are not reported here. However, rental rates will be explored later.

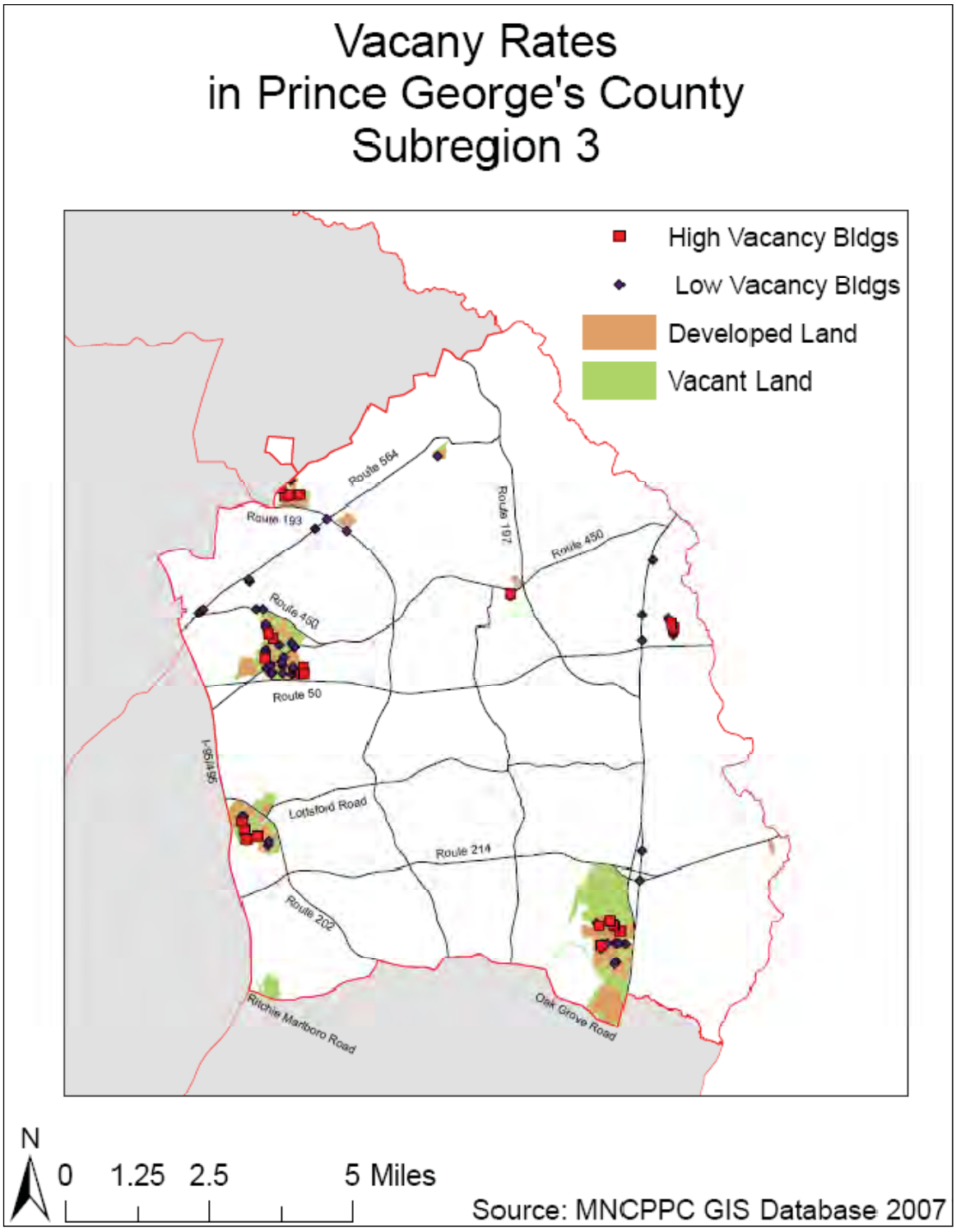
[36] This excludes buildings occupied by owners.



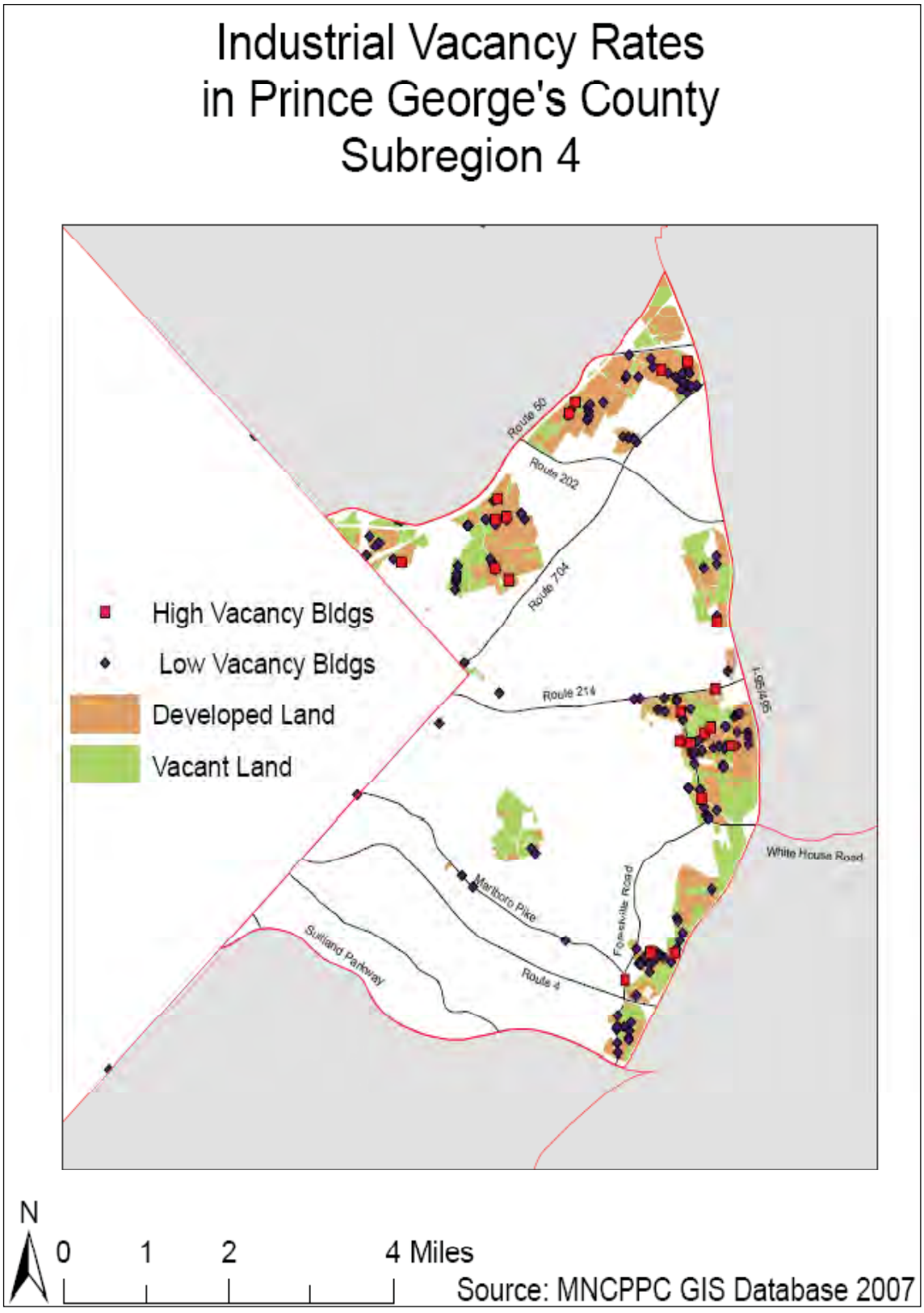
Map A7-11. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 1



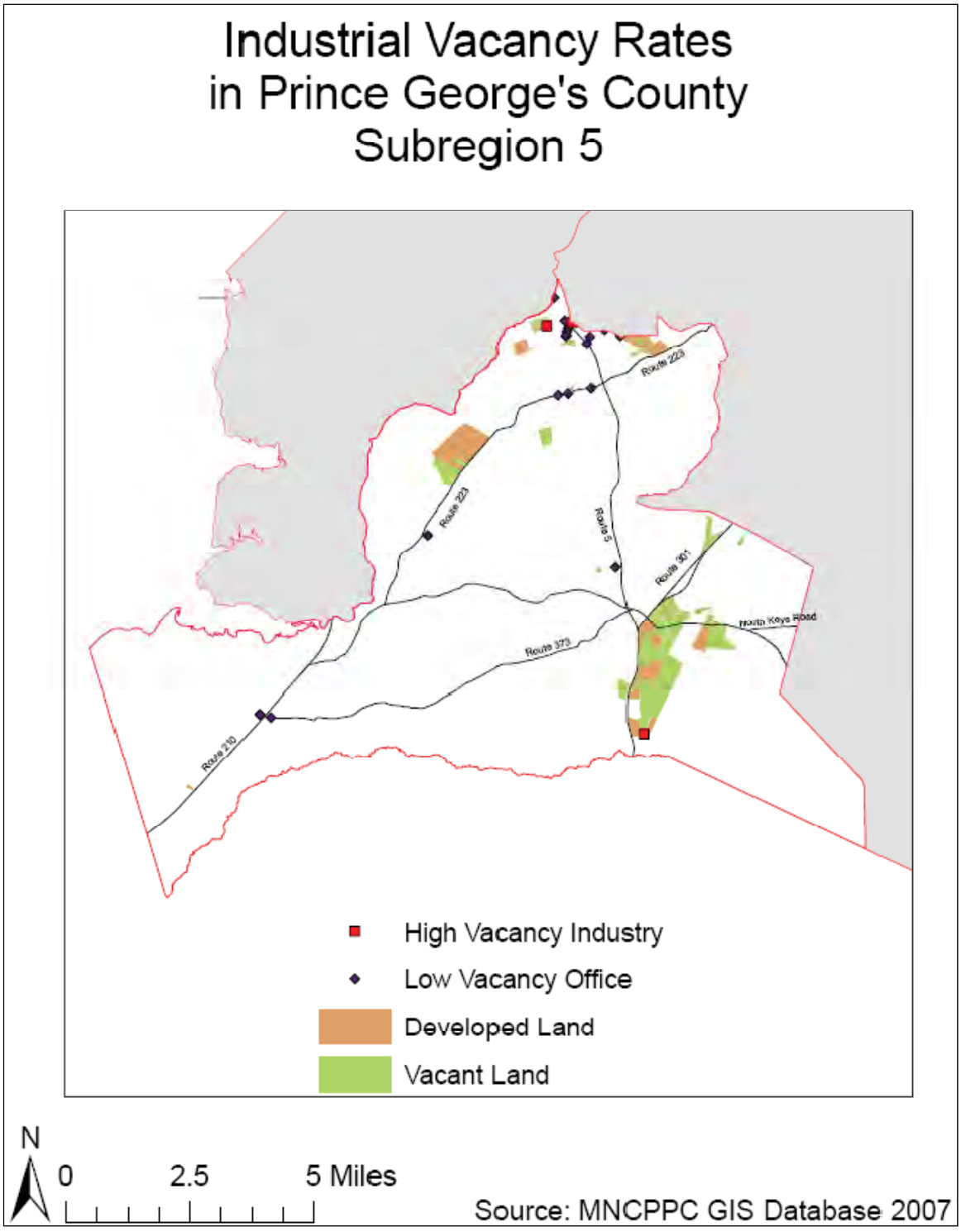
Map A7-12. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 2



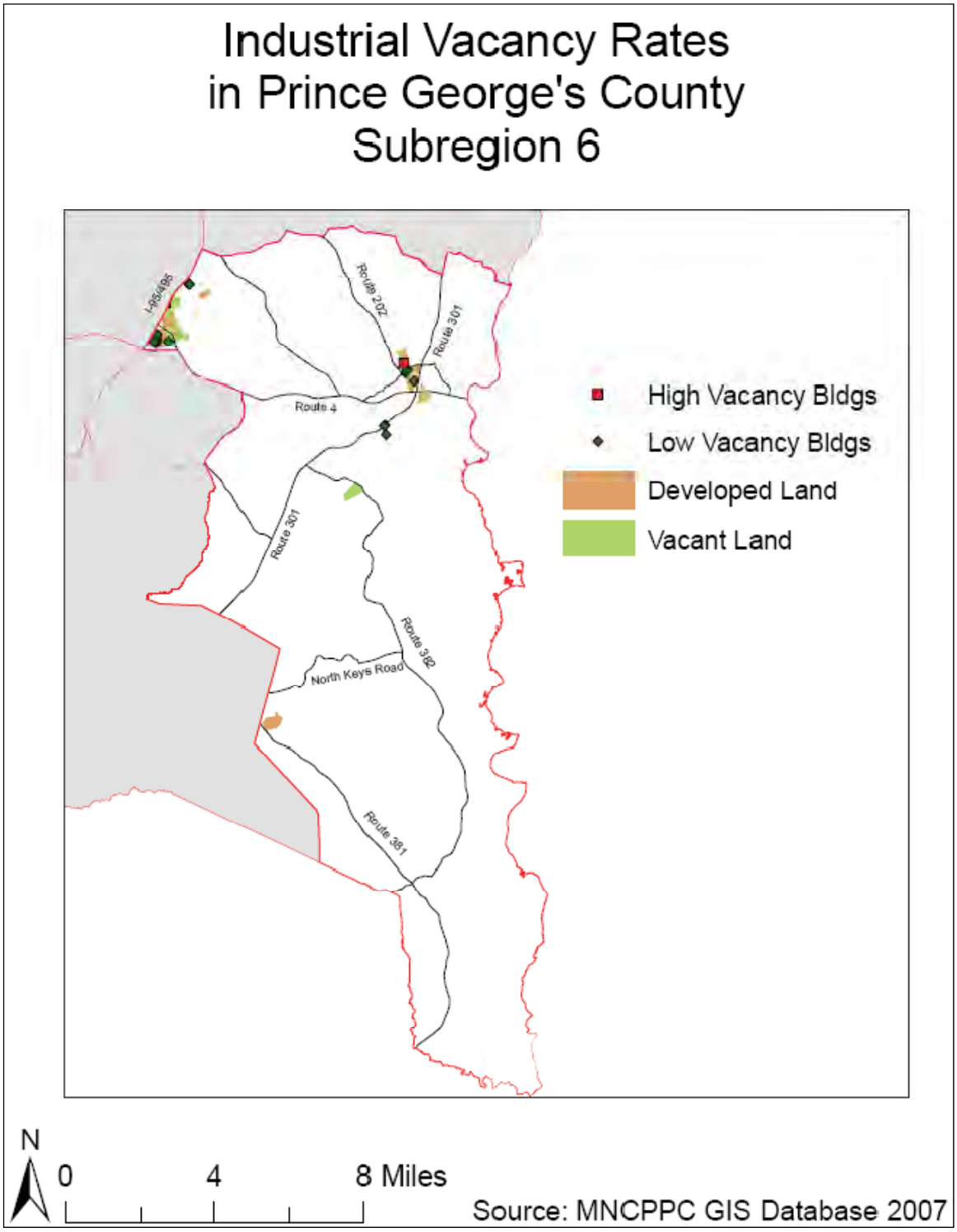
Map A7-13. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 3



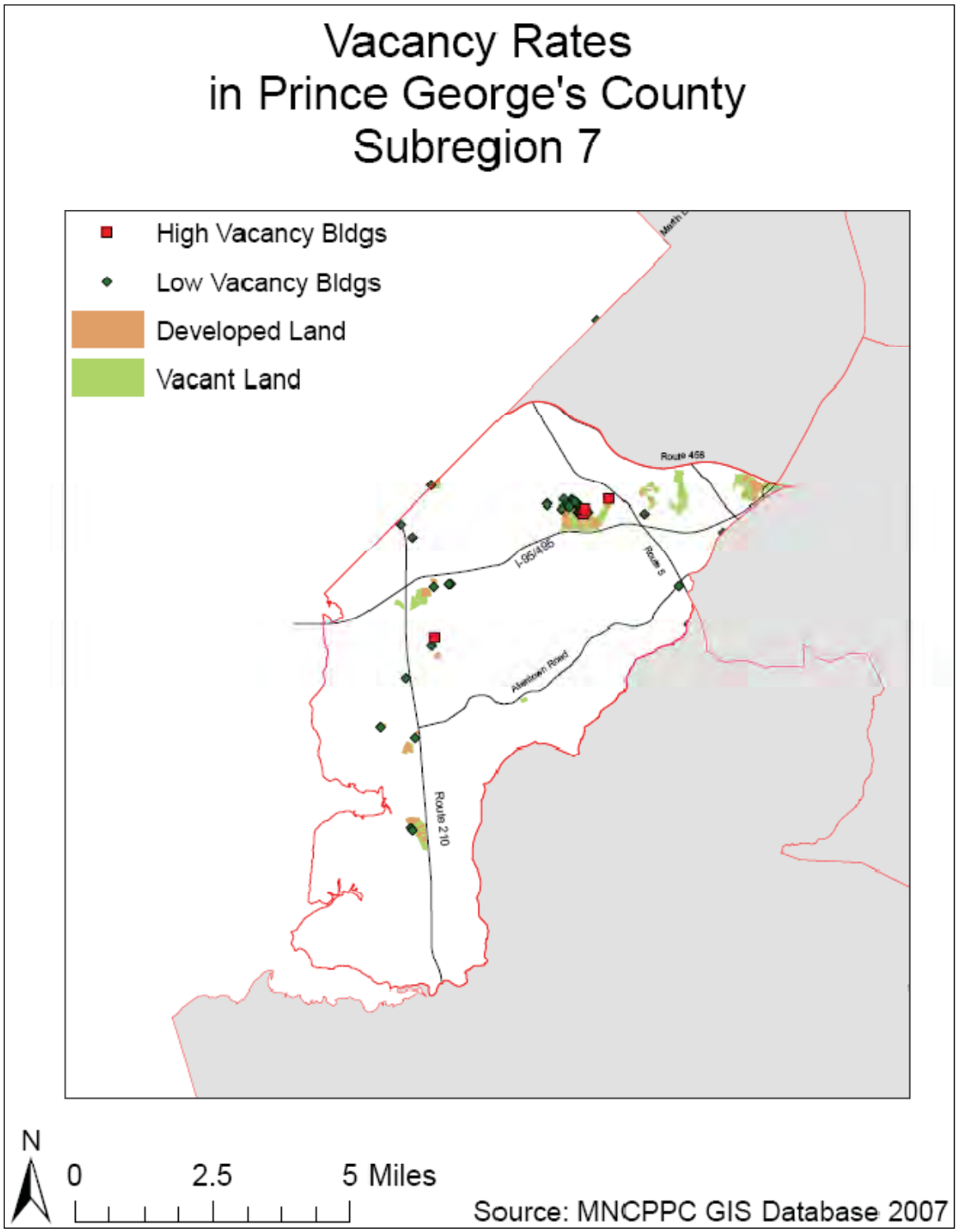
Map A7-14. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 4



Map A7-15. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 5



Map A7-16. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 6



Map A7-17. Location of High Vacancy > 17 percent and Low Vacancy < 9 percent Nonowner Occupied Industrial Space in Prince George's County in Subregion 7

Comparing Industrial and Flex Space in Washington, D.C. Metro Counties

As part of the (2a) case analysis, the amount of existing industrial and flex space for rent in the three Washington, D.C. metro counties (Prince George's, Fairfax, and Montgomery) was compared, using the CoStar database. The results are summarized in Table A7-5 below.

Prince George's County has about 40 percent of all industrial and flex space in the three metro counties, with a slightly larger share (50 percent) of vacancies. Vacant buildings in Prince George's County remain on the market slightly longer than those in Montgomery County and more than twice as long as those in Fairfax County. Average building sizes and ages are comparable across the counties, and square foot rents are significantly lower in Prince George's County, suggesting that factors other than cost and availability are influencing the location decisions of firms. As discussed in the previous report and elsewhere herein, wages are also typically higher in the other two counties. Thus, it appears that firms are locating industrial operations in both Fairfax and Montgomery counties faster than in Prince George's County and paying a premium in both rent and labor costs to do so.

Table A7-5. Industrial & Flex Space for Rent: Comparison of Washington, D.C. Metro Counties

County	Prince George's	Fairfax	Montgomery
Buildings	870	656	622
RBA	36,737,557	31,718,125	22,372,553
Vacant (SF)	4,907,240	3,062,371	1,901,599
Vacancy Rate	13.4%	9.7%	8.5%
Average Building (SF)	42,227	48,351	35,969
Average Building Age (yrs)	29.4	25.6	26.5
Average Time on Market (months)	32.4	15.4	28.7
Average Warehouse Rent per SF per yr	$ 6.16	$ 9.10	$ 10.72
Source: CoStar Data			

Case (2b): Historical Demand for Industrial Use, but Encroachment by Non-Industrial Uses

As reported in Appendix 6, the service and residential sectors are showing strong County growth, while the manufacturing, warehousing, and transportation and wholesaling sectors are experiencing either negative or relatively slow growth. These growth rates are repeated here in Table A7-6. The continued growth in service employment and housing may put pressure in some locations on land currently zoned industrial. Where office and retail land users are placing pressure on industrial space is the topic of this section and explored in more detail in the Appendix 8.[37] Clearly the increasing demand for land by service employers and for housing will encroach on industrial land uses in some County locations. To what extent and where these conflicts occur are examined here at the subregion level. To reiterate, this is case (2b), where residential, retail, and office users may encroach on current industrial areas. The case reflects the instances in which there may still be demand for industrial land, but alternative uses are willing to pay higher rents and, therefore, displace industrial uses.

Table A7-6. Growth Rates of Office and Retail and Industrial Land Users and Population, 1990 to 2005

	1990 Employment	2005 Employment	Prince George's County Annual Growth Rate
Services	93,135	116,020	1.5%
Construction	25,747	31,750	1.4%
Manufacturing	14,537	11,037	-1.8%
Transportation and Warehousing	8,817	9,855	0.7%
Wholesale	12,199	12,060	-0.1%
Population	725,515	846,123	1.0%

Sources: County Business Patterns (CBP) and U.S. Census Bureau

[37] The ES202 data will be used to analyze the precise location of these activities.

DAMS File, Text Amendment, and Nonconforming Uses

This case of weak industrial demand, but strong demand by office, retail, and residential land uses, was explored through the county's DAMS file and text amendment history.

Table A7-7 indicates that there is a total of 588.5 acres of nonconforming uses on industrially zoned land or 5.1 percent of the total industrially zoned acreage. A nonconforming property is defined in this report as a property that is zoned for industrial uses but is not taxed for an industrial use by the SDAT. Nonconforming uses are allowed "provided that the zoning requirements were adopted after the use was established" or the Planning Board has authorized the use by granting nonconforming status. Nonconforming uses may also suggest that the market is changing, and the zoning has not kept pace with market demand. County officials will want to consider whether to change zoning or enforce the laws that exist to control "unwanted" uses.

There are nonconforming properties in every zoning category. A greater percentage of acreage in I-4 and U-L-I are considered nonconforming (at 30.3 percent and 33.8 percent, respectively). However, I-4 and U-L-I zoned properties represent only 2.6 percent and .04 percent of the county's industrial-zoned acreage, respectively. Most of the nonconforming acreage is zoned I-1 and I-3. Together, these two zoning categories account for almost 56.0 percent of the nonconforming, industrially zoned acreage. Given that U-L-I was created somewhat recently and was superimposed on land containing some older industrial uses, it is not surprising that there would be several parcels that do not fit every specific requirement of the zoning ordinance and would, therefore, be grandfathered.

Table A7-7. Non Conforming Uses of Industrially Zoned Land for Prince George's County*

	I-1	I-2	I-3	I-4	E-I-A	U-L-I	Total
Total	4845.5	2012.3	2059.9	296.8	2263.8	44.4	11522.7
Developed Acres	2787.1	1161.3	922.2	151.7	1222.0	33.1	6277.4
Nonconforming Acres	187.6	71.3	138.2	90.0	85.0	15.0	588.5
Non-conform. acres (%)	3.9	3.5	6.7	30.3	3.8	33.8	5.1
* Table does not include acreage encompassed by Andrews Air Force Base and Chalk Point							

Source: Prince George's County Zoning map and tax records, 2007

The DAMS file

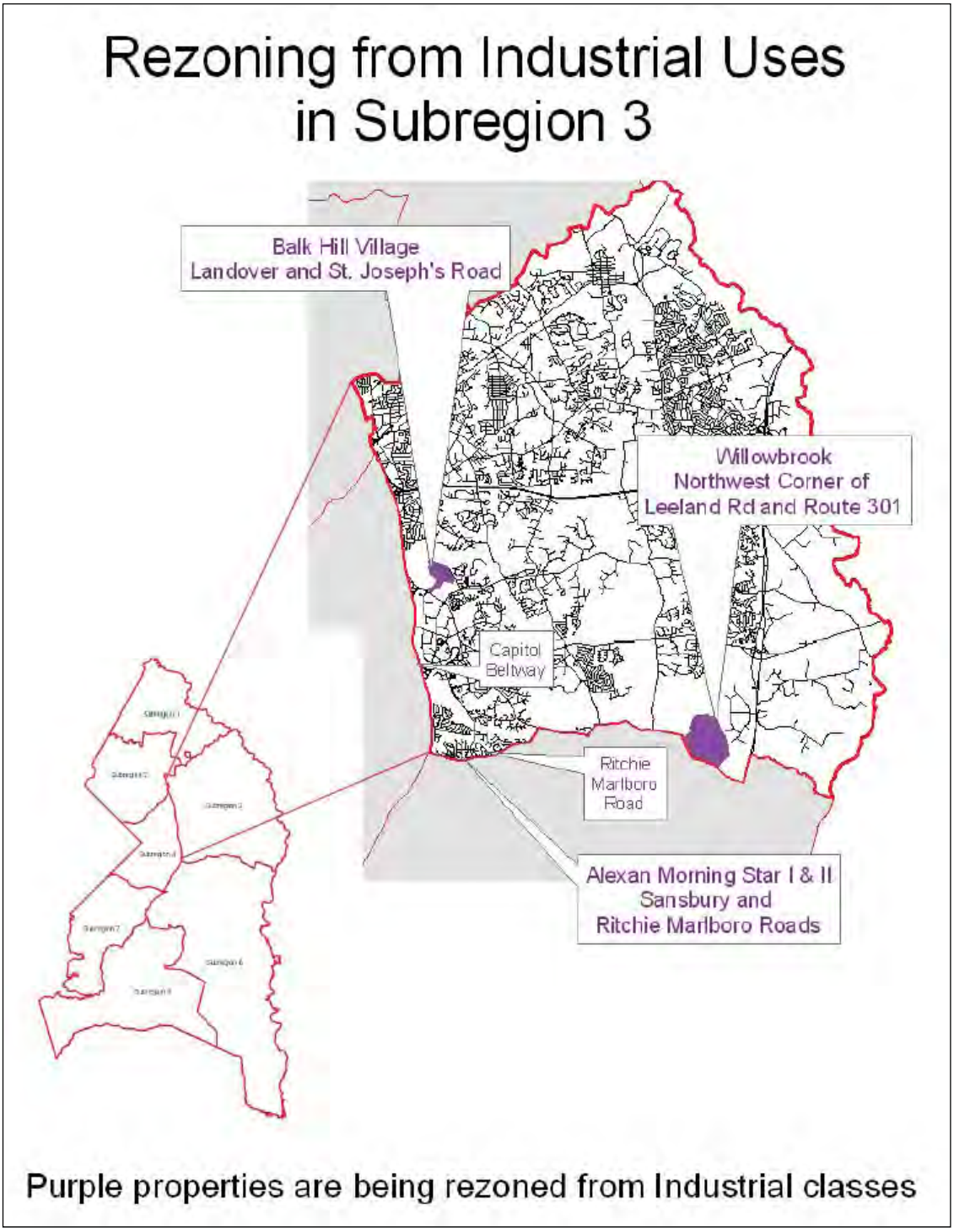
The DAMS file reports rezoning requests and approvals from January 1, 2000 to July 1, 2007 in the county. The DAMS file indicates that the loci for rezoning activity are in Subregions

3, 4, and 5. Table A7-8 reports the results by subregion, including the amount of acreage and new land use. These are all areas that were rezoned from an industrial to nonindustrial use. For example, in Subregion 3, 143.7 acres were rezoned, with 20.5 acres going into residential use and 123.3 acres transferred to mixed use. Subregion 5 experienced the most rezoning activities from industry to other uses. The precise location of these rezoning cases that occurred over the period 1990 to 2005 are shown in Map A1-18 through A1-20 below.

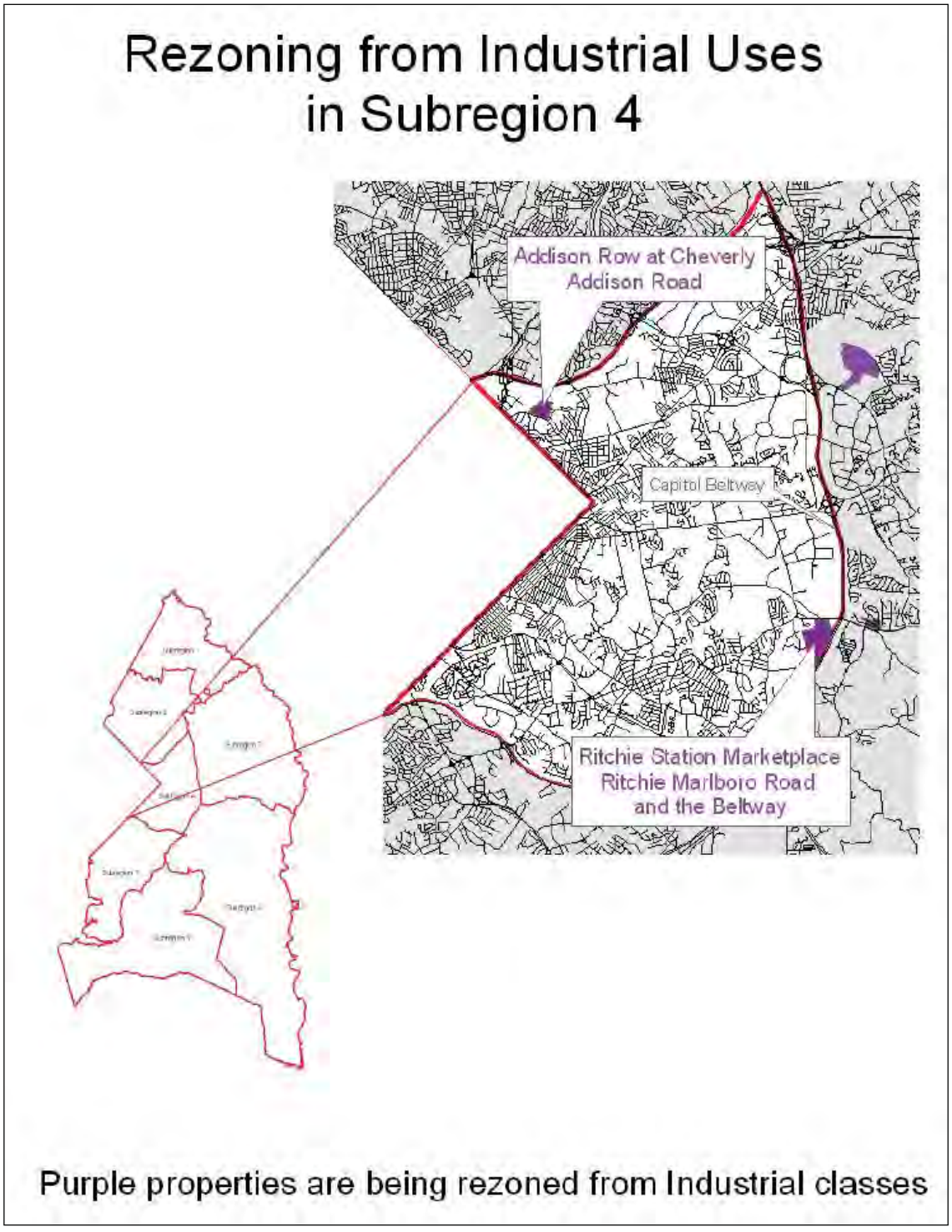
Table A7-8. Subregion and Amount of Land Rezoned from Industrial to Other Uses

Subregion	Total Acres Rezoned	Receiving Zoning Category, by Acres (Percent of Subregion Total)		
		Residential	Commercial	Mixed Use / Planned Community
3	143.7	20.5 (14.3)		123.2 (85.7)
4	150.9		116.5 (77.2)	34.4 (22.8)
5	585.2	502.1 (85.8)	83.1 (14.2)	

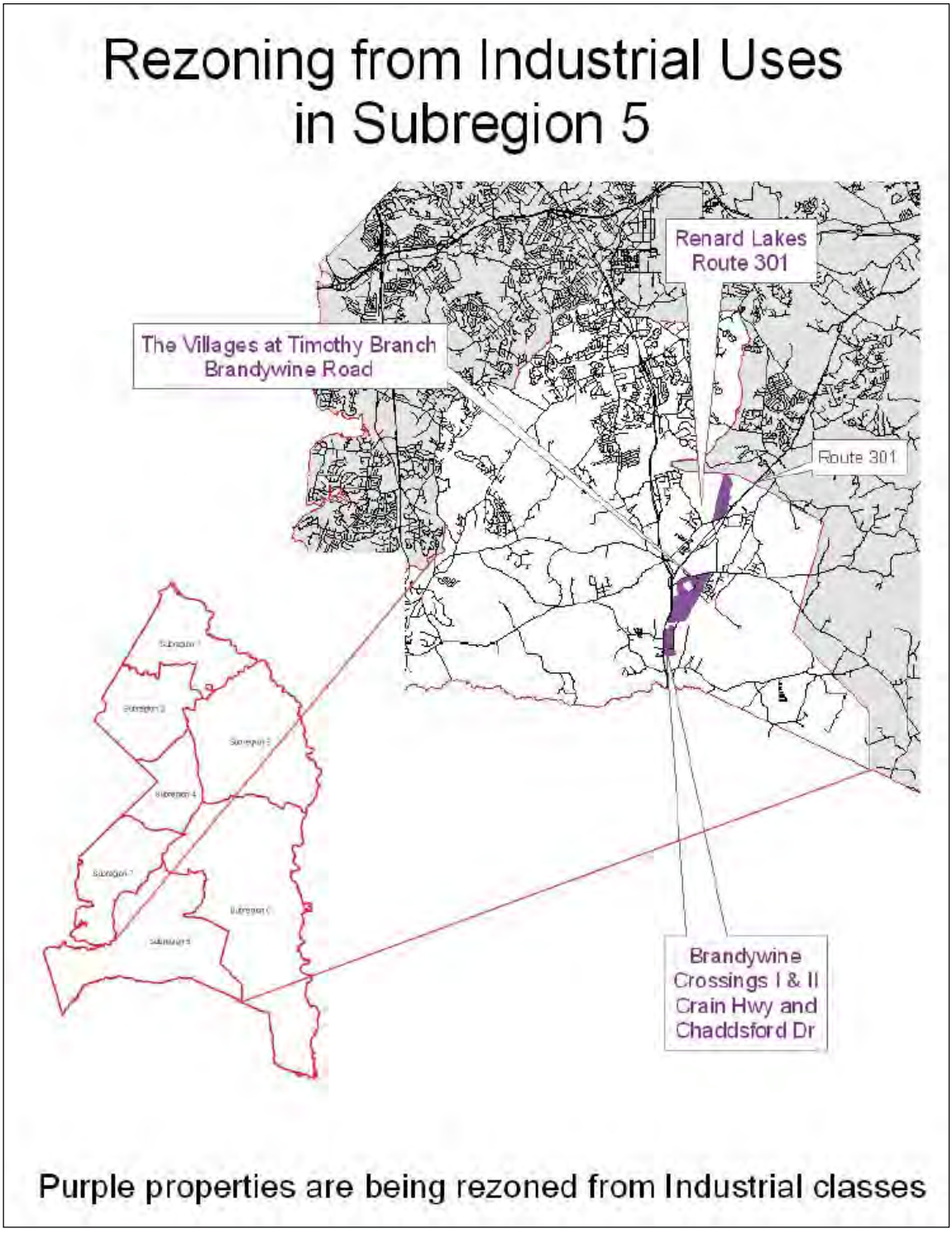
Source: DAMS File, 1/1/2000–7/1/2007, Prince George's County



Map A7-18. Location of Rezoning Cases in Subregion 3, January 1, 2000–July 1, 2007



Map A7-19. Location of Rezoning Cases in Subregion 4, January 1, 2000–July 1, 2007



Map A7-20. Location of Rezoning Cases in Subregion 5, January 1, 2000–July 1, 2007

Text Amendments Results

Text Amendments information by Subregion is reported in Appendix 8 – Assessment of Industrial Areas by Subregions in Prince George's County.

Nonconforming Uses by Subregion

The location of nonconforming uses may also suggest where there is less demand for industrial land and a greater market demand for other uses. The Prince George's Zoning Ordinance defines a nonconforming use as "the use of land or buildings that does not conform to the requirement of the code." A nonconforming property is here defined as a property that is zoned for industrial uses; however, is not taxed as an industrial use by the SDAT. Table A7-9 shows the location, by subregion, of the nonconforming uses. The average percent of nonconforming uses is 5.1 percent of all industrially zoned land and 9.4 percent of all industrially developed land in the county. Nonconforming uses are spread throughout all the subregions; however, the acreage is largest in Subregion 5, with 316.6 acres in nonconforming uses. In Subregion 5, fully 54 percent of all industrially zoned land is in nonconforming uses. The share of land in nonconforming uses is over ten times the countywide average of 5.1 percent. A large acreage and share of industrial land in nonconforming uses suggests there may be market demand for alternative uses other than industrial in these locations.

Table A7-9. Acreage and Percent of Land in Nonconforming Industrial Use, by Subregion

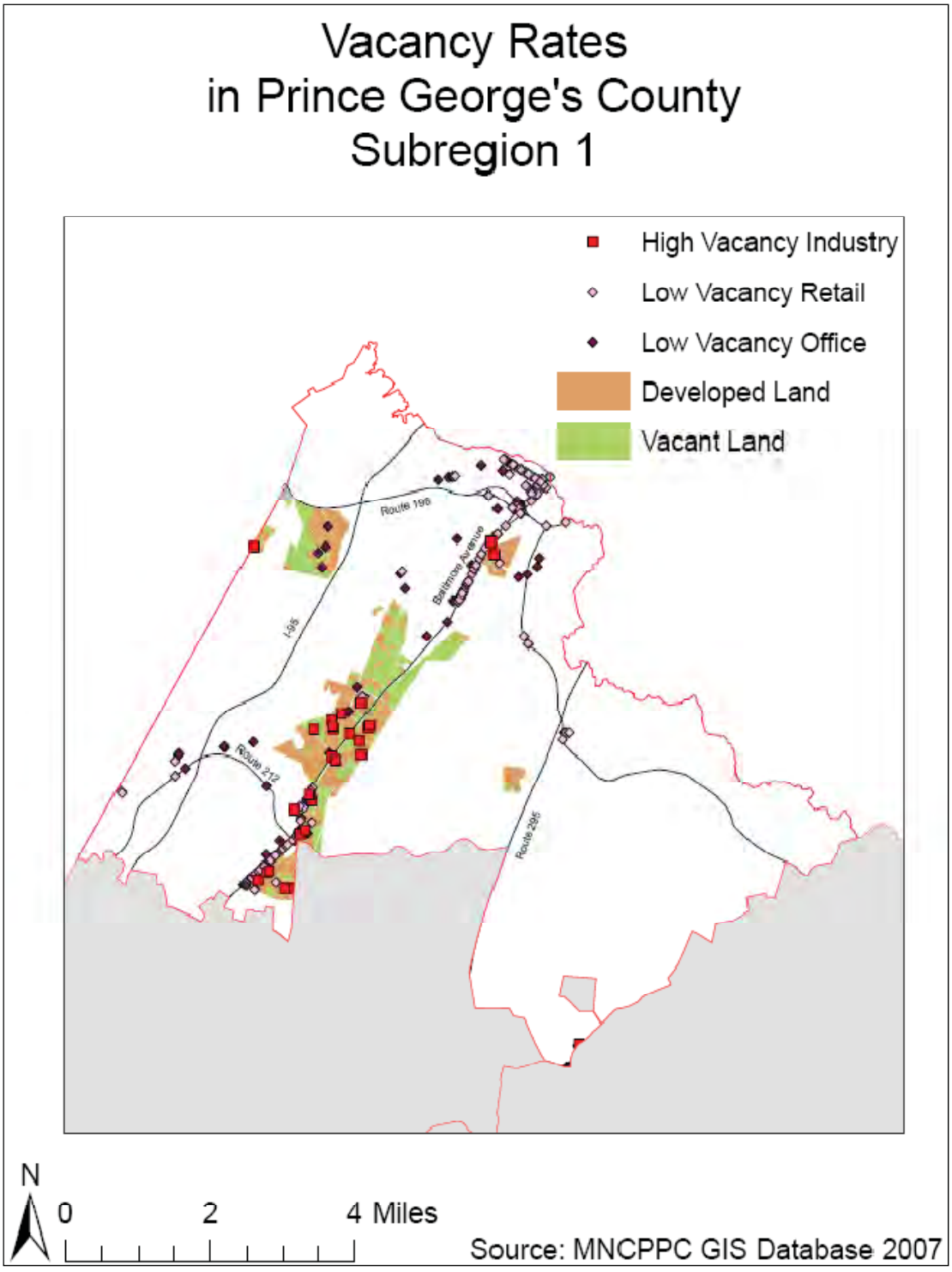
	Total	Percentage
Subregion 1 Total Industrially Zoned Acres	1,933.0	
In Developed Nonconforming Use	66.7	11.4
Subregion 2 Total Industrially Zoned Acres	681.7	
In Developed Nonconforming Use	49.1	8.4
Subregion 3 Total Industrially Zoned Acres	2,133.5	
In Developed Nonconforming Use	29.2	5.0
Subregion 4 Total Industrially Zoned Acres	3126.0	
In Developed Nonconforming Use	49.6	8.5
Subregion 5 Total Industrially Zoned Acres	2218.6	
In Developed Nonconforming Use	316.6	54.0

Subregion 6* Total Industrially Zoned Acres	787.0	
In Developed Nonconforming Use	30.5	5.2
Subregion 7 Total Industrially Zoned Acres	642.8	
In Developed Nonconforming Use	44.5	7.6
County Total Industrially Zoned	11522.7	
Developed Nonconforming Use	586.4	5.1
*Excluding Andrews Air Force Base and Chalk Point Power Plant		

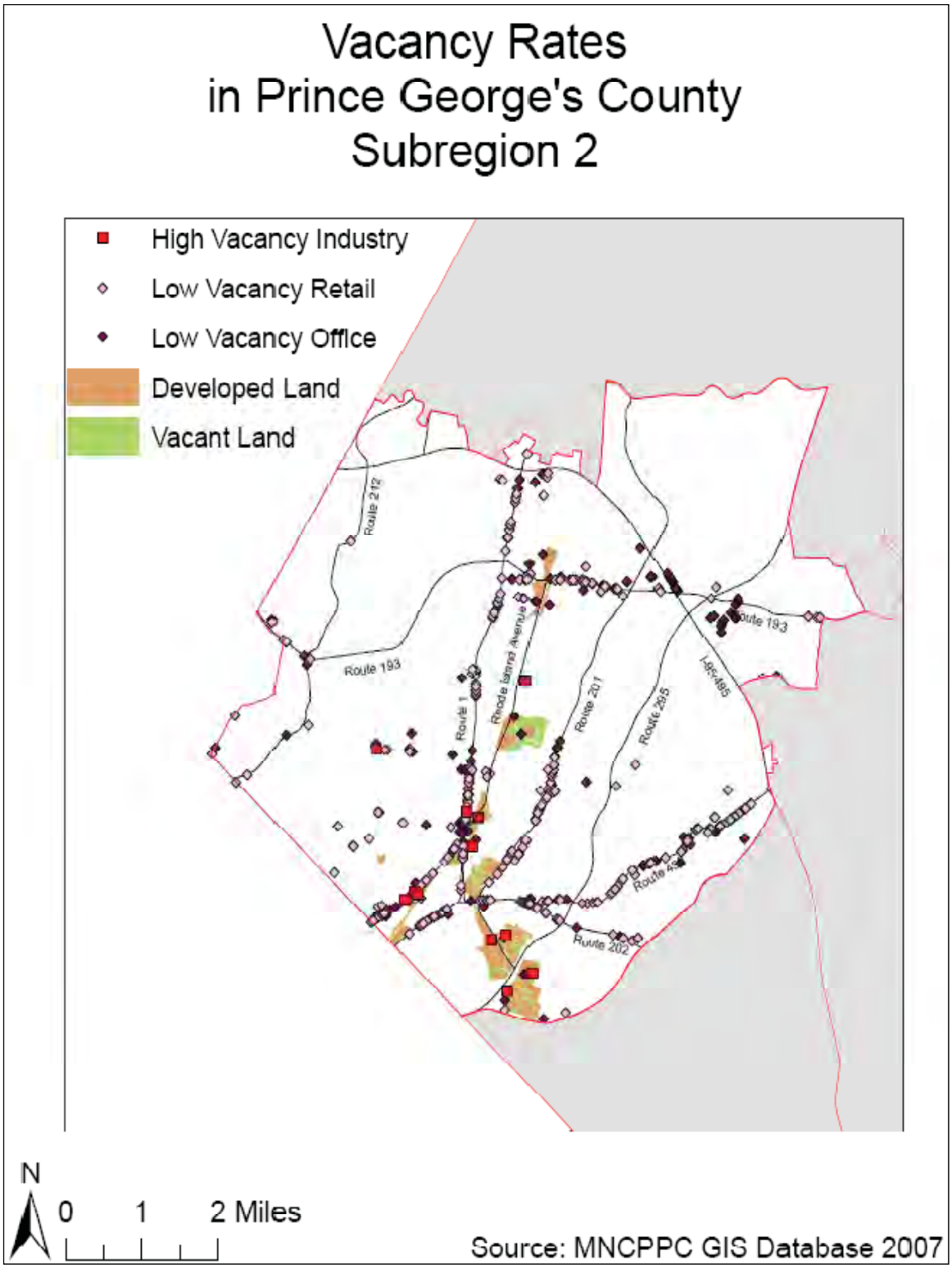
Source: Prince George's Tax Assessor's File, 2007

Competition from Retail and Offices

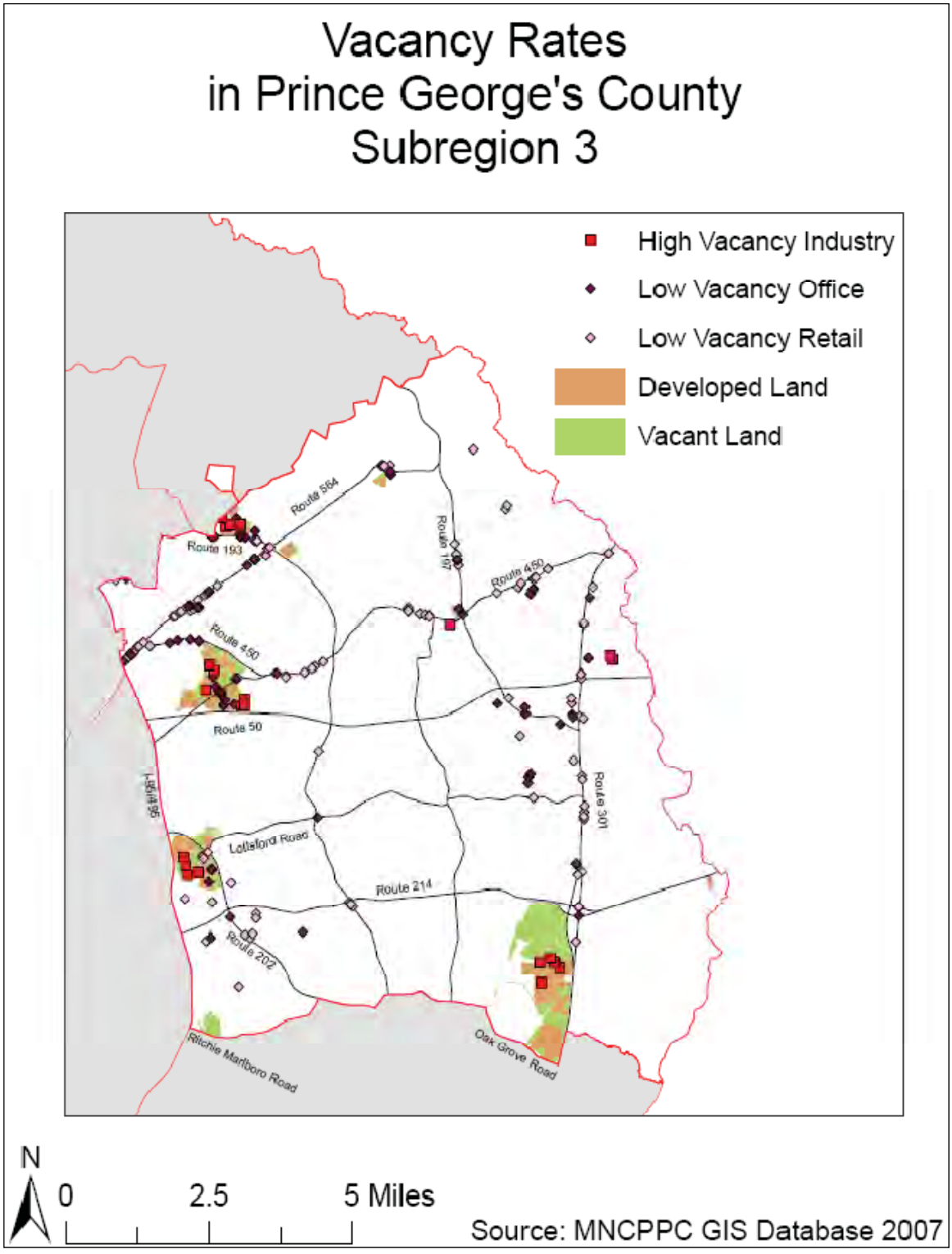
Another means of identifying locations where industrial demand is weak and demand for space by office and retail uses is strong is to find locations where the industrial vacancy rate is high, but the vacancy rate for retail and office space is low. These results are shown in Map A7-21 through A7-27. A number of locations show up as high demand for office retail space but weak demand for industrial space. These locations are the southern portion of the Baltimore-Washington Parkway in Subregion 2, the Goddard Corporate Park off of Greenbelt Road in Subregion 3, the Southern part of Largo Road in Subregion 6, and between Branch Avenue and the Capital Beltway in Subregion 7.



