Market and Trends Assessment

Rt. 1 Corridor

1

HOWARD COUNTY
MARYLAND

Howard County Department of Planning and Zoning – October 2020

ROUTE 1 MARKET ASSESSMENT

I. INTRODUCTION

The Route 1 Corridor serves the easternmost part of Howard County, which runs parallel to I-95 (see map below). Before the Interstate system was constructed, Route 1 served as the main north/south highway serving the eastern U.S. from Maine to Florida. As such, the land use patterns along this historic highway are typically characterized by vintage motels and hotels, roadside restaurants, trucking terminals, warehouses and various other uses. The roadway was designed to support the movement of goods and people.

Over many decades, Route 1 has become a secondary corridor to the interstate highway system and it now serves local and regional transportation needs in most states.

This paper includes a summary of recent demographic and economic trends that have shaped the region and the Corridor over the past few decades. These trends will set the context for future revitalization efforts and will summarize the major market forces and trends influencing recent real estate development, leasing and pricing within the Route 1 Corridor submarkets. Market segments include:

- apartment market
- retail market
- office market
- industrial market
- warehouse/distribution market

By analyzing recent supply and demand factors for key market segments, the analysis aims to identify the balance of existing land uses over time. It will also identify currently underutilized parcels for unlocking future redevelopment potential, which will allow the introduction of new uses along the Corridor.

A second assessment, covering Transportation and Transit issues, will address transportation and infrastructure needs in the corridor. Both assessment reports will provide a baseline of information that will offer a framework for the Land Use and Urban Design Assessment. That Assessment will identify candidate corridor investment areas where possible redevelopment and targeted infrastructure investment can be concentrated.

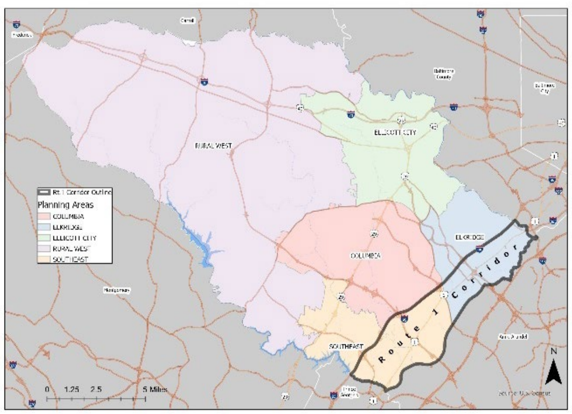
These assessment reports build upon prior Route 1 studies, plans and initiatives including the following:

- *Corridor Revitalization Study Phase 1* (2001)
- *Corridor Revitalization Study Phase 2* (2002)
- Route 1 new zoning districts adopted (2004)
- *SHA Corridor Improvement Strategy* (2008)
- *Route 1 Manual* (2009)
- *Market Analysis & Strategic Implementation Analysis: US Route 1* (2011)
- *PlanHoward 2030* (2012)
- North-Laurel Savage Sustainable Community Application/Action Plan (2013)
- Route 1 Tax Credit Program (2014)
- *Bike Howard* (2016)
- *Walk Howard* (2017)
- *Howard County Development Regulations Assessment* (2018)
- *US 1 Safety Evaluation on Bicycle and Pedestrian Safety* (2019)

These prior studies and reports highlight the need for the corridor's revitalization and for various safety improvements to reduce the number of vehicle and pedestrian accidents. These assessment reports recognize that Route 1 is in a rapidly urbanizing corridor and that growth and redevelopment will occur here.

These three assessments, enhanced through a public engagement process, report on the current economic, market, and transportation realities along the corridor, and provide market-based development concepts and transportation enhancements to maximize the economic potential of Route 1.

