MARKET ANALYSIS

Howard County: Gateway Innovation District

2025

Howard County MARYLAND

PES Partners for Economic Solutions

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GATEWAY master plan

CONTENTS

OVERVIEW

The following research and analyses were conducted to support the development of a master plan for Gateway Innovation District: a real estate demand analysis, a review of assets and resources in the community, and a comparative analysis (with peer innovation districts).

To help paint a picture of the current and potential future areas of strength for the proposed innovation district, the asset mapping research examined resources in Howard County and surrounding areas, including:

- Washington-Baltimore combined statistical area ("the CSA");
- Howard County; and
- State of Maryland.

KEY FINDINGS

The analysis demonstrates that Gateway Innovation District has a strong foundation of resources and opportunities in each of the areas of study:

Real Estate Demand: Vacancy is concentrated in traditional commercial office space, accounting for close to 80% of all vacant space. Innovation / flex office space is in higher demand, but may not support the needs of some target industries. There is a significant opportunity to redevelop or retrofit properties - especially converting flex space into multi-story innovation / flex offices - to better attract and serve areas of existing strength and areas of growing and emerging strength.

Workforce and Industry: Gateway's identified areas of strength are well-aligned with the workforce in the county and broader CSA. Notably, cybersecurity is the largest workforce and has seen a 21.7 percent growth in program completions (2018–22), while military / defense / government contracting also saw a 20.2 percent rise. Sectors like medical laboratories, precision instrument manufacturing, and distribution / logistics show high R&D investment and / or workforce growth at the CSA level, despite smaller local footprints. These represent opportunities for Gateway to strengthen its industry alignment.

Key Assets: Gateway and Howard County have access to a dense network of innovation resources, with over 110 innovation-related assets identified across Howard County and surrounding jurisdictions. Data show an important gap in workforce pipeline development, however, as only 13 percent of assets fall under education / training. Gateway Innovation District can help meet this need by expanding higher education partnerships and creating programs aligned with emerging industry needs.

Comparative Analysis: By examining Bossier City, Pittsburgh, and Atlanta, this analysis identifies several important models for Gateway to learn from and adapt, including approaches to enhancing cybersecurity talent development, advancing sustainability goals, and addressing housing needs. The appendices offer further insights by comparing Gateway assets and positioning to those of peer and aspirational innovation districts.

DEFINED MARKET DEMAND

Today, existing businesses at Gateway are thriving, and in a recent survey of tenants, most anticipated future growth (Figure 1).

Figure 1: Tenant expectations for growth, Gateway, 2024[1]

58.1%
of tenants reported increased annual revenue in past year

23.3%
of tenants expected a 1.0-5.0% increase in revenue each year over the next five years

35.1%
of tenants anticipated needing more space in the next five years

OVER 155
current Gateway businesses engaged

Top technical / specialized skill areas tenants anticipated needing align well with higher education programming in the region:
- Network, cloud, and other security;
- Artificial intelligence; and
- Software and computer services.

Source: Stiletto Analysis

This anticipated growth among current tenants validates broader estimated workforce demand in Howard County. Figure 5 highlights the current inventory and estimated future demand at Gateway for commercial and innovation / flex office spaces. Appendix I outlines the methodology of these analyses.

Across the U.S., demand for flexible workspaces is generally increasing.

This trend is largely associated with the COVID-19 pandemic, which prompted many industries to rethink physical spaces.

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GATEWAY RENTABLE BUILDING AREA AND VACANCY

A foundational component of the market analysis was the assessment of building area and vacancy at Gateway and in Howard County. This assessment included both current and forecasted demand, using existing data and a demand model (refer to Appendix I for a detailed methodology).

CURRENT COMMERCIAL SPACE USE

Gateway has 7.5 million square feet of rentable building area (RBA). As Figures 1-2 highlight, most of this space (52.4%) is designated commercial office space, with 4.0 million square feet across 56 buildings. Another 1.9 million square feet (25.7%) is industrial space spread across three buildings. Innovation / flex office properties have the lowest share of RBA, with 1.7 million square feet (21.9%) across 26 buildings.

Figure 2: Comparing RBA in Gateway and Howard County, 2024[2]

PROPERTY TYPE	GATEWAY				HOWARD COUNTY		
	NUMBER OF BUILDINGS	RBA (SQ. FT.)	TOTAL VACANT SPACE	VACANCY RATE (%)	RBA (SQ. FT.)	TOTAL VACANT SPACE	VACANCY RATE (%)
Commercial office	56	3,953,865 sq. ft.	818,130 sq. ft.	20.7%	20,018,466 sq. ft.	2,824,454 sq. ft.	14.1%
Industrial	3	1,936,098 sq. ft.	183,853 sq. ft.	9.5%	34,851,849 sq. ft.	1,665,527 sq. ft.	4.8%
Innovation / flex office	26	1,653,305 sq. ft.	62,816 sq. ft.	3.8%	11,286,789 sq. ft.	430,248 sq. ft.	3.8%
Total	**85**	**7,543,268 sq. ft.**	**1,064,799 sq. ft.**	**14.1%**	**66,157,104 sq. ft.**	**4,920,229 sq. ft.**	**7.4%**

Source: CoStar
Note: In this analysis, the following terms are used to describe property space related to office and flex buildings: "commercial office" refers to traditional office employment space; "innovation / flex" refers to what CoStar defines as flex buildings. CoStar provides a definition of flex building and space.

Figure 3: Percentage of rentable building area by property type, Gateway, 2024[3,4]

- 25.7%
- 21.9%
- 52.4%

— Commercial Office — Industrial — Innovation / Flex
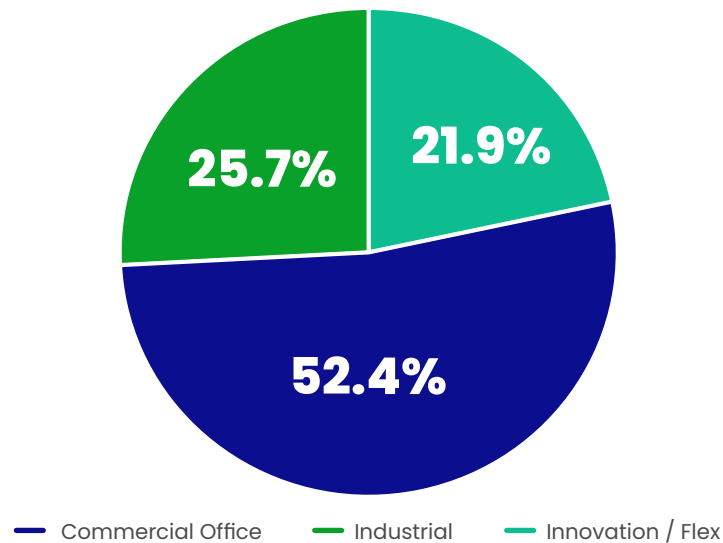
Sources: CoStar, Stiletto Analysis

Of Gateway's total RBA, 1.1 million square feet is vacant, a rate of 14.1 percent. Vacant commercial office space drives this figure, with a vacancy rate of 20.7 percent. Gateway has 818,130 square feet of vacant commercial office space, representing 76.8 percent of all vacant space at Gateway (Figure 4). Industrial space has a vacancy rate of 9.5 percent, with 183,853 square feet of vacant space. This figure accounts for 17.3 percent of vacant space at Gateway. Innovation / flex office properties have the lowest vacancy rate, at only 3.8 percent or 62,816 square feet of vacant space. This portion represents only 5.9 percent of all vacant space at Gateway.