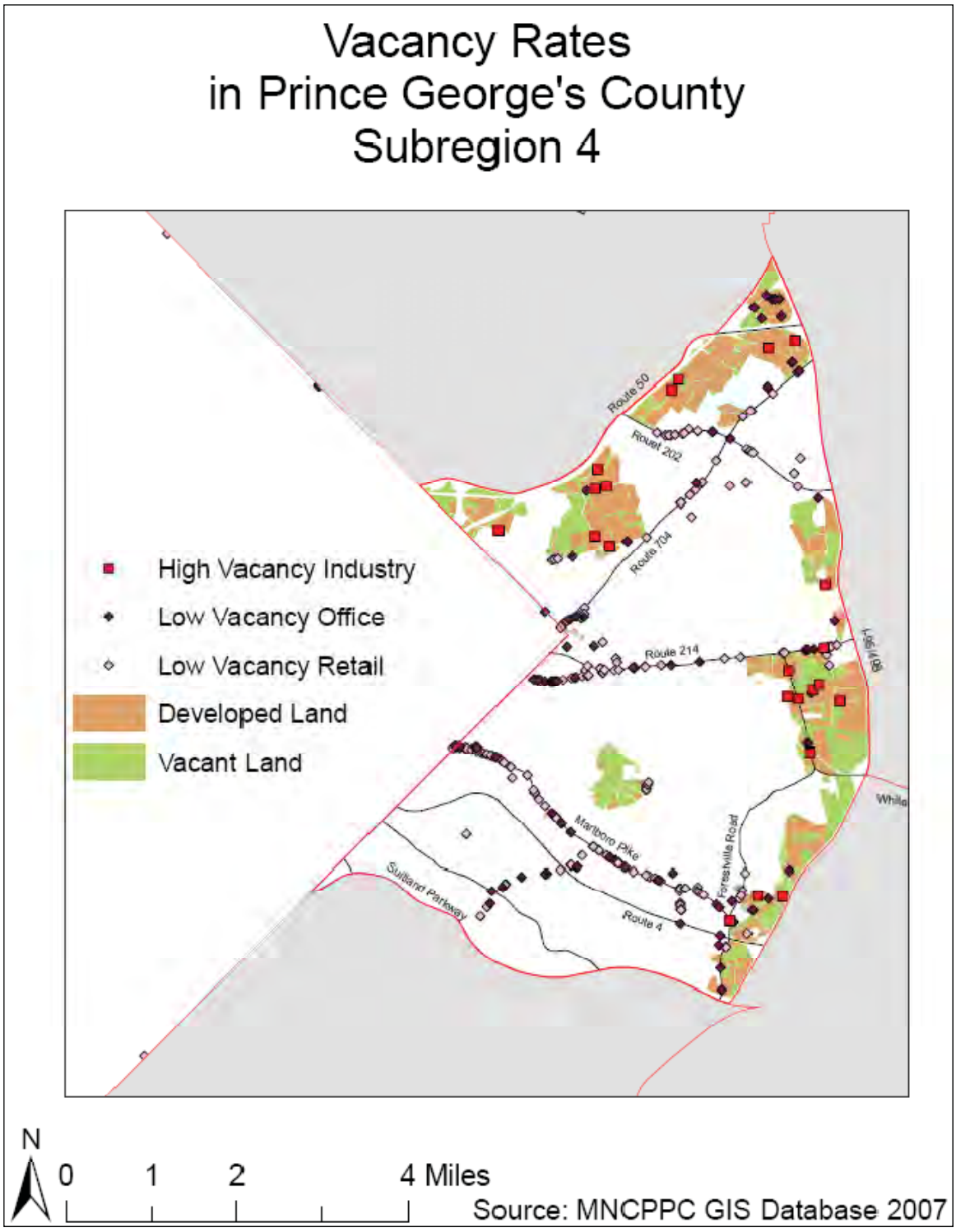
Map A7-21. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 1



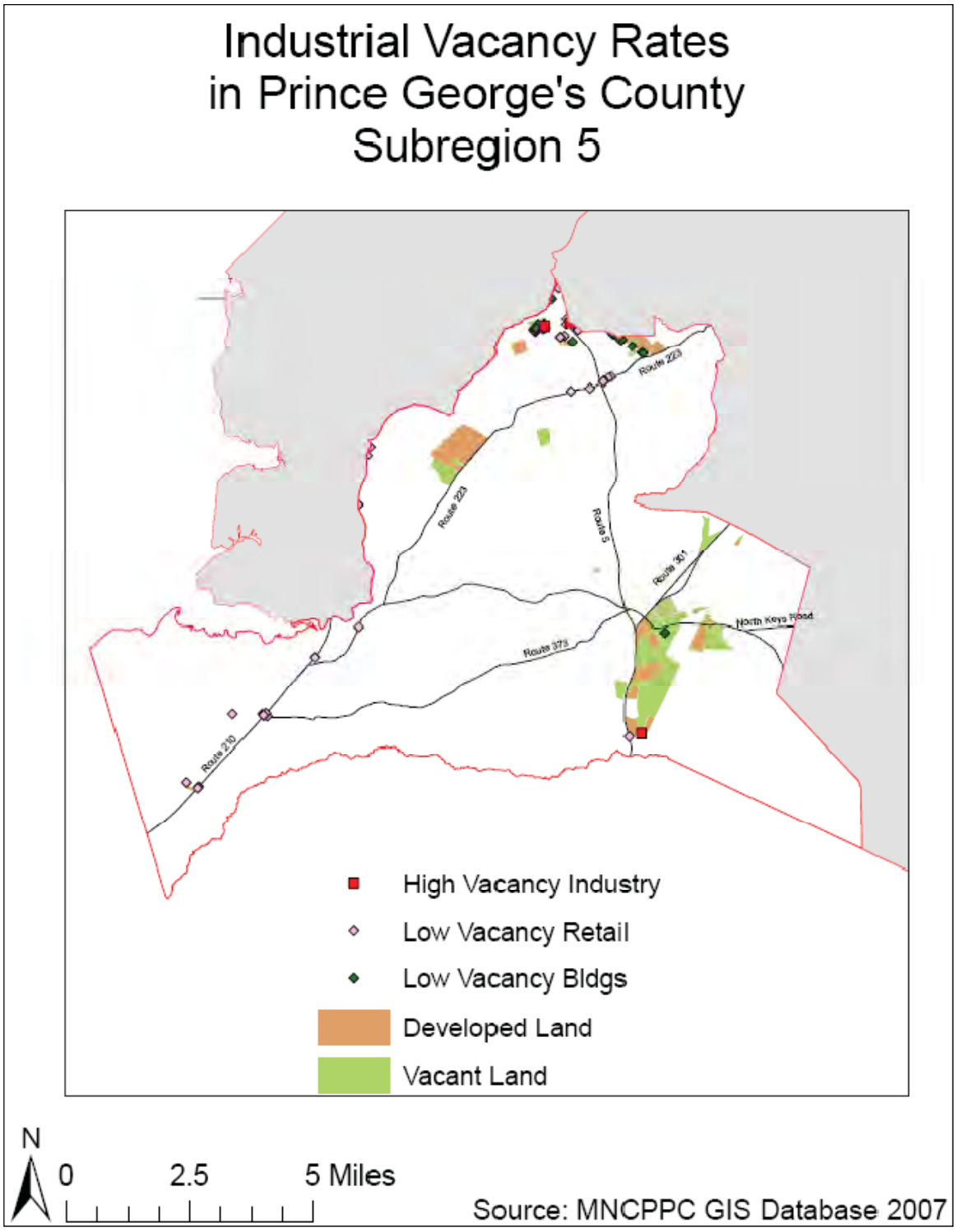
Map A7-22. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 2



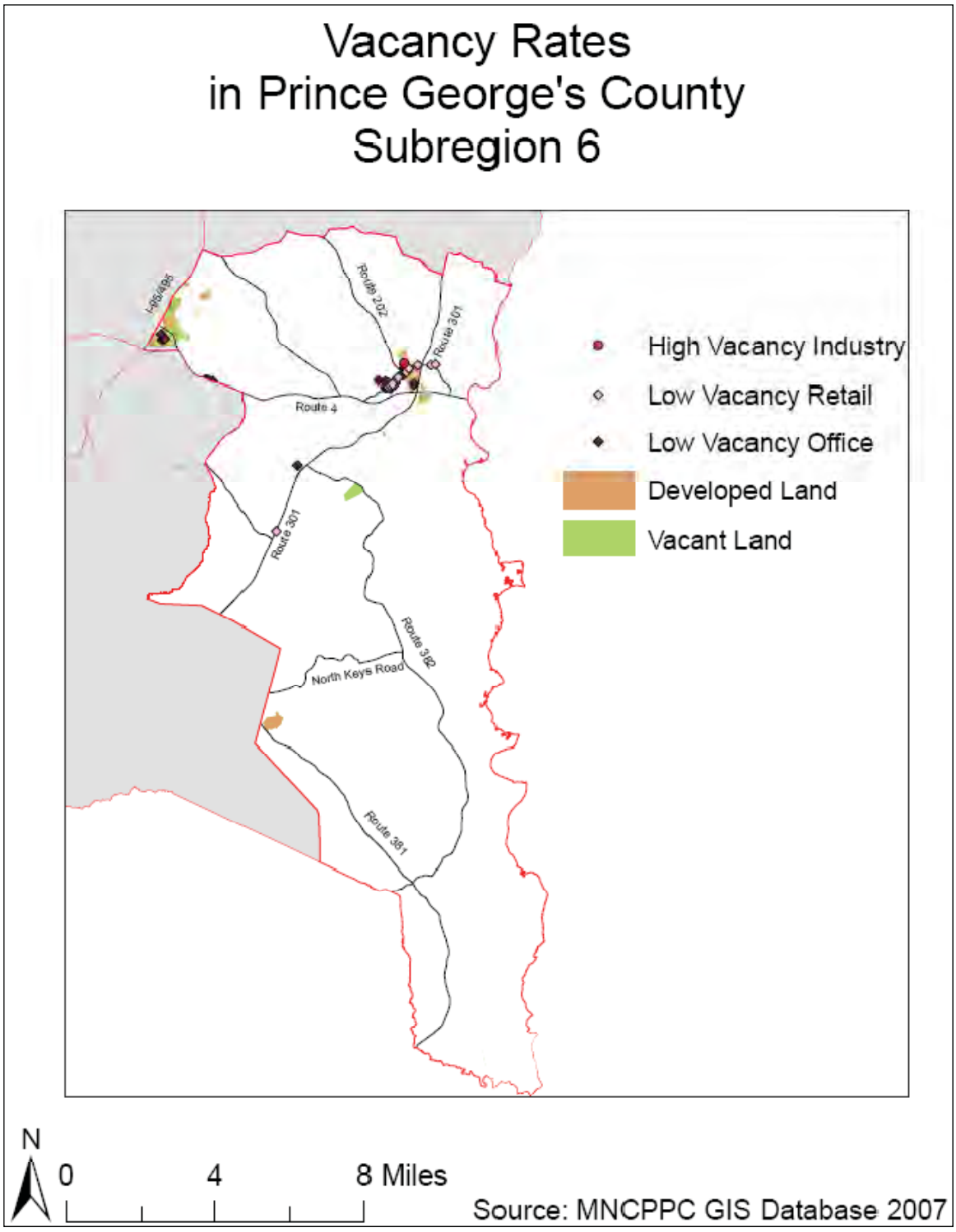
Map A7-23. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 3



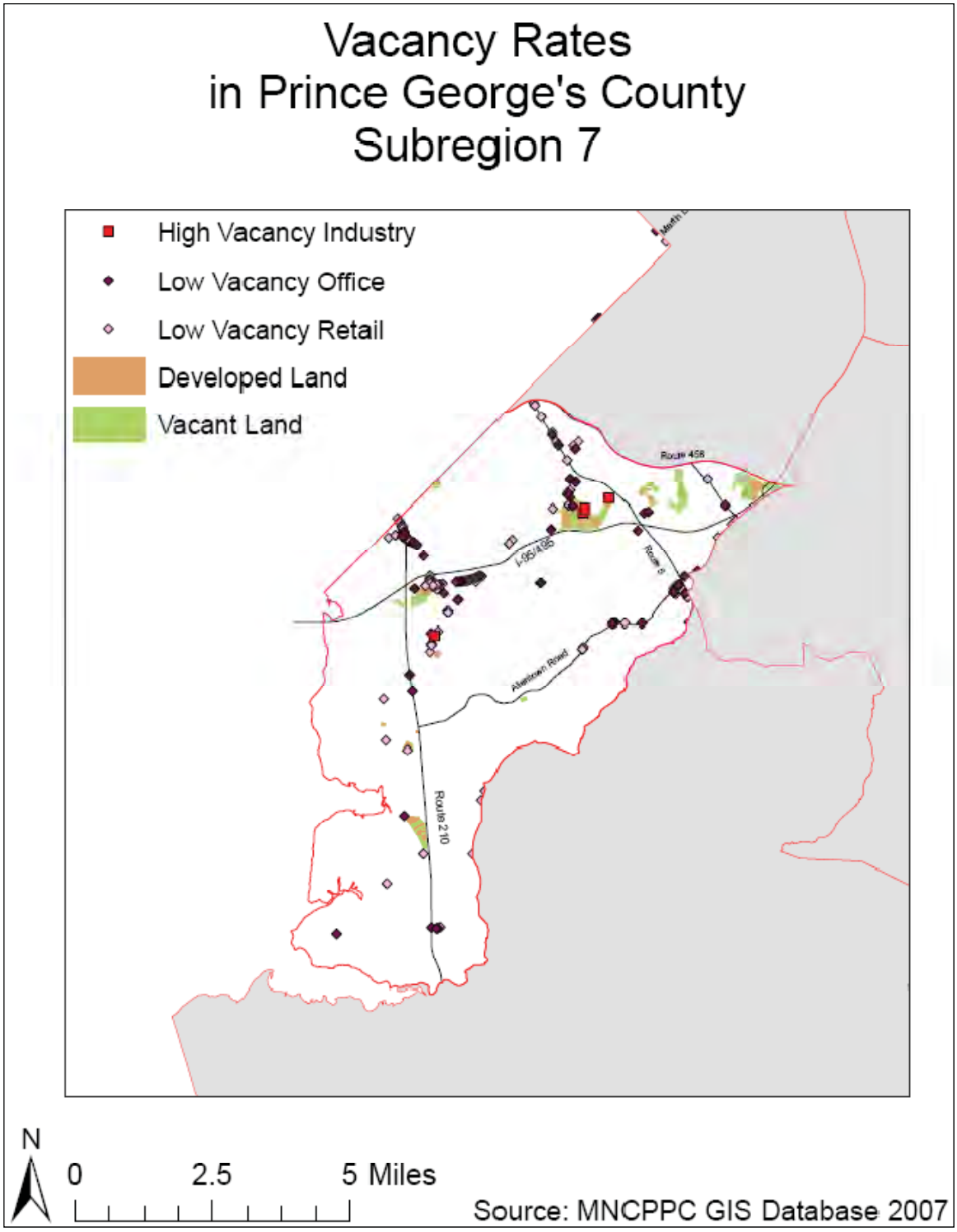
Map A7-24. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 4



Map A7-25. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 5



Map A7-26. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 6



Map A7-27. Sites with High Industrial Vacancies and Low Retail and Office Vacancies, Subregion 7

Special Cases

There are at least two instances where the transition from industrial to alternative uses outlined in Cases 2a and 2b deserve special attention: (1) they are the industrial districts surrounding metro stations and industrial districts with a legacy of contamination. For example, the county may want to plan future development around metro stations that are more land intensive than typical industrial activity. High-density residential and offices encourage ridership on metro and generate more tax revenue for the county. In other locations, the county may decide, as Montgomery County has at the Twinbrook metro station, to preserve some industrial uses, even though there are market pressures to displace industry; and (2) in the case of contamination, there may be locations where the market is pressing for a change to a nonindustrial use, but a legacy of contamination makes this option unhealthy, and a continued industrial use may be the best direction. These are issues to be explored in more detail later but are being addressed in part here.

Metro Stations

Land accessible to the urban core is generally in demand and sells at higher prices than more distant sites. Land surrounding the Washington Metro Area transit stations is just such a high-premium location. The occupancy rates of industrial land and buildings are consistent. At present, the industrial sites within a five-mile radius of Metro stations are 84 percent developed, leaving a 16 percent land vacancy rate for industrial zoned land within that five-mile radius. This vacancy rate is substantially lower than the county average of 45.5 percent of industrially zoned land sitting vacant.

Among all industrial and flex industrial space for rent, the average vacancy rate within five miles of the metro stations is 11.8 percent, with an average warehouse rent of $7.09. This vacancy rate within a five-mile radius of the metro station is slightly lower than the current countywide vacancy rate for rental industrial buildings of 13.4 percent. This indicates, as expected, that there is higher demand for locations near metro stations. Greater demand near Metro stations is supported by the higher mean rent of $7.09, compared to $6.16 for the county as a whole. The results, displayed in Table A7-10, show some interesting patterns for specific Metro stations. The industrial building vacancy rates are lower than average at all Metro stations, except Naylor Road and Suitland. The vacancy rates at Naylor Road and Suitland are not only well above the county average but more than twice the rates of metro stations at Branch Avenue and College Park.

The reasons for the weak demand at Naylor Road and Suitland, as well as the strong demand at Branch Avenue and College Road will be explored. One reason for weak demand at Naylor Road may be the high rents at this location; $9.73 compared to the all Metro location average rent of $7.09 per square foot per year. In contrast, the average rent at Suitland is well below the all-Metro location average.

Table A7-10. Industrial and Flex Space Building Area for Rent, Vacant Space, Vacancy Rate, and Average Rent within a Five-Mile Radius of the Metro Stations

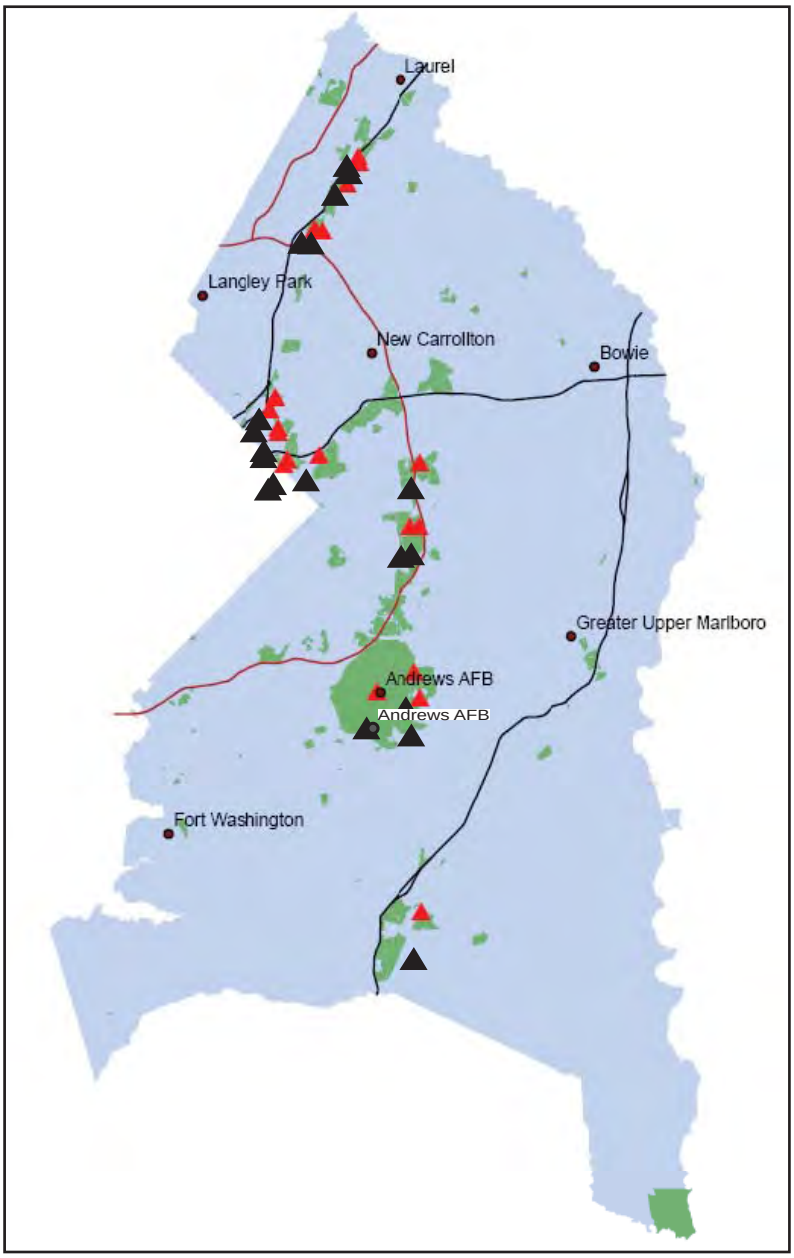
Metro	Subregion	RBA	Vacant (Sq. Ft.)	Vacancy Rate	Average Wholesale Rent per Sq. Ft.
Southern Hills	4	34,740,211	4,325,911	12.5%	7.46
Branch Avenue	4	8,088,179	599,142	7.4%	6.54
Naylor Road	4	14,525,638	2,443,322	16.8%	9.23
Suitland	4	13,087,524	2,158,568	16.5%	5.79
Greenbelt	2	24,625,687	2,213,608	9.0%	6.27
College Park	2	20,888,314	1,741,278	8.3%	6.28
Prince George's Plaza	2	29,720,988	3,588,326	12.1%	7.76
West Hyattsville	2	28,405,273	3,514,330	12.4%	7.85
New Carrollton	2	25,659,046	2,645,943	10.3%	5.99
Landover	4	33,605,092	3,813,467	11.3%	7.49
Cheverly	4	35,576,754	4,328,409	12.2%	7.51
Largo Town Center	3	26,404,575	3,401,489	12.9%	6.01
Addison Road	4	32,220,239	3,811,580	11.8%	7.26
Capitol Heights	4	32,892,829	4,342,380	13.2%	7.26
Morgan Boulevard	4	32,683,941	3,565,792	10.9%	6.82
Total		393,124,290	46,493,545	11.8%	
Average		26,208,286	3,099,570	11.8%	7.09
Median		28,405,273	3,514,330	12.1%	7.26

Source: CoStar Data, 2007

Contaminated Lands

Another issue arises with land that has evidence of contamination. Where land shows evidence of serious contamination that is expensive to remediate for a residential or commercial use, it may be most cost effective to keep the parcel and district in an industrial use. Recent legislation now permits contaminated sites to be cleaned to a standard fitting its new use. If that new use is a school or residential development, then cleanup standards are more stringent and costly. Where the use remains industrial, remediation is usually cheaper, making redevelopment more cost effective. Thus, where serious contamination exists, the county should give serious consideration to keeping the district in its industrial use. Map A7-28 shows the sites where there

is evidence of contamination in Prince George's County. Because the seriousness, pervasiveness, or cost of remediation is not known, any rezoning activity should entail an environmental assessment. The available data on each of these industrial sites noted on Map A7-28 are reported in this appendix. Information on the contamination at these sites was obtained from the MDE and U.S. Environmental Protection Agency (EPA).



Map A7-28. Contaminated Sites in Industrially Zoned Areas in the County

Source: MDE, 2007

Case (3): Healthy Industrial Districts in Prince George's County

CoStar data was used to identify industrial buildings with vacancies below 9.0 percent of building area. The low vacancy group returned 743 buildings with 28 million square feet of space and a vacancy rate of 3 percent. The countywide average for TOM is 32 months; the TOM for these low vacancy buildings is 16 months. All of this information is included in the vacancy reports in Appendix 2 and 3. The mapping of these low vacancy industrial buildings begins to give an idea of where the healthy industrial areas are located. These results were displayed in Figures A7-20–27, herein. The results highlight a number of industrial areas where there is evidence of strong market demand. Examples of these locations are the intersection of Sandy Spring Road and US 1 in Subregion 1, along Rhode Island Avenue in Subregion 2, along Kenilworth Avenue in Subregion 2, the southern portion of Martin Luther King, Jr. Highway in Subregion 4; the northern portion of Woodyard Road in Subregion 5; and the intersection of Pennsylvania Avenue and the Capital Beltway in Subregion 6.

Future analysis will examine the industrial makeup of the strong industrial areas. Recent trends in the county, from 1990 to 2005, indicate overall manufacturing and wholesale trade declined and construction and transportation and warehousing exhibited slow growth. See Table 1-5 above. However, at the more disaggregate industrial level, there are several industrial subsectors within each industrial category that are growing. For example, within manufacturing, textile product mills, plastics and rubber, and computer and electronic products experienced employment growth.[38] These growth sectors that are industrial land users are repeated from Appendix 6 and shown below in Table A7-11. The locations for these activities, as well as others, are likely to be strong industrial districts. At this stage, it is not known where these growth activities locate, but the forthcoming work with the ES202 data will provide this information.

[38] The ES202 data will be used to identify where in the county these growth industrial activities are concentrated.

Table A7-11. Industrial Land Users that Experienced Job Growth: 1990-2005 (growth rate)
Construction: Construction of buildings (1.6 percent) Specialty Trade Contractors (2.3 percent)
Manufacturing: Textile Product Mills (6.0 percent), Plastics and Rubber Products Manufacturing (1.7 percent), Computer and Electronic Product Manufacturing (0.5 percent)
Wholesale: Merchant Wholesalers, Nondurable Goods (0.3 percent)
Transportation and Warehousing: Transit and Ground Passenger Transportation (2.6 percent) Support Activities for Transportation (11.3 percent) Warehousing and Storage (9.2 percent).

Source: QCEW, Bureau of Labor Statistics

Summary of Subregional Analysis

In Chapter I of this Appendix, the demand for industrial land and buildings in Prince George's County subregions was analyzed using a framework of four cases: Case 1, where there never has been market demand for industrial land; Case 2a, where there is current weak industrial demand along with weak demand by other job creating uses; Case 2b, where there currently is weak industrial demand, but strong demand by other uses, including residential, retail, and/or office; and Case 3, where industrial land uses are thriving. Table A7-12 summarizes the findings.

Table A7-12. Summary of Indicators of Demand for Industrial Land in Prince George's County, Ranked by Subregion with the Strongest Demand

Subregion	Percent of Acreage in Nonconforming Land Use	Land area vacancy rate	Acres in Industrial Zoning	Share of County's Industrially Zoned Land	Share of County's Industrial Bldg. Sq. Footage	Industrial Bldg. Sq. Foot Vacancy Rate	Conclusions
2	7.8	25.0%	681.7	5.9%	14.0%	3.6%	High demand for land and Industrial space
4	2.0	40.0%	3126	27.1%	36.0%	12.9%	Above average demand for land but above average building vacancy rate
1	7.2	42.0%	1933	16.8%	23.0%	8.3%	Average demand for land and below average demand for industrial space

3	1.7	43.0%	2,133.5	18.5%	17.0%	11.1%	Average demand for land, and industrial space
6	4.6	48.0%	787	6.8%	4.0%	10.7%	Below average demand for land and average building space demand
5	15.2	60.0%	2,218.6	19.3%	3.0%	14.9%	Low demand for land and buildings
7	7.0	62.0%	642.8	5.6%	3.0%	4.9%	Low demand for land, but buildings full
County Total or Average		45.5%	11,522.6			10.0%**	
*Excluding Andrews Air Force Base and Chalk Point Power Plant ** Includes all industrial and flex space in Prince George's County							

Source: Prince George's Zoning Map, Assessors File, and CoStar, 2007.

The analysis indicates that, generally, Subregions 6 and 7 can be classified under Case 1; Subregions 3, 4 and 5 might be classified under either case 2a or 2b; and Subregions 1 and 2 could be classified under case 3. However, a main conclusion is that subregions are too heterogeneous to put the whole subregion firmly in one of the four categories. In later Appendices the focus will be on individual industrial areas, by expanding the analysis to include field observations and analysis at a smaller geographical scale. Both strategies will enable the research to pinpoint specific areas in the county that could provide support for thriving areas and others where rezoning from industrial uses will not have negative impacts on the industrial sector.

Prince George's County and Intrametropolitan Commuting Patterns

This analysis of intrametropolitan commuting patterns highlights the importance of preserving some industrial jobs and districts, even where there is pressure for rezoning to other uses.

Overview of Residential Location of Private Sector Workers in Prince George's County

The LEHD (LEHD) database was used to break down Prince George's private sector employees by their county of residence. According to the census, the county had 229,582 private sector jobs in 2004, of which only 32 percent were filled by county residents. Approximately 13 percent of Prince George's private sector employees came from Montgomery County, 12 percent came from Anne Arundel County, and 6 percent came from the District. Other neighboring jurisdictions, including Baltimore City and County, Howard, Calvert, Charles, and Fairfax Counties, supplied 22 percent of the workers employed in Prince George's. (See Figure A7-1.)

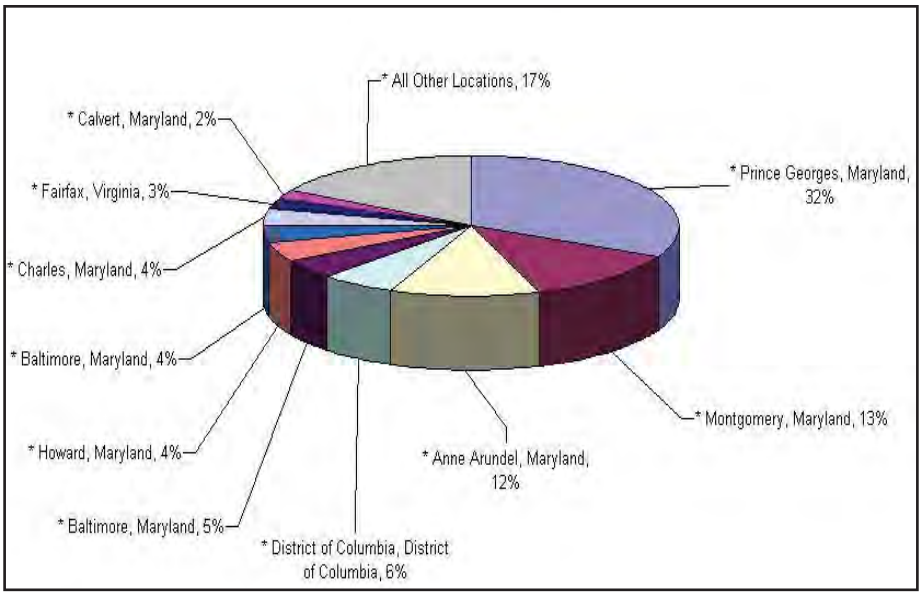


Figure A7-1. Distribution of Residential Counties for Workers in Prince George's in 2004

Source: LEHD, U.S. Census Bureau

A comparison of the distribution of commuters who worked in the county across three years for which data is available—from 2002 through 2004—shows interesting patterns. Contrary to the growth in county population and services sectors during this period (see Appendix 6), private companies in the county, in fact, employed fewer workers from the county and more workers from other jurisdictions in terms of percentage. (See Table A7-13.) In 2002, Prince George's County private sector employers hired 36 percent of their labor force from within the county, but by 2004, the percentage had dropped to 32 percent despite the fact that total workers hired by private businesses in the county increased by 1 percent . A small but increasing share of employment was hired from Montgomery County, Fairfax, and other surrounding jurisdictions.

Table A7-13. Distribution of Residential Locations for Workers Hired by Companies Located in Prince George's County: 2002-2004

	2002	2003	2004
Total Private Jobs	227,368	226,448	229,580
Percent from Prince George's	36	31	32
Percent from Montgomery	12	13	13
Percent from Fairfax	2	3	3
Percent from Neighboring Jurisdictions	26	27	27
% from Other Locations	25	26	25

Source: LEHD, U.S. Census Bureau

The LEHD database also allows an examination of the job locations for employed residents in Prince George's County and compares it to other jurisdictions in the region. Of all employed residents in Prince George's County in 2004, 45 percent were hired by private firms in the county. Both Montgomery and Fairfax counties hire substantially greater shares of their own residents, filling 65 percent and 59 percent of county jobs with county residents. Table A7-14 shows that on every weekday, about 55 percent of employed residents in Prince George's commute to workplaces outside the county. Montgomery had the lowest percentage of out-commuters (35 percent), and Fairfax comes as the second lowest with 41 percent. Both sets of numbers, in Table A7-13 and A7-14, indicate Prince George's weaker ability to meet private sector labor demand with county residents than Montgomery or Fairfax counties. It is important, however, to note that the focus of job analysis in both Appendix 6 and this one is placed on the private sector employment. Thus, approximately 80 percent accounts for the total employment in Prince George's County (based on the 2004 LEHD data).

Table A7-14. Private Sector Job Locations of Employed Residents in 2004, by County of Residence, 2004

	Within the County	Outside the County
Prince George's County Residents	44.8%	55.2%
Montgomery County Residents	65.1%	34.9%
Fairfax County Residents	59.2%	41.8%

Source: LEHD, U.S. Census Bureau

Aside from the burden such commuting puts on the regional transportation infrastructure, congestion, and demand for fossil fuels, the relatively low percentage of private sectors jobs in the county, taken by the county residents in 2004, raises questions about a possible mismatch between the skills and education that businesses in the county require and the skills of county residents. It is observed that, while the county experienced strong positive growth rates in services sectors, the job share taken by its residents declined. (See Table A7-15.) Even though the LEHD data are available for years before 2002, the above findings suggest employment absorption is not in proportion with the growth of the services sector. In other words, job growth is not evenly distributed among in-county and out-of-county residents. The residents of other counties gained an increasingly large share of Prince George's County jobs.

Table A7-15. Employment in the Industrial Sector and Services Sector in Prince George's County				
	2002	**2003**	**2004**	**% Change, 2000-2004**
Industrial sector	63,975	61,190	62,565	-2.2
Services sector	163,593	165,572	167,228	2.2

Source: LEHD, U.S. Census Bureau

Residential Locations for Workers of Industrial Land Using Sectors and Commercial Land Using Sectors in Prince George's County

The above analysis shows that the share of a county's private sector workers who also live in that county is lower in Prince George's County than in either Montgomery or Fairfax Counties. Census tract data in the LEHD dataset is used to analyze commuting patterns for the more disaggregated industrial sector. An objective is to know the share of Prince George's County residents who fill the county's service, manufacturing, construction, wholesaling, and warehousing and transportation jobs. Another objective is to know which sectors—commercial land users or industrial land users—are more likely to employ Prince George's residents. Commuting data by industry is not available at the county level. Therefore census tract data with varied industrial concentrations is analyzed to see where their employees resided. For example, a question of interest is whether census tracts, with a high proportion of jobs in manufacturing, are more likely to hire employees from the county.

Data from 32 representative census tracts, which were home to 31,467 industrial jobs and 52,221 service jobs in 2004, was collected (the number of total private jobs was 230,022). Tracts that have a similar distance to the major regional arteries, but varied industrial structures, were selected. For example, tract 800203, which is adjacent to I-95 and has 61 percent of its total private workforce in industrial land using sectors, was selected. Its neighboring tract (800107), which encompasses the city of Laurel and has 90 percent of total private workforce in office land using sectors, was also selected. The census tracts selected for analysis are shown in Map A7-29.

Map A7-29. Census Tracts Selected for Commute Analysis

Source: Prince George's County M-NCPPC DAMS Database and LEHD Data

LEHD data was used to extract the 2004 employment in services, construction, manufacturing, transportation and warehousing, and wholesale trade across the 32 sampled census tracts. From the same data source, the county of residence for employees in that census tract was also obtained. Using these data, a simple linear regression was generated to estimate the number of jobs taken by county residents corresponding to the number of private jobs in each sector. The regression results were as follows:

Number of Jobs Taken by County Residents = 58.67 + 0.29x (services) + 0.30x (construction) + 0.97x (manufacturing) + 0.24x (transportation & warehousing)–0.64x (wholesale trade) [39]

(N = 32)

This analysis finds that, when a census tract has high percentage of its jobs in manufacturing, it also has a high proportion of its employees hired from the county. In contrast, when a census tract has a high proportion of its jobs in services, a larger share of the census tract employees come from other counties in the region.

Thus, it is estimated that for every 100-job increase in the number of service jobs in a census tract, the census tract hired 29 Prince George's County residents and 61 residents from other Washington metro counties. For every additional 100 construction jobs, about 30 jobs went to county residents. Transportation and warehousing employers hired only 24 county residents for every additional 100 jobs. In dramatic contrast, for every 100 manufacturing jobs in the sample census tracts, nearly all (97 percent) were filled by Prince George's County residents. Perhaps, skills required by manufacturing companies match county residents' skills better than the other sectors'. The negative value for wholesale trade can be interpreted as follows: the greater the census tract employment in wholesale trade, the lower the share of those employees who are county residents.

Although this rather simplistic regression model ignored other possible factors to explain residential location of workers, it enables a comparison between the relative importance of industrial and commercial land-using sectors in providing jobs for county residents. It can be concluded that manufacturing employers are most likely to hire local residents and transportation and warehousing and services are least likely to hire county workers. This result highlights the importance of manufacturing jobs to the county's economy.

Age and Wages of County Employees

In Appendix 6, the QCEW was used to compare average annual pay per employee across different sectors and across the three counties. The comparison shows that the four industrial sectors provide higher wage jobs compared to other service subsectors, including NAICS 44-45

[39] Significance level p for services is <0.000, for construction is <0.025, for manufacturing is <0.000, for transportation and warehousing is < 0.001, and for wholesaling is <0.014. R-square is 0.92.

(retail), NAICS 71 (arts, entertainment, and recreation), NAICS 72 (accommodation and food services), and NAICS 62 (health care and social assistance). (See Figure A7-2.) The analysis, based on the QCEW suggested that, despite the fact that the county—like the entire nation—has seen a structural shift toward a service based economy, the county continues to benefit much from industrial activities. This is especially true when the education attainment for employees working in those sectors in the D.C region is examined. Table A7-16 shows that metropolitan-wide, the four major industrial land using sectors are more likely to employ people with lower education levels (high school or less) than services sectors do.

Table A7-16. Educational Attainment for Employees Working in Four Major Sectors in Washington, D.C.-Maryland-Virginia Metropolitan Area

Sector	High School or Less	Some College	College Grad or More
Construction	61.3%	21.3%	17.4%
Manufacturing	32.7%	24.2%	43.1%
Transportation and Warehousing	44.4%	31.7%	23.9%
Wholesale Trade	37.8%	28.6%	33.5%
Services Sector	26.6%	23.2%	50.2%

Source: American Community Survey, 2005: Public Use Microdata Samples, U.S. Census Bureau

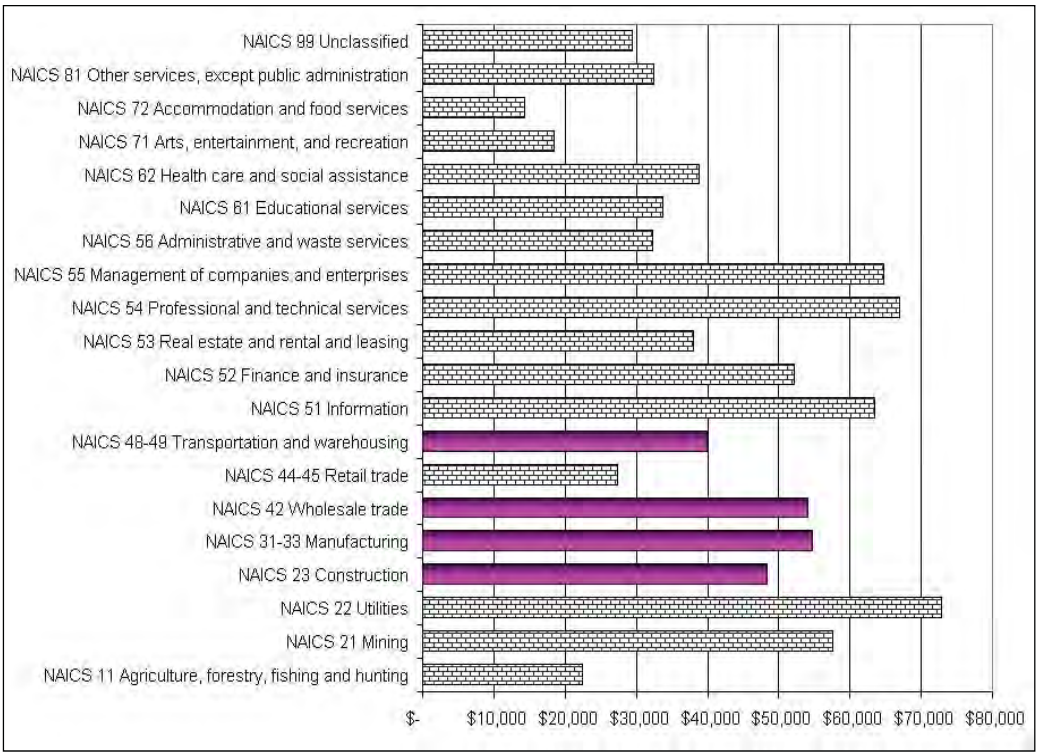


Figure A7-2. Comparison of Average Annual Pay per Employee in 2005 Across All Industrial Sectors in Prince George's County

Source: QCEW, Bureau of Labor Statistic

By using the LEHD data, the findings in Appendix 6 are confirmed. Tables A7-16–-17 show private sector jobs in the county broken down by worker age and earnings in 2004. The results are compared across three major counties in the Washington, D.C. region. Prince Georges County had 28.7 percent of its total private sector jobs filled by people age 30 or younger, a slightly higher proportion than Montgomery and Fairfax counties. While a younger age profile may explain some of the lagging wage performance in Prince George's County, it does not explain it all. Prince George's County had a significantly higher proportion of low paid jobs than the other two counties. Prince George's County had 30 percent of its jobs paying $1,200 or less, while Montgomery and Fairfax counties had 26 percent and 21 percent of jobs in the $1,200 or below salary category. Fairfax had the largest share of jobs that paid more than $3,400 a month, with 49 percent of jobs in this category. The equivalent percentage for Prince George's County was 33 percent. Data from 2002 to 2004 suggest that those percents remained fairly stable over time in all three counties.

Table A7-17. Percentage of Private Sector Workforce, by Age Cohort, in Three D.C. Metropolitan Counties: 2004			
	Prince George's	Montgomery	Fairfax
Age 30 or younger	28.7%	26.1%	25.7%
Age 31 to 54	57.8%	59.9%	61.6%
Age 55 or older	13.5%	14.0%	12.7%
Total private jobs	230,022	386,946	486,580

Source: LEHD, U.S. Census Bureau

Table A7-18. Percentage of Private Sector Workforce, by Earnings Cohort, in Three D.C. Metropolitan Counties, 2004			
	Prince George's	Montgomery	Fairfax
$1,200 per month or less	30.2%	25.9%	21.3%
$1,201 to $3,400 per month	37.0%	35.4%	29.5%
More than $3,400 per month	32.9%	38.7%	49.2%
Total private jobs	230,022	386,946	486,580

Source: LEHD, U.S. Census Bureau

Particularly relevant to the topic at hand, these findings highlight and corroborate the importance of county protection of healthy existing industrial areas. The industrial sector tends to provide relatively high salaries and benefits for workers with less formal education.

Summary of County and Intra-Metropolitan Commuting Patterns

Section II analyzes the commuting patterns of the county's workforce and shows the importance of industrial activities to the county's economy and workforce. Among the findings are:

- Prince George's residents fill only 32 percent of the jobs provided by companies located in the county.
- Less than 45 percent of the Prince George's County resident workforce actually works inside of the county, while the proportion of own-county employment is much higher for residents of Montgomery (65.1 percent) and Fairfax (59.2 percent) counties.
- Manufacturing companies in Prince George's County are much more likely to provide jobs to county residents, rather than out-of-county commuters, than are companies operating in the county's service sector and other industrial sectors.

Conclusions

Appendix 7 continues the analysis of industrial land use, moving from the broad county-wide focus presented in Appendix 6 to a more detailed subregional analysis. This report also continues an examination of the workforce in Prince George's County, moving from broader county-wide demographics in Appendix 6 to a discussion of intrametropolitan commuting patterns and implications for both land use and economic development within the county.

This report establishes four distinct cases as a means of organizing and addressing the different conditions affecting the development of industrial land within the county. Strategies for all recommend further investigation, and the development of planning responses will differ for each case, and will be the subject of future Appendices. The four cases are as follows:

Case 1: Locations where demand is both currently and historically low.

Case 2a: Locations where evidence suggests historic demand for industrial but where current demand is weak for both industrial and other uses, including office and retail.

Case 2b: Locations where evidence suggests historic demand for industrial but where current demand is weak for industrial and strong for office and retail uses.

Case 3: Locations where industrial demand is high, indicating a healthy industrial area.

Analysis at the subregional level suggests that Subregions 6 and 7 fall under case 1; Subregions 3, 4, and 5 fall under either case 2a or 2b; and Subregions 1 and 2 may fall under Case 3. However, the subregions are too heterogeneous to say that every industrial area in every subregion falls into this category. The results of this analysis are summarized in the Table A7-19, below. Future analysis will study locations within each subregion.

Table A7-19. Summary of Analysis of Demand for Industrial Space				
Subregion	**(1) No Evidence that Industrial Demand Was Ever Strong**	**(2a) Evidence of Traditional Industrial Demand, but Current Demand of Industrial and Other Uses Is Weak**	**(2b) Evidence of Traditional Industrial Demand, Current Weak Industrial Demand Is Weak, but Demand from other Uses Is Strong**	**(3) Currently Strong Industrial Demand**
1			X	X
2			X	X
3		X		X
4		X		
5	X	X		
6	X			
7	X			

This report also analyzed commuting patterns among residents and workers in Prince George's County and the metro area in an effort to determine the relationship between industrial land uses, job creation, and employment within the county. The analysis showed that only 32 percent of the workforce for companies located in Prince George's County is comprised by Prince George's County residents. In addition, less than 45 percent of the Prince George's County resident private-sector workforce actually works inside of the county, while the proportion of own-county, private-sector employment is much higher for residents of Montgomery and Fairfax counties.

The analysis also revealed that manufacturing land uses in the county are more likely to employ Prince George's County residents than other uses, particularly transportation and warehousing, services, and construction. In addition, wages for manufacturing jobs tend to be higher than many other sectors. When taken together, these findings highlight the importance of preserving healthy industrial areas and continuing to attract manufacturing where appropriate.

Since Prince George's County has traditionally had a larger share of its land and employment in industrial activities than the other counties in the metropolitan area, it faces special challenges as the national economy moves from an industrial economy to one more based on services. The next appendix will explore ways county government can make this transition to ensure future economic and social health.

Appendix 8. Assessment of Industrial Areas by Subdivisions in Prince George's County[40]

Introduction and Methodology

County-level and overall subregion level data was analyzed to gain an understanding of industrial land use and employment trends countywide (Appendices 7 and 8). In Appendix 8, the analysis is disaggregated to industrial areas within each of the seven planning subregions. With diversity of the conditions and future prospects for industrial districts across the county, it is important to begin to disaggregate the analysis to understand each district. This is the goal of this Appendix. The economic health of each industrial area within each subregion is discussed separately. A five-tier classification system is developed as a means to evaluate where industrial land should be protected and where transition to other uses might be the better course. The majority of the work presented in this appendix was done by graduate city-planning students taking a "special topics" economic development course at the University of Maryland during the spring of 2008. The consultants are especially grateful to the CoStar Group, Inc., and Jay Spivey, and Scott Gabor, who through a negotiation with Margaret McFarland, Director of the new Masters in Real Estate program and the University, permitted its use of the CoStar data free of charge. The CoStar data usually sells for about $16,000 per year. As such, this generous arrangement not only gave the students a valuable educational experience but provided a generous subsidy to the county. The analysis suggests that, of the 35 industrial areas analyzed, 20 are both healthy and not threatened by encroachment from other land uses. Three other areas show no evidence of demand for industrial use and, therefore, require minimal or routine planning attention in terms of rezoning. This leaves 12 industrial areas where planners face more complex challenges and opportunities for redevelopment.

Methodology

Each industrial area is defined as a contiguous geographical area, zoned industrial, on the county's zoning map. Therefore, the 589 acres that are nonconforming, i.e., used industrially according to the tax records but not on land that is not zoned industrial, are excluded. In the discussion that follows, both industrial space and flex space are included as industrial. The CoStar data shows that, over time, flex space is an increasing proportion of industrial space in the county. Of the 247 industrial and flex space buildings built between 1968 and 1974, only 6 percent were

[40] This assessment was completed on June 19, 2008.

classified as flex buildings. Of the 248 buildings built between 1976 and 1993, 46 percent were flex buildings.

Students and faculty researchers wrestled with the question of how to assess the economic health of each industrial area. An original categorical breakdown of four industrial categories included industrial areas that are (1) thriving, (2) exhibiting signs of weak demand for industrial space, (3) areas facing encroachment by new uses, and (4) industrially zoned land for which there never had been a demand for industrial space. After analyzing each industrial area, it was concluded that five categories were needed, described in detail below.

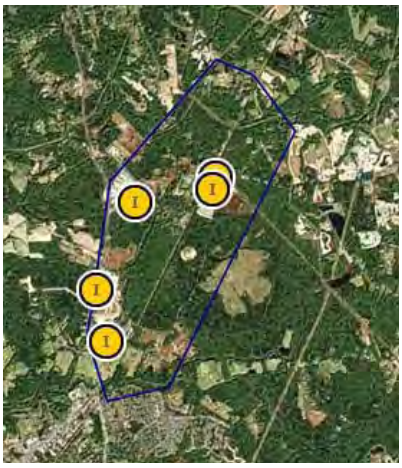
Data

The CoStar Data

CoStar provides in-depth information on commercial and industrial properties through a web-based, interactive portal. Subscribers can query dozens of variables for detailed and flexible geographic areas. Results may be presented in tabular or graphic form and combined with demographic data, aerial images, and maps.

The CoStar data includes information by building for occupant, owner, address, zoning category, building type (i.e., industrial, flex space, office building, etc.), secondary use (i.e., industrial and auto repair or retail and car dealership), rentable area, rent, vacancy rate, year of construction, time vacant space has been on the market, and new proposed construction. Much of the date are available for past years, and so, an evaluation of trends is also possible.

In the study, the boundaries for each industrial area in the county were drawn to the outline of the industrially zoned area, as defined by the county. See Maps A8-1 and A8-2 for examples.



Map A8-1. Aeial View of Industrially Zoned Land, Outlined to Identify All Industrial Buildings Inside the Industrial District. Location: MD 301 and Brandywine Road aerial map|

Note: I = Industrial buildings

Source: CoStar

Map A8-2. Aerial View of Industrially Zoned Land, Outlined to Identify All Industrial Buildings Inside the Industrial District. Location: Woodyard Road

Note: I = Industrial buildings and F = flex space

Source: CoStar

Combining the CoStar data with the land zoning maps provided by the county and reported in Appendix 7, it was possible to discern where the county has zoned land industrial, but there is no market demand, i.e., an absence of industrial and flex space buildings. It was also possible to determine where there is an active demand for industrial land and buildings by the presence of

industrial buildings. Where there is market pressure to shift away from industrial uses to residential, retail, or commercial, when an industrially zoned area has industrial, commercial, and/or retail buildings, rezoning requests and text amendments information were combined and reported in Appendix 7, to provide greater understanding of the demand for industrial land in each location. Each industrial area within each subregion was evaluated and placed into one of five categories.

Categories of Industrial Districts

The final five categories of industrial areas are described here and summarized in Table 1-1. Each industrial district in the count-y is given a type.

Type 1: Weak or Nonexistent Industrial Demand

These are areas where the land is zoned industrial, but there is no evidence of demand for industrial space in this location. No industrial activity means there is no evidence of either industrial buildings, from the CoStar data, nor industrial activity, via the satellite images. The satellite images came from CoStar, www.maps.live.com, MSN, and Google. For example, in Subregion 5 on Steed Road and Piscataway Road, there were no buildings located on the industrially zoned land according to CoStar, but the satellite image showed the presence of an airport. (See Map A8-3.) This industrial district is not included in category 1. An industrial district is included in category 1 only when there are both, no industrial buildings and no visible activity. Districts that fall into this category include those facing rezoning requests for commercial, residential, and office building uses or where the county has adjusted to demand from other uses through text amendments.

Map A8-3. Aerial View of Washington Executive Airport

Source: CoStar data

Type 2: Deindustrializing and Abandoned

The Type 2 category includes industrial areas where there is a history of industrial activity, but according to the CoStar data, overall building vacancy rates are high. In addition, these areas show no evidence of any recent construction, and the rental rates are below the average regional rental rates. High vacancies, combined with long periods on the market, indicate deindustrialization. In these areas, the trend data show an increase in vacancy rates and a drop in rental rates. Furthermore, in this instance, there is no evidence of economic health in the retail or commercial sectors. In other words, there is no recent construction for retail or commercial space, and if these activities are present or proximate, the rental rates are low and the vacancy rates are above average. "Weak" demand was defined as a building vacancy rate that was above the county's 13.4 percent vacancy rate for rentable industrial and flex space.

Type 3: Deindustrializing and Transitioning

Similar to category 2, this category includes industrial areas where there is a history of industrial activity and evidence of weak current demand; high industrial building vacancy rates, no recent industrial construction, and below-average industrial rental rates. The difference from category 2 is that there is evidence here that retail, commercial, and/or residential activity is healthy, i.e., new construction, low office or retail vacancy rates, and/or high or rising rental rates for office and retail space. In Type 3 industrial areas, there is evidence of pressure for displacement of industrially zoned areas from competing uses.

Type 4: Competitive Land Use Succession

Type 4 areas are those districts that indicate evidence of healthy industrial activity. There may be new construction and/or above average rental rates; low vacancy rates, as defined as below the county average of 13 percent or lower; and short periods on the market when rentals become available. In this case, there is evidence that, although the industrial activity is healthy, there is also evidence that retail, commercial, and/or residential activities are healthy as well. Both Type 3 and Type 4 industrial areas are facing competing uses and pressure for transition; the difference is Type 4 industrial activity is strong rather than declining.

Type 5: Healthy Industrial Areas

Type 5 industrial areas are those that are economically healthy. These areas exhibit new construction, low vacancy rates, and above-average rental rates. When an industrial property

comes on the market, it does not stay on the market long. New or proposed construction, in areas with developable land, is characteristic of the areas defined as healthy. In these cases, there is little evidence of encroachment from alternative land uses, differentiating it from Type 4.

Given the complexity of identifying economic health, each of the industrial areas was presented for class discussion, where the appropriate conclusions were debated. The data available is reported in Appendix 1.1. Appendix 1.2 shows graphs on absorption rates, deliveries, vacancy rates, rental rates, and TOM used in the submarkets analysis.

In some cases, a high local vacancy rate occurred because one very large building was obsolete and vacant, thus biasing the results for the industrial area. When this was the case, the outlier building was deleted and the industrial area reevaluated before drawing any conclusions. In other words, care was taken to distinguish between poorly performing buildings and poorly performing industrial areas. In other cases, an individual building might show a 100 percent vacancy rate because it was just coming on-line and did not yet have a tenant. Rather than a sign of economic weakness, it indicates health because of new construction.

