



County of Fairfax, Virginia

MEMORANDUM

DATE: October 23, 2024

TO: Board of Supervisors
Planning Commission

FROM: Tracy D. Strunk, AICP, Director
Department of Planning and Development (DPD)

SUBJECT: Office, Industrial, and Retail Land Use Trend Reports

The Fairfax County Department of Planning and Development (DPD) retained Clarion to prepare a series of reports related to office, industrial, and retail land use trends, which are attached. Using national, regional and local trends and best practices, the reports provide a series of policy and regulatory recommendations that will inform the ongoing work associated with the [Countywide Policy Plan Amendment – Plan Forward](#) (2022-CW-2CP).

Next steps include presenting this information at future Board of Supervisors and Planning Commission committee meetings to solicit feedback for staff to consider as part of any future changes to the Policy Plan.

Please feel free to contact me with any questions.



PLANNING & DEVELOPMENT

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Office Land Use Trends Report

Fairfax County, Virginia

Department of Planning and
Development

Report prepared by:

CLARION

September 2024

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1: Project Overview

Background

The Fairfax County Department of Planning and Development has requested a review of office land use trends, as authorized by the Fairfax County Board of Supervisors. The objective of this review is to determine whether, in light of projected office demand in the region, land planned, zoned, and used for offices should be retained by the County, or whether projected diminishing demand for office space may be counterbalanced by allowing for conversion to residential use, to meet what is demonstrably a high demand in the County.

This report looks at office use trends both nationally and in Northern Virginia and considers opportunities and challenges inherent in converting office space to housing. This information provides the background and context for the recommendation of suggested areas to focus redevelopment, and an updated list of criteria for assessing such requests.

In addition to this project overview, this report includes the following sections:

- **2: Office Land Use Trends.** Overview of national and regional office trends, including vacancy rates and anticipated demand for office space, along with consideration of barriers and opportunities with office conversions.
- **3: Office-to-Residential Project Examples.** Examples of completed office-to-residential conversion projects in cities around the country. A brief overview of each project's location and key characteristics is provided, along with information about available financial or regulatory incentives.
- **4: Recommendations.** Suggested edits to the County's Appendix 13 of the Policy Plan, to use more detailed performance criteria in evaluating office conversion requests, and two examples of locations where conversion may be considered desirable.
- **5: Sample Analysis.** Example of how GIS data can be used to quantify assessment of one component of a performance standard (Proximity to Amenities/Necessities).
- **6: Appendix.** Summary of current policies and regulations in the Fairfax County Policy Plan and Zoning Ordinance related to office land uses.
- **7: Sources and Supporting Materials.** List of the sources and supporting materials that were used to develop this report.

Note about Terminology

Throughout the content that follows, when this report uses the term “conversion,” it is intended to encompass two scenarios. The first is the adaptive reuse, or conversion, of an existing structure from one type of use to a new use (typically from office to residential use). The term is also intended to encompass situations where an existing office structure is “converted” by means of demolition and replacement of the structure with a new building. The report focuses generally on conversion to residential, but may also include office conversion to other uses such as industrial, if indicated by context or content.

2: Office Land Use Trends

Office Vacancy Rates

Even before the COVID-19 pandemic, the market for office space was in flux, adapting to the increasing demand for high-quality spaces with amenities close at hand. Now that the most severe impacts of the pandemic are largely behind us, that trend remains true, but nearly everything else about the office market has changed. According to real estate professionals, there is no going back to the relatively steady demand for office space that used to define the market. The permanence of remote work and hybrid schedules, combined with decreasing demand and increasing uncertainty in financial markets on account of rising interest rates, have all changed the extent and characteristics of demand in the office real estate market. This section examines the office trends and projected demand for office uses nationally.

Nationally

LINGERING IMPACTS FROM COVID-19 PANDEMIC¹

The national office vacancy rate reached 21 percent in the third quarter of 2023, the highest level in 30 years, according to reports by the commercial real estate groups, CBRE Group and JLL. Since 2019, the overall office vacancy rate has increased by three percent, triggered by work-from-home policies implemented in the COVID-19 pandemic, and maintained after the announcement of the end of the public health emergency. Because remote work has continued post-pandemic, nationwide, office occupancy rates have been slow to recover, despite a five percent increase from pre-COVID levels in the number of office jobs (as distinguished from retail and hospitality positions, or construction jobs). Consequently, in the first quarter of 2024, the national office vacancy rate was 17.6 percent, higher than the previous peak in the midst of the Global Financial Crisis of 2008, when office vacancy rates reached 16.3 percent. While record high vacancy rates during the Global Financial Crisis were largely the product of financial imbalances, today's high office vacancy rates are influenced by several factors:

- Employers maintaining remote/hybrid work arrangements and consequently downsizing their office spaces.
- Beginning in late 2022 and continuing through 2023, hesitation by companies to sign new leases or expand their office space footprint, because of high interest rates on loans and lingering fears of an economic recession, but as of September 2024 the likelihood of an impending recession seems to have lessened.
- A general oversupply of office space that is difficult to lease because it does not align with tenants' changing preferences for high-quality, smaller, and collaborative spaces near amenities like public transit and restaurants.

While some employers discontinued full-time remote work arrangements following the end of the COVID-19 pandemic, hybrid arrangements remain prevalent, and real estate professionals believe these

¹ This report uses the County's Economic Development Authority data for metrics where such data is available. Where EDA data was not available, this report relies on information in commercial real estate reports, released quarterly, which often cite higher estimates than EDA data for the same metrics.

arrangements are permanent, thus impacting long-term prospects for office demand. The permanence of both remote work and hybrid schedules has forced employers to re-evaluate their office space needs, with many choosing to downsize their office footprints while opting for higher quality in the smaller spaces they are choosing to occupy.

FLIGHT TO QUALITY

There is a shift to increased demand for spaces with ample amenities (both on-site and in close proximity) and in better locations – a trend termed the “flight to quality.” This is happening because hybrid work reduces the overall need for space, allowing tenants to occupy smaller but higher-quality spaces in a cost-efficient manner. The desire for higher-quality space is driven by employers hoping that a higher-quality office space can act as an incentive to bring employees to work more days in-office, but it is also a recognition that employees who are present less often need less private space, and can work just as efficiently from shared, collaborative spaces. Mike Samuels, a principal with real estate consulting and valuation firm Clarion Samuels in Philadelphia, confirms this trend, citing the changing needs of law firms as an example. In the past, law firms provided large, individual offices to their partners and associates. Firms are now seeking spaces where the associates – who are no longer expected to be present every day – can work from shared, collaborative spaces during the one or two days a week they are in the office. Where there was once the need for dozens of private offices, now three or four private offices will suffice, as long as those are accompanied by “amenitized” collaborative space.

The flight to quality trend is creating differences in vacancy rates and asking rent prices between office classes throughout many cities. For example, in Northern Virginia, Class A office space (including “trophy” office space located in the most prestigious office towers in a submarket) had the lowest vacancy rate in the first quarter of 2023 of 18 percent compared to 22 percent and 19 percent of Class B and C offices, respectively. Both trophy and Class A properties are often in more desirable locations like downtowns and near high frequency transit where employees have access to more amenities within a walkable distance, compared to Class B and C spaces that are more likely to be dispersed in suburban areas. However, even demand for Class A space can vary significantly between cities, and also within local markets. Along the East Coast, in locations as diverse as suburban New Jersey outside New York City, to rapidly growing sunbelt locations like Charlotte, North Carolina, there are many Class A spaces in suburban office parks that are struggling as much as Class B and C spaces in these areas. Equally, there are Class A spaces in central cities where office prices are plummeting to the extent that – quality and proximity of amenities notwithstanding – conversion to other uses becomes the more financially feasible option.

FEAR OF WORSENING ECONOMIC CONDITIONS

Another factor affecting office vacancy rates is a fear of worsening economic conditions. Overall, the U.S. has been able to stave off an economic downturn that many anticipated would unfold in late 2023. However, rising interest rates and the on-going uncertainty in economic conditions have discouraged tenants from signing new leases or expanding their current office space. Developers have been disinclined to take on the necessary debt to initiate new projects, when faced with the combination of high interest rates, rising construction costs, and slack demand. In some cases, this reluctance extends also to initiation of housing development projects, despite pronounced demand for more housing in many locations. To convert an office building into housing, a rezoning or other approval from a municipal

government is often required. As debt becomes more expensive, the prospect of borrowing, then undergoing a protracted and uncertain public process to secure approval for conversion of existing, underutilized office space to residential use becomes less practical and less appealing. Despite the fact that there is a strong demand for more housing, each time delay diminishes the prospect of realizing an anticipated reasonable return on the initial investment.

OVERSUPPLY OF OLDER CLASS B AND C SPACES

According to a report by the Wall Street Journal, an oversupply of office space has been in the making long before the COVID pandemic, driven by a rapid depreciation of commercial property from a 1981 change to the tax code, and a long period of low interest rates. The pandemic shortened the time it has taken to see the effects of an oversupply of office space. This oversupply is especially pronounced in older, low-quality buildings that are contributing to the spike in vacancy rates. Older buildings with this Class B and Class C space are often in need of renovation before being re-occupied, but even if there is demand, developers are finding it increasingly difficult to secure loans with satisfactory conditions to make such renovations worthwhile.

Fairfax County/Metro DC

Office vacancy trends in Fairfax County generally mirror national trends in terms of high vacancy rates, a shift to high-quality office spaces, and a slowing of new office construction. In mid-year 2023, office vacancy rates reached 17.1 percent in Fairfax County, according to the County's Economic Development Authority (EDA), with submarkets not served by rail transit seeing significantly higher vacancies, up to 43.3 percent in Newington/Lorton, and 38.4 percent in Bailey's Crossroads. Conversely, areas such as Burke and McLean/Great Falls were considerably below the County rate, with only 3.0 and 3.4 percent vacancies, respectively. At the same time (mid-year 2023), office vacancies in DC reached 20 percent for the first time in recorded history.

The flight to quality trend is present in both Fairfax County and the DC metro. In the third quarter of 2023, Class B office spaces accounted for 60 percent of the total vacancy rate in Fairfax County. In the DC metro, Class A office spaces represented 80 percent of new leasing activity in the second quarter of 2023 while Class B and C accounted for only 14 and five percent, respectively. According to a quarter two 2023 report by Cushman & Wakefield, in the metro DC area, data indicate that offices closer to mixed-use submarkets that have retail, entertainment, and residential uses performed better post-COVID than those further from mixed-use development. These trends seem to indicate that single-use, suburban office parks are increasingly falling out of favor and tenants will continue moving toward high-quality, amenity-rich spaces. These findings align with the County's own research, which indicates that "demand for older office product with fewer amenities has dramatically shifted downward," with new construction clustering closer to mixed-use activity centers, accessible by rail transit.

Projected Demand for Office

Remote and Hybrid Work will Continue to Reduce Demand for Office

In the near term, it is expected that remote and hybrid work arrangements will continue to reduce demand for office space. Although many employers prefer that staff work in the office because managers perceive in-person interactions to be more beneficial than virtual engagement, and that in-office conditions encourage innovation, employees' very strong preference for hybrid-work arrangements – with 98 percent stating they prefer remote work at least some of the time -- mean such arrangements are likely to persist. This will continue pushing employers to downsize their office space and locate in amenity-rich buildings (with gyms, cafes, and collaborative spaces), and in closer proximity to amenity-rich areas (served by transit, close to restaurants). While external factors, such as proximity to amenities, are important to whether employees want to show up, desire to be in the office is also affected by internal company policies, such as parking or transportation subsidies, availability of childcare, quality of technology on-site, office perks like catered lunches, as well as individual preference and social cohesion.

Generally, submarkets with trophy and Class A office space in proximity to public transit, restaurants, retail, and entertainment are expected to perform well. A 2023 CBRE survey of commercial office tenants confirms this ongoing trend of more tenants preferring office spaces with on- and off-site amenities and in locations with ample public transit. In fact, 82 percent of respondents indicated their real estate decisions were heavily influenced by proximity to transit. Further, the top three most important amenities tenants consider when evaluating a property are public transit access, adequate car parking, and on-site café food and beverage. While café food and beverage within the same building was identified specifically by respondents surveyed by CBRE, other studies show proximity to restaurants and food places off-site is preferred more broadly. According to a 2020 report by JLL, the future of office space will be based on "...a greater mix of experiential spaces toward supporting teams and collaboration, as well as heavily amenitized social or client space which acts as a showcase for a company's brand and culture."

Long-term trends in office demand are uncertain, with real estate experts with the Counselors of Real Estate emphasizing that the office market is in uncharted territory and current issues are likely to persist for between three and 10 years. Challenges abound for older office spaces, especially for buildings in undesirable locations, that are highway-dependent and not within walking distance of any office-supporting uses like restaurants. Commercial real estate experts are signaling that functionally obsolete office buildings, predominantly Class B and C spaces, are at risk of default if they are financially incapable of securing new loans to perform necessary renovations and upgrades (not to mention new tenants if improvements can be completed). Rising interest rates, stricter underwriting requirements, and lack of investor interest in older buildings are decreasing the viability of these buildings for office use. In some cases, the infeasibility for continued office use could indicate these structures are good candidates for conversion projects; however, some of the same location-related issues that limit the desirability of the buildings for office use may apply equally to their re-use as housing.

As more tenants look to maximize the advantages of their office space, the demand for offices near amenities that are attractive to employees will almost certainly persist and demand in the region is likely to mirror national trends more broadly.

Interest in Office to Residential Conversions Expected to Continue

Low office occupancy rates combined with the national shortage of housing is contributing to a growing interest in converting commercial office spaces to residential uses. According to a 2022 report by Up for Growth, the U.S. has a housing shortage of nearly 3.8 million homes while at the same time, millions of square feet of office space are vacant across major cities around the country. This presents a unique opportunity to expand housing options while reducing some pressure from low office occupancy rates.

Over the last seven years, the real estate group CBRE has tracked 89 completed office-to-residential conversion projects throughout 26 major cities. The average age of converted buildings was 80 years old, signaling that developers are perhaps targeting the ‘low hanging fruit’ – pre-WWII office buildings that have design elements like shallower floorplates, higher ceilings, and access to windows, all of which make a structure easier to convert to residential use. However, conversion projects are happening across the country and are not necessarily confined to cities with a large supply of pre-WWII office buildings. San Diego, Boston, Manhattan, Cleveland, and Philadelphia have led the way in completing the most adaptive reuse projects in the past seven years, according to a report by CBRE. In 2022, Los Angeles, California; Kissimmee, Florida; Alexandria, Virginia; and Baltimore, Maryland led the way for the highest number of units created by office to residential conversion projects.

In addition to pressure to convert office buildings to residential uses, conversion of office buildings to industrial or warehouse uses is also becoming more common. In recent years, rising industrial rents along with rapidly growing demand for warehouse and distribution space have enticed developers to pursue these projects. Unlike residential projects, office-to-industrial or warehouse are happening more in suburban office parks where location characteristics – such as proximity to highways – that are less valued for residential development are highly beneficial for industrial and warehouse uses. According to real estate experts with Counselors of Real Estate, developers see warehousing as the top choice for converting obsolete office buildings because demand is growing (especially in land-constrained communities on the East Coast), and the cost of such conversions is considerably less than conversion to residential use. This is true for several reasons, including that fewer structural modifications are needed, fewer discretionary approvals are needed, and financial gains are more predictable and quicker to realize. There are other advantages to nonresidential conversion projects; one example is that switching from one non-residential use to another does not involve an increase in the number of new students that need to be accommodated in the local school system.

Office Conversion Barriers and Opportunities

Challenges to Residential Conversion

According to a 2023 report by McKinsey Global Institute, there is lower demand for Class B and C offices overall, undergirding the structures’ growing functional obsolescence. Where these office spaces are also located in suburban, car-dependent locations, the likelihood of their revitalization and reuse diminishes. Standalone suburban offices and suburban office parks face other impediments to residential redevelopment. They were, first and foremost, built in the suburban locations they occupy so they would be near highways, without too much concern for proximity to transit, access to key amenities, or any of the other elements that residential development needs. The reliance of these locations on cars to access

every daily need is inconsistent with common planning objectives of dense, walkable development, and the possibility that they may generate significant increases in traffic on local roads can give rise to resistance from local residents. Residential conversions in these locations also pose the potential for increased burdens on schools, where a sudden influx of residents in formerly commercial areas is difficult to accommodate. Similarly, a large number of new residents can stretch the capacity of emergency services trying to reach more dispersed areas that historically were not in need of a high level of service. In some areas, these barriers may not be insurmountable from a developer's perspective, but there is still the question of whether to promote them, if they do not align with planning best practices.

Leaving aside the particular challenges of converting Class B and C suburban office space, there has been an overall increase in both planned and completed office-to-residential projects in recent years. Conversions still represent only a small fraction of existing buildings that are redeveloped – in some cases it is more straight-forward and more cost-effective to demolish existing structures and build from scratch. In other cases, County contacts have indicated that it is, in fact, not more cost-effective to demolish an existing structure and build from scratch. Given the continuously rising cost of materials and construction, this calculus on the feasibility of reuse versus scraping a site for new construction is likely to continue evolving. Nevertheless, whether buildings are converted or replaced, commercial real estate experts estimate that at least ten percent of both urban and suburban offices could be converted without detriment to the office market. In fact, estimates in a CBRE 2022 report indicate if every then-planned office conversion were completed – in addition to all projects completed since 2016 – surplus office space would decrease by only two percent.

Federal Support for Office Conversions

In October 2023, the Biden Administration announced new federal programs to support expanded office-to-residential conversion projects, as part of the Administration's wider goal to increase housing affordability. Revisions to the Community Development Block Grant program, administered by the U.S. Department of Housing and Urban Development, now enable states and local governments to use grant funding to buy, rehabilitate, and convert commercial buildings to residential uses. The Department of Transportation (DOT) will offer below-market financing options through the Transportation Infrastructure and Innovation Act and the Railroad Rehabilitation & Improvement Financing program for projects near public transit, emphasizing the importance of affordable housing in proximity to public transit. This will make available over \$35 billion to support transit-oriented development. Moreover, the DOT will offer two types of technical assistance grants to guide communities looking to leverage federal funding for conversion projects. While federal support for conversion projects is important and indicative of the urgency of both the housing crisis and high office vacancy rates, it is too soon to tell how much it will spur new conversion projects.

Demand for Increased Flexibility in Zoning and Building Codes to Support Adaptive Reuse

In many locations, existing zoning and permitting regulations present significant barriers to adaptive reuse projects, according to a report from the U.S. Chamber of Commerce. Economic challenges such as growing construction and material costs already limit the feasibility of office-to-residential conversion projects and restrictive regulatory standards can add more time and cost, ultimately discouraging

developers from pursuing such projects. Jurisdictions can add flexibility into their zoning codes and tailor regulatory processes to help make conversion projects more attractive to developers and promote adaptive reuse projects.

Introducing a streamlined approval and permitting process for office-to-residential projects is perhaps the most straightforward way jurisdictions can encourage expanding office-to-residential projects. An expedited approval process can reduce time, cost, and uncertainty of a project. For instance, if a conversion project does not need to go through a public hearing, there is little to no risk that the project will be held up by opposing parties or possibly stopped. Another way communities can support conversion projects is by adjusting their development regulations to be more conducive to the unique needs of adaptive reuse projects, by adding flexibility to dimensional standards, threshold requirements, nonconformity regulations, and open space requirements. Cities like Boston, Massachusetts and Portland, Oregon have put in place flexible approval processes and regulatory standards for office-to-residential conversion projects, and have seen more success with the number of projects.

3: Office to Residential Project Examples

Characteristics of Office to Residential Conversion Projects

The examples in this section demonstrate that office-to-residential conversion projects have been occurring for many years, driven in part by the country's pervasive and acute housing shortage. The on-going pressure for more housing, combined with the more recent drop in demand for office space, has made the possibility of conversion more attractive in many places. Conversions are occurring more frequently across the country, in cities with historically strong office submarkets, that are now grappling with record-high vacancy rates. While many office-to-residential projects share similar characteristics such as being located in the downtown core, this sample of projects is meant to provide a brief background of the mix of locational and regulatory characteristics of conversion projects.

Table 1: Characteristics of Office-to-Residential Projects

Characteristics	Alexandria, VA	Arlington, VA	Montgomery County, MD	Boston, MA	Chicago, IL	Cleveland, OH	Denver, CO
Mixed-Use District		X	X				
Finance/Central Business District	X			X	X	X	
Office/Business Park						X	X ¹
Near Rail Stations	X	X	X	X	X		X
Near Bus Routes		X			X		
Within a BRT Corridor						X	
Incentives Available				X	X	X	
Regulatory Changes							
Plan Policies			X	X			

Notes:

1: Although Denver has completed office-to-residential projects in the downtown area and recently announced plans to focus adaptive reuse projects there, for this report, we focus on conversion projects outside of downtown to provide an example of a conversion project in a business park setting.

Alexandria, Virginia

Alexandria's office vacancy rate was 14 percent at the end of 2022, slightly offset by the construction and subsequent full occupancy of an office building for the Institute for Defense Analyses headquarters. Alexandria's vacancy rate is expected to increase in the future as employers reduce their office footprints and move to trophy office spaces. Vacancy rates are not expected to reach levels seen in other communities, however, given the city's proximity to DC and the rate of office-to-residential conversion projects. In 2022, Alexandria ranked second in the most converted residential units from office uses when

compared to nine other cities, owing in large part to the conversion of three 1980s office buildings into 435 residential units at Park + Ford.

EXAMPLE PROJECT

In addition to the Park + Ford project, Alexandria also saw completion of the conversion of a mixed-use building that was formerly used for offices along with restaurants and other uses at 801 N. Fairfax Street. The project is adjacent to bus routes and near key amenities such as green space, restaurants, and retail, and created 54 condominium units in Old Town North.

LOCATION CHARACTERISTICS

Many office-to-residential projects in Alexandria have been proposed and developed in Old Town and Old Town North where historic office buildings with floorplates compatible for conversion are clustered.

INCENTIVE OPTIONS

The City currently does not offer financial incentives for conversion projects; however, their website indicates they will monitor conversion projects for ongoing challenges and consider whether regulatory and financial tools are necessary in the future.

REGULATORY CHANGES

No regulatory changes have yet been made to support conversion projects in Alexandria. The City notes future regulatory flexibilities may be needed for buildings that have difficulty meeting regulatory standards and have more challenging structural features. Most conversion projects to date in the City have focused on Class B and C office buildings that were easily able to meet dimensional, parking, and open space requirements.

SUPPORTING PLAN POLICIES

Alexandria's Comprehensive Plan does not include goals or policies related to adaptive reuse of office buildings.

Arlington, Virginia

Office vacancy rates in Arlington do not differ greatly from the rest of Northern Virginia. In mid-2022, the office vacancy rate reached 21 percent, up from 19 percent at the beginning of 2021. Hybrid work arrangements reduced office demand, hitting Arlington's two main office submarkets especially hard. According to a report from the commercial real estate firm Colliers, the Rosslyn-Ballston corridor reached a vacancy rate of 23 percent and the National Landing submarket rose to 24 percent in the second quarter of 2022. Interestingly, Class A had the highest total area of additional vacant space in the same quarter and 385,327 square feet of negative net absorption. Arlington has less office-to-residential conversion activity compared to Fairfax County and Alexandria. A County memo on office-to-residential conversions provides some insight on why this is so: "In Arlington, with much of our commercial and mixed-use areas governed by long-range, transformative land use plans, owners of functionally obsolete office buildings will most likely find it more compelling and financially feasible to pursue site plan redevelopment than go through a conversion process."

EXAMPLE PROJECT

220 Twentieth Street is one of the few office-to-residential conversion projects in Arlington. In 2009, the site was transformed from a vacant office building into a 265-unit multi-family development.

LOCATION CHARACTERISTICS

220 Twentieth Street is located in the National Landing office submarket. Residents of the project can easily access public transit either through one of several nearby bus routes or the Crystal City Metro located less than half a mile away.

INCENTIVE OPTIONS

Currently, Arlington does not have financial incentives in place for office-to-residential conversion projects.

REGULATORY CHANGES

Arlington is working to introduce regulatory changes to accommodate office-to-residential conversion projects. Since 2022, the County has been working on the 'Commercial Market Resiliency Initiative (CMRI) 2.0.' One component of this project regarding adaptive reuse aims to address historically high office vacancy rates. The CMRI targets zoning changes to facilitate the conversion of offices to other non-residential uses in commercial districts, and focuses on identifying specific regulations, practices, and processes where introducing flexibility could bring more opportunities to improve the use of commercial space. The CMRI would permit new uses in commercial districts by right such as urban agriculture, micro-fulfillment centers, and commercial kitchens, among other uses.

SUPPORTING PLAN POLICIES

Arlington's Comprehensive Plan does not specifically address office-to-residential conversion. However, the General Land Use Plan element of the Comprehensive Plan includes goals to enhance high-density, mixed-use development along the Rosslyn-Ballston corridor that includes residential, commercial, and office uses.

Montgomery County, Maryland

Montgomery County's office properties were struggling to retain and attract new tenants long before the COVID-19 pandemic, as highlighted in a 2015 Montgomery County Office Market Assessment Report. One major reason for this trend is because Montgomery County's office spaces are primarily located in single-use, automobile-oriented parks that lack restaurants, entertainment, retail, and other amenities. The assessment report revealed that offices located in mixed-use developments with ample amenities and good transit connectivity were best positioned to remain competitive, and would likely see an increase in demand in the future. Montgomery County's office vacancy rate reached 16 percent in the third quarter of 2023. Regional commercial real estate experts point to hybrid work arrangements, loss of businesses during the pandemic, high interest rates, and an oversupply of outdated office space influencing Montgomery County's high vacancy rates.

EXAMPLE PROJECT

The development of Octave 1320 repurposed a 1963 office building into 102 multifamily condominium units in downtown Silver Spring. The project was completed in 2016 and aimed to attract first-time buyers looking for affordable and walkable spaces.

LOCATION CHARACTERISTICS

Proposals for office-to-residential conversion projects in Montgomery County appear to be concentrated in Downtown Silver Spring where residents are well connected to the rest of the City and the greater DC area through metro lines and where amenities like restaurants, retail, and event spaces abound.

Montgomery County points to location and access to amenities as key factors behind the success of Octave 1320. The site's proximity to the Red Line Metro Station and amenities in Downtown Silver Spring made it attractive to buyers and helped lower project costs. Project costs were also reduced because the developer did not provide parking since the site was located in the Silver Spring Parking District where parking is provided through county-owned garages.

INCENTIVE OPTIONS

Montgomery County invested \$4.1 million into the Octave 1320 project through a public-private partnership. Currently, it appears the County does not provide financial incentives for office-to-residential conversion projects more broadly.

REGULATORY CHANGES

Montgomery County provided flexibility in regulatory standards for the Octave 1320 project but has not introduced county-wide regulatory changes to support office-to-residential conversion projects.