Figure 4: Percentage of total vacant space by property type, Gateway, 2024[5,6]

- 5.9%
- 17.3%
- 76.8%

— Commercial Office — Industrial — Innovation / Flex
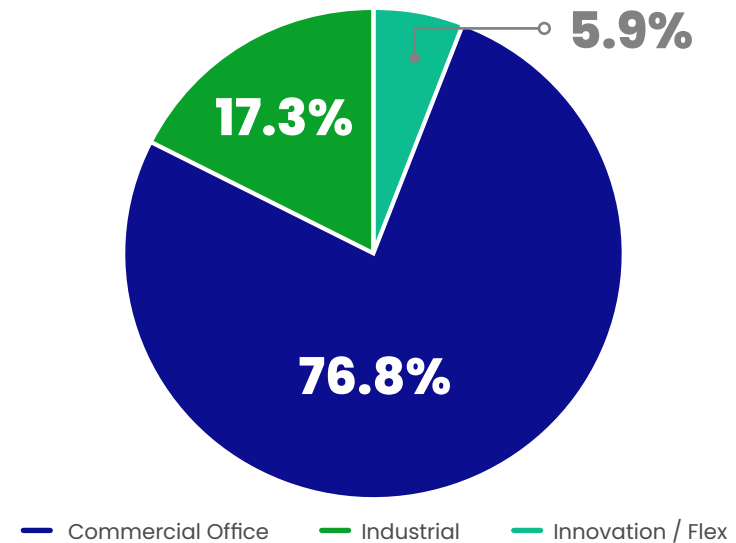
Sources: CoStar, Stiletto Analysis

Research suggests that the priority industries Gateway is interested in attracting appear to have large shares of their occupancies in innovation / flex office properties at Gateway. The innovation / flex office occupancy of the following industries as a percentage of their total Gateway occupancy is as follows:

- **R&D in biotechnology:** 69.9 percent[7]
- **R&D in physical, engineering, and life sciences:** 45.8 percent[8]
- **Testing labs:** 50.5 percent[9]
- **Engineering services:** 25.7 percent[10]

Currently, all innovation / flex office properties are one story, with the exception of 7125 Columbia Gateway Dr., which is three stories. There are, however, opportunities over time to create innovation / flex spaces that respond to industry needs for collaboration, partnership, and flexible workspace.

For example, CoStar provides a more modern vision of flex properties with their definition as "[a] type of building(s) designed to be versatile, which may be used in combination with commercial office (corporate headquarters), research and development, quasi-retail sales, and including but not limited to industrial, warehouse, and distribution uses. At least half of the rentable area of the building must be used as commercial office space. Flex buildings typically have ceiling heights under 18 feet, with light industrial zoning. **Innovation / flex office buildings have also been called Incubator, Tech, and Showroom buildings in markets throughout the country."[11]**

Trends in commercial office space at Gateway contrast with the large growth in industry workforces that would typically demand commercial office space over a similar timeframe. Overall, this workforce grew from 90,339 to 105,604 in Howard County from 2014-23, or 16.9 percent, a growth rate surpassing those of workers in both industrial and innovation / flex office properties.[12,13]

While some industries at Gateway may appear to resist the general shift toward remote work, the broader trend toward flexibility may still be at play. Across the U.S., demand for flexible workspaces is generally increasing. The COVID-19 pandemic prompted many industries to consider the value of both the adaptability of physical space and the adaptability of workforces to change and uncertainty. Given that most of Gateway's properties are aging (refer to Appendix IV), it may be the case that some spaces and properties at Gateway do not align with recent preferences for commercial office space (e.g., Gateway currently has 56 commercial office buildings and almost one in five were built in the 1980s, and only three of those built in the 1980s have been renovated).

Meanwhile, Gateway's low vacancy rate and greater stability in net absorption in Howard and the comparator counties indicate greater demand for innovation / flex office properties. This demand, however, must be balanced with the goal of increased density at Gateway (see Appendix IV for more details on net absorption).

FORECASTING FUTURE COMMERCIAL DEMAND: HOWARD COUNTY

To forecast future commercial space demand in Howard County, a model was developed that based the demand for commercial real estate on the size of workforces within industries occupying the various types of real estate in Howard County.

For example, manufacturing industries primarily require industrial space; therefore, a large manufacturing workforce would necessarily require a larger amount of industrial space. CoStar tenant data for Howard County was used to assign North American Industry Classification System (NAICS) industries to commercial office and innovation / flex office properties based on the workforces occupying these spaces.

Historical and current occupancy data and industry workforce data were analyzed to determine the occupied square footage per job for industrial, commercial office, and innovation / flex office space. Industry workforce projections were then used in combination with the above-mentioned square footage per job (i.e., demand per job) to forecast future demand from 2024-53 (refer to Appendix V for details on workforce trends and priority industries and Appendix VI for workforce projections).

With Gateway's density goals in mind, future demand has been calculated for commercial office and innovation / flex office properties (demand calculations do not include industrial properties). Gateway Innovation District will compete for the forecasted demand in commercial real estate.

COMMERCIAL OFFICE DEMAND

Over the next 30 years, demand for commercial office space across Howard County is expected to stabilize from significant vacancies recorded during and after the pandemic.[14] To respond to the current trends and demands from the industries Howard County wants to attract and retain, Gateway Innovation District has the opportunity to improve its occupancy through owner investment in current properties. Forecasting suggests a steady increase in the workforce within priority industries over the next 30 years.

Current commercial office inventory is 20.0 million square feet, but inventory is projected to outpace demand for the first few years under low- and moderate-growth scenarios. Under a high-growth scenario, however, demand could reach 21.5 million square feet, exceeding current inventory by 1.4 million square feet (6.8%).[15]

In 10 years (2033), demand could reach between 20.0 million square feet and 21.4 million square feet, requiring between 26,414 square feet and 1.4 million square feet in additional inventory.

In 20 years (2043), demand could reach between 21.5 million square feet and 24.3 million square feet, requiring between 1.4 million and 4.3 million additional square feet, given the current inventory.[16]

In 30 years (2053), the net new inventory required to meet new demand is estimated to be between 2.8 million square feet (14.1% more than current inventory) and 7.2 million square feet (36.1% more than current inventory).[17]

INNOVATION / FLEX OFFICE PROPERTY DEMAND

Over the next 30 years, demand for innovation / flex office properties and flexible workspaces across Howard County is expected to experience strong growth. Based on projected workforce growth, innovation / flex office demand is expected to reach between 13.3 million square feet and 14.5 million square feet within five years (2028).[18]

In 10 years (2033), demand could reach between 13.7 million square feet under a low-growth scenario, representing 2.4 million net new square feet more than the current inventory (21.1%). Under a high-growth scenario, demand could reach 15.3 million square feet, 4.1 million more square feet than the current inventory (35.9%).[19]

In 20 years (2043), industrial demand could reach between 14.8 million square feet and 17.7 million square feet, requiring between 3.5 million and 6.4 million additional square feet given the current inventory.[20]

In 30 years (2053), the net new inventory required to meet new demand is estimated to be between 4.5 million square feet (39.9% more than current inventory) and 8.8 million square feet (77.5% more than current inventory).[21]

Figure 5: Forecasted demand by property type (all industries), Howard County, 2023-53[22]

PROPERTY TYPE	INVENTORY (SQUARE FEET)	DEMAND (SQUARE FEET)			
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053	NEW 2023-53
Low-Growth Scenario*					
Commercial office	20,008,466	20,034,880	21,463,453	22,830,612	2,822,146
Innovation / flex office	11,286,789	13,665,320	14,768,470	15,787,071	4,500,282
High-Growth Scenario†					
Commercial office	20,008,466	21,373,330	24,280,407	27,222,599	7,204,133
Innovation / flex office	11,286,789	15,339,067	17,709,699	20,038,882	8,752,093

Source: Stiletto Analysis

* **Low growth scenario:** The annual growth rates estimated for 2024-53 in the moderate scenario were reduced by 30.0 percent and applied to the workforces in office and innovation /flex properties. The moderate growth scenario was estimated as follows: The data and analysis platform Lightcast performs workforce projections by industry to 10 years (currently 2024-34). These projections are based on combined five-, 10-, and 15-year trends in historical data from the Bureau of Labor Statistics' Quarterly Census of Employment Wages. The projections were then adjusted to account for national- and state-level industry projections. This projection was then extended to 2053 to project out 30 years using a linear projection. The workforces for industries occupying office and innovation / flex space properties were summed for each year and estimated based on the linear projection.
† **High growth scenario:** The annual growth rates estimated for 2024-53 in the moderate scenario were increased by 30.0 percent and applied to the workforces in the commercial office and innovation / flex properties.