These parameters were evaluated in contextual rather than absolute terms. When it is concluded that rents were high, it means that rents were high relative to the county and region. Area trends were also examined. How stable has occupancy been over the past ten years? Are new buildings proposed or under construction? The countywide and regional vacancy rates are shown in Table 2. However, many industrial areas did not fall neatly into one category. For example, where an industrial area had a large number of industrial buildings and low vacancy, i.e., high demand but low rents, does this mean the area is deindustrializing (Type 3) or that it is a strong industrial area with valuable low-cost space that contributes to start-ups and regional economic growth? Many of the assignments are open to debate.

The five types, the number of areas that fell into each category, and the broad policy responses are summarized in Table A8-1. The county and region comparisons are shown in Table A8-2, and the definitions for each category are summarized in Table A8-3

Table A8-1. Categories of Industrial Health

Subregion	1	2	3	4	5	Total
	Weak or No Industrial Demand	Deindustrializing & Abandoned	Deindustrializing & Transitioning	Competitive Land Use Succession	Healthy Industrial Areas	
1				1	3	4
2				2	2	4
3	1		1	1	4	7
4				3	6	9
5			1		2	3
6	1		1		2	4
7	2	1	1			4
Total	4	1	4	7	19	35
Condition	Past/Present weak demand	Past industrial demand; present weak demand for all uses	Industrial demand has weakened; other uses competing	Healthy industrial and strong/growing demand from other uses	Healthy industrial demand	
General Recommendation	Consider rezoning as part of next plan update	Address legacy issues (brownfields); consider rezoning as part of next plan update	Consider case-by-case for text amendments; address legacy issues (brownfields); consider rezoning as part of next plan update	Evaluate on case-by-case basis; allow transitions to office/mixed use where appropriate; focus on transportation (transit) and communications infrastructure	Protect industrial uses; maintain/improve infrastructure; encourage industrial development	

Table A8-2. Industrial and Flex Space for Rent: Comparison of Washington, D.C. Metro Counties			
County	**Prince George's**	**Fairfax**	**Montgomery**
Buildings	870	656	622
RBA, in sq. ft.	36,737,557	31,718,125	22,372,553
Vacancy Rate	13.4%	9.7%	8.5%
Average Warehouse Rent per SF per Year	$ 6.16	$ 9.10	$ 10.72
Average Building Age (Yrs)	29.4	25.6	26.5
Average Time on Market (Months)	32.4	15.4	28.7

Source: CoStar Data, repeated from Table 1-5 in Appendix 7.

Table A8-3. Land Demand Categories and Measures of Industrial Health					
	1	**2**	**3**	**4**	**5**
Industrial Demand	**Never**	**Weak**	**Weak**	**Strong**	**Strong**
Industrial Land Vacancy Rate	High	Low	Low	Low	Low
Industrial Bldg Amount	Low (if any)	High	High	High	High
Industrial Bldg Vacancy Rate	High/Above Average	High/Above Average	High/Above Average	Low/Below Average	Low/Below Average
Industrial Rents	Low/Below Average	Low/Below Average	Low/Below Average	High/Above Average	High/Above Average
New Industrial Construction	None	None	None	Yes	Yes
Industrial Bldg TOM	Long/Above Average	Long/ Above Average	Long/ Above Average	Short/Below Average	Short/Below Average
Other Demand from Office/Commerce Residential	**Maybe**	**Weak**	**Strong**	**Strong**	**None**

Preliminary Conclusions and Next Steps

The subregion analysis builds on the earlier research indicating an excess of industrial-zoned land countywide and seeks to identify specific areas where industrial land should be protected and areas where rezoning and transition to other uses may occur without adverse effects on the county's industrial sector. Of the 35 industrial areas identified, the research concluded that 19 areas are strong. Type 5 areas should probably be preserved and protected for current and future industry. There are five Type 1 and Type 2 areas that should probably be considered for rezoning to other uses in the course of normal planning activities. The one Type 3 should be considered for rezoning after additional study. The seven Type 4 areas that are healthy industrial areas, experiencing significant encroachment from other sectors, present the most challenging

case. Should the county let the market take its course, or should some of these industrial areas be preserved?

In total, this analysis suggests that roughly two-thirds of the county's industrial areas may be adequately served by attentive but routine planning actions, while the remaining one-third require further study and intensive planning attention. More detailed study of two of the type 2, 3, and 4 areas will be conducted over the coming months, by means of interviews and additional qualitative research, with project completion expected in 2009.

Subregion 1

Recommendations

Industrial land in Subregion 1 includes some older established areas as well as significant new development. Economic indicators suggest that, overall, this subregion has healthy industrial development. Given previous investments in infrastructure and an ideal location, it is recommended that the county support improvements and expansions to industrial development in this subregion as necessary.

Background

Subregion 1 is located in the northern portion of the county. It is bounded to the north and west by the county line. To the south, it extends as far as the Beltway. The eastern border includes federally owned lands, such as Patuxent Wildlife Refuge.

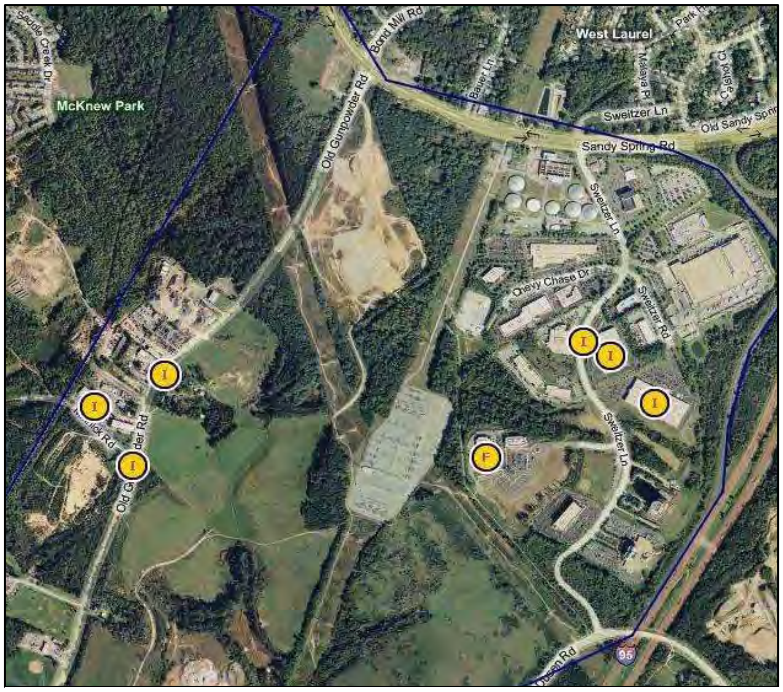
Subregion 1 includes 1,933 acres of industrially zoned land. This is approximately 17 percent of the all such property in the county. The total RBA is slightly under 8.5 million square feet. This is approximately 23 percent of the total RBA throughout the county. Building vacancy rates are below the average for the county, at 9 percent compared to the county's 13.4 percent. However, the overall land vacancy rate, for industrial zoned property, is 41.5 percent. These figures suggest that Subregion 1 is a primary location within the county for future industrial development and has the vacant property remaining to support continued industrial expansion.

Analysis of Industrial Areas

Maryland 95 Corporate Park

This industrial area is located adjacent to I-95. It is bounded to the north by Sandy Spring Road and to the west by Old Gunpowder Road. Properties located on this site include seven industrial facilities, one of which is flex space. Many of the industrial facilities are warehouses, including a property owned by United Parcel Service (UPS). Along Old Gunpowder Road, there are several older businesses, including auto repair shops and a gravel yard. Several new industrial buildings, including the flex facility, are located just west of the interstate on Sweitzer Lane. There appears to be a mining operation on Old Gunpowder Road, just south of Sandy Spring Road. The property just to the south of this property is an electrical switching station; to the east

there is a water treatment facility. There are ten office buildings located on Sweitzer Lane, just south of Sandy Spring Road.



Map A8-4. Aerial View of Industrial and Flex Buildings in the Maryland 95 Corporate Park Area of Planning Subregion

Source: CoStar

In general, this is a healthy industrial area and should be classified as Type 4 because of some evidence of pressure from other uses. The industrial building vacancy rate is extremely low, less than 1 percent. Rents are higher than the county average, $12 per square foot for warehousing, compared to $6.16 countywide, and have increased significantly in the past two years. However, there are more office buildings in this region than industrial buildings, most of which have very high lease rates. Clearly there is competing demand for office use in this area.

Because industries in this area appear to be successful, the county should support additional industrial development. The location, zoning, and existing land uses make this area attractive to a variety of industrial businesses. A location close to the interstate is very desirable for warehouses and service industries. As most of the property is zoned I3, it is also a good location for R&D or Information Technology businesses that are more compatible with the site requirements of a planned industrial/employment park and the existing office space. Also, the presence of mining and large infrastructure, such as the electrical station, may make the area less attractive

for residential development and, therefore, suitable for industries that prefer to locate away from housing developments.

Though this area is a desirable location for industrial businesses, most of the land available is developed. It is recommended that the county continues to support industrial development in this area and considers increasing the local land supply available to industry if necessary.

Laurel and Cherry Lane Business Centers

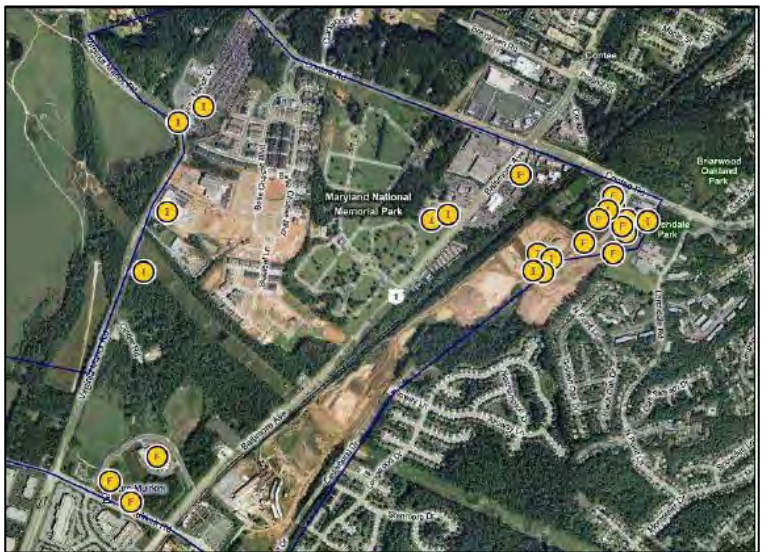
The Laurel and Cherry Lane Business Centers are located at the intersection of Baltimore Avenue and Cherry Lane in Laurel. There are 17 industrial buildings between these two parks, 11 of which are flex properties. The secondary uses within this business park are quite varied and include R&D, warehouse, showroom, self-storage, light manufacturing, and a truck terminal. In addition to the industrial uses, there are ten retail buildings and two office buildings. Examples of retail businesses include a restaurant, auto sales and repair, mattress sales, and a liquor store. Most of these properties are immediately adjacent to Baltimore Avenue. The industrial sites are located behind them.

This area should be considered a healthy, industrial center and be classified as Type 5. The average rental rates have been rising steadily over the past ten years. In 2008 the average rental rate was approximately $9 per square foot. This is above the average for the county of $6.16 per square foot. The buildings in these industrial parks are, on average, 24 years old, slightly newer than the county average of 29.4 years. The vacancy rate is estimated to be 12 percent. This is slightly lower than the county average of 13.4 percent. However, in the past ten years, the vacancy rates have fluctuated significantly in this area due to the large concentration of flex space. Historically, the vacancy rate in this area has been low, typically around 5 percent. The turnover in these industrial parks appears to be fairly rapid. A typical property will remain on the market for approximately just seven–nine months.

This region is entirely built out. There is no vacant land free for development. Though there is significant demand for retail space, it is limited to those sites located on Baltimore Avenue. Industrial buildings in this area may be older, but there is still demand for the space. It is recommended that this area be designated a healthy industrial area, Type 5. The county should protect industrial uses and improve infrastructure as necessary.

Brickyard and Konterra Region

This region is largely undeveloped. It is bounded by Contee Road to the north and Muirkirk Road to the south. The western edge is Virginia Manor Road. The eastern boundary lies just to the east of Baltimore Avenue. There are 12 industrial buildings, 6 of which are flex buildings. Secondary uses include warehouses, self-storage, and R&D space. An additional 12 industrial buildings have been proposed or are currently under construction. There are five retail and office buildings located along Baltimore Avenue. The largest of these buildings is Marlo Furniture. Maryland National Memorial Park is located in the center of this region. Immediately to the west of the park is a new residential development.



Map A8-5. Aerial View of Industrial and Flex Buildings in Brickyard and Konterra Area of Planning Subregion 1

Source: CoStar

Though this area is currently experiencing a lot of growth and development, there are a few older buildings along Virginia Manor Road and Baltimore Avenue. The average age of the industrial space is 26 years, which is less than the county average of 29.4 years. These businesses include a warehouse and an auto repair shop. There are no vacancies. Many of the remaining buildings have been completed since 2003. Most of these buildings are flex space, and one of these is used for R&D purposes.

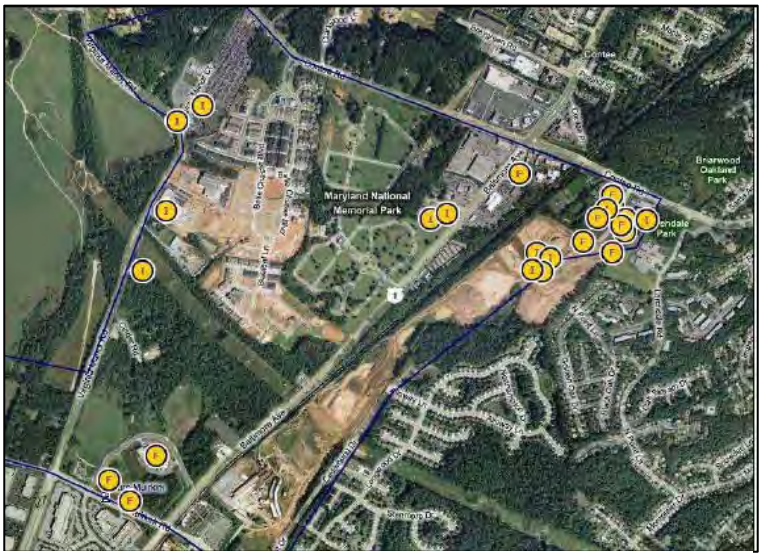
There are many new and proposed buildings in the Brickyard and Konterra developments. In the first quarter of 2008, 150,000 square feet of industrial space was delivered. Another

615,000 square feet are in the pipeline. About one half of the buildings will be flex space. The predominant secondary use is warehouse space.

In general, this is a healthy industrial area and should be classified as Category 5. Rental rates are high, approximately $15 per square foot. Most properties stay on the market less than nine months. The vacancy rate is very high, approximately 32 percent. However, this is due to the fact that 150,000 square feet were delivered in the first three months of this year. In previous years, the vacancy rates have averaged closer to 7 percent. If the market is any indication, there is certainly a lot of anticipation that this area will absorb much more industrial development in the future.

It is recommended that this region be considered a key center of future industrial growth. There is already significant investment in industry throughout the corridor defined by Baltimore Avenue and I-95. It is an ideal location for business because of its proximity to the highway and the railway. Also, it is an attractive location for start-up companies affiliated with nearby universities, including University of Maryland, College Park; University of Maryland, Baltimore Campus; Johns Hopkins; and Loyola. Discussions with a local developer have indicated that this area has many attributes that are attractive to industrial businesses, particularly those companies that specialize in science and technology research. Such attributes include a location near commercial businesses and housing at a variety of price points.

There are still some large undeveloped properties in this region. However, the rate of growth in this region is also very rapid, and many undeveloped sites already have proposed development plans. As shown in the zoning map (right), most of the surrounding region is zoned for residential or mixed/commercial development. The color key for the zoning map is: red = commercial; purple = mixed use; yellow = residential; tan and green = industrial; and light green = open space. Where land is zoned industrial, the green signifies vacant land, and the tan are developed. It may require some support from the county to ensure suitable sites are available should there be additional demand for industrial development.

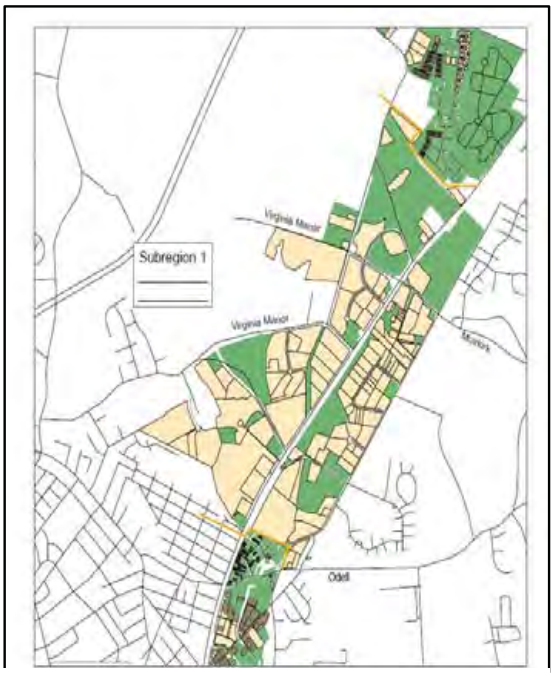


Map A8-6. Aerial View of Zoning in the Brickyard and Konterra Area of Planning Subregion 1

Source: M-NCPPC

Beltsville and Ammendale

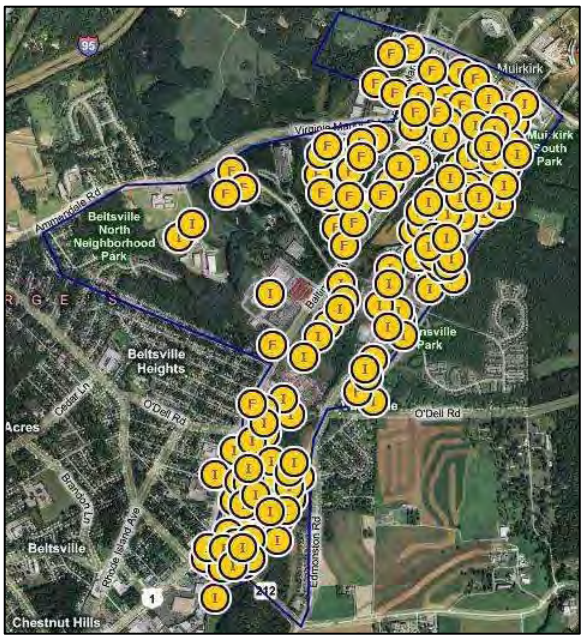
The Beltsville and Ammendale area, in planning Subregion 1, includes industrial land along US 1, to the south of Muirkirk, and north of MD 212 in Beltsville. The industrial area consists of several major industrial parks, such as Beltsville Industrial Park (on the east side of US 1), Ammendale Technology Park and Ammendale Commerce Center (on the west side of US 1), and part of Konterra Business Campus, located south of Muirkirk. This area is characterized with a high concentration of industrial/flex buildings with close access to I-495/I-95 (Exit 25, University of Maryland). Map A8-7 shows the distribution of developed sites in the area. County records on rezoning requests and text amendments suggest that this area is not experiencing pressure from any other uses.



Map A8-7. Vacant and Developed Industrial Property in Planning Subregion 1

Note: Green is vacant and tan is developed land.

Source: M-NCPPC



Map A8-8. Aerial View of Industrial and Flex Buildings in the Beltsville and Ammendale Area of Planning Subregion

Source: CoStar

Map A8-8 shows locations of industrial and flex buildings in the area. The area has a total of 155 industrial and flex buildings–specifically, 45 flex buildings, most of which are located in Ammendale Technology Park, Ammendale Commerce Center, and Konterra Business Campus. Commercial activity in the area is relatively insignificant with a presence of eight office buildings and five retail buildings. The total industrial/flex rentable square footage offered by the entire area is 6,104,596. The current industrial/flex building vacancy rate is nine percent, lower than the county average, while rental rates for warehousing in the area range from $5.17 to $5.75 per square foot per year, which is also lower than that of the county ($6). Current market clearance for industrial buildings in the area is 22.4 months. The predominating industrial activity is warehousing, light manufacturing, and some R&D activities.

Figure A8-1 demonstrates age distribution for industrial buildings in this area of Subregion 1. Most buildings are from 20 to 40 years old, and the average building age is 27 months, compared to 29.4 years for the county. Most of the newer buildings are concentrated in the Am-

mendale Technology Park and Konterra Business Campus, both of which are along the west side of US 1.

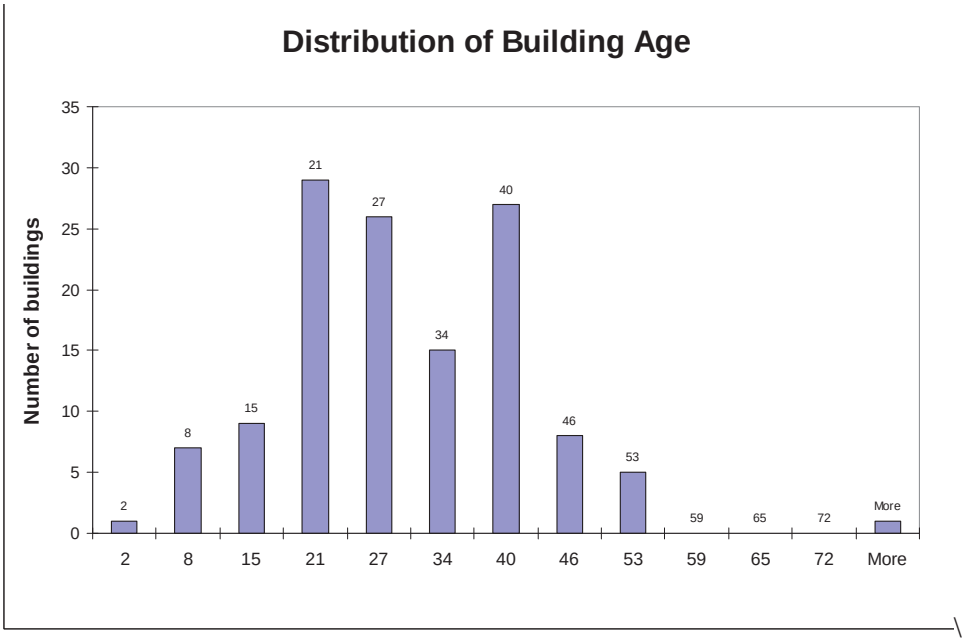


Figure A8-1. Building Age Distribution in Planning Subregion 1

Source: M-NCPPC

A closer look at the building vacancy rates across major industrial parks within this industrial area reveals that Beltsville Industrial Park (Map A8-9) with 34 buildings emerges as a very healthy park with a very stable low vacancy rate (currently under 4 percent). It also has less than half average time of space availability (12.2 months) for the whole area. Buildings in the park are older and most of them serve as warehouses. The average rental rate is only $5.50 per square foot per year.

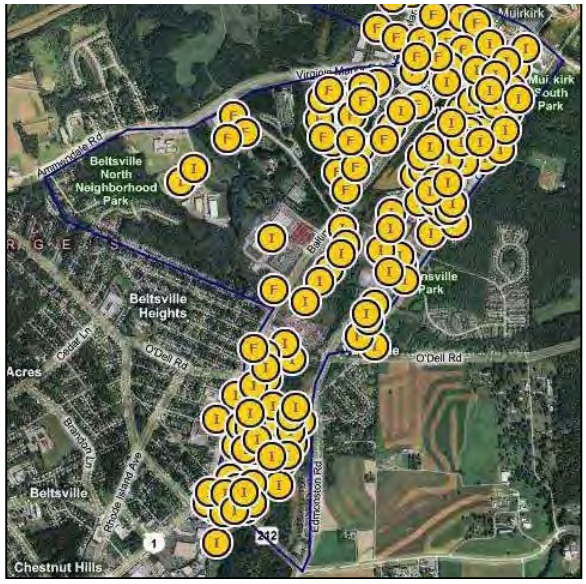
Map A8-9. Aerial View of Beltsville Industrial Park

Source: CoStar

In contrast, Ammendale Technology Park has only 12 buildings but with higher average vacancy rate of 19 percent. High building vacancy rates are not specific to any particular buildings but appear to be for the entire park. The higher rental range ($9.16-$12.50) is perhaps one of the major factors that causes high vacancy rates. However, buildings in this technology park are fairly new compared to others in the area; most of them were built in the 1980s. This park is surrounded by undeveloped industrially zoned land, which allows for possible expansion in the future.

Map A8-10. Aerial View of Ammendale Technology Park Source: CoStar

Source: CoStar



Map A8-11. Aerial View of Konterra Business Campus

Source: CoStar

Konterra Business Campus section south of Muirkirk also has more recently built structures that accommodate flex activities, including light manufacturing. Currently, this section of the industrial park has low vacancy rate (6 percent) and high range of rents ($9.95–$13.75 per square foot per year.) With its convenient access to Interstate I-95 and strong rents, this area continues to be in strong demand, and there is no evidence that the county should consider it for other types of use. From property data, the Konterra area of planning Subregion 1 has two distinct industrial sites. One site, which is east of US 1, is more suitable to traditional industrial usage, such as warehousing. This site has been completely built-out but will possibly continue to support the county's competitive advantage. Meanwhile, the other site located west of US 1 offers flex buildings that can house high-technology-related manufacturing activities, if the county intends to invest in attracting this type of business. There is also vacant industrial land for expansion of this site in the future. Another access to I-95, to avoid traffic backed up on US 1 is desirable if such expansion takes place in the area. This is a healthy industrial area, and therefore, it is ranked as a Type 5.

Subregion 2

Recommendations

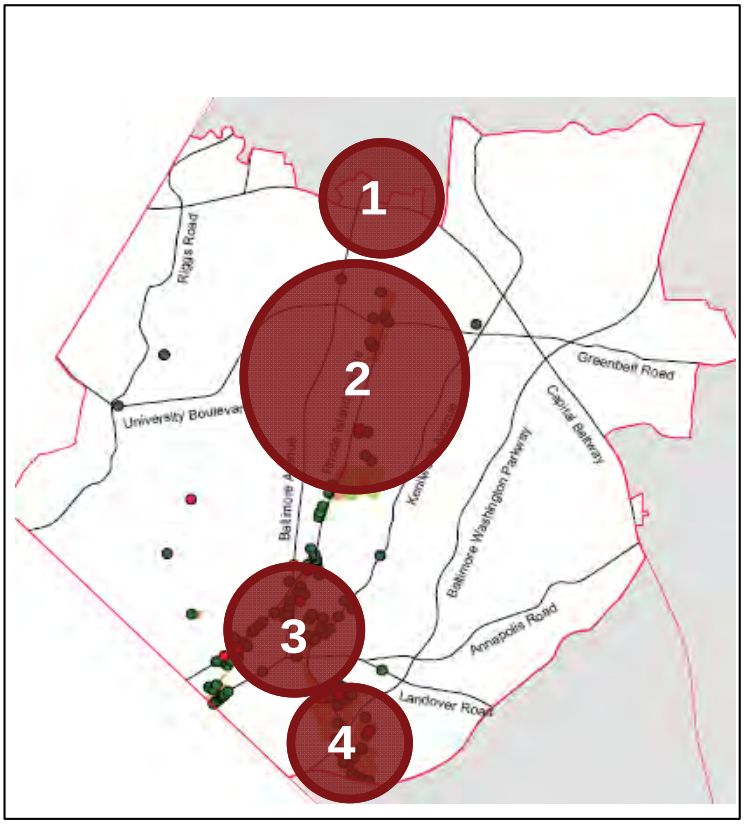
Subregion 2 is completely builtout in terms of industrial land. Industrial buildings enjoy an extremely low vacancy rate of 3.63 percent according to CoStar. Industrial land within the subregion is generally concentrated in four areas. Two of those areas, Beltway North and Kenilworth-Cheverly, are healthy rail-served industrial parks with a combined total of 6.5 million square feet of warehouse and manufacturing space. These areas should be protected from encroachment by other uses. Planning and economic development activities related to these areas should focus on maintaining and improving infrastructure and assisting firms, as necessary, in ensuring that the aging building stock continues to meet industrial needs.

The other two areas—University-East and Hyattsville—exhibit more of a scattered-site organization. Industrial land use is healthy with signs of competition from other uses with upward pressure on rents. These pressures, combined with the aging building stock, suggest that these areas are ripe for land use succession to more intensive uses, including office and laboratory R&D. Such conversions would benefit the county through the creation of jobs and higher tax base and, therefore, should be reviewed and permitted on a case-by-case basis. University-East and Hyattsville may likely see increased pressure for residential conversions, and high-density conversions may make sense in some locations, particularly in mixed-use, transit-served areas. The University-East and Hyattsville areas should be studied in greater detail.

Background

Subregion 2 is located along the US 1 corridor, abutting the District of Columbia to the south and Montgomery County to the west. Its 682 acres of industrial land comprise 5.9 percent of the county's total industrial-zoned land, all of which are builtout. The subregion has 7,118,384 million square feet of industrial, including flex space, with an overall vacancy rate of 3.6 percent. Industrial rents are generally comparable with the county, although some areas within Subregion 2 are experiencing upward pressure due to competition from other uses. Industrial and flex buildings within the Subregion are 41 years old on average, ten years older than the countywide average. Buildings are generally smaller as well, averaging 24,717 square feet for the subregion compared to 42,653 square feet countywide. These age and size limitations have not adversely affected rents or occupancy rates; however, functional obsolescence, along with aging infrastruc-

ture, are inevitable concerns worthy of planning attention. The focus of that attention will vary depending on the industrial area within the subregion.

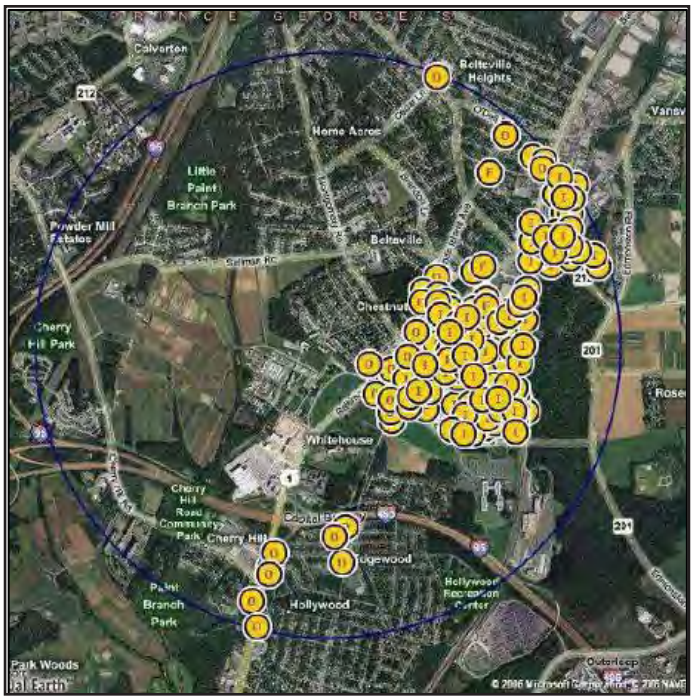


Map A8-12. Subregion 2 Showing Four Concentration Areas of Industrial Land

Analysis

Beltway-North

This area is comprised of healthy industrial parks with some overlap into Subregion 1. The parks contain 113 buildings, with a total of 3.5 million square feet (some of which is counted under the Subregion 1 totals). Vacancy stands at 7 percent with TOM at 13 months, indicating healthy demand. Rents are stable and comparable with county averages. Median building age is about 34 years. The parks are rail served and have close access to I-95.



Map A8-13. Aerial View of Industrial and Flex Buildings in the Beltway-North Area of Subregion 2

Source: CoStar

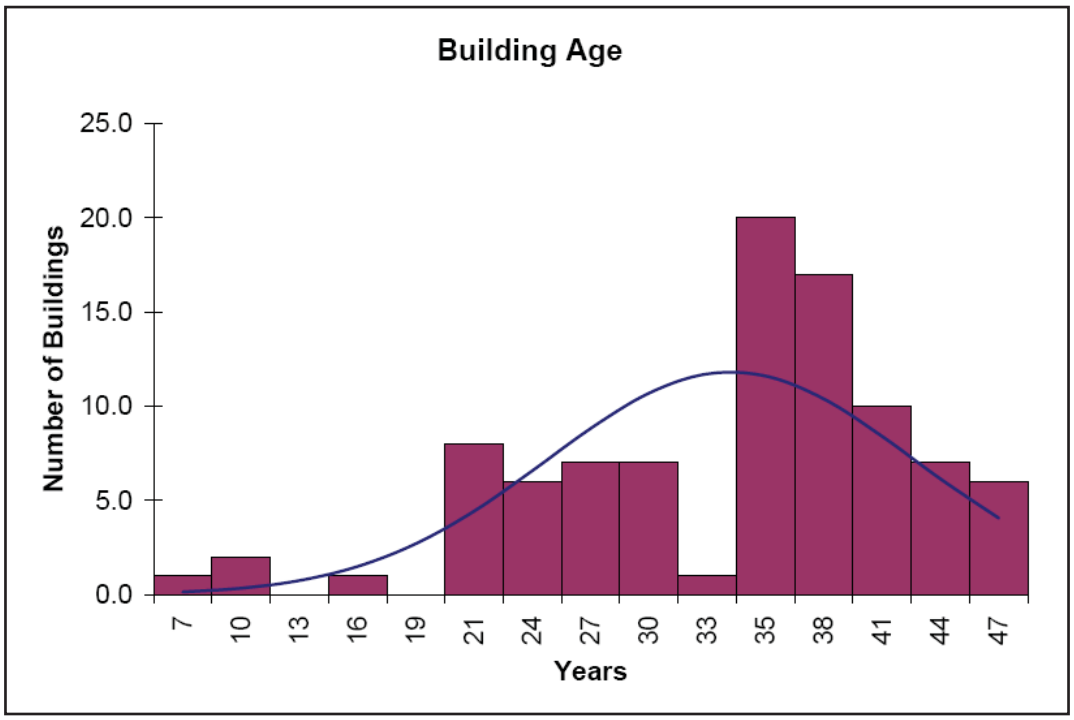
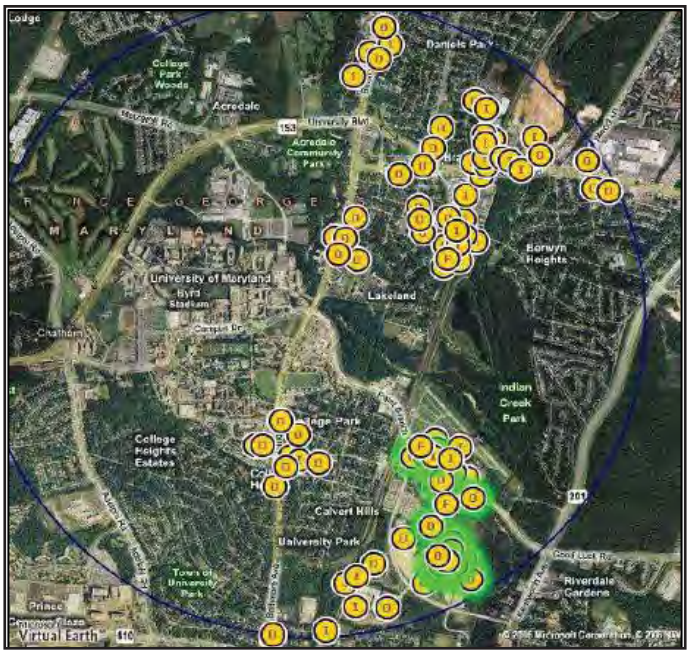


Figure A8-2. Age of Industrial Buildings in Beltway North

Source: CoStar



Map A8-14. Aerial View of Industrial and flex buildings in the University-East area of Subregion 2

Source: CoStar

This area includes healthy, but aging, industrial with relatively high rents, at $11.60 for warehousing, and an emerging office sector as shown in the table. The indicators suggest that industrial land in this area may be ready to transition to more intensive office and R&D uses. Given the scattered nature of industrial facilities in the area, additional study is indicated, and land use succession will need to be considered in a highly localized way.

Table A8-4. Comparison of Industrial/flex and Office Indicators for the University–East Area of Subregion 2

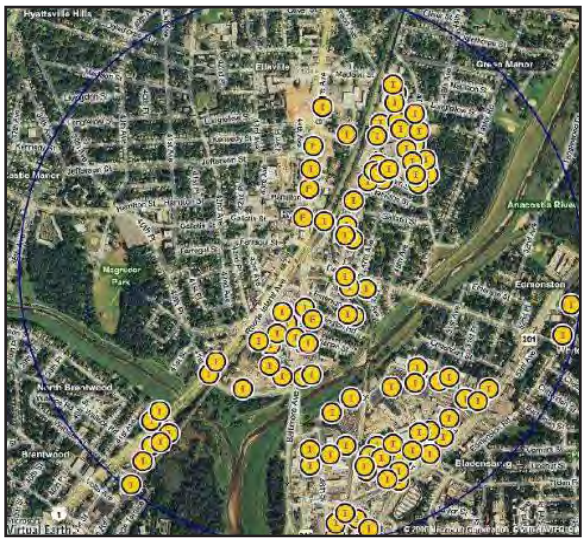
Industrial/Flex	Office
36 Buildings	46 Buildings
1.3 Million Square Feet	1.6 Million Square Feet
Average Building Age 40 Yrs	Average Building Age 27.5 Yrs
0 Buildings Proposed or Under Construction	14 Buildings Proposed or Under Construction
9 Months TOM	63 Months TOM

Source: CoStar

Hyattsville

This area also contains healthy industrial land uses with 1.8 million square feet of industrial space in 99 buildings. The area is both rail served and Metro served. Industrial and flex

vacancy stands at just 2 percent, with only 4.5 months on the market. Some of the buildings are concentrated in an industrial park toward the southeast; however, many are scattered throughout the town. Median building age is about 41 years. While rents do not exhibit the same upward pressure, as in the University-East area, functional obsolescence is inevitable and land use succession is likely given the location and amenities. This area should be studied in greater detail to develop highly localized strategies.



Map A8-15. Aerial View of Industrial and Flex Buildings in the Hyattsville Area of Subregion 2

Source: CoStar

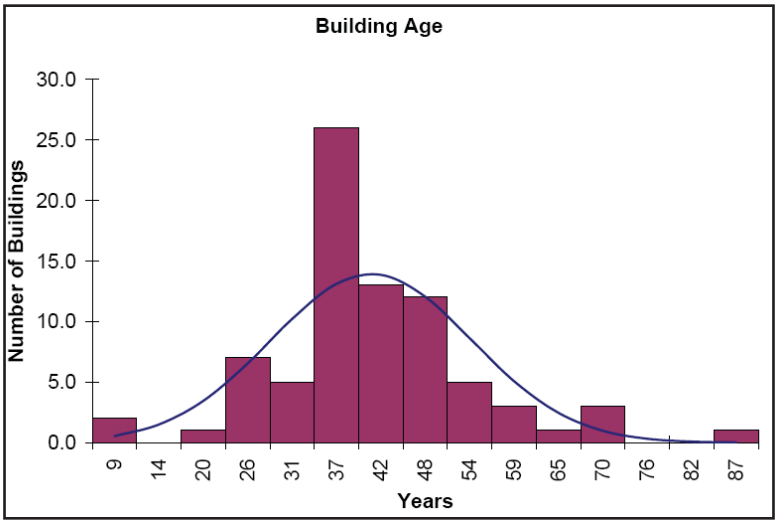
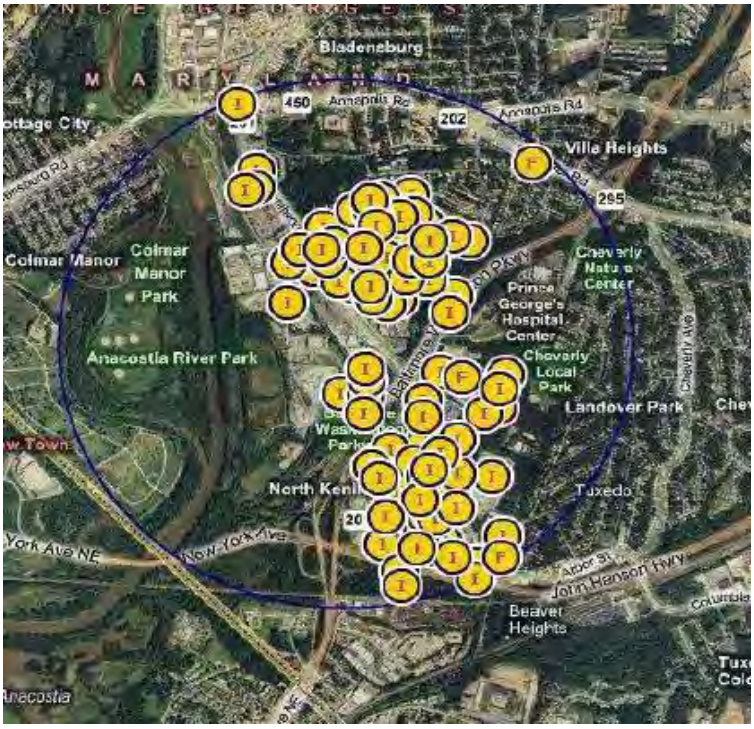


Figure A8-3. Age Distribution of Industrial Buildings in the Hyattsville Area of Subregion 2

Source: CoStar

Kenilworth-Cheverly



Map A8-16. Aerial View of Industrial and Flex Buildings in the Kenilworth-Cheverly Area of Subregion 2

Source: CoStar

This area lies at the southern edge of Subregion 2 and is comprised of two industrial parks, with three million square feet of industrial space in 107 buildings. Vacancy stands at 7 percent with average TOM at 15.8 months. The parks are rail served with good highway access on I295 into the District of Columbia and out to the Beltway. Average building age is about 41 years. The area is healthy but aging, with similar concerns as the Beltway-North area. This area is also ranked as a Type 5 industrial area.

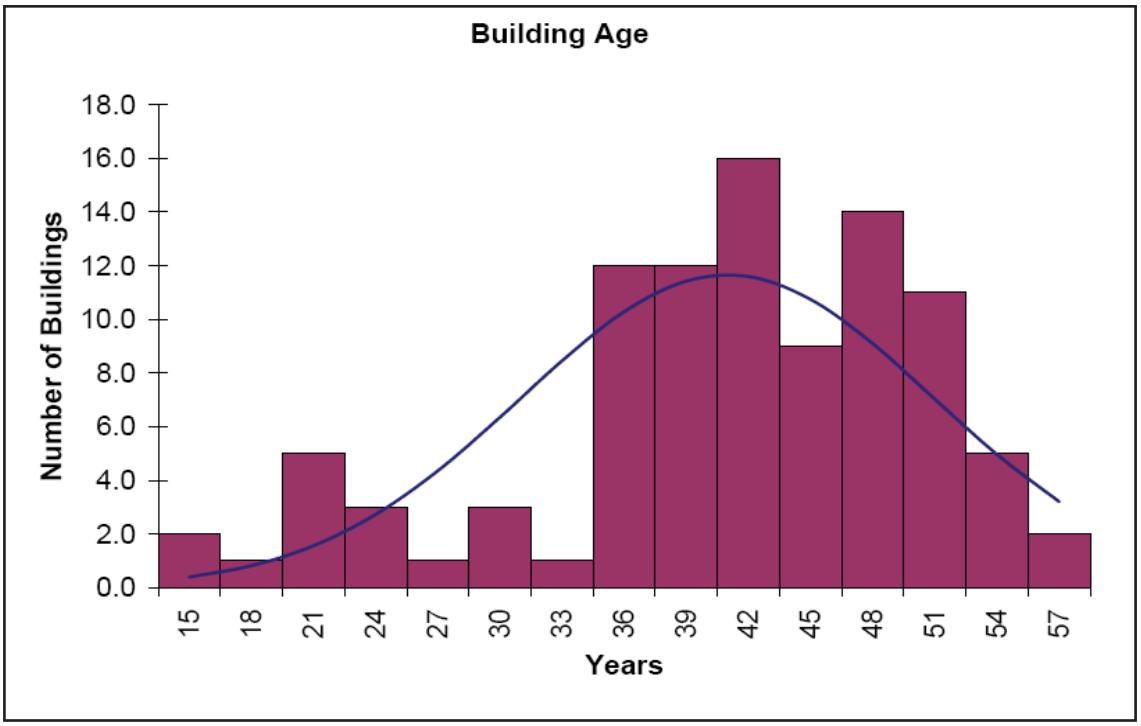


Figure A8-4. Age Distribution of Industrial Buildings in the Kenilworth-Cheverly Area of Subregion 2

Source: CoStar

Subregion 3

Recommendations

Industrial-zoned land in Prince George's County planning Subregion 3 is experiencing both growth in new markets, as well as pressure for land transition in other markets. The analysis reports that the majority of industrial land is appropriately zoned. However, the Hampton Park site should be rezoned into a mixed used residential category.

Background

Planning Subregion 3 is located in the eastern portion of the county. The area is delineated by Patuxent River on the east; the Capital Beltway (I-495) on the west; the connection of Leeland, Oak Grove, and White House Roads in the south; and a series of lakes (Mabott Pond, Cash Lake, and Redington Lake) to the north. Major municipalities in the subregion include Bowie, Largo, and Glenn Dale.

Subregion 3 consists of 2,133 acres, or 18.5 percent of the county's industrial-zoned land. Of this land, 57 percent has been improved in some way, while 911 acres are currently vacant. There is currently over 8.5 million square feet or 16.7 percent of the county's rentable industrial space in the subregion.

The subregion contains several industrial clusters briefly described below:

- Goddard Park. Adjacent to the NASA Goddard Space Flight Center (GSFC), the area is bounded by Good Luck Road, Northern Avenue, and Greenbelt Road.
- Bowie Park. A relatively new development, the area encompasses the southwest corner of Annapolis Road and Laurel Bowie Road.
- Washington Business Park. One of the subregion's larger industrial/business parks, this area emanates several blocks from the intersection of Forbes Boulevard and Martin Luther King, Jr. Highway.
- Maryland Science and Technology Center. This growing development is located in the northeast corner of North Crain Highway (MD 301) and John Hanson Highway (MD 50).

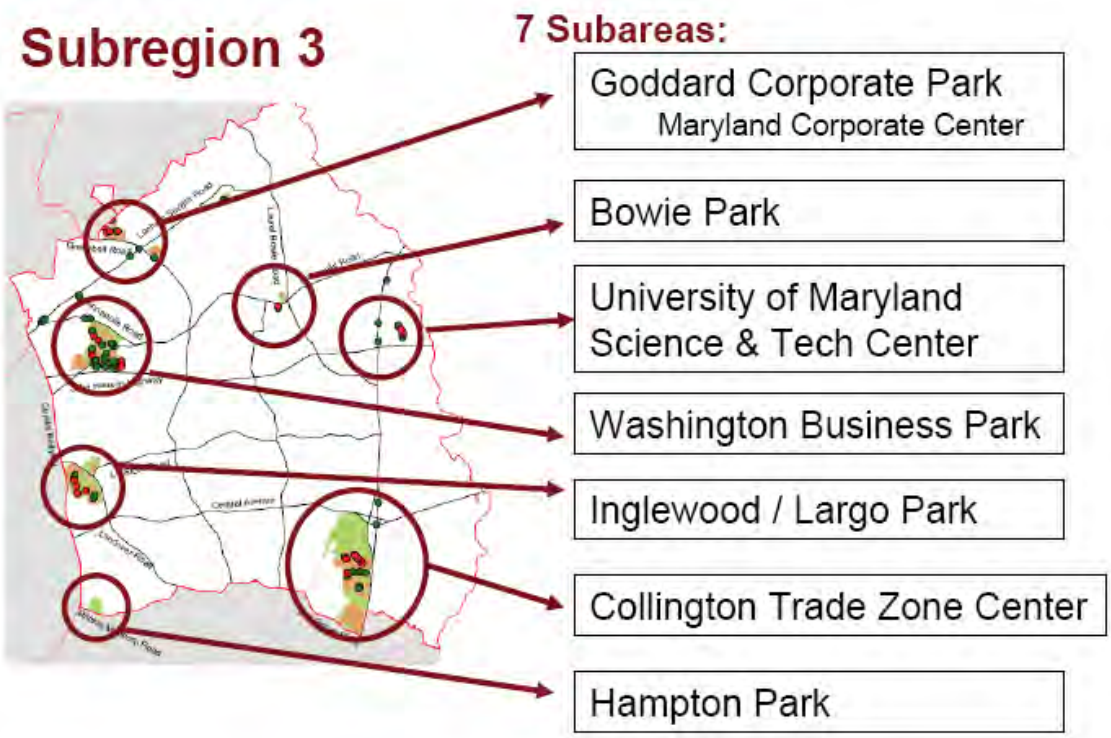


Figure A8-5. Locations of Industrial Sites in Subregion 3

- Collington Trade Zone. The largest of the subregion's industrial-zoned land, 16 acres are designated as a Foreign Trade Zone. The area is located on the west side of South Crain Highway between Central Avenue and Leeland Road.
- Largo Town Center. The Largo Town Center Metro Station lies in the southern portion of this area. It is delineated by the Capital Beltway, Landover Road and Central Avenue.
- North Hampton Park. This undeveloped site is located on the northeast corner of the Capital Beltway and Ritchie Marlboro Road.

Analysis

Goddard Park

Goddard Park consists of 11 flex/industrial buildings that make up 748,000 square feet of rentable building area (RBA) and 10 office properties consisting of 712,000 square feet of RBA. Major tenants include Lockheed Martin and Northrop Grumman. The area is experiencing

declining industrial demand, with an average vacancy rate of 44 percent over the past five years. Four of the 11 properties (258,000 square feet) have been completely vacant for over five years. These buildings include three flex use properties and one industrial warehouse. Over the past five years, annual industrial rental rates have experienced a nine percent annual decline.

Despite the poor industrial performance measures, the area has exhibited signs of potential growth. A new industrial building (142,000 square feet RBA) was built in 2005 and remains fully leased. In addition, a new development has been proposed that will add 50,000 square feet of new office space and 100,000 square feet of new industrial space. Given the proximity to the NASA GSFC and its list of related tenants, the area remains an important industrial location. The area is identified as a Category 4.

The area does not provide exceptionally easy access to major transportation links. As a result, the area does not appear to be a logical distribution center. The transition of existing empty warehouse properties into potential R&D incubator space is recommended.

Bowie Park

Bowie Park contains three industrial buildings with 95,000 square feet of RBA. Currently two of the three industrial buildings are public storage warehouses. Two new industrial buildings have been built since 2005, resulting in a 72 percent increase in RBA. In addition, three new industrial buildings (55,000 additional square feet) have been proposed. Existing industrial buildings are both experiencing seven percent average vacancy rate. Although the area does not appear to be a major employment center, demand for public storage and light industrial use appears strong. The area is identified as a Category 5. It is recommended that the existing zoning of the area should be maintained.

Washington Business Park

The Washington Business Park consists of 48 industrial/flex buildings, with 3.1 million square feet of RBA. The average age of the industrial buildings is 22 years, significantly less than the county average of 31 years.

Demand for industrial uses has been steadily growing. 8 new industrial buildings were added since 1999 resulting in an increase in RBA of 25 percent. Vacancy rates have stayed relatively low with a high of 16 percent in 1999 to the current low of 6.3 percent. Industrial rents have increase by 35 percent since 1999. The area is identified as a Type 5.

Although no new industrial buildings are planned, a 122,000 square feet (RBA) office building has been proposed. No change to current zoning policy is recommended.

Maryland Science and Technology Park

The Maryland Science and Technology Park is planned to eventually become a 465-acre R&D park. Currently, the area contains eight industrial buildings with 242,000 square feet of RBA and five office buildings with 287,000 square feet of RBA. The development plan calls for 345 acres of developed land with an eventual 6.4 million square feet of total RBA.

The area is in the beginning stages of growth. Six new industrial buildings have been added since 2000, resulting in a 297 percent increase in RBA. Four new office buildings have been added since 2005, resulting in an 845 percent increase in RBA. Currently, a 144,000 square feet (RBA) office building is being constructed. Due to the high levels of construction, vacancy rates for both industrial and office buildings have fluctuated widely. However, most industrial buildings were fully leased within two years of construction completion. It is difficult to project vacancy trends for office properties due to the limited time frame (most buildings are less than two years old). Vacancy rates have declined since 2006 from 68 percent to the current rate of 19 percent. The area is identified as Category 5. Given the planned development and rate of growth, no changes to current zoning policy are recommended.

Collington Trade Zone

The Collington Trade Zone Area currently contains 37 industrial buildings with 3.4 million square feet of RBA. It is a designated Foreign Trade Zone (FTZ). The area is a major distribution hub for companies such as Safeway and Nordstrom.

The area is experiencing steady growth. Seven new industrial buildings have been added since 2000, increasing RBA by 16 percent. Between 1999 through 2004, vacancy rates have stayed below 5 percent. Recently, vacancy rates have risen but continue to remain under 12 percent. At this time, no new buildings have been proposed. However, annual rents have increased 33 percent since 2000, indicating a relatively healthy industrial area. The area is identified as Category 5.