SUPPORTING PLAN POLICIES

Thrive Montgomery 2050 addresses adaptive reuse of office space through the goal to “Promote cost-effective and adaptive reuse design strategies to retrofit single-use commercial sites such as retail strips, malls, and office parks into mixed-use developments.”

Boston, Massachusetts

Like many other cities with large office submarkets, Boston's office market has been slow to recover in the post-pandemic era. Downtown office vacancies reached historic rates of nearly 20 percent toward the end of 2022. The flight to quality trend is also present in Boston as older office spaces experience higher vacancy rates. For instance, the Class B vacancy rate hit 27 percent in the second quarter of 2023. In response to underutilized office space and high demand for housing, in mid-2023, Mayor Michelle Wu introduced a public-private partnership program called “Downtown Office to Residential Conversion Pilot Project.” The Pilot project aims to spur office conversion projects in downtown Boston.

EXAMPLE PROJECT

Information for proposed projects leveraging funding from the Conversion Pilot Project is not available. However, an example of a completed conversion project is 100 Shawmut, a 138 residential unit project that transformed an office building constructed in 1915. Originally developed as a warehouse, the building was later used for office purposes until it was converted in 2015.

LOCATION CHARACTERISTICS

The target area for funding office to residential conversion projects is in the 121B Demonstration Project Area which includes much of the Financial District where underutilized office space is concentrated. However, funding for conversion projects proposed anywhere in the city will also be considered on a case-by-case basis. The Financial District is well connected to the rest of the city through metro lines, providing residents of conversion projects with easy access to public transit.

INCENTIVE OPTIONS

Through the Conversion Pilot Project, commercial office building owners can qualify for reduced property tax rates (a rate reduction up to 75 percent for up to 29 years) if they initiate the conversion of their buildings to residential uses by 2025. The Boston Planning and Development Agency (BDPA), the City and the commercial property owner would be in a public-private partnership through the issuance of a payment in lieu of taxes (PILOT) agreement. Project eligibility requirements include complying with the City's Inclusionary Zoning and energy efficiency standards. Additionally, projects designed to preserve ground floor retail and other public uses are highly encouraged in order to support more mixed-use development in the downtown core.

REGULATORY CHANGES

Development review and permitting processes will be revised and streamlined through the pilot program to help fast-track conversion projects and reduce financial costs for the developer.

SUPPORTING PLAN POLICIES

PLAN: *Downtown* includes priorities for office-to-residential projects such as “Implement adaptive reuse practices to convert vacant office spaces into residential and other viable uses” and “Preserve the historic fabric and explore opportunities for adaptive reuse, especially office-to-residential conversion,” Other priorities focus on revitalizing downtown by increasing residential growth, expanding mixed-uses and diversifying active ground-floor uses, and strengthening active transportation connections and non-vehicular modes of transportation.

Chicago, Illinois

Chicago's office vacancy rate in the third quarter of 2023 reached a historic 23 percent within the Loop (the City's central business district). Recent trends show new office investment is gradually moving to the West Loop/Fulton Market area where higher-quality and amenity-rich office space is plentiful. Class A office spaces are outperforming Class B and C spaces as they have a lower vacancy rate of 20 percent compared to Class B and C offices with rates of 28 percent and 26 percent, respectively. A LaSalle Street market study revealed the flight-to-quality trend, indicating amenity-dense space in new buildings near shops, restaurants, nightlife, good transit, and ample greenspace is what office tenants are seeking. In response to these findings, former Mayor Lori Lightfoot launched the LaSalle Street Reimagined initiative aimed to transform LaSalle Street into a mixed-use corridor by turning vacant commercial space into mixed-use housing and neighborhood-oriented retail. LaSalle Street Reimagined allocates \$550 million to office-to-residential projects and mixed-use development. Funding is available for the construction of three projects, which will introduce 1,000 residential units into the area. Each project is required to make

30 percent of the units affordable, and developers are encouraged to attract grocery stores and other amenities to support a mixed-use environment.

EXAMPLE PROJECT

The Monroe Residences & Hotel is a proposed project that transforms a historic office building constructed in 1911 and an adjacent office tower from the 1950s into a 228-room hotel and 349 residential units, 105 units of which will be affordable. The project will include amenities such as a rooftop pool, a fitness center, a bar and restaurant as well as co-working space for residents. The 611,000 square foot office building is a Class B office space, located at 111 West Monroe Street.

LOCATION CHARACTERISTICS

The target area for conversion projects is along Chicago's Central Finance District, the LaSalle Street corridor. Economic activity has historically clustered along LaSalle Street, where legal firms, financial institutions, multi-national corporations, and other firms lease office space. Conversion projects are ideal here because of the central location, close to the city's lakefront, parks, and cultural amenities, with links to the area's strong public transit networks. Residents of conversion projects would have easy access to the El, the extensive bus network, and easy connections to the Metra suburban rail network.

INCENTIVE OPTIONS

Financial assistance is available to developers of office-to-residential conversion projects through funding from tax-increment financing (TIF). Additionally, to promote a mixed-use, neighborhood-oriented environment suitable for residential uses along LaSalle, grants through the Chicago Department of Planning and Development (DPD) are available to incentivize development of locally owned restaurants and entertainment in vacant storefronts and underutilized ground-level spaces.

REGULATORY CHANGES

It does not appear Chicago has modified their ordinances or permitting processes to support office-to-residential conversion projects.

SUPPORTING PLAN POLICIES

Chicago's Central Area Plan includes elements focused on strengthening economic growth in the city core, expanding quality living through adaptive reuse of buildings, developing high-density, mixed-used corridors, and strengthening transportation connections. Office-to-residential conversion projects are not addressed within the plan specifically.

Cleveland, Ohio

Cleveland's office vacancy rate stood at 21 percent in the first quarter of 2023, up from 19 percent in 2022. Like other cities, Cleveland has experienced a slowing in subleasing activity as well as new office construction. Hybrid work arrangements, a decrease in office jobs, and firms moving to smaller office spaces are driving high vacancy rates. Cleveland stands apart from other cities in that their office vacancy rates have been slightly cushioned by the aggressive pursuit of office-to-residential conversion projects in the city. Since the early 1970s, commercial to residential adaptive reuse projects have been undertaken by developers. According to a 2020 study, Cleveland ranked 8th nationally for most new residential units

developed through adaptive reuse projects, surpassing other cities with competitive office submarkets such as Washington, DC, and San Francisco, California. A more recent study revealed Cleveland has the highest percentage of office stock planned for conversions at 11 percent, amounting to 3.5 million square feet planned or in the process of conversion.

EXAMPLE PROJECT

Iconic Living at the 9 is a 194 unit residential and commercial project located in downtown Cleveland. The project includes residences as well as a hotel, transforming the previously vacant, 29-story Ameritrust Tower into a lively, mixed-use development. The tower was constructed in 1971 and sat vacant for nearly a decade before it was converted in 2014. Residents of Iconic Living at the 9 are within a five-minute walk from the HealthLine Bus Rapid Transit system.

LOCATION CHARACTERISTICS

Much of Cleveland's office-to-residential projects have concentrated downtown where there is ample stock of historic structures and amenities such as restaurants, retail, and entertainment venues. Highlighting the importance of public transit to conversion projects, existing projects are clustered in the Euclid Avenue corridor where the HealthLine BRT system has spurred transit-oriented development. For instance, since the introduction of the Healthline along Euclid Avenue, there has been 7.9 million square feet in new commercial developments, 13,000 new jobs, and approximately 4,000 new residential units along the route.

INCENTIVE OPTIONS

Cleveland supports conversion projects by offering historic tax credits through the Ohio Historic Preservation Tax Credit, which can be leveraged for the private redevelopment of historic buildings.

REGULATORY CHANGES

Information of modifications to Cleveland's ordinances or permitting processes to support office-to-residential conversion projects could not be found. However, Cleveland has specific design standards for adaptive reuse and conversion projects within their design review guidelines.

SUPPORTING PLAN POLICIES

The Cleveland 2020 Citywide Plan outlines several policies related to adaptive reuse such as encouraging "green building" techniques in renovated housing, economic re-use of significant structures, and preservation of historic structures throughout the city. Adaptive reuse of office spaces to residential is not addressed specifically.

Denver, Colorado

Denver recently conducted a study to measure the feasibility of office-to-residential conversion projects downtown as the city grapples with high office vacancy rates and high demand for housing. Through the study, Denver hopes to identify key strategies to support conversion projects and bring underutilized space back to life. Denver acknowledges supporting office-to-residential projects would help create a central neighborhood district where residents would be in close proximity to both public transit and desirable amenities. Although conversion projects are being targeted downtown, Denver is also an

example of how infill projects within office parks can help create mixed-use environments and alter single-use office parks to meet modern preferences and demands. Successful examples are found in the Denver Tech Center located approximately 15 minutes southwest of downtown where several residential infill projects have been completed with more in the pipeline.

EXAMPLE PROJECT

Recently, several multi-family projects have been proposed in the Denver Tech Center. One such project is a seven-story residential building adjacent to an existing Class A office building at 4600 South Syracuse. The proposed multi-family project would replace a surface parking lot, introducing more residential space within the office park where demand is growing for living space in a more suburban environment but still close to employers.

LOCATION CHARACTERISTICS

The Denver Technological Center (DTC) was created in 1962 on 40 acres and today spans more than 900 acres southeast of downtown Denver. It has grown to be a strong employment hub in the city, employing more than 35,000 people and providing office space to over 1,000 businesses. Multi-family housing is interspersed throughout the DTC along with restaurants, making it an increasingly coveted suburban submarket. Public transit in this area is limited given its location right along the I-25 corridor. One light rail station is within a ten-minute walking distance.

INCENTIVE OPTIONS

While no financial incentives for conversion projects exist, Denver recently announced that the City would be piloting an Adaptive Reuse Program targeted to Upper Downtown. The pilot program aims to support the conversion of underutilized commercial office buildings into mixed-use residential projects by providing direct assistance to property owners and developers in navigating the City's review and permitting system. More specifically, the program will expedite the permitting and approval process for qualified projects which will help improve the financial feasibility of projects.

REGULATORY CHANGES

Except for the changes to the permitting and approval processes offered through the Adaptive Reuse Pilot Program, Denver has not made regulatory changes to support adaptive reuse or conversion projects more broadly.

SUPPORTING PLAN POLICIES

Denver's Comprehensive Plan 2040 outlines several strategies related to expanding housing such as increasing development of housing units close to transit and mixed-use developments. However, there are no strategies that specifically target adaptive reuse of office spaces.

4: Recommendation

Overview

This section provides a recommendation for Fairfax County regarding policy guidance for office land use, as well as a suggested approach for implementing the recommendation. This recommendation is based on our review of:

- Office trends nationally and within the Northern Virginia/Metro DC region;
- Recent office conversion projects in the County and in other jurisdictions; and
- The County's current guidance (Appendix 13) on assessing requests for conversion of office land uses to housing.

At present all indicators point to an existing oversupply of office space that is unlikely to see renewed demand over the near to medium-term horizon (5-10 years). Demand for lower quality office space (classes B and C), and older structures in need of costly renovations to upgrade building infrastructure such as HVAC and communications technology, are unlikely to see renewed demand at all. At the same time, the pandemic-driven change to remote work appears to have permanently altered the extent of in-office presence required for many industries. Although hybrid schedules are now more common than 100 percent remote work, the extent of space required for employees who do not have to be present every day is permanently diminished. This change has altered the kind and configuration of office space that is still desirable, such that demand centers on smaller, more flexible, highly-amenitized office spaces.

This report is focused on the future of office land use, but our recommendation takes into account the County's demand for housing as well. While this report does not seek to repeat information County Planning staff are aware of regarding the high percentage of cost-burdened households in the metro region, and the significant extent of projected need for new housing units over the coming decade, the basic facts of the current situation indicate that there is an oversupply of office space in the County for which a return of demand is not foreseen, at the same time there is a demonstrated and increasing need for more housing. Given these conditions, we suggest that a more favorable approach to office conversion requests be adopted, subject to alignment with certain updated performance criteria.

Although some real estate professionals estimate that ten percent of office space in any given market could be converted to other uses while still maintaining adequate existing capacity to meet demand, there is no simple equation of the percentage of office square footage, versus residential, versus other commercial and service uses, that should be maintained. A combination of related factors, such as proximity to amenities, proximity to transit, quality of office space, along with the particular demands of the submarket, all contribute to determining the viability of office space in a specific location. However, while there is no single number that would be a valid target for how much office space to maintain in various locations, we do believe that, in considering individual requests, the County could usefully employ the slate of factors described below as a guide to making an informed determination on whether to view such requests favorably.

Encourage Office Conversions that Conform with Updated Performance Criteria Guidelines

Generally, the guidance provided by the County’s Policy Plan, and contained in Appendix 13 regarding “Guidelines for Commercial Building Repurposing” adopted in 2017, is consistent with national best practices. The County may choose to “stay the course,” but given the high demand for housing and the low demand for office, we believe that a more proactive, detail-driven approach to allowing office conversion would be beneficial. We therefore propose adjustments to the current guidelines, to provide more specific criteria against which to assess conversion requests, including both repurposing and redevelopment. For example, this guidance could be used when reviewing requests to remove an existing office building use in favor of a new building and use that may or may not seek flexibility with the residential/non-residential land use mix in the Comprehensive Plan. Additionally, it could be used to review future requests to amend the Comprehensive Plan from office to another use. Finally, it could be applied to proposals that include repurposing an existing office building into another use that could include additional gross floor area.

Appendix 13 proposes that the conversion of office to residential use “may be appropriate in the Tysons Urban Center, [Community Business Centers] CBCs, [Transit Station Areas] TSAs, Suburban Centers, Suburban Neighborhoods, and Low Density Residential Areas.” The following seven criteria are proposed as performance standards or guidelines against which the desirability of conversion is to be measured: Compatibility; Transportation; Site Design; Schools, Parks, and Other Public Facilities; Environment Affordable and Workforce Dwelling Units; and Historic Preservation.

These are good initial criteria. However, in light of changed circumstances since the adoption of this Appendix in 2017, we propose the following, more detailed assessment criteria. Many are related to the existing seven performance measures, but provide expanded considerations on which to base assessment of conversion requests.

While we believe the criteria listed below will remain relevant over time, specific thresholds used for assessment – vacancy rate, for instance – will need to adapt in response to market changes, and in comparison, across County submarkets and locations. We therefore do not recommend exact numerical standards as the basis for assessment.

1. Location

- a. Is the proposed conversion in a submarket that has a high office vacancy rate compared with other County submarkets? Has the rate increased and remained comparatively high since the onset of the pandemic in 2020? The County’s Office Building Repurposing white paper identified four submarkets with vacancy rates over 20 percent (Fairfax/Oakton, Vienna, Baileys Crossroads, Newington/Lorton) at the end of 2022. If information over time indicates the persistence of high vacancies, these could be submarkets where demand is not going to revive in the medium- to long-term.
- b. Because office demand is likely to remain slack for some time, requests for conversion in persistently higher vacancy areas (in combination with consideration of other factors listed below) could be favorably viewed, encouraging office conversion to other uses to avoid long-term vacancy.

2. Class/Age of Office Space

- a. Is the space Class B or C? Or is the building old enough that significant investment to upgrade HVAC or technology infrastructure would be required before re-occupancy?
- b. In both of these cases, these buildings may be considered functionally obsolete, and are increasingly unlikely to be re-occupied as office space. Again, a conversion request could prevent on-going vacancies and deterioration from lack of occupancy and regular maintenance.
- c. Conversely, newer space, particularly Class A office that is highly amenitized or in close proximity to amenities, may be worth maintaining.

3. Proximity to Rail Transit

- a. Is the site transit-accessible (either Metro, or in proximity to BRT lines)? As the County's own data shows, locations that lack rail access have the highest vacancies. However, lack of access to rail is likely to be similarly disadvantageous for any residential development that might replace vacant offices.
- b. Since transit-access is desirable for both office and residential uses, conversion requests where the resulting residential development would need to rely exclusively on car transport to access daily necessities could be viewed less favorably, but that may need to be balanced with other County priorities.

4. Proximity to Amenities/Necessities²

- a. Is the site near amenities that office tenants are seeking? Is it near the type of development that residents need to access regularly (grocery stores, schools, parks)? How are these amenities/necessities accessible?
- b. To a certain extent, both office tenants and residents want access to the same amenities, most notably transit and restaurants. However, it is more important for residential development to be near schools, parks, and grocery stores than it is for offices, particularly if these destinations are accessible by means other than driving.
- c. If a conversion request would result in a vacant office being replaced by residential development in proximity to schools, parks, grocery stores, and other daily necessities, particularly if these necessities do not rely exclusively on auto access, the request should be reviewed favorably.

5. Revitalization Area

- a. Is the request in a revitalization area?
- b. Renovations and renewed development in such areas should be considered favorably.

6. Affordable and Workforce Units

- a. Does the proposal meet only the minimum requirements for provision of affordable or workforce housing?
- b. Any conversion request that proposes to provide more than the minimum requirements for affordable housing should be viewed favorably. The County could choose to offer further incentives in such instances, such as allowing a higher residential density/intensity, new

² See Section 5: Sample Analysis.

construction, flexibility with the land use mix, and/or new uses than might otherwise be allowed without a Plan amendment, and/or offering streamlined administrative procedures.

7. Re-use, or Replacement

- a. Aligned with the notion that the most sustainable building is one that is already there, and supportive of the County’s existing Environment element goals, proposals for the conversion or adaptive reuse of existing, vacant buildings– particularly if accompanied by upgrades that enhance energy efficiency or accomplish other sustainability goals – could be viewed more favorably than requests that involve demolition and replacement of existing structures (unless the existing structure is dilapidated to the extent of being uninhabitable).

Overall, conversion requests should be considered more or less favorably depending on their alignment with the elements listed above. If a more quantifiable approach to assessing requests is desired, these criteria – along with the existing seven performance standards, where they do not overlap – could be assigned points values reflecting their relative importance, and any conversion request would need to amass a minimum number of points before being considered or approved.

5: Sample Analysis: Amenity Analysis in High and Medium Vacancy Submarkets

Proximity to Amenities/Necessities

To a certain extent, both offices and residences prioritize access to the same amenities, so determining which should have “proximity precedence” in certain areas or for certain repurposing requests may be difficult. The more detailed performance standards described in the Recommendation above aim to help with that decision-making process, and this section presents an example of how GIS data can be used to further quantify applying one of the criteria.

According to Fairfax County’s Office Building Repurposing white paper prepared by the Department of Planning and Development (DPD), “[b]uildings in a suburban office park may lack access to the public services and amenities that people need and expect where they live. Investment in the spaces outside of building footprints may be necessary to create new livable neighborhoods and communities with adequate open space, recreational facilities, retail services, and other amenities.” Should a conversion request be considered here?

To help answer that question, we chose two submarkets to assess their proximity to transit and recreational amenities that are important to residential uses. The analysis focuses on Newington/Lorton, with the highest office vacancy rate of 43.3 percent, and the Dulles Suburban Center, with a mid-range office vacancy rate of 19.4 percent, to get a better sense of how these submarkets differ in terms of access to key amenities. We used several Fairfax County geospatial datasets to assess if the target office submarkets were within 0.25 miles of the following features:

- Metro rail;
- Recreation facilities;
- Bike routes; and
- County parks

Since the target land use is office and mixed-uses, we extracted ‘Office’, ‘Mixed Uses’, and ‘Retail’ land uses from the *Comprehensive Plan Base Recommendation* dataset and overlaid them with our target office submarket areas to locate the amenities within these areas. Our proximity radius is within a distance of a quarter mile -- generally held to be a reasonable walkable distance -- and created 0.25 mile buffers for each amenity to capture the spatial relationship between office submarket and amenity.

Figure 1 shows the Newington/Lorton office submarket. The map indicates there are some areas of the submarket in proximity to transit and recreation facilities, shown in the blue areas (darker blue indicates a higher concentration of amenities within that 0.25 mile buffer area).

Figure 2 shows the Dulles submarket. The map shows more blue areas, indicating that there are many areas in proximity to the chosen amenities.

5: Sample Analysis: Amenity Analysis in High and Medium Vacancy Submarkets

Proximity to Amenities/Necessities



Figure 1: Newington/Lorton Submarket

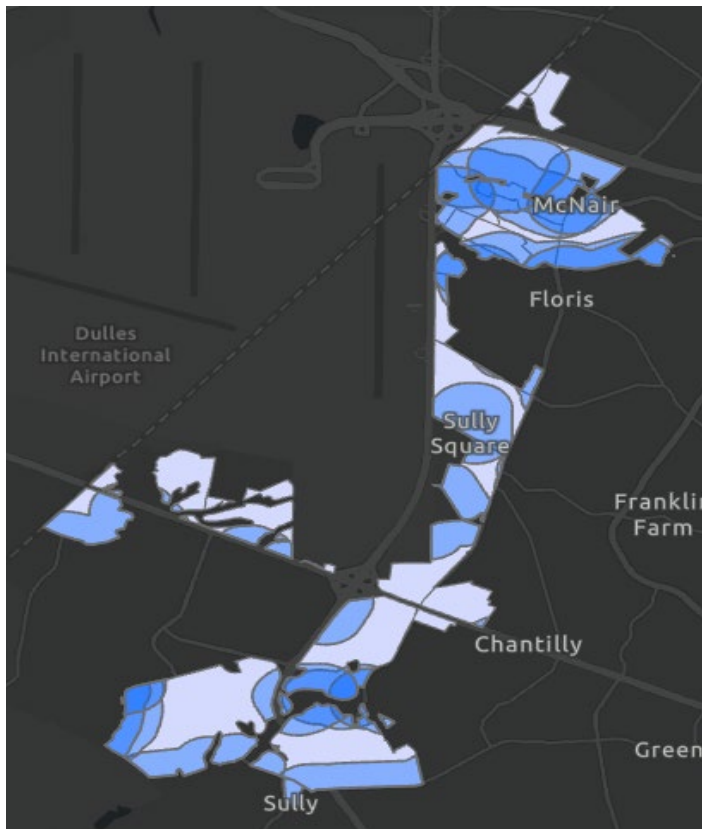


Figure 2: Dulles Submarket

The analysis in this section considers both proximity to rail transit – desirable for both office and residential uses – and proximity recreation amenities – presumably in higher demand by residential development than office users -- in two of the County’s submarkets that currently have higher vacancy rates. If an office-to-residential conversion request were submitted for one of these areas, staff could use such an analysis to determine if the resulting residential would be within a defined proximity (in this case, 0.25 miles) to transit, recreation facilities, parks, and bike routes. Requests that demonstrate closer proximity (more blue areas on the maps) could be rated or viewed more favorably. While this example uses recreational facilities as the amenity, it can be adapted to focus on schools, mixed-use areas, solely on transit proximity, or other elements, depending on available data.

6: Appendix: Current Office Policies and Regulations in Fairfax County

This section provides a brief summary of Fairfax County’s current policies and regulations for existing and future office uses, both as a standalone use, and as part of a broader mix of land uses.

Fairfax County Policy Plan (2017 Edition)

Goals and Policies

The Preface to the 2017 Policy Plan establishes 20 goals to provide focus for the objectives and policies in other plan elements. References to land use considerations for commercial development appear in four of the 20 goals, and generally apply to office development as a subset of commercial/industrial development:

Quality of Life. The primary goal of Fairfax County’s policies and priorities is to...achieve an outstanding quality of life through *a balance between access to convenient multi-modal transportation and residential, commercial, and industrial development.*

Land Use. Growth should take place in accordance with criteria and standards designed to *preserve, enhance, and protect an orderly and aesthetic mix of residential, commercial/industrial facilities, and open space* without compromising existing residential development.

Revitalization. Fairfax County should encourage and facilitate the revitalization of older commercial and residential areas...revitalization initiatives should encourage business development, promote public and private investment and reinvestment, and *seek to prevent or eliminate the negative effect of deteriorating commercial and industrial areas.*

Private Sector Facilities. Fairfax County should continue to *encourage the development of appropriately scaled and clustered commercial and industrial facilities* to meet the need for convenient access to goods and services and to employment opportunities.

Land Use Element

Objective 3: Fairfax County should maintain a supply of land sufficient to meet the need for housing, commercial, industrial, institutional/public services, and recreational and leisure activities to support the Comprehensive Plan.

Policy a. Conduct a comprehensive community needs assessment, at least once every five years, to determine future land requirements to meet adopted county goals.

Objective 9: Nonresidential redevelopment or repurposing should be in accord with the recommendations of the Comprehensive Plan.

Policy c. Ensure that the redevelopment or repurposing of existing uses is consistent with the provision of adequate transportation and public facilities.

Policy f. Ensure that the repurposing of existing structures is in accordance with the “Guidelines for Commercial Building Repurposing” in the Land Use Appendix.

Objective 16: Fairfax County should encourage Transit-Oriented Development (TOD) with focused growth near certain planned and existing rail transit stations as a way to create opportunities for compact pedestrian- and bicycle-friendly, neighborhood centers accessible to transit.

Appendix 11: Guidelines for transit-oriented development. Appendix 11 establishes guidance for compact, pedestrian-oriented, mixed-use development around existing and planned rail transit stations. Guidelines of importance to the office conversation include:

- **Transit Proximity and Station Area Boundaries.** Focus and concentrate the highest density or land use intensity close to the rail station, and where feasible, above the rail transit station.
- **Station-specific flexibility.** Examine the unique characteristics and needs of a particular station area when evaluating TOD principals to ensure the appropriate development intensity and mix of land uses relative to the existing and planned land uses for the surrounding areas.
- **Mix of Land Uses.** Promote a mix of uses to ensure the efficient use of transit, to promote increased ridership during peak and off-peak travel periods in all directions, and to encourage different types of activity throughout the day.
- **Housing Affordability.** Provide for a range of housing opportunities by incorporating a mix of housing types and sizes and including housing for a range of different income levels.
- **Regional Framework.** Provide a more efficient land use pattern by concentrating growth around existing and planned transit station areas.
- **Economic Benefits.** Create an employment base and encourage commercial revitalization adjacent to transit facilities.
- **Phasing of Development.** Ensure that projects are phased in such a way as to include an appropriate mix of uses in each phase of the development.

Supporting narrative for several of the above guidelines acknowledge that the actual mix of uses that is achieved in individual station areas will be influenced by market feasibility.

Appendix 13: Guidelines for commercial building repurposing. Appendix 13 establishes flexibility to accommodate the repurposing of older commercial buildings that have been vacant for an extended period, or are otherwise considered obsolete. Of particular relevance in this Appendix area the areas of focus where repurposing is encouraged, and the seven performance standards to be used in assessing the desirability of repurposing requests.

Conversion of office to residential use may be appropriate in Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), Suburban Centers, Suburban Neighborhoods, and Low Density Residential Areas.

Performance criteria include: Compatibility; Transportation; Site Design; Schools, Parks, and Other Public Facilities; Environment; Affordable and Workforce Dwelling Units; and Historic Preservation.