FORECASTING FUTURE COMMERCIAL DEMAND: GATEWAY

In addition to forecasting commercial demand in Howard County, the analysis also estimated future commercial demand in Gateway. Figure 6 illustrates low- and high-growth scenarios. These scenarios were determined based on the forecasts for the county and expected growth within Gateway Innovation District:

- Current (2024) share of Howard County jobs that are located at Gateway: **7.4 percent**[23,24]
- Target low-growth share by Year 10: **8.4 percent**[25,26]
- Target high-growth share by Year 10: **10.3 percent**[27,28]

Figure 6: Forecasted new demand (sq. ft.) by property type (all industries), Gateway, 2023–53[29]

PROPERTY TYPE	INVENTORY (SQUARE FEET)	NEW DEMAND (SQUARE FEET)		
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053
Low-Growth Scenario				
Commercial office	3,953,865	444,605	621,573	790,951
Innovation / flex office	1,653,305	169,957	199,469	226,724
High-Growth Scenario				
Commercial office	3,953,865	895,881	1,105,025	1,305,199
Innovation / flex office	1,653,305	389,318	436,538	480,146
Total Combined Commercial and Innovation / Flex Space Demand				
Low-growth	5,607,170	614,562	821,043	1,017,676
High-growth	5,607,170	1,285,200	1,541,564	1,785,346

Source: Stiletto Analysis

DEMAND IN PRIORITY INDUSTRIES

Analysis has confirmed that there are priority industries that can be targeted as potential, current, or future Gateway tenants. These include industries of existing strength and growing and emerging strength:[‡]

Areas of Strength[§]

• Cybersecurity;

• Military, defense, and government contracting;

• Scientific research and development services; and

• Software development.

Growing and Emerging Areas of Strength[¶]

• Medical laboratories and diagnostic imaging;

• Precision instrument manufacturing; and

• Distribution, transportation, and logistics.

By focusing only on commercial real estate demand for these priority industries, the analysis estimated more precisely the approximate forecasted demand in the industries Gateway Innovation District is most interested in attracting and retaining.

From 2024-53, the priority industries identified as targets for Gateway are expected to experience modest to high job growth in Howard County.[30] While some industrial property exists currently at Gateway and some relevant industries require industrial property, Gateway is constrained in the amount of industrial real estate it can or is willing to provide.

Therefore, growth in demand for industrial properties by these industries is not the focus of analysis.

The analysis compares current Gateway inventory with growth in industry demand for commercial office and innovation / flex office property to guide redevelopment efforts and identify how Gateway can meet a feasible share of county-wide demand from priority industries.

COMMERCIAL OFFICE AND INNOVATION / FLEX OFFICE PROPERTY DEMAND

Figure 7 indicates that the growth in commercial office demand in industries that are areas of strength is expected to be modest relative to other property types, but still significant. In fact, to accommodate the workforce of the future, it is anticipated that Howard County could add over 1.4 million square feet of additional commercial office square feet.

Growth in innovation / flex office property demand is forecasted to be high, even under the low-growth scenario, but will require creative planning in order to meet Gateway's density goals. Figure 6 highlights that by 2053 (Year 30), the forecasted demand for innovation / flex office space could range from 3.6 million square feet (1.9 million more square feet than Gateway's current inventory) to 4.7 million square feet (3.1 million more than current inventory).

[‡]Three key industries were added after the completion of the study; these included an additional area of existing strength (technology) and two additional areas of growing and emerging strengths (quantum and AI).
[§]Areas of strength are sectors where there is excellent alignment across the ecosystem and anticipated growth.
[¶]Growing and emerging areas of strength are areas where there are opportunities to improve ecosystem alignment and / or anticipated growth and strength.

Figure 7: Forecasted demand (sq. ft.) by property type (priority industries), Howard County, 2023–53[31]

PROPERTY TYPE	INVENTORY (SQUARE FEET)	FORECASTED DEMAND (SQUARE FEET)			
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053	NEW 2023–53
Low-Growth Scenario					
Commercial office	3,953,865	4,494,471	4,979,496	5,400,977	1,447,112
Innovation / flex office	1,653,305	2,970,964	3,279,041	3,563,165	1,909,860
High-Growth Scenario					
Commercial office	3,953,865	5,029,410	6,077,816	7,064,046	3,110,181
Innovation / flex office	1,653,305	3,390,446	4,068,789	4,745,162	3,091,857

Source: Stiletto Analysis

INDUSTRY AND WORKFORCE DATA

To understand strengths and opportunities, education, research, workforce, and industry assets were examined for each of the priority industries, including areas of strength (cybersecurity; military, defense, and government contracting; scientific research and development services; and software development) and growing and emerging areas of strength (medical laboratories and diagnostic imaging; precision instrument manufacturing; and distribution, transportation, and logistics).**

OBSERVATIONS

- **Cybersecurity** had the largest workforce among the priority industries[32] and was experiencing substantial growth, both in terms of workforce[33] and number of program completions.[34]
- **Military, defense, and government contracting** program completions increased by 20.2 percent (2018-22), a promising sign for the county and CSA, which are well-known for their emphasis on this industry.[35]
- **Scientific research and development services** was well aligned in terms of its program completions, workforce, and business counts.[36]
- **Software development** had also experienced workforce growth,[37] but program completions in this field had declined sharply.[38] It may be important to investigate the reason for this decline to understand what kinds of partnerships or initiatives could be undertaken to ensure the industry's workforce can continue to meet demand going forward.

- **Distribution, transportation, and logistics** experienced a decline in program completions,[39] and while there is an expected decline in the Howard County workforce projections (2023-28),[40] the CSA is expected to grow its workforce by 12.2 percent during this period. The CSA will likely require an infusion of new graduates, and with that, Howard County has an opportunity to capture some of the CSA's growth (and reverse the county's anticipated workforce decline).
- **Precision instrument manufacturing** accounted for a relatively small proportion of the region's workforce and businesses but was associated with an outsized R&D investment of $1.5 billion (engineering).[41] It may be valuable to explore how this emerging area could be strengthened in the region.
- **Medical laboratories and diagnostic imaging** was also associated with strong R&D funding ($2.8 billion in life sciences).[42] This area reported an increase in program completions in the region, which aligned with expected workforce growth.

**Three priority industries were added after the completion of the study; these included an additional area of existing strength (technology) and two additional areas of growing and emerging strength (quantum and AI).

Figure 8: Key industries (areas of strength and areas of growing and emerging strength), Howard County, 2024[43]

AREAS OF STRENGTH
HOWARD COUNTY

Cybersecurity

Military, defense, and government contracting

Scientific research and development services

Software development

Technology

GROWING AND EMERGING AREAS OF STRENGTH
HOWARD COUNTY

Medical laboratories and imaging

Precision instrument manufacturing

Distribution, transportation, and logistics

Artificial intelligence (AI)

Quantum

Source: Stiletto Analysis

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TOP FIVE BUSINESS CLUSTERS

The priority industries identified for Howard County and Gateway Innovation District were well aligned with industry and workforce strengths in the county. The Harvard Business School U.S. Cluster Mapping Project reported the following Top 5 Business Clusters[††] for Howard County. Corresponding NAICS code descriptions are provided for each:[44]

- **Education and knowledge creation:** Particularly in research and development in the physical, engineering, and life sciences (except Nanotechnology and biotechnology) (NAICS 541715).