The area is only partially developed. A significant area north of current improved property remains industrially zoned. Although no new development has been proposed, the FTZ designation and existing steady growth indicate that the unimproved area may eventually be needed

for further industrial expansion. It recommended that the existing zoning policy for the entire industrially zoned area should be maintained.

Largo Town Center

The Largo Town Center Industrial area includes 12 flex/industrial buildings, comprising 916,000 square feet of RBA and 15 office properties, with 1.3 million square feet of RBA. The area also includes nine retail properties (789,000 square feet RBA) and a large housing development. The Largo Town Center Metro Station is located in the southern portion of the area.

The area is experiencing increasingly stagnant industrial demand. Between 1998 and 2003, industrial vacancy rates remained below 10 percent. From 2004 to 2007, vacancy rates have risen to an annual average rate of 14.4 percent, above the county average of 13.4 percent. In addition, there has been only one new industrial building in the past 10 years and no industrial buildings in the pipeline.

In contrast, office demand in the area has grown significantly. Three new buildings since 2000 have increased office RBA 37 percent. The area has experienced a 3.6 percent annual growth in rental rates over the past nine years and vacancy rates lower than 12 percent in the past 10 years. Current vacancy rates of 37 percent are attributed to recently completed office properties. Absent these properties, the current vacancy rate would be 13 percent. There are 12 new office buildings proposed for the area and one office property currently under construction. The area is identified as a Category 3. The area is potentially experiencing a major transition from industrial uses to more office type uses. As the explosive office growth becomes constrained by residential housing on the southern end of the area, increased pressure to convert existing industrial buildings in the north may price out existing industrial tenants. As this site offers exceptional access to transportation hubs, it is recommended that there should be flexibility in allowing uses to shift from industry to offices.

North Hampton Park

North Hampton Park currently has no development. The area is relatively close to the Steeplechase industrial development on the east side of the Capital Beltway. A rezoning request has been submitted requesting a change in zoning from industrial to residential. There is no current demand for industrial or office use in this area. No new buildings have been proposed for this site. However, across the interstate, five new buildings (Steeplechase) totaling 611,000

square feet of RBA have been proposed for development. Although this may indicate future demand, a large industrial-zoned area to the south of the proposed Steeplechase development also remains available. Any additional growth in the Steeplechase development will most likely occur in this southern area and not in the North Hampton Park area. In addition, North Hampton Park is bordered to the north, east, and south by residential development. Therefore, the area will not be able to easily expand, limiting the desirability of the property. The area is identified as a Category 1.

One of the strengths of the property is its proximity to the new Steeplechase development. The area could be used to serve the employees of the Steeplechase as a retail and service center. Given the limited growth potentials of the area and availability of prime industrial space southwest of this location, rezoning for mixed-use residential as the demand rises is recommended.

Subregion 4

Recommendations

Subregion 4 occupies the west–central part of the county. Overall, industrial areas within this subregion are healthy. Given the subregion's proximity to the Washington, D.C. area and the fact that many areas are along major highways and/or roadways—and nine sites are near Metro stations—this subregion has strong locational advantages for both industry and office space. (For a map of the metro stations in this subregion, see Map A8-6 in the appendix.) The exception to a strong industrial base is New Carrollton, which, although zoned industrial, has only office buildings. The county should consider rezoning the New Carrollton area out of industrial and encourage a high quality office and transit-oriented development around the New Carrollton Metro Station. All other industrial sections in the subregion are healthy and should be maintained or protected at least in the short run. The caveat is that locations surrounding metro stations deserve further study and careful planning. Kenilworth and Capitol Heights are both experiencing some pressure from alternative land uses and in the long run bear further study.

Background

The boundaries are the following: north, MD 50/New York Avenue/John Hanson Highway; East: Capital Beltway/I-95/495; south, Suitland Parkway; west, Southern Avenue (D.C.) for the southern section, Central Avenue (D.C.) for the northern section. In addition, the subregion contains a small section north of MD 50, in the northeast corner, occupied by the New Carrollton Metro Station.

Subregion 4 contains 3,126 industrially zoned acres,
40 percent of which are vacant. The 3,126 acres make up 27.1 percent of the total industrially zoned land in the county. The county average for vacant industrial land is 45.5 percent. The subregion has just under 19.1 million square feet of RBA. Of this, 2.46 million square feet (12.9 percent) are vacant as of spring 2008. This is below the countywide vacancy rate of 13.4 percent.

Subregion 4 contains nine primary industrial areas. Although there may be other "pockets" of industrial land and/or activity, the nine primary areas will be detailed herein. From north to south, they are:

- New Carrollton Metro

- Ardmore Park
- Cabin Branch
- Kenilworth
- Landover Center
- Hampton Park
- Capitol Heights
- Forestville
- Penn Belt

Each of the nine industrial areas within this subregion contains more industrial parks and sections than the ones for which the area is named; those will be identified in the analysis sections. The titles above denote the "main" industrial sections of each area. The areas are outlined on the subregion map in Figure A8-6, which also denotes the industrially zoned land.

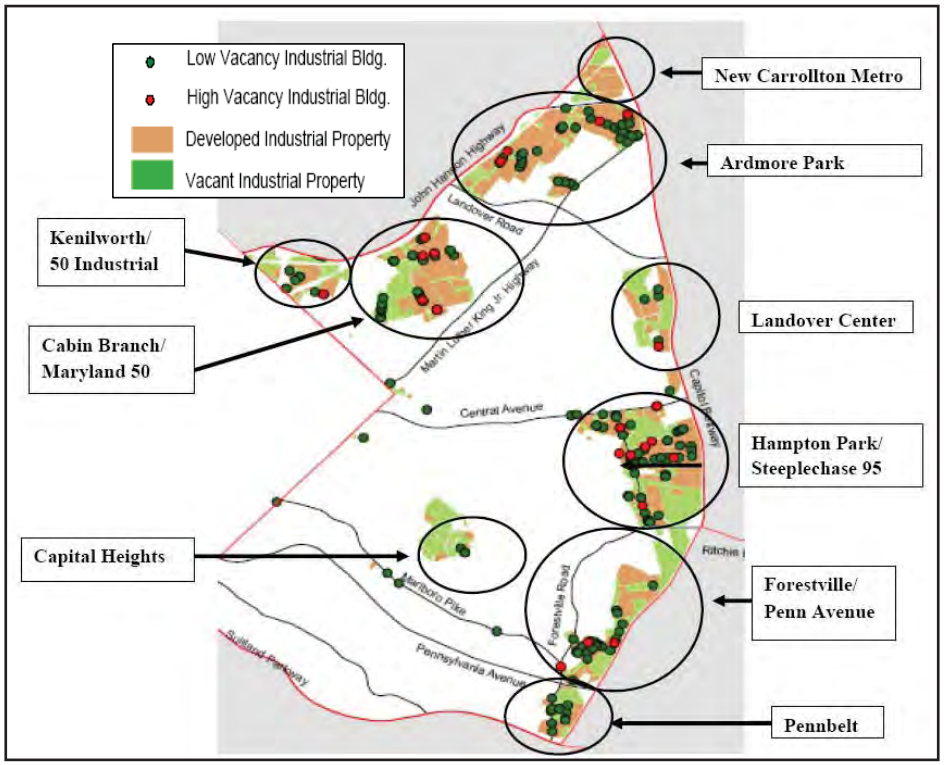


Figure A8-6. Subregion 4 Outline

Source: M-NCPPC

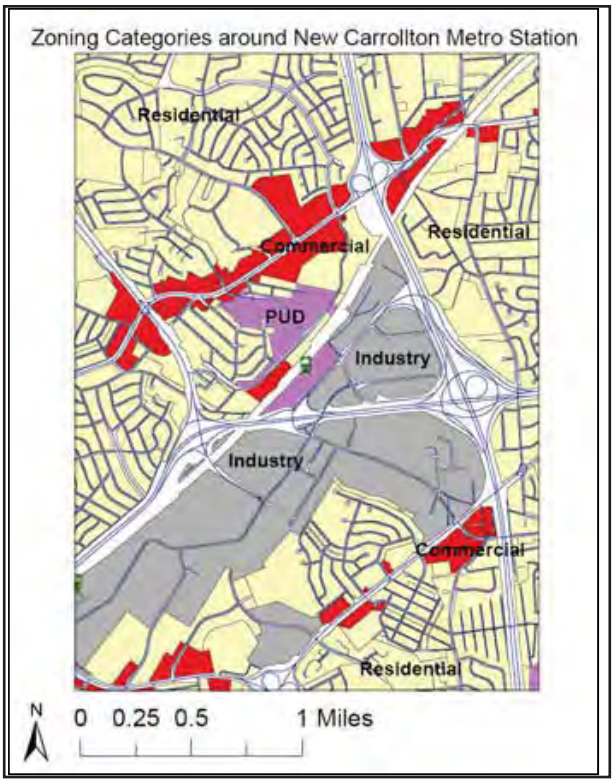
Analysis

New Carrollton Metro

This area contains the New Carrollton Metro Station along with the surrounding office and retail. It contains no industrial buildings. New Carrollton is categorized as a Type 3; it has already deindustrialized and transformed into a commercial/office district. This area is experiencing competing demand from other uses, particularly office and retail, and the land is too valuable for industrial activity to survive.

The office/retail activity, which is contained in the Metro East Business Community, is very healthy. The vacancy rate is 9 percent for the 19 buildings. Many of the buildings are under 30 years old, and are one or two stories high. The area has another 674,000 square feet in proposed RBA, with these structures being mostly traditional office high-rises. Average TOM is 16.1 months.

Complete statistics for New Carrollton are reported in Table A5-1. Histograms detailing the age of the buildings for both industrial/flex and office/retail are contained in Subregion 4 of this appendix. If a graph is not present for a metric, this indicates the data was not available at the time of analysis.



Map A8-17. Zoning of New Carrollton Metro Station Area

Color Key: Red = Commercial; Purple = Mixed Use; Yellow = Residential; Grey = Industrial; Light Green = Open Space.

Source: M-NCPPC

Ardmore Park

This area is bordered by MD 50 on the north and west, Martin Luther King, Jr. Highway on the east, and Landover Road on the south and west. It contains the Landover Metro Station. In addition to the Ardmore Industrial Park, this area contains Ardmore Industrial Center, Landover Distribution Center, Washington Commerce Center, and the Ardwick Ardmore Industrial Park. There are 111 properties total, with 94 being industrial or flex. Only 10 of the 94 are owner occupied. The industrial/flex buildings are primarily warehouses; the retail structures are general, freestanding. The vacancy rate of industrial property in this area is low. It was 20 percent in 1998 but is currently 10 percent, below the county average of 13.4 percent. The average rent runs $6.01, compared to $6.16 for the county. The time a rental unit sits on the market is seven months, compared to the county average of 13.5 months. Ardwick/Ardmore industrial areas are

categorized as Type 5 areas. All the major indicators for industrial/flex and office/retail—vacancy rate, TOM, rental rate—are below the averages. Average building age is 31.7 and 35.4 years respectively, so the structures are relatively young. The buildings are in a good location, either along MD 50 or near the Beltway. Vacancy for industrial building space reached a maximum of 25 percent in 1999 but has been lower ever since; in 2005 it was 3 percent. Office/retail vacancy has been below 4 percent for over ten years. Industrial/flex rent rates have been steady, at around $5.00 per square foot.

Cabin Branch/Maryland 50

Cabin Branch/Maryland 50 contains the Cheverly Metro Station and is just west of Ardmore Park. MD 50 is on the north and Martin Luther King, Jr. Highway is on the south. The Cheverly Metro Station is on the northwest corner. The area also contains the Blake Industrial Park, the National Commerce Park, the Congressional Gateway Center, and the Cabin Branch Distribution Center.

Map A8-18. Aerial View of Cabin Branch/MD 50

Source: CoStar

The area includes 63 properties, 56 of which are industrial and 7 are office/retail. The area is a Category 5. There are some vacancies, with the industrial/flex rate at 15 percent, which is above the 13.4 percent county average, but most buildings have been fully leased for over ten years. The rental rate for industrial and flex is $5.00 per square foot, more than a dollar less than the county average of $6.16 for warehouse space. Several move-ins are scheduled during the summer of 2008, which will lease over 200,000 square feet of the 504,000 currently available.

The average TOM in the area for industrial/flex buildings is 19.6 months, well below the county average of 32.4 months.

A section that could be classified as transitional is the group of buildings along Marblewood Road. These may be developed into other uses if the market demanded. The buildings in this section are older and smaller than the rest in the area and contain many car repair shops and smaller businesses. Most of these have been fully leased for ten years.

The office/retail buildings are currently 68 percent vacant. This is due to two office buildings on Sheriff Road that are 100 percent vacant and have been since 2007. The remaining five office/retail buildings are 100 percent leased. Average TOM for office/retail in the Area is 9.7 months, below the subregion average of 13.4 months.

Furthermore, the section south and east of the Cheverly Metro Station is currently vacant. It is zoned as industrial, but there is a residential section between it and the train station. The area may need to be rezoned out of industrial and changed to commercial or residential in order to maximize the use around the metro station, since additional industrial development could be difficult there. While this area is categorized as a Type 5, it deserves further study because of the proximity to the Metro.

Kenilworth/MD 50 Industrial

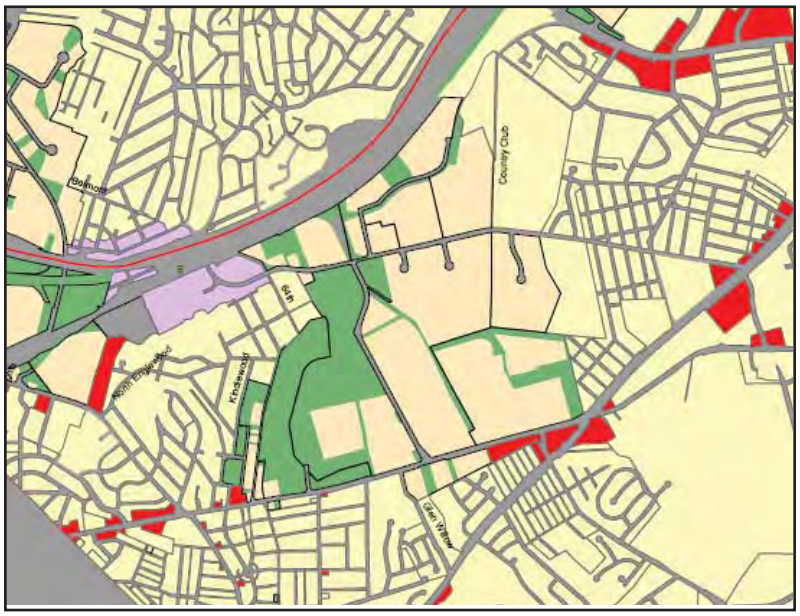
Kenilworth/MD 50 Industrial area is at the intersection of MD 50 and Eastern Avenue and occupies the section south of MD 50 and east of Eastern Avenue. I-295, Kenilworth Avenue, runs through the center. It is all industrial, and there are only nine buildings.

The area is a Category 4. There are nine industrial properties, all rental buildings. It is, overall, a healthy area with a good location, just outside the Washington, DC border. Most of the buildings have been fully leased since 2002; only one has had any vacancy fluctuation over the past six years. The area has a higher-than-county-average vacancy rate, but the reason is the high vacancy rate in one structure at 4800 Addison Road. This 340,000 square foot building has been abandoned for ten years and is scheduled to be demolished. Were it not for this structure, the rest of the indicators—vacancy, TOM, etc.—would be well below average. This parcel was rezoned in the first half of 2007 and was changed to a mixed-use/planned community land use. Once the vacant building is torn down, the area can be considered economically healthy. Because of rezoning to mixed use and the proximity to the Metro, this a Type 4 area that warrants further studies.

Map A8-19. Aerial View of Kenilworth/MD 50 Industrial

Source: CoStar

Attention should be paid to protecting the existing industrial structures and sections since they remain viable entities. The area does have a history of uses other than industrial, and encroachment may occur. The property at 1761 Olive Street was formerly condominiums and was converted to a warehouse in 2006 (the building was originally constructed in 1955).



Map A8-20. Kenilworth/MD 30 Industrial Area

Color Key: Red = Commercial; Purple = Mixed Use; Yellow = Residential; Tan and Green = Industrial; Light Green = Open Space.

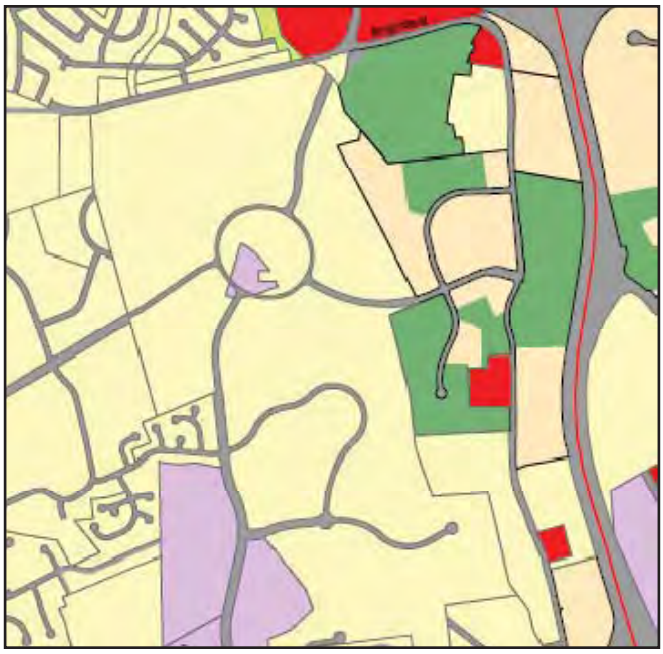
Source: M-NCPPC

Landover Center

Landover Center runs along the Beltway (eastern border), with Landover Road on the north and Central Avenue on the south. The western edge is about one mile inside the Beltway. The area contains Redskins Stadium, along with Landover Centre 2, the I-95 Office Park, a Metro station, and Centre Point.

Landover Center is categorized as Type 4. The industrial areas are healthy, but there is some pressure from encroaching office and retail. The vacancy rate for industrial/flex is 8 percent; for office/retail it is 12 percent. Both are under the county and subregion averages of 13.4 percent and 14 percent, respectively. The industrial/flex vacancy has never risen above 14 percent since 1998, and rents have increased about $1.00 per square foot over the same time frame. Overall, rental rates are about average. Vacancies in office/retail have hovered around ten percent for the past decade.

TOM for industrial space is 16.2 months, and for office/retail it is 4.5 months, both are below the average. There is, however, about 30,000 square feet of industrial that have been on the market for over two years. This is also the only area in Subregion 4 where the flex buildings outnumber the industrial, so the area has a potential to be configured as needed. Zoning categories vary across the area, and the area deserves further study. Current industrial sites may need some protection against encroaching uses.



Map A8-21. Zoning of Landover Center Area

Color Key: Red = Commercial; Purple = Mixed Use; Yellow = Residential; Tan and Green = Industrial; Light Green = Open Space.

Source: M-NCPPC

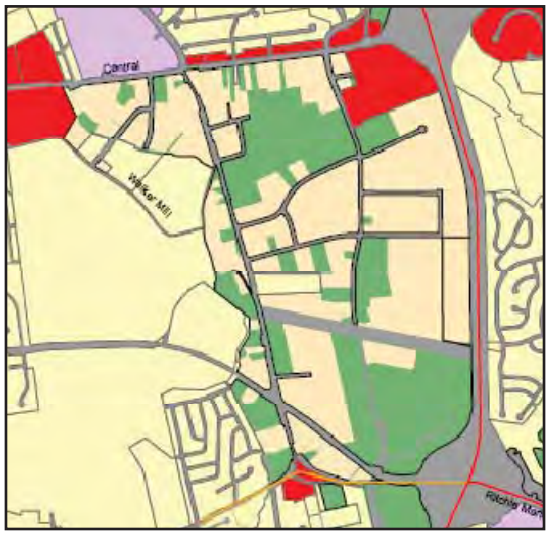
There is one vacant, cleared-off area south of the stadium. This is currently zoned as either commercial- or residential-planned community. Given that this site does not have good access to the Beltway and is surrounded by residential properties, the current nonindustrial zoning choice may be more appropriate. Access would be along both Central Avenue and Garrett A. Morgan Boulevard.

Hampton Park/Steeplechase 95

Hampton Park/Steeplechase is just south of Landover Center, with Central Avenue on the north. Walker Mill Road is the southern border; the Beltway is on the east. The area extends about one mile west, inside the Beltway. In addition to Hampton Park and the Steeplechase 95 International Business Park, the area contains Kingdom Square, the Hampton Business Park, Ritchie Road Industrial Center, and Central Industrial Park. The area encompasses over 130 properties in all, more than 100 of which are industrial sites.

Hampton Park/Steeplechase 95 is another Category 5. Both types of buildings, industrial/flex and office/retail, are in very good shape. Vacancy rates are under ten percent and have been since 2005. TOM is below average at 26.7 months—the average is 32.4. Roughly half of the vacant square footage for industrial has been on the market for 12 months or less.

Rent for industrial—most of which are warehouses—is $7.02, almost a dollar per square foot above the warehouse rent average for the county. The rental rates for industrial/flex have also increased over time, rising from $4.50 in 1999 to the $7.02 current rate.



Map A8-22. Hampton Park/Steeple Chase

Color Key: Red-Commercial; Purple-Mixed Use; Yellow-Residential; Tan and Green-Industrial; Light Green-Open Space.

Source: M-NCPPC

In an aerial view of this location, a vacant section in the southeast corner stands out. The section is zoned industrial and has a good location (the cloverleaf of the Beltway and Ritchie Marlboro Road). Fourteen buildings have been proposed for this section—11 industrial and 3 office buildings. These will add a total of almost 1.2 million square feet in RBA. Part of this location is destined to become a FTZ. Accordingly, the area should remain primarily industrial. Attention should be paid to protect the industrial sites, given the excellent location, economic health, and the possibility of competing uses. Hampton Park/Steeplechase 95 is another Category 5 industrial area.

Capitol Heights

This area is the only interior section analyzed here—the remainder all lie along the Beltway or other major roads. The area is at the intersection of Walker Mill Road and Addison Road South. The four industrial properties, part of the Walker Mill Business Park, are either warehouses or truck terminals. There are two retail establishments in the area.

Map A8-23. Aerial View of Capitol Heights

Source: CoStar

The existing industrial economy is healthy (Type 5) with an average rent of $9.15. All buildings are fully leased and have been for the last year. While there was a 40 percent vacancy rate in 2005, a year later, the area's vacancy rate was only 10 percent. Overall, the properties have mostly been stable and occupied for the past ten years. (TOM data is not available.)

A review of previous land uses further suggests that this area remain industrial. There are six primary sections that were formerly mining locations and are part of "the Teardrop." Only half have road access. Some sections are elevated above the surrounding terrain, and there are several storm water runoff spots.

Map A8-24. Zoning of Capitol Heights Area

Color Key: Red=Commercial; Purple=Mixed Use; Yellow=Residential; Tan and Green=Industrial; Light Green=Open Space

Source: M-NCPPC

These sections may need to be cleaned in order to be reused and road access added. They would likely not be conducive to retail, other commercial use, or office buildings. Therefore, Capitol Heights Area 7 can remain heavily industrial and has some opportunity to grow and develop, depending upon the amount of cleanup required. This is an area for further study.

Forestville/Pennsylvania Avenue Corridor

The Forestville/Pennsylvania Avenue Corridor is bordered by Walker Mill Road on the north, the Beltway on the east, and Pennsylvania Avenue on the south. The Forestville/Pennsylvania Avenue Corridor extends west for about a mile inside the Beltway.

Rent for industrial/flex is $7.71, which is above the warehouse rate ($6.16) but below the flex average ($12.22). The rental rate has increased steadily over time, going from $4.00 per square foot to the current rate of $7.71. There is no evidence of encroachment from other uses. Rent for the 35 office/retail buildings is $22.27, which is below the subregion average of $23.04. The office/retail vacancy rate is at 17 percent, above the county average for office/retail of 14 percent.

TOM for industrial/flex is 6.9 months; over 100,000 square feet of the vacant space was on the market for three months or less. For office/retail it is 15.3 months, which is slightly above

the subregion average of 13.5. For all the reasons stated, Area 8 is another strong Category 5 area.

There was a rezoning proposal put forth in the first half of 2007 for a 116.5 acre section of vacant land in the northeast corner at the intersection of Walker Mill Road/Ritchie Marlboro Road and the Beltway. The proposal was to rezone to commercial. The southern and northern sections of this industrial area are shown in Maps A8-25 and A8-26.

Map A8-25. Northern Section
Source: CoStar

Map A8-26. Southern Section
Source: CoStar

PennBelt

PennBelt is the most southern industrial area within Subregion 4. It is a small section containing 33 properties. The area is bordered by Pennsylvania Avenue on the north, the Beltway on the east, and Suitland Parkway on the south. Similar to several other industrial areas in this subregion, PennBelt extends about a mile west inside the Beltway. There are 88 properties, with 53 industrial/flex buildings and 35 office or retail. Eight buildings are owner occupied.

Area 9 is a strong Category 5. The vacancy rates are at two percent for industrial/flex space. The high for this metric was 12 percent back in 2005, but has been below 8 percent for most of the decade. Current rental rates average $6.30, but TOM is 8.9 months for industrial/flex, well below the county average. Average building age is about 32 years. The location is very good with access to the Beltway, Suitland Parkway, and Pennsylvania Avenue.

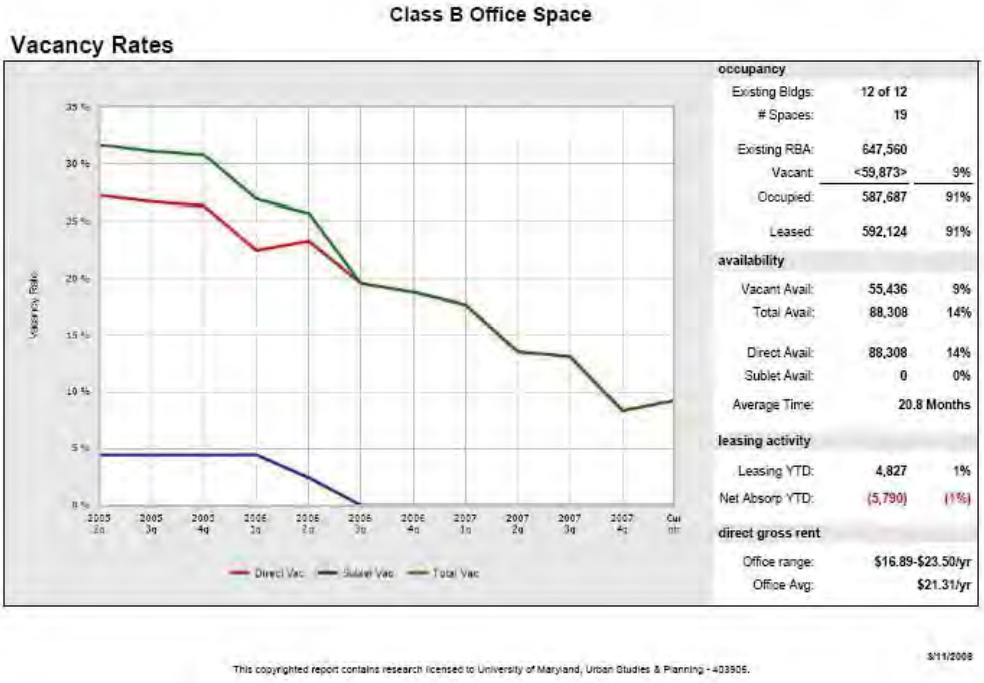


Figure A8-7: Class B Space in New Carrollton Area

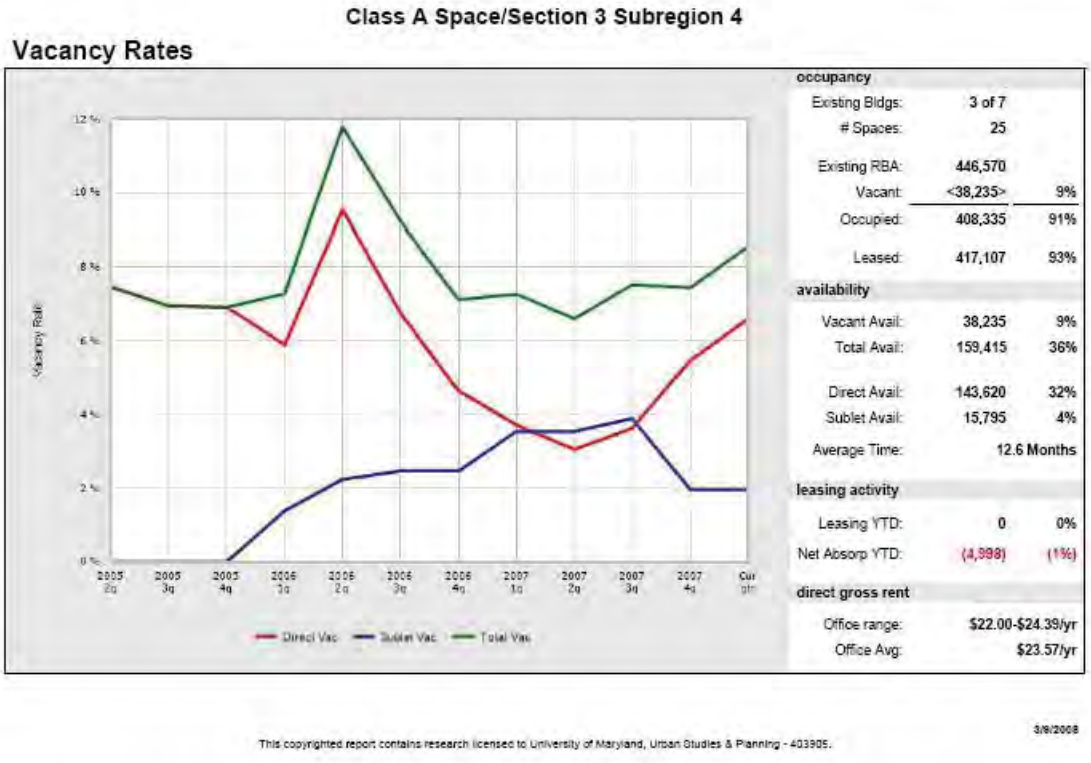
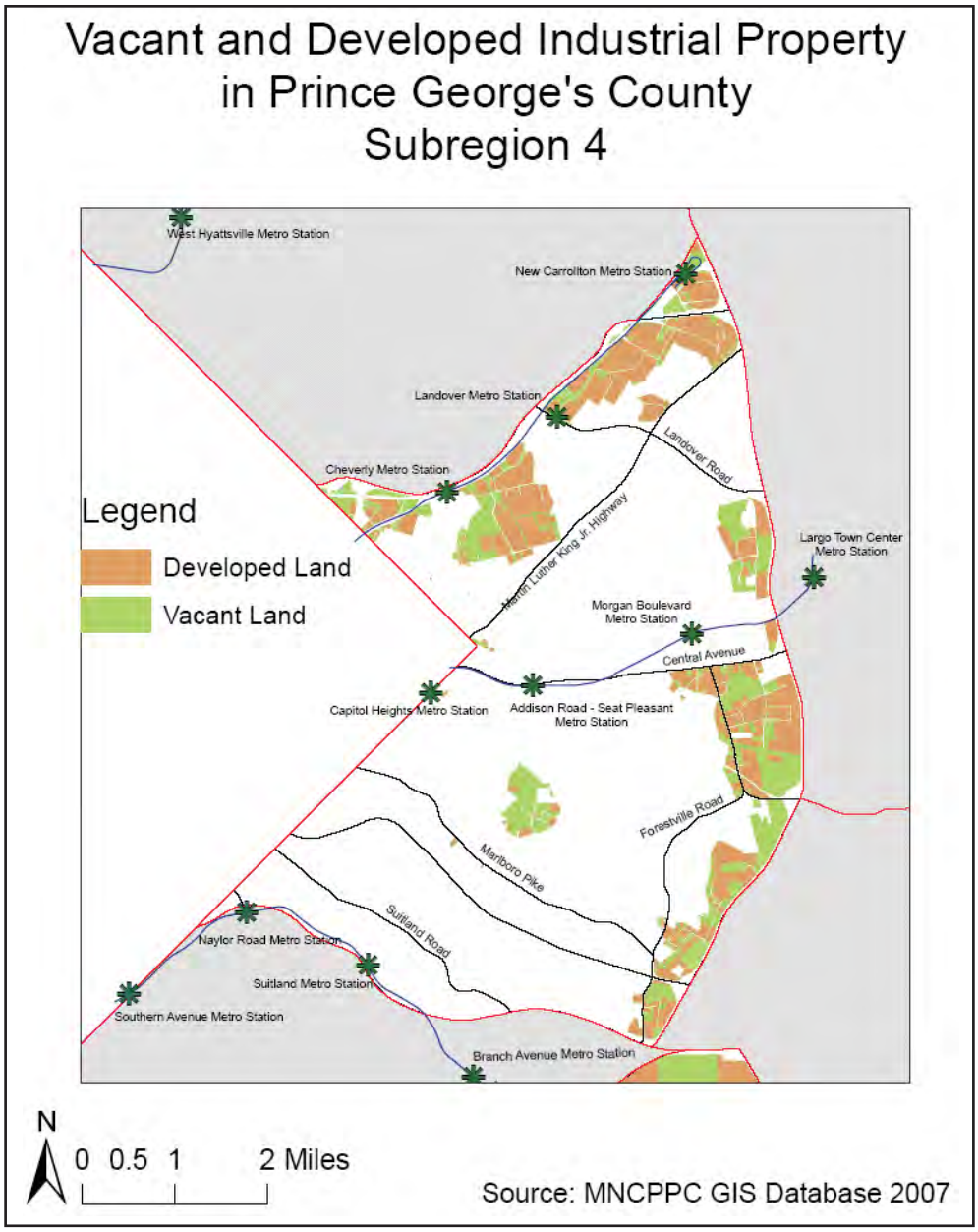


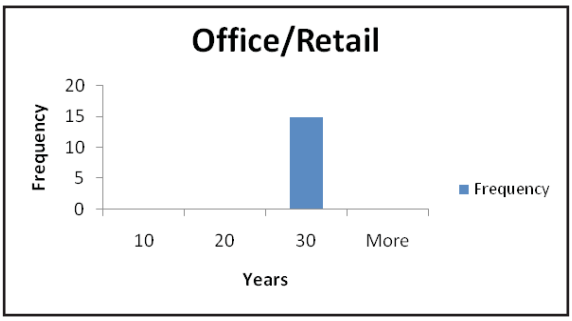
Figure A8-8: Class A Office Space in the New Carrollton Area.



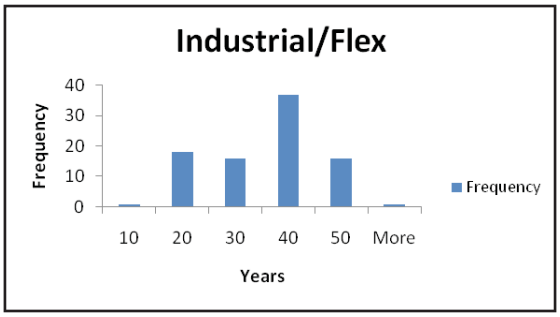
Map A8-27. Metro Stations in Subregion 4

Subregion 4 Histograms of Building Age

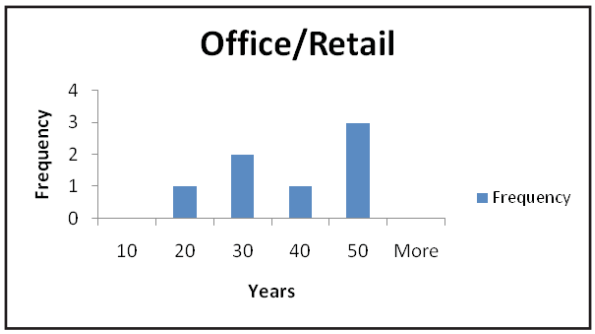
New Carrollton



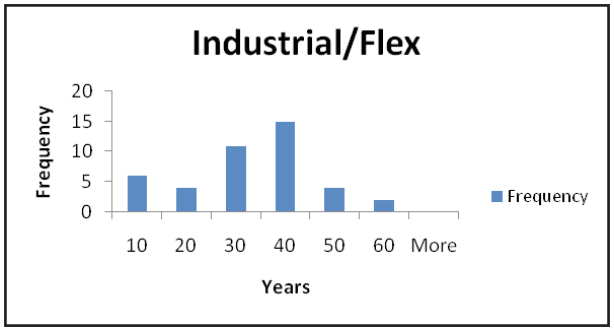
Ardmore Park



Ardmore Park

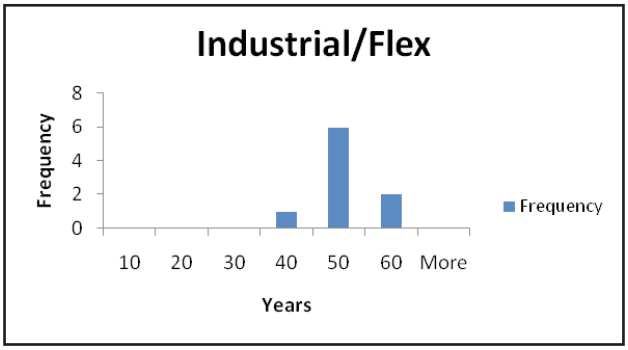


Cabin Branch

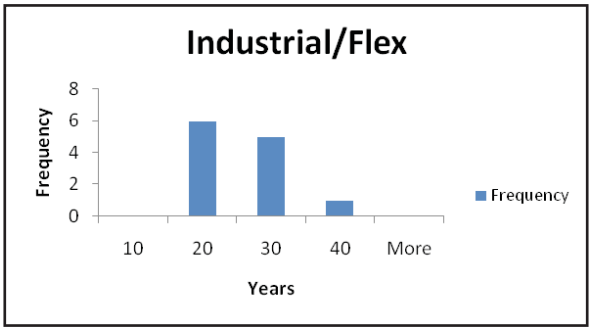


Cabin Branch

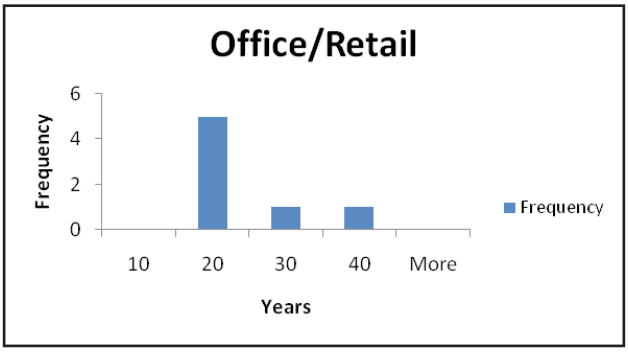
Kenilworth



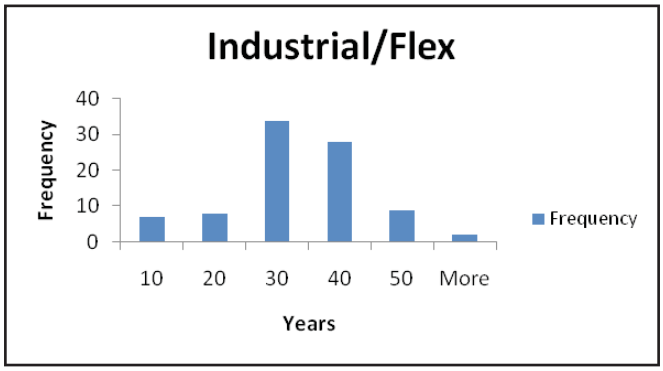
Landover Center



Landover Center

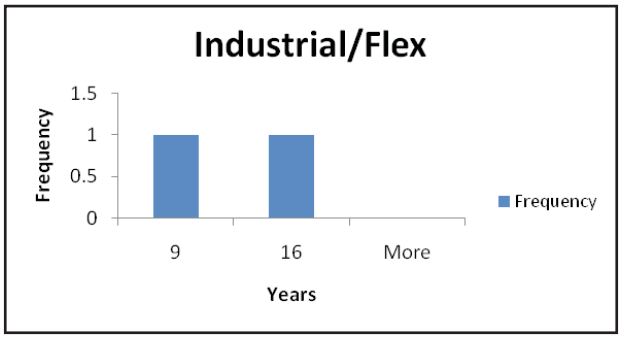


Hampton Park

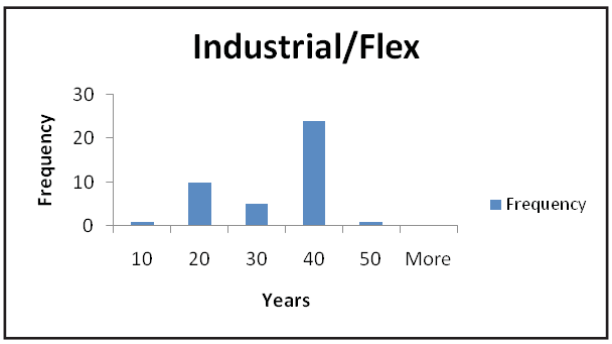


Hampton Park

Capitol Heights

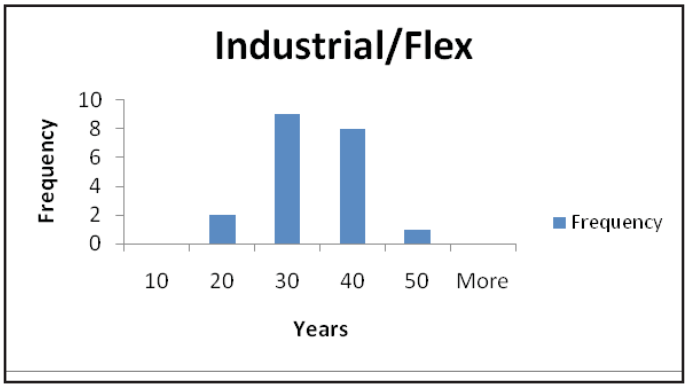


Forestville

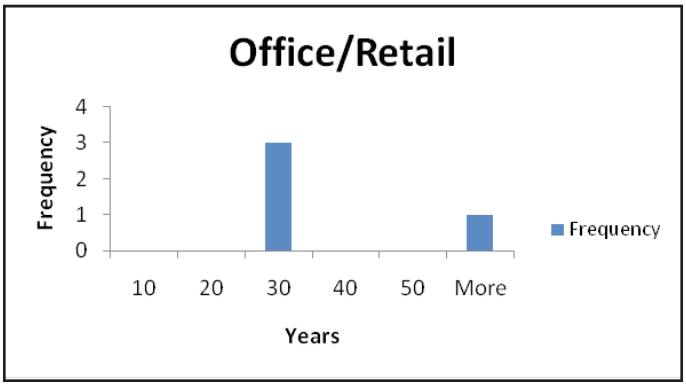


Forestville

Penn Belt



Penn Belt



Subregion 5

Recommendations

The general overview of Subregion 5 is the demand for industrial use is mixed. The Woodyard Road area has strong industrial demand. So, the best strategy for this area is to keep the current industrially zoned areas as industrial and provide adequate infrastructure. Currently, Steed Road and Piscataway Road function well as an airport. So, in the short term, "status quo land" strategy looks like the best option in this location.

Finally, because Area 3 (MD 301 and Brandywine Road) is under transition, due to growing pressure for other uses, adjusting to the market demand appears to be the best option. At the same time, to take advantage of this land use transition, it is necessary to rezone the heavy industry site to lighter industrial use or environmentally sound uses that are compatible with commercial, residential, and office development.

Background

Subregion 5 is in the southern part of Prince George's County and includes Clinton, Brandywine and Accokeek. The total acreage of industrially zoned land in Subregion 5 is 2,218 acres,[41] accounting for 20 percent of the total county industrially zoned land. On the other hand, RBA accounts for just 3.4 percent (1,773, 602 SF) of the county total RBA.[42]

Of the industrially zoned land, 1324.4 acres or 59.7 percent of the land, is undeveloped now, which is significantly higher than the countywide average of 44.5 percent. Particularly, as shown in Table A8-5, land zoned as I-2 (heavy industrial use) shows the highest undeveloped percentage in comparison to other industrial uses, indicating a weak demand for a heavy industrial use in Subregion 5.

Subregion 5 has a high percentage of nonconforming uses. According to the Prince George's County Tax Assessor's file, more than half of the nonconforming use is clustered in Subregion 5,[43] indicating a greater demand for other uses.

[41] Source: Prince George's County Tax Records, 2007

[42] Industrial Land Use Study, Appendix 7, Table 1-4

[43] Industrial Land Use Study, Appendix 7, Table 1-9. A nonconforming property is here defined as a property that is zoned for industrial uses; however, it is not taxed as industrial use by the SDAT.

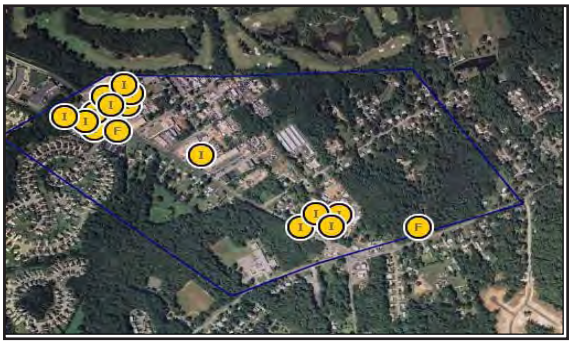
Table A8-5. Acreage in Industrially Zoned Land, Developed and Vacant in Subregion 5							
	I-1	**I-2**	**I-3**	**I-4**	**E-I-A**	**U-L-I**	**Total**
Acreage	622.7	565.8	275.4	74.6	680.1		2218.6
Developed	188.8	158.5	116.7	55.6	374.6		894.2
Vacant	433.9	407.3	158.7	19	305.5		1324.4
Percentage	69.7	72.0	57.6	25.5	44.9		59.7

Source: Industrial Land Use Study, Appendix 7, Prince George's County Tax Records, 2007

Analysis

Woodyard Road

The Woodyard Road area is outside of the south gate of Andrews Air Force Base. The main intersection is the Woodyard Road and Old Alexandria Ferry Road. The area is surrounded by low to medium residential use. As shown in Map A8-28, industrial buildings are clustered on Old Alexandria Ferry Road. This area has been categorized as Type 5.



Map A8-28. Aerial View of Woodyard Road Area

Source: CoStar

The area is a healthy industrial area with a low vacancy rate. Currently, the area has 16 industrial building (including two flex buildings); the vacancy rate for these 16 industrial buildings has been under 4 percent since 2003 (See the Appendix 5.1). Also, according to the CoStar data, the average TOM is just 1.1 months, indicating a strong demand for industrial uses.

The area's current rent for an industrial building is $12.00/square foot (see Appendix 5.1), which is significantly higher than a county average $6.1. In addition, the proposed flex development (130,000 square feet flex building at 8201 Woodyard Road) shows that there is a growing demand for light industry. Given that most of current industry buildings are warehouses, the flex building projects suggest the growing demand for office-intensive, industrial use.

The low vacancy rate, short TOM, and the new proposed flex project suggests that the area is a healthy industrial site. Also, it looks as if there is no competition from other uses, in that there is only one office building and one retail building in the area. Thus, it is necessary to protect this established industrial space with adequate infrastructure. No precise data exists to show the age of the current industrial buildings. However, given that some of the industrial buildings in the area were built between late 1970 and early 1980, it is expected that some of the area will experience aging infrastructure problems in the near future. Therefore, to keep this area as a healthy and viable industrial site, it is necessary to review infrastructure adequacy to determine when infrastructure improvements are needed.

Steed and Piscataway Roads

This area is near the intersection of Steed Road and Piscataway Road. The area is surrounded by low-density, residential uses. The site is currently used as the Washington Executive Airport. The airport was established in 1939 as a private airport and developed into a general and commercial use airport. Except for the airport, the remaining area is used for casual recreation, such as horse stables and farms.

Map A8-29. Aerial View Washington Executive Airport

Source: CoStar

The fact that the area is used as an airport indicates that it serves a unique industrial site, even though there are no typical industrial buildings in the area. Along with the airport facility, aircraft-related facilities, such as engine rental and aircraft maintenance and inspection, are clustered at the airport.

Currently, the presence of the airport strongly impacts on the neighboring land use pattern. Since 2002, according to zoning bill (CB-51-2002), the area has been designated as a general aviation airport policy area (APAs). Generally, in these areas, if property is within one mile

of the airport, land use control is implemented to discourage uses incompatible with the airport. This regulation also aims to mitigate airport related nuisance, such as noise and safety.

Given that the area is currently being used as an airport, it would not be necessary to rezone the current industrial site in the short term. However, it may not be suitable to keep an airport use in the long term. The airport was built in 1939 when there was not suburban development pressure. Therefore, the area can be expected to experience pressure from other development in the near future to accommodate Prince George's County's growth. Also, the aging of the airport would prevent utilization of the facility, which would result in underutilization of the current industrial site. In addition, the neighboring area is gradually developing in residential use, and the safety and noise problems associated with the airport would be a more serious problem. To address these challenges, Prince George's County should consider an alternative development plan that would replace the airport use in the long term.

MD 301 and Brandywine Road

The MD 301 and Brandywine Road is located at the southern part of Prince George's County. According to the zoning map, the industrial site (grey color) is surrounded by residential use. The industry site is accessible by the MD 301 and Brandywine Road.

Map A8-30. Zoning of MD 301 and Brandywine Road

Color code: Gray–industrial, Purple–mixed use, Green–open space, Yellow–residential, Red-retail

Source: M-NCPPC

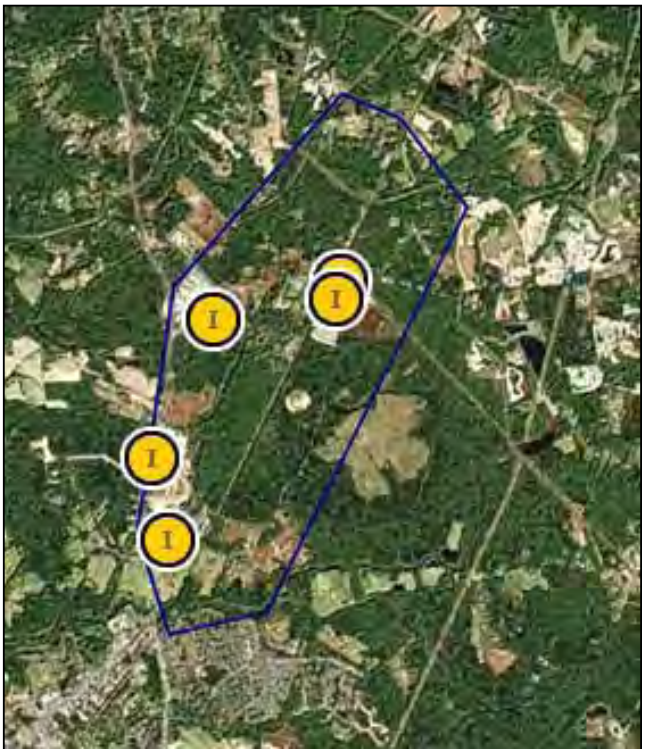
Generally, the area is experiencing a decline in industrial demand. During the past three years, the area's vacancy rate has been above 20 percent, which is significantly higher than the county average (see the Appendix 5.2). As a result of this, currently, 253,200 square feet are available among the total RBA of 1,035,411 square feet.

Also, as shown in the Map A8-31 aerial map, industrial activity is low in that a significant share of the industrially zoned land is undeveloped now. Currently, the area has only five industrial properties; one of which has been almost 40 percent vacant for almost 72 months.[44] Also, the fact that there has been no current new construction since 1998[45] suggests that demand for

[44] 250,300 square feet is available for this building among the 624, 502 square feet.

[45] Five properties' built year are as follows ; 1954, 1984, 1991, 1996, 1998

industrial use is stagnant for this area. The average rent for the area is $6.95 per square foot per year, which is slightly higher than the Prince George's County average rent of $6.16 for warehouse uses.