Comprehensive Land Use Plan (Map and Land Use Categories)

The Comprehensive Land Use Plan includes a dedicated office land use category, which encompasses 241,666 square feet or 0.002% percent of the total land area in Fairfax County. Office uses are also accommodated in mixed-use areas, which include 5,555.99 sq. ft. acres or 2.30 percent of the total land

area in Fairfax County. Mixed-use areas (which include office) are encouraged in Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), Suburban Centers, Industrial Areas, and, to a lesser degree in Suburban Neighborhoods and Low Density Residential Areas.

Definitions for the individual land use categories illustrated on the map and the terms ‘office’ or ‘mixed uses’ are not defined in the Plan glossary.

Special Planning Areas

The Comprehensive Land Use Plan provides more detailed policy guidance and land use recommendations for each of Fairfax County’s 14 Planning Districts, as well as sub-geographies within each district. Office uses are encouraged as part of a broader mix of uses in most of the County’s Special Planning Areas, including the Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), Suburban Centers, and Industrial Areas.

Zoning Ordinance (2024)

Base Zoning Districts

The Fairfax County Zoning Ordinance includes four office zoning districts:

Low-Rise Office Transitional District (C-1). Provides for non-retail commercial uses such as offices, financial institutions, and other similar uses. The C-1 District is intended to provide for those types of uses in a low-intensity manner so that they are compatible with and serve as a transition to adjacent single-family dwellings.

Limited Office District (C-2). Provides areas where predominantly non-retail commercial uses may be located such as offices, financial institutions, and other similar uses. The C-2 District is intended to provide for those types of uses in a low-intensity manner so they can serve as a transition between higher intensity uses and residential uses.

Office District (C-3). Provides for predominantly non-retail commercial uses, primarily including offices, financial institutions, and other related and supporting uses.

High Intensity Office District (C-4). Provides areas of high-intensity development of predominantly non-retail commercial uses, including offices, financial institutions, and other nonresidential uses.

Additionally, offices are permitted by right in the C-5 through C-8 Commercial districts if they do not exceed defined floor area limits, and otherwise with approval of a special exception.

Offices are also permitted by right in all Industrial districts:

Industrial Institutional District (I-1). Provides areas for intense office and office-related uses in a campus-like or institutional setting. Uses are generally limited to office uses and supporting nonresidential uses with enhanced site layout and building design quality.

Low Intensity Industrial District (I-2). Provides areas for scientific research, development and training, offices, industrial flex, small-scale production, and manufacturing incidental and accessory to those types of uses. The I-2 District is designed to promote an industrial park atmosphere for the conduct of research-oriented activities and other similar uses. Development will incorporate enhanced building

and site design, and performance standards in this district will ensure that development is compatible with surrounding uses.

Light Intensity Industrial District (I-3). Provides areas for scientific research, development and training, offices, light-intensity production of goods, and related supply and supporting nonresidential activities. This district is designed to provide for a broad spectrum of clean industries operating under enhanced performance standards.

Medium Intensity Industrial District (I-4). Provides area for a wide range of industrial uses such as scientific research, development and training, offices, medium-intensity production of goods, and related supply and supporting nonresidential activities at a greater intensity of development than is allowed in the I-3 District.

General Industrial District (I-5). Provides for a wide range of industrial and industrially-oriented business activities. Uses must minimize noise, smoke, glare, and other environmental pollutants on the uses within the district and on neighboring areas. Other nonresidential uses generally provide services and supplies to industrial companies, engage in wholesale operations, and are associated with warehouse establishments.

Heavy Industrial District (I-6). Provides for heavy industrial activities. Uses and activities that may require noise, vibration, intensive traffic, and other environmental pollutants are tolerated and are subject to minimum performance standards. The I-6 District is intended for use by the largest manufacturing operations, heavy equipment, construction and fuel yards, major transportation terminals, and other basic industrial activities required in an urban economy.

Finally, offices may be permitted by special exception in the R-1 through R-8 and R-30 Residential zoning districts. In R-1 through R-8, the special exception will only be considered if the office is in a Community Business Center (CBC) area, and located in a single-family dwelling constructed before 1973. In R-30, the special exception will be considered only in accessory structures or the two lowest floors of a primary structure, and may not occupy more than 15 percent of the structure's gross floor area.

PERMITTED USES

Permitted uses in the four office zoning districts vary by district, but generally include a mix of commercial and public, institutional, and community uses. Residential uses are not permitted in office districts except for some group living facilities permitted by special exception.

USE STANDARDS

Use-specific standards apply to office uses in the C-5 through C-8 districts (e.g., limitations on office use gross floor area). Use standards also apply to office uses in several residential districts (e.g., office cannot be located in a single-family detached dwelling constructed after February 26, 1973).

Planned Zoning Districts

Each of the County's Planned Districts addresses the kind of development that is desired in the defined area, most allowing office development of varying size and intensity, tied to the purpose of the district. The Planned Development Commercial District (PDC), Planned Residential Mixed-Use District (PRM), and

the Planned Tysons Corner Urban District (PTC) are most permissive for office development, with intensity generally limited by floor area ratio. Where these districts are coincident with areas delineated in the Comprehensive Plan as Transit Station Areas, Community Business Centers, Commercial Revitalization Districts or Areas, and Urban and Suburban Centers, the FAR may be increased in support of accomplishing plan goals.

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Industrial Land Use Trends Report

Fairfax County, Virginia

Department of Planning and
Development

Report prepared by:

CLARION

September 2024

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1: Project Overview

Background

The Fairfax County Department of Planning and Development has requested a review of industrial land use trends to determine the need for an amendment to the County's Comprehensive Policy Plan Land Use Element, as authorized by the Fairfax County Board of Supervisors. This report looks at industrial use trends, land supply, and best practices from other jurisdictions around the northeast and southeast, and elsewhere in the country, to inform potential updates to the Policy Plan.

About this Report

This report is the result of that research, and includes three sections and an appendix in addition to this project overview:

- **2: Industrial Land Use Trends.** This section provides an overview of national and regional trends for industrial development related to industrial users, space requirements, and anticipated demand over the next decade. A snapshot of industrial development characteristics in Fairfax County is also provided, along with a summary of the recent trends that led to this report.
- **3: Survey of Industrial Policies and Regulations.** This section summarizes the results of research conducted into industrial policies and regulations in other high growth counties (northeast and southeast); other formerly industrial locations (northeast and southeast); and additional examples with an industrial focus (western states). A summary of key themes found in the policies and regulations for each group of jurisdictions is provided, along with a summary of industrial policies and regulations by jurisdiction.
- **4: Recommendations.** This section outlines recommended updates to the Fairfax County Policy Plan and Zoning Ordinance in response to the industrial trends Fairfax County is experiencing and the results of research conducted into industrial policies and regulations in other jurisdictions.
- **Appendix: Current Industrial Policies and Regulations.** This section summarizes current policies and regulations in the Fairfax County Policy Plan and Zoning Ordinance relative to industrial development.

A list of sources and supporting material used to develop this report is attached.

2: Industrial Trends

Demand for Industrial Space/Primary Industries

Nationally

According to JLL's 10th Annual Industrial Tenant Demand Study, national demand for industrial space is up 30 percent year-over-year for 2022. Throughout 2022, 2,200 tenants were seeking 864 million square feet of space, an increase over the 2021 demand of 664 million square feet. In 2019, the total annual absorption of industrial space nationwide was 233.8 million square feet. While demand was steady pre-pandemic, the vast expansion of e-commerce beginning in 2020 has changed the industrial landscape. The increased reliance on e-commerce has driven a significant and (so far) sustained increase in demand by the warehouse and distribution sector, and has in turn spurred a significant increase in construction activity in an effort to meet the need for spaces of 100,000 square feet to 500,000 square feet. The need for larger structures is one factor driving construction; another is that the logistics operations that support distribution and fulfillment work best in modern warehouse spaces, of which the U.S. has relatively few. Newmark's 2022 trends report indicates that "more than 70% of existing U.S. industrial space was constructed before the 21st century, and a full third of the inventory is over 50 years old." These existing spaces are often poorly suited to accommodate the automated systems that increasingly feature in the operations of the industry.

If the pandemic sparked a permanent change in e-commerce and its supporting industries, it also revealed significant weaknesses in globe-spanning supply chains. Many manufacturers responded to these disruptions by deciding to pursue a shorter supply chain – in other words, by initiating a "reshoring" boom that is driving demand for manufacturing space. This trend, combined with the auto industry's recent expansion to meet electric vehicle (EV) and battery manufacturing needs, has elevated demand for manufacturing space to be the second most important driver of demand for industrial space nationwide.

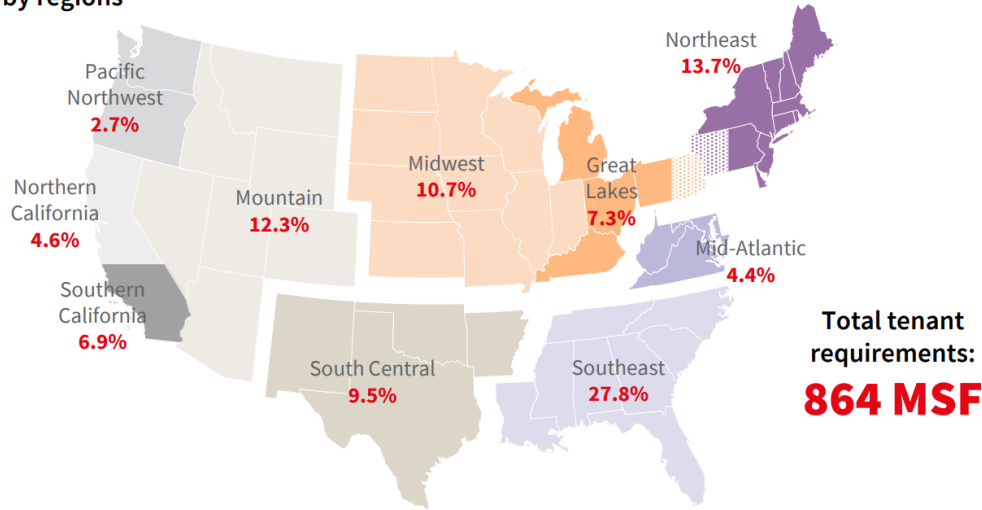
The primary industries seeking industrial space in the U.S. in 2023 include:

- **Warehouse & Distribution** (also referred to as Logistics and Parcel Delivery): Projected need of 194 million square feet in 2023, representing nearly one fourth (22%) of total demand for industrial space nationally
- **Auto Industry**: Demand up 156 percent since 2021
- **Construction, Machinery & Materials**: Demand up 41 percent, driven by the expanding development pipeline for both commercial and residential
- **Reshoring to address supply chain issues and backlogs at ports**: Ports in the Southeast saw an additional 240 million square feet in demand

The Mid-Atlantic accounted for 4.4 percent of the overall demand, which is the second lowest demand nationwide. Nevertheless, this still represents a 26 percent increase, and in line with national trends, Warehouse and Distribution is the primary driver of demand for space.

Figure 2-1: Nationwide Industrial Space Demand by Region

Demand by regions



Region	Total tenant demand (MSF)	% of U.S. total demand	% change, 2020 to 2021	Most active industry (not including undisclosed)
Pacific Northwest	23	2.7	25.6	Logistics & Parcel Delivery
Mid-Atlantic	38.4	4.4	26.1	Logistics & Parcel Delivery
Northern California	40.1	4.6	4.0	Traditional Retailer
Southern California	60	6.9	16.0	Logistics & Parcel Delivery
Great Lakes	62.8	7.3	11.6	Logistics & Parcel Delivery
South Central	82.5	9.5	16.5	Logistics & Parcel Delivery
Midwest	92.2	10.7	32.0	Logistics & Parcel Delivery
Mountain	106.6	12.3	58.4	Logistics & Parcel Delivery
Northeast	117.9	13.7	39.7	Traditional Retailer
Southeast	240.3	27.8	36.5	Logistics & Parcel Delivery
U.S. Total	863.7	100	26.6	Logistics & Parcel Delivery

Sources: JLL Research, U.S. Census Bureau

Looking ahead, the forecast may not be quite as robust. In August 2023, the Herndon-based NAIOP (Commercial Real Estate Development Association, formerly the National Association of Industrial and Office Parks) reported: “The industrial market remains relatively healthy, although not as strong as it was last year [2022]. After several quarters of demand for industrial space outstripping supply, the reverse has been true since the third quarter of 2022. Construction starts and transactions have slowed, reflecting higher interest rates, tighter lending standards and cooling demand. Supply and demand for industrial space appear to be converging toward a slower pace of growth that is more aligned with pre-pandemic trends.”

While some national trends, such as interest rates increases and concerns over a potential recession in 2024, apply in Northern Virginia as well as across the country, there are several factors that make the area unique.

Metro DC/Northern Virginia Region

WAREHOUSING AND DISTRIBUTION SPACE PRIMARY DRIVER OF INDUSTRIAL DEMAND

The need for Warehouse and Distribution space is the primary driver of industrial demand in the Metro DC/Northern Virginia region. Table 1 provides a comparison between submarkets in Fairfax County and other locations regarding square footage of existing Warehouse and Distribution space (industrial space for other uses – data centers, for instance – is not included in this inventory) and space under construction, along with available inventory, cost per square foot, and vacancy.

Table 1: Warehouse and Distribution Space: Inventory, Vacancy, Cost

Market Areas	Warehouse & Distribution Inventory (sq ft)	Available Inventory ³	Total Vacancy	Cost per sq ft	Under Construction
Overall Area					
Metro DC	96,064,256	9.4%	3.7%	\$13.64	3,925,922
Submarkets in Fairfax County					
Dulles South ¹	3,936,803	11.0%	4.4%	\$16.63	130,000
Greater Fairfax/Falls Church	1,577,175	6.3%	4.7%	\$17.02	0
Herndon/Reston	237,167	4.0%	2.8%	\$10.00	0
I-95 Corridor ²	14,654,625	10.1%	4.9%	\$15.44	113,490
Southeast Fairfax	9,008,136	8.6%	5.2%	\$14.10	0
Other Northern Virginia/Maryland					
Dulles/Manassas	25,835,180	7.0%	3.1%	\$17.06	590,993
Prince William West/Greater Manassas	9,223,063	8.0%	4.5%	\$17.91	460,993
Alexandria/Arlington	4,123,099	14.8%	4.6%	\$17.56	0
Prince Georges County MD	37,661,372	9.7%	2.7%	\$12.17	2,537,439
Montgomery County MD	7,965,249	7.7%	6.7%	\$17.44	0
Other Locations					
Eastern/Central PA	830,645,498	7.2%	3.7%	\$9.15	25,941,993
Charlotte	272,713,893	7.6%	3.7%	\$7.33	13,833,842
Atlanta	593,574,085	10.6%	5.2%	\$6.34	33,248,896
Dallas	784,890,878	Not avail.	8.2%	\$6.69	58,547,767
Chicago	1,307,851,323	7.1%	3.8%	\$7.05	26,104,640

Notes:

1: This submarket corresponds to areas included in the Dulles Suburban Center (Route 28 Corridor) Special Planning Area.

2: This submarket corresponds to the three industrial Special Planning Areas.

3: Whether on a lease, sublease or on sale, the available space is divided by the total inventory of occupied or unoccupied space. The difference between a vacancy rate and an availability rate is whether or not the property is vacant versus a property that is currently on the market for sublease.

Table 1: Warehouse and Distribution Space: Inventory, Vacancy, Cost

Market Areas	Warehouse & Distribution Inventory (sq ft)	Available Inventory ₃	Total Vacancy	Cost per sq ft	Under Construction
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Source:

JLL, Industrial Insight, Q2 2023

<https://www.us.jll.com/en/trends-and-insights/research/industrial-market-statistics-trends>

Individual reports for locations listed in this table downloaded from this landing site

Although Table 1 shows that the cost for industrial space in the Metro DC/Northern Virginia region is two times higher than the cost for industrial space in other areas, there is nevertheless low vacancy, and construction of additional space, both of which indicate demand.

However, according to a local JLL industrial land expert in the region, few of these distribution centers want to look at spaces less than 100,000 square feet, and many would prefer to lease or build spaces up to 500,000 square feet. They also have an additional land demand need for parking in greater quantities than other industrial uses. The result is that sites under seven acres are not competitive for new speculative development; at least seven acres is needed to build a 100,000 square foot fulfillment center with adequate area for parking, which will cover roughly 33 percent of the lot.

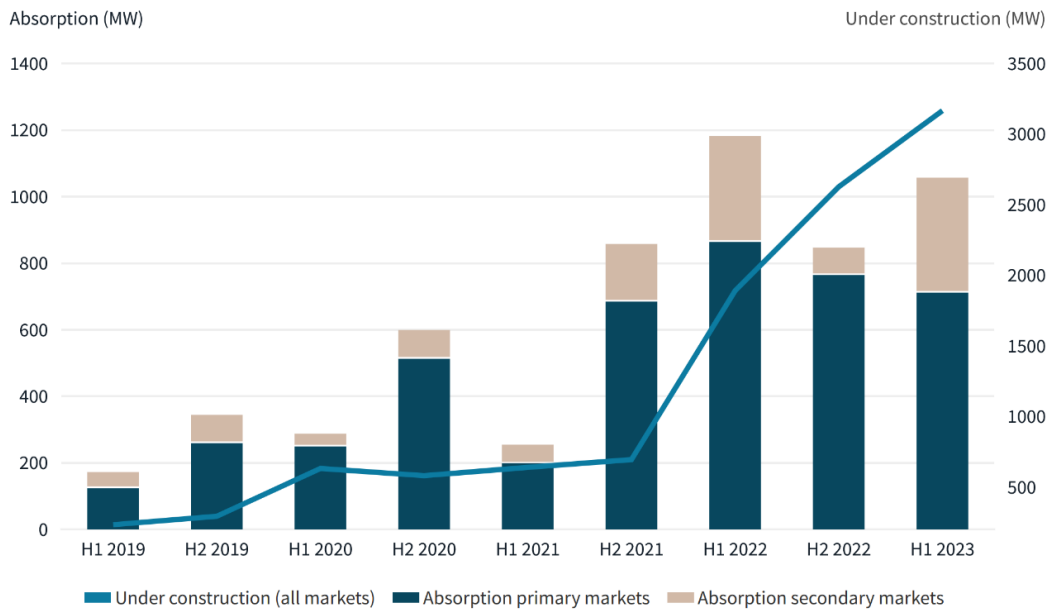
DATA CENTERS INCREASE DEMAND¹

Further, as the County is aware, there is additional pressure for large tracts of industrial land to accommodate data centers. While Northern Virginia is not the only location experiencing growth in demand for potential data center locations, the region is unique in the extent of existing data centers. Over the coming years, this source of demand is projected to increase, both nationally, and as long as large enough industrial tracts – vacant or to be redeveloped – remain available, in Northern Virginia.

JLL treats data centers separately from other industrial uses, and their projections are expressed in terms of megawatts – in other words, the amount of power capacity a site can provide – rather than square footage. There is, nevertheless, a correlation between the need for greater amounts of power and greater amounts of space, and this chart shows both increasing dramatically over the past four years.

¹ Clarion prepared a separate data center report for the County (completed in September 2023) which looks at the reasons for this concentration and offers recommendations for managing the demand.

United States data center absorption & construction



Source: JLL Research •
*Includes markets with complete historical data from 2019-2023

As artificial intelligence and reliance on cloud data services expand, so too will the need for space to accommodate this use. Northern Virginia already has the highest concentration of data centers in the nation, and even if the largest centers are concentrated in neighboring Loudoun and Prince William Counties, Fairfax County is nevertheless aware of the pressure for sites that can accommodate a further proliferation of data centers.

Like Warehouse and Distribution, the data center industry's preference is also to secure large sites that can accommodate facilities of at least 100,000 square feet-- and often much larger--with the result that data center demand for sites has eroded the land supply for other uses. This demand is combined with the fact that data centers typically can pay much higher prices than other industrial users--up to \$4 million per acre. Few other entities seeking industrial land area can afford costs this high. Thus, where data centers are permitted, and larger (6 to 12 acre) vacant tracts or redevelopment sites are available, they can outcompete any other use seeking to locate in an area.

Fairfax County

AREAS PLANNED FOR INDUSTRIAL USES

In 2023, Fairfax County has 3,712 total acres of land planned for industrial uses on the Comprehensive Plan map. Concentrations of industrial land are focused in three Special Planning Areas: Ravensworth, the I-95 Corridor, and Beltway South. There are additional concentrations of industrially planned land along the western end of the Dulles Toll Road, around Reston, and then south of Dulles, along Route 28, around Chantilly. Much of this second area on the western edge of the County is coincident with what is covered in the Comprehensive Plan as the Dulles Suburban Center (Route 28 Corridor) Special Planning Area. Finally, there is a scattering of land in the Tysons Urban Center area that is planned for industrial uses.

According to a local JLL industrial land expert in the region, despite comparatively high land prices, the County is still desirable for industrial development in two particular areas:

- **I-95 Corridor.** This corridor, which includes the County’s three industrial Special Planning Areas, is desirable for industrial tenants because it offers access to major transportation corridors like I-95/495/395 and access to much of the Metro DC area.
- **West Fairfax/Chantilly Submarkets.** These submarkets align with portions of the County’s Dulles Suburban Center, and are appealing because of their proximity to Dulles, and the “trifecta” of being wedged between affluent and rapidly growing Prince William and Loudoun Counties (new households that need and can afford lots of construction supplies and durable goods); major government contractor suppliers; the massive Dulles Discovery Center campus, and a concentration of mixed-use development near the Innovation Center Metrorail Station.

AREAS ZONED FOR INDUSTRIAL USES

Most of the 8,274 acres of land zoned for different types of industrial use in the County is developed. According to a report from the County’s Department of Management and Budget, as of January 2022, there are approximately 67 parcels of vacant land that are zoned for industrial in the County, totaling 250 acres. Table 2 provides a breakdown of parcels and acres by industrial zone district. The average size of the vacant industrial parcels (across the six industrial districts) is four acres with the largest being 21 acres.

Table 2: Vacant Land Zoned for Industrial

Zoning	Number of Parcels	Approximate Acreage
I-1, Industrial Institutional	1	12.91
I-3, Light Intensity Industrial	4	20.2
I-4, Medium Intensity Industrial	9	42.07
I-5, General Industrial	40	121.57
I-6, Heavy Industrial	13	53.25
Totals	67	250

Source: Fairfax County Department of Management and Budget, January 2022

Evolving Needs for Industrial

While it is true that the County’s industrial land inventory is not well-matched with the space-hungry demands of the primary industries seeking industrial space (large-scale warehouse and distribution facilities, and data centers), these industries are not the only drivers of demand for industrial space. There are many smaller, newer uses that are competing with “traditional” smaller scale industries such as contractor’s offices, landscaping firms, auto repair, HVAC installation companies, and other contractors for industrial land.

The national overview of industrial demand trends at the beginning of this report indicated that, after warehouse and distribution, the second largest driver of demand for industrial space is manufacturing firms. This trend also holds true for the metro DC region (not considering the unique data center demand in Northern Virginia). In many cases, manufacturing space demand is driven by emerging industries with different needs than traditional manufacturers.

Emerging Industries

Two prominent examples of emerging industries are high tech manufacturing, and micro-industry or the MAKER Movement. Many industries rely on high tech manufacturing as a component of their operations, including pharmaceuticals; medical device creators; aeronautics, space and defense concerns; and electronics and telecommunications firms. This type of industrial use is distinguished from traditional industrial uses by relying heavily on technology and automation to manage many aspects of production, being “clean,” i.e., having no discernible impacts that extend outside a building, and generating little traffic beyond what an office normally would.

The MAKER movement typically involves small-scale, artisanal creation of art or handicrafts, food, or other consumer products such as hand-crafted furniture. Subject to regulations requiring impacts to be contained within a structure, these are also “clean” uses. Occasionally, in areas where it is permitted, these operations have a public-facing component, such as a showroom, studio, or tasting room that the public may visit. In these cases, the use requires flex space, rather than exclusively industrial space.

The industries mentioned above may be competing for space with more traditional manufacturing operations, but they are not competing with the large-scale demands of data centers and distribution centers. Because they operate at a smaller scale, they may be well-matched for the inventory of industrial space that the County does have, either on vacant parcels, or through redevelopment opportunities. Either of the County’s concentrated industrial areas – along I-95 or in the Dulles Suburban Center area – may be a good fit for emerging manufacturing needs. In the Dulles Suburban Center area, they likely could fit within the mixed-use context the area seeks to cultivate, while additionally benefiting from synergies in the concentration of government offices and innovative, technology-driven firms in that area.

Traditional Heavy Industry

In urbanized or urbanizing areas, there is little new demand for space for heavy industry. These kinds of industries, with their potential for negative impacts and lack of compatibility with surrounding development, prefer large parcels of land in isolated areas, and proximity to the raw materials that they are processing. The County does have the transportation and power infrastructure to support such industries, but not the extent of isolated industrial land that these industries want, at prices that are competitive with other location options. Given the increasing density of surrounding development in the County, it is likely that any proposal to establish such a use that has to go through the Special Exception process would generate significant opposition from surrounding businesses and residents. Overall, the detriments likely outweigh the benefits to heavy industry seeking this type of land in the County.

Industrial Parks

Though many communities have begun to consider the creation of business parks, or isolated single-use office development, less desirable than in previous decades, industrial park areas are still useful and sought after properties. These sites offer the convenience of the building and site features needed by industrial uses being “built in” – adequate floor-to-ceiling height, open floorplates, and loading and delivery facilities. Industrial parks can be cheaper than single site development, because tenants benefit from economy of scale in shared features like sewers, lighting, and other infrastructure like street or rail connections to transportation networks outside the park. Depending on the similarity of tenants, there

may also be a synergistic effect from multiple related businesses or industries, where suppliers and buyers can be near one another. Finally, because industrial park uses are compatible with one another, and often governed through agreement to a set of covenants, conditions, and restrictions (CCRs), the risk of issues or conflicts with incongruent neighbors is reduced.

Though standalone industrial park space is still needed, development practice has evolved somewhat to include more than just industrial space in the developments. Tenants are interested in space where various functions and business units can be combined in a single building. The result is often referred to as industrial flex space, where the new construction accommodates a combination of office space, warehouse area, and occasionally retail space as well, all in one place. The County's current use permissions in industrial districts would permit this mix of uses, where "business service" and "restaurant" are allowed as an associated service use (A+), and "office" is permitted by right in all "I" districts (along with allowances for Religious Assembly, Child Care and Private Schools and other uses.).

Mixture of Uses

The County has experienced some pressure to allow a greater mixture of uses in industrial areas, and this is a common trend in other communities as well. In particular, lower land costs make industrial areas attractive for uses that require a larger footprint, such as religious assembly, specialized instruction centers, and private schools. While industrial flex development emphasizes the combination of space within a structure, there is also a demand for a combination of uses – office, industrial, and support services (i.e., childcare, retail services) – to be permitted in a defined geographic area, rather than just in a single structure. Because of the industrial component, there is typically still a need for good access to transportation routes, and the ability to be served by truck traffic. As a result, depending on the scale and intensity of the industrial component, such areas may be suited for a mix of commercial, industrial, and supporting uses, but incompatible with residential development.