- **Metalworking technology:** Consisted solely of power-driven hand tool manufacturing (NAICS 333991).
- **Information technology and analytical instruments:** Particularly in software publishers (NAICS 513210).
- **Communications equipment and services:** Particularly wireless telecommunications carriers (except satellite) (NAICS 517112).
- **Production technology and heavy machinery:** Particularly in conveyor and conveying equipment manufacturing (NAICS 33922).

PRIORITY INDUSTRIES

Figure 9 provides an overview of the strengths in priority industries[‡‡] for Gateway.

Figure 9: Priority industries, Washington, D.C.-Baltimore CSA and Howard County, 2022-23[45]

PRIORITY INDUSTRY	PROGRAM COMPLETIONS (2022)	R&D (2022)	WORKFORCE (2023)		BUSINESSES (2023)	
	CSA	HOWARD COUNTY	HOWARD COUNTY	CSA	HOWARD COUNTY	CSA
Areas of Strength (excellent alignment and anticipated growth)						
Cybersecurity	19,318[46] Growth of **21.7%** (2018-22)[47]	$436.5M Computer and information sciences[48]	18,032[49] Expected growth of **10.5%** (2023-28)[50]	315,656[51] Expected growth of **4.6%** (2023-28)[52]	1,360[53]	27,307[54]

[††]Note that only the top five clusters are highlighted. Overall cluster scores have been removed to avoid misinterpretation.
[‡‡]Refers to original seven priority industries selected for Gateway Innovation District.

PRIORITY INDUSTRY	PROGRAM COMPLETIONS (2022)	R&D (2022)	WORKFORCE (2023)		BUSINESSES (2023)	
	CSA		HOWARD COUNTY	CSA	HOWARD COUNTY	CSA
Military, defense, and government contracting	**3,694**[55] Growth of **20.2%** (2018–22)[56]	Not available	Government and military business numbers are often sensitive and suppressed in industry calculations. However, Howard, in its proximity to Washington and wider Maryland military and defense strength, is estimated to have a high concentration of businesses in, or supporting, this sector.			
Scientific research and development services	**5,575**[57] Growth of **10.9%** (2018–22)[58]	**$6.4B** Across all disciplines[59]	**10,601**[60] Expected growth of **13.9%** (2023–28)[61]	**96,470**[62] Expected growth of **7.6%** (2023–28)[63]	**271**[64]	**6,005**[65]
Software development	**3,350**[66] Decline of **−9.1%** (2018–22)[67]	**$436.5M** Computer and information sciences[68]	**14,841**[69] Expected growth of **13.9%** (2023–28)[70]	**257,547**[71] Expected growth of **6.5%** (2023–28)[72]	**1,132**[73]	**23,545**[74]
Growing and Emerging Areas of Strength (opportunities to improve alignment and / or anticipated growth and strength)						
Medical laboratories and diagnostic imaging	**5,399**[75] Growth of **10.8%** (2018–22)[76]	**$2.8B** Life sciences[77]	**404**[78] Expected growth of **1.3%** (2023–28)[79]	**16,718**[80] Expected growth of **6.9%** (2023–28)[81]	**52**[82]	**1,262**[83]
Precision instrument manufacturing	**3,282**[84] Growth of **3.6%** (2018–22)[85]	**$1.9B** Engineering[86]	**491**[87] Expected decline of **−8.7%** (2023–28)[88]	**18,523**[89] Expected growth of **10.6%** (2023–28)[90]	**30**[91]	**206**[92]
Distribution, transportation, and logistics	**1,310**[93] Decline of **−10.5%** (2018–22)[94]	Not available	**1,543**[95] Expected decline of **−2.8%** (2023–28)[96]	**24,633**[97] Expected growth of **12.2%** (2023–28)[98]	**135**[99]	**2,279**[100]

Sources: Stiletto Analysis, Lightcast, National Science Foundation (Higher Education, Research and Development)

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JOB GROWTH

As Figures 10-11 illustrate, overall job and industry numbers are positive in Howard County and the Washington-Baltimore CSA, with both jurisdictions forecasting job growth (2023-28).[101,102]

Figure 10: Howard County by the numbers, 2023-28[103]

10,873 registered businesses in Howard County (2023)	**187,461** jobs in Howard County (2023)
5.0% projected job growth in Howard County (2023-28)	**9,569** projected increase in new jobs in Howard County (2023-28)
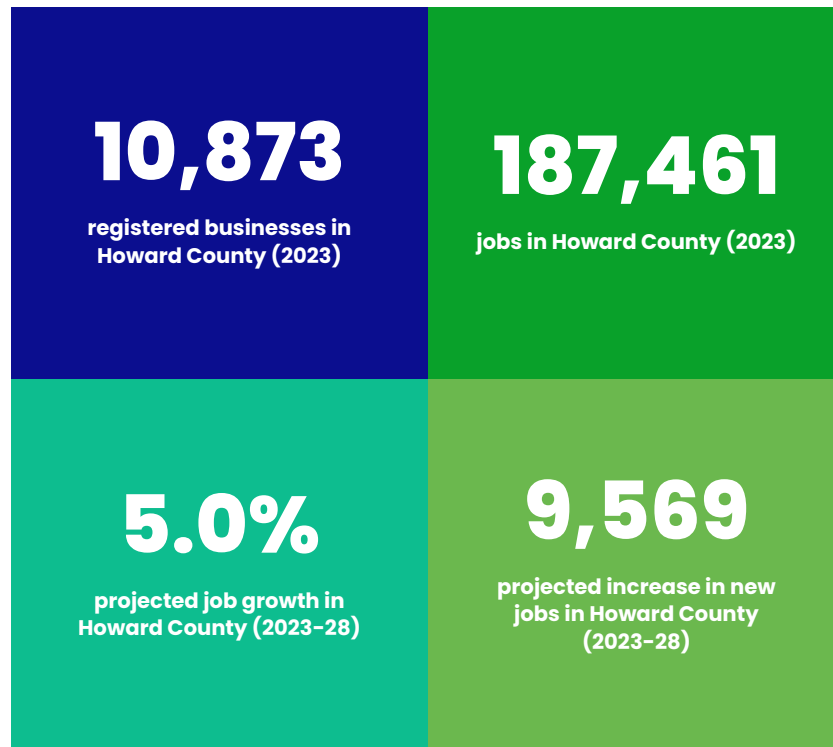
Source: Lightcast

Figure 11: Washington-Baltimore CSA by the numbers, 2023-28[104]

298,279 registered businesses in the CSA (2023)	**5,903,199** jobs in the CSA (2023)
6.6% projected job growth in the CSA (2023-28)	**387,508** projected increase in new jobs in the CSA (2023-28)

Source: Lightcast

INDUSTRY COMPETITION

Shift-share analysis metrics were used to understand industries' competitiveness in the county and CSA. These metrics examine underlying factors that influence economic change in a given region. Such analyses typically consider national trends, a region's industry mix, and other factors affecting the region's competitiveness (e.g., location, demographics, policies). For Howard County, the following components were considered in the shift-share analysis:

- **Employment concentration:** Indicates how strong the representation of a given industry in Howard County or the CSA is relative to the national concentration, where a location quotient (LQ) above 1.00 indicates a share of employment higher than the national average.
- **Industry mix effect:** Indicates how much of an industry's projected job change within Howard County or the CSA results from the industry's national growth and decline patterns.
- **Competitive effect:** Indicates how much of an industry's projected job change in Howard County or the CSA is the result of the unique attributes of the region.