Map A8-31. Aerial View of MD 301 and Brandywine Road

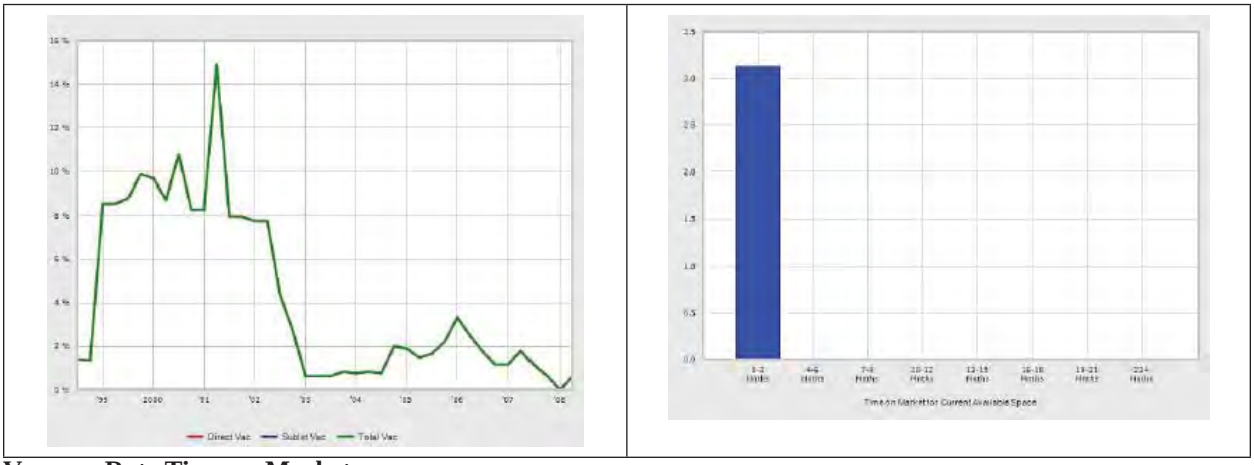
Source: CoStar

Along with the stagnant demand for industrial use, the area is experiencing an increasing demand for other uses. According to the DAMS report, there is a growing demand for residential or mixed use. From 2000 to 2007, there were three rezoning requests from industrial use. One of them is the Renard Lake MD 301 Project that aims to develop a residential site. Another project, the Village at Timothy Project, also aims to rezone the previous I 3 (planned industrial/employment park) and E-I-A (employment and industrial use) to a LAC and residential medium density uses. In the third request, the Brandywine Crossing Project aims to develop an industrial site as a mixed-use development. Currently, a big box project, Brandywine Shopping center is under construction.

The stagnant demand for industrial use as well as rezoning requests indicates the area's weak industrial demand and the growing demand for other uses. Thus, it is appropriate to allow a transition in this area to reflect the market change.

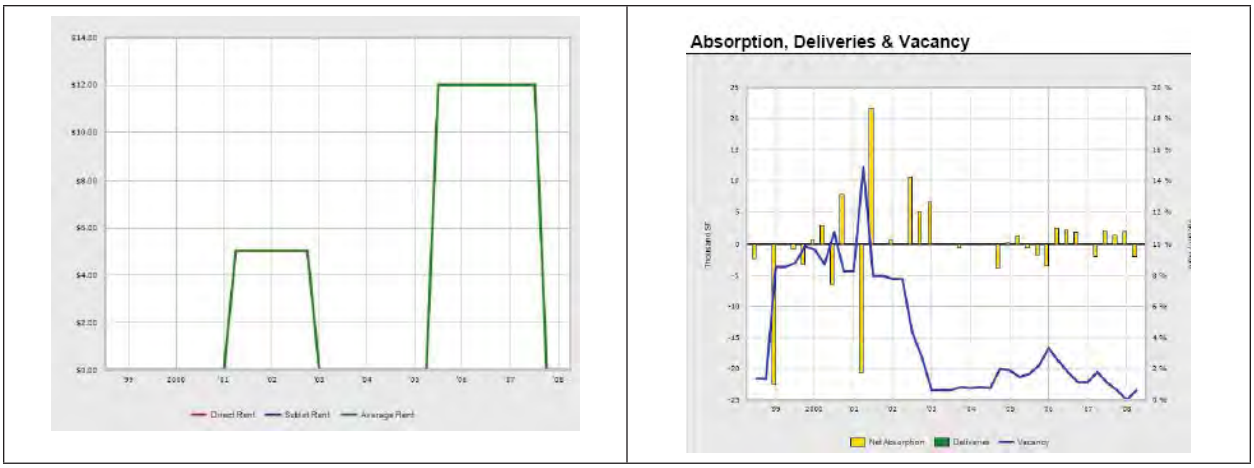
Along with this conversion to adjust to the changing environment, it is also appropriate to rezone the current industrial zoning. For example, it is necessary to replace I-2 use with I-1 or other environmentally sound industrial zoning. According to the CoStar data, some portion of the industrially zoned land in this area is designated for I-2 uses. As discussed above, the fact that a high proportion of I-2 zone land in Subregion 5 is undeveloped suggests that demand for heavy industry is weak. Moreover, given that the area is experiencing pressure for a transition from industrial use to residential or mixed use development, the heavy industry use would conflict with the new development. Given this transition from industrial development, it is likely that only light industry could thrive in this area.[46]

Woodyard Road (Area 1)



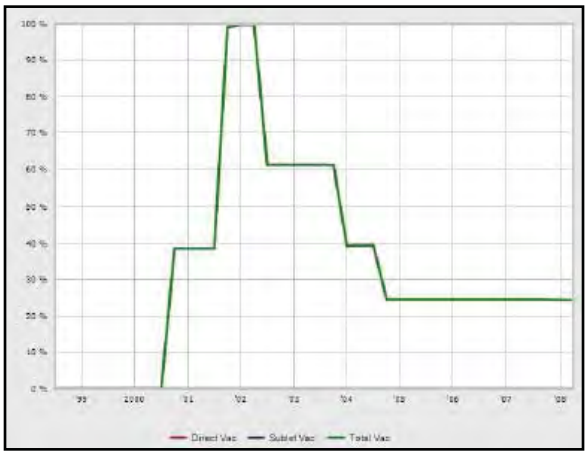
Vacancy Rate Time on Market

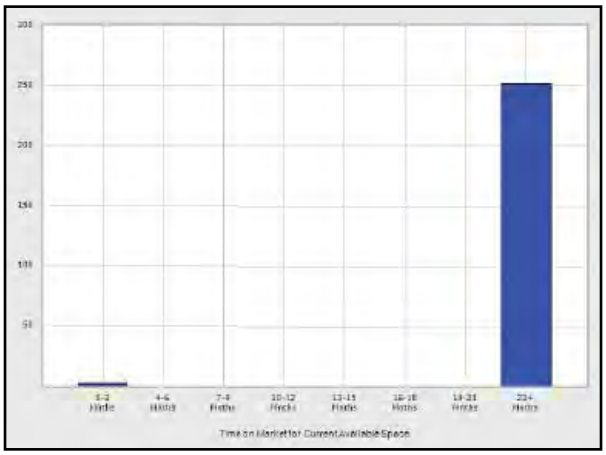
[46] According to the CoStar data, one property is located in 14149 Brandywine Road and is zoned for heavy industry (I 2)



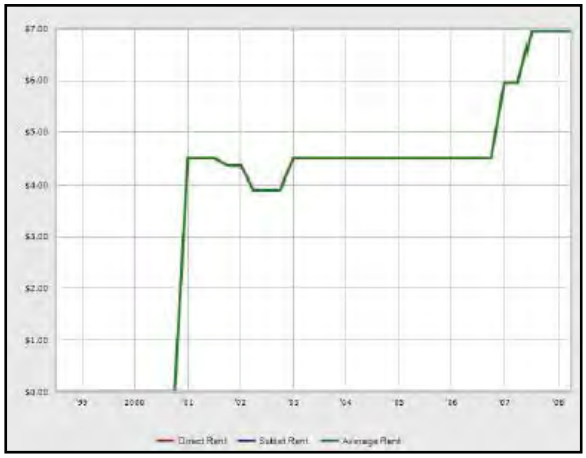
Rent Increase, Absorption, Delivery and Vacancy

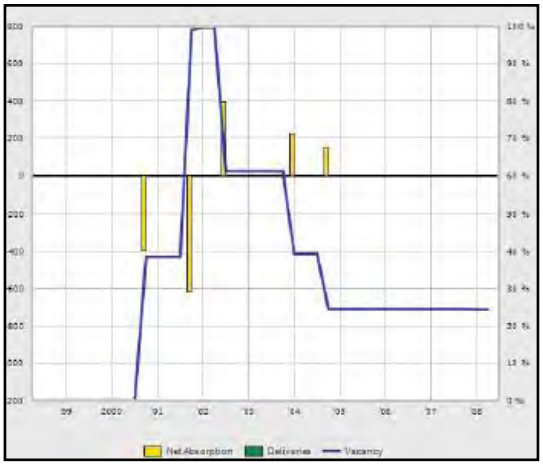
MD 301 & Brandywine Road





Vacancy Rate Time on Market





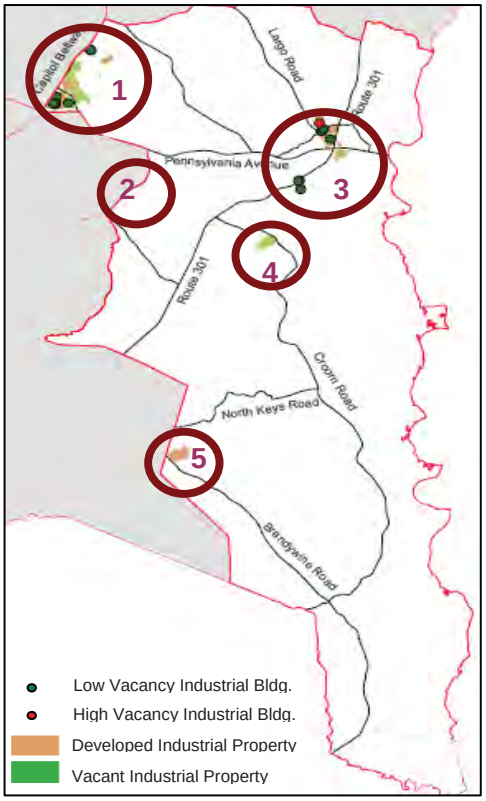
Rent Increase Absorption, Delivery and Vacancy

Subregion 6

Recommendations

The two overall recommendations for Subregion 6 are to support industrial activities in the northern part of the subregion, improving industrially relevant infrastructure to retain and enhance investments, and to release acreage in the southern portion from industrial zoning when demand arises in the future.

Background



Map A8-32. Location of Industrial buildings in Subregion 6

Source: M-NCPPC GIS data

Subregion 6 is located in the most southeastern part of Prince George's County. Its main transportation routes are I-395, Blue Star Memorial Highway (MD 301), and east/west Pennsylvania Avenue (MD 4).

The area has a total of 787 acres of industrially zoned land (all I-1, I-2, I-3), constituting only 6.8 percent of the entire county's total industrial area. The land vacancy rate, depicted by the green areas in Map A8-32, is 48.3 percent, slightly over the county average (46 percent). This data shows that this Subregion still has a large concentration of industrially zoned but vacant land, suggesting a rather low demand for land for industrial purposes. The total RBA is 2,171,890 square feet or slightly under 6.0 percent of the county total.[47]

Capital Beltway (East)-Area 1

This area is located around the intersection of Pennsylvania Avenue and the Capital Beltway, and includes Eastgate Business Park, PennBelt South Industrial Center, and Randall Industrial Center. The following table summarizes the most important features of the area.

Table A8-6. Demand Indicators in Subregion 6-Area 1

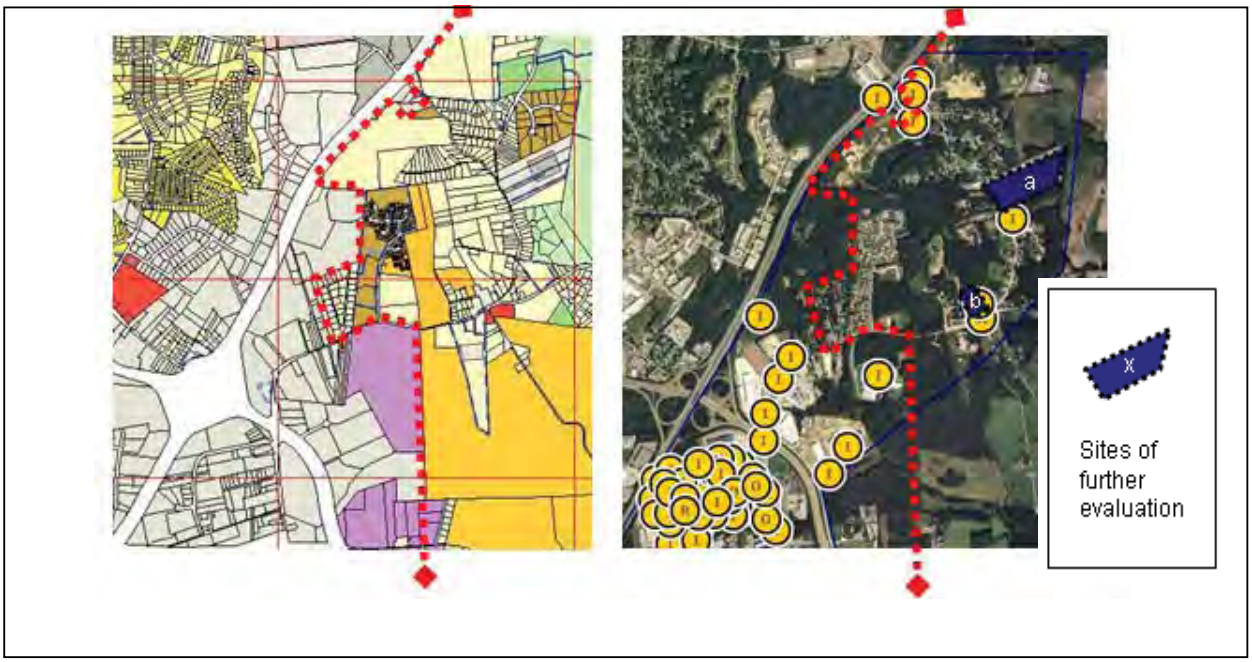
Indicators–Area 1	Industrial / Flex
Existing Buildings	48 / 1
Current Building Vacancy Rates	19 percent
Current Rental Rate (Price Per SF)	$6.00–6.50 /yr (Avg. $6.30/yr)
Average Age of Building	27 (1952-2008)
Dominant Zoning Category (Industrial/ Flex)	Ind: I-1, Flex: I-1
Dominant Secondary Use (Industrial/Flex)	Warehousing, Wholesale
Current Average TOM	12.7 Months
Owner Occupied (Industrial/Flex)	11 / 1

Source: CoStar

The CoStar database shows a total of 49 industrial buildings, 6 office buildings, and 2 retail buildings. The relatively high current building vacancy rate of 19 percent is due to four buildings, two of which are currently under construction or have been proposed (highlighted in green). Most of the properties in this area are fully leased, predominantly for warehousing. The average absorption time for industrial properties is currently 12.7 months, and rental rates have consistently increased in the last couple of years, reaching a current square foot average of $6.30 per year. These numbers indicate that this Capital Beltway-East area is a Type 5 industrial area.

[47] Source: Prince George's County Tax Records, 2007

The zoning map below helps illustrate the spatial relation of the industrial uses adjacent areas.



Map A8-33. Zoning and Aerial Map Subregion 6-Area 1

Source: Prince George's County Zoning Map, CoStar 2008

This industrial corridor profits from the transportation/access advantages. There also seems to be sufficient space for future expansion, as indicated by the large treed areas within the industrially zoned area (compare both maps).

Even though this is overall a healthy industrial area (Type 5), there might be one or two relatively remote industrial sites with comparative disadvantages (inferior accessibility, potential conflicts with encroaching residential developments), which might require further evaluation on whether an industrial use here is beneficial. These sites are marked blue in Map A8-33.

Area 2–Andrew's Air Force Base (east)

The industrially zoned area near Andrew's Air Force base stretches along the bases entire eastern border. CoStar shows currently a total of 15 industrial buildings, many of which are used for warehousing, distribution, and manufacturing. Vacancy rates are extremely low in this area, currently nearly 0 percent. There is also a new proposed industrial warehouse building here of 60,000 square feet. Industrial buildings in this area have a short TOM, currently 1.9 months, another indication of market demand.

Table A8-7. Demand Indicators in Subregion 6-Area 2	
Indicators	**Industry / Flex**
Existing Buildings	14 / 1
Current Building Vacancy Rates	0% (12% total available due to new building)
Current Rental Rate (Price Per SF)	$5.95 /yr
Average Age of Building	20 years (1957-2008)
Dominant Zoning Category (Industrial/Flex)	Industrial: I-1
Dominant Secondary Use (Industrial/Flex)	Warehousing, Distribution, Manufacturing
Current Average TOM	1.9 Months
Owner Occupied (current) (Industrial/Flex)	4/ 1

Source: CoStar

However, large parts of this area, north from Dower House Road, are still not developed, and there is no evidence of retail or commercial encroachment. As for the section south of Dower House Road, large parts are mainly used for storage space or are still undeveloped. So, despite the healthy cluster developments at Dower Employment Center and Kentech, there are large reserves of undeveloped land in the northern and southern borders of Andrew's Air Force Base (east). These are possibly areas of excess industrial land and could be considered for rezoning when requested. Any change of function, however, has to consider the proximity to the Air Force Base and possible incompatible uses. Because of the overall health of the industrial buildings in this location, it was ranked as a Type 5 area.

Map A8-34. Zoning and Aerial Map Subregion 6-Area 2

Source: CoStar 2008, Prince George's County Zoning Map)

Upper Marlboro (east)- Area 3

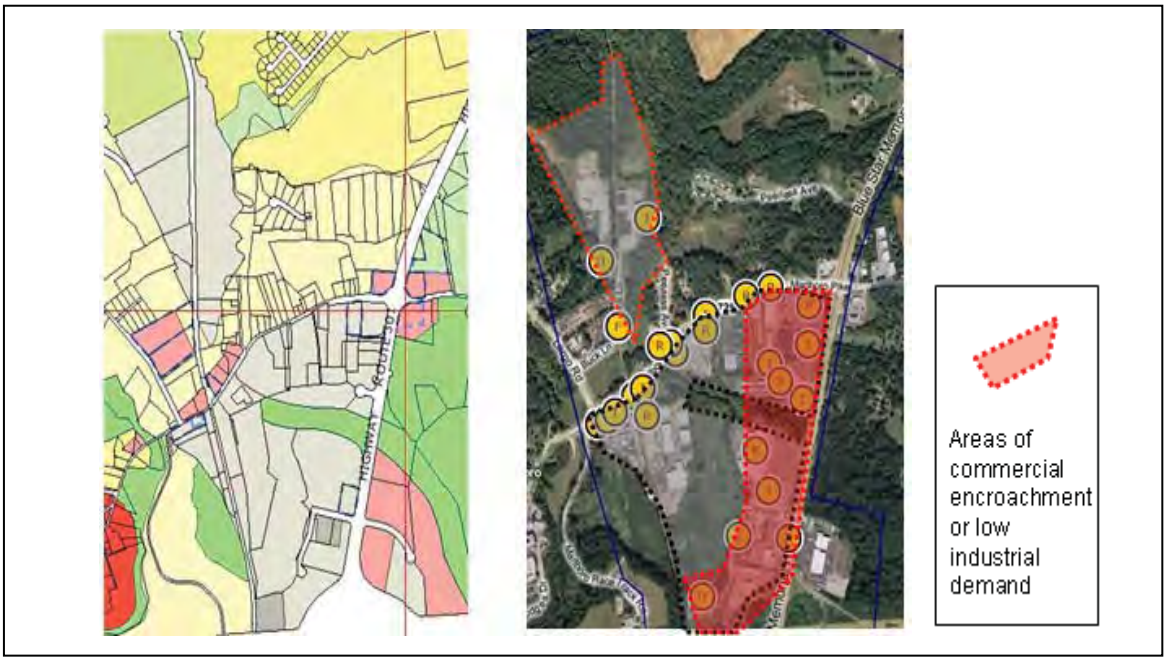
Area 3 is located in Upper Marlboro, around the intersection of Blue Star Memorial Highway (MD 301) and Pennsylvania Avenue; Marlboro Pike runs about half-way through this location.

Table A8-8. Demand Indicators in Subregion 6-Area 3	
Indicators–Area 3	**Industrial / Flex**
Existing Buildings	11 / 2
Current Building Vacancy Rates	22%
Current Rental Rate (Price Per SF)	$6.00 /yr (Avg. $6/yr)
Average Age of Building	35 years (1939-87)
Dominant Zoning Category (Industrial/Flex)	ind: I-1, flex: I-1
Dominant Secondary Use (Industrial/Flex)	Wholesale
Current Average TOM	36.1 Months
Owner Occupied (Industrial/Flex)	3/ 1

Source: CoStar

CoStar has identified about 26 properties in this area, of which only half have industrial uses. The other properties are used for commercial purposes, though zoned industrial. The existing industrial buildings have had high vacancy rates since 2004, with a current vacancy rate of 22 percent. Two properties are currently completely vacant, generating a total of nearly 120,000 square feet open for lease. The average TOM in this area is a very high 36.1 months, giving a rather gloomy prospect for a fast turnover.

Commercial functions, on the contrary, seem to have better conditions for development in this area. While the businesses around the western end of Marlboro Pike are mostly smaller auto repair shops and gas stations, there is a noticeable increase of other retail uses along Memorial Highway (e.g., new Jeep auto sales, Home Depot, Wendy's restaurant), as well as office developments along Chrysler Drive and the intersection with MD 4. This encroachment in the area is visualized more clearly in the following two maps (red highlights). Apparently, there is a connection/orientation toward the already commercially zoned areas.



Map A8-35. Zoning and Aerial Map Subregion 6-Area e4

Source: CoStar 2008, Prince George's County Zoning Map)

The upper, red-bordered segment clearly shows low demand for an industrial function. This section is only half developed; the industrial property on the right has been 100 percent vacant since 2003 and the building on the left is used for office functions. Because of the described

changes in this part of Upper Marlboro, this area is designated as Type 3, deindustrializing and transitioning. This is an industrial area where the county should entertain requests for rezoning.

Marlton (East)-Area 4

This area is located in the eastern part of Marlton along Croom Road (MD 382). The following maps show the result of absolutely no demand for any development on this industrially zoned property over the last decades. The area is completely covered with trees, indicating a Category 1 classification. As described in the first chapter of this Appendix, this is an area that requires no active intervention at the moment but merely observation. Depending on demand, there may be some rezoning required in the future.

Map A8-36. Zoning and Aerial Map Subregion 6-Area 4

Source: Prince George's County Zoning Map, CoStar 2008

Brandywine Road- Area 5

The Brandywine area is located at the intersection of Brandywine Road and Gibbons Church. Currently there are sand and gravel mining activities. This appears to be a healthy economic activity (a special case of Type 5) that should continue existing in this area until the time when other, more land-intensive activities compete for this land.

Map A8-37. Zoning and Aerial Map Subregion 6-Area 5

Source: Prince George's County Zoning Map, CoStar 2008

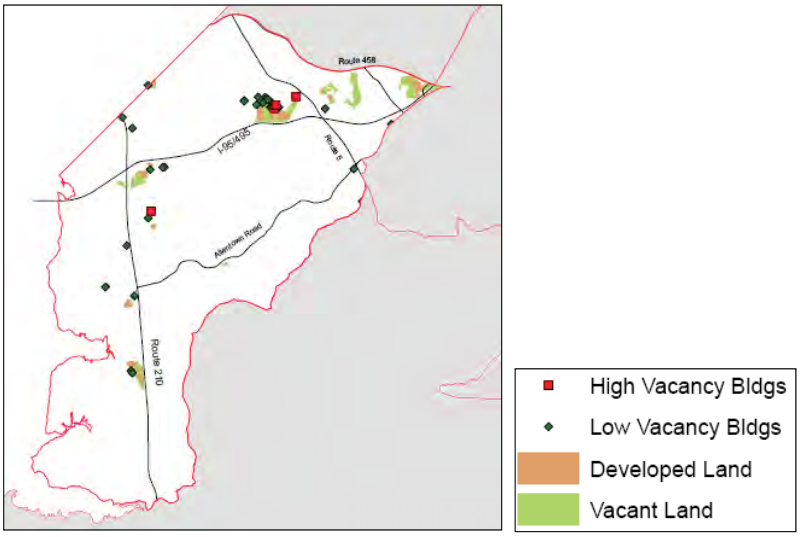
Subregion 7

Recommendations

As Subregion 7 has industrial areas in Categories 1, 2, and 3, it is suggested that proper rezoning be considered, if pressure from other uses arises in the subregion.

Background

Subregion 7 is bounded to the north by the District of Columbia and Suitland Parkway, to the west by the Potomac River; to the east by Piscataway Road, and to the south by Swan Creek and Piscataway Creek. I-95 crosses the region from west to east, while Indian Head Highway runs from north to south.



Map A8-38. Industrial Areas in Subregion 7

Source: M-NCPPC GIS data, 2007

Subregion 7 currently has 642.8 acres of industrially zoned land, which accounts for 5.6 percent of the county's industrial land. Compared to other subregions, such as Subregions 2 and 4, Subregion 7 has a relatively small proportion of its land zoned industrial.

Total RBA is 1,694,044 square feet, which represents 3.2 percent of the county's total. Of the area, 83,453 square feet is currently vacant. The building vacancy rate is 4.9 percent. The following table shows the zoning categories of industrial land in Subregion 7. Sixty-two percent of the industrial zoned land is vacant.

Table A8-9. Acreage by Zoning Category

	I-1	I-2	I-3	I-4	E-I-A	U-L-I	Total
Total	351.3	.	174.1	117.5	.	.	642.8
Developed	138.6	.	63.6	40.2	.	.	241.8
Vacant	212.7	.	111.1	77.2	.	.	401.1

I-1: light industrial
I-2: heavy industrial
I-3: planned industrial/employment park
I-4:limited intensity industrial
E-I-A:employment and institutional area
U-L-I: urban light industrial

Source: Prince George's County Tax Records, 2007

Subregion 7 has a slightly higher percent of land in nonconforming use compared to the county average, as shown below. While there have been no requests to rezone from industrial land in this area, the high proportion in nonconforming uses suggests that the demand here is not for industrial land.

Table A8-10. Nonconforming Uses

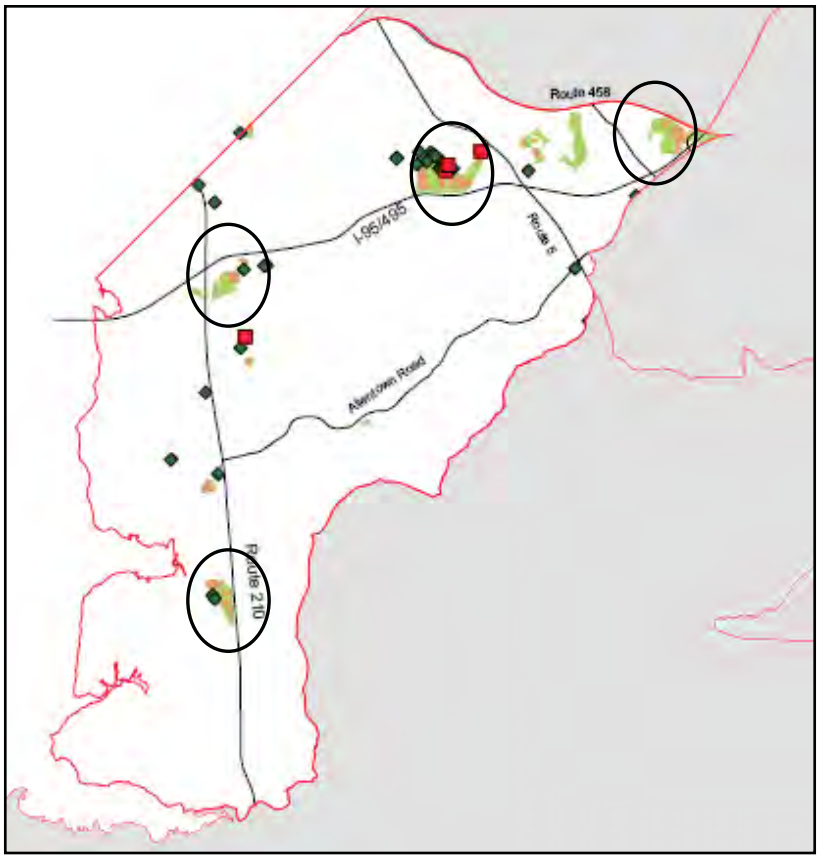
Non-conforming use:

	Subregion 7	PG County
Total	642.8	11522.7
Non-conforming; in developed area	44.5	586.4
%	7.6%	5.1%

Source: Prince George's County Tax Records, 2007

Analysis

Each of the industrial zones in Subregion 7 was divided into four subareas, named after defining features—local landmarks and neighborhood names. These four areas are illustrated in the circled areas below.



Map A8-39. Industrial Areas in Subregion 7

Source: M-NCPPC GIS data, 2007

Suitland Parkway

Bounded by the Capital Beltway and Suitland Parkway, this site generally has good access. The site is surrounded by residential uses, mostly single-family houses. The aerial photo on the left below is an image of industrial properties. A truck terminal can be seen in a seemingly abandoned site. Both data from M-NCPPC GIS database and CoStar Group show no signs of industrial activities in Suitland Pkwy area. Therefore, it is determined that this subarea has very weak demand and categorizes it as Type 1. It is suggested that the site can be rezoned into other uses if needed.

Map A8-40. Aerial View of Suitland Parkway Industrial Sites

Source: CoStar

Temple Hill–Marlow Heights Industrial Park

Marlow Heights Industrial Park is the largest industrial area in Subregion 7. It is bounded by Branch Avenue and the Capital Beltway on the east and runs west to the St. Barnabas Road apartment buildings are immediately adjacent to the northern boundary. There are low-density, residential neighborhoods on the east side. The site is fenced from the new residential development to the south.

Map A8-41. Aerial View of Marlow Heights Industrial Sites

Source: CoStar

Access into and out of the site is difficult, with poor internal circulation. The winding Temple Hill Road does not have access ramps to the Beltway on the south end. In order to get on the Beltway, trucks need to share St. Barnabas Road with family vehicles and make turns at an intersection by the side of a large commercial site.

Most buildings are one- to two-story rectangle brick warehouse buildings with large floor plates. Two giant parking lots for auto repair facilities are in the middle of the site. The average building age is 23 years. The following histogram of building age shows that 25 out of 29 buildings were built before 1979.

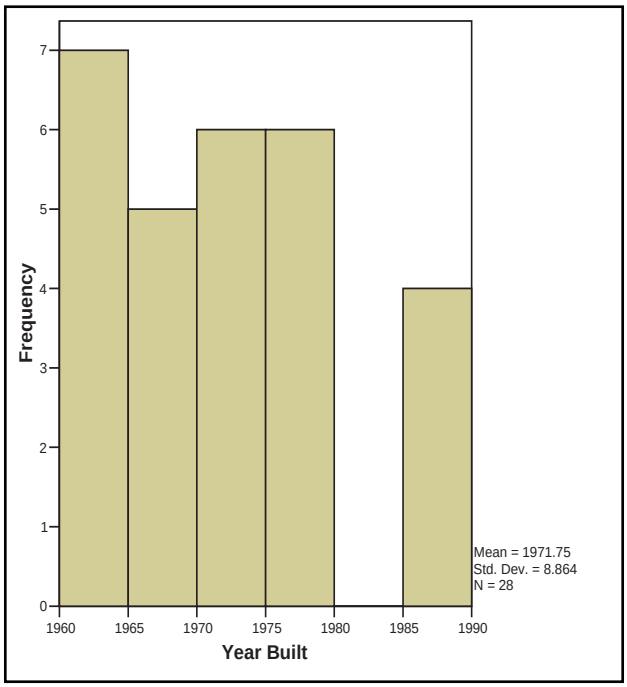


Figure A8-9. Building Age in Temple Hills/Marlow Heights

Source: CoStar

The warehouse buildings are generally well-maintained. The surface parking spaces are in poor condition, and nearby is a parcel of vacant land. It's likely there are environmental issues, such as fuel leakage and other contamination associated with the cement plant.

This area has a total of 29 industrial buildings. Eight of them are owner occupied. The majority of the businesses are warehouses. The site also includes one manufacturing plant, one cement plant, one truck terminal, and two auto repair businesses. Major tenants include Silver Hill Aggregates, Sun Auto Service, Paramount Cab, and McCrea Equipment Corporation. Cur-

rently, the percentage of leased building space is 89 percent with an average weighted rent of $7.90. In other words, the vacancy rates and rental rates are at about the county average.

Map A8-42. Aerial View of Temple Hills/Marlow Heights Industrial Sites

Source: CoStar

A small portion of the land and building is underutilized. Transportation access is relatively poor compared to other neighboring industrial zones. In addition, proximity to low- to medium-density, residential use and new development does not make this area ideal for heavy industrial activities. The conclusion is that it falls in Type 3: deindustrializing and transitioning. Other current uses can remain, but the Capital Beltway and adjacent residential uses preclude the site from expansion. It is suggested that proper rezoning should be considered if pressure from other uses arises in the area.

Oxon Hill

The site is located just south of Forest Heights, along the Beltway. Several commercial/office buildings line the streets immediately south of the site. There is a shopping center to its west and several apartment complexes to its east.

Oxon Hill Road, Indian Head Highway and the Beltway provide good arterial access to the area. The site is inviting to visitors. The buildings are well maintained. Even though Oxon Hill has a large supply of industrially zoned land, the area has only two active warehouse buildings. The two owners of the properties are U Store and Big Boy Toy in New York. Other land remains vacant.

Map A8-43. Aerial View of Oxon Hill Industrial Sites

Source: CoStar

The land use for Big Boy Toy is nonconforming. The land is used for its warehouse, according to CoStar Group data, and is zoned C-S-C, commercial shopping center. Considering its location and context, it is concluded that this area is Type 1. There is no need for immediate action; alternatives to industrial land uses should be entertained when the requests arise.

Map A8-44. Aerial View of Warehouse Space in Oxon Hill

Source: CoStar

Livingston–Fort Washington

The site of Fort Washington is located at the corner of Indian Head Highway and Livingston Road. There are very few industrial activities on this site except two owner-occupied warehouses from Fort Washington, LLC. None of the data sources provide further detail for this site. It is concluded that there is very weak demand in the Fort Washington subarea. Therefore it is Type 2: past/present weak demand.

Map A8-45. Aerial of Industrial Sites in Livingston and Fort Washington Area

Source: CoStar

Summary

This analysis builds on the earlier research indicating an excess of industrial zoned land countywide and seeks to identify specific areas where industrial land should be protected and areas where rezoning and transition to other uses may occur without adverse effects on the county's industrial sector. Map A8.46 summarizes the category for each industrial area in the county. The map shows some interesting patterns of healthy industrial area along the Beltway and near Andrews Air Force Base. Of the 35 industrial areas identified, 19 areas are considered strong, Type 5 areas, and these should probably be preserved and protected for current and future industry.

Type 4 industrial areas facing encroachment from other uses are concentrated in the northwestern portion of the county, particularly along US 1 and at Metro stations. These seven

Type 4 areas present the most challenging case. Should the county let the market take its course, or should some of these industrial areas be preserved?

In general, the areas with weaker demand—Categories 1, 2, and 3—are a distance from the major transportation arteries. Exceptions include the Capital Beltway and Suitland Parkway area in Subregion 7 and North Hampton Park in Subregion 3. Both are categorized as Type 1 industrial areas. Perhaps the proximity to residential areas makes both the Capital Parkway/ Suitland and the Hampton Park locations unattractive to industry. There are five Type 1 and Type 2 areas that should probably be considered for rezoning to other uses in the course of normal planning activities. Very few acres show up as Category 2 sites, deindustrializing with little to no demand from other uses.

The four Type 3 areas should probably be allowed to transition after further study. The four Type 3 sites comprise 17.6 percent of the industrial acreage and are located in more remote locations of the county, away from major transportation connections.

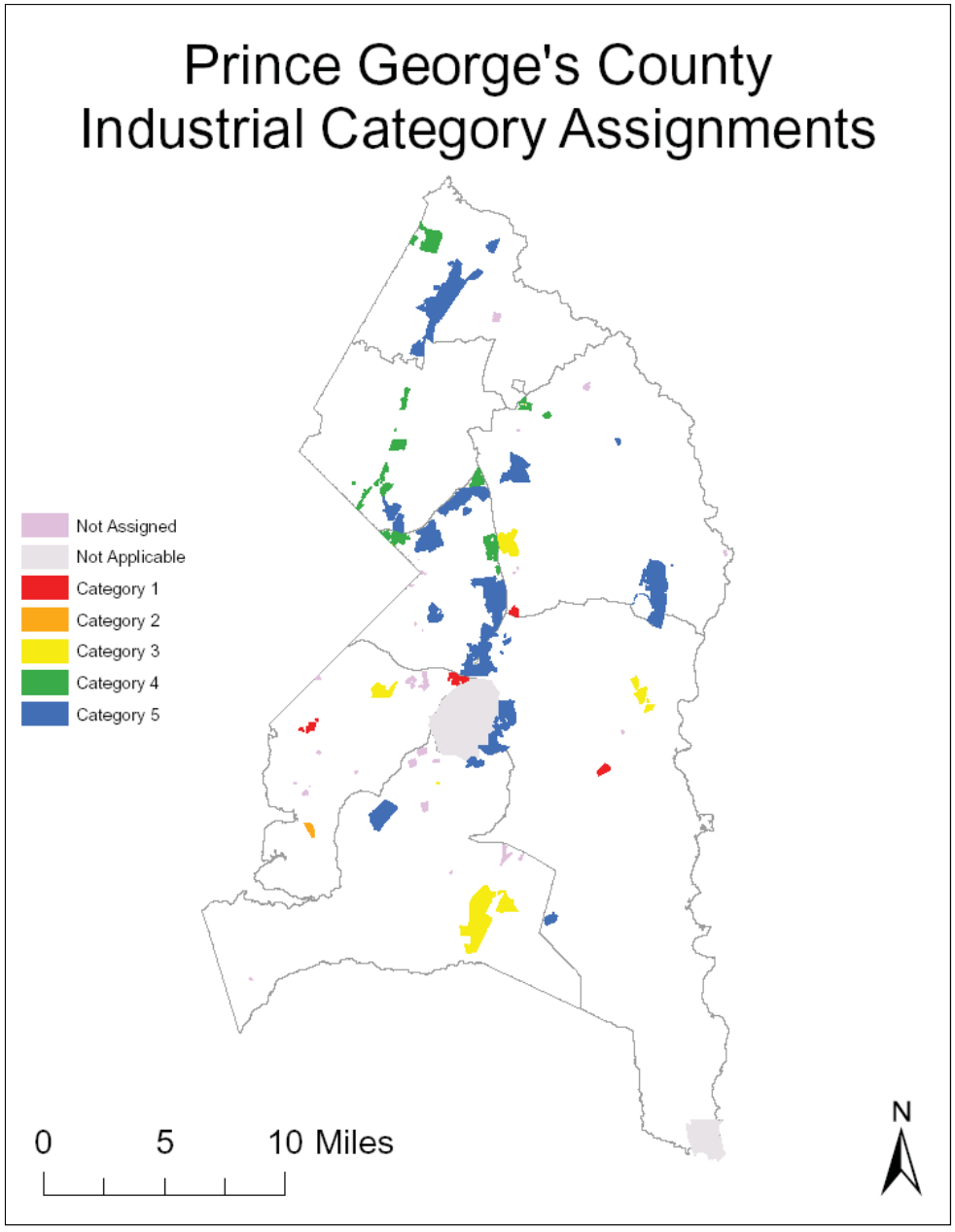
The acreage that falls into each category is shown in Table 8.11. While it is too early to recommend any firm results, the analysis suggests that roughly 25 percent of the county's industrial land falls into Categories 1, 2, and 3 and could be rezoned to other uses without serious impact on the county's industrial sector.

Table A8-11. Acres in Each Category

Category	Acreage	Percent
1	335	2.7
2	76	0.6
3	2,639	21.4
4	1,382	11.2
5	7,374	59.8
Other	518	4.2
Total	12,349	100
Rezone (1,2, and 3)	3,050	24.7

This analysis suggests that roughly two-thirds of the county's industrial areas may be adequately served by attentive but routine planning actions, while the remaining one-third of the industrial areas require further study and intensive planning attention. More detailed study of two of the Type 3 and 4 areas will be conducted over the coming months.

In the next phase of the study, the Appendix 6, Analysis, was merged with the results presented here. The objective is to find out where the strong and thriving industrial sectors correlate with the county's healthy industrial areas. This analysis will be augmented with strategically selected interviews with owners of industrial firms. These research activities will facilitate the development of more specific recommendations on county policy for specific industrial areas.



Map A8-46. Location of Industrial Land Use Categories

Source: M-NCPPC GIS data, 2007

Appendix 9. Developing Profiles of Selected Industrial Locations in Prince George's County[48]

Introduction

This report, "Developing a Profile of the Industrial Enterprises in Prince George's County," examines the county's industrial areas that have been classified as Category 4 in greater detail than in Appendix 8. Category 4 areas are designated as economically healthy and facing either market pressure or community pressure to transition to office, residential, and other land uses. In some cases there is conflict between neighbors and the healthy industrial areas. The Category 4 areas present the greatest challenges to and opportunities for the county. Category 4 areas are located in county planning Subregions 1, 2, 3 and 4 (listed in Table A9-1) and include 1,457 acres.

In these Category 4 areas, the county is faced with three broad options: (1) to protect the area's industrial activities; (2) to allow the market to take its course; or (3) to undertake a conscious strategy to promote innovation and long-run competitiveness through such initiatives as a high-technology economic development. These three options involve more than simple zoning solutions. For example, in option (1), the county will need to undertake urban design actions to buffer thriving industrial activities from residences.

Table A9-1. Category 4 Industrial Areas

Sub-Area	Acreage
Maryland 95 Corporate Park	397
University East	195
Hyattsville	189
Goddard Corporate Park	104
Kenilworth /US 50 Industrial	169
New Carrollton Metro	135
Landover Center	268

Source: Analysis in Appendix 8, 2008

This Appendix contains recommendations of policy options for the Category 4 areas. The recommendations are based on site analyses, interviews with industrial firm owners and other stakeholders, discussions with county community planners, and a review of methods used by

[48] This report was completed in March 2009.

other jurisdictions to determine when and where industrial land should be protected and methods used to protect industrial areas.

Review of Study Purpose

In 1975 the county commissioned a study of industrial land needs for the next ten years. The conclusion was that there was an insufficient reserve of industrial land in 1975 to meet the projected need. In response, the county aggressively zoned land for industrial use. However, when the county conducted a follow up study in 1984, the pace of industrialization had slowed. Though the additions to zoned industrial acreage were immediately reduced after 1984, by 2007 the county had created an excess of industrial-zoned land.

A calculation of the excess land was presented in Appendix 7, Chapter 2; however, due to the inclusion of Andrews Air Force Base and Chalk Point in the earlier calculations, the numbers are revised here to exclude Andrews and Chalk Point. The 2007 developed acreage of industrially zoned land without Andrews and Chalk Point was 6,371.8 acres. The total industrially zoned, but vacant, land in 2007 was 4,605.5 acres. An additional 1,373.1 acres were zoned industrial but not used as industrial. A total of 12,350.4 acres were zoned for industrial purposes as of 2007.[49] Using the county's rule of 3:1, the 1957–2007 land absorption rates, and the assumed continuation of this absorption rate over the next ten years, the county should keep 2,640 acres of industrial land in reserve. These 2,640 acres include the 1,373.1 acres that are zoned industrial but used for nonindustrial uses. In other words, the 2,640 acres assumes that the nonindustrial uses on industrial land will eventually close or relocate. If this is not the case, the county has an excess of 1,266.9 acres of industrially zoned land. (See Figure A9-1.) The black-striped area reflects surplus industrial land. The white-striped area shows perceived shortages.

Looking at the issue another way, if current development trends continue as they did over the 1957–2007 and 1984–2007 periods, and the county continues the current 1983–2007 trend of rezoning out of industry, the county will run out of industrial land between 2042–2046. (See Figure A9-2.) The earlier date assumes the 1,373.1 acres zoned industrial, but occupied by nonindustrial uses, remain and the later 2046 date assumes the nonindustrial uses on industrial land ultimately move out and leave this area to industry. The earlier date also extrapolates the faster 1984–2007 annual growth rate (turquoise) in industrial land demand, while the later date extrapolates the slightly slower 1957–2007 growth rate (pink).

[49] Not including Andrews Air Force Base and Chalk Point.

There are several reasons to expect future demand for industrial land to slow. Both nationally and locally, growth in the industrial sector has slowed, while the service sector has grown. (See Appendix 6 for more discussion.) Second, as the region prospers and the county's land values rise, firms become less land intensive, and when this isn't a possibility, on the margin, some firms will no longer be able to afford a Prince George's County address. Finally, the post-1950s growth trends reflect the decentralization of industrial employment out of Washington, D.C. Most industry has already decentralized, and so, this influx can be expected to slow.

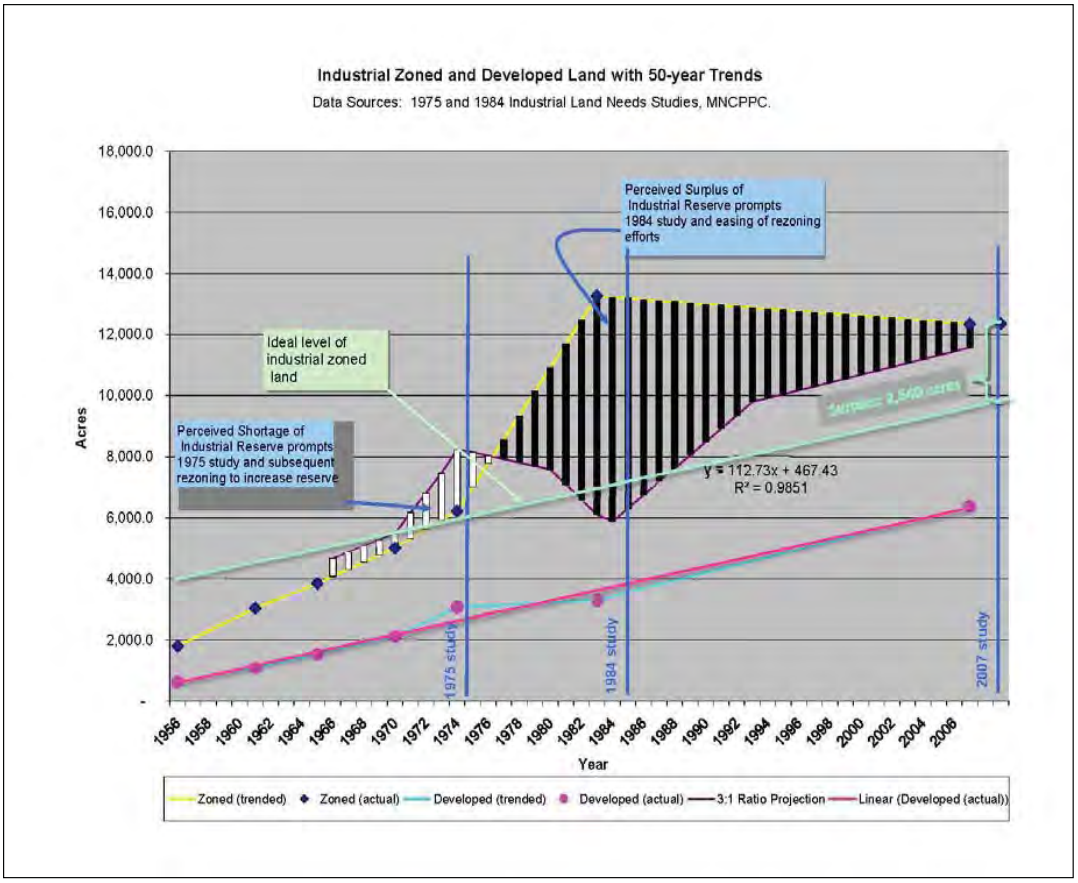


Figure A9-1. Industrial-Zoned and Developed Land with 50-Year Trends

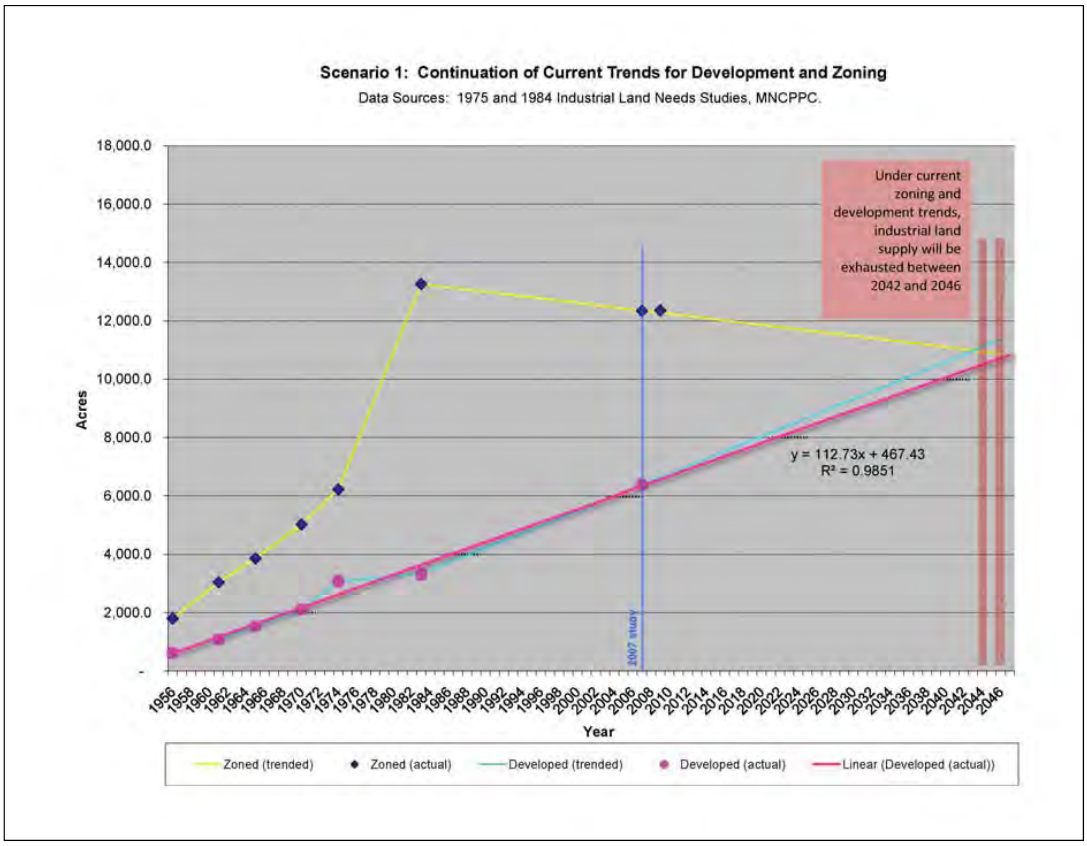


Figure A9-2. Land Demand If Current Trends Continue

Prioritizing Industrial Districts

In Appendix 8, the areas of industrially zoned land were analyzed to determine the economic health of each area. Measures of economic health included such data as land and building vacancy rates, building rent levels and change in building rents, time that rentals sat vacant on the market, rezoning requests, and the presence and strength of competing land uses. Each area was then classified into one of five categories. Category 1 applies to areas that had weak or no industrial demand, as indicated by surplus land and no industrial capital investment. Category 2 applies to areas that were deindustrializing or abandoned, i.e., exhibiting previous capital investment but current weak demand as indicated by high industrial/flex space vacancy rates. Category 3 applies to areas that are deindustrializing and transitioning smoothly to other uses, i.e., high industrial/flex building vacancy rates but capital investment and low vacancy rates in office space. In total, 3,050 acres of land were placed in Categories 1, 2, or 3. In other words, these are the highest priority sites to be rezoned out of an industrial use when demands for alternatives arise.