However, light industrial areas that allow a mix of uses, have operations that are entirely contained within buildings, and do not generate significant truck traffic, may be suited for adjacent residential uses as well, particularly where Metro stations also exist in close proximity. This appears to be the mix of development that is proposed in the Special Planning Area for Dulles Suburban Center, and map searches indicate that this mix of uses already exists along the Dulles Toll Road, and along Route 28, where commercial and industrial uses front the road, but residential development backs up close behind it. This mixture of uses may be less appropriate for some of the industrial areas along the I-95 Corridor, such as the Newington industrial area. But the Springfield area shows a mix of uses in relatively close proximity, as does Lincolnia, with existing residential development not far from the concentration of industrial land.

Balancing Industrial Demand Against Housing Needs

There is also significant demand for more housing in the County, that is in some cases generating pressure and requests to convert industrially zoned areas to allow housing. This is a trend that is playing out in many high growth locations across the country. In the midst of a nationwide housing crisis, combined with inflationary pressures, decreasing affordability, and population growth, it can begin to seem urgent that every available acre of land be dedicated to housing development.

All of these pressures are present in Fairfax County, and compounded by the desirability of the area as a center of abundant employment with a high quality of life. If the cost of industrial land is less expensive

than land zoned for other uses like residential development, as is often the case, this heightens the pressure for conversion. This is particularly true for industrial areas that are proximate to walkable urban centers, services and amenities, and high-frequency transit. This pressure should not be interpreted as an indication of the lack of demand for that land to be used for industrial development.

In Fairfax County, there is comparatively little industrial land, and a lot of residential land. Starting from an already limited supply, it seems that supporting employment goals would indicate the need for conservation, rather than conversion, of what industrial land there is.

There are areas in the County where accommodating – or even encouraging - the conversion of industrial parcels may make sense. These opportunities are discussed in Section 6.

3: Survey of Industrial Policies and Regulations in Other Jurisdictions

Clarion reviewed adopted policies and regulations in a variety of other jurisdictions to identify the extent to which each entity addresses industrial trends and capacity. Results are organized into three groups:

- **High growth counties (Northeast and Southeast)** – this group includes counties that abut Fairfax County (Loudoun, Arlington, and Prince William counties in Virginia; and Howard County, Maryland; as well as other high growth metropolitan jurisdictions with similar characteristics, Henrico County/Richmond, Virginia, and Fulton County, Georgia (Atlanta Metro).
- **Other formerly industrial locations (Northeast and Southeast)** – this group includes jurisdictions in the northeast and southeast that have a strong history of industrial uses, but that have experienced shifts in industrial demand and have had to proactively reposition former industrial properties, including Pittsburgh, Pennsylvania; Paterson and Campden, New Jersey; Buffalo, New York; and Worcester, Massachusetts.
- **Additional examples with an industrial focus (Western States)** – this group includes jurisdictions familiar to Clarion that have taken proactive steps to protect or reposition industrial land in light of pressures for conversion to other uses, including Albuquerque, New Mexico; and Las Vegas and Reno, Nevada.

A summary of key themes for each group of jurisdictions is provided below, along with a summary of industrial policies and regulations for each jurisdiction.

High Growth Counties (Northeast, Mid-Atlantic, and Southeast)

Key Themes

High growth jurisdictions are addressing their own unique challenges through innovative goals and policies. In our review of planning documents, the following key themes emerged:

- While many places no longer depend on their industrial centers for their economic success, several plans acknowledge **retaining industrial land** is important to various extents to accommodate future job growth opportunities as is the case in Prince William, Howard, and Fulton counties.
- Growth pressures and the unavailability of developable land are forcing several places to prioritize **adaptive reuse and revitalization projects of vacant and underutilized land** such as the case in Prince William, Loudoun, and Howard Counties. Henrico, Howard, and Fulton county's plans target redeveloping industrial land specifically.
- Generally, **analyses of land capacity and industrial needs assessments were not common elements** in planning documents. Though it's dated, Arlington appeared to be the only jurisdiction to conduct an industrial land use assessment.

Prince William County, Virginia

COMPREHENSIVE PLAN – LAND USE CHAPTER (2022)

Industrial Trends/Land Capacity

The Comprehensive Plan does not include an analysis of industrial trends or the supply of industrial land.

Goals and Policies

Prince William County's goals and policies are guided by smart growth principles and aim to improve services and infrastructure, expand housing options, and encourage mixed-use development to accommodate their growing population. Policies that specifically reference industrial uses include:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

LU 27: Promote adaptive reuse as part of the Comprehensive Plan's goals to meet the housing needs, provide civic amenities, preserve historic structures, improve economic development, and provide resilience to neighborhoods (pg. 111).

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

LU12.3: Ensure that the County provides enough properly located lands dedicated for industrial uses exclusive of data centers (pg. 17).

Future Land Use Plan (Map and Land Use Categories)

The plan identifies introducing new industrial land use classifications for key corridor areas including an industrial classification that will allow a mix of light manufacturing and industrial as well as commercial, office and flex space.

Industrial (I): Provide areas for a range of industrial and employment uses which promote a diverse tax base, encourage economic vitality, and support at place employment. Retail/retail service uses may be located to support the needs of those employed within the greater industrial area. Within an industrial designated area, the more intense uses should be located in the core of the area and transition to less intense uses at the periphery. Based on respective use, Industrial T-4 should occur in areas with access to major roads rather than passing through tertiary or residential roads. Data centers and distribution and fulfillment centers are discouraged in Industrial T-2.

Industrial land use categories are tailored in each Small Area Plan:

Industrial (I), T-3: areas will complement existing concentrations of manufacturing and industrial uses, enabling the area to evolve as a major employment center for the County (Bethlehem Road Activity Center Land Use Plan).

Industrial (I), T-3 – Tech/Flex: areas will allow for and support a mix of light manufacturing, light industrial and commercial flex, start-up businesses, and office uses, while also accommodating existing and planned data center uses (Sudley Road Corridor Land Use Plan).

Other Specific Guidance

Bethlehem Road Activity Center Land Use Policy

BRLU 1: Diversify non-residential uses to complement existing industrial development in a manner that is compatible with existing residential uses. Potential non-residential uses may include research facilities, general office, data centers, light manufacturing, or other similar uses (pg. 47).

Sudley Road Corridor Land Use Policy

SRLU 1.5: Accommodate a range of light manufacturing, light industrial and commercial flex, start-up businesses, and office uses, as well as existing and planned data center uses, in designated technology flex areas adjacent to Interstate 66 (pg. 105).

Implementation Strategies

LU27.1: Incentivize building reuse at a neighborhood scale to encourage activation of a cohesive community (pg. 111).

LU27.2: Encourage adaptive reuse projects to provide space for a mix of uses (pg. 111).

LU27.3: Evaluate the Zoning Ordinance, Design and Construction Standards Manual, and site design requirements to determine if any should be modified to allow greater flexibility in the adaptive reuse of buildings (pg. 111).

LU27.4: Encourage adaptive reuse projects that provide more investment, development, and revitalization in areas and in structures that might otherwise remain vacant or underused (pg. 111).

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE (2005)

Industrial Zoning Districts

The Zoning Ordinance for Prince William contains the following three industrial districts:

M-1, Heavy Industrial District: implement the industrial employment land use classification of the Comprehensive Plan. The purpose of this district is to also promote employment opportunities and to enhance the tax base of Prince William County. It is designed to provide areas for and to encourage development of heavy and intensive industrial processing, manufacturing and storage with limited retail and service uses. Retail or residential and low intensity employment uses are generally incompatible with the nature of uses contemplated in the M-1 District.

M-2, Light Industrial District: implement the flexible use employment center land use classification of the Comprehensive Plan. It is also intended to implement the industrial employment center land use classification as a transition to the flexible use employment center land use classification. The purpose of this district is to also promote employment opportunities and to enhance the tax base of Prince William County. It is designed to provide areas for research and development centers, light

industrial manufacturing, warehousing, wholesaling and related office and institutional uses, and not for retail and service uses except in support of the uses primarily intended.

M/T, Industrial/Transportation District: implement the industrial employment land use classification of the Comprehensive Plan. The purpose of this district is to also promote employment opportunities and to enhance the tax base of Prince William County. It is designed to provide areas for and encourage development of heavy industrial uses, and in particular for including those which generate considerable truck and/or heavy equipment traffic, or which require access to more than one mode of transportation. Facilities involving specialized transportation and industrial equipment, together with related supporting services, should be located in the M/T District since, by their nature, such uses must be served by transportation facilities capable of handling the type and amount of traffic generated.

Allowed Uses

Residential uses are not permitted in any of the industrial districts as either a primary or secondary use. A mix of commercial and retail such as restaurants, retail stores, and indoor recreational facilities are permitted as secondary uses within each industrial district.

Use Standards

Use-specific standards apply to recycling collection points and self-storage centers which have size and location requirements.

Loudoun County, Virginia

LOUDOUN COUNTY GENERAL PLAN (2019)

Industrial Trends/Land Capacity

The Comprehensive Plan does not include an analysis of industrial trends or the supply of industrial land.

Goals and Policies

The General Plan outlines policies under five key elements including Land Use; Natural, Environmental, and Heritage Resources; Housing; Economic Development; and Fiscal Management and Public Infrastructure. Policies aimed at industrial uses include:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

IR Policy 1: Ensure reinvestment initiatives and redevelopment, infill development, and adaptive reuse projects will enhance quality of life and neighborhood character, fulfill community needs, and improve economic opportunities (pg. 2-25).

IR Policy 2: Recognize adaptive reuse of existing unused or underutilized buildings as an opportunity to establish or reinforce a community's identity and sense of place (pg. 2-25).

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

IR Policy 3: Promote redevelopment and infill projects that balance compatibility and integration with new housing choices and creative designs (pg. 2-25).

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Not applicable.

Future Land Use Plan (Place Types)

Loudoun designates Place Types for sub-geographies in the county in lieu of traditional land use categories. The General Plan contains Place Type maps for their four policy areas, Urban, Suburban, Transition, and Rural. Each policy area has specific policies, strategies and actions based on local needs. The Suburban Industrial/Mineral Extraction Place Type allows uses for heavy manufacturing, warehousing, research and development, data centers, with complimentary uses of retail and service commercial, flex space, and light production. Another Place Type allowing industrial uses includes the Transition Light Industrial Place Type, which allows uses such as light production, data centers, flex space and complementary uses of retail and service commercial and institutional uses.

Other Specific Guidance

Area Plans

Not applicable.

Implementation Strategies

1.1.A. Develop criteria to identify and prioritize areas for redevelopment, infill development, adaptive reuse, and reinvestment, with the Priority Commercial Redevelopment Areas Map serving as the source for initial areas of focus (pg. 7-7).

1.1.B. Create a common vision and objectives for areas identified for redevelopment, infill development, adaptive reuse, and reinvestment through a public process (pg. 7-7).

1.1.C. Address redevelopment, infill development, adaptive reuse, and reinvestment as part of community plans. Pay particular attention to a community's historic assets and function in areas with under recognized historic resources or limited historic resources protections, such as the legacy village cores of Ashburn, Arcola, and Old Sterling (see Legacy Village Cores Map) (pg. 7-7).

1.8.A Develop zoning regulations and design standards that discourage the displacement of legacy flex, industrial, and employment uses by new large-scale uses (pg. 7-9).

1.8.B. Develop zoning regulations and design standards that expand opportunities for small-scale manufacturing in place types allowing flex, light industrial, industrial, and employment uses (pg. 7-9).

1.8.C. Amend zoning use definitions in industrial, flex, and employment-centered zoning districts to accommodate makerspaces, emerging small-scale manufacturing sectors, and the marketing and retail of goods produced on-site (pg. 7-9).

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Zoning Districts

Loudoun County adopted an updated zoning ordinance in December 2023. The new zoning ordinance includes three industrial zoning districts:

IP – Industrial Park. The purpose of the Industrial Park (IP) Zoning District is to:

- Implement the Suburban Employment, Suburban Industrial/Mineral Extraction, Transition Light Industrial, Transition Industrial/Mineral Extraction, Leesburg JLMA Employment, and Joint Land Management Area (JLMA) - Leesburg Industrial/Mineral Extraction Place Types of the General Plan;
- Provide opportunities for a broad array of employment uses and opportunities for synergies among businesses;
- Offer prime locations for office, light production, flex space, and warehousing uses, including startups and established businesses, where uses do not generate excessive noise or air pollutants and ensure all outdoor storage is sited and screened to reduce visibility from roadways or adjacent properties;
- Support limited first floor retail or other accessory uses that serve predominant uses;
- Establish a development pattern where buildings are the predominant feature when viewed from roadways and adjacent properties and parking is screened from roads and adjacent properties; and
- Create transitions between IP Zoning District uses and other developments, particularly adjacent residential neighborhoods.

GI – General Industry. The purpose of the General Industry (GI) Zoning District is to:

- Implement the Suburban Industrial/Mineral Extraction, Transition Industrial/Mineral Extraction, and Joint Land Management Area (JLMA) - Leesburg Industrial/Mineral Extraction Place Types of the General Plan;
- Provide a location for industrial uses that are incompatible with residential uses due to the prevalence of outdoor storage and emissions of noise, odor, and vibrations to operate;
- Ensure compatibility and long term, economic viability of industrial uses and accessory uses through the use of screening and setbacks from road and adjacent residential uses;
- Provide for development with limited traffic and aesthetic impacts on surrounding properties and on public facilities and utilities; and
- Permit residential and other uses only to the extent that they may be compatible with general and intensive industrial uses.

MR-HI – Mineral Resource-Heavy Industrial. The purpose of the Mineral Resource – Heavy Industry (MR-HI) Zoning District is to:

- Implement the Suburban Industrial/Mineral Extraction, Transition Industrial/Mineral Extraction, and Joint Land Management Area (JLMA) - Leesburg Industrial/Mineral Extraction Place Types of the General Plan;
- Serve as an interim, long term Zoning District recognizing that areas devoted to resource extraction may and should ultimately be converted to other compatible and beneficial uses consistent with the General Plan;

3: Survey of Industrial Policies and Regulations in Other Jurisdictions High Growth Counties (Northeast, Mid-Atlantic, and Southeast)

- Protect the mineral resources, primarily diabase rock, of the County:
 - For possible future economic development;
 - To provide for diabase resource extraction operations at appropriate locations and under controlled conditions; and
 - To co-locate quarries and compatible heavy industrial uses.
- Provide a location for mineral extraction and intensive industrial uses that are incompatible with residential uses due to the prevalence of emissions of noise, odor, and vibrations to operate;
- Ensure compatibility and long term, commercial viability of mineral extraction and intensive industrial uses and accessory uses through the use of screening and setbacks from road and adjacent residential uses;
- Provide for development with limited traffic and aesthetic impacts on surrounding properties and public facilities and utilities; and
- Permit residential and other uses only to the extent that they may be compatible with mineral extraction and associated intensive industrial uses.

Allowed Uses

Residential uses permitted within the IP District and MR-HI District are limited to residences for caretakers or guards.

Use Standards

Maximum permitted steady state vibration levels are performance standards specific to uses in industrial areas. Generally, uses in all districts must comply with performance standards requiring light and glare standards, noise standards, and steep slope standards.

Arlington County, Virginia

GENERAL LAND USE PLAN (2020)

Industrial Trends/Land Capacity

The Comprehensive Plan does not include an analysis of industrial trends or the supply of industrial land.

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Not applicable.

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Not applicable.

Future Land Use Plan (Map and Land Use Categories)

The current land use map includes one industrial land use classification, Service Industry. While a purpose statement is unavailable, the Plan indicates typical uses in this category includes wholesale, storage, and light manufacturing uses, including those relating to building construction activity.

Other Specific Guidance

Four Mile Run Valley (4MRV) Area Plan (2018)

The 4MRV is the last remaining sizeable area dedicated to industrial uses in Arlington County. Historically, industrial uses clustered along the County's rail corridors but over time, they were replaced by higher-density residential and commercial uses. The Plan includes an assessment of the area's existing industrial and commercial uses and includes a framework for how 4MRV can support the county's key priorities in the short and long term. Two themes within the plan directly reference industrial uses:

- Maintain industrial character
- Maintain space for industrial businesses and county uses

Industrial land use trends between 1993-2015 for the county as a whole and the Four Mile Run Study Area are described on page 2.11. Notably, Arlington County had 1.7 million square feet of industrial or flex space in 1995. By 2010, supply decreased to a total of 1.5 million square feet. In 2015, the supply of industrial and flex space dropped again to 1.3 million square feet. Industrial space did not fluctuate much within the Four Mile Run Study Area in this time. Today, the 4MRV area represents 55 percent of Arlington's industrially zoned land.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

The General Land Use Plan references an Industrial Land Use and Zoning Study conducted by the county in 2000. At the time of the report, industrial land had declined since the 1950s and nearly half of industrial-zoned areas were transformed into high-density, mixed-use developments. The County found that while many industrial uses were no longer needed for their economic success, some retained value and should be accommodated for. These uses included warehousing, wholesale distribution, and research/development. Several strategies to retain existing industrial areas were described such as integrating industrial uses into nonindustrial zoning districts through special exception processes or implementing performance standards. A link to the report is [here](#).

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Zoning Districts

Three industrial districts exist in Arlington, CM – Limited Industrial, M-1 – Light Industrial, and M-2 – Service Industrial. M-1 and M-2 purpose statements are unavailable in the current ordinance.

CM District: Provides areas for light manufacturing, wholesale businesses and distribution centers and other uses inappropriate to residential or service business areas.

Allowed Uses

Permitted residential uses in these districts are limited to group living facilities such as group homes, dormitories, and fraternity and sorority houses – all requiring permit approval. Several retail, service, and commercial uses are allowed by right in each district including food establishments, office uses, and many retail sale facilities.

Use Standards

Use-specific standards apply to several industrial and non-industrial uses including building material sales yards, foundries, indoor-only uses, sign making shops, and vehicle storage lots and towing services (e.g., use must be conducted wholly within a building or fence requirements).

Henrico County / Richmond, Virginia

COMPREHENSIVE PLAN (2009)

Industrial Trends/Land Capacity

The Comprehensive Plan includes a demand analysis of the estimated nonresidential total demand in 2030 using a comparison of population and employment forecasts. Office use was estimated to have the highest demand and industrial uses had the lowest demand. Additionally, an analysis of the change in land use by type between 1990 and 2006 is included in the plan. Industrial land had a 60.25 percent change in this time, increasing from 2,514 acres to 4,028 acres.

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

- a. Encourage employment-generating uses to reuse or intensify existing land areas designated for Office/Service/Industrial uses, when appropriate (pg. 285).
- b. Encourage the rehabilitation and reuse of industrial properties (pg. 24).

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

- a. Encourage the private sector to provide certain specialized facilities that may be attractive to some industrial and economic development prospects (pg. 195).

Future Land Use Plan (Map and Land Use Categories)

Industrial uses are integrated in the Future Land Use Plan within the Office/Service/Industrial areas. Land use classifications for industrial uses include Light Industry (LI), Heavy Industry (HI), and Planned Industry (PI). Definitions of the land use categories are provided below.

Light Industry (LI) areas are intended for manufacturing, fabricating and warehousing establishments with the least potential for adverse impact on adjacent development. They include uses and provisions that mitigate noise, heavy truck traffic, fumes, vibration or other forms of pollution.

Planned Industry (PI) is applied to areas intended to accommodate a variety of industrial establishments, which employ high environmental quality standards and have minimal impacts on adjacent uses. They require large tracts of land because of their nature and function. They provide shared access, coordinated design and a planned layout.

Heavy Industry (HI) is applied to areas intended to accommodate manufacturing and fabricating establishments which are generally characterized as producing noise, vibration, heavy truck traffic, fumes and other impacts, which may be objectionable to adjacent uses.

Other Specific Guidance

Area Plans

Not applicable.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE (2010)

Industrial Zoning Districts

Industrial uses fall into three districts in Henrico County:

M-1 - Light Industrial District: Provides lands for a variety of commercial uses and manufacturing, fabricating, and warehousing activities that only produce minimal odors, noises, and similar adverse impacts on nearby lands. To ensure minimal adverse impacts, many industrial activities are only allowed if conducted within enclosed buildings.

M-2 – General Industrial District: Provides lands for a variety of commercial uses and manufacturing, fabricating, and warehousing activities that have the potential to produce low to moderate levels of odor, noise, and similar adverse impacts on nearby lands. To minimize adverse impacts on adjacent lands, many uses are allowed only if they are located a minimum distance from adjacent Residential zoning districts.

M-3 – Heavy Industrial District: Provides lands that accommodate intense industrial development that is important to the County's economy but may adversely impact surrounding lands. To minimize adverse impacts on nearby lands, many uses are allowed only if they are located a minimum distance from adjacent Residential zoning districts.

Allowed Uses

Residential uses are not permitted in industrial districts. Allowed uses include manufacturing, laboratories, warehouses, and recycling.

Use Standards

General use standards for industrial districts include uses must be located within a completely enclosed building except for parking, loading facilities, and outdoor storage areas and must not create any hazardous conditions on neighboring lands. Use-specific standards apply to several industrial uses including location requirements for extractive industries, screening requirements for outdoor storage of materials for service uses, and storage requirements for waste-related services.

Howard County, Maryland

PLANHOWARD 2030 COMPREHENSIVE PLAN (2012)

Industrial Trends/Land Capacity

The Comprehensive Plan includes an analysis of the change in land use in acreage between 1990 and 2006. Industrial land increased by 60.25 percent in this period, increasing from 2,514 acres to 4,028 acres.

Goals and Policies

PlanHoward addresses policies and implementing actions in three priority areas Environment, Economy, and Community. Policies related to industrial uses appear primarily in the Economy priority area.

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Not applicable.

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Policy 5.6: Plan for Class A office, industrial, and mixed-use redevelopment of commercial and industrial properties within the Snowden-GE area where appropriate (pg. 59).

Policy 10.2: Focus growth in Downtown Columbia, Route 1 and Route 40 Corridors, and some Columbia Village Centers, as well as some older commercial or industrial areas which have redevelopment potential (pg. 140).

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Policy 6.4.c.: Commercially and Industrially Zoned Properties: Establish policies to protect and promote commercially and industrially zoned land for future job and business growth opportunities (pg. 172).

Future Land Use Plan (Map and Land Use Categories)

Not applicable.

Other Specific Guidance

Area Plans

Not applicable.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

US 1 Corridor Redevelopment: A market-based analysis of the commercial and industrial conditions of the Route 1 Corridor described on page 57 of the plan revealed this area as a vital economic asset. The corridor has 30 percent of the County’s jobs despite comprising only eight percent of the land area. While past efforts to encourage revitalization of old, underutilized properties were not fruitful, redevelopment efforts will continue to be necessary to accommodate future growth. Other counties provide more ideal conditions for office uses but the Corridor has several competitive advantages in sectors such as information technology, financial services, and cyber security support which can help grow Route 1 as a strong employment hub.

Case Studies

Not applicable.

ZONING ORDINANCE (2013)

Industrial Zoning Districts

There are two industrial districts in Howard County, M-1 – Manufacturing: Light, and M-2 – Manufacturing: Heavy.

M-1 – Manufacturing (Light) District : Permits a mix of manufacturing, warehousing and business uses with provisions for limited retail sales.

M-2 – Manufacturing (Heavy) District: Permits a mix of manufacturing, warehousing, industrial and business uses with provisions for limited retail sales.

Allowed Uses

Flex space, day treatment or care facilities, child day care centers, and carryout restaurants are a few uses permitted by right in the M-1 district. Primarily manufacturing-oriented uses are permitted by right in the M-2 district. Personal service establishments, service agencies, and retail establishments are allowed as accessory uses with size restrictions in both districts.

Use Standards

Use-specific standards apply to a couple non-industrial uses in industrial districts such as project size requirements for retail centers and location requirements for go-cart tracks.

Fulton County, Georgia (Atlanta Metro)

FULTON COUNTY 2035 COMPREHENSIVE PLAN (2016)

Industrial Trends/Land Capacity

Not applicable.

Goals and Policies

The Comprehensive Plan organizes goals and strategies into six elements Population, Land Use, Housing, Transportation, Environmental, and Community Facilities and Resources. Below are strategies specifically addressing industrial land:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Not applicable.

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

- a) Provide incentives for the redevelopment of underutilized commercial, office and industrial areas as identified in the Future Development Map (pg. 118).

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

- a) Adopt an industrial preservation policy (pg. 119).
- b) Review the zoning regulations for the M1A, M1, and M2 zoning districts to further maintain the integrity of all Industrial areas (pg. 128).

Future Land Use Plan (Map and Land Use Categories)

Industrial Marketplace: provide places within the industrial districts that serve the commercial and retail needs of the people who work in these areas. The Industrial Marketplace is further defined as an area that is roughly one-half mile in radius from major road intersections within the industrial areas.

Industrial: The purpose of the Industrial Zone Character Area is to preserve the integrity of industrial areas in Unincorporated South Fulton that accommodate the most intense industrial uses while limiting their impact on the surrounding neighborhoods. These areas have the highest intensity of industrial uses that require the most stringent regulations and site control. Most industrial uses require buffers and separation from incompatible uses.

Other Specific Guidance

Area Plans

The Fulton Industrial Community Improvement District (CID) completed a Master Plan for the Fulton Industrial Boulevard Corridor. The Corridor is a key industrial area for the County and was once a thriving industrial hub in the 1960s. However, the area's productivity declined when more nonresidential development grew along the boulevard when industrial demands changed. Concerned with the decline in industrial capacity, the County began a revitalization effort in 2010 to prevent the continued loss of industrial land and better integrate commercial and industrial developments.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE

Zoning Districts

Industrial uses fall into three districts in Fulton County:

3: Survey of Industrial Policies and Regulations in Other Jurisdictions Other Formerly Industrial Locations (Northeast, Mid-Atlantic, and Southeast)

M-1A Industrial Park District: Provides land areas for the development of industrial parks which meet the needs for manufacturing, fabricating, processing, warehousing, distributing, research, office and related uses in an attractive environment.

M-1 Light Industrial District: Provides locations which meet the needs of processing, manufacturing, fabricating and warehousing, research and office uses, and related uses.

M-2 Heavy Industrial District: Provide locations for a full range of manufacturing, processing, extraction, terminal and warehousing uses, and closely related uses.

Allowed Uses

Allowed uses are not listed in the Code, only prohibited uses. Residential dwellings are prohibited in all districts.

Use Standards

Use-specific standards do not appear in the Fulton County Code of Ordinances.