Figures 12 and 13 provide an overview of each of these components for the top 10 industries (by employment concentration) in Howard County and the CSA, respectively. As Figure 12 highlights, the **highest employment concentration** in Howard County was in professional, scientific, and technical services (2.70).[105] The employment concentration for this occupation in Howard County was not only above the national share of employment but was also higher than the CSA share.

The Howard County industry most affected by national trends **(industry mix effect)** was administrative and support and waste management and remediation services (-318), indicating that the industry is underperforming in the region compared to national trends. This finding can be interpreted as an opportunity for the region, as it suggests that there may be unmet demand for this industry.

Figure 12: Top 10 industry competition by two-digit NAICS, Howard County, 2023[106]

TWO-DIGIT NAICS	2023 EMPLOYMENT CONCENTRATION (LQ)	INDUSTRY MIX EFFECT	COMPETITIVE EFFECT
54: Professional, scientific, and technical services	2.70	22	23
42: Wholesale trade	1.98	17	85
23: Construction	1.15	29	23
53: Real estate and rental and leasing	1.13	5	−64
56: Administrative and support and waste management and remediation services	1.10	−318	1,077
61: Educational services	1.07	40	255
71: Arts, entertainment, and recreation	1.04	123	149
55: Management of companies and enterprises	1.03	6	−157
51: Information	0.97	−83	−40
44: Retail trade	0.92	−213	−15

Source: Lightcast

Figure 13: Top 10 industry competition by two-digit NAICS, CSA, 2023[107]

TWO-DIGIT NAICS	2023 EMPLOYMENT CONCENTRATION (LQ)	INDUSTRY MIX EFFECT	COMPETITIVE EFFECT
54: Professional, scientific, and technical services	1.85	22,072	−43,833
61: Educational services	1.47	812	−5,982
90: Government	1.42	−44,356	6,509
81: Other services (except public administration)	1.26	295	−10,024
51: Information	1.04	3,047	−6,912
23: Construction	1.04	−4,621	−12,328
71: Arts, entertainment, and recreation	1.04	−2,051	−2,030
56: Administrative and support and waste management and remediation services	1.01	−6,426	−8,552
53: Real estate and rental and leasing	0.99	25,771	−10,440
72: Accommodation and food services	0.91	−7,449	−2,024

Source: Lightcast

METHODOLOGY OVERVIEW: STILETTO ANALYSIS

SOURCES

Real estate inventory and occupancy were sourced from CoStar, a commercial real estate data and analytics platform available through private subscription. Data were also provided by Partners for Economic Solutions and the Howard County Economic Development Authority.

NAICS industry workforce data were sourced from Lightcast, an economic and demographic data platform available through private subscription.

DEMAND MODEL

The model based the demand for commercial real estate on the size of the workforces within industries occupying the various types of real estate in Howard County. For example, manufacturing industries primarily require industrial space. A large manufacturing workforce would necessarily require a larger amount of industrial space.

CoStar tenant data for Howard County were used to assign NAICS industries to industrial, commercial office, and innovation / flex office space based on the workforces occupying this space. Historical and current occupancy data and industry workforce data were then analyzed to determine the occupied square footage per job for industrial, office, and innovation / flex space.

Industry workforce projections were then used in combination with the following square footage per job (i.e., demand per job) to forecast future demand from 2024-53:

- **Commercial office:** 200 square feet per job; and
- **Innovation / flex office:** 300 square feet per job.

As Figure 16 highlights, square footage per job has remained relatively constant over the last decade (2014-23).[108,109]

DETERMINING LOW- AND HIGH-GROWTH SCENARIOS

To forecast real estate demand, the model relied on workforce growth projections in relevant industries[*] that will drive demand for industrial, commercial office, and innovation / flex office space.

Workforce projections were calculated for two growth scenarios:

- Low-growth scenario; and
- High-growth scenario.

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* Refers to original seven priority industries selected for Gateway.

Figure 14: Historical square footage per job, Howard County, 2014–23[110,111]
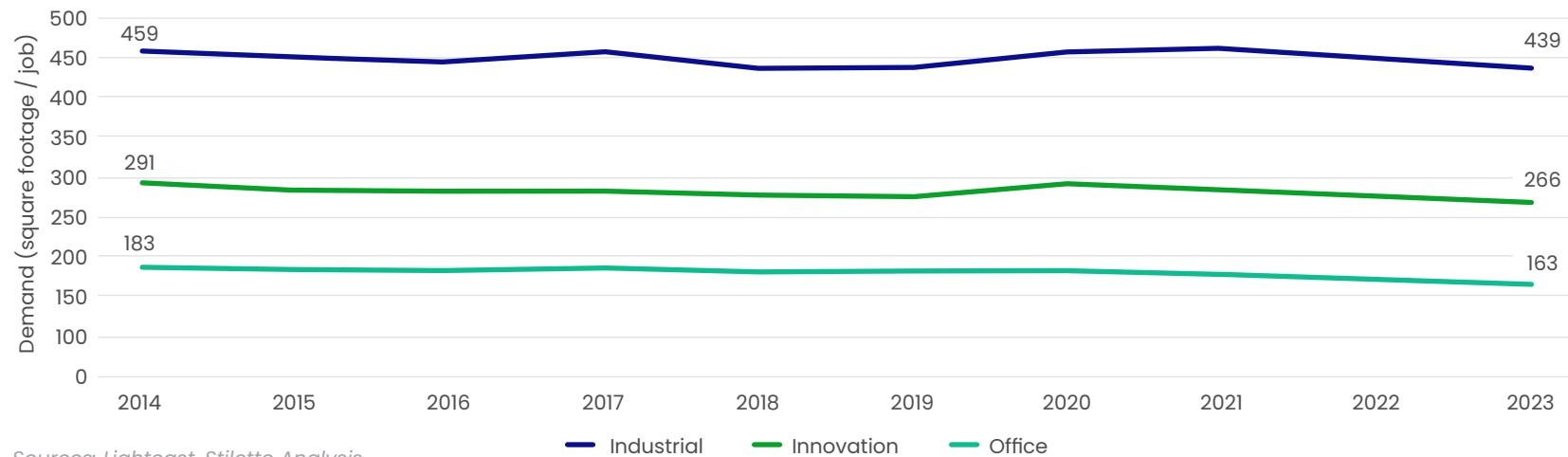
Sources: Lightcast, Stiletto Analysis

To determine low- and high-growth scenarios, a moderate-growth scenario was first estimated as follows:

- The data and analysis platform Lightcast performs workforce projections by industry to 10 years (currently 2024-34). These projections are based on combined five-, 10-, and 15-year trends in historical data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages. The projections are then adjusted to account for national- and state-level industry projections.
- This projection was then extended to 2053 to project out 30 years using a linear projection.
- The workforces for industries occupying industrial, commercial office, and innovation / flex office space were summed for each year and estimated based on the linear projection.

The low- and high-growth scenarios were estimated as follows:

- **Low-growth scenario:** The annual growth rates estimated from 2024-53 in the moderate scenario were reduced by 30.0 percent and applied to the workforces in office and innovation / flex spaces.
- **High-growth scenario:** The annual growth rates estimated from 2024-53 in the moderate scenario were increased by 30.0 percent and applied to the workforce in office and innovation / flex space.

The market demand analysis considers variables such as net absorption and building class in Gateway by examining trends locally and in surrounding counties.