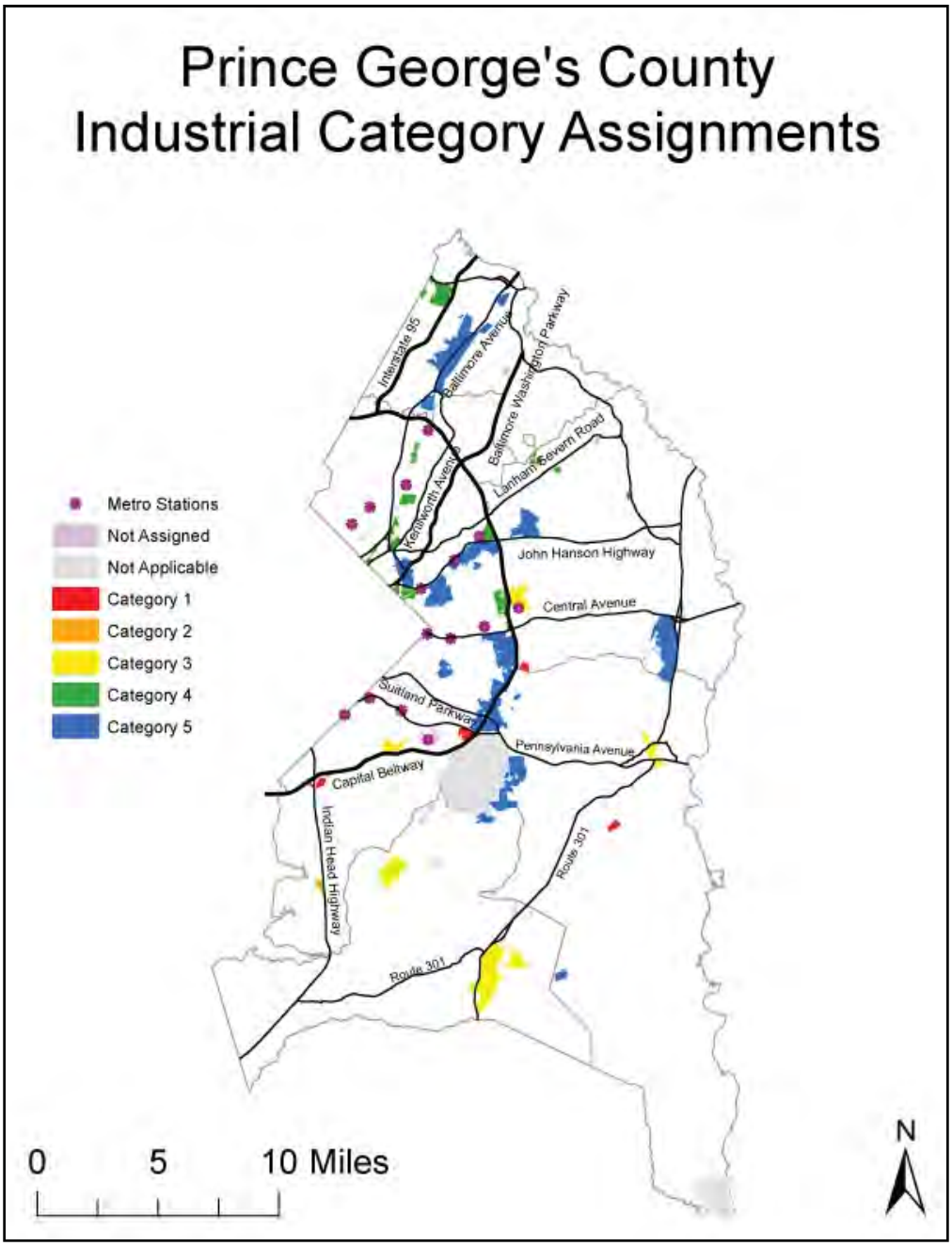
Table A9-2 summarizes the five categories of industrial land. The locations of these sites are shown in Figure 1-3.

Table A9-2. Categories of Industrial Health[1]						
	1	2	3	4	5	Total
Subregion	Weak or No Industrial Demand	Deindustrializing and Abandoned	Deindustrializing and Transitioning	Competitive Land Use Succession	Economically Healthy Industrial Areas	
1				1	3	4
2				2	2	4
3	1		1	1	4	7
4	1[2]			3	6[3]	9
5			1		1	3
6	1		2		2	4
7	2	1	1			4
Total	4	1	5	7	18	35
Condition	Past/Present weak demand	Past industrial demand; present weak demand for all uses	Industrial demand has weakened; other uses competing	Economically healthy industrial and strong/growing demand from other uses	Economically healthy industrial demand	
General Recommendation	Consider rezoning as part of next plan update	Address legacy issues (brownfields); consider rezoning as part of next plan update	Consider case-by-case for text amendments; address legacy issues (brownfields); consider rezoning as part of next plan update	Evaluate on case-by-case basis; allow transitions to office/mixed use where appropriate; focus on transportation (transit) and communications infrastructure	Protect industrial uses; maintain/improve infrastructure; encourage industrial development	

Notes:

[1] Piscataway was moved to Category 3 following an August 20, 2008 meeting with several Prince George's County community planners.
[2] Walkers Farm area has a small section with economically healthy PDR but a large undeveloped area for which there is no industrial demand. This area is recategorized as Category 1 to allow for rezoning out of industrial.
[3] The portion of Walker's Farm that has healthy activity should be kept in industrial and maintain its Category 5 status. (See Figure 9-1 and 9-2.)

Source: Analysis in Appendix 8, 2008



Map A9-1. Categories of Industrial Land

Source: M-NCPPC GIS data, 2007

Selection of Category 4 Sites

The methodology for allocating each industrial area to a category is described in detail in Appendix 8. Briefly, the areas considered as economically healthy—Categories 4 and 5—had above-county, average rents, below-county, average vacancy rates, below-county, average TOM

and growth in rents, and below-county, average age of buildings, i.e., evidence of new investment. Table A9-3 provides a summary of the countywide averages for these measures.

Table A9-3. Summary of Countywide Averages Used in Measures of Economic Health

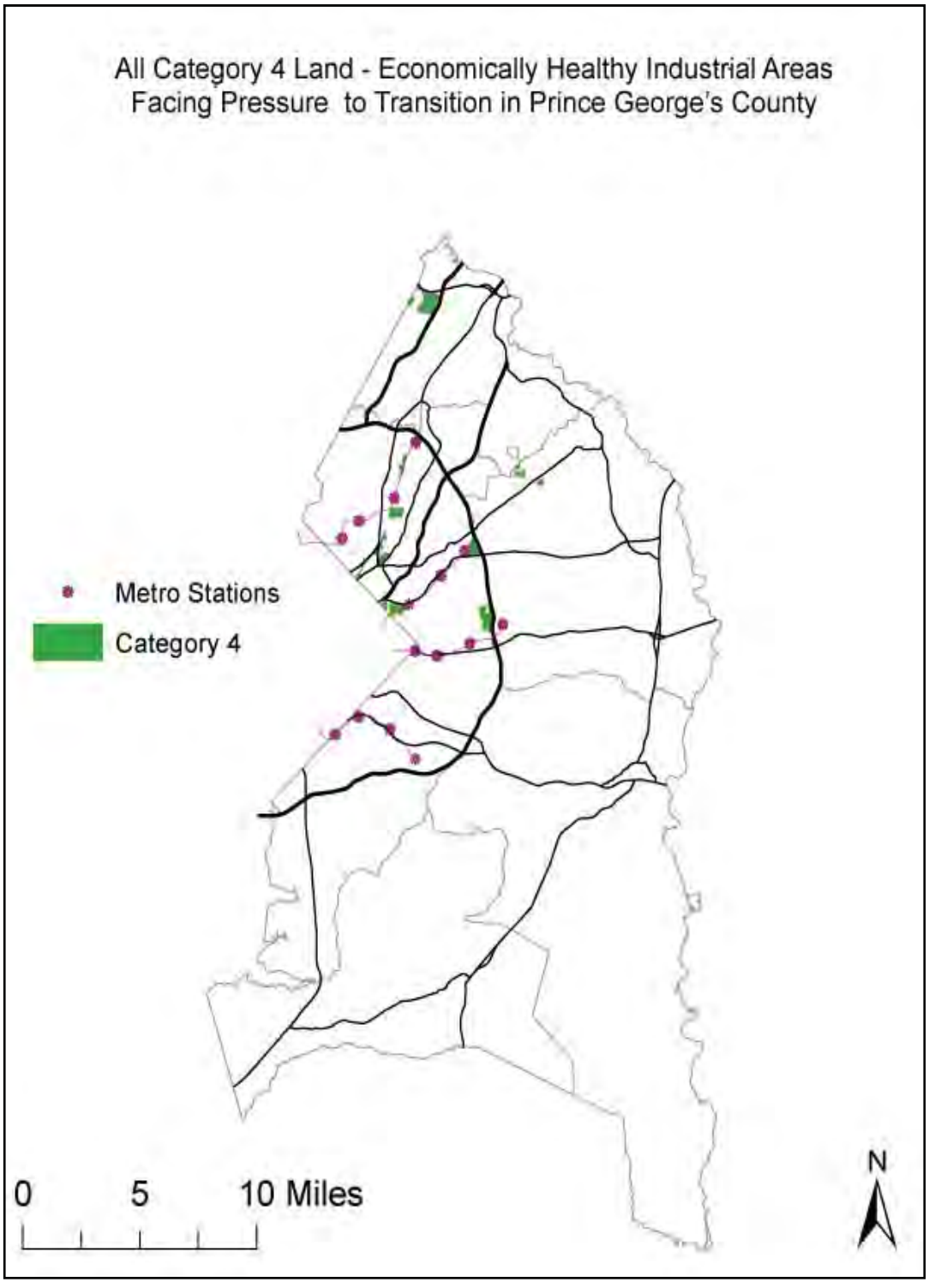
	County	Notes
Total Existing Industrial/Flex Buildings	1,343	1
Total Existing Industrial/Flex RBA (SF)	55,860,585	1,4
Industrial/Flex Space Vacancy Rate	14.1%	2
Avg. Industrial/Flex Building Age (years)	29.7	2
Avg. TOM for Industrial/Flex Space	27	2
Avg. Warehouse Rent	$6.04	3
Avg. Flex Rent	$10.67	3
Avg. Flex Vacancy Rate	17%	
Avg. Flex TOM (months)	24.2	3
Avg. Office Space Rent—All	$23.08	3
Avg. Office Space Vacancy Rate—All	18%	
Avg. Office Space TOM—All (months)	22.8	
Avg. Office Space Rent—Class A	$24.51	3
Average Office Space Vacancy Rate—Class A	26%	
Avg. Office Space TOM—Class A (months)	17.8	
Avg. Retail Rent	$18.84	3
Avg. Retail Vacancy Rate	5%	
Avg. Retail TOM for Office Space (months)	12.6	

Notes:

1. CoStar selection criteria include existing industrial and flex, owner and nonowner occupied.
2. CoStar selection criteria include existing industrial and flex, nonowner occupied only.
3. Triple Net Asking Rents, $/sf.; excludes operating expenses, property taxes and insurance, maintenance, repairs, and building alterations.
4. RBA = Rentable Building Area excludes circulation and common areas.

Source: CoStar, July 3 and August 30, 2008

The Category 4 areas show evidence of economically healthy uses but competing market demand from residential, office, or retail uses or conflicts with residents. A map of the Category 4 sites is shown in Map A9-2. These Category 4 areas present the greatest planning challenges for the county.



Map A9-2. Category 4 Industrial Areas

Source: M-NCPPC GIS data, 2007

Production, Distribution, and Repair (PDR)

From here on, the definition and nomenclature from "industrial sectors" is revised to PDR. This is being done for two reasons. First, the industrial sector definition used in previous Appendices included only construction, manufacturing, transportation and warehousing, and wholesaling. This definition excludes a number of activities that are pervasive, important, and appropriate in Prince George's industrial districts. From the visual inspection and interviews, it became clear that auto repair services, data processing, waste management, internet providers, printing services, and laundry services are just some of the important jobs and industries missing in the prior definition of industrial uses—construction, manufacturing, transportation and warehousing, and wholesaling—and are activities that are clearly compatible with industrial zoning.

Accordingly, the definition is being broadened to include PDR that includes some services and retail activities appropriate for industrially zoned land and that play an important function in the economy of Prince George's County. Moreover, the term PDR is used in several other influential industrial, land use studies. Therefore, the results are now more consistent and comparable to the industrial land studies conducted in Washington, D.C., San Francisco, and Seattle.[50] This new industrial definition is used in the analysis that follows.

Quarterly Census of Employment and Wages (QCEW)

The QCEW (or formerly ES-202) Program derives data from quarterly tax reports submitted to the state by employers subject to unemployment insurance laws. The QCEW database provides information on employment by enterprise at the address level of geographic detail. One disadvantage of the QCEW is it does not include small farms, self-employed non-agricultural workers, unpaid family workers, and agents paid solely by commission. The advantage of this dataset is that all other wage paying establishments located within industrial areas in the county can be identified. Also, the number of employees in the establishment and its line of business can be determined. However, to comply with the Maryland Department of Labor, Licensing, and Regulation's requirement for protecting firm confidentiality, the exact employment count for a given NAICS class, when there are fewer than three establishments in an area in that NAICS class or when employment of one establishment accounts for more than 80 percent of the count,

[50] Industrial Area Design Guidelines, San Francisco Planning Department, August 2001; Industrial Lands Survey, Investigation of Comparable Cities, City of Seattle, Department of Planning and Development, 2005; Industrial Land in a Post Industrial City, District of Columbia Land Use Study, District of Columbia, Office of Planning, August 2006.

is withheld. In those two cases, data ranges similar to the County's Business Patterns (CBP) data are reported

Tables A9-4 and A9-5 show the summary for businesses in all Category 4 industrial areas in the county. The activities shown in Table 1-4 are the activities that are consistent with the earlier definition of industrial activities, including Construction, Manufacturing, Transportation and Warehousing, and Wholesaling. The activities in Table A9-5 are now added to create a new definition of PDR activities. In other words, the activities shown in Table A9-5 were not included in the earlier definition but will be included from here on. During the course of visits and interviews in Prince George's industrial areas, it was noted that excluding these services would be an oversight. They are important activities found on industrially zoned land in Prince George's County and particularly relevant to this Appendix, as they are located in some Category 4 districts and likely to become increasingly important with time.[51]

Table A9-4. Activities Found in Category 4 Industrial Areas, Number of Employees, Establishments, and Share of County Employment and Establishments in the Last Quarter of 2007. Using the Definition of Industrial Employment in Appendices 7, 8, and 9.

NAICS	Industry	Employment in Category 4 Areas	Establishments in Category 4 Areas	Percent of County Employment in NAICS Class	Percent of County Establishments in NAICS Class
236	Construction of Buildings[2]	45	11	1	2%
237	Heavy and Civil Engineering Construction***2	161	4	6	4%
238	Specialty Trade Contractors*[2]	2027	76	8	6%
312	Beverage and Tobacco Product Manufacturing	20-100	1		
313	Textile Mills	0-19	1		
321	Wood Product Manufacturing[2]	0-19	1		
322	Paper Manufacturing	0-19	1		
323	Printing and Related Support Activities1	195	8	8	8%
327	Nonmetallic Mineral Product Manufacturing***[2]	0-19	1		
332	Fabricated Metal Product Manufacturing***[2]	175	5	18	15%
335	Electrical Equipment, Appliance, and Component Manufacturing***[2]	0-19	1		
336	Transportation Equipment Manufacturing	500-999	2		
337	Furniture and Related Product Manufacturing[2]	0-19	3		
339	Miscellaneous Manufacturing1	70	3	18	8%

[51] The employment and establishment totals for the whole county can be provided upon request.

423	Merchant Wholesalers, Durable Goods*[2]	684	18	10	4%
424	Merchant Wholesalers, Nondurable Goods[2]	86	6	2	3%
425	Wholesale Electronic Markets and Agents and Brokers[2]	19	6	3	6%
484	Truck Transportation2	182	7	10	3%
488	Support Activities for Transportation**[1]	7	4	1	5%
491	Postal Service	20-100	2		
492	Couriers and Messengers	101-499	1		
493	Warehousing and Storage**[2]	0-19	2		

Notes:

*Among top ten major employers of all industries with valid data in the county in 2005 (see Appendix 6).
** Among top ten growing industries of all industries in the county with valid data 1990–2005 (see Appendix 6).
***Among top ten declining industries of all industries in the county with valid data 1990–2005 (see Appendix 6).
[1] Among industries that gain competitive advantage in the D.C. region.
[2]Among industries that lose competitive advantage in the D.C. region (see Table 4-5 Appendix 6).

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

That is why, from this point on, the term PDR is used, and the service and retail activities are added as shown in Table A9-5. The data in those tables show that more than 40 percent of the county's internet service providers and data entry employment is in Category 4 areas and concentrate in one company, and more than 50 percent of transportation equipment manufacturing employment is located in Category 4 industrial areas.

Table A9-5. Additional Category 4 Activities Added to the Definition: Number of Employees, Establishments, and Share of County Employment and Businesses in the Last Quarter of 2007, Using the Broader Definition of Industrial Employment

NAICS	Industry	Employment in Category 4 Areas	Establishments in Category 4 Areas	Percent of County Employment in NAICS Class	Percent of County Establishments in NAICS Class
221	Utilities	20-100	1		
444	Building Material and Garden Equipment and Supplies Dealers[2]	23	5	1	4
511	Publishing Industries (except Internet)[1]	80	5	6	10
517	Telecommunications[1]	0-19	2		
518	Internet Service Providers, Web Search Portals, and Data Processing Services2	101-499	1		
562	Waste Management and Remediation Services[2]	855	5	39	6

811	Repair and Maintenance[2]	253	37	7	7
812	Personal and Laundry Services[2]	704	3	16	1

Notes:

[1] Among industries that gain competitive advantage in the D.C. region.
[2] Among industries that lose competitive advantage in the D.C. region.

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Identifying Industrial Districts for Transition versus Preservation versus Upgrading

The focus of this appendix is to examine the Category 4 industrial areas—those that are economically healthy and facing pressure from competing land uses—and to determine whether the county's best strategy for each area is industrial preservation, transition to other uses, or upgrading to a more innovative, competitive employment district. The criteria used to decide on the best strategy are summarized in Table A9-6. A recommendation for protection is based on a combination of attributes, rarely just one. These criteria are described herein.

Protection of Industrial Area

The attributes that favor protection include areas where PDR activities are critical to the county's economic health.

1. The term "important to the county's economic health" is defined as districts with a concentration of firms that are growing, paying high wages absolutely or relative to skill levels, supporting a large number of county residents, and are central to the direction that the county would like to move in the future, i.e., biotechnology.

2. A criterion for protection is when the area is home to large and important county employers. There may be both economic and political reasons to preserve these areas as industrial.

3. A factor that favors protection is a location where firms provide important inputs to other vital industries in the county. For example, if a location provides necessary, low cost inputs or nurtures startups to the county's growing high technology sectors, then preservation may be in order.

4. A criterion arises when the surrounding land is home to PDR activities that will be incompatible with the direction of the transition, i.e., a residential land use that will be

incompatible with the activities on the perimeter. Friction between incompatible uses involves complaints about visual blight, pollution, noise, and truck traffic during rush and night hours.

5. Preserving some PDR areas facing pressure to transition—through implementation of buffering and other strategies—can avoid additional neighborhood conflict in the future.

6. A justification for preserving a Category 4 area as industrial could be the site has a history of contamination. The costs of cleanup for non- industrial uses may be prohibitive, and therefore, the area is best left as industrial.

7. The final criterion is a location used and needed for municipal services, such as a recycling yard, that is difficult to locate elsewhere.

To summarize: the methodology for determining optimal land use policy in Category 4 areas is to examine the physical environment of the industrial area, including surrounding uses, to use the QCEW to determine the industrial activities in the area and to conduct interviews with county officials, businesses, and citizens. See Table A9-6.

Table A9-6. Summary of Criteria for Evaluating Category 4 Industrial Areas

Criteria	Description	Do Conditions Favor Protection?	Do Conditions Favor Conversion?	Notes
Zoning	Does current zoning allow for non-PDR uses?	No. This would include I-1, I-2, I-4	Yes. This would include I-3, M-X-D, E-I-A.	This criteria is contextual, not definitive.
Transit	Within 1/3 mile of existing or proposed Metro station?	No	Yes	
Physical Characteristics & Marketability	Site characteristics, parcel size and configuration, building size, age and configuration, surrounding development patterns, transportation access (freight), etc.	Area is attractive to PDR given current and expected market trends in site selection.	Area is difficult or expensive to develop for PDR, given current or expected PDR site selection criteria.	
Separation of Uses	Are the uses within the area predominantly PDR, and are they well separated from non-PDR uses?	Yes	No	
Impact of Non-PDR development on Adjacent PDR Uses	If some of the land was developed as non-PDR, would it significantly impact the adjacent PDR uses?	Yes	No	

Table A9-6. Summary of Criteria for Evaluating Category 4 Industrial Areas				
Criteria	**Description**	**Do Conditions Favor Protection?**	**Do Conditions Favor Conversion?**	**Notes**
Rent	Are rent levels in the area stable and affordable for PDR?	Yes. Average rents fall within the range of county averages.	No. Rents have escalated to the point where they may negatively affect PDR operations.	
Industry Linkage	Are there significant linkages among PDR industries in the area?	Yes	No	
Existing and Projected Employment	Does the area employ a significant number of county residents and pay family sustaining wages? Are PDR firms in the area growing or demonstrating particular competitive advantage?	Yes	No	
Employment Transition	Will conversion to other uses create more jobs at family sustaining wages than it displaces?	No	Yes	
Public Facilities	Are existing public facilities (schools, etc.) adequate to service new development due to conversion, or will the development provide additional facilities?	No	Yes	
Environmental/ Public Health Impact	Do the environmental impacts (contamination, noise, air pollution, etc.) adversely impact the surrounding area, particularly residential or "sensitive receptor" land uses?	No	Yes	"Sensitive receptor" land uses include schools, day care centers, nursing homes, hospitals etc., where sensitive populations like children and seniors are concentrated.
Brownfield Impacts	Is the known or suspected contamination of the area such that cleanup, to the standards required for residential or mixed use, would be prohibitively expensive?	Yes	No	

Table A9-6. Summary of Criteria for Evaluating Category 4 Industrial Areas				
Criteria	**Description**	**Do Conditions Favor Protection?**	**Do Conditions Favor Conversion?**	**Notes**
Economic Impact of PDR Uses	Are the PDR uses within the area significant base sector uses? Do they employ a significant number of local residents and/or generate significant (economic) export activity?	Yes	No	
Critical Uses	Are the PDR uses within the area critical in supporting base sector uses or municipal functions?	Yes	No	
Land Use Succession	Has significant conversion to other uses already happened, either through market forces in permissive zoning areas or through text amendments?	No	Yes	
Potential for PDR Expansion	Would protection of the area for PDR create realistic opportunities for PDR expansion of existing firms as an alternative to relocation?	Yes	No	
Building Type/ Building Context Alignment	Is there good alignment between the PDR building types found in the area and the surrounding context?	Yes	No	Based on San Francisco industrial design guidelines, types/ context includes industrial, mixed use, and residential.
Proximity to Resources of Extraordinary Value	Is the area close to important human resources or specific infrastructure (such as rail, highways, etc.), where such proximity is essential to the operation?	Yes	No	

Retention of Current Zoning and Policy

In many Category 4 areas, current zoning is working. In some of these cases, PDR activities are successfully operating side-by-side with office uses, and in other instances, the demand for office, residential, or other nonindustrial uses are slowly outbidding the PDR activities, and the county should let market forces prevail. In this second instance, these are locations where the PDR activities are economically healthy but less critical to the county's economic future, i.e., declining county sectors, low wage jobs, or a high proportion of employees residing outside of the

county. The method of drawing conclusions on appropriate land policy is to examine the PDR activities and their surrounding land uses, examine CoStar and other relevant data, and interview public officials, business owners, brokers, and citizens.

Thus, it is proposed that current policies/regulations for two different cases are retained because current policy is working. In one case, the area's PDR activities are operating compatibly with office uses. In the second case, conflict between uses is evident, but the best strategy is to let the market take its course, and gradually let the area shift out of industrial. At some future date, the county may want to change the zoning. It is recommended that large scale changes are avoided here to minimize existing businesses' concerns and offer greater flexibility for landowners contemplating land use options.

Upgrade Area to High Technology PDR Centers

Local governments around the county are taking advantage of national growth in high-technology employment. High wages, good jobs, and tax revenues make the high-technology sector a focus for economic development efforts across the county. For example, a 2002 study reported 36 states and 77 local governments targeting the biotechnology industry in economic development plans in 2000.[52]

Prince George's County has major advantages in high technology sectors, especially biotechnology and aerospace industries. The advantages include proximity to the University of Maryland, College Park; Goddard Space Flight Center; U.S. Census Bureau; and the USDA, Agricultural Research Service. The county is located between the John's Hopkins and University of Maryland medical centers in Baltimore and the National Institute of Health, National Institute of Standards, and the Shady Grove LSC in Montgomery County. Both of these neighboring jurisdictions are shorter on accessible industrial sites than is Prince George's County. Prince George's County has transportation advantages with 15 Metro stations and I-95. Thus, in three Category 4 locations, the recommendation is to establish an environment that encourages high-quality office, mixed land use, incubator space, and light industrial activities.

The seven Category 4 industrial areas include locations shown in Table A9-7. These are the same locations shown in Map A9-3. Because of the diversity of industrial conditions in Hyattsville and University East, these areas are subdivided into smaller industrial areas.

[52] The Signs of Life: The Growth of Biotechnology Sectors in the U.S., Cortright, Joseph and Heike Mayer, The Brookings Institution, Center on Urban and Metropolitan Policy, 2002.

Table A9-7. Category 4 Industrial Areas	
Sub-Area Name	**Acreage**
Maryland 95 Corporate Park	397
University East	195
College Park Metro	129.9
University East	63.9
Hyattsville	189
Edmonston	45.6
Bladensburg	73
Brentwood	52.4
Cottage Hill	18
Goddard Corporate Park	104
Kenilworth/US 50 Industrial	169
New Carrollton Metro	135
Landover Center	268

Source: Analysis in Appendix 8

Industrial Zoning Categories

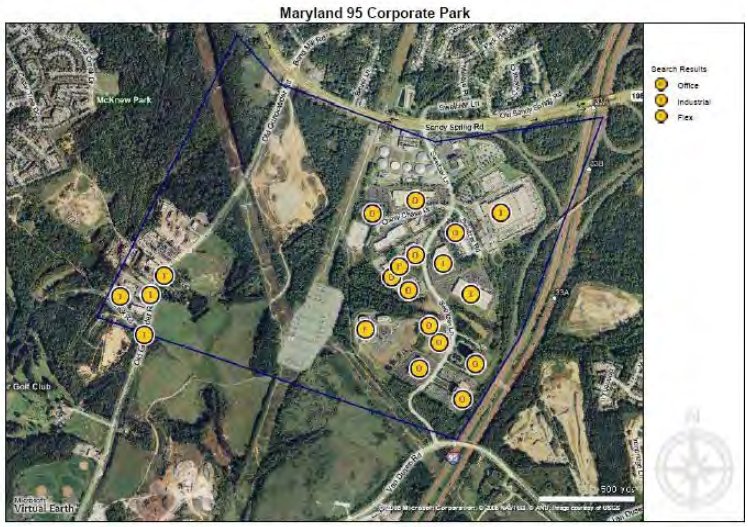
Prince George's County's industrial zoning categories include:

- I-1 Zone (light industrial);
- I-2 Zone (heavy industrial).
- I-3 Zone (planned industrial/employment park);
- I-4 Zone (limited intensity industrial);
- U-L-I Zone (urban light industrial);

The next chapters address the issues with each of the seven Category 4 subareas.

Maryland 95 Corporate Park (397 Acres)

This industrial area is located adjacent to I-95. It is bounded to the north by Sandy Spring Road, to the west by Old Gunpowder Road, and to the south by Van Dusen Road. Properties located on this site include 7 industrial buildings, 2 flex buildings, and 12 office buildings. Many of the industrial facilities are warehouses, including a property owned by UPS.



Map A9-3. Industrial, Flex, and Office Buildings in the Maryland 95 Corporate Park Area

Source: CoStar, January, 2009

Along Old Gunpowder Road and Minnock Road there are several older businesses, including auto repair shops and a gravel yard. There is a mining operation on Old Gunpowder Road, just south of Sandy Spring Road. The property just to the south of this property is an electrical switching

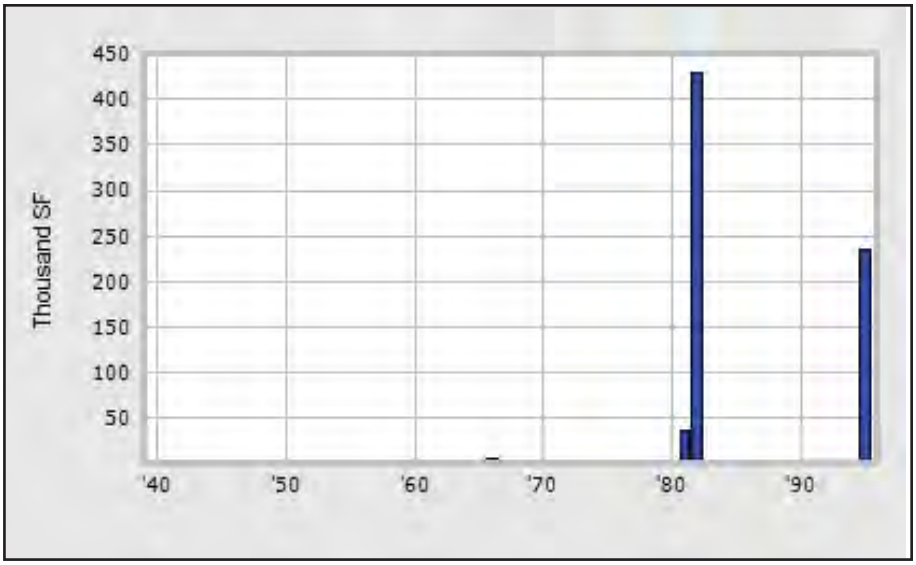


Figure A9-3. Industrial, Flex, and Office Buildings in the Maryland 95 Corporate Park Area

Source: CoStar, January, 2009

station, and to the east, there is a water treatment facility. Three newer industrial buildings and one flex building are located on the west side of this site, just off of Sweitzer Lane and just east of I-95. (See Map A9-3.) The office buildings are on the west side of the area, along Sweitzer Lane, Chevy Chase Drive, and Frost Place.

The industrial building vacancy rates are low relative to the county averages, and rents are higher than the county average. Industrial rents are $10.90 per square foot, compared to $6.04 countywide, and have increased significantly in the past two years. The flex space vacancy rate is 31 percent in two buildings, compared to a county average of 17 percent. Although the vacancy rate is higher than average, so are the rents: $12.95 per square foot in MD 95 Corporate Park versus $10.67 in the county (see Tables A9-3 and Figure A9-4). The office buildings in this area have slightly below-average rents but extremely low-vacancy rates and relatively shorter periods on the market when vacancies become available. The office rental rate in the area is $21.42, compared to $23.08 for the county. The office vacancy rate is 10 percent compared to the county average of 18 percent. TOM in the area is 19.4 months, versus 22.8 months for the county average. The area is zoned I-3 and clearly is transitioning to an office-oriented area.

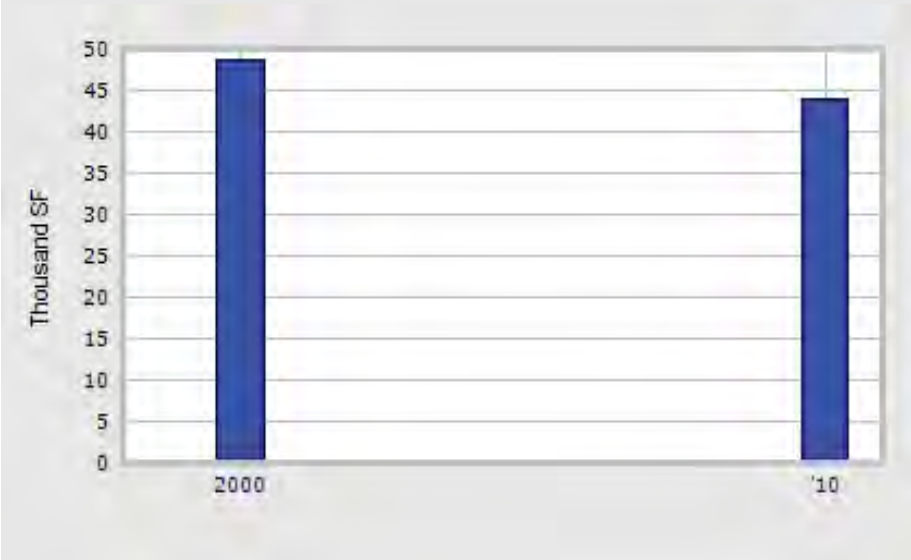


Figure A9-4. Deliveries of Flex Space, MD 95 Corporate Park

Source: CoStar 2008

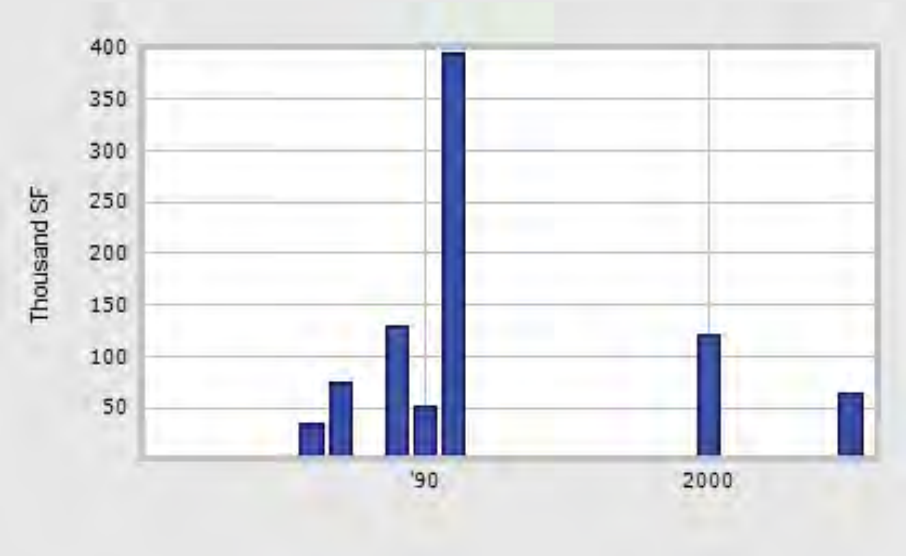


Figure A9-5. Deliveries of Office Buildings, MD 95 Corporate Park

Source: CoStar 2008

The age of the buildings clearly shows the transition from industrial (Figure A9-3) to flex (Figure A9-4) and office (Figure A9-5). The flex and office space is newer than the industrial space, and the last industrial building was delivered in 1994, more than 14 years ago.

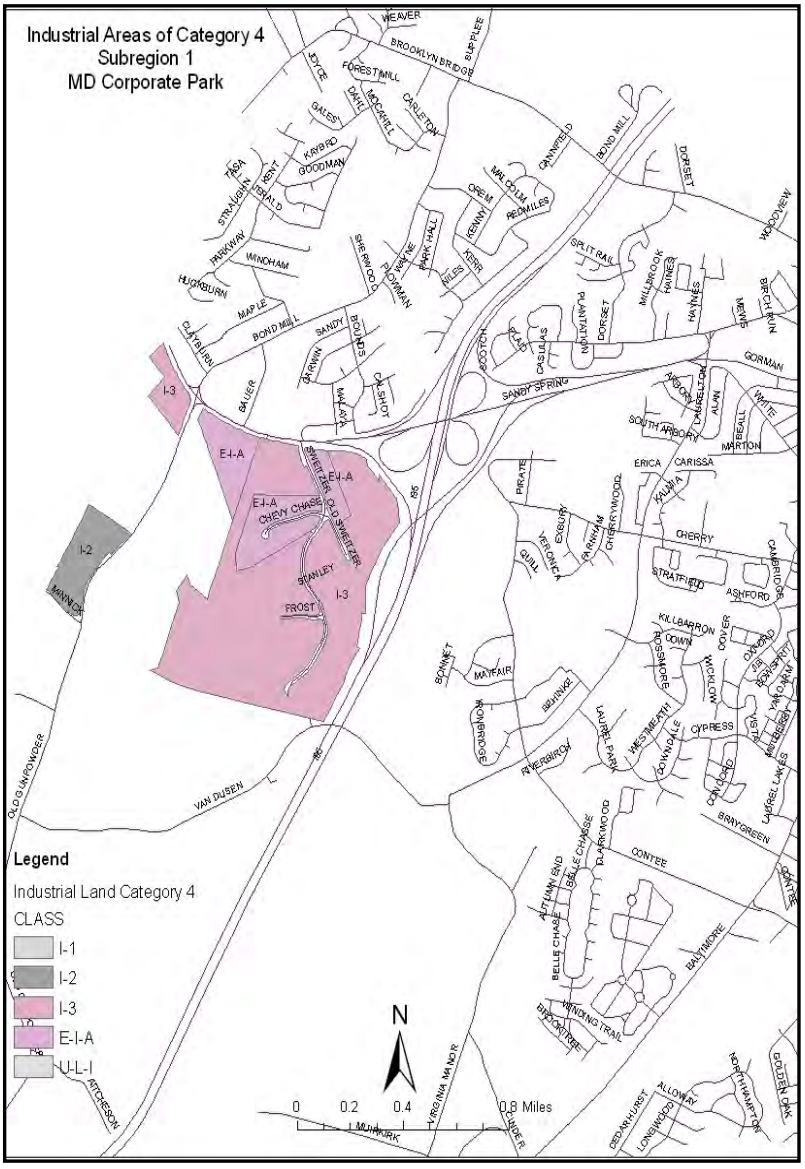
The current location near the interstate and county I-3 zoning make this area attractive to a variety of industrial businesses, as well as office space (Map A9-4). Also, the presence of mining and large infrastructure, such as the electrical station and I-2 zoning on the east, may make the area less attractive for residential development and, therefore, suitable for industries that prefer to locate away from housing developments.

Table A9-8. Statistics for MD 95 Corporate Park

	Flex[a]	Industrial	Office[b]	Office Class A
Number of Buildings	2	7	12	5
RBA	48,860	722,711	870,947	643,098
Average TOM	17.4 mos.	8.1 mos.	19.4 mos.	17.8 mos.
Vacancy Rate	31%	1%-no new construction	10%-no new construction	9%
Average Rent	$12.95	$10.90[c]	$21.42	$21.39

[a]=based on 1 property
[b]=based on 11 properties
[c]=triple net asking rent per sq. ft.

Source: CoStar, January 2, 2009



Map A9-4. MD 95 Corporate Park Zoning

Source: M-NCPPC GIS data, 2007

PDR Employment

According to the QCEW dataset, there are 17 PDR businesses in MD 95 Corporate Park. Employment and number of establishments,[53] according to the QCEW data, are shown in Table A9-9. The data show that waste management and remediation services and merchant wholesalers durable goods account for more than 75 percent of the area PDR employment. However, a lot of

[53] Interviews and site visits indicate that the QCEW data is missing a number of firms.

employment concentrates in a small number of firms. Non-PDR employment hires more workers than does PDR employment in this area.

Table A9-9. Maryland 95 Corporate Park-PDR Employment

Industry	Employment	Establishments
Utilities	20-100	1
Specialty Trade Contractors	50	4
Printing and Related Support Activities	20-100	1
Nonmetallic Mineral Product Manufacturing	1-19	1
Miscellaneous Manufacturing	1-19	1
Merchant Wholesalers, Durable Goods	101-499	2
Wholesale Electronic Markets and Agents and Brokers	1-19	1
Warehousing and Storage	1-19	1
Waste Management and Remediation Services	500-999	2
Total PDR Employment	1,133	17
Total Non-PDR Employment	1,894	28
Total Employment	3,027	45

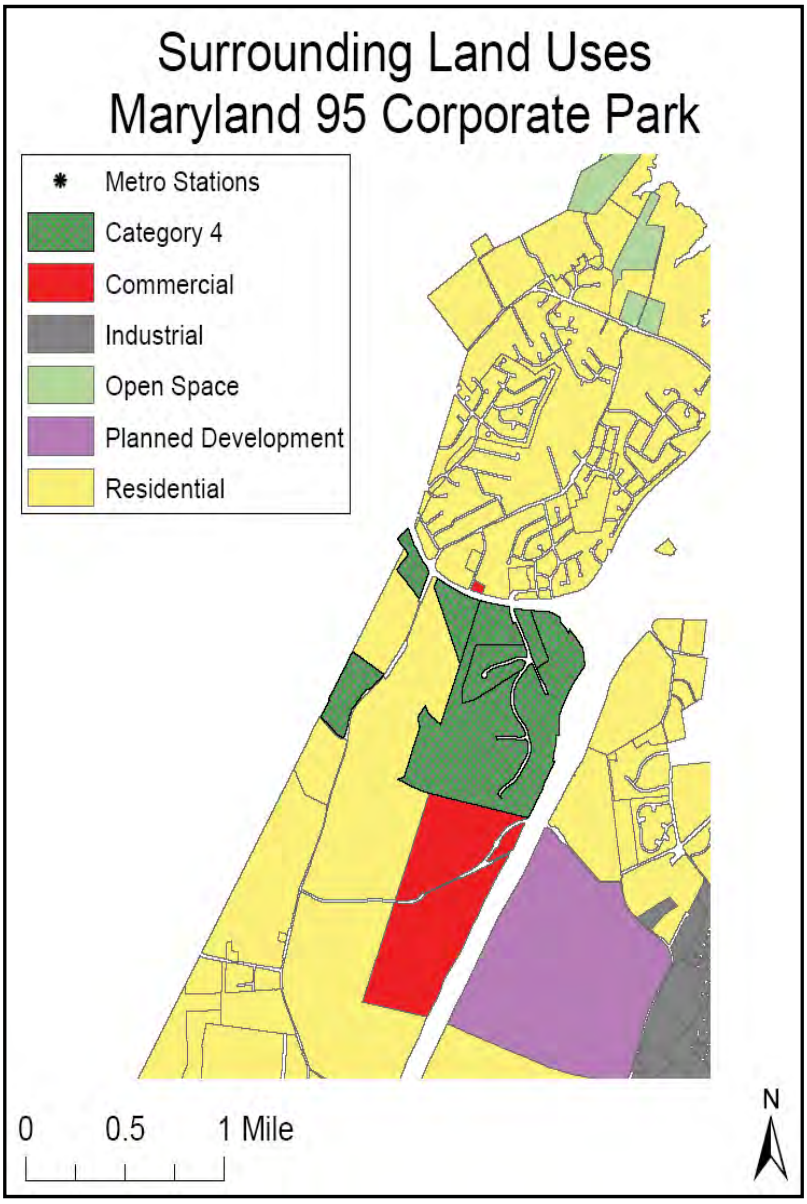
Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Brownfields

An evaluation of EPA and MDE data indicates there are no brownfields in this industrial area.

Surrounding Land Uses

Map A9-5 shows that the surrounding land uses are primarily retail and residential activities.



Map A9-5. Land Uses of Maryland 95 Corporate Park-Surrounding Areas

Source: M-NCPPC GIS data, 2007

Recommendation for MD 95 Corporate Park

Our recommendation is to allow the transition out of the land-intensive industrial activities in this location and transition to a higher-density, job-intensive R&D, high-technology, first-class office environment. The location has many advantages that suggest that this could be one of the county's premier PDR high-technology employment centers for the future. The site is near the Goddard Space Flight Center and is already home to a Lockheed Martin facility. The site

is just north of the planned Konterra development, a town center on nearly 500 acres, consisting of 4,500 residential units and 5.9 million square feet of commercial, retail, and office space. In addition, the MD 95 Corporate Park site is just north of where the InterCounty Connector (ICC) will end, positioning it as a key regional transportation hub. Map A9-6 shows the planned ICC interchange at I-95. MD 95 Corporate Park is just north, on the east of I-95. This site will continue to be an attractive office market/office flex space center, which is likely to displace some of the less profitable industrial activities on Minnick Road.

Map A9-6. ICC Alignment

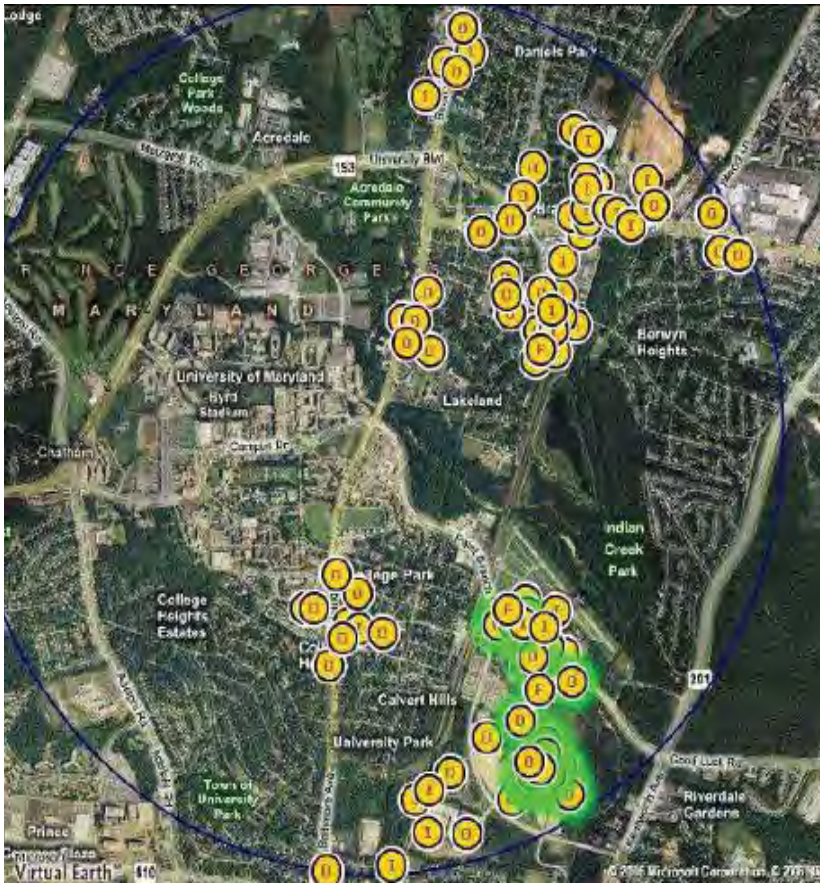
Source: http://media.washingtonpost.com/wp-srv/metro/graphics/icc_071205.pdf .Retrieved on January 2, 2009.

There are a number of acres zoned residential in the middle of this site but not developed (see Map A9-5). While it has been determined that the county has an excess of industrial land, it is recommended that the county consider rezoning of this area from residential to a category that allows light manufacturing, R&D, commercial, and office. The county is in need of high quality R&D sites, and this location—with access to Baltimore, Montgomery County, and the District of Columbia—is a prime location for high quality development.

University East (195 Acres)

This area includes healthy but aging industrial, with relatively high rents, at $11.60 for warehousing (compared to $6.04 for the county average), and an emerging office sector as shown by the (O) sites in Map A9-7. The indicators suggest that industrial land in this area may be poised for transition to more intensive office and R&D uses. The CoStar data show that the

industrial/flex space is in strong demand, with only an average of nine months on the market, compared to 63 months on the market for office space. (See Table A9-10.)



Map A9-7. Aerial Ivew of Industrial and Flex Buildings in the University-East Area

Source: CoStar, 2008

Table A9-10. Statistics for University East

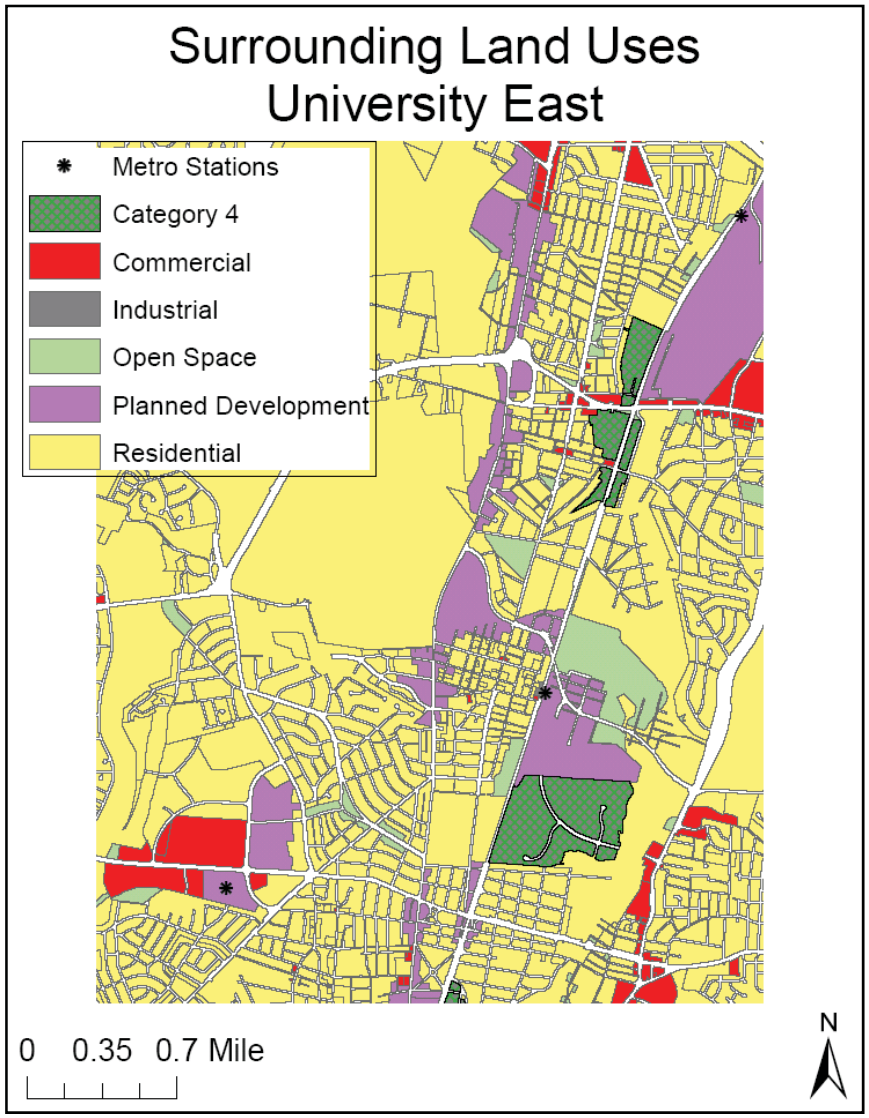
	Industrial/Flex	Office
Total Existing Buildings	36	46
Total Existing RBA (SF)	1.3 Million	1.6 Million
Avg Bldg Age (Yrs)	40	27.5
Buildings proposed or under Construction	0	14
TOM (months)	9	63

Source: CoStar data, August 30, 2008

Surrounding Land Uses

The land surrounding both the Berwyn/Branchville Road and M Square areas is primarily residential in nature. (See Map A9-8.)

Building on the initial assessment of the University East area, it was determined that further detail was warranted. Therefore, the area was divided into two sub-areas: the M Square area in the vicinity of the College Park Metro Station, and the Berwyn Road/Branchville Road areas along the rail line both north and south of Greenbelt Road.