Other Formerly Industrial Locations (Northeast, Mid-Atlantic, and Southeast)

Key Themes

Formerly industrial jurisdictions are challenged with high vacancy rates and how to spur economic development into their former industrial areas. After review of their planning documents, the following themes emerged:

- Redevelopment of industrial land is **complicated by the presence of environmental contamination** as many of these places are amongst the oldest cities characterized as industrial hubs. Strategies for brownfield redevelopment specifically are prevalent in the plans for Camden, Buffalo, and Worcester.
- **High rates of vacant and underutilized land** from the decline of the industrial sector and subsequent decline in population drive many of the economic development and land use policies. Broadly, places are thinking creatively about incorporating modern, mixed-uses into adaptive reuse of vacant or underutilized industrial land.
- Retaining industrial land was not a prevalent goal for many jurisdictions except for Buffalo and Worcester.

Pittsburgh, Pennsylvania

COMPREHENSIVE PLAN (IN PROGRESS)

Pittsburgh recently announced plans to create its first ever comprehensive plan, *ForgingPGH*. Throughout the city's history, planning has happened at the neighborhood level. Several neighborhoods have their own plans that address local priorities and outline implementation strategies. There are few mentions of industrial uses in the neighborhood plans.

Industrial Trends/Land Capacity

Not applicable.

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Not applicable.

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Not applicable.

Future Land Use Plan (Map and Land Use Categories)

Not applicable.

Other Specific Guidance

Homewood Comprehensive Community Plan

Adaptive reuse of industrial sites was identified as a key business and innovation priority in the Homewood community. Homewood is targeting specific properties with former industrial uses for economic revitalization. One project converted a former industrial building into a space for economic opportunity for the neighborhood. The site was repurposed to not only provide space to local businesses, but to serve as an educational hub.

Hazelwood Comprehensive Community Plan

The Hazelwood community plan includes an analysis of developable land by land use type. General Industrial, Neighborhood Industrial and Urban Industrial are among the land use types with development potential within the neighborhood.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE

Pittsburgh has many more allowances for residential uses within industrial districts compared to the other communities. Industrial uses fall into three districts:

NDI - Neighborhood Industrial District: 1. Allows a broad range of industrial uses, subject to performance standards; 2. Accommodates other uses that are compatible with office, commercial and residential land uses; and 3. Encourages development patterns that include a mix of housing, employment and shopping opportunities.

GI - General Industrial District: 1. Accommodates a full range of industrial, manufacturing, warehouse, and similar uses which are incompatible with lower intensity land uses; 2. Preserves land for manufacturing uses to maintain the diversity of the City's economic base; 3. Allows limited commercial development to support industrial uses without competing for land value; and 4. Encourages appropriate multi-unit residential development in the adaptive reuse of older industrial buildings.

UI - Urban Industrial District: 1. Allows mid-sized to large industries with lower external impacts on surrounding properties and districts; 2. Provides a flexible district that addresses the growing need for easily adaptable and flexible spaces, including office parks, incubator spaces, high technology and service sector industries; 3. Allows multi-use buildings that permit assembly, inventory, sales, and business functions within the same space; 4. Encourages adaptive reuse of manufacturing buildings and allow the development of high density multi-unit residential buildings.

ALLOWED USES

NDI allows the most residential uses with single-unit detached, single-unit attached, two-unit dwellings, three-unit dwellings, and multi-unit dwellings all permitted by right. Assisted Living Class A, housing for the elderly (limited) and large personal care residences are permitted with an administrator exception. Assisted Living (Class B and C), community homes, housing for the elderly (general) and multi-suite residential (general) are permitted as special exceptions within the NDI district. Personal care residence (large) is the only residential use permitted in the GI district as a special exception. In the UI district, Assisted Living Class A and B and Multi-Residential (limited) are permitted by right. Multi-unit residential, Assisted Living Class C, Community Home, Housing for the Elderly (General) and Personal Care residence (large) are special exceptions in the UI district. Housing for the Elderly (Limited) and Multi-Suite Residential (General), and Personal Care Residence (Small) are permitted with an administrator exception.

Paterson, New Jersey

CITY OF PATERSON, NEW JERSEY MASTER PLAN (2014)

Industrial Trends/Land Capacity

Land use trends were analyzed between 2004 and 2012 and show minor changes for most land use classifications. Industrial land comprised 311 acres in 2004 and 311.50 acres in 2012 resulting in only a 0.5 change. Land uses with the greatest change include commercial and vacant land, changing by -68.10 and 106, respectively.

Goals and Policies

As the country's first planned industrial city, Paterson is challenged with infusing new economic opportunities into the city's deteriorated formerly industrial land and improving the condition of existing infrastructure. Many of the goals and objectives within the Master Plan aim to revitalize the city and make it more economically-, socially-, and environmentally-sustainable. Goals and objectives related to industrial uses include:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Land Use Goal 2. To address the problems associated with vacant or abandoned properties:

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Strategy c: Repurpose abandoned industrial facilities for modern uses (pg. 03-3).

Economic Development Goal 4. To promote the redevelopment of vacant/abandoned properties:

Strategy c: Promote the adaptive reuse of industrial buildings, either as housing or retrofitted for new industries.

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Housing Goal 3. To provide opportunities for the construction and/or rehabilitation of affordably priced market rate housing:

Strategy a: Consider conversion of vacant industrial buildings to residences (pg. 03-5).

Land Use Goal 1. To provide for an appropriate mix of land uses, balancing the needs for residential, commercial, and industrial lands, with needs for civic uses and open space & recreation:

Strategy c: Address obsolete industrial uses that border residential or commercial zones (pg. 03-3).

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Not applicable.

Future Land Use Plan (Map and Land Use Categories)

The Master Plan identifies one industrial land use category, Industrial. Purpose statements for land use categories are not included in the Plan.

Other Specific Guidance

Area Plans

Paterson has 16 redevelopment areas identified to require significant redevelopment and rehabilitation. Each redevelopment area has a land use plan and outlines key goals and implementation strategies. A few redevelopment areas and key goals include:

Area 11 Rehabilitation Plan (2009)

Area 11 encompasses 250 acres and consists of residential properties, industrial properties, office and medical uses and some retail uses clustered along Main Street. The rehabilitation plan is intended to activate the St. Joseph's Regional Medical Center as an economic development generator and create six zoning districts including an industrial transition zone. Key goals include:

- Develop infill housing in residential neighborhoods
- Rehabilitate and adaptively reuse historic industrial buildings as housing or commercial uses.

Fourth Ward Redevelopment Plan (2003)

The purpose of the Fourth Ward plan is to encourage capital investment, new housing, and business opportunities in the fourth ward located primarily in the center of the city. The Plan splits the area into six zoning districts, three designated as commercial/industrial districts and another as a light industrial transition district. Key goals in the Fourth Ward include:

- Acquire properties throughout the designated area and redevelop them with appropriate housing or commercial uses.

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- Enforce the recommended residential and commercial design standards.

Implementation Strategies

A list of more specific action strategies under each core topic including key agency/partners and a time range are provided on page 17-13. While few action strategies mention industrial land specifically, several directly reference redevelopment of vacant property.

Economic Development Recommended Action Strategies

- Provide incentives to utilize vacant space in downtown buildings
- Enhance the role of St. Joseph's Medical Center as an economic engine in the City
- Make productive use of vacant and abandoned properties

Housing Recommended Action Strategies

- Address vacant and abandoned properties and use as potential housing sites
- Acquire properties in redevelopment areas for housing development

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE (2016)

Paterson has two industrial districts:

I-1 Light Industrial District: The intent of the I-1 Light Industrial District is to provide for a wide variety of light manufacturing, fabricating, processing, wholesale, distribution, and warehousing uses in a setting conducive to public health, economic stability and growth, and protection from blight and nonindustrial encroachment. The regulations are designed to permit operations in a clean and quiet manner and to protect adjacent district uses and industries within the district. Further development of residences is prohibited in this district to protect homes from the adverse effects of industries and to conserve the supply of industrial land for industrial uses. Further, in order to avoid bringing the general public into the district, to protect commercial establishments from the adverse effects of industry and to conserve the supply of land for industrial uses, most commercial uses are prohibited from the I-1 District.

I-2 Heavy Industrial District: The intent of the I-2 Heavy Industrial District is to provide land for more intense types of industrial and manufacturing uses excluding those with nuisance characteristics. While the mapping of this district unavoidably includes some residential buildings, future construction of dwellings in such districts is prohibited in order to protect homes from the adverse effects of industries and to conserve the supply of industrial land for industrial uses. Further, in order to avoid bringing the general public into the district and in order to protect commercial

establishments from the adverse effects of industry, most commercial uses are prohibited from the I-2 District.

Camden, New Jersey

CITY OF CAMDEN MASTER PLAN (2009)

Industrial Trends/Land Capacity

Not applicable.

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Housing Plan Recommendation 2: Restructure the management of vacant and underutilized properties (pg. 10).

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Not applicable.

Land Use Plan (Map and Land Use Categories)

Light Industrial: Areas primarily designated for manufacturing, warehouse and distribution facilities, wholesale sales, fabricating, and handling of goods and products.

Port Related Industrial: Areas primarily designated for docks, wharves, piers, and related facilities, used in connection with the transfer, storage-in-transit, and incidental processing of cargo from or to waterborne craft, heavy industrial uses, manufacturing, and other uses permitted in the light industrial district.

Office Light Industrial: Areas primarily designated for offices, limited manufacturing and research, flexible high technology facilities, and laboratories.

Other Specific Guidance

Area Plans

Not applicable.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Districts

There are four industrial districts in Camden, LI-1 – Light Industrial, LI-2 – Light Industrial, GI-1 – General Industrial and GI-2 – General Industrial. Purpose statements for these districts are not provided on the online code.

Allowed Uses

All residential uses besides living quarters for caretakers or watchmen are prohibited in these districts. A few permitted uses include restaurants, professional offices, commercial recreation facilities, parks, community center buildings, and libraries.

Buffalo, New York

CITY OF BUFFALO LAND USE PLAN (2016)

Industrial Trends/Land Capacity

One of Buffalo's key priorities is to reclaim vacant buildings and land. The amount of vacant buildings and land grew when the city lost major employers with the decline of its manufacturing sector and households moved to the suburbs. To target adaptive reuse strategies, the City mapped the amount of vacant land in residential, commercial, and industrial districts. Residential land had the most vacant land with 1,260 acres and industrial had the lowest with 915 acres.

Goals and Policies

Buffalo's land use policies are targeted to three key objectives: 1) Grow the Economy, 2) Strengthen Neighborhoods, and 3) Repair the Environment. Example policies specific to industrial uses include:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

- a. Reinforce employment centers along the Belt Line by encouraging a mix of uses for underutilized structures (pg. 24).

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

- a. Prioritize strategic brownfield sites, and support their remediation and reclamation (pg. 24).

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

- A. Preserve industrial sites, particularly with rail or highway access; and increase the availability of reuse-ready structures and shovel-ready land (pg. 24).
- b. Support a working waterfront with industrial and marine commercial uses, while minimizing adverse impacts on public access and wildlife (pg. 22).

Land Use Plan (Map and Land Use Categories)

The Land Use Plan identifies one industrial category (Industrial), encompassing eight percent of the city. A purpose statement for this category does not appear in the Plan. Employment is a proposed land use category that would contain key employment areas, including strip retail, flex commercial, manufacturing and industrial zoning districts.

Other Specific Guidance

Area Plans

Buffalo has an abundance of vacant or underutilized industrial land given its history as a manufacturing hub on the east coast. A significant portion of this land is expensive to redevelop because of environmental contaminants and are considered to be brownfields. Under the New York State Department's Brownfield Opportunity Area (BOA) Program, Buffalo created three studies for the Tonawanda Street Corridor, Buffalo Harbor, and Buffalo River Corridor BOAs. The studies include study area trends, inventory of current land use, site profiles, and implementation strategies that include land use and zoning recommendations.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Real estate trends for the industrial market were analyzed within the three brownfield opportunity area (BOAs) plans.

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Districts

Industrial uses are separated into two districts in Buffalo:

D-IL - Light Industrial: The D-IL district addresses sites intended for low-impact and moderate-impact employment uses, which may benefit from close proximity to, but clear separation from, mixed-use residential neighborhoods, and are typically located adjacent to highway, rail, and water access points.

D-IH - Heavy Industrial: The D-IH district addresses intensive, high-impact employment uses, which are generally incompatible with mixed-use residential neighborhoods and typically benefit from isolated locations, often adjacent to highway, rail, and water access points.

Allowed Uses

Permitted residential uses within the D-IL and D-IH are limited to caretaker dwellings. Halfway houses are permitted within the D-IL district with a special use permit. A broad range of civic and retail and service uses are permitted by right within the D-IL district including public safety facilities, amusement facilities, drive-through facilities, restaurants, and general retail and service. The D-IH has far fewer uses permitted by right.

Worcester, Massachusetts

COMPREHENSIVE PLAN (IN PROGRESS)

Worcester is currently in the process of creating a new comprehensive plan, *Worcester Now*. While the whole draft plan is unavailable to view, draft recommendations are posted on the city's website. The last comprehensive plan was created in 1987. *Worcester Now* will integrate topic-specific planning efforts that

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have occurred over the decades, providing a comprehensive framework to guide growth for the next 30 years.

Industrial Trends/Land Capacity

Not applicable.

Goals and Policies

Worcester Now outlines goals under key topics such as housing, transportation and mobility, culture and creativity, and economic opportunity. Examples specific to industrial include:

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Goal 2.2. Brownfield Redevelopment: Partner to responsibly redevelop underutilized industrial areas and brownfields as centers of green economic activity and well-paying jobs. (pg. 11)

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Not applicable.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Goal 2: Welcome a balance of industries that provide living-wage jobs to all. 2.1. Commercial & Industrial land preservation: create and manage a 21st century industrial and commercial land preservation strategy based on market viability and future land use vision for Growth Areas. (pg. 11)

Future Land Use Plan (Map and Land Use Categories)

Not applicable.

Other Specific Guidance

Area Plans

Not applicable.

Implementation Strategies

Not applicable.

Needs Assessment or Other Market-Based Analysis

Not applicable.

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Districts

One industrial park district exists in Worcester, IP-0.33: Light Industrial. The purpose statement for this district is unavailable on the city's website. Worcester also has an overlay district that permits a range of uses:

Adaptive Reuse Overlay District (AROD). The purposes of the AROD are: 1. Provide for the coordinated and mixed development of residential, business, industrial, manufacturing, and institutional uses; 2.

Encourage adaptive reuse of abandoned, vacant, or underutilized businesses or manufacturing buildings

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or structures; 3. Create major new mixed used areas in planned locations at appropriate densities, heights and mixtures of use; and 4. Encourage flexibility in architectural design, restoration and building bulk.

Allowed Uses

Permitted residential uses in the IP 0.33 district include family day care homes, group residences (general or limited) and temporary shelters requiring a special permit. Very few business uses are permitted by right in the IP 0.33 District, limited to credit unions with drive-throughs, radio/tv studios, research labs without manufacturing abilities, and wholesale business or storage within an enclosed structure.

Additional Examples: Western States

Key Themes

Many recent plans and codes for communities in western states have placed a strong emphasis on understanding regional demand for industrial and employment uses, establishing clear policy guidance to retain/expand those uses (or not), and adopting regulations that support those strategies. Often, these recommendations are informed by market-based land demand and capacity analyses.

Albuquerque/Bernalillo County, New Mexico

[COMPREHENSIVE PLAN \(2017\)](#)

Industrial Trends/Land Capacity

The Land Use Element of the Comprehensive Plan includes an analysis of vacant and undeveloped land and identifies Areas of Change and Areas of Consistency to help inform land use recommendations. The Economic Element notes, “Having an adequate inventory of land, buildings, and infrastructure is critical to support and attract new business investment across the region. In addition to encouraging business investment and growth, it is important to balance the supply and demand for non-residential development in different areas.”

Goals and Policies

Goal: Create Employment Centers that prioritize employment opportunities and foster synergy among businesses.

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Until 80 percent of the available land in Employment Centers has developed with uses associated with employment opportunities, discourage residential uses on the ground floor.

After employment has been established on 80 percent of the available land, encourage mixed-use development to introduce high-density residential uses that bring housing to jobs.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

Prioritize industrial employment in areas with good connectivity for freight routes.

Reassess zoning capacity every five years for at least 20 years of growth within Centers, Corridors, and City Areas of Change.

Future Land Use Plan (Map and Land Use Categories)

The Vision Map identifies a hierarchy of centers and corridors that are intended to accommodate higher intensity development. This hierarchy includes a number of Employment Centers:

Employment Centers are intended to remain predominately industrial, business, and retail centers.

Employment Centers tend to be auto-oriented and need to provide excellent access for trucks and connections for freight. For this reason, Employment Centers should be located near major intersections or along highways or major arterials. Additionally, because land uses are typically separated by parking

lots or arterial roads, street design should emphasize efficient movement of vehicles and pedestrian accommodation within business parks. Once Employment Centers are largely developed, it may be appropriate and beneficial to introduce mixed-use and/or higher-density residential development.

Other Specific Guidance

Area Plans

Albuquerque/Bernalillo County maintain an extensive library of sector plans that provide area-specific policy guidance.

Implementation Strategies

N/A

Needs Assessment or Other Market-Based Analysis

See above.

Case Studies

N/A

ZONING ORDINANCE

Industrial uses are designated to the following five districts in Albuquerque:

MX-H Mixed-use – High Intensity: The purpose of the MX-H zone district is to provide for large-scale destination retail and high-intensity commercial, residential, light industrial, and institutional uses, as well as high-density residential uses, particularly along Transit Corridors and in Urban Centers. The MX-H zone district is intended to allow higher-density infill development in appropriate locations.

NR-C Non-residential – Commercial: The purpose of the NR-C zone district is to accommodate medium-scale retail, office, commercial, and institutional uses, particularly where additional residential development is not appropriate or not desired because of a deficit of jobs or services in relation to housing units in the area. Primary land uses include a wide spectrum of retail and commercial uses intended to serve both neighborhood and area-wide needs, as well as some light industrial uses.

NR-BP Non-residential – Business Park: The purpose of the NR-BP zone district is to accommodate a wide range of non-residential uses in campus-like settings to buffer potential impacts on surrounding uses and adjacent areas. Allowable uses include a wide variety of office, commercial, research, industrial, distribution, showroom, processing, and institutional uses.

NR-LM Non-Residential – Light Manufacturing: The purpose of the NR-LM zone district is to accommodate moderate-intensity commercial, light assembly, fabrication, and manufacturing uses, while buffering adjacent lower-intensity, Residential and Mixed-use zone districts from the traffic, noise, and other impacts of those uses.

NR-GM Non-residential – General Manufacturing: The purpose of the NR-GM zone district is to accommodate a wide variety of industrial, manufacturing, and heavy commercial uses, particularly those with noise, glare, or heavy traffic impacts, in areas separated from Residential and Mixed-use areas and less intense, lighter impact businesses.

Allowed Uses

Residential uses such as townhouses, live-work, multi-family, and several group living facilities are permitted by right in the MX-H district. Residential uses are not permitted in the NR-C, NR-BP, NR-LM, or NR-GM; however, live-work dwellings are permitted as a conditional accessory use in both the NR-C and NR-BP districts. A mix of civic and institutional and commercial are permitted in each district.

Las Vegas, Nevada

2050 MASTER PLAN (2021)

The City of Las Vegas adopted a new Master Plan in 2021, replacing a 20-year old plan.

Industrial Trends/Land Capacity

The City retained a local economic consultant as part of the Master Plan process to evaluate trends and document capacity, that noted: “As large national retailers, corporate chains, and businesses have felt pressure from consumers and have made decisions to close “brick and mortar” locations as they adapt to rapidly changing economic conditions, commercial properties, shopping centers, and retailers have left a wide range of vacant spaces available.”

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

Ensure redevelopment and infill development are directed to appropriate locations within those place types once evaluated for compatibility and suitability to job creation. (3-41)

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

Direct appropriate defense, UAV, automation, and technology businesses requiring large footprints to the Congressionally designated job creation zone within the Nu Wav Kaiv area in northwestern Las Vegas as infrastructure is developed and extended to the area. (3-41)

Future Land Use Plan (Map and Land Use Categories)

The Future Land Use Plan identifies one Industrial land use category, but identifies a range of industrial, commercial, and mixed-use zone districts as compatible.

Other Specific Guidance

Area Plans

The Master Plan provides tailored land use recommendations by sub-area.

Implementation Strategies

Consider selective expansion of redevelopment areas consistent with Land Use goals and the 2050 General Plan to ensure redevelopment, small business development, and the ability to attract major large employers that are aligned with the Comprehensive Economic Development Strategy (CEDs). (3-42)

Needs Assessment or Other Market-Based Analysis

See above.

Case Studies

The Master Plan highlights a series of infill/redevelopment catalyst sites as case studies.

ZONING ORDINANCE

To support the implementation of the 2050 Master Plan, the City of Las Vegas initiated a project (with support from Clarion) to align and update portions of the Unified Development Ordinance (UDO) related to industrial uses and zoning districts. Although the primary focus of the project was the uses allowed in the C-M and M districts and the development standards related to those uses, Clarion also evaluated whether some uses currently allowed in only those districts have such minor impacts to neighboring areas that they should be permitted in other commercial districts, and what additional or different development standards should apply in those cases.

The goal of this effort was to ensure that (1) Las Vegas remains competitive in attracting and retaining industrial and commercial-industrial uses; (2) the City is not over-regulating those uses based on past assumptions about their impacts that are no longer accurate; (3) the regulations are tailored to the inventory of industrial lands available in the City, which are generally smaller and more embedded in surrounding development than those in surrounding Clark County; and (4) the actual likely impacts of those uses on surrounding areas are avoided or mitigated.

Recommendations addressed allowed uses, development standards, and a range of other considerations based on a review of industrial districts in comparable communities. Targeted updates to the UDC were adopted in July 2023.

Zoning Districts

Las Vegas has two industrial districts:

C-M – Commercial/Industrial: The C-M District is a general commercial and restricted industrial district designed to provide for a variety of compatible business, warehouse, wholesale, office and limited industrial uses. This district is intended to be located away from areas of low and medium density residential development. The C-M District is consistent with the Light Industry/Research category of the General Plan.

M - Industrial: The M District is intended to provide for heavy manufacturing industries in locations where they will be compatible with and not adversely impact adjacent land uses. This district is intended to be located away from all residential development. The M District is consistent with the Light Industry/Research category of the General Plan.

Allowed Uses

Residential uses are not permitted in either district. A mix of commercial, retail, and civic uses are permitted in both districts.

Reno, Nevada

REIMAGINE RENO MASTER PLAN (2018)

Industrial Trends/Land Capacity

As an initial step in the Master Plan update, the City retained an economic consultant to conduct a market-based needs assessment for residential and non-residential development. This information was

used to inform the development of a new Economic Element in the Master Plan, future growth scenarios, and ultimately, updates to the Future Land Use Map. One of the key objectives for this analysis was to help clarify the role of the remaining industrial land in the City versus that of industrial lands in other parts of the region—essentially, to what extent should the City seek to retain its remaining industrial lands, and for what purpose.

Goals and Policies

Conversion or Adaptive Reuse of Vacant or Underutilized Industrial Buildings

DTRC-ID.3: RELATIONSHIP OF USES. Provide flexibility for the adaptive reuse of existing industrial buildings and for the incorporation of high-density residential and live/work opportunities in the Innovation District in configurations. (This policy applies within one of several subdistricts in the larger Downtown area - a mixed-use designation.) (pg. 107)

Redevelopment of Industrial Buildings for Residential or Mixed-Use Development

See above.

Guidance Regarding the Retention of Industrial Land (or Compatibility with Industrial Land)

The economy element of the Master Plan (Citywide Policies | GP1: Resilient Local and Regional Economy) establishes a guidance for employment uses within the City of Reno that complement regional and state economic development priorities. Relevant goals and policies include:

1.2B: Modern Industrial Hub. Support the continued growth of the city’s logistics and manufacturing industries and leverage the region’s infrastructure and assets to broaden the economic base through attraction of advanced manufacturing employers and modern logistics operations.

1.2D: Employment Centers. Plan, invest in, promote, and incentivize the creation and improvement of cohesive employment areas with diverse functions (as defined by the Structure Plan), and clearly identify where specific employment uses are desired and where infrastructure, housing, services, and amenities that support businesses exist or are planned.

1.2E: Proactive Investment. Proactively invest in infrastructure and amenity projects, using the capital improvement plan, sewer capital fund, and other public funding and financing tools that will enhance the attractiveness of high priority employment areas in coordination with public and private partners, when possible.

1.2F: Encroachment. Protect industrial areas and employment centers from encroachment by potentially incompatible land uses or conversion to alternative uses.

EA-ILA.3: RESIDENTIAL COMPATIBILITY Concentrate taller buildings away from adjacent residences (stepping down building heights along shared property lines) and mitigate noise, odor, lighting, and other potential impacts so as to minimize conflicts. Where industrial/logistics areas abut unincorporated land that is planned for future residential, anticipate potential future impacts and take steps to mitigate them, such as through the incorporation of a buffer that is retained for open space.

Future Land Use Plan (Map and Land Use Categories)

Structure Plan Map

The Structure Plan map identifies generalized areas for different types of development. It is supported by a more detailed Future Land Use Map. The Structure Map includes three categories of employment areas:

Industrial/Logistics Areas. These areas are oriented towards industrial, manufacturing, and logistics uses. Uses include a mix of large footprint warehouse/flex space, manufacturing facilities, and smaller ancillary and supporting industrial, commercial, and office uses. Residential uses are generally not supported due to compatibility issues; however, access to housing options and services within close proximity of industrial/logistics areas plays an important role in supporting live-work opportunities for the local workforce and reducing the need for cross-town trips.

Innovation Areas. These areas support ongoing education, research, entrepreneurship, business incubators, and other endeavors that seek to turn knowledge into products, processes, and services. A range of academic/institutional uses, research facilities, new forms of workspace (e.g., co-working spaces, make spaces, etc.) as well as higher-density residential types (including student housing), and supporting office, retail, and other commercial uses are encouraged in innovation areas.

Airport Transportation Areas. This designation is intended to support a broad range of transportation, service, and employment uses that complement and are compatible with Reno/Tahoe Airport Authority's core mission of maintaining and expanding aviation services and facilities to meet regional demand. To protect the functions of existing and future airport operations, residential uses and other incompatible uses that could negatively impact safe aviation operations are not allowed. Areas directly adjacent to airport transportation areas (and some portions of RTAA properties) have the highest densities of manufacturing and distribution employment within the city.

Other Specific Guidance

Area Plans

Area-specific policies (design principles) are provided for each category of uses identified on the Structure Plan map. These principles were used to inform updates to the zoning regulations.

Implementation Strategies

The Master Plan includes numerous strategies to support the implementation of policies for the City's employment areas.

Needs Assessment or Other Market-Based Analysis

This work was completed in conjunction with the capacity analysis described above.

Case Studies

Not applicable.

ZONING ORDINANCE

Industrial Districts

Industrial uses are split into two industrial districts in Reno, I: Industrial and IC: Industrial Commercial.