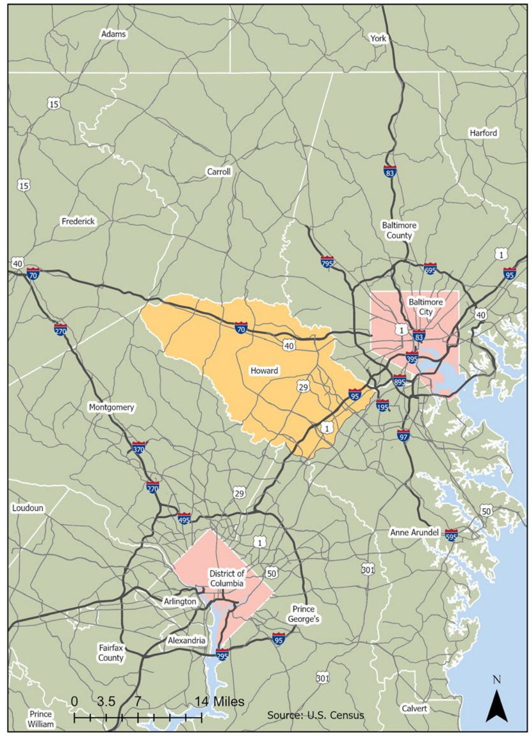
Map 1 Route 1 Corridor and Planning Areas



Regional Context for Market and Demographics

Howard County is in the central part of Maryland and is within the Greater Baltimore-Washington Metropolitan Statistical Area (MSA). Howard

Map 2 Howard County Regional Location



County is home to suburban neighborhoods, large economic hubs, industrial and warehouse/ distribution zones, and areas of agricultural and scenic rural and wooded lands. It is positioned between and benefits from the economic activities generated by the City of Baltimore and the District of Columbia, as well as other major employment cores in Montgomery County and the BWI area of Anne Arundel County.

Howard County boasts low unemployment, access to high quality academic institutions, and a highly-educated workforce. It is home to the Johns Hopkins University Applied Physics Lab, which employs about 5,600 people and is planning for added growth. Howard County is the third most affluent county in the United States and is frequently cited for its high-quality public-school system.

Economic Strengths

The Route 1 Corridor is located a few miles from the Baltimore Washington International Thurgood Marshall Airport (BWI), Fort George G. Meade, the National Security Administration, the Port of Baltimore and many of the nation's most important federal institutions.

The Route 1 Corridor's total employment was 44,192 in 2018, accounting for 18 percent of all the jobs in Howard County. The Wholesale Trade industry is the biggest employer in the corridor, contributing 7,901 jobs, which is 17.9 percent of all jobs in the Route 1 Corridor in 2018 and 55 percent of the county's wholesale trade jobs.

Legacy Land Uses

While an important employment corridor for the county, Route 1 has pockets of legacy corridor land uses, including blighted commercial and industrial buildings and properties that have been lacking reinvestment for decades.

Economic Opportunities

The Baltimore-Washington corridor is one of the most concentrated in the US in terms of cybersecurity firms and is comparable with regions such as San Francisco, Seattle, and Boston. As Fort Meade, the nation's epicenter of cybersecurity and information systems, continues to grow, the county could capitalize on its expansion. Fort Meade houses approximately 55,000 jobs on-site, another 110,000 jobs off the base. Over 13,000 county residents currently work at the Fort Meade campus.

Over the coming years, extensive growth is projected to continue at Fort Meade in support of the National Security Agency, Defense Cyber Command, and Service Cyber Headquarters. The combination of these factors has added 10,000 jobs in the last decade and are projected to add upwards of 10,000 more positions to the Fort Meade workforce. Many cybersecurity jobs in the county are currently located within the Route 1 corridor, or nearby.

Existing Relevant County Policy

As stated earlier, Route 1 serves as an important, eastern transportation corridor connecting major employment centers in Baltimore, MD and Washington D.C. The nearly 12-mile stretch of US Route 1 is an essential part of the vibrant neighborhoods and economy that helps define Howard County.