Map A9-8. Land Uses in University East-Surrounding Areas

Source: M-NCPPC GIS data, 2007

M Square

The M Square area includes 357 acres of land under I-3 and Mixed Use Transit (M-X-T) zoning classifications. See Figure 3-3. Of this, 226 acres are zoned M-X-T, comprising the northern half of the area known as M Square. M-X-T zones are not included in this study's total

of industrial land because of the wide flexibility of uses allowed under this category (including industrial/R&D/institutional). While not counted toward the industrial land total, these 226 acres are, nonetheless, predominantly industrial in nature and largely builtout. The southern half of the M-Square area is zoned I-3 (130 acres). This area is counted toward the industrial land total. It is largely undeveloped or awaiting redevelopment. Data reported herein represent the entire M Square area, because of the contiguous nature of the area in terms of development. (See Table A9-11)

Map A9-9. Aerial View of M Square Site

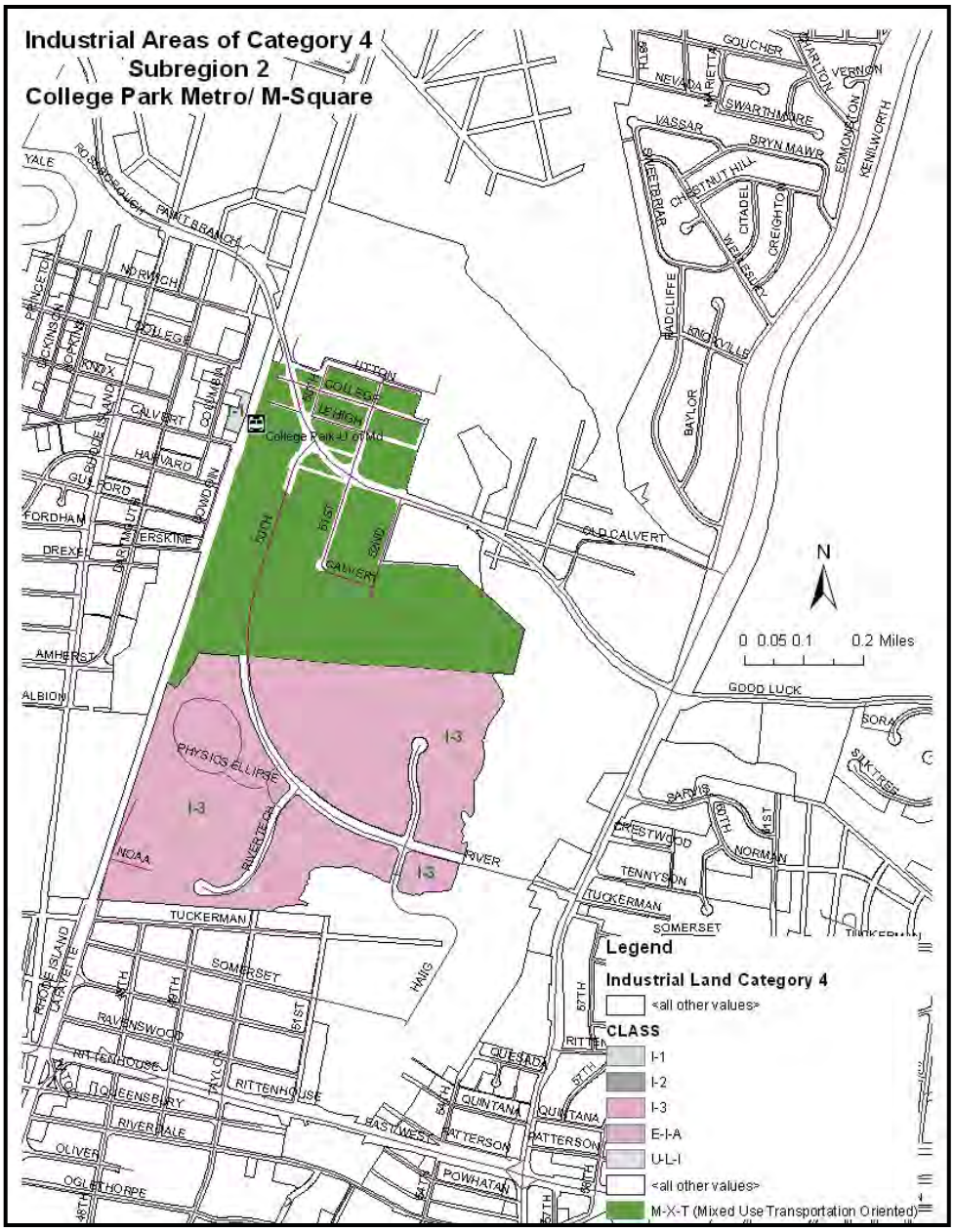
Source: Google Maps 2008

Table A9-11. Statistics for M Square		
	M Square	**Notes**
Total Existing Buildings (industrial & flex)	14	1
Total Existing RBA (SF) (industrial & flex)	566,897	1,4
Industrial Space Vacancy Rate	3%	2
Avg. Building Age (years)	44.0	2
Avg. Warehouse Rent	$11.00	2,3
Avg. Flex Rent	N/A	2,3
Avg. TOM for Industrial Space (months)	13.5	2
Industrial Space Vacancy Rate-Class A Office Space	13%	5
Avg. Building Age (years)-All Office	12.7	
Avg. Office Space Rent-Class A	$27.89	6
Avg. TOM for Office Space-Class A (months)	39.9	5
Avg. Office Space Rent-Class B	N/A	3
Avg. TOM for Office Space-Class B	N/A	
Avg. Office Space Rent–Retail	None	
Avg. TOM for Office Space-Retail	None	

Notes:
1. CoStar selection criteria include existing industrial and flex, owner and nonowner occupied.
2. CoStar selection criteria include existing industrial and flex, nonowner occupied only
3. Triple Net Asking Rents, $/SF
4. RBA excludes circulation and common areas
5. M Square vacancy and TOM higher due to new deliveries
6. M Square rent is full service gross

Source: CoStar, 2008

Current and proposed development in M Square consists primarily of midrise office/R&D facilities in a suburban office park setting, with a strong federal government presence. Thematically, the M Square university/government/industry buildings cluster focuses on food safety, intelligence, and global climate change research. Nearly all of the new development is slated for the I3 zone and is consistent with allowable uses under the current zoning ordinance. See Map A9-10. Interviews were conducted with several individuals involved in M Square in some fashion, including firm managers, developers, brokers, public agencies, and University of Maryland officials. Due to confidentiality concerns, the results of those interviews have been consolidated and generalized here.



Map A9-10. Zoning of M Square

Source: M-NCPPC GIS data, 2007

No concerns were expressed in terms of land use or zoning. It appears from those interviewed that the current zoning is appropriate. However, frustration with the planning and development process was universal. This finding is consistent with interviews in other industrial areas, although there are some peculiarities with M Square related to local conditions and the involvement of the university.

Consistent with other locations in Prince George's County, the M Square interviewees were emphatic in criticism of the entitlement and permitting process and the lack of cooperation and coordination between economic development, planning, and elected officials at the municipal and county levels. Confidentiality precludes mentioning specifics; however, the interviews uncovered specific examples where political infighting, a protracted, "provincial" and "fuzzy" development process, and a lack of coordination has led to adverse economic development impacts. These negative impacts include loss of private capital investment, loss of both existing and future jobs, loss of existing and future high-growth, high-tech industry, and loss of county and municipal tax revenue. The magnitude of these losses has not been calculated; however, the loss of tax base is in the tens of millions of dollars, and job losses/forfeitures are in the hundreds. Pride, prejudice, and political turf, it seems, are expensive propositions for Prince George's County taxpayers.

Based on this more intensive analysis, the M Square falls into the second Category 4 policy option, leaving current zoning as is. The I-3 zoning is appropriate for current and proposed uses and should be maintained. The issues surrounding the development of this area are related to implementation of policy rather than inadequate zoning.

Berwyn Road/Branchville Road

The Berwyn Road/Branchville Road area consists of three pieces located (predominantly) along the western edge of the rail right-of-way on the north and south sides of Greenbelt Road (MD 193). The three pieces include the Berwyn Industrial Park, The Washington Post site, and the Branchville Industrial Park.

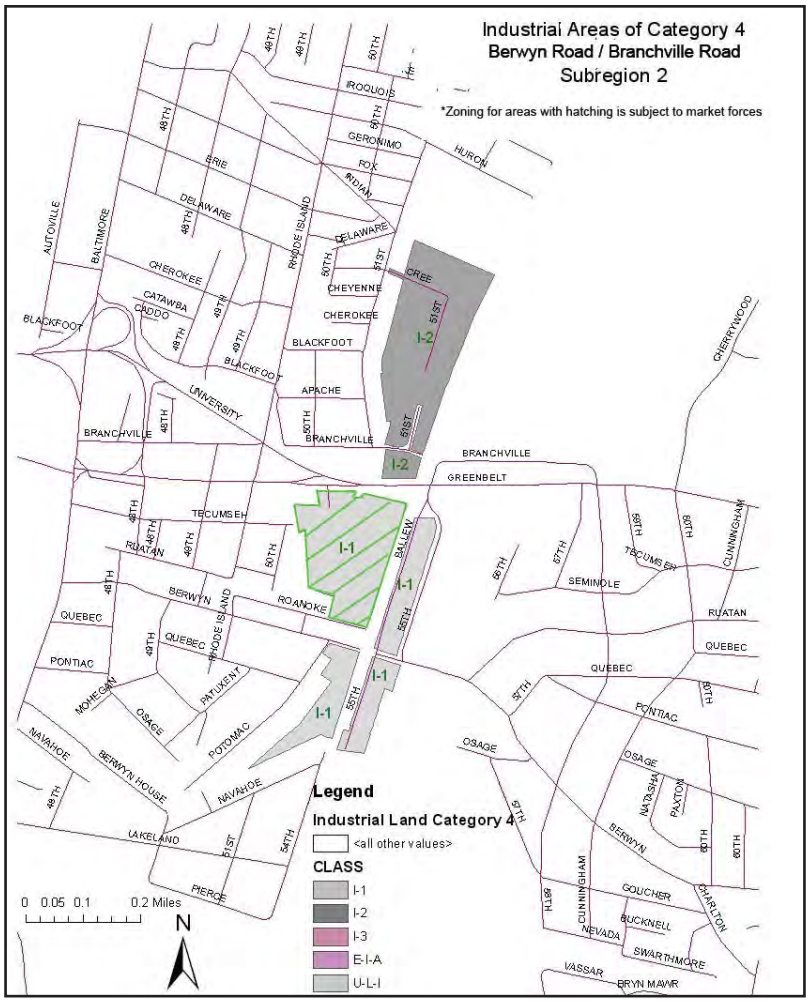
The Berwyn Road Industrial Park is comprised predominantly of industrial flex space with a variety of small firms, including building subcontractors, a caterer, and several service industries. Flex and industrial rents are substantially above the county averages of $10.94 and $6.04. Office rents are slightly below the county average. (See Table A9-12.) The park appears to be well integrated into the neighborhood. It is fully leased with appropriate uses, and abbreviated interviews with several tenants revealed no significant issues. This area may, thus, be considered healthy industrial.

Table A9-12. Berwyn/Branchville Statistics					
	Number of Buildings	**Avg. Bldg Age (Yrs)**	**RBA**	**Gross Rent/SF**	**Triple Net Rent**
Flex	4	36.8	35,823	19.75	N/A
Industrial	14	31.3	505,965		12.00
Office	8	30.2	103,891		22.00
Total	26	31.8	645,679		

Source: CoStar, August 2008

The Branchville Road Industrial Park lies to the north of Greenbelt Road along the western edge of the rail line. The area is well established and occupied by appropriate uses. The city of College Park maintains public works facilities on the northern end of the park. Other users include a large tubing manufacturer (Stone Industrial) and several smaller manufacturers, construction subcontractors, and service firms. The park appears to be well integrated into the neighborhood. It is fully leased with appropriate uses, and abbreviated interviews with several tenants revealed no significant issues. This area may, thus, be considered healthy industrial.

Map A9-11 shows current zoning codes and recommendations for Berwyn Road/Branchville Road area. There is a significant mixed-use/residential development underway on the eastern side of the rail line, across from the Branchville Industrial Park. While this is unlikely to cause encroachment due to the rail line, care should be taken to ensure appropriate buffering in the new development to minimize conflicts. The Washington Post site, south of Greenbelt Road, requires more attention. The Post recently announced that it will be closing the facility. This opens up the site to redevelopment, and interviews have revealed competing interests and ideas about what should be done at the site. For this reason, this site, shown in the green-hatched marking in Map A9-11, should remain in Category 4, economically healthy with pressure for competitive land use succession. A detailed study of the site should be undertaken before a decision is made concerning preservation as industrial or conversion to other uses.



Map A9-11. Zoning of Berwyn/ Branchville Road Area

Note: The green-hatched area requires site specific planning.

Source: M-NCPPC GIS data, 2007

PDR Employment in Berwyn Road/Branchville Road

The major PDR employers in this area include the Specialty Trade Contractors with 65 percent of the area PDR employment. (See Table A9-13.) There is very little non-PDR employment in this industrial area.

Table A9-13. Berwyn Road /Branchville Road–PDR Employment

Industry	Employment	Establishment
Construction of Buildings	1-19	1
Specialty Trade Contractors	174	11
Furniture and Related Product Manufacturing	1-19	1
Miscellaneous Manufacturing	20-100	1

Publishing Industries (except Internet)	1-19	1
Repair and Maintenance	55	4
Total PDR Employment	266	19
Total Non-PDR Employment	10	3
Total Employment	276	22

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Brownfields

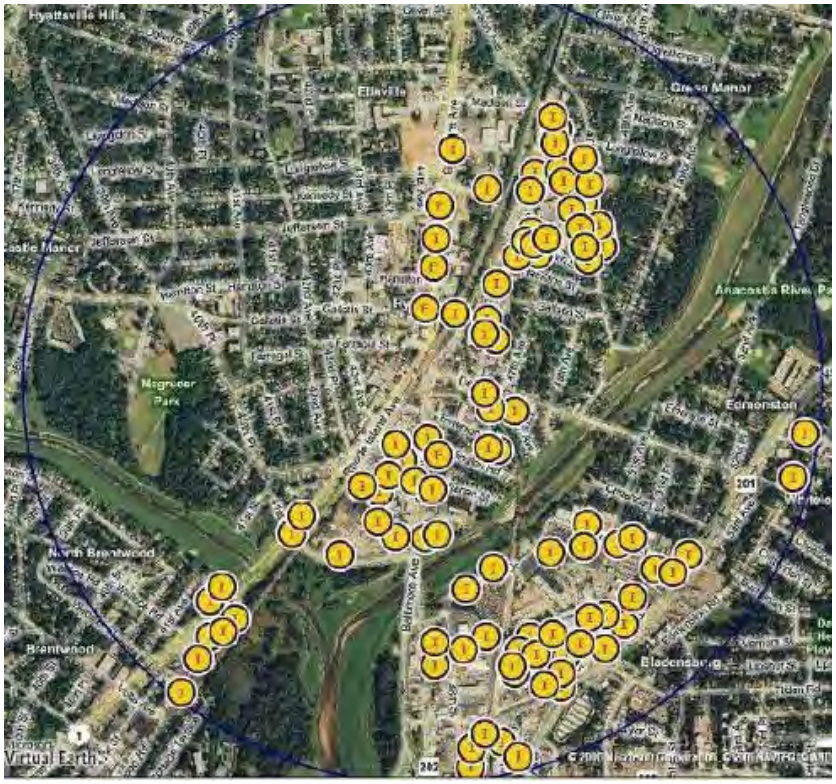
Our data sources suggest there may be two brownfields in this industrial area. The first is J.L. Clark Mfg./Stone Industries (MD-291). The 18-acre J.L. Clark Mfg./Stone Industries site is located at 9207 51st Street, College Park. According to a report by the MDE, in August 1989, 450 gallons of methyl ethyl ketone (MEK) overflowed from a 750-gallon underground storage tank (UST). The MEK migrated across the adjoining Department of Public Works and Transportation (DPW&T) property and then eastward to the railroad tracks where it formed a one-foot deep pool of liquid. Plant personnel excavated contaminated soil, containerized it in sealed 55-gallon drums, and notified the EPA and the MDE's Hazardous and Solid Waste Management Administration (HSWMA). Soil sampling indicated that not all MEK was removed and additional soil was removed from the DPW&T property near the railroad tracks. J.L. Clark Mfg. removed all three of the MEK USTs subsequent to the spill.

In October 1989, the MDE prepared an Environmental Priorities Initiative/Preliminary Assessment (EPI/PA) of the site. The EPI/PA documented existing site conditions at that time, which included a description of the August 1989 spill of MEK. The report concluded that waste management practice and handling of waste material at the facility appeared to be in compliance with existing Resource Conservation and Recovery Act regulations, except for waste cooling water and labeling of drums, which were referred to the HSWMA Enforcement Division for follow up. MDE prepared a Site Survey report of the facility in November 1999. The report concluded that the 1989 reported levels of MEK in soil appeared to be below the EPA Risk-Based Concentration (1.2 x 105 milligrams per kilogram) for MEK in soil at industrial sites.

According to the latest public information in 2007, the MDE has determined that no further action by the state is planned with regard to this site. Therefore, this site is being considered to be cleaned/safe as long as it remains in industrial use.

Hyattsville (189 Acres)

This area contains healthy industrial land uses with 1.8 million square feet of industrial space in 99 buildings. The area is both rail- and Metro-served. Industrial and flex vacancy stands at just 2 percent, with only 4.5 months of TOM needed for sale. Some of the buildings are concentrated in an industrial park toward the southeast; however, many are scattered throughout the town. Median building age is about 41 years. While rents do not exhibit the same upward pressure as seen in the University-East area, functional obsolescence is inevitable, and land use succession is likely given the location and amenities.

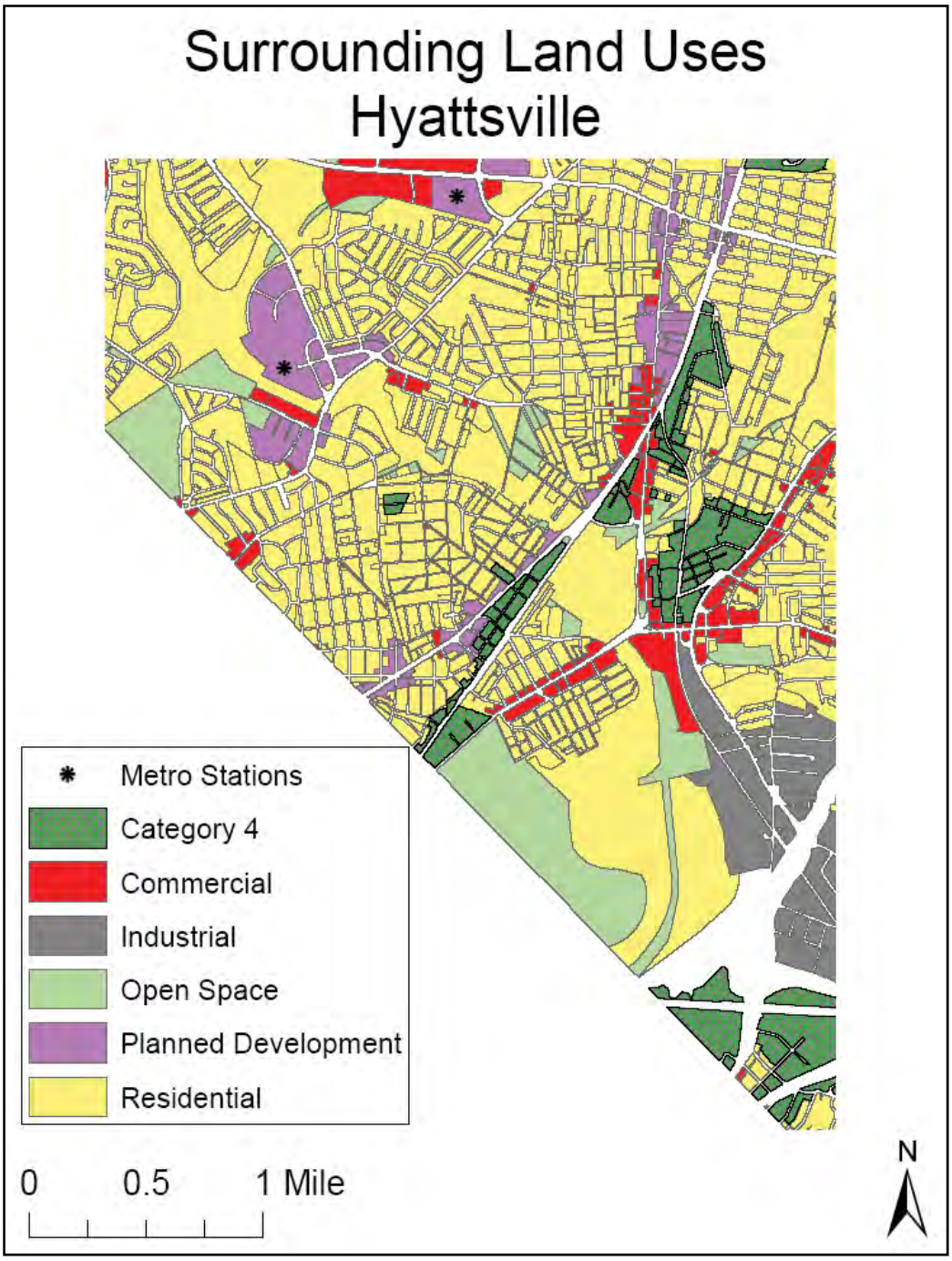


Map A9-12. Aerial Location of Industrial Buildings in Hyattsville,

Source: CoStar, July 3, 2008

Map A9-12 shows the location of all industrial sites in the Hyattsville area, according to CoStar on July 3, 2008. Map A9-13 shows the Category 4 area and surrounding land uses in Hyattsville. A closer look at this area reveals that almost all of the industrial land is concentrated in four subareas within the Port Towns planning area. These subareas include Bladensburg, Edmonston, Cottage Hill, and Brentwood. These four areas were all included in a 2008 char-

rette planning process as part of the county's Port Towns Sector Plan (2009a) and Sectional Map Amendment process.



Map A9-13. Land Uses in Hyattsville-Surrounding Area

Source: M-NCPPC GIS data, 2007

The average age of buildings in this area is shown in Figure A9-6, and detail statistics for all four sites are reported in Table A9-14.

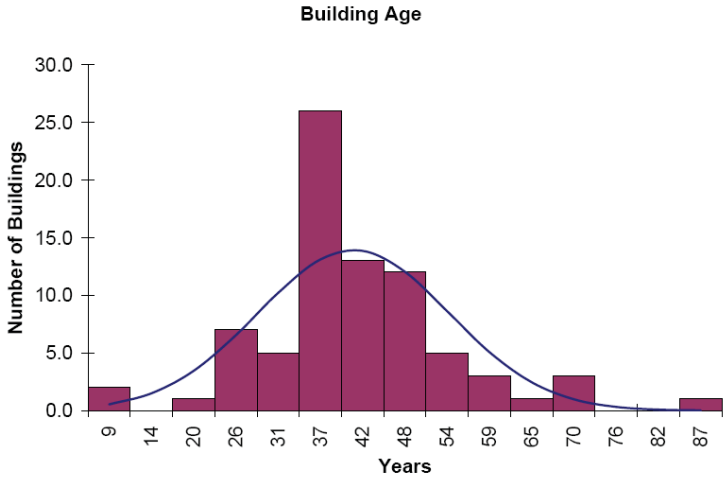


Figure A9-6. Age Distribution of Industrial Buildings in the Hyattsville Area

Source: CoStar. July 3, 2008

Table A9-14. Statistics for Hyattsville Area

	Cottage Hill	Brent-wood	Edmonston	Bladensburg
Total Existing Buildings (industrial & flex) (1)	9	54 (1 flex)	29	36
Total Existing RBA (SF) (industrial & flex) (1,4)	283,280	667,091	498,882	820,993
Industrial Space Vacancy Rate (2)	4%	7%	3%	1%
Avg. Building Age (years) (2)	38.0	45.0	36.6	42.0
Avg. Warehouse Rent (2,3)	$6.50	$5.50	$7.00	$8.50
Avg. Flex Rent (2,3)	N/A	$10.0	N/A	N/A
Avg. TOM for Industrial Space (months) (2)	10.4	17.4	11.3	8.1
Industrial Space Vacancy Rate-Class A Office Space	No Office	No Office	No Office	7%
Avg. Building Age (years)-All Office				54
Avg. Office Space Rent-Class A				N/A
Avg. TOM for Office Space-Class A				N/A
Avg. Office Space Rent-Class B (3)				$8.57
Avg. TOM for Office Space-Class B				9.3
Avg. Office Space Rent-Retail	None		None	None
Avg. TOM for Office Space-Retail	None		None	None

Notes:
1. CoStar selection criteria include existing industrial and flex, owner and nonowner occupied.
2. CoStar selection criteria include existing industrial and flex, nonowner occupied only
3. Triple Net Asking Rents, $/sq. f.
RBA = excludes circulation and common areas

Source: CoStar, January 17, 2009.

Bladensburg

Bladensburg is a very healthy industrial area. The current vacancy rate for industrial space in Bladensburg is 1 percent, well below the county average of 14.1 percent. Warehouse rents average $8.04, well above the county average of $6.04.

At the end of 2007, Bladensburg was home to 60 PDR enterprises and 1,297 PDR employees. Sixty-two percent of PDR employment in Bladensburg is in specialty contracting. manufacturing activities account for five percent. Fifteen percent of PDR employment is in waste management and remediation services and repair and maintenance. (See Table A9-15.)

Table A9-15. Bladensburg (Hyattsville)-PDR Employment

Industry	Employment	Establishments
Construction of Buildings	7	3
Specialty Trade Contractors	807	27
Printing and Related Support Activities	1-19	2
Fabricated Metal Product Manufacturing	20-100	1
Furniture and Related Product Manufacturing	1-19	2
Miscellaneous Manufacturing	20-100	1
Merchant Wholesalers, Durable Goods	129	4
Merchant Wholesalers, Nondurable Goods	20-100	2
Wholesale Electronic Markets and Agents and Brokers	1-19	2
Building Material and Garden Equipment and Supplies Dealers	19	3
Truck Transportation	1-19	2
Warehousing and Storage	1-19	1
Publishing Industries (Except Internet)	1-19	1
Telecommunications	20-100	2
Waste Management and Remediation Services	20-100	1
Repair and Maintenance	101	6
Total PDR Employment	1,297	60
Total Non-PDR Employment	117	12
Total Employment	1,414	72

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

As part of the charrette planning process, this area was proposed as a “green industrial area.” This proposal suggested that the buildings within the industrial area could be made “green”—that is, upgraded to comply with Leadership in Energy and Environmental Design (LEED) standards in some fashion. The proposal did not contemplate the manufacture of “green” products within this region, which is an alternative understanding of the phrase “green industrial

area." Green and sustainable development is increasingly an important concept and should be incorporated into plans wherever appropriate and feasible. There are concerns, however, with the approach being proposed, given the specific nature of the area for which it is being proposed.

The "green objective" can be accomplished by alternative actions. CoStar data and visual inspections reveal that the area in question is completely builtout, and there is no available land for new industrial development. As a practical matter, the difficulties in site assembly, demolition, environmental remediation, and the environmental restrictions due to the proximity to the Anacostia River, combined with the existence of "shovel-ready" industrial sites elsewhere in the county, make industrial-to-industrial redevelopment unlikely. Thus it is unclear how or when "green" standards would be applied, and the county runs the political risk of this being interpreted as an additional burden being placed on local business owners, regardless of the validity of such a claim.

If green standards are applied at the time of renovations or improvements, based on a threshold criteria (as is often the case with American Disabilities Act requirements, for example), this could discourage reinvestment and lead to decay. If the objective of proposing a "green industrial area" is predominantly environmental, the area would benefit more from simply enforcing existing environmental regulations. For example, the area suffers from a significant dust problem resulting from one or more of the business operations. Cleaning up this one problem and implementing appropriate environmental controls to curb dust levels in the future would improve the environmental public health of the area, reduce the appearance of blight, and improve relations with neighboring residential areas. While specific regulations and enforcement actions would need to be reviewed and coordinated with state environmental officials, enforcing existing regulations with specific polluters seems more appropriate and cost effective than implementing new planning regulations for the entire area.

A proposal to create a Green Industrial District (GID) cluster for most of the existing industrial areas in Bladensburg and Edmonston is contained in the fall 2008 report of the University of Maryland's Historic Preservation program. The proposal calls for involving business owners in an alliance to make the production processes greener. The report states that the GID could not only save business owners money in operating expenses but attract people interested in touring the green buildings and seeing the sustainable practices. It could sponsor workshops on how local residents and other visitors can green their homes. The students believe the GID could

"boost the local economy and generate potential clients for the existing industries." The report highlights local businesses in the area that are already implementing green practices. The GID proposal is worth further exploration by the county.

Brownfields in Bladensburg

The Bladensburg area has a number of brownfields. Hyattsville Gas, a former manufactured gas plant, is on 13 acres straddling the boundary between Edmonston and Bladensburg, Maryland. The property is comprised of two adjoining parcels: Parcel 1 (4.5 acres) and Parcel 2 (8.5 acres).

According to a report of the MDE, from 1907 to 1946, a manufactured gas plant operated at this site. The plant manufactured gas by using the coal carbonization process and then switched to carbureted-water-gas process. There is concern that the handling and storage of the residues (tar, oil, and spent gas-purification media) from these gas-manufacturing processes may have contaminated soil and groundwater at the property.

Historical research indicates that a pre-cast concrete manufacturing plant, a car manufacturing facility, and two repair shops also previously operated on the property. One of the repair shops was operated by the Washington Suburban Sanitation District and was razed between 1963 and 1965. The MDE report indicates that a previous investigation of the property's soil and groundwater quality revealed the presence of minute levels of semivolatile organic compounds in the soil and some levels of volatile and semivolatile organic compounds and metals in the groundwater had exceeded federal and state drinking water standards.

On November 18, 1998, Washington Gas Company submitted an application to the Voluntary Cleanup Program. Review of the application revealed a number of data gaps that took over a year to completely address. Finally, the department approved the application, confirmed the applicant's status as a responsible person, and notified Washington Gas that submission of a RAP was necessary to address the soil and groundwater contamination at the site.

On May 1, 2002, the department approved a human health and ecological risk assessment that Washington Gas prepared to assist with the design of an appropriate RAP strategy. Based on this approval, Washington Gas began preparing its proposed RAP. Additional subsurface data, including product thickness measurements, laboratory analysis of soil samples, and clay layer elevations and geotechnical properties were collected to assist in this effort. The MDE report

(2003) indicated that the MDE is still waiting for the submission of the proposed RAP. There is no further progress report related to this site.

A second brownfield site is National Fence Manufacturing Company. The National Fence Manufacturing site is located at 4301 46th Street in Bladensburg. According to the latest available MDE report, Jack Long owned and operated the facility from 1959 through 1968. The company occupied two blocks of buildings and open areas between 45th and 47th Streets and was bounded by Upsher and Tanglewood Avenues. In 1968, P&F Industries of Great Neck, New York purchased the entire property and operated as National Fence Manufacturing Co., Inc., until bankruptcy in 1981. Subsequently, Merchant's Metals purchased the property and shut down the manufacturing operation but retained the company's name, assets, and liabilities.

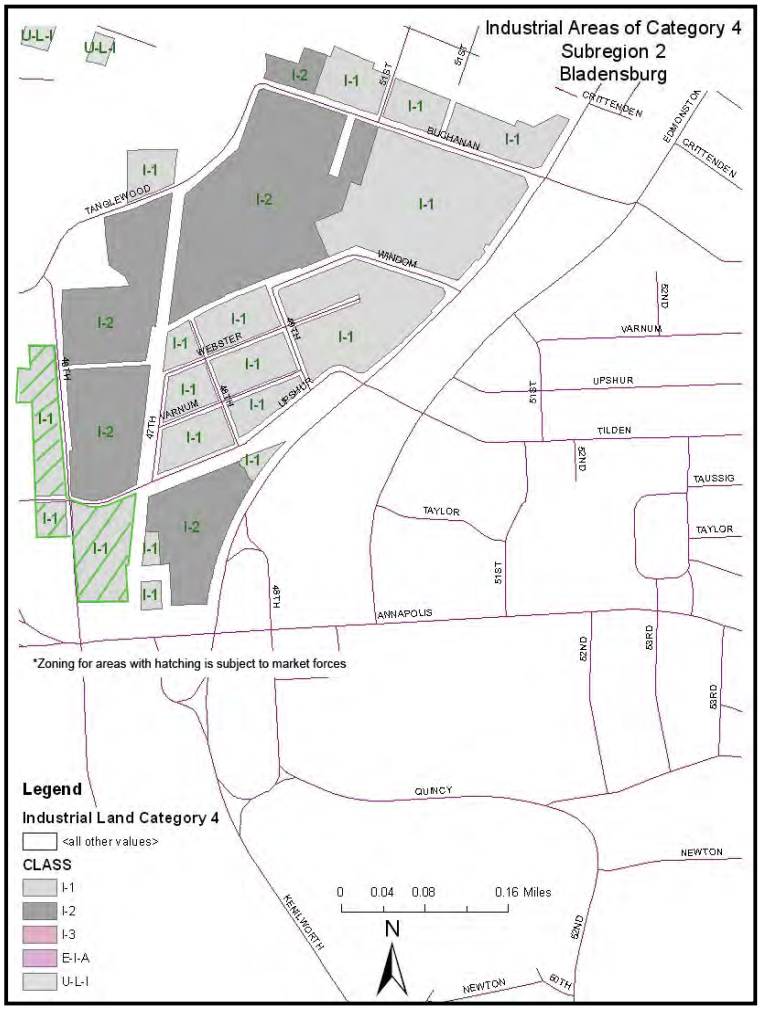
The National Fence Manufacturing Company, Inc. notified the EPA under the SuperFund Act that all wastes generated between 1959 and 1981 were removed from the site by various truckers. In 1985, the MDE prepared a preliminary assessment of the facility, noting that there appeared to be no place that waste could be buried or otherwise dumped, and that no storm drains were observed on any streets surrounding the property. MDE concluded that no further action was needed at the site.

On July 1, 1984, the Waste Management Administration of the Maryland Department of Health and Mental Hygiene published a master list of all sites where the Department had reason to believe or had been notified that controlled hazardous substances may be present. Subsequent to the publication of this list, the department conducted further investigation of department files and performed on-site investigations at a number of these sites. A status update was published in the Maryland Register on January 4, 1985. Based on this review, it was determined by the administration that no further action at this site would be necessary and the site was deleted from the master list. Since the site was also listed on EPA's Comprehensive Environmental Response, Compensation and Liability Information System, a designation of no further remedial action planned by EPA would constitute a final decision by both the state and EPA based on the information that was available at the time. Based on this public information, this site is considered to be Cleaned/Safe and suitable for continued industrial/flex land uses and an additional reason not to consider any changes in land use out of industrial.

The charrette proposed a plan for Bladensburg that rezones a small portion of the industrial district just north of the rail right-of-way to mixed use in order to facilitate the redesign of

the entry into Bladensburg coming across the bridge on Bladensburg Road. The elevated rail structure provides a significant barrier between the subject parcels and the rest of the industrial district. These parcels are occupied by relatively low-density industrial and low-end commercial uses. Relocating these uses, therefore, appears to be straightforward, although finding available sites/buildings nearby may be difficult given the lack of vacant buildable sites and low vacancies for existing sites. However, assuming relocation can be accomplished, the new mixed-use design achieves the objective of creating a sense of identity and entry for Bladensburg. Therefore, the rezoning is appropriate and does not represent a substantial encroachment to the existing industrial district. (See Map 9-14.) The sites marked with green slashes are the sites where rezoning is acceptable.

The remainder of the Bladensburg industrial district is economically strong and exhibits considerable evidence of agglomeration benefits, which tends to explain the higher rents in the face of less than desirable physical conditions. This area is a strong Category 5 and should be protected. Some consideration should be given to visually buffering the area to improve compatibility with other uses.

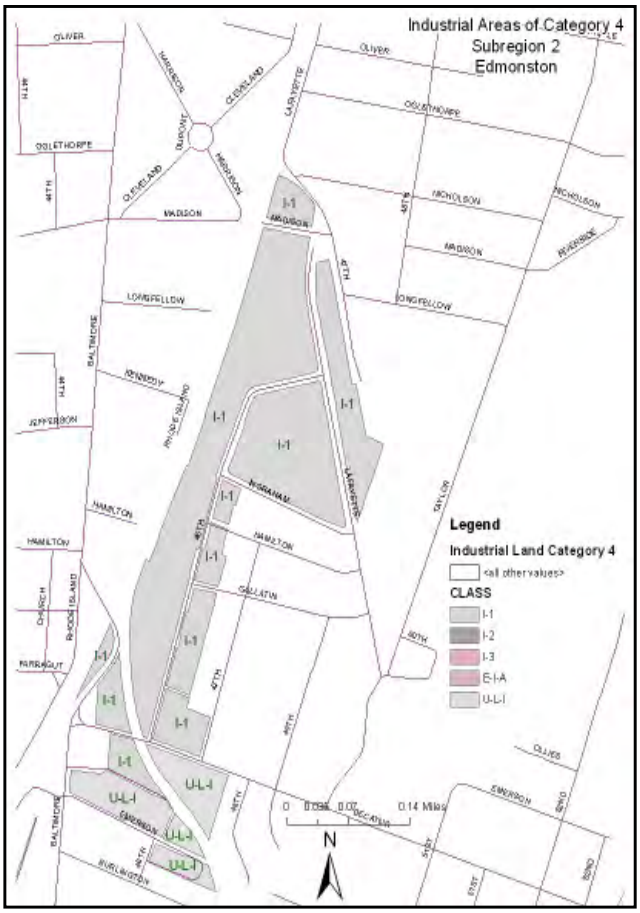


Map A9-14. Current and Proposed Zoning for Bladensburg

Source: M-NCPPC GIS data, 2007

Edmonston

While there are some scattered PDR uses in other parts of Edmonston, the only large, contiguous industrial area is an industrial park in the Edmonston/North area (See Map A9-15.) The charrette planning consultant offered two options for development in this area. It was determined that the first option (Option 1) has minimal impact on industrial land. However, there are several concerns about the Option 2 charrette proposal to replace the existing industrial park with high-density residential.



Map A9-15. Current and Proposed Zoning for Edmonston

Source: M-NCPPC GIS data, 2007

The area contains 500,000 square feet of industrial space in 30 buildings. Vacancy stands at 3 percent, TOM is 11.3 months, and rents are higher than average at $7.00/square foot Thus, this is a very healthy industrial area, providing needed support to the Prince George's County economy.

Our employment analysis shows that the PDR firms in the industrial park employ over 1,100 people. (See Table A9-16.) Interviews conducted in relation to this area revealed issues with capricious code enforcement and lack of service on the part of the local municipality (Edmonston). A portion of the industrial park apparently is located in Riverdale, but similar problems were not reported there. Although interviews with area

s did not identify any specific problems with nearby residential neighbors, visual inspection confirmed that buffering for the park is minimal. As discussed previously, conflict between industrial uses and other nearby uses, especially residential, can be problematic, and appropriate buffers are needed.

Table A9-16. Edmonston (Hyattsville)-PDR Employment

Industry	Employment	Establishment
Construction of Buildings	1-19	2
Heavy and Civil Engineering Construction	20-100	2
Specialty Trade Contractors	471	18
Beverage and Tobacco Product Manufacturing	20-100	1
Wood Product Manufacturing	1-19	1
Paper Manufacturing	1-19	1
Printing and Related Support Activities	20-100	1
Fabricated Metal Product Manufacturing	101-499	2
Merchant Wholesalers, Durable Goods	12	5
Merchant Wholesalers, Nondurable Goods	20-100	2
Building Material and Garden Equipment and Supplies Dealers	1-19	1
Truck Transportation	78	3
Support Activities for Transportation	1-19	1
Couriers and Messengers	101-499	1
Repair and Maintenance	33	12
Personal and Laundry Services	1-19	1
Total PDR employment	1,135	54
Total non-PDR employment	46	6
Total employment	1,181	60

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Edmonston shows a range of PDR activities with 1,135 employees in 54 enterprises. The major shares of enterprises are construction sectors (51 percent area PDR employment). Trucking activities and repair and maintenance account for 30 percent of the area's PDR employment. Industrial uses—even healthy ones—are often noisy and unsightly. Good urban design can help mitigate the visual and auditory impacts of industrial operations.

Converting a healthy industrial area to residential use is problematic in several ways. First, there are financial considerations. Industrial uses contribute substantial tax revenues without a proportional demand for services. Residential uses typically demand more services and generate lower tax revenues. Second, this particular industrial area provides significant employment that is easily accessible to local residents. Third, there is the practical matter of how such a

transition would be undertaken. Simply rezoning the land will not lead to the desired change. Existing establishments could continue to operate and would likely do so for some time. However when an establishment leaves, it is unlikely that the desired industrial-to-residential conversion would take place incrementally, since this would require the construction and sale of high-end condominiums in an area still populated by active industrial uses.

Achieving the Option 2 charrette vision requires the closing or relocation of all (or nearly all) existing establishments. Given the number and variety of existing establishments, this means that Edmonston will need to decide whether it is preferable to endure a protracted period of future abandonment and decay of vacated industrial properties or to intervene in the process using eminent domain. If it chooses to allow industrial properties to be vacated and abandoned, this will likely have a negative effect on the surrounding residential neighborhood, making the desired "high end" residential even less likely. If it chooses to intervene, it will be hard-pressed to show how such a development is in the public interest, given that it eliminates jobs, increases demand for services, and generates a net loss in public revenue.

In summary, this is a proposal with very little, if any, upside and a lot of downside. The change from industrial to residential should be rejected, and the industrial area be protected. Investing in buffering and infrastructure improvements would help with perceptions and neighbor relations, while preserving stable employment lands.

Cottage Hill and Brentwood

The Port Towns charrette plans propose converting the Cottage Hill industrial area into a medium density mixed-use area with a new MARC stop (2009a). The area contains nine buildings and 283,280 square feet of space, most of which appears to be warehousing. Based on the most recent data, employment in the Cottage Hill area appears to be low (45 employees), although at least one building is unaccounted for in the numbers. The interviews that were conducted suggested that this location was selected because of convenience but is not a "must-have" location for those establishments that were interviewed. The interviews did not reveal any buyer-supplier clustering in this area.

Generally, the data on this area confirm that the proposal for a MARC stop in this area made sense and that the tradeoffs between present uses and jobs, and those created by the MARC stop, would be a net positive for the local community. With the protection and strengthening of

other industrial areas close by, the workers from this area could easily be absorbed within the larger Port Towns planning area. Adding additional MXT-zoned land would allow for some of the service-type PDR uses to be integrated into a mixed use context (2009a).

The conclusion, therefore, is to support the consultant's proposal to locate the MARC stop on the Cottage Hill site, subject to the appropriate due diligence. Since the MARC station is still conceptual in nature, this is a long-term vision rather than an imminent change. Therefore, the industrial land in Cottage Hill should be considered healthy but subject to market forces.

In examining the Hyattsville area in future detail, Brentwood is found to be economically healthy and not facing encroachment from alternative uses. According to the QCEW, there appears to be over 400 jobs here. (See Table A9-17.) In addition, CoStar data show that there were 139,846 square feet of industrial space added in 2008 in this area. The only office space is Class C. Therefore, Brentwood would be placed in Category 5—an economically healthy industrial area that should be left as is.

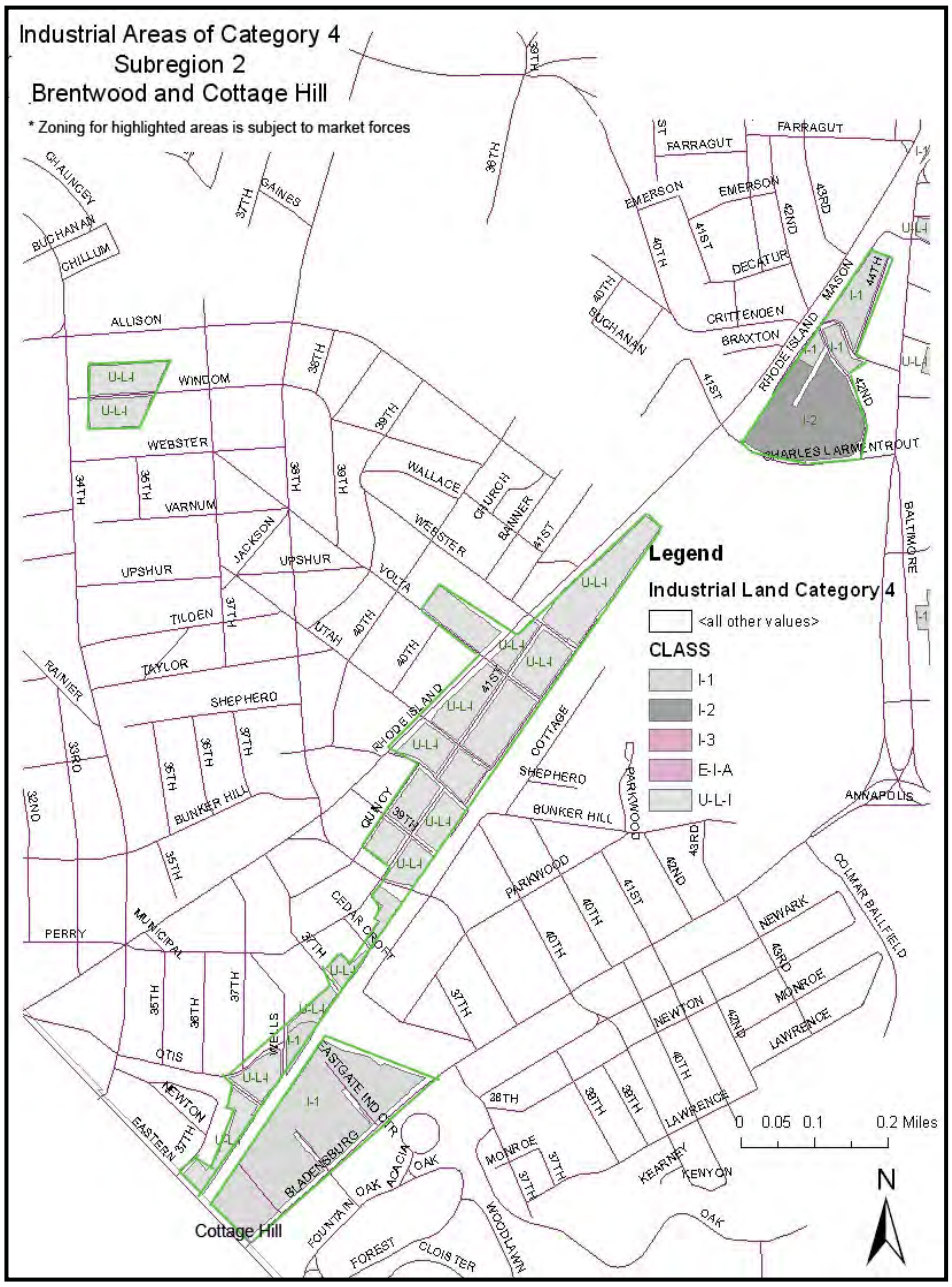
Eighty-three percent of PDR employment in Brentwood is in specialty trade contracting. One-third of the PDR enterprises are in this line of business. The area also is home to few non-PDR activities. There are no known brownfields in this area.

Table A9-17. Brentwood (Hyattsville)–PDR Employment

Industry	Employment	Establishments
Construction of Buildings	1-19	2
Specialty Trade Contractors	371	7
Merchant Wholesalers, Durable Goods	1-19	2
Merchant Wholesalers, Nondurable Goods	1-19	1
Building Material and Garden Equipment and Supplies Dealers	1-19	1
Support Activities for Transportation	1-19	1
Postal Service	1-19	1
Repair and Maintenance	34	9
Personal and Laundry Services	1-19	1
Total PDR Employment	447	25
Total Non-PDR Employment	45	6
Total Employment	492	31

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

In conclusion, there is no reason to change any zoning in the Cottage Hill and Brentwood areas. (See Map A9-16for the current zoning.)



Map A9-16. Current and Proposed Zoning for Brentwood and Cottage Hill

Source: M-NCPPC GIS data, 2007

Recommendations for the Hyattsville Industrial Areas

Except where noted herein, the overall recommendations are consistent with the plans proposed in the Port Towns charrette. Specifically, it is recommended that "Option 2" for the redevelopment of the Edmonston/North industrial park be rejected. In Bladensburg, the "green" objective is being supported, even though significant efforts can and should be undertaken, using

existing environmental regulations and remedies, before additional planning and zoning actions, related to the creation of a "green" industrial, move ahead. It needs to be emphasized that all efforts in this direction be incremental and sensitive to the pressures that small businesses face in the current economy.

After more detailed investigation, the original classification of the entire Hyattsville area as Category 4 industrial is revised as follows. Bladensburg and Edmonston-North are economically healthy and important to the county and therefore, should be protected; Cottage Hill should be allowed to respond to market demand. Brentwood is a Category 5 area, a healthy and vital industrial area not threatened by encroachment at present. The only exception to the proposed industrial area protection in Bladensburg and Edmonston-North is the rezoning on the north end of the Bladensburg industrial district to facilitate mixed-use, entryway development as proposed in the charrette. The industrial impact of this action is minimal when compared to the community benefits achieved. However, further encroachment on the industrial area, beyond what is proposed, is strongly discouraged.

Goddard Corporate Park (104 Acres)

Goddard Corporate Park consists of nine flex/industrial buildings that encompass 698,999 square feet of building area; two Class "A" office properties, consisting of 105,000 square feet, and seven Class "B" offices. (See Table A9-18.) The area is experiencing weak industrial/flex demand. The area has experienced an average industrial/flex vacancy rate of 31 percent over the past five years. Two flex buildings have been completely vacant for over five years, and the rent in the industrial building is below average at $5.25 per square foot. Over the past five years, annual industrial rental rates have experienced a nine percent annual decline.[54]

Table A9-18. Statistics for Goddard

	Industrial/Flex West	Class A Office	Class B Office
Number of Buildings	9	2	7
Square Feet	698,899	105,000	526,481
Average Rent/Year	11.50	21.65	20.26
Buildings Proposed or Under Construction	0	0	0
Average TOM	83.2 mos.	11 mos.	33 mos.
Vacancy Rate	31%	8%	22%

Source: CoStar, September 6, 2008

[54] CoStar, September 2008.

This area was designated a Category 4 industrial area because, despite the poor industrial performance measures, the area exhibits signs of growth. A new flex building with 142,000 square feet of RBA was built in 2005 and remains fully leased. In addition, a new development has been proposed that will add 50,000 square feet of new office space and 100,000 square feet of new flex space. Given the proximity to the NASA GSFC and its list of related tenants, the area remains an important industrial location.

PDR Employment

Table A9-19 shows the following employers in the Goddard site, according to the QCEW. There were also non-PDR activities in the area. Non-PDR employment contributes more than one-half on this area's employment.

Table A9-19. Goddard Corporate Park-PDR Employment

Industry	Employment	Establishment
Specialty Trade Contractors	51	4
Transportation Equipment Manufacturing	500-999	2
Support Activities for Transportation	1-19	1
Repair and Maintenance	1-19	1
Total PDR Employment	775	8
Total Non-PDR Employment	1,216	29
Total Employment	1,991	37

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

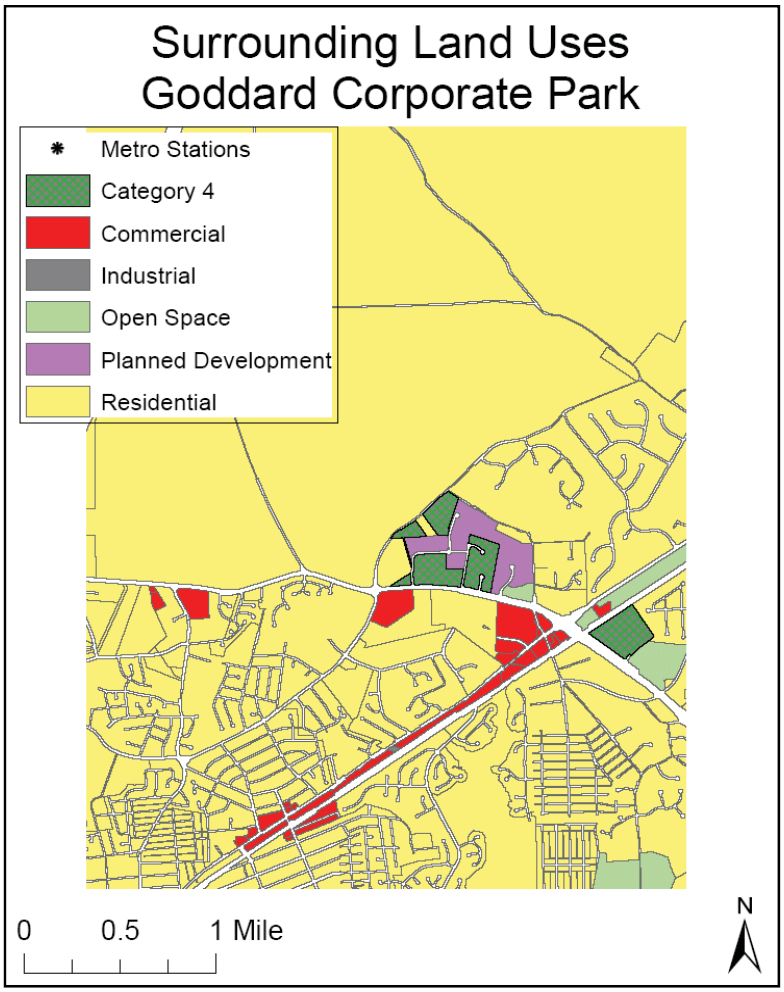
Office-based activities found in the Goddard industrial area include: Lockheed Martin; Northrop Grumman, Austin Group/FHEI, TMI Solution, General Dynamics (defense and aerospace related, headquartered in VA), MEI Technologies (aerospace related, headquartered in Houston), L-3 Communication Titan Corporation, GSA, Doctors Community Hospital, Computer Technologies Consultants, Constellation Software Engineering Corp., CJ Lending LLC, Ayers & Ford, and PA (Internal Medicine). Employers found in the Aerospace Building on Aerospace Road include Boeing, Big Brothers & Big Sisters, Radiation Management, and NASA, Solutions for Enterprise-Wide Procurement. The area has a strong cluster of aerospace-related activities.

The Goddard site also includes manufacturing and warehousing activities. The representatives of TVI Corporation, a company that makes shelter systems, decontamination centers, filter canisters, respirators, thermal sensor products, tents, and mobile kitchens were interviewed. Sixty-five percent of the firm's products are for military purposes and the rest for commercial.

The company has several plants in the D.C. metropolitan area; another plant is in Frederick. The materials are transported to the Goddard site by railroad and truck. The company was located in Beltsville until 2002 and then moved to the current location and expanded in 2003-2004. Its current total square footage is about 100,000 square feet. The company employs skilled and semi-skilled workers (70 workers plus 60 staff). Most of the workers live in Prince George's County; some staff comes from Howard County. Highway access is a major reason the company selected this site, and they are satisfied with the road system and site amenities but would prefer better recycling of waste materials. Home Depot has a distribution center on the same site, another indication of the site's good highway access to the region.

Surrounding Land Uses

The land uses surrounding the Goddard Corporate Park include residential, open space, and some retail. A Planned Unit Development (PUD) is situated in the midst of the I-1 zoning. See Map A9-17.