I: Industrial: The I district is intended to accommodate intensive land uses that require mitigation of impacts, including the heaviest industrial uses. Sites are commonly comprised of large footprint buildings designed for warehousing, flex space, manufacturing, and supporting office uses. This district should be located in areas with access to air, roadway, and/or railway transportation systems. This zoning district should be separated from residential development and schools by natural and man-made buffers.

IC: Industrial Commercial: The IC district is intended to provide for a mix of industrial, research and development, and commercial uses. Sites are commonly comprised of moderate-footprint buildings (generally less than 500,000 square feet) designed for warehousing, flex space, manufacturing, and supporting office uses. This zoning district should be separate from residential development by natural and man-made buffers.

Allowed Uses

Residential uses are prohibited in both the I and IC districts. Several commercial uses are permitted including restaurants, call centers, offices, and general retail

4: Recommendations

General Recommendations

This section provides a summary of our general recommendations for Fairfax County regarding industrial land uses and recommendations for targeted updates to the County's Comprehensive Plan and Zoning Ordinance. These recommendations are based on our review of industrial trends nationally and within the Northern Virginia/Metro DC region, a survey of industrial policies and regulations in other jurisdictions, and our collective experience developing comprehensive plans and zoning codes for jurisdictions across the country. Not all of these recommendations will apply in all areas of Fairfax County. Circumstances will vary at the Special Planning Area and land unit level and recommendations should be tailored to the local context.

While recommendations specific to the Comprehensive Plan or Zoning Ordinance are provided in some instances, other recommendations apply more broadly to both policies and regulations. Generally, we recommend that a market-based capacity and needs assessment for industrial lands in the County be performed to help further inform the application of these recommendations and future updates to the County's Comprehensive Plan along with possible amendments to the Zoning Ordinance.

Retain existing industrial land in designated Industrial Areas to the extent practicable.

There is a limited supply of industrially zoned land in Fairfax County and much of the industrial land that is vacant or underutilized consists of small parcels. While these parcels generally cannot meet the demand for warehouse and distribution or data center space, there are other growing industries that could use such parcels, including high tech manufacturing and small-scale artisanal production. There may also be demand for these smaller parcels from limited-scale light industrial firms, such as HVAC contractors. These industries may be able to occupy some of the County's vacant parcels, or they may pursue opportunities for redeveloping parcels that are dilapidated, prime for revitalization, or underutilized. If the cost for doing so is favorable, industries seeking larger sites may also pursue opportunities for consolidation and redevelopment. Finally, the County may also consider expanding permissions to allow light industrial firms with limited needs for outdoor storage to expand into some commercial zones as well.

Regardless of the particular industry, trends indicate that there will be demand for the County's existing industrial land, and the County's 2017 Policy Plan identifies the need to maintain a balance of residential and non-residential uses (including industrial development). The Comprehensive Plan also identifies three areas of particular importance for Industrial Development: Beltway South, I-95 Corridor, and Ravensworth, which provides potential tenants or developers with some degree of assurance that industrial uses will be accommodated and that potential conflicts with their business operations will be minimized in these Special Planning Areas.

While there may be instances when the conversion of a parcel from industrial to residential makes sense, such requests should be evaluated with the long-term viability of adjacent industrial uses in mind, and the recognition that in an urbanized/urbanizing area such as Fairfax County, once industrial land is converted to other zoning or other uses, it can rarely be re-established as industrial land.

Potential Plan Amendment

Review and update policies for the Beltway South, I-95 Corridor, and Ravensworth Industrial Areas to discourage the conversion of industrial land for residential uses. Where exceptions may be applicable due to a site's access, proximity to residential uses, or other factors, address these possibilities at the Land Unit Level.

Review and consider updates to Special Planning Areas (outside of designated Industrial Areas) that have concentrations of industrial uses, to clarify if the intent is to maintain and preserve these concentrations, or to encourage them to convert to other uses.

This recommendation refers to the Tysons Urban Center, Dulles (Route 28 Corridor) Suburban Center, and the various Special Planning Areas along the Metro Orange Line and Silver Line/Dulles Toll Road.

While many of the County's industrial parcels are concentrated in Special Planning Areas such as the I-95 Corridor or in portions of the Dulles Suburban Center area, there are other industrial parcels scattered in various locations around the County. Many of these sites, in Tysons, Merrifield, Springfield, and other dispersed locations, appear to be surrounded by non-industrial land. Their zoning may be a reflection of how the parcels were being used at the time zoning was applied, but given their surroundings, this may be increasingly out of character with the kind of development that has occurred in or is planned for an area.

Tysons Urban Center

Heavier industrial zoning (I-5 and I-6) seems out of character with development in the Tysons area, designated as the only Urban Center in the County. Given the evolution of the Tysons area and recent planning updates that sought to reflect such changes in development focus, the remaining industrial parcels may be better employed for other uses more aligned with the residential and commercial character of the area. Rezoning requests in this area – and others where isolated industrial parcels are no longer aligned with nearby land uses – could be encouraged to bring these parcels into better alignment with their surroundings.

Dulles Suburban Center

The Special Planning Area for the Dulles (Route 28 Corridor) Suburban Center acknowledges that the area is “one of Fairfax County's largest employment areas,” which includes the Westfields Business Park. There is a long history of planning for the area, dating back to the 1950s, when land was “planned for employment or industrial use since the airport was envisioned...” Over time, more residential development has occurred in the area, producing a mix of uses with more intense commercial and industrial uses along the transportation corridors, and residential filling in other areas. The Comprehensive Plan acknowledges that as of 2015, “approximately 75 percent [of the area] was zoned for commercial or industrial use.” Even so, as of the most recent update in 2018, more emphasis is placed in a mix of uses than on maintaining this concentration of employment and industrial land. While Chantilly is included in the planning area, there is little to no mention of the concentration of industrial uses in that area, or recognition of its desirability as a location for industrial uses. Land Units H and I within the Dulles (Route 28 Corridor) Suburban Center are delineated on the Comprehensive Plan Map as Industrial; however, they are not distinguished as an Industrial Area on the Comprehensive Plan Special Planning Areas Map. Policies for both land units acknowledge the presence of industrial uses, but also encourage a mix of commercial and office uses. The preservation of industrial uses in this location is not identified as a

priority. Land Unit J in the Dulles (Route 28 Corridor) Suburban Center—just south of Land Units H and I—was recently replanned to encourage a mix of uses, and is designated as mixed uses on the Comprehensive Plan Map.

This creates confusion: should Land Units H and I be shown as an Industrial Area on the Comprehensive Plan Special Planning Areas Map to reflect the Comprehensive Plan Map and zoning, or is the objective for land use in this area to change over time, coming more into alignment with the suburban mixed-use vision of the plan? If so, that may represent a reduction of employment land -- or at least a change to lesser intensity employment uses -- in the area, and the plan should be explicit about that policy direction. We think it would be worthwhile to reconcile potential discrepancies between current use and future policy direction for the areas within this planning area -- including a more explicit explanation of plans and goals for development in and around Chantilly and Westfields. If there is debate about what the emphasis for land use should be, we suggest that, given the concentration of existing non-residential uses, and in recognition of the on-going need for non-residential support services for nearby Dulles airport, this is one of the areas where the County should strive in particular to maintain a supply of industrial land.

Orange Line and Silver Line Transit Station Areas

The same sort of discrepancy exists with these plan areas (Merrifield, Reston Town Center, Herndon, Wiehle-Reston East, and Innovation Center) and the existing zoning and land uses along the Metro Orange Line and Dulles Toll Road/Metro Silver Line corridors. Merrifield is generally located south of Interstate 66 (I-66), north of Woodburn Road, west of Holmes Run, and east of Long Branch Stream Valley and Prosperity Avenue and encompasses the Dunn Loring Merrifield Metrorail station. The area is zoned for office, retail, residential, and light industrial west of Interstate 495. The plans and maps emphasize mixed-use development. The Dulles Toll Road/Metro Silver Line corridor stretches from the County's western boundary, east along 267 for approximately 10 miles until the intersection with Hunter Mill Road, the majority of the zoning on the south side of 267 is industrial, alternated with Planned Development. The plans and maps for these areas, conversely, emphasize transit-oriented mixed use and residential development. Given the plan direction and the evolution of land use in this corridor, it may be another area where rezoning requests are viewed favorably. Incremental changes over time will likely bring this area into closer alignment with the Planning Area vision, with more transit-oriented mixed use, including residential development alongside office and institutional development, with some remaining industrial.

Potential Plan Amendment

- Review and update the portions of the Comprehensive Plan/Special Planning Areas that have concentrations of industrial uses/industrial zoning to clarify the future land use vision and policy guidance for each area.
- Review and update the Dulles Suburban Center, Merrifield, Reston Town Center, Herndon, Wiehle-Reston East, and Innovation Center portions of the Comprehensive Plan that have concentrations of industrial uses/industrial zoning that are desirable to retain.
- Clarify the future land use vision and policy guidance for each area to discourage conversion of industrial lands outside of defined transit station areas. This may be accomplished by designating portions of the areas that are predominantly industrial (and desirable to retain as industrial) as Industrial Areas on the Comprehensive Plan Special Planning Areas Map, as well as through the adoption of stronger policies regarding the importance protecting industrial land for applicable Land Units. Land Units H and I in the Dulles Suburban Center should be a priority.

Expand criteria for requests to replan industrial land for residential development.

Many of the Objectives and Policies in the Housing Element of the Comprehensive Plan focus on the provision and retention of affordable housing. While there is greater detail related to the general expansion of housing – not just affordable units – in the Appendices and Special Planning Areas, we do highlight the policy below, on account of its relevance to requests to replan industrial land to allow residential development.

Policy d. Do not approve residential rezoning applications above the low end of the Plan range, unless an appropriate commitment of land, dwelling units, and/or a cash contribution to the Housing Trust Fund is provided. For further guidance, see the Residential Development Criteria.

Potential Plan Amendment

This policy could be amended in two ways to ensure that when requests are made to replan existing industrial land for residential use, the Plan amendment nomination would be tied to commensurate community benefits being provided. First, nominations could be expected to meet the high end of the density range, rather than the low end. Second, nominations could be subject to additional criteria to be accepted for consideration. For example, a higher percentage of affordable units could be recommended, or affordable units could be recommended to reach a lower threshold of AMI. Additional criteria should also consider changes to tax revenue that would occur from the conversion of commercial or industrial to residential due to state code provisions.

5: Appendix: Current Industrial Policies and Regulations in Fairfax County

This section provides a brief summary of Fairfax County’s current policies and regulations for existing and future industrial development.

Fairfax County Policy Plan (2017 Edition)

Goals and Policies

The Preface to the 2017 Policy Plan establishes 18 goals to provide focus for the objectives and policies in other plan elements. Direct references to land use considerations for industrial development appear in four of the 18 goals:

Quality of Life. The primary goal of Fairfax County’s policies and priorities is to...achieve an outstanding quality of life through *a balance between access to convenient multi-modal transportation and residential, commercial, and industrial development.*

Land Use. Growth should take place in accordance with criteria and standards designed to *preserve, enhance, and protect an orderly and aesthetic mix of residential, commercial/industrial facilities, and open space* without compromising existing residential development.

Revitalization. Fairfax County should encourage and facilitate the revitalization of older commercial and residential areas...revitalization initiatives should encourage business development, promote public and private investment and reinvestment, and *seek to prevent or eliminate the negative effect of deteriorating commercial and industrial areas.*

Private Sector Facilities. Fairfax County should continue to *encourage the development of appropriately scaled and clustered commercial and industrial facilities* to meet the need for convenient access to goods and services and to employment opportunities.

Land Use Element

Objective 3: Fairfax County should maintain a supply of land sufficient to meet the need for housing, commercial, industrial, institutional/public services, and recreational and leisure activities to support the Comprehensive Plan.

Policy a. Conduct a comprehensive community needs assessment, at least once every five years, to determine future land requirements to meet adopted county goals.

Objective 11: Redevelopment of existing residential neighborhoods...

Policy b. Ensure that redevelopment of existing residential neighborhoods for commercial/industrial uses provides affordable dwelling units or a contribution to the Fairfax County Affordable Housing Trust Fund equal, at minimum, to the replacement value of all affordable units displaced.

Appendix 12: Guidelines for higher intensity within areas planned for industrial uses. Appendix 12 acknowledges the potential for changes in technology and market demand, and the need to provide more flexibility to allow certain uses, such as data centers and self-storage facilities, to be built at higher intensities within areas planned for industrial uses on the Comprehensive Land Use Plan Map. The appendix establishes performance criteria to guide the review of proposed uses, to address the

following potential impacts: traffic volumes; noise, light, and other environmental impacts; visual impacts (building design); lot size and parcel consolidation; and site-specific considerations related to circulation and access, parking, landscaping, and stormwater management. Opportunities for higher intensity uses are excluded in areas with a baseline Plan recommendation for industrial uses.

Appendix 13: Guidelines for commercial building repurposing. Appendix 13 establishes flexibility to accommodate the repurposing of older commercial, office, retail, or service buildings that have been vacant for an extended period, or are otherwise considered obsolete. Light industrial uses, such as industrial/flex or light manufacturing are identified as appropriate for the reuse of outmoded office or retail buildings in a number of locations, subject to performance standards. Standards are similar to those outlined in Appendix 12, but also address potential impacts to: schools, parks, and other public facilities; energy efficiency and green building practices; and historic preservation.

Economic Development Element

Objective 1: Provide an environment where businesses flourish and jobs are created.

Policy g. Plan for sufficient land suitable for economic development to be available in appropriate locations throughout Fairfax County.

Comprehensive Land Use Plan (Map and Land Use Categories)

The Comprehensive Land Use Plan includes one industrial land use category, which encompasses 3,012 acres or 1.53% of the total land area in Fairfax County. Definitions are not provided for the individual land use categories illustrated on the map; however, the Plan glossary provides the following guidance:

Industrial Uses: The types of uses intended for industrial areas are generally regulated more strictly due to their anticipated impacts to adjacent areas. This category is not appropriate for residential uses and limits future office uses to those which are ancillary to industrial use.

Special Planning Areas / Industrial Areas

The Comprehensive Land Use Plan provides more detailed policy guidance and land use recommendations for each of Fairfax County's 14 Planning Districts, as well as sub-geographies within each district. The Plan identifies three sub-geographies as priority locations to retain for industrial uses (Beltway South, Ravensworth, and the I-95 Corridor) and notes that office and commercial areas uses should generally be limited in designated Industrial Areas. In addition, large portions of the Dulles Suburban Center are designated for industrial uses. A brief summary of each area is provided below.

BELTWAY SOUTH INDUSTRIAL AREA

The majority of the Beltway South Industrial Area is located in the Annandale Planning District (with a small portion located in the Lincolnia Planning District). It includes a mix of industrial, office, and research and development facilities. Warehouse uses are prevalent, along with processing and manufacturing uses. Major objectives for the area are to:

- Ensure the compatibility of infill uses;
- Ensure appropriate transitions towards the periphery adjacent to existing residential development; and

- Monitor environmental quality and safety of specific industrial areas.

RAVENSWORTH INDUSTRIAL AREA

The Ravensworth Industrial Area is located in the Annandale Planning District, and is characterized by a mix of warehouse/distribution uses with some medium intensity offices. The area abuts established residential uses on three sides, and the Ravensworth Shopping Center. Major objectives for the area are to:

- Preserve the present community-serving, lower intensity industrial uses;
- Ensure the compatibility of infill uses within the Industrial Area; and
- Ensure appropriate transitions towards the periphery adjacent to existing residential development by providing buffering and screening greater than required in the Zoning Ordinance.

I-95 CORRIDOR INDUSTRIAL AREA

The I-95 Corridor Industrial Area is located in the Springfield Planning District, and is characterized by a predominance of industrial, warehouse, fuel storage, vehicle repair, wholesale and commercial retail, flex-space, and office uses. Major objectives for the area are to:

- Retain suitable locations for industrial uses;
- Redevelop the blighted industrial areas along Cinder Bed Road and the Long Branch of Accotink Creek north of Blacklick Road; and
- Protect environmental quality corridors and provide public trail access.

DULLES SUBURBAN CENTER

The Dulles Suburban Center abuts the eastern and southern boundary of Washington Dulles International Airport, and is one of Fairfax County's largest employment areas. The Center includes a mix of mid-rise office, industrial, and industrial/flex development that serves local and regional communities, as well as pockets of residential, mixed-use development, and public facilities. Industrial-related objectives for the area are to:

Objective 6. Provide flexibility for economic enterprises attracted to the Dulles Airport area by encouraging a mix of land uses compatible with and that bolster Dulles Airport operations and the existing industrial and office uses.

Objective 15. Support Dulles Airport operations and future expansion by ensuring land use compatibility and retention of industrial land uses within the Dulles Suburban Center.

Zoning Ordinance (2022)

Industrial Zoning Districts

The Fairfax County Zoning Ordinance includes six industrial zoning districts:

Industrial Institutional District (I-I). Provides for intense office and office-related uses in a campus-like or institutional setting. Uses are generally limited to office uses and supporting nonresidential uses with enhanced site layout and building design quality.

Low Intensity Industrial District (I-2). Provides areas for scientific research, development and training, offices, industrial flex, small-scale production, and manufacturing incidental and accessory to those types of uses. The I-2 District is designed to promote an industrial park atmosphere for the conduct of research-oriented activities and other similar uses. Development will incorporate enhanced building and site design, and performance standards in this district will ensure that development is compatible with surrounding uses.

Light Intensity Industrial District (I-3). Provides areas for scientific research, development and training, offices, light-intensity production of goods, and related supply and supporting nonresidential activities. This district is designed to provide for a broad spectrum of clean industries operating under enhanced performance standards.

Medium Intensity Industrial District (I-4). Provides for a wide range of industrial uses such as scientific research, development and training, offices, medium-intensity production of goods, and related supply and supporting nonresidential activities at a greater intensity of development than is allowed in the I-3 District.

General Industrial District (I-5). Provides for a wide range of industrial and industrially-oriented business activities. Uses must minimize noise, smoke, glare, and other environmental pollutants on the uses within the district and on neighboring areas. Other nonresidential uses generally provide services and supplies to industrial companies, engage in wholesale operations, and are associated with warehouse establishments.

Heavy Industrial District (I-6). Provides for heavy industrial activities. Uses and activities that may require noise, vibration, intensive traffic, and other environmental pollutants are tolerated and are subject to minimum performance standards. The I-6 District is intended for use by the largest manufacturing operations, heavy equipment, construction and fuel yards, major transportation terminals, and other basic industrial activities required in an urban economy.

PERMITTED USES

Permitted uses in the six industrial zoning districts vary by district, but generally include a mix of industrial; commercial (including office); and public, institutional, and community uses. Aside from a residence for a manager or employee, religious group living in conjunction with and contained within the same structure as a religious assembly use, and residence halls in conjunction with a private school, college, or university, residential uses are not permitted. Residence halls and religious group living are limited to the I-2, I-3, and I-4 districts. Uses in the Industrial Uses classification are primarily limited to industrial districts, but some are also allowed in certain commercial districts (e.g., goods distribution hub, craft beverage production establishment, and small-scale production establishment).

USE STANDARDS

Use-specific standards apply to most industrial uses. Standards also apply to some non-industrial uses in industrial districts (e.g., limitations on the size and location of restaurants or personal services in relation to primary uses).

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Retail Land Use Trends Report

Fairfax County, Virginia
Department of Planning and
Development

Report prepared by:

CLARION

October 2024

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1: Project Overview

Background

The Fairfax County Department of Planning and Development has requested a review of retail land use trends, as authorized by the Fairfax County Board of Supervisors. The objective of this review is to determine whether land planned, zoned, and used for retail should remain as-is, or if that land would better serve the county by allowing for conversion to residential, industrial, or other uses.

To support informed decision-making on this topic, this report examines national trends in retail use and conversion. It looks at common retail building types in light of the desirability of retention versus potential opportunities and impediments to conversion to other uses.

About this Report

In addition to this project overview, this report includes the following sections:

- **2. Retail Land Use Trends.** This section includes a brief overview of national and regional vacancy rates, factors that contribute to retail vacancy rates, and the potential demand for repurposing or converting different types of existing retail structures and developments to other uses.
- **3. Conversion Considerations and Examples.** This section examines some considerations that impact the potential for conversion of different types of existing retail structures, and provides some examples of conversion projects. It looks at conversion to various other uses, including: retail to residential, retail to experiential uses, and retail to other uses.
- **4. Recommendations.** This section includes a brief summary of potential policy or regulatory adjustments that would facilitate conversion of retail space to other uses in the County.
- **5: Appendix.** Summary of current policies and regulations in the Fairfax County Policy Plan and Zoning Ordinance related to retail land uses.
- **6. Sources and Supporting Materials.** List of the sources and supporting materials that were used to develop this report.

2: Retail Land Use Trends

Widespread pessimistic predictions on the death of bricks and mortar retail space seem to have been premature. The COVID-19 pandemic was undoubtedly a rough patch for in-store retail experiences, but since the end of the public health emergency, the demand for some types of retail space has experienced a robust recovery quite dissimilar to the on-going doldrums in demand for office space.

This demand for retail space is driven by on-going consumer demand, and an economy that has avoided repeated predictions of slowdown or recession. It is also driven by a lack of new retail square footage under construction, such that retail establishments looking for space are in a constrained and competitive market.

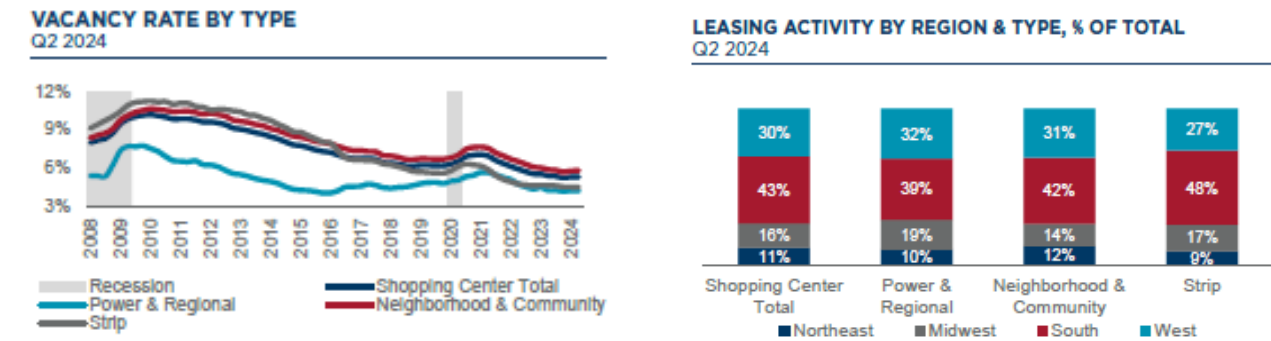
While these factors objectively explain the low vacancy rates cited below, they may seem hard to reconcile with visibly distressed examples of retail, such as blocks of empty downtown storefronts, dying malls, and vacant strip malls. As later sections of this report will discuss, much like other types of commercial real estate, the prevalence of demand is tightly linked to particular *kinds* of retail space, and the differences between them matters very much.

Retail Vacancy Trends

National Retail Vacancy Rates

At the end of the second quarter of 2024, Cushman & Wakefield put the national vacancy rate for open air shopping centers¹ at 5.3 percent, while Colliers cites overall retail space vacancy at 4.1 percent. Cushman & Wakefield notes that this vacancy rate is at its lowest level in the last two decades. While the firm predicts higher vacancies in 2025, it anticipates this change will be minimal, with vacancies still holding below pre-pandemic rates. Nationally, vacancy rates for all types of retail peaked between 2020 and 2021 and have been steadily dropping, with Neighborhood & Community Retail having the highest vacancy rate of all types, and Power & Regional Centers having the lowest vacancy rate of all types. Leasing activity for all types of retail has been strongest in the South (representing between 39 and 48 percent of all leasing activity) and weakest in the Northeast (representing between nine and 12 percent of all leasing activity).

¹ An open air shopping center (sometimes also called an open air mall) is one where store fronts face sidewalks or pedestrian pathways, and access comes from outdoors, as opposed to an enclosed shopping mall where most store fronts (except anchor tenants) are accessed from walkways interior to the structure.



Source: CoStar, Cushman & Wakefield Research

Figure 1: National Vacancy Rates and Leasing Activity

Northern Virginia Retail Vacancy Rates

According to Virginia Realtors, at the end of the second quarter of 2024 (July 2024), retail vacancies statewide were even lower than the national level: 3.8 percent. With low vacancies come rising rents, exacerbated by on-going slow starts in construction. Within the overall category of retail vacancies, at the statewide level, small and neighborhood retail vacancy rates were at 1.9 percent, while big-box vacancies were at 5.0 percent. The overall vacancy for all types of retail in Northern Virginia is even lower, at 3.4 percent, after peaking at 5.1 percent in Q2 of 2021 (source report does not break down retail type by MSA). This falls in the middle range of the nine metropolitan statistical areas (MSAs) included in this report, where Northern Virginia has the fourth highest vacancy rate (though still quite low overall).

Q2-2024 Retail Vacancy Rate by MSA

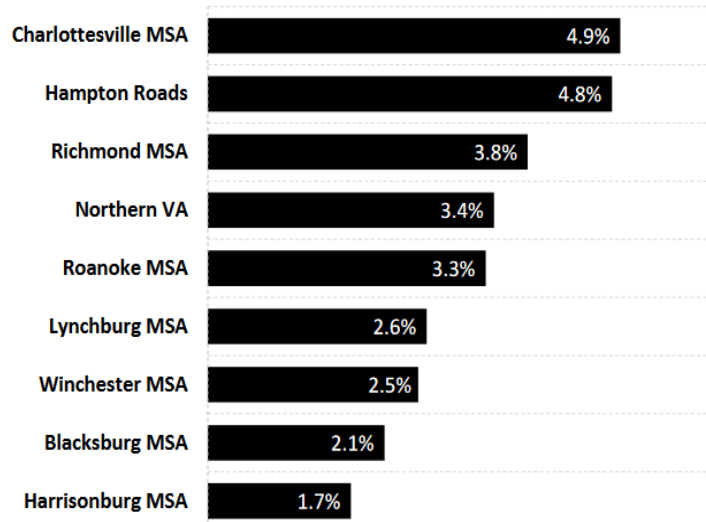


Figure 2: Virginia Realtors Q2 2024 Report

Factors Contributing to Retail Vacancy Rates

Shift to E-Commerce

An obvious and long-standing contributor to increasing retail vacancies, where they exist, is consumer preferences shifting to online shopping. This is a trend that has been gaining momentum for the last decade and more, but was pushed into overdrive by the COVID-19 pandemic, when social distancing and stay-at-home orders limited opportunities for in-person shopping. Even without pandemic restrictions, online shopping has steadily grown in popularity because it is convenient, often offering a broader

selection of products than is available in store, available for browsing at any time of day. Most consumers can fulfill almost all their needs through Amazon, and the 200 million Amazon Prime members can usually do so with same-day or 24-hour delivery. As Amazon has consumed steadily more market share, even traditional retail chains have been forced to shift at least part of their business online, operating a hybrid model where consumers can shop online, or at remaining bricks and mortar locations. There are few retailers that do not have this dual presence, but there is a small handful of goods that consumers still prefer to shop for in-person, including higher-end items. Experiential uses, which focus on providing a unique experience rather than the sale of a material good and can include everything from climbing gyms to venues that can hold “immersive” events, have also seen rising success.