Absorption refers to the amount of space leased over a period, typically quarterly or annually. **Net absorption** measures the total amount of space leased, less the amount of space vacated over the same period. It is a key indicator of real estate demand. Positive net absorption indicates demand, whereas a negative value may indicate low demand or oversupply.[112]

Commercial real estate properties are categorized into A, B, or C classes based on several factors, including price and quality of amenities. To a degree, these classifications are relative to the location of the property; a B-class building in a large metropolitan center could be categorized an A-class building in a smaller area.[113,114]

NET ABSORPTION: HOWARD COUNTY

Examining the net absorption in Howard County reveals trends within each property type. Two major economic events have had impacts on net absorption, which are identifiable in the data:

- **Great Recession (2007-09):** Both innovation / flex office and industrial space experienced sharp declines into negative net absorption around this time, with industrial space seeing the most extreme drop to -490.3 thousand square feet in 2008. Commercial office space experienced a decline from 2007 to 2008, seemed to recover the loss in 2009, but dipped into negative net absorption in 2010.
- **COVID-19 pandemic (2020-21):** All property types reported sharp declines in net absorption in 2020, with commercial office space having the most extreme figure of -738.5 thousand square feet. Industrial space did not report negative net absorption in 2020 but did have a change of -90.7 percent from the previous year.

Also notable, the net absorption of innovation / flex office and industrial space has tended to fluctuate more than commercial office space; however, there appear to be downward trends in net absorption for all three property types, beginning even before 2020, though the prolonged effects of the pandemic may be skewing the figures for more recent years.

Net absorption of commercial office space has declined since 2014, when it reached its second-highest value since 2006, at 720,000 square feet.

Industrial space reached its highest net absorption of 1.2 million square feet in 2017 but declined drastically to the negative in 2018. Net absorption has experienced a downward trend since.

Though fluctuating, the general trend for net absorption of innovation / flex office properties has been downward since 2016. Innovation / flex office properties did reach positive net absorption from 2021–22 but declined into the negative in 2023.

NET ABSORPTION: COMPARATOR COUNTIES

Examining the net absorption rate of commercial office space in the comparator counties reveals a downward trend in net absorption since 2005, despite regular fluctuations. The combined counties have reported negative net absorption since 2019, with a 20-year low in 2023, when 2.2 million more square feet of commercial office space were vacant than were leased.

In contrast, net absorption rates for industrial space have generally grown since 2014, though negative net absorption was observed in 2023 and 2024 (YTD). The counties reached the highest net absorption in 2020, when 8.9 million more square feet were leased than vacated, but net absorption was lower in subsequent years. In 2023, 943.3 million more square feet were vacant than were leased.

Net absorption of innovation / flex office properties also began a downward trend in 2016 despite fluctuations. In 2016, net absorption was at its highest since 2005, with 923.3 million net leased square feet. As of 2024 (YTD), 117.3 thousand more square feet were vacant than leased.

BUILDING CLASS: GATEWAY

As Figure 19 illustrates, most buildings at Gateway are Class B (63 properties and 74.1% of all property types comprise this class). Only 16.5 percent (14 buildings) are considered Class A. As highlighted in Figure 20, despite their classification as Class A buildings, the Class A commercial office buildings at Gateway are actually at least over a decade old, with 11 out of 14 buildings constructed between 2000 and 2009, with the remaining three built between 1980 and 1999. Only one of these buildings has been renovated since 2010. Class A buildings typically attract tenants with their prestige and quality and can command higher rents, whereas classes B and C can attract tenants with lower rent prices. **There is an opportunity for Howard County to work with developers and owners to invest in renovations over time that will upgrade the class of buildings and / or update the amenities offered to prospective and existing tenants.**

Figure 15: Number of buildings by class, Gateway, 2024[115]
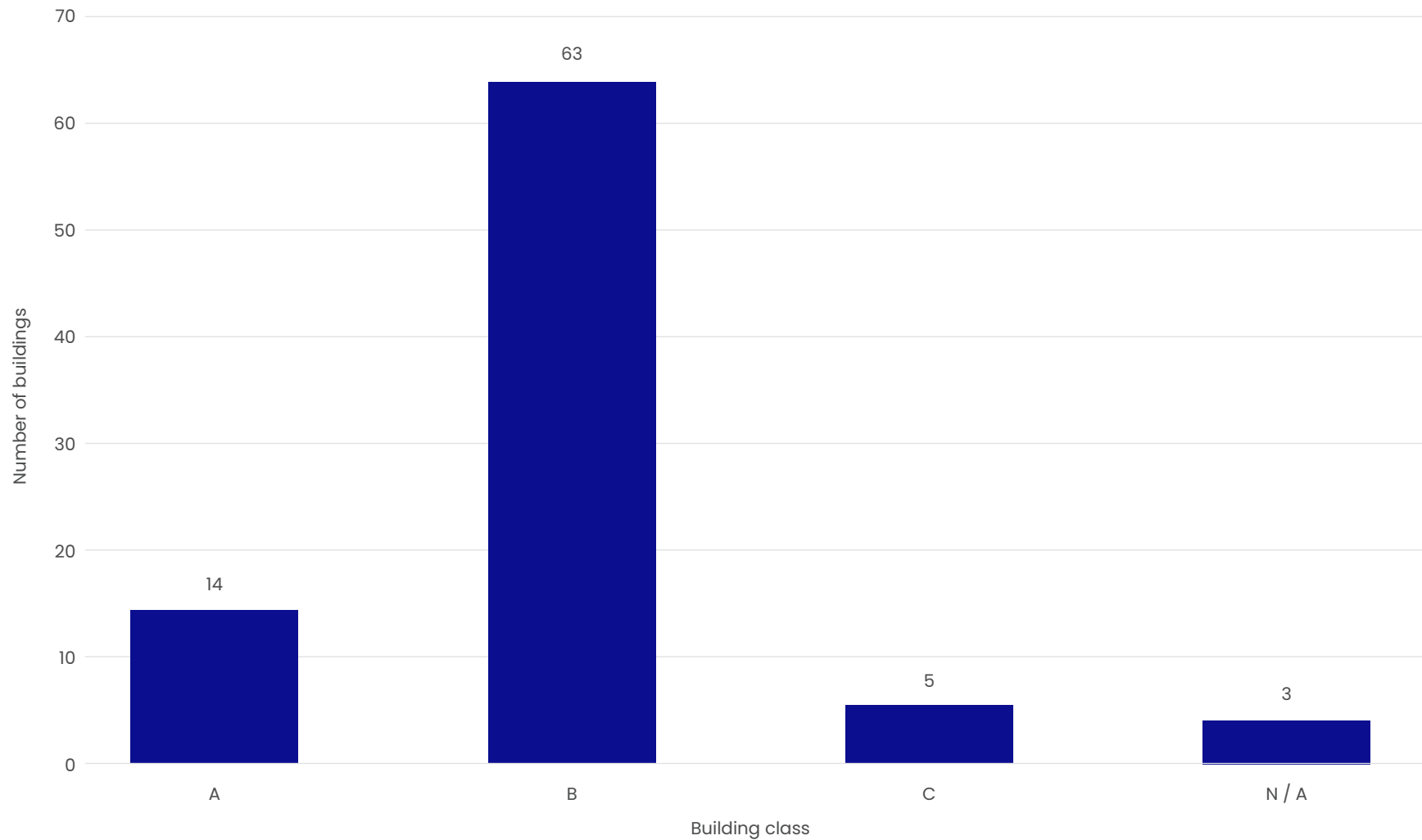
Source: CoStar

Figure 16: Commercial office building vacancy rates and renovations by building class, Gateway, 2024[116]

	BUILDING	A CLASS	B CLASS	C CLASS
Number of buildings		14	40	2
Vacancy rate		25.9%	16.9%	0.5%
Time of construction / renovation	**1980–89**	1	9	1
	Renovations (2010-present)	1	0	0
	1990–99	2	11	0
	Renovations (2010-present)	0	4	0
	2000–09	11	18	1
	Renovations (2010-present)	1	0	1
	2010–19	0	2	0
	Renovations (2010-present)	0	0	0

Source: CoStar

WORKFORCE TRENDS BY BUILDING TYPE AND PRIORITY INDUSTRY

As Figure 17 illustrates, the workforce typically occupying industrial, commercial office, and innovation / flex office properties grew in Howard County from 2014-23. The largest growth was in the workforce typically occupying commercial office space (16.9%), followed by the workforce occupying industrial space (15.1%) and that typically occupying innovation / flex office space (12.2%).