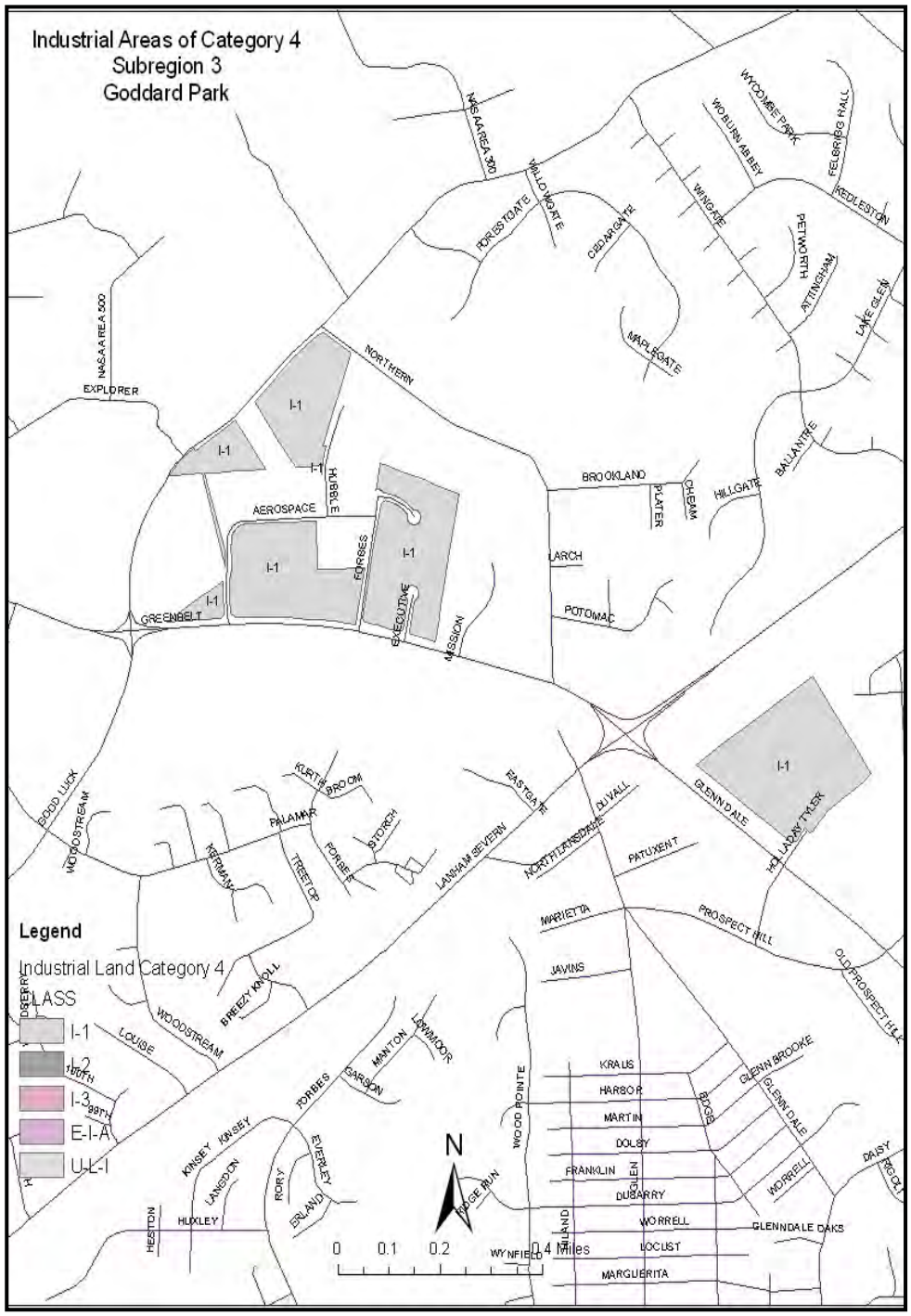
Map A9-17. Land Uses of Goddard Corporate Park-Surrounding Area

Source: M-NCPPC GIS data, 2007

Interview Results and Recommendation

The current zoning at the Goddard site works well, with office and manufacturing activities operating compatibly. (See Map A9-18.) The current I-1 zoning allows light industrial, R&D, fabrication and assembly, warehouse and distribution, and outside storage under certain circumstances. It is proposed that the county retain the current zoning but begin to consider turning this area into a high-technology park focused on aerospace businesses. Currently, the area has 9.37 acres of vacant land. The property is wooded and generally flat and has more than 500 feet of frontage on Good Luck Road, as well as approximately 386 square feet of frontage on Northern Avenue. The site is also strategically located near the front gate for NASA, thus, providing an exceptionally convenient location for NASA contractors.

The location provides good transportation access and proximity to the GSFC. In the relatively short run, the county could establish an incubator in the currently vacant flex space.



Map A9-18. Current and Proposed Zoning for Goddard Corporate Park

Source: M-NCPPC GIS data, 2007

Kenilworth/US 50 (169 Acres)

The Kenilworth/US 50 industrial area, in Subregion 4, is at the intersection of US 50 and Eastern Avenue. I-295 and Kenilworth Avenue run through the center. (See Map A9-19.) It is all industrial (i.e., no office), and there are 13 industrial buildings recorded by CoStar on August 30, 2008. (See Table A9-20.)

Map A9-19. Aerial View of Kenilworth/50 Industrial Area

Source: Google Map, 2008

The area's economic health is mixed. At 4800 Addison Road is a large vacant site, once occupied by a Giant Food warehouse. This is a 355,000 square foot parcel, located just east of the rail tracks and has been on the market for more than ten years. The asking rent according to CoStar is $4.00 per square foot.[55] This explains the area's high vacancy rate and long TOM shown in Table 6-1. According to staff of the Prince George's County Planning Department, the site was purchased by Douglas Jamal, who requested it to be rezoned into a mixed-use site. The zoning was changed, and further development is being planned.[56]

[55] As of November 15, 2008

[56] Discussion on March 4, 2009 with Sonja Ewing, staff of Prince George's County Planning Department

Table A9-20. Statistics for Kenilworth/US 50		
	Industrial/Flex	**Office**
Number of Buildings	13	0
Square Feet	725,132	0
Average Building Age		0
Average Rent/Year	$4.04	0
Buildings Proposed or Under Construction	0	0
TOM	123.2 mos.	0
Vacancy Rate	48%	0
Building Class	2 class B 7 class C 3 Not Reported	

Source: CoStar, August 30, 2008

While CoStar reports that the remaining buildings in the area are occupied, a site visit and interviews with brokers indicate a number of additional vacancies on both the east and west side of the rail tracks. An interview with Wilkes Leasing, who owns warehouse space at 4525 Addison Road, revealed that this building has 20,000 square feet for rent and is largely vacant. Wilkes Leasing owns the space and bought it about a year ago. The site is currently home to two tenants, the True Apostolic Church and a transportation company. The third part of the property is available as a warehouse. According to the broker for this site, it is in "rough shape," with a leaky roof. They are looking for a lease that will occupy the property "as is" and are charging $3.00-4.00 per square foot. A Google search of the address indicated that Safeway, Inc. owned the property at some time, and both the internet search and signage at the site suggests this was where Safeway produced ice cream.

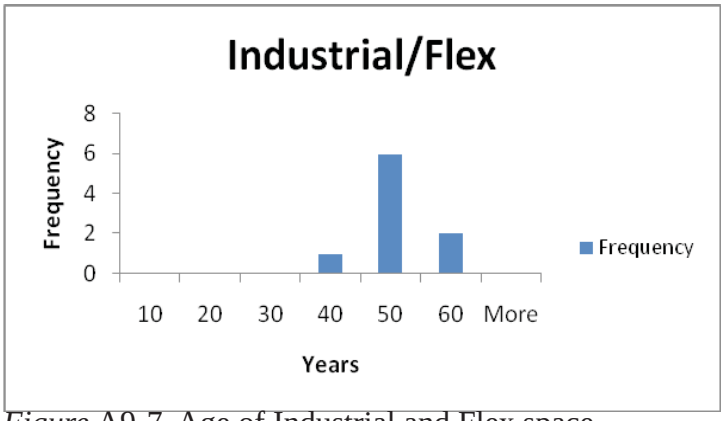


Figure A9-7. Age of Industrial and Flex space

Source CoStar on November 15, 2008

On the west side of the rail tracks, the signage suggests a barrel manufacturer on S Street recently moved out into the district. A number of other warehouses appear vacant and for rent.

The $3.00 to $4.00 per square foot rents put this area at the low end of the county's industrial space rents, which average is$6.04.

Consistent with the low rents, CoStar classifies all industrial space in this area as B- and C-class space, with seven C-space sites and two B-space sites.[57] The majority of the space is aging and outdated, having been built 50 years ago or more. (See Figure A9-5.)

However, a number of healthy businesses are operating in the area. A large recycling operation, Joseph Smith and Sons, occupies the north portion of the area. A window manufacturer operates on Olive Street, and a condominium warehouse facility appears economically vibrant, occupied by various businesses including a printing business. The large site across I-95/Kenilworth Avenue is a county Washington Suburban Sanitary Commission operation.

PDR Employment

PDR Employment, as reported by the QCEW, is shown in Table A9-21 below. An on-site interview with the manager at the recycling operation indicated the Joseph P. Smith recycling company—the largest landowner in the area—has approximately 100 workers on its payroll at this site.[58] In addition, the window manufacturer does not show up on the QCEW report, and it employs approximately 12 workers on site.[59] Non-PDR employment is small in this industrial area.

[57] As of November 15, 2008.

[58] Joseph P. Smith and Sons has twelve other sites across the eastern seaboard. Interview on October 10, 2008.

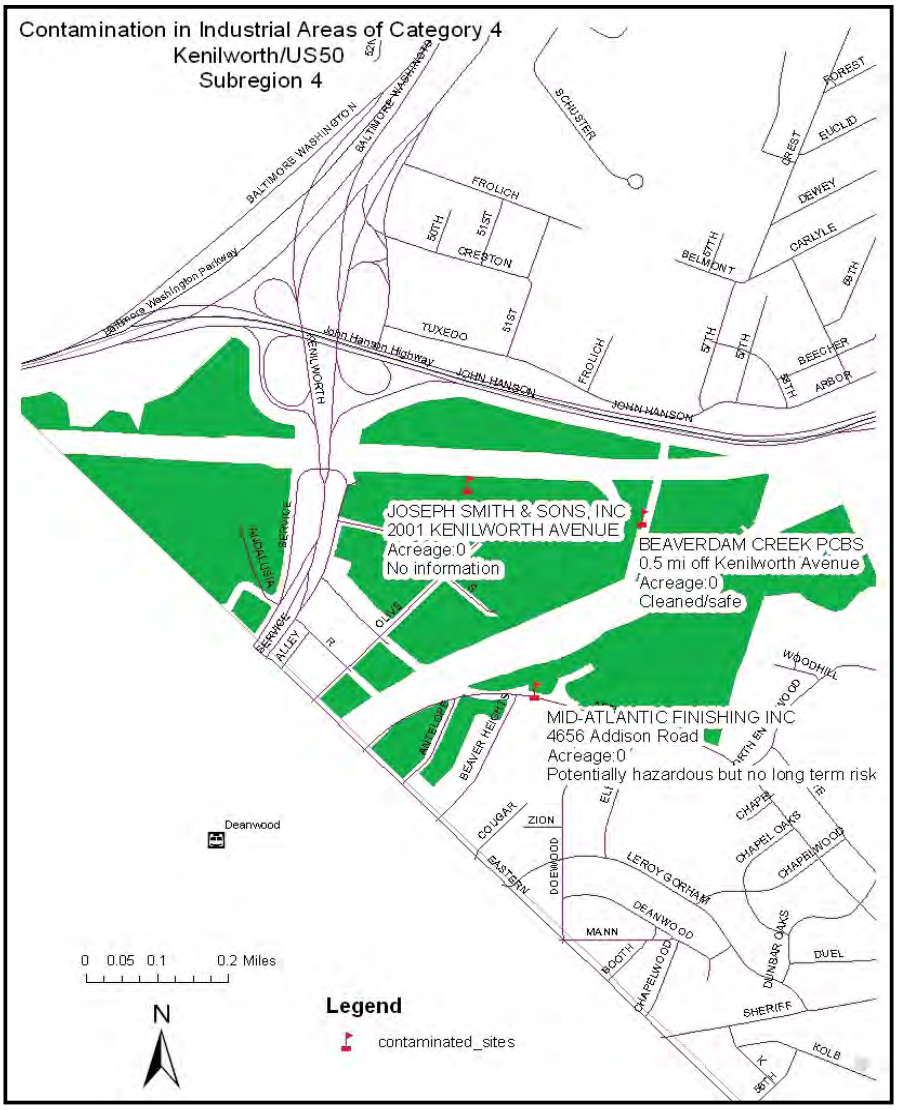
[59] Interview on October 10, 2008.

Table A9-21. Kenilworth/US 50 PDR Employment		
Industry	**Employment**	**Establishments**
Construction of Buildings	1-19	1
Heavy and Civil Engineering Construction	20-100	1
Fabricated Metal Product Manufacturing	20-100	2
Merchant Wholesalers, Durable Goods	239	3
Truck Transportation	20-100	2
Support Activities for Transportation	1-19	1
Publishing Industries (except Internet)	20-100	1
Waste Management and Remediation Services	20-100	2
Repair and Maintenance	1-19	1
Total PDR Employment	545	14
Total Non-PDR Employment	3	2
Total Employment	548	16

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Brownfields

Three sites in the Kenilworth/US 50 industrial area have been reported for environmental infractions: Joseph P. Smith and Sons, Mid-Atlantic Finishing Inc., and Beaverdam Creek. All sites have either been cleaned or are no longer considered by the MDE to pose any long-term risk as long as this area remains industrial. These sites are shown in Map A9-20.



Map A9-20. Sites with History of Environmental Contamination

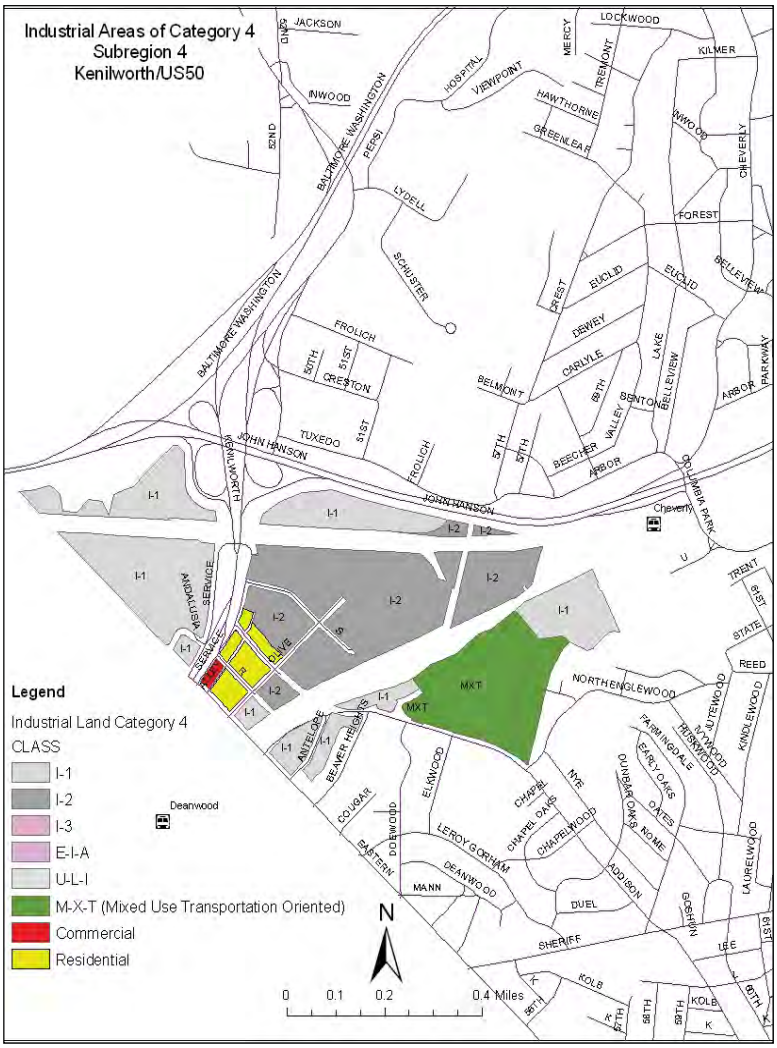
Source: M-NCPPC GIS Data and MDE 2007

Surrounding Land Uses

Kenilworth is being classified as a Category 4 industrial area because of the presence of economically healthy industrial businesses, with evidence of conflicting residential and industrial activities. In particular, the industrial area surrounds and abuts a residential area. (See Map A9-21.) Heavy truck traffic in and out of the neighborhood, as well as dust, creates tensions between the neighborhood and industrial businesses. Figure 6-4 includes an update to the original GIS database obtained from the county. This new information is the change in zoning code for the

area that includes the former site of Giant™. According to the last visit to PGAtlas.org, the site is currently zoned as M-X-T.

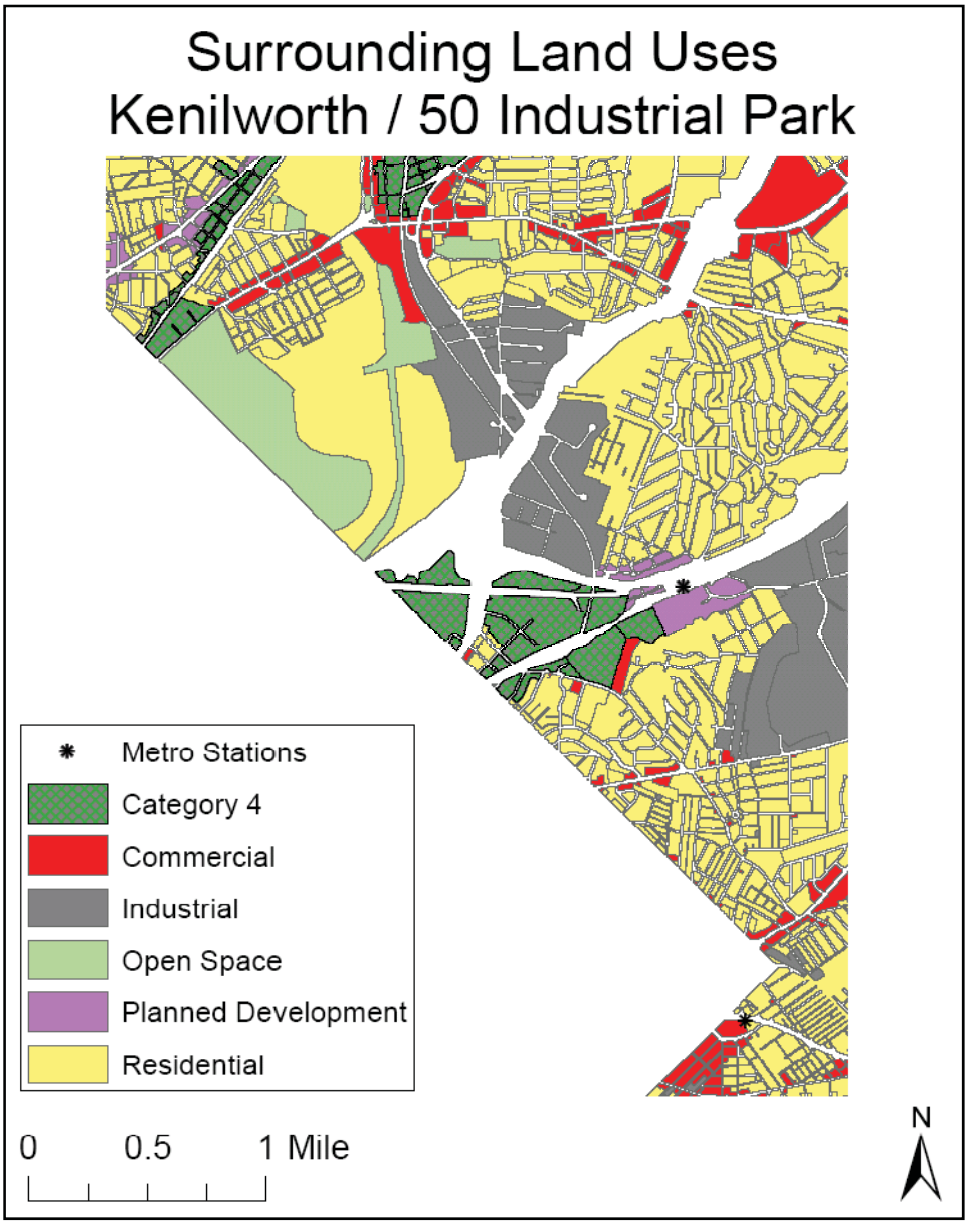
This is not an area where industrial activities can be easily phased out, for a number of reasons. According to one broker, Mr. Smith was offered $50 million for the 17-acre site where the recycling business is situated. He refused the offer, saying that the business was too profitable to warrant a land sale for this price. In addition, the prior contamination issues suggest that the county would face large cleanup costs in the event that this industrial area was closed down.



Map A9-21. Zoning of Kenilworth Area

Source: M-NCPPC GIS Database and PGAtlas.com December 30, 2008

Figure 6-5 shows that the larger area is home to healthy industry, shown in gray. So any conversion out of industry would create conflicts between the uses on the northern side of the site. Also, the site has good rail access. It also provides a needed county facility for recycling.



Map A9-22. Land Uses in Kenilworth-Surrounding Area

Source: M-NCPPC 2007

Recommendation for Kenilworth/US 50

It is recommended that the county examine urban design and road rerouting options to protect the economically healthy businesses, while protecting the residential neighborhood

that sits on the southwest portion of the site, bounded by Addison Road North to the northeast, Olive Street to the east, Kenilworth Drive to the west, and Eastern Avenue to the south. It is also recommended that the county look into the prospect of building on current area strengths and making this area a regional recycling center.

Recycling as an Industrial Park Concept

Economic development officials in York County Pennsylvania proposed a recycling industrial park concept there.[60] Recycling companies serve an important function in all metropolitan areas, including Prince George's County, and should not be thought of merely as "nuisance" businesses. These companies reprocess thousands of junk cars, appliances, and other large items from the county annually and keep tons of metal, paper, plastic, and other products out of county landfills and incinerators. It sorts and ships out tons of materials to manufacturers that recycle and reuse metals and plastics and contribute positively to the local economy. However, certain facets of the recycling industry are incompatible with many other aspects of urban life and increasingly lead to conflict. In an effort to address this conflict in a positive way, further exploration of a "Recycling Park" concept is recommended.

As presently conceived, a recycling park would simply be a special purpose industrial park that would provide a location for multiple recycling and reclamation businesses with the infrastructure and amenities common to many recycle operations. Specifically, such sites require adequate rail and truck access, plus the traditional infrastructure. Rail access currently exists at this Kenilworth site. This area could be redesigned with a recycling operation in mind and, thus, might require proactive installation of systems designed to mitigate environmental impact. A key component of this effort would include urban design and buffering strategies to eliminate existing conflicts between recycling activity and the adjacent residences. This probably would include rerouting of egress and entrance to the Baltimore-Washington Parkway.

[60] Dempwolf, C. S. 2006. River of Opportunity: A Comprehensive Land Use Study and Economic Development Plan for the Codorus Corridor. York, PA, York County Economic Development Corporation

New Carrollton Metro (135 Acres)

This area is home to the New Carrollton Metro station along with the surrounding office and retail. Although zoned light industrial (I-1), it contains no industrial buildings. It has already deindustrialized and transformed into a commercial/office district. Demand from office space users makes the area too valuable for industrial activity to survive.

According to both CoStar and interviews with brokers, the office/retail activity in the New Carrollton Metro area is very healthy. The vacancy rate is 9 percent for the 15 buildings, compared to the 18 percent county vacancy rate for office. (See Tables A9-3 and Map A9-23.)

Table A9-22. New Carrollton Statistics

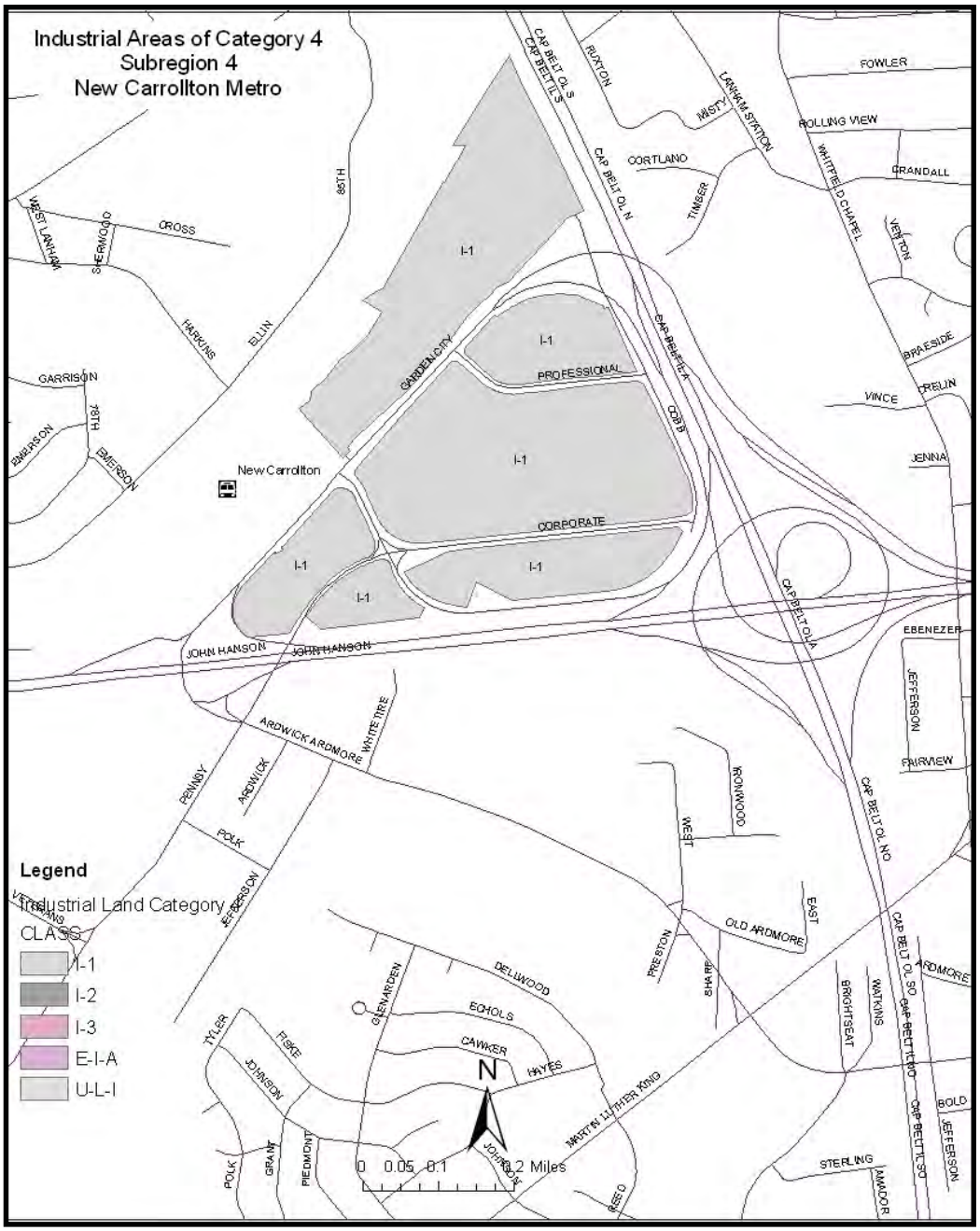
	Industrial/Flex	Class A Office	Class B Office
Number of Buildings	0	3	12
Square Feet	0	446,570	647,560
Average Rent/Year	0	$23.57	$21.31
Buildings Proposed or Under Construction	0	4	0
TOM	0	12.6 mos.	20.8 mos.
Vacancy Rate		9%	9%

Source: CoStar, March 9, 2008

Most of the buildings are under 30 years old. The area has another four additional Class A buildings in the planning phase.[61] According to CoStar, the average TOM is 16.1 months, compared to 22.8 months for office space in the county. Interviews with brokers at Edge Realty, TSC Realty, and Michael and Co.[62] confirm the findings from the CoStar data. All these brokers confirmed that rents for office space range from $20.00 to $23.50 per square foot, vacancy rates are relatively low, and vacant units do not sit on the market long. Figure 7-1 shows that this New Carrollton Metro area is dominantly zoned as I-1: light industrial.

[61] CoStar, August 12, 2008

[62] Brent Prossner of Edge Reality, Victor D'Ambrosia of TSC Realty, and Andy Mayer of Michael and Co. on November 25, 2008.



Map A9-23. Zoning at New Carrollton Site

Source: M-NCPPC 2007

PDR Employment

Table A9-23. New Carrollton PDR Employment		
Industry	**Employment**	**Establishment**
Construction of Buildings	1-19	2
Printing and Related Support Activities	1-19	1
Electrical Equipment, Appliance, and Component Manufacturing	1-19	1
Merchant Wholesalers, Durable Goods	20-100	2
Merchant Wholesalers, Nondurable Goods	1-19	1
Wholesale Electronic Markets and Agents and Brokers	10	3
Postal Service	20-100	1
Publishing Industries (except Internet)	1-19	1
Internet Service Providers, Web Search Portals, and Data Processing Services	101-499	1
Total PDR Employment	459	13
Total Non-PDR Employment	1,768	81
Total Employment	2,227	94

Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

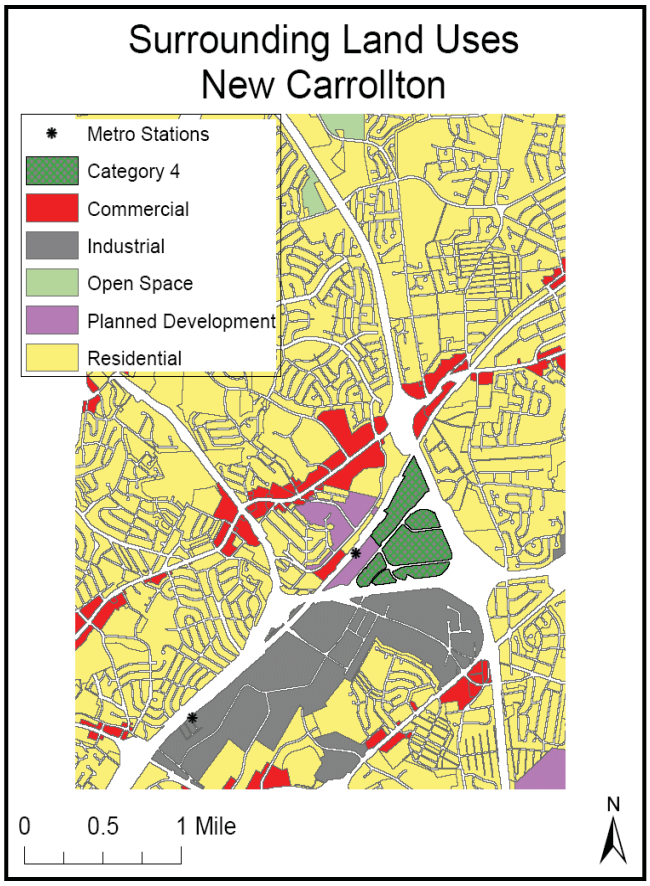
An analysis of the PDR employment indicated this area of New Carrollton is home to a large internet provider (see Table A9-23), but this company moved to Howard County before the interviews. Clearly, non-PDR firms are the major source of employment at this industrially zoned New Carrollton site.

Brownfields

An evaluation of EPA and MDE data indicate there are no brownfields in this industrial area.

Surrounding Land Uses

Map A9-24 shows the surrounding zoning for this area. The areas surrounding the New Carrollton site are industrial to the south, residential to the east, residential PUDs and retail to the west and north.



Map A9-24. Land Uses in New Carrollton-Surrounding Area

Source: M-NCPPC, 2007

Recommendation for New Carrollton

Our recommendation for New Carrollton is to rezone this area for mixed use, including residential, office, and commercial uses.[63] In addition to rezoning changes, the county should undertake the planning necessary to create a first-class pedestrian-friendly urban center.[64] An interview with a local broker indicates that nearly 80 percent of employees at New Carrollton currently drive to work. There is currently a walking path from the road to the Metro station, but it is difficult to access, and the area still does not encourage walking. Planning efforts should

[63] An interview with Rich McDonough, Vice President with Fraser Forbes in McLean, VA on December 10, 2008 indicates that a mixed use rezoning is already under discussion in the county.

[64] This is not a new idea. In July, 2008 the Urban Land Institute convened a technical assistance panel for the New Carrollton Metro Station. The ULI supported the recommendations of the 2004 New Carrollton Transit-Oriented Strategy Planning Study, authored by PB PlaceMaking for the M-NCPPC. Both visions call for an urban place with improved transportation access, walkability, and mixed-use downtown for the 71 acres surrounding the New Carrollton Metro.

be undertaken to increase Metro ridership from the site and reduce auto dependency. This New Carrollton location has the potential to be a world class development with a mix of residential, office, and commercial activity. The Metro station provides easy access to Washington, D.C. and the MARC train, and AMTRAK provides access to Union Station in D.C, and Baltimore, Philadelphia, and New York. The county could make this a first-class urban center to compete with any location in the world.

The current industrial zoning adds uncertainty to developers and inhibits the highest quality development. While unlikely that any industrial activity can afford to locate to the New Carrollton triangle, the legality of an industrial use may discourage investors from putting top dollar in buildings and amenities in this location. Out-of-date zoning and inadequate planning around the New Carrollton Station is creating a serious missed opportunity for Prince George's County.

Landover Center (268 Acres)

Landover Center runs along the Beltway (eastern border), with Landover Road on the north and Central Avenue on the south. The western edge is about one mile inside the Beltway. The area borders the Redskins stadium on the east.

The Landover industrial area is economically healthy, and it is designated as a Category 4 location because there appeared to be pressure from encroaching office uses. After further evaluation, it was concluded that office users and industrial/flex operations operate compatibly, and no change in zoning or policy is needed.

This is an economically healthy industrial/flex and office area. The vacancy rate for industrial is 0 percent; for flex space it is 9 percent; for office, 20 percent, and for the one retail building it is 70 percent.[65] The industrial/flex space vacancy rate is well below the county averages of 14.1 percent and 17 percent for flex space. The 20 percent office vacancy rate is slightly above the county average of 18 percent. (See Tables A9-24 and Figure A9-9.) Industrial/flex rents are not available.[66] Rents for office space have remained constant at about $21.87 per square foot, slightly below the countywide average of $23.08.

[65] CoStar, August 31, 2008

[66] Co Star, August 31, 2008 and January 4, 2009.

Table A9-24. Statistics for Landover			
	Industrial	**Flex**	**Office**
Number of Buildings	2	7	6
Square Feet	244,000	44,383	177,848
Average Vacancy Rate	0%	9%	20%
Average Rent/Year	Not Reported	Not reported	$21.87
TOM	0 Months	20.7 Months	21.4 Months

Source: CoStar, August 30, 2008 and January 4, 2009

TOM for Landover industrial and flex space is below the county average—no time for industrial space and 21.4 months for flex space, versus 24.2 months for flex space countywide. The TOM is also below average for office space, at 21 months in Landover versus about 23 months for the county. In short, the industrial, flex, and office space is economically healthy in Landover. (See Tables A9-24 and Figure A9-8.)

Figures A9-6 and A9-7 show that the industrial/flex space is about the same age as the office space. This suggests that, rather than one use displacing the other, both uses have come on-line at about the same time. In other words, investors in office space knew that manufacturing operated nearby and decided those operations would be good neighbors and vice versa.

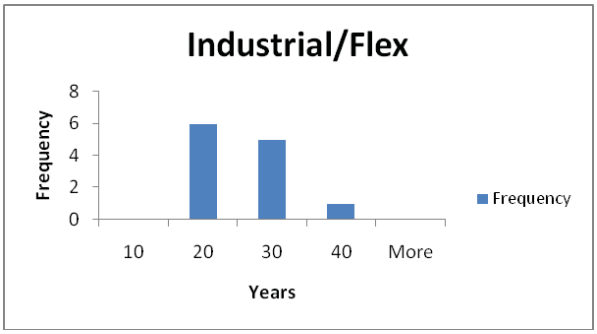


Figure A9-8. Age of Industrial/Flex Space in Landover

Source: CoStar 2008

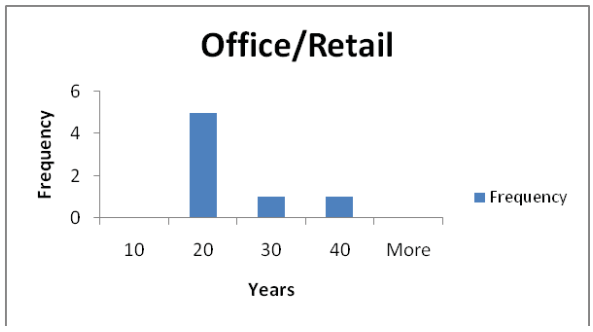
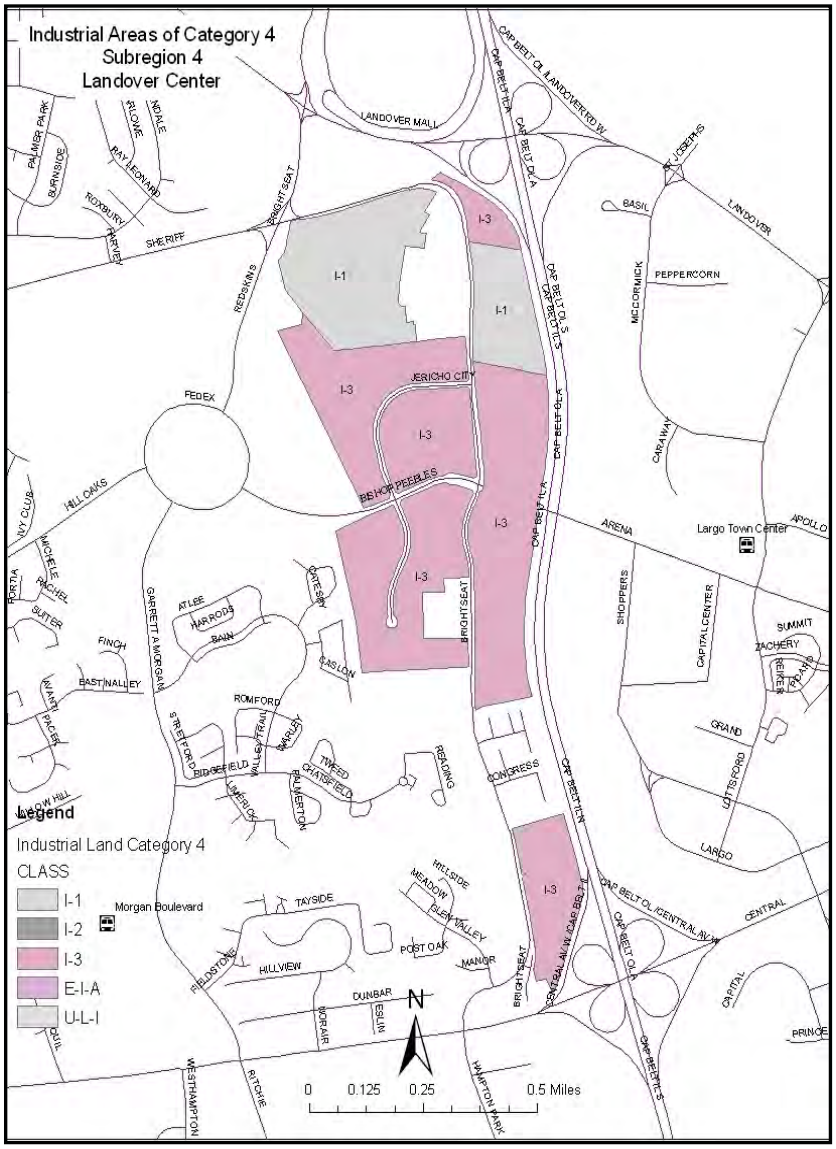


Figure A9-9. Age of Office Retail Buildings in Landover

Source: CoStar 2008



Map A9-25. Zoning of Landover Area

Source: M-NCPPC, 2007

Map A9-25 shows Landover Center area is currently zoned as I-3 (planned industrial/ employment park).

PDR Employment

According to the QCEW, the largest employers in the Landover industrial area are personal and laundry services, which accounts for more than 65 percent of total PDR employment. Printing enterprises and specialty trade contractors altogether account for 21 percent of total PDR jobs. (See Table A9-25.) An interview with Thompson Creek, manufacturer of replacement

windows, doors, and siding, indicates that this is a good location for entrance to I-95 and easy access to markets in Virginia and Maryland. Other major operations in Landover include Cintas, uniform rental and work apparel; Jericho City of Praise with 95,000 square feet of rentable space, which includes a church, senior housing, and administrative offices; and a Library of Congress Annex. Non-PDR employment makes up about one-fourth of the areas employment.

Table A9-25. Landover PDR Employment

Industry	Employment	Establishment
Heavy and Civil Engineering Construction	20-100	1
Specialty Trade Contractors	103	5
Textile Mills	1-19	1
Printing and Related Support Activities	93	3
Publishing Industries (Except Internet)	20-100	1
Repair and Maintenance	1-19	1
Personal and Laundry Services	500-999	1
Total PDR Employment	941	13
Total Non-PDR Employment	231	19
Total Employment	1,172	32

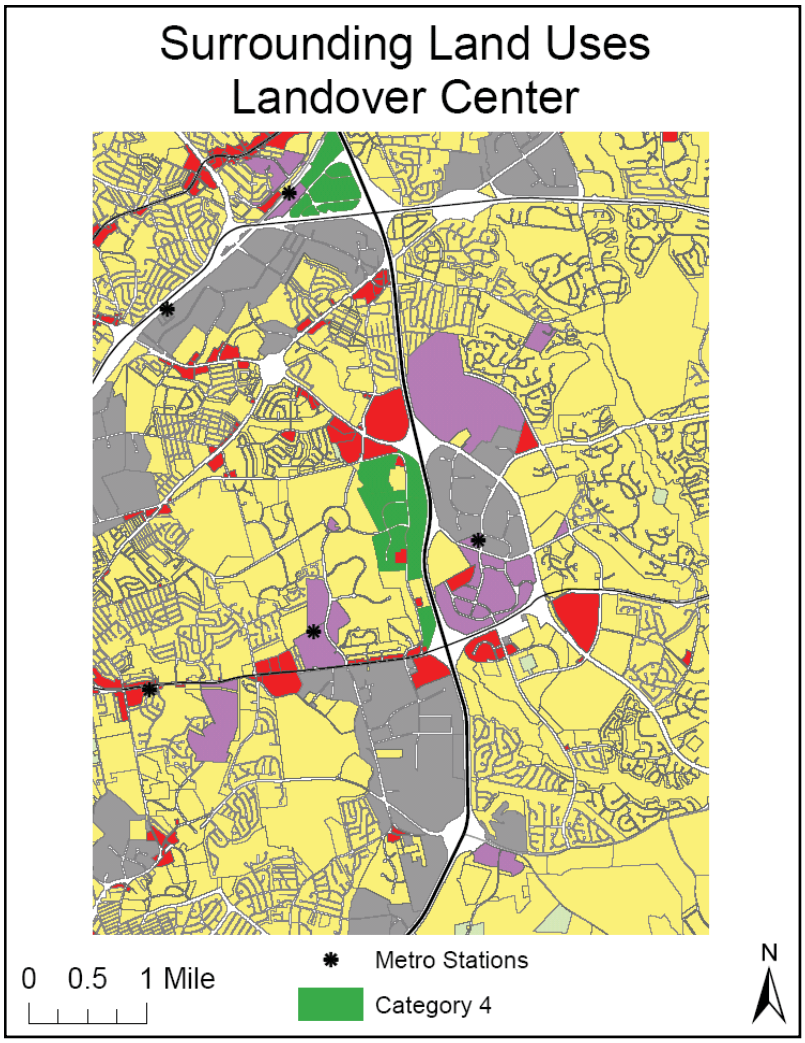
Source: QCEW, 4th Quarter 2007, Bureau of Labor Statistics

Brownfields

An evaluation of EPA and MDE data indicates there are no brownfields in this industrial area.

Recommendation for Landover

It is recommended that current zoning and policy remain unchanged. Rather than a situation of encroachment from office space, the interviews and CoStar analysis indicate that office and industrial/flex uses operate compatibly in Landover. Figures A9-32 and A9-33 indicate the industrial flex space and office buildings are both about the same age. This indicates that these two land uses have remained compatible neighbors for several decades. Map A9-26 shows how both industrial/flex and office uses are incorporated into the larger area.



Map A9-26. Land Uses in Landover Industrial Area-Surrounding Area

Source: M-NCPPC, 2007

Revisions of Analysis in Appendix 8

Walker Mill/Capitol Heights

Walker Mill was categorized in Appendix 8 as a Category 5, but as a result of discussion with county officials and private analysts questions arose as to where it should be categorized.[67] It was ultimately decided that it should be kept in Category 5 because it's a large vacant site surrounded by economically healthy industrial activities. It was concluded that rezoning of the vacant areas at the Walker Mill site could likely threaten the existing healthy businesses. An

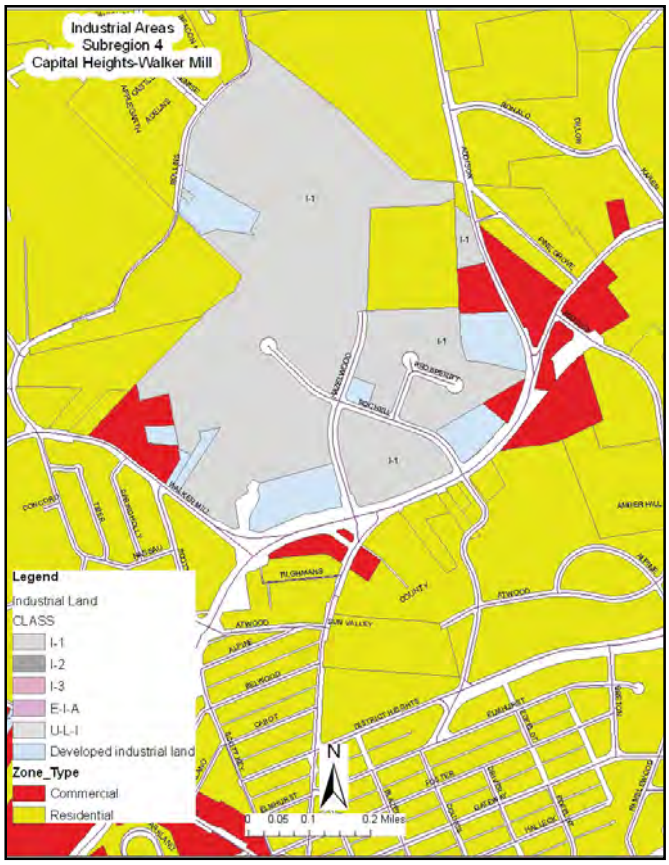
[67] Sean Pink, Market Analyst/Planner, RKG Associates, Inc.

aerial view of the site is shown in Map A9-27. The developed sites are shown on Walker Mill Road and the north portion of Addison Road south. In Map A9-28, industrially zoned but developed sites are shown in light blue. The original color associated with industrial-zoning code indicates undeveloped areas. Both the aerial map and the zoning map show a large portion of the area undeveloped.

The area is home to a trucking business and a construction company (QCEW, 2007).

Map A9-27. Arial View of Walker Mill/Capitol Heights Area

Source: Google Maps 2008



Map A9-28. Development and Vacant Land Area at Walker Mill

Source: M-NCPPC GIS Data, 2007

Summary of Recommendations

Table A9-26 summarizes the zoning-related recommendations for Category 4 industrial areas in Prince George's County.

Table A9-26. Summary of Recommendations

Site	Current Zoning	Recommendation
Maryland 95 Corporate Park	E-I-A and I-3	Rezone residential land between Sweitzer Road and Gunpowder Road to create a large urban, office and high-technology development.
University-College Park Metro	I-3	Protect and retain as industrial/flex.
University East	I-1 and I-2	No change to zoning but better policy to create high-technology office and assembly park; immediate review of The Washington Post site potential and options is advised.

Hyattsville-Bladensburg	I-1 and I-2	Protect and preserve as industrial with the rezoning of selected sites to create a more attractive entrance.
Hyattsville-Edmonston	I-1	Protect industrial area and provide buffers with neighboring residences.
Hyattsville-Cottage Hill	I-1	Let market forces decide future use.
Hyattsville-Brentwood	U-L-I	On further examination, this is a Category 5 area with healthy industrial activity and no evidence of encroachment. Retain current zoning and policy.
Goddard Corporate Park	I-1	Retain current zoning, but plan for an advanced high-technology district.
Kenilworth/50 Industrial Area	I-1, I-2, and M-X-T	Retain industrial district and improve urban design and infrastructure to improve compatibility with residential area.
New Carrollton Metro	I-1	Rezone and create a world-class, transit-oriented urban center.
Landover Center	I-1 and I-3	Retain current zoning and policy.

To summarize, three recommendations are being made that, in the final analysis, have little to do with zoning.

Our recommendations leave the county with a more than adequate supply of industrially zoned land. As indicated in Appendix 6, and repeated earlier, the county has an excess of about 2,640 acres of industrially zoned land. This calculation is based on the county's formula of having a reserve of industrially zoned land that is three times the industrial-land-use absorption rate over a ten-year period. Currently, 3,050 acres of industrially zoned land have been placed in Categories 1, 2, and 3—acreage that could be rezoned to nonindustrial land uses without adverse impacts on the county economy. These are the highest priority sites to be rezoned out of an industrial use when demands for alternatives arise.

Our interviews with industrial firm owners in various Category 4 areas revealed substantial sentiment that municipal governments generally do not appreciate the value of PDR activities. The impression of these owners was that local governmental officials do not adequately appreciate the tax revenue and employment generated by PDR-related firms and sometimes use capricious code enforcement to make it inconvenient for normal business operations.

1. It is being suggested that the county take on the role of educating municipalities and citizens about the economic and fiscal benefit of PDR firms.

2. The county should invest in improved urban design, and buffering could help alleviate such conflicts with PDR activities. It is also being suggested that some of this lack

of appreciation may be caused by conflict between residential and PDR uses, and the county should invest in enhanced buffering of industrial uses—as suggested for the Edmonston and Kenilworth area analyses in this appendix.

3. The above criticism applies to the community planning process as well. For example, some PDR firm owners felt shut out of the charrette planning process during the *Port Towns Sector Plan and Sectional Map Amendment* process. They found that recommendations were made that would rezone and transform their land, without having been informed of those proposals upfront. An effort should be made to recruit local PDR firm owners and managers to participate in the sector planning process and to continually inform them about the progress and draft reports of plans.

4. Many firm owners interviewed were also critical of the entitlement and permitting process in the county, and the lack of cooperation and coordination between economic development, planning, and elected officials at the municipal and county levels. They reported that the county is notorious for having an overly lengthy entitlement and permitting process. This problem has been acknowledged almost universally, and it is producing negative economic impact throughout the county. These negative impacts include loss of private capital investment, loss of both existing and future jobs, loss of existing and future high-growth, high-tech industry, and loss of county and municipal tax revenue. The total magnitude of these losses has not been calculated; however, in the M Square area alone, the loss of tax base is in the tens of millions of dollars, and job losses/forfeitures are in the hundreds. A recent study comparing development around Metro stations in Prince George's and Montgomery County found that between 1993 and 2006, county level conditions inhibited station area commercial development by 28 percent.[68] Pride, prejudice, and political turf, it seems, are expensive propositions for Prince George's County taxpayers.

5. There was concern that the county does not take a proactive approach to determining the needs of its PDR firms. For example, one owner suggested that the county interview key firms to ask them where they purchase inputs, so that the information could be used to recruit new PDR firms into the county that supply existing businesses.

[68] Transit-Oriented Development in Prince George's County and Montgomery County, Maryland; Further Evidence of the East-West Divide, Dempwolf, C.S., 2008. Unpublished paper .

6. This relates to the above issue. It was clear from the interviews that the Prince George's County PDR firms are advantageously situated to make the county a regional center for "green collar" employment. Many local governments, including Prince George's, Anne Arundel, and Montgomery counties and the District of Columbia, have passed legislation requiring LEED certification on new public buildings and new commercial and residential construction. It is likely that the Obama Administration will increase incentives for green business creation and employment. Interviews with construction supply firms clearly indicated that a major reason they were located in Prince George's County was because of location to markets. It is suggested that the county explore how it can assist its existing PDR firms, and to recruit new firms to take advantage of a local and national trend toward green construction and employment. This recommendation is a corollary to Chapter 4- Bladensburg to create a green industrial district.

7. The county should conduct a study to determine the needs of high-technology businesses and begin to strategically promote high-technology parks in both the Goddard Corporate Park and the Maryland 95 Corporate Park. The county has the potential to be a global competitor in the aerospace and biotechnology sectors, but they need to think strategically about the kinds of investments and policy to make this happen.

Finally, the numerous studies and efforts to plan for a high quality, walkable, mixed-use center for New Carrollton are worthwhile. This area has all the advantages of a major global office, residential, and retail center. The county should begin to build on these advantages.

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