Lingering Impacts of COVID-19

As mentioned above, COVID-19 accelerated the existing trend towards online shopping, and mandatory temporary closures followed by social distancing orders caused major upheaval for in-person retailers. Many retailers, especially those already struggling before the pandemic, were not able to withstand the temporary closings, and were forced to shutter their stores permanently, which resulted in a significant increase in vacant retail spaces. In looking at more recent vacancy rates, overall demand nationwide appears to have rebounded to or exceeded pre-pandemic rates, but there are vast discrepancies within these high-level estimates. One exception that has gained a high degree of coverage is the on-going struggle of ground-floor retail in downtowns and urban cores, where the lack of workers returning full-time to offices has kept demand for these spaces low, and vacancies high. Until issues with vacant office space are resolved – either through re-occupancy or re-use -- vacant retail space in these same areas is likely to remain high.

Over-Retailing and Market Saturation

Another prevalent cause of persistent retail vacancies is that the past two decades have seen the construction of too much retail space. In urban and suburban areas, widespread requirements for ground floor retail in mixed-use construction has led to many areas having an oversupply of ground-floor retail space. Because the requirements were not adequately targeted to areas with features that could successfully support retail, mixed-use building requirements that were intended to create activated and vibrant streetscapes have in some cases produced the opposite effect. These requirements have produced ground-floor retail in new developments that is hard to fill, and hard to keep occupied. Mixed-use developments that were built to meet ground-floor retail requirements that were not informed by the types of trade area studies that many retailers do before choosing a location have generally struggled. To cite one component considered in a market analysis, studies show that storefronts that do not front a major street, even if only a block away or on a side-street, experience a significant decline in foot traffic, making these spaces undesirable, subject to frequent turnover with long periods of vacancy in between. The viability of ground floor retail is also reliant on having a critical mass of residents and/or office workers on the upper floors (or within a short walking distance). Without a “captive audience” of residents or workers that are likely to frequent ground floor retail shops on a routine basis, businesses struggle, and spaces are more likely to remain vacant, even if they are located along a major street frontage, or near a high-frequency transit station. Central business districts and employment centers are still struggling to

return to post COVID-19 occupancy rates and, as such, ground floor retail in these areas has been dramatically impacted by an on-going lack of both daily foot traffic, and upper floor occupancy.²

Finally, and perhaps counterintuitively, ground floor retail succeeds best where ground floor retail already exists. Because the tenant base of any single building is not likely to be adequate to support a shop or restaurant, that shop or restaurant depends on the presence of other “draws” in the surrounding area, and attracting some spillover from other activity. According to development professionals, creating the critical mass for a retail corridor where none exists can take decades of incremental activity before a thriving retail market can coalesce. This means that ground floor retail spaces in mixed-use buildings in areas where there is not an existing concentration of non-residential uses tend to remain vacant. These spaces have an additional struggle to compete on cost: their rents are more expensive because they are new, and they often require additional upfront investment for tenant improvements before they are move-in ready. This means that returns need to be immediate, high, and sustained for a retail business to make a go of it in a new mixed-use building – even leaving aside other concerns about adequate foot traffic and other retail in the vicinity -- all high barriers that are not present to the same extent in existing spaces in established commercial corridors.

At the other end of the retail spectrum, suburban and highway commercial strips lined with strip malls or standalone big-box structures are not only overbuilt, they are full of aging structures, often designed to serve the types of retail that are experiencing diminishing demand. As a result, their vacancy rates are high, and rising, as discussed further in *Evolving Location and Structure Demand*.

Evolving Location and Structure Demand

Although there have been more stores opening than closing over the past year or so, the seeming disconnect between this fact and widespread vacancy in some areas and with some types of buildings points to the fact that the footprint and locations of certain existing vacant spaces are not suitable for the kinds of stores being opened. Retailing trends and demand evolve more quickly than other types of development, which can render some building forms obsolete even faster than depreciation and reaching the end of a building’s useful life can do.

Currently, there is high demand for small spaces of approximately 2,500 square feet that can accommodate “lifestyle” retail such as fast casual restaurants, and convenience outlets like 7-Eleven. When these are not standalone structures like convenience stores, the desirable locations often occur in the context of “power centers,” which are auto-oriented, unenclosed commercial developments of 250,000 to 750,000 square feet, with one to three big-box anchors, pad sites or strip centers incorporated into the development along the periphery, and shared parking. The Fair Lakes shopping center is an example of this type of development in Fairfax County.

There is also a strong demand for mid-sized retail spaces, ranging from 7,500 up to 50,000 square feet. Given sharp inflationary trends post-pandemic there is a pronounced growth in standalone discount stores such as Dollar General (typically, 7,200 to 10,000 square feet), and low-cost grocery markets such as Aldi (18,000 to 22,000 square feet). Consumers of retail spaces at the larger end of this spectrum are

² For more information about Office Land Use Trends, see companion report prepared by Clarion Associates, dated September 2024.

international grocery stores such as H-Mart (typically 50,000 square feet), and experiential outfits like Planet Fitness or Urban Air, and similar indoor adventure parks.

What is not thriving? Enclosed shopping malls of the sort that proliferated in the US between 1960 and 2000 are dying at a precipitous rate. Both in the enclosed shopping mall context and in non-mall locations, fashion outlets are also struggling, unless they are high-end retailers like Louis Vuitton and Gucci. However, there are exceptions: a 2023 Market Study for Tysons Corner commissioned by the Tysons Community Alliance (TCA) and conducted by HR&A, Toole Design and Wells & Associates, indicates that enclosed centers in Fairfax County appear to be in better shape than many others around the country. The Market Study illustrates that as of May 2023, visitation to Tysons Corner Center, Tysons Galleria, Pike 7 Plaza, and the Shops at Fairfax Square, had neared pre-COVID levels. (See Figure 2.) Of the four centers evaluated for the Market Study, Tysons Corner Center and Tysons Galleria experienced the strongest rebound in visitation, which the Market Study attributes to the fact that these centers draw most heavily from a much larger market area (more than 68 percent of visitors traveled from more than 10 miles away and 27 percent traveled from more than 50 miles away).

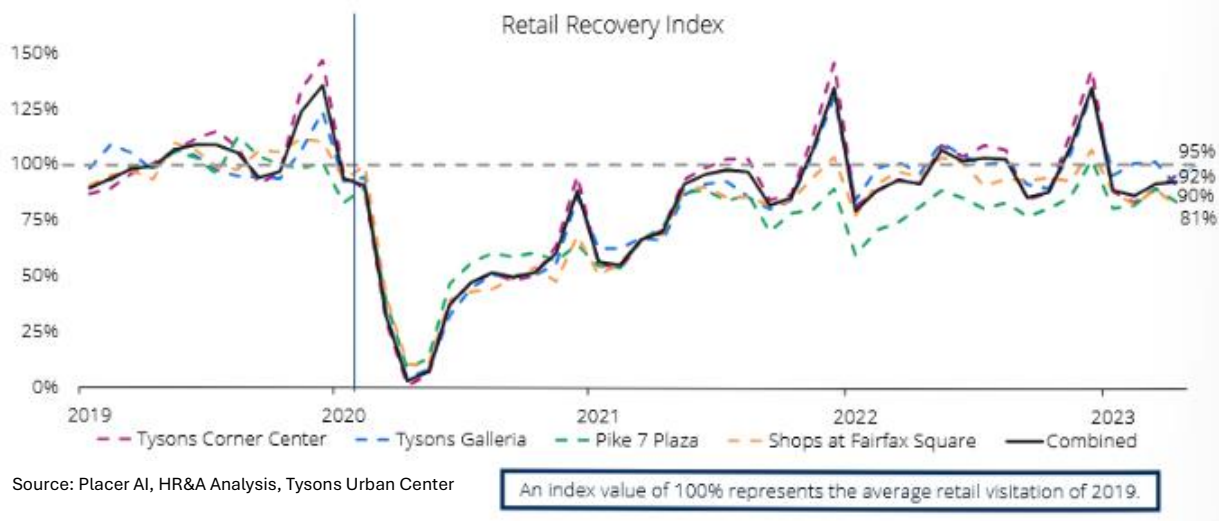


Figure 3: Tysons Retail Recovery Index

Some standalone big-box stores, pre-dating power centers or built outside of them, have succumbed to the greater convenience of multiple outlets in one location that can be accessed in power centers. Location aside, some big-box chains have been struggling with high overhead combined with supply chain challenges and competition from online retailers. This combination of factors contributed to the demise of Bed, Bath, and Beyond, leaving hundreds of vacant big-box structures scattered across the country. Once these stores become vacant, because of their large size and no-frills build outs, they have historically proven particularly difficult to reoccupy or reuse.

Finally, older standalone strip centers (again, outside the context of power centers) have been declining for years. Given the generally low quality of initial construction for these developments, and their advancing age, many of these strip malls are obsolete: the cost of necessary renovations required to reuse or re-occupy them is not economical; it is cheaper for retail outlets to invest in occupying newer

space (though not brand new, and in need of tenant improvements). As a result, for most strip malls constructed 20 or more years ago, regardless of location, no recovery in demand is anticipated.

Construction Pipeline

Retail construction starts remain historically low. Nationally, in 2023, 9.8 million square feet of new retail space was built, which amounts to just 0.2% of existing inventory. Northern Virginia mirrors this trend, with a year-over-year increase in square footage of 0.2%. Additionally, both the square footage delivery and the amount of retail space under construction is down from prior year reporting. Retail construction starts began to decline during the pandemic, and despite a subsequent recovery in demand for retail space, retail construction has not rebounded. The market is lagging in response to demand, and starts remain at the lowest level of the past five years. The on-going low level of new construction has led to constrained supply, and given the delay between starts and delivery, that condition is anticipated to persist in the coming years.³ While the lack of new space coming available contributes to low vacancy rates and rising rents, it is worth reiterating that these supply shortages are for the most desirable locations and the most sought-after building types, like power centers and small spaces within lifestyle centers.⁴ The Mosaic District is an example of this type of development in Fairfax County.

Supply constrictions, however, do not increase demand across the board: there is still diminishing demand for standalone big-box stores and mall space. This suggests that the construction of new retail space will center around the kind of retail spaces that are in demand, with underutilized

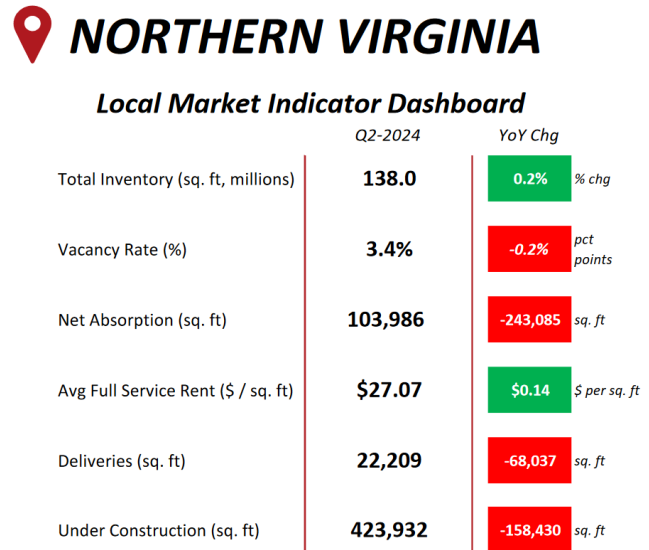


Figure 4: Northern Virginia Retail Statistics

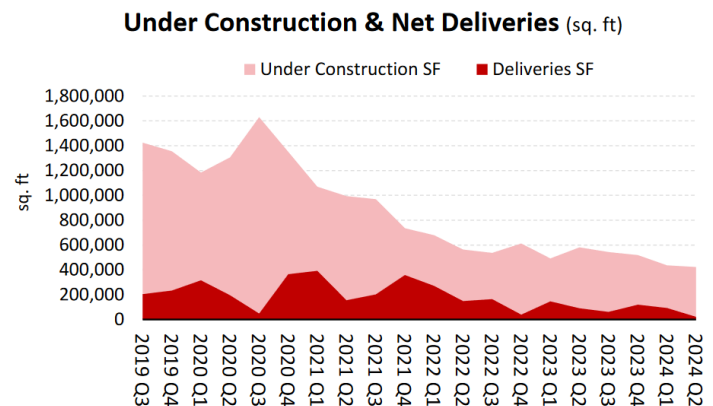


Figure 5: Retail Square Footage Inventory

³ CRE Daily. U.S. Retail Vacancy Rate Hits Lowest Level in 20 Years. July 2024. <https://www.credaily.com/briefs/us-retail-vacancy-rate-hits-lowest-level-in-20-years/>

⁴ A lifestyle center is an outdoor shopping center designed to mimic urban street shopping, featuring a range of retail stores, but also including non-retail components such as entertainment venues and dining options in an open-air, pedestrian-friendly environment.

existing spaces being allowed to convert to alternate uses and more desirable configurations, as described in the next section of this report.

Possibilities for Repurposing Distressed Retail Structures

Ground-Floor Retail

For many cities, converting ground-floor retail space to housing is seen as infeasible, with safety and privacy for residents among the primary concerns in converting existing spaces. Others worry that ground-floor residential units are unpleasant for pedestrians. Some developers are pushing for greater allowance for ground-floor residential in lieu of retail, as more residential units help drive the feasibility of large projects, and market studies suggest a high possibility of the required retail space being difficult to fill. Despite developer pushback, many cities continue to require retail components in new mixed-use developments, under the belief that the residential units will be enough to support the retail requirements. However, as described above in Over-Retailing and Market Saturation, this is not likely to be true, particularly outside of established retail corridors, and on low-traffic local streets. In the face of a national housing crisis, relaxing ground-floor retail requirements and allowing for other uses, especially ground-floor residential, can be helpful on numerous fronts. Retail requirements should also consider existing conditions. It may not make sense to require ground floor retail in areas where conditions do not support their success, like if they are on a side street or far from established retail areas. If this is done strategically, new development will not further exacerbate an existing oversupply of retail space, and projects that are not saddled with unleaseable retail space will be more financially viable while enabling the provision of additional, more urgently needed housing.

Strip Malls

Strip malls are often located in suburban areas along main commercial corridors,⁵ in areas where residential and commercial areas have been kept separate through single-use zoning. They typically include a row of retail tenants fronted by parking between the building and the street frontage.

Strip malls have been hit particularly hard by changing retail and post-COVID trends, with studies demonstrating that older, 1980s-era properties are particularly underutilized. Many such strip malls have reached the end of their lifecycle, when rising maintenance costs begin to exceed the cost to demolish and redevelop. These dated and increasingly vacant strip malls and their parking lots are underutilized land, and where planning or zoning allows conversion, provide excellent redevelopment opportunities. Rough estimates have shown that repurposing 10% of existing strip malls into housing could create more than 700,000 new homes nationally.⁶

Rezoning may be needed to create housing in areas where previously only single-use commercial zoning applied. In some cases, rezoning requests for strip mall conversion can encounter neighborhood opposition, when denser multi-family development has historically been uncommon in areas that were previously limited to commercial development. However, such rezonings, when approved, allow the

⁵ Abu-Khalaf, Ahmad. Repurposing Underutilized Strip Malls to Create Multifamily Housing. November 2023.

<https://www.enterprisecommunity.org/sites/default/files/2023-10/Repurposing-Underutilized-Strip-Malls-White-Paper-Final.pdf>

⁶ Abu-Khalaf, Ahmad. Repurposing Underutilized Strip Malls to Create Multifamily Housing. November 2023.

<https://www.enterprisecommunity.org/sites/default/files/2023-10/Repurposing-Underutilized-Strip-Malls-White-Paper-Final.pdf>

creation of multi-family structures that can help to diversify housing options in areas that previously limited or did not allow multi-family. Finally, because strip malls chose locations with good transportation access (even if only for automobiles), any replacement development would also reap this benefit.

In Fairfax County and in other major metropolitan areas across the U.S., some older strip malls have retained retail tenants serving local and ethnic communities. These tenants are able to “hang on” because they are serving the needs of a defined community, the rent is cheaper here than in new development, and often the size of the space is of a smaller scale. Without plans and policies in place to prevent loss and displacement of these retailers, redevelopment pressure often spells their demise. The recommendations in this report suggest certain measures that can be considered that allow for both the replacement of outmoded strip mall development, and the preservation of retail outlets that remain in them.

Shopping Malls

For at least two decades, shopping malls (particularly lower-end malls) have grown increasingly out of sync with evolving retail trends. Once the pinnacle of retail development, these large, windowless structures can be difficult to repurpose to other uses. However, they do hold potential for conversion, or, in some cases, may simply benefit from a shift from traditional retail to more experiential uses. Shopping malls also have the option to retain some retail while developing other space into a more mixed-use product. Converting sections of shopping malls to residential use, or adding residential units in unused parking lots, can locate enough consumers near retail to keep this type of retail alive. For malls in extreme decline or that are already closed, the entire parcel of land – an area sometimes up to a hundred acres -- can be repurposed for apartments or townhomes. Like strip centers, shopping malls are often in suburban locations along major transportation corridors, so any converted development benefits from this access.

Mall conversion, however, presents unique challenges. The structures themselves are vast and windowless, with most interior space configured along wide interior corridors. This configuration can be difficult to convert to residential use without significant and costly reconstruction. Residential redevelopment isn't the only suitable use for mall conversions, however. Shopping malls structures may be better suited for conversions to educational facilities, data centers, medical facilities, and experiential uses, taking compatibility with adjacent uses into consideration. When less parking is needed by any new use, some of the extent of large surface parking lots may be redeveloped for other uses too.

Big-Box Stores

In the past, it was particularly difficult to find new uses for big-box structures once they became vacant. Cities adopted White Elephant Ordinances,⁷ and tried to get operators to agree to redevelopment or demolition clauses that accompanied project approvals. However with the rise in need for light industrial

⁷ In this context, big box stores that became vacant were considered white elephants, because they could not be re-used or re-occupied without extreme difficulty, and the cost of maintaining the vacant structure and property was out of proportion to its usefulness. Over time, re-use of these structures has become easier, but some communities still require written commitment from the original business operator to assist in finding subsequent tenants in the event of vacancy.

space, empty big-box stores now appear somewhat more readily re-usable than was true in the past. Out of all the structures discussed in this report, big-box stores are the most well suited for conversion to some light industrial uses for which there is rapidly rising demand, such as warehousing and distribution centers, or data centers (again accounting for compatibility with adjacent uses and other relevant considerations). Empty big-box stores also have the potential for conversion to other large footprint uses, like civic or entertainment uses, or fitness centers. As with shopping malls, even if the structure is not easily convertible to multi-family housing, unneeded parking area on the site may be.

3: Conversion Considerations and Examples

As cities across the US face a shortage of housing, many are exploring the potential for converting existing buildings of various types into residences. The biggest example of this phenomenon is office to residential conversion. After COVID-19, many companies chose to remain fully remote or only return to the office in a part-time capacity, leading to an abundance of vacant office space that could be suitable for conversion to residential use. Similarly, retail spaces that are not anticipating a revival in demand may be candidates for conversion to residential uses. While not as “hot” a topic as office conversions, there are many retail spaces that are suitable for conversion into housing. This section provides a brief overview of some common conversion types, and where available, some specific examples of conversion projects.

Retail to Residential

Shopping Mall Conversion: Micro Lofts at the Arcade Providence, Providence, RI

Despite inherent difficulties owing to mall design, conversion to residential or mixed-use development is probably one of the most prevalent and frequently executed types of conversion. That is partly owing to abundance of opportunity: dying malls are scattered throughout the country. It is also the quality of the opportunity: because retail “has historically followed rooftops, most malls are already in dense population centers -- the exact places most in need of housing.” As a result, these conversions are not uncommon, with hundreds of examples that could be cited. The following example shows that conversions can accomplish more than one community objective. In this case, both historic preservation, and addition of new, lower-cost micro-unit housing.

This 1828 Greek revival building is a historic structure and was one of the country’s oldest shopping malls. After its closure in 2008, the mall was in danger of demolition until a developer proposed a multi-million-dollar reuse project to convert the mall to micro-units. The micro-units are particularly popular with students at nearby universities and the city’s rising population of single person households. The ground-floor is a mix of apartment amenities, retail, and restaurants.⁸

⁸ Business Insider. America's oldest shopping mall has been turned into beautiful micro-apartments — take a look inside. October 2016. <https://www.businessinsider.com/americas-first-shopping-mall-is-now-micro-apartments-2016-10>

Image © Ben Jacobsen/Northeast Collaborative Architects



Strip Mall Conversion: La Placita Cinco, Santa Ana, California

When strip malls lose anchor tenants, generally the most recognizable retail lessee that occupies the largest space and draws the most customers to a development, it can start a negative spiral where all other lessees end up closing down for lack of business. Strip malls also end up vacant when they age into obsolescence, with retail tenants moving to or initially locating in newer, more updated construction. Outdated strip malls in need of significant maintenance are also good candidates for repurposing, as they may have few existing tenants to negotiate with and have lower acquisition costs. It is often more economically efficient to tear down existing structures and build new, but in at least some cases, conversion of existing space to new use is possible.

This strip mall conversion project consisted of two single-story commercial buildings, a gas station, and a significant amount of asphalt paving. The gas station and parking lot were converted to a mixed-use building of affordable rental homes priced at 30-60% of the area median income. The existing commercial buildings (and their tenants) remained and were integrated into the site plan, received façade updates and enhanced pedestrian access, and were brought into ADA access compliance.⁹ The site redevelopment also includes a playground and landscaped plazas.

⁹ Abu-Khalaf, Ahmad. Repurposing Underutilized Strip Malls to Create Multifamily Housing. November 2023.
<https://www.enterprisecommunity.org/sites/default/files/2023-10/Repurposing-Underutilized-Strip-Malls-White-Paper-Final.pdf>



Image © TCA Architects

Strip Mall Redevelopment: Townhomes at Graham Park, Falls Church, Virginia

Graham Park Plaza was established in 1971, along Arlington Boulevard (Route 50) at the intersection with Graham Road. In 2021, the development firm EYA purchased 8.3 acres at the west end of an existing shopping center site. This area has been redeveloped with a total of 172 three- and four-story townhome units, that includes 22 affordable units. There are street and sidewalk connections from the residential development into the remaining shopping areas, so it is possible to access the retail area easily, either on foot or by bike. The shopping area includes a Giant grocery, McDonald's and some other fast casual restaurants, a pediatric urgent care, and a bank. The development has a park, playground, and central gathering space called the Hangar. At the time of this report, only 5 of the units remain unsold.



Image from EYA Development

Ground-Floor Retail

Converting ground-floor retail spaces comes with a set of unique challenges that must be considered. Ground-floor retail spaces are typically designed with large open floor plans, high ceilings, and significant frontage to attract foot traffic. Converting these spaces to residential use requires substantial structural modifications to create livable units, including additional plumbing, electrical work, and partitions for privacy. There are also concerns that ground-floor residences will be too loud or not private enough for residents. Elevated stoops, sub-grade entrances, and lobby entrances are all ways to provide tenant access while providing more privacy.

Many commercial, downtown, and mixed-use developments are planned and zoned specifically to encourage active ground-floor uses. These uses are seen as integral to promoting activated and safe streets, and it may be difficult for community members, stakeholders, and governing bodies to agree to allow residential on ground-floors. While maintaining some ground-floor retail in mixed-use developments along high-traffic corridors contributes to vibrant, pedestrian-friendly environments, there are circumstances where converting these spaces to residential units makes sense. This is particularly true for side streets or less walkable areas where retail demand is insufficient. In such cases, a balanced approach that includes flexible zoning permissions and creative design solutions can help maintain the benefits of mixed-use developments while addressing the realities of market demand and urban housing needs.

Retail to Experiential Uses

Overview

As consumer preferences shift from valuing material goods to valuing experiences, one way to address increasing retail vacancy is to allow more experiential uses. The shift to wanting unique experiences is indicative of a desire for spaces that facilitate social interaction and activity. By nature, these uses are not as susceptible to e-commerce competition as traditional retail is.

Food Halls and Markets

While grocery needs can be met online and through delivery apps, food halls that sell specialty goods or have a variety of restaurants bring a unique experience to dining or grocery shopping. Food halls might feature a variety of cuisines and styles that appeal to groups or families looking for variety. They also tend to feature local vendors and chefs, some even serving as “incubators” for small local restauranteurs. Farmers markets, and specialized grocery stores are less susceptible to e-commerce competition by offering goods that are difficult to sell online or that cater to a particular ethnic group (Patel Brothers, H-Mart, etc.). Fresh produce, artisanal products, and local meats or seafood attract food enthusiasts while also supporting local economies and promote a social atmosphere.

Entertainment Complexes

Former department stores, with large footprints and warehouse exterior, are particularly well suited for repurposing into entertainment centers. Entertainment complexes generally offer a combination of activities, gaming, and dining, and often encourage longer visits. These complexes might include venues like bowling alleys, trampoline parks, climbing gyms, or indoor mini-golf. Entertainment complexes could require large open spaces, but do not require frequent window openings or significant subdivision and reconfiguration of internal space in the way a residential conversion would. While smaller spaces, such as ground-floor retail, might not offer enough space for a full entertainment complex, they may still be suitable for entertainment uses, like escape rooms, arcades, or newly axe-throwing venues.

Fitness and Wellness Centers: Pickleball America, Stamford Connecticut

Experiential uses also include a variety of fitness and wellness uses, which are generally not included in traditional retail zoning. Fitness centers might include CrossFit gyms, yoga studios, or pickleball courts, while wellness uses include wellness spas and holistic health clinics. Chains like Orange Theory and F5 Boxing have capitalized on vacant retail space where allowed. These uses provide the same benefits many planners want from retail – large windows and storefronts that are attractive to pedestrians and encourage an activated street. These uses also integrate well with a mixed-use development, as people want an option for fitness located by their residence and may be inclined to shop for fitness gear in nearby stores or purchase food at restaurants after their workouts. They also promote the social and community atmosphere consumers are looking for.

Stamford Town Center shopping mall in Stamford, Connecticut is getting new life by converting an 80,000 square foot mall into one of the world’s largest pickleball venues.¹⁰ The facility is planned to include 28 pickleball courts, lockers, showers, and a café. The popularity of pickleball has exploded in recent years, and this reuse project is a great example of adapting to market changes.