Figure 17: Howard County workforce trends, 2014-23[117,118]
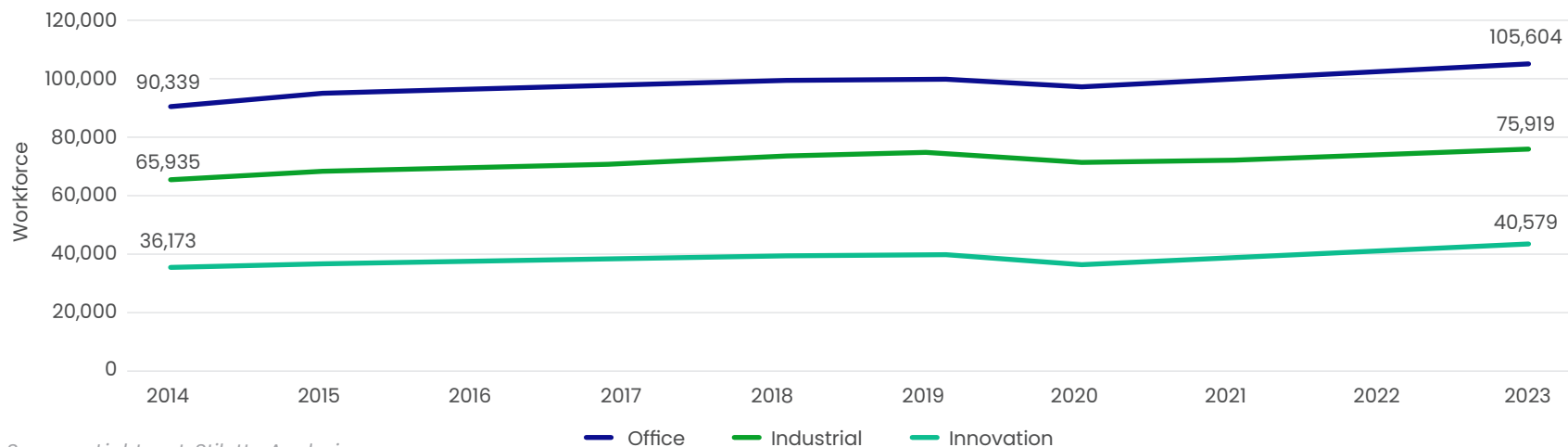
Sources: Lightcast, Stiletto Analysis

During 2014-23, the square footage per job remained relatively constant across the three property types (Figure 18). On average:

- Industrial building workforces required 451 square feet per job;
- Commercial office building workforces required 178 square feet per job; and
- Innovation / flex office building workforces required 280 square feet per job.

Industry workforce projections in this analysis were used in combination with the above-mentioned square footage per job (i.e., demand per job) to forecast future demand from 2024-53.

Figure 19 illustrates the NAICS industries identified as being potential current or future Gateway tenants.

Figure 18: Square footage per job, Howard County, 2014-23[119]
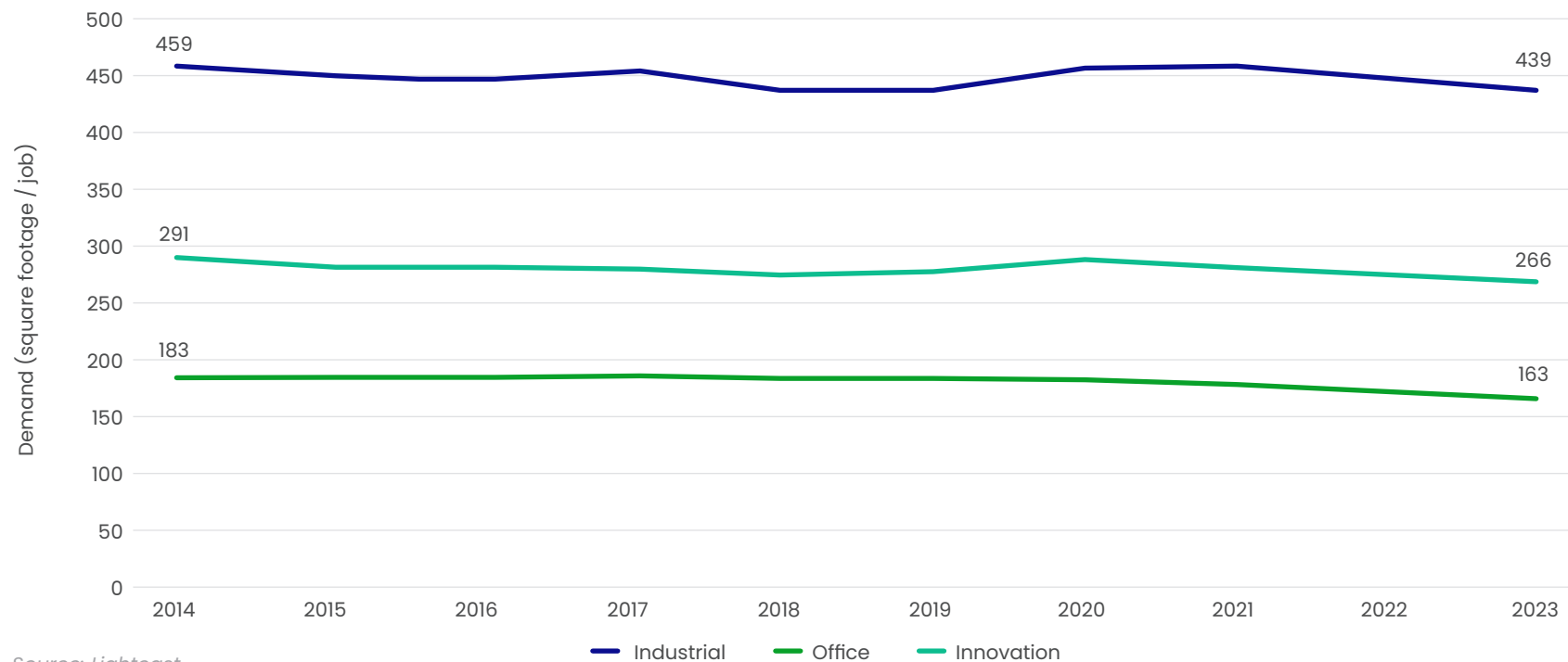
Source: Lightcast

SECTOR	NAICS CODE	NAICS INDUSTRY
Corporate Headquarters	551114	Corporate, subsidiary, and regional managing offices
Cybersecurity / software development	513210	Software Publishers
	518210	Data Processing, Hosting, and Related Services
	541330	Engineering Services
	541511	Custom Computer Programming Services
	541512	Computer Systems Design Services
	541519	Other Computer Related Services
Detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing
	334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals
Distribution and logistics	541614	Process, Physical Distribution, and Logistics Consulting Services
Government contracting	923100	Administration of human resource programs
	924100	Administration of environmental quality programs
	926100	Administration of economic programs
Medical laboratories and diagnostic imaging	334516	Analytical Laboratory Instrument Manufacturing
	339112	Surgical and Medical Instrument Manufacturing
	621511	Medical Laboratories
	621512	Diagnostic Imaging Centers
Military and defence	334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
	927110	Space research and technology
	928110	National security
	928120	International affairs
Scientific research and development services	541380	Testing Laboratories
	541620	Environmental Consulting Services
	541690	Other Scientific and Technical Consulting Services
	541713	Research and Development in Nanotechnology
	541714	Research and Development in Biotechnology (except Nanobiotechnology)
	541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

Source: Stiletto Analysis

To forecast workforce demand in Howard County, industry job data were analyzed and projections were developed for the three growth scenarios: low-, moderate-, and high-growth. For simplicity, only the low-growth and high-growth scenarios are presented. For reference, the following projected workforce numbers are presented:

Howard County total: Figure 20 presents the forecasted workforce occupying the commercial office and innovation / flex office properties for all industries in Howard County.