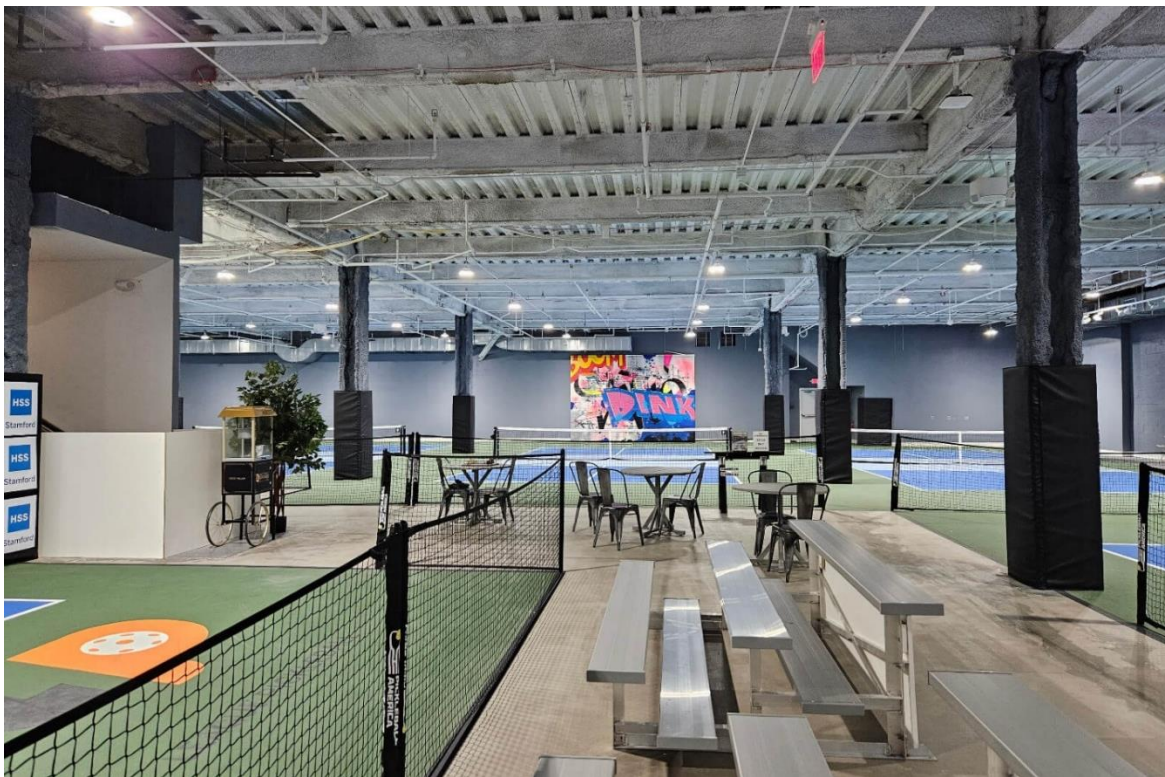


Image © Pickleball America

Cultural and Artistic Venues

Similar to fitness centers, cultural and artistic venues are a great option for vacant retail spaces with a smaller footprint. They are also conducive to social and community engagement, and integrate well with a walkable, activated street. Art galleries, theaters, and pottery and painting classes are all examples of artistic and cultural experiential uses that appeal to the modern consumer. Larger retail spaces might be suitable for creative museums or interactive art installations.

Public and Community Spaces: Public Library in McAllen, Texas

Other examples of experiential uses include certain types of community spaces, or “third spaces,” that are not the home or the workplace, but are also not private enterprises like restaurants or coffee shops. Public recreation centers, indoor parks, and libraries can provide a host of activities that attract local

¹⁰ New York YIMBY. Renderings Reveal 80,000-Square-Foot Pickleball Venue to Debut at the Stamford Town Center Mall in Connecticut. April 2023. <https://newyorkyimby.com/2023/04/renderings-reveal-80000-square-foot-pickleball-venue-to-debut-at-the-stamford-town-center-mall-in-connecticut.html>

residents and provide this third space for community engagement. These spaces promote community interaction, and so can become valuable community assets. Recreation centers and libraries that host events and workshops may contribute to a community's vibrancy.

The city of McAllen, Texas bought a vacant Walmart to convert into the nation's largest single-story library. The 124,000 square foot space consists of 14 study rooms, two computer classrooms, a teen center, and, of course, plenty of room for books. The library collaborates with other community partners as well. Every Saturday, the library hosts a year-round farmer's market outside their building. They have also worked with AARP tax assistance, Marketplace Navigators health insurance volunteers, and summer meals programs.¹¹



Image © Lara Swimmer Photography

Retail to Other Uses

Industrial and Self-Storage: Northgate Industrial Park

Industrial uses have not been subject to the same drop in demand as office and retail – quite the opposite. Industrial demand is driven by light industrial uses as opposed to heavy industry and manufacturing, and exists at both the large-footprint end of the spectrum, and small-space demand, for companies such as HVAC installation and repair, and “maker” uses engaged in micro-scale artisanal production products.

Large-scale operations are potentially strong tenants for former big-box stores. These stores already have loading docks, making conversion easier, and they have been sited and designed to accommodate heavy

¹¹ Strong Towns. The McAllen Main Library: A model for big box retrofit or not? July 2016. <https://www.strongtowns.org/journal/2016/7/15/the-mcallen-main-library-a-model-for-big-box-retrofit-or-not>

traffic. Large parking lots can be repurposed for outdoor storage or as space to build additional structures. The vast empty interior space is an advantage, and the lack of windows and other design elements is rarely a disadvantage. While industrial uses, storage, or warehousing do not necessarily result in site improvements and increased design quality that can be achieved with conversion to housing or a mixed-use development, conversion to these types of uses can stimulate job growth and economic development, and make a positive contribution to an area's tax base.

In Sacramento, California, the Northgate Industrial Park project plans to repurpose a 17.6-acre site that used to be Fry's Electronics Store. The existing 156,000 square foot building will become an industrial warehouse facility. In addition to the converted structure, a new warehouse structure of 109,673 square feet will be constructed on the existing surface parking lot. The redevelopment site boasts of the excellent interstate access the location has, and also highlights its proximity to Sacramento's airport – the interconnectedness of multiple modes of transportation being especially important for some warehouse and distribution operations.



Image © LaTerra Development

Education and Medical Offices: North Kansas City Early Education Center

Reuse for large-scale education facilities is another option for vacant retail spaces. Early childhood education and preschools in particular are in high demand and can be costly to construct. Renovating existing buildings can be a significant cost-saving measure, which is especially valuable to non-profits looking to create schools or childcare centers.

While offices have struggled to return to pre-pandemic demand, trends suggest that medical offices are a stronger market than traditional office space.¹² Medical offices could include traditional doctor or dentist offices, as well as physical therapy, chiropractic, mental health counseling, or addiction rehabilitation

¹² RCLCO. Retail Reimagined: 8 Ways Retail Spaces are Being Converted and Revitalized. May 2023. <https://www.rclco.com/publication/retail-reimagined-8-ways-retail-spaces-are-being-converted-and-revitalized/>

facilities. Both education and medical uses perform stronger in areas with large household growth, making them strong contenders to fill vacant shopping centers or strip malls.

North Kansas City Schools converted a former Price Chopper and Hobby Lobby to an early education center. This 112,000 square foot project serves approximately 1,000 children from preschool to 5th grade, about half of whom have special needs. DLR Group, a design firm that worked on the project, noted that the conversion cost per square foot was significantly less than it would have cost to build a school from the ground up. This space was also in a prime location – the empty stores were in the center of the school district and located along a very frequented transportation corridor.



Image © 2021 Michael Robinson

4: Recommendations

Overview

This section provides recommendations for Fairfax County regarding policy guidance on the issue of vacant retail spaces in the County, and opportunities to leverage their potential for alternative uses. Recommendations are based on the review of:

- Retail trends nationally and within the Northern Virginia region;
- Recent retail conversion projects in the County and in other jurisdictions; and
- The County’s current guidance (Appendix 13) on assessing requests for conversion of retail land uses to housing.

Encourage Retail Conversions that Conform with Expanded Performance Criteria Guidelines

Appendix 13 of the County’s Comprehensive Policy Plan regarding “Guidelines for Commercial Building Repurposing” already considers instances where re-purposing retail space could be appropriate:

“Alternative commercial, service, office, light industrial, governmental or institutional uses may also be appropriate for the repurposing of spaces planned and developed for retail use, retail or other commercial uses, or as a retail component of a mixed-use plan recommendation.

Examples of such uses may include entertainment uses, indoor recreation, professional offices, health care providers, theater/performing arts centers, libraries, or emergent commercial/industrial uses such as craft breweries, makerspaces, or small-scale production facilities, among others.”

The added emphasis is ours, to demonstrate that conversions such as this report describes are already contemplated by the Plan (and occurring on the ground). The criteria covered by Appendix 13 for assessing potential conversion requests may be less relevant to retail re-purposing or reuse than when applied for converting office space to residential use. However, the seven Appendix 13 criteria to consider in part are: Compatibility; Transportation; Site Design; Schools, Parks, and Other Public Facilities; Environment Affordable and Workforce Dwelling Units; and Historic Preservation.

The retail trends examined in this report suggest consideration of an expanded list of criteria when assessing requests for partial redevelopment (for example, filling a vacant parking lot with new residential that would otherwise need a Plan amendment, or converting ground floor retail to residential) – this could be a way to review those requests absent a Plan amendment to include:

1. **Type of structure**

Consider whether the structure is likely to be re-occupied by a retail tenant. Certain structures are less likely to be re-used by retail establishments, even if they were purposely built for retail. Accordingly, any proposals for re-use of an empty big store or re-purposing of empty enclosed malls should likely be favored.

2. Age/type of retail space

The average useful lifespan of a commercial structure is roughly 40 years. After that point, the cost to renovate the structure and/or update building systems system including HVAC and wiring for communications technology is often greater than the building's value. In cases where a redevelopment request applies to a building nearing the end of its useful life, approval of redevelopment is likely a better option than retaining the original structure. Strip malls in particular become less viable for re-use and re-occupation the older they become.

3. Proximity to other retail

Though similar to compatibility, this focuses more specifically on determining whether the location is already part of a viable, existing retail corridor or commercial neighborhood, because retail builds on other retail, and rarely succeeds in isolation. This criteria may help in determining whether vacant ground floor retail spaces should be retained or allowed to be repurposed.

4. Proximity to transportation

Structures with access only on local streets, or that are not within ¼ mile of Metro or BRT may be viewed as unlikely for retail re-use, and could be favored for changes of use or redevelopment. Where aging strip malls are located near transit, repurposing some of the parking area with housing – or the whole development, depending upon its occupancy and viability – could also be favorably considered.

5. Alternative ways to activate the streetscape absent ground floor retail

Redevelopment proposals that offer streetscape enhancements (landscaping, pedestrian amenities such as shade structures and benches) where storefronts would be removed could be reviewed more favorably.

6. Additional affordable and workforce housing

Proposals that replace underutilized retail structures and/or the associated parking lots with affordable and/or workforce housing beyond the minimum required should receive favorable consideration. In particular, proposals that replace empty ground floor retail with affordable or workforce units rather than more market rates units could receive special consideration for approval.

7. Located in a revitalization or special planning area

Similar to above, proposals for new development or redevelopment in revitalization areas or special planning areas where underutilized retail structures and/or the associated parking lots are replaced or redeveloped should receive favorable consideration.

Explore the Use of Agreements and Incentives to Preserve Existing Retail

Development agreements can be used in two ways to discourage the displacement of existing, viable retail enterprises when there is a proposal for site redevelopment. Both of these approaches have been used in residential redevelopment contexts, in high-demand locations when redevelopment threatens to displace long-term, moderate-to-lower-income communities, but they can be employed to preserve commercial uses as well. Prior to implementing either of the options described below, the County should

establish clear criteria for the kind of businesses that may be eligible for such assistance, and the circumstances that must apply.

RIGHT OF RETURN

In situations where a redevelopment involves preserving a retail component on a site, or redeveloping with replacement commercial space, existing tenants can be offered right of return. This can take the form of guaranteeing a tenant space in the redeveloped property, or maintaining a lease in existing retail space preserved on site. Two potential complications with its implementation are addressing rent differentials between current lease rates and potential increases on account of improvements to the space, and the ability to monitor over time and enforce any private agreement to which the County is directly a party.

COMMUNITY BENEFITS AGREEMENT / RELOCATION ASSISTANCE

If circumstances prohibit a retail tenant from returning to a redevelopment site, either because there is no retail component in the proposed redevelopment, or because agreement on terms of return cannot be reached, developers can enter into an agreement to provide relocation assistance to existing tenants as a condition of approval for their proposed new development. Such an agreement prevents outright displacement of existing retail, helps to ensure its re-establishment elsewhere, and still enables redevelopment of an underutilized site. Determination of the location for re-establishment should be driven by the retail tenant.

COUNTY PROGRAMS AND INCENTIVES

Other economic development agencies in the nation offer programs that support entrepreneurs and small businesses with displacement, and any new support or incentive programs might fit readily within Fairfax County's Department of Economic Initiatives (DEI) portfolio.

Expand Allowable Uses to Align with Updated Policies

As discussed throughout this report, there are many factors that impact retail vacancy rates – including the size of a store, location, and presence of an anchor store. However, one broad regulatory adjustment that tends to decrease vacancy rates is to expand allowable uses beyond traditional retail. The County's commercial "C" zoning districts allow a broad array of uses, including most of the non-industrial uses discussed in this report, either by right, by special permit, or special exception. None of the County's C districts, however, allow household living uses. In other words, conversion to housing in these districts is not allowed. Undoubtedly intended as a measure to reserve land for commercial uses, this prohibition may continue to be valid: conversion or reuse can occur from one commercial use to another. But a more fine-grained analysis may indicate the need for adjustments in this approach. If there is a C-5 area that is struggling to attract and maintain commercial tenants based on vacancy rates and other factors, this area, given its scale and the fact that is already integrated amidst surrounding residential development, might be a candidate for conversion into residential development if the zoning allowed.

Some of the County's already thriving retail areas may have no trouble attracting new commercial tenants to vacant retail spaces. But older, traditional suburban auto-oriented corridor development may benefit from expanding to allow more mixed-use development through a Plan amendment and/or rezoning. This

allowance could be especially helpful in the County’s designated revitalization or special planning areas, particularly those in close proximity to Metro or high frequency bus lines.

Clarify Priority Locations for Ground Floor Retail

Should new developments be required to provide ground floor commercial space? Or should they be permitted instead to develop single-use residential properties? Should existing development be allowed to convert ground floor space to other uses, including more residential units?

The answer to this likely depends in part on past policy: if mixed-use buildings were widely required, there may already be a surplus of commercial space that is not in high demand. With new proposals, it is helpful to consider some of the same items that a retailer would in conducting a market area study:

1. Trade area

Ground floor retail in a mixed-use building is generally built to the scale of serving a “convenience trade area” (as opposed to a destination trade area, which draws from a wider area). These areas offer goods and services that residents need on a regular basis, and do not want to travel far to obtain. Groceries are a prime example, as are restaurants and coffee shops, but so are many service businesses such as gyms and hair salons. Although these businesses serve a local area, the resident base of a single building is not enough for them to succeed. Consider all development within a 10-minute walking distance, and 5-minute drive. Are there enough residents nearby? If this is the only residential development, or if nearby residential development is spread out or not dense enough, the location would not be desirable. Are there other businesses nearby? Even neighborhood-serving businesses benefit from the presence of other established businesses in the trade area.

2. Density

Similar to supporting transit, convenience trade areas can use density as a useful indicator of whether there are enough people to support a business. Transit planners often use a range between 15 and 44 dwelling units per acre, depending on the type and frequency of the transit. The County could apply a similar metric.

3. Access

In multi-use development, convenience trade relies on multi-modal access. It should front a collector or an arterial, and a location along a transit corridor or near a Metro stop is beneficial. However, pedestrian and other non-motorized access is important too. The more means of access in proximity to the location, the better.

Market studies typically also include detailed information on trade area demographics and income. While these are not likely to be elements the County considers in reviewing development proposals, retailers will not choose a location that does not align with their defined “market” related to demographics and income. This is to say that even if the above considerations seem favorable for supporting ground floor retail, there may be other salient concerns that development review does not account for which will determine the ultimate success of a ground floor retail location.

5: Appendix - Current Retail Policies and Regulations in Fairfax County

This section provides a brief summary of Fairfax County's current policies and regulations for retail, both as a standalone use, and as part of a broader mix of land uses.

Fairfax County Policy Plan (2017 Edition)

Goals and Policies

The Preface to the 2017 Policy Plan establishes 20 goals to provide focus for the objectives and policies in other plan elements. References to land use considerations for commercial development appear in four of the 20 goals, and generally apply to retail development as a subset of commercial development:

Quality of Life. The primary goal of Fairfax County's policies and priorities is to...achieve an outstanding quality of life through *a balance between access to convenient multi-modal transportation and residential, commercial, and industrial development.*

Land Use. Growth should take place in accordance with criteria and standards designed to *preserve, enhance, and protect an orderly and aesthetic mix of residential, commercial/industrial facilities, and open space* without compromising existing residential development.

Economic Development and Opportunities. Fairfax *maintains its prosperous economic climate and varied employment opportunities* by continuing to develop and pursue a broad range of actions, including public/private partnerships, designed to enhance its long-term competitive position in regional, national, and international economic development.

Revitalization. Fairfax County should encourage and facilitate the revitalization of older commercial and residential areas...revitalization initiatives should encourage business development, promote public and private investment and reinvestment, and *seek to prevent or eliminate the negative effect of deteriorating commercial and industrial areas.*

Private Sector Facilities. Fairfax County should continue to *encourage the development of appropriately scaled and clustered commercial and industrial facilities* to meet the need for convenient access to goods and services and to employment opportunities.

Land Use Element

Objective 2: Fairfax County should seek to establish areas of community focus which contain a mixture of compatible land uses providing for housing, commercial, institutional/public services, and recreation and leisure activities.

Policy a. Create mixed-use Centers which enhance the sense of community and reduce the need to travel long distances for employment and/or services.

Policy b. Encourage, within the Tysons Urban Center, cores of Suburban Centers, cores of Community Business Centers, and Transit Station Areas, and other areas within these Centers that would benefit from revitalization and redevelopment, the development of mixed-use projects.

Policy c. Maintain the integrity of mixed-use Centers and neighboring residential communities.

Objective 3: Fairfax County should maintain a supply of land sufficient to meet the need for housing, commercial, industrial, institutional/public services, and recreational and leisure activities to support the Comprehensive Plan.

Policy a. Conduct a comprehensive community needs assessment, at least once every five years, to determine future land requirements to meet adopted county goals.

Objective 7: Fairfax County should reserve and/or conserve areas which provide primarily community-serving retail and service uses.

Policy a. Preserve or establish areas of the county which provide necessary commercial and professional services to the community.

Policy b. Implement programs to improve older commercial areas of the county to enhance their ability to provide necessary community services.

Policy c. Encourage redevelopment or repurposing projects in commercial areas that would preserve or increase desirable community services.

Objective 9: Nonresidential redevelopment or repurposing should be in accord with the recommendations of the Comprehensive Plan.

Policy c. Ensure that the redevelopment or repurposing of existing uses is consistent with the provision of adequate transportation and public facilities.

Policy f. Ensure that the repurposing of existing structures is in accordance with the “Guidelines for Commercial Building Repurposing” in the Land Use Appendix.

Objective 16: Fairfax County should encourage Transit-Oriented Development (TOD) with focused growth near certain planned and existing rail transit stations as a way to create opportunities for compact pedestrian- and bicycle-friendly, neighborhood centers accessible to transit.

Appendix 6: Guidelines for Interim Improvement of Commercial Establishments. In some areas of the county, the Comprehensive Plan envisions a substantial change in land use that is expected to come about in connection with eventual redevelopment. In such areas, it may be immediately beneficial and further the overall principles of the Plan to allow changes in existing uses that do not strictly conform with the long-term recommendations of the Comprehensive Plan. Such changes in use may be allowed, on a case-by-case basis, if:

- They result in significant public benefits, for example, improvements in circulation or access, parking, landscaping, site design or building design;
- Those public benefits outweigh any adverse effects of the change in use; and
- Allowing the change in use will not delay or interfere with the achievement of the long-range objectives of the Comprehensive Plan.

Appendix 11: Guidelines for transit-oriented development. Appendix 11 establishes guidance for compact, pedestrian-oriented, mixed-use development around existing and planned rail transit stations. Guidelines of importance to retail development, preservation, or conversion include:

- **Transit Proximity and Station Area Boundaries.** Focus and concentrate the highest density or land use intensity close to the rail station, and where feasible, above the rail transit station.
- **Station-specific flexibility.** Examine the unique characteristics and needs of a particular station area when evaluating TOD principals to ensure the appropriate development intensity and mix of land uses relative to the existing and planned land uses for the surrounding areas.
- **Mix of Land Uses.** Promote a mix of uses to ensure the efficient use of transit, to promote increased ridership during peak and off-peak travel periods in all directions, and to encourage different types of activity throughout the day.
- **Housing Affordability.** Provide for a range of housing opportunities by incorporating a mix of housing types and sizes and including housing for a range of different income levels.
- **Regional Framework.** Provide a more efficient land use pattern by concentrating growth around existing and planned transit station areas.
- **Economic Benefits.** Create an employment base and encourage commercial revitalization adjacent to transit facilities.
- **Phasing of Development.** Ensure that projects are phased in such a way as to include an appropriate mix of uses in each phase of the development.

Supporting narrative for several of the above guidelines acknowledges that the actual mix of uses that is achieved in individual station areas will be influenced by market feasibility.

Appendix 13: Guidelines for commercial building repurposing. Appendix 13 establishes flexibility to accommodate the repurposing of older commercial buildings that have been vacant for an extended period, or are otherwise considered obsolete. Of particular relevance in this Appendix area the areas of focus where repurposing is encouraged, and the seven performance standards to be used in assessing the desirability of repurposing requests.

Conversion of retail to residential use may be appropriate in *portions* of Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), Suburban Centers, Suburban Neighborhoods, and Low Density Residential Areas, based on the type of retail and the localized context, as discussed throughout this report.

Performance criteria include: Compatibility; Transportation; Site Design; Schools, Parks, and Other Public Facilities; Environment; Affordable and Workforce Dwelling Units; and Historic Preservation.

Alternative commercial, service, office, light industrial, governmental or institutional uses may also be appropriate for the repurposing of spaces planned and developed for retail use, Retail or Other Commercial Uses, or as a retail component of a mixed-use Plan recommendation. Examples of such uses may include entertainment uses, indoor recreation, professional offices, health care providers, theater/performing arts centers, libraries, or emergent commercial/industrial uses such as craft breweries, makerspaces, or small-scale production facilities, among others.

Comprehensive Land Use Plan (Map and Land Use Categories)

The Comprehensive Land Use Plan includes a dedicated category for Retail and Other Commercial Uses, which encompasses 529,986,851 square feet 4.24% percent of the total land area in Fairfax County. Retail

uses are also accommodated in mixed-use areas, which include 5,555.99 acres or 2.30 percent of the total land area in Fairfax County. Mixed-use areas (which include retail and other commercial components) are encouraged in Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), and Suburban Centers.

Definitions for the individual land use categories illustrated on the map and the terms ‘retail,’ ‘commercial,’ and ‘mixed uses’ are not defined in the Plan glossary.

Special Planning Areas

The Comprehensive Land Use Plan provides more detailed policy guidance and land use recommendations for each of Fairfax County’s 14 Planning Districts, as well as sub-geographies within each district. Retail uses are encouraged as part of a broader mix of uses in most of the County’s Special Planning Areas, including the Tysons Urban Center, Community Business Centers (CBCs), Transit Station Areas (TSAs), Suburban Centers, and Industrial Areas.

Zoning Ordinance (2024)

Base Zoning Districts

The Fairfax County Zoning Ordinance includes four retail zoning districts:

Neighborhood Commercial Retail District (C-5). Provides for neighborhood-oriented convenience shopping. Typical uses include retail commercial, such as grocery stores, drug stores, small specialty shops, and business and personal service establishments, with a limited number of small professional offices and other similar uses. The C-5 District is intended to accommodate development in compact centers. Development should incorporate safe multimodal access, pedestrian circulation, and should be architecturally compatible with the neighborhood in which it is located. Development in the C-5 District is not intended to attract substantial trade from outside the neighborhood.

Community Retail Commercial District (C-6). Provides locations for retail commercial and service uses oriented to serve multiple neighborhoods within the community. Typical uses in the C-6 District are similar to those allowed in the C-5 District, but also include more intense commercial uses. Development within the district should be encouraged in compact centers with coordinated development that is planned to maximize comparison and one-stop shopping, to minimize traffic congestion, and to incorporate safe multimodal and pedestrian circulation.

Regional Retail Commercial District (C-7). Provides locations for a full range of retail commercial and service uses oriented to serve a regional market area. Areas in the C-7 District should be located adjacent to major transportation facilities, and development within the district should be encouraged in centers that are planned as a unit. Development in the C-7 District should incorporate walkable and safe multimodal design.

Highway Commercial District (C-8). Provides locations on heavily traveled collector and arterial highways for auto-oriented commercial and service uses. The C-8 District is intended to accommodate uses in a manner that minimizes interference with through traffic movements and to

ensure a high standard in site design, layout, and landscaping. Allowed uses in the C-8 District are encouraged in concentrations.

General retail is also permitted by right as a primary use in the following Planned Development Districts:

Planned Residential Community District (PRC): Retail uses are permitted under the Neighborhood Convenience Center, Village Center, Town Center, and Convention/Conference Center designations.

Planned Development Commercial District (PDC): The PDC District encourages the innovative and creative design of commercial development. The district regulations are designed to accommodate preferred high density or intensity land uses which if not strictly controlled as to location and design in accordance with the Comprehensive Plan recommendations could produce detrimental effects on neighboring properties.

Finally, general retail may be established in the **Medium Intensity Industrial District (I-4)**, **General Industrial District (I-5)**, and **Heavy Industrial District (I-6)**, only with board approval of a special exemption.

PERMITTED USES

Permitted uses in the four commercial zoning districts vary, but generally include a mix of commercial and public, institutional, and community uses. They also include a variety of commercial uses beyond retail, including animal-related services, restaurants, offices, business and services, and some recreation and entertainment uses. Residential uses are not permitted in commercial districts except for some group living facilities permitted by special exception.

USE STANDARDS

Use-specific standards apply to retail uses in the I-4 through I-6 districts (e.g., limitations on retail use gross floor area, restrictions on hours of operation, and screening requirements for outdoor storage and loading areas).

Planned Zoning Districts

Each of the County's Planned Districts addresses the kind of development that is desired in the defined area, most allowing office development of varying size and intensity, tied to the purpose of the district. The Planned Development Commercial District (PDC), Planned Residential Mixed-Use District (PRM), and the Planned Tysons Corner Urban District (PTC) are most permissive for office development, with intensity generally limited by floor area ratio. Where these districts are coincident with areas delineated in the Comprehensive Plan as Transit Station Areas, Community Business Centers, Commercial Revitalization Districts or Areas, and Urban and Suburban Centers, the FAR may be increased in support of accomplishing plan goals.

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