Gateway total: Figure 21 presents the forecasted workforce occupying the commercial office and innovation / flex office properties for all industries in Gateway.

Gateway priority industries: Figure 22 presents the forecasted Howard County workforce within industries identified as potential current or future Gateway tenants occupying commercial office and innovation / flex office properties.[*]

Figure 20: Howard County total workforce projections, 2023–53[121]

PROPERTY TYPE	CURRENT	FORECASTED			
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053	NEW 2023–53
Low-Growth Scenario					
Commercial office	105,604	112,819	120,863	128,562	22,957
Innovation / flex office	40,579	48,747	52,682	56,316	15,737
High-Growth Scenario					
Commercial office	105,604	120,356	136,726	153,293	47,689
Innovation / flex office	40,579	54,718	63,174	71,483	30,904

Source: Stiletto Analysis

[*]Refers to original seven priority industries selected for Gateway.

Figure 21: Gateway total workforce projections, 2023–53[122]

PROPERTY TYPE	CURRENT	FORECASTED			
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053	NEW 2023–53
Low-Growth Scenario					
Commercial office	10,187	12,410	13,295	14,142	3,955
Innovation / flex office	652	1,219	1,317	1,408	756
High-Growth Scenario					
Commercial office	10,187	14,666	15,712	16,713	6,526
Innovation / flex office	652	1,950	2,107	2,253	1,600

Source: Stiletto Analysis

Figure 22: Howard County priority industry workforce projections, 2023–53[123]

PROPERTY TYPE	CURRENT	FORECASTED			
	YEAR 0 2023	YEAR 10 2033	YEAR 20 2043	YEAR 30 2053	NEW 2023–53
Low-Growth Scenario*					
Commercial office	22,370	25,309	28,040	30,413	8,043
Innovation / flex office	8,775	10,598	11,697	12,711	3,936
High-Growth Scenario†					
Commercial office	22,370	28,321	34,225	39,778	17,408
Innovation / flex office	8,775	12,094	14,514	16,927	8,152

Source: Stiletto Analysis

***Low-growth scenario:** The annual growth rates estimated from 2024-53 in the moderate scenario were reduced by 30.0 percent and applied to the workforces in commercial office and commercial innovation properties.

†**High-growth scenario:** The annual growth rates estimated from 2024-53 in the moderate scenario were increased by 30.0 percent and applied to the workforces in the commercial office and commercial innovation properties.

ENDNOTES

All endnotes have been verified as of the date of this report.

[1]   Stiletto Analysis, 2024

[2]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[3]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[4]   Stiletto Analysis, 2024

[5]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[6]   Stiletto Analysis, 2024

[7]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[8]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[9]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[10]   CoStar commercial real estate data, Gateway, 2024, available through private subscription

[11]   "CoStar Glossary: Flex Buildings," CoStar, n.d., https://www.costar.com/about/costar-glossary#go_f

[12]   "Industry Table, Howard County (MD), 2014-23," Lightcast, 2024

[13]   CoStar commercial real estate data, Howard County, 2024, available through private subscription

[14]   Stiletto Analysis, 2024

[15]   Stiletto Analysis, 2024

[16]   Stiletto Analysis, 2024

[17]   Stiletto Analysis, 2024

[18]   Stiletto Analysis, 2024

[19]   Stiletto Analysis, 2024

[20]   Stiletto Analysis, 2024

[21]   Stiletto Analysis, 2024

[22]   Stiletto Analysis, 2024

[23]   CoStar Gateway tenant data, available through private subscription, provided by Howard County Economic Development

[24]   Stiletto Analysis, 2024

[25]   CoStar Gateway tenant data, available through private subscription, provided by Howard County Economic Development

[26]   Stiletto Analysis, 2024

[27]   CoStar Gateway tenant data, available through private subscription, provided by Howard County Economic Development

[28]   Stiletto Analysis, 2024

[29]   Stiletto Analysis, 2024

[30]   Stiletto Analysis, 2024

[31]   Stiletto Analysis, 2024

[32]   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

[33]   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

[34]   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

[35]   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

[36]   Stiletto Analysis, 2024

[37]   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

[38]   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

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[41]   "Higher Education Research and Development Survey (HERD)," National Science Foundation, 2024, https://ncses.nsf.gov/surveys/higher-education-research-development/2022

[42]   "Higher Education Research and Development Survey (HERD)," National Science Foundation, 2024, https://ncses.nsf.gov/surveys/higher-education-research-development/2022

43   Stiletto Analysis, 2025

44   "Industry Cluster Identification, Howard County, MD," Lightcast, 2024

45   Stiletto Analysis, 2024

46   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

47   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

48   "Higher Education Research and Development Survey (HERD)," National Science Foundation, 2024, https://ncses.nsf.gov/surveys/higher-education-research-development/2022

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58   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

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67   "Program Snapshot, 2 CSAs, DC-VA-MD-WV; Lightcast Q1 2024 Data Set," Lightcast, 2024

68   "Higher Education Research and Development Survey (HERD)," National Science Foundation, 2024, https://ncses.nsf.gov/surveys/higher-education-research-development/2022

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86   "Higher Education Research and Development Survey (HERD)," National Science Foundation, 2024, https://ncses.nsf.gov/surveys/higher-education-research-development/2022

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100   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024.

101   "Industry Table: All Industries in Howard County (Maryland), 2023-28, Lightcast Q2 2024 Data Set," Lightcast, 2024

102   "Industry Table: All Industries in Howard County (Maryland), 2023-28, Lightcast Q2 2024 Data Set," Lightcast, 2024

103   "Industry Table: All Industries in Howard County (Maryland), 2023-28, Lightcast Q2 2024 Data Set," Lightcast, 2024

104   "Industry Table: All Industries in Howard County (Maryland), 2023-28, Lightcast Q2 2024 Data Set," Lightcast, 2024

105   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

106   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

107   "Industry Table: All Industries in Howard County (Maryland), 2022-23, Lightcast Q2 2024 Data Set," Lightcast, 2024

108   "Industry Table, Howard County (MD), 2014-23," Lightcast, 2024

109   Stiletto Analysis, 2024

110   "Industry Table, Howard County (MD), 2014-23," Lightcast, 2024

111   Stiletto Analysis, 2024

112   "What Is Absorption in Industrial Real Estate," Janover Industrial Property Loan, 2024, https://industrialproperty.loan/investor-glossary/absorption/

113   "Understanding Industrial Building Classifications," Iskalo Development Corp., 2024, https://iskalo.com/insights/understanding-the-industrial-building-classifications/

114   "CoStar Glossary," CoStar Group, 2024, https://www.CoStar.com/about/CoStar-glossary

115   CoStar commercial real estate data, available through private subscription

116   CoStar commercial real estate data, available through private subscription

117   "Industry Table, Howard County (MD), 2014-23," Lightcast

118   Stiletto Analysis, 2024

119   "Industry Table, Howard County (MD), 2014-23," Lightcast

120   Stiletto Analysis

121   Stiletto Analysis, 2024

122   Stiletto Analysis, 2024

123   Stiletto Analysis, 2024

GATEWAY
master plan

Howard County
MARYLAND

HOK

PES
Partners for
Economic Solutions

STILETTO