PlanHoward 2030, the county's general plan adopted in 2012, considers Route 1 a major growth corridor and a key part of its economic base. Following comprehensive zoning changes in 2013, new residential development has occurred along the corridor, largely scattered amongst a variety of automobile-related businesses, industrial uses, truck terminals, motels, junkyards and underutilized properties. While many corridor businesses serve a variety of local and regional service needs, there are gaps in terms of meeting the service needs of the current and growing residential population.

Route 1 has not yet been able to attract significant private investment beyond industrial, warehouse and multi-family development. Despite population gains over the past several decades, the Route 1 area in Howard County lacks the full variety of retail and service options that other parts of Howard and surrounding Counties enjoy.

It's envisioned that this analysis will provide a redevelopment strategy with guiding principles that will assist in the development of the general plan update and its policies for Route 1 which ultimately may change the appearance, function, and viability of the corridor as a livable residential community and place to conduct commerce.

Route 1 Corridor Vision

The Route 1 Corridor in Howard County will be ***enhanced as a significant employment corridor with a series of vibrant, livable, walkable activity centers with a mix of uses characterized by improved pedestrian, bicycling, and transit mobility. The corridor will successfully blend needed community services with a sustainable industrial base.***

Assessment Highlights

Key guiding principles to reach this vision include the following:

- Attract private investment in the corridor by adopting new tools to enhance the Route 1 Corridor's competitiveness, attract and retain businesses, and maximize redevelopment opportunities,
- Create a critical mass of retail and service activity, especially within the walkable activity centers,
- Retain existing industrial and manufacturing,
- Identify possible economic development programs for property owners in the corridor,
- Capitalize on the expansion of office and flex space to accommodate cybersecurity and information systems companies,
- Improve the housing to job ratio in the corridor to allow more new workers to live nearer their work, and
- Address nonconforming uses and structures along Route 1 to reduce blight.

Population Trends and Projections

This section examines Howard County's population growth trends and household income in comparison to other central Maryland Counties, and details the recent population and demographic trends in Route 1 Corridor submarkets between 2010 and 2018, and some projections between 2018 and 2023. RKG analyzed the regional trends from 1970 to 2018 for the following counties that are adjacent to Howard County and within the Greater Baltimore-Washington MSA. Those surrounding counties include: (1) Prince George's County, (2) Baltimore County, (3) Anne Arundel County, (4) Harford County, (5) Carroll County, (6) Queen Anne's County, (7) Montgomery County. To complete the regional trend analysis, RKG used data from Woods & Poole Economics, Inc., a national data analytics firm. The Route 1 Corridor demographic data were obtained from ESRI, a data analytics and Geographic Information Systems (GIS) company.

Population in the Route 1 Corridor has increased rapidly since 2000, increasing from 37,244 in 2000 is 57,139 in 2020, a growth rate of 2.7 percent since 2010. The average annual growth rate has accelerated during that period and has peaked since 2010 at 2.8 percent annually. In fact, since 2010, the Route 1 Corridor has accounted for roughly one quarter of Howard County's population growth.

According to ESRI, 47.8 percent of households in the Route 1 Corridor had incomes above $100,000, as of 2020. This figure is lower than it is for Howard County as a whole (58.8 percent), but moderately better than it is for the State of Maryland (42.6 percent) and the Baltimore MSA (41.0 percent). These households with higher education levels and higher incomes, while not par with the county as a whole, will drive future demand for retail goods, services, restaurants and entertainment.

Howard County is located within one of the most affluent and economically robust regions in the country and hence enjoys numerous economic and demographic advantages. Employment expansion and population growth have been strong since 1970 as the Baltimore-Washington Metropolitan Area has expanded rapidly. The completion of the region's state and interstate highway system and regional rail service has enabled the population to commute to and from the region's major employment hubs.

The County's population growth remains the fastest among its neighboring counties, and its job gains have far outpaced the MSA. Howard County's 20 percent employment growth between 2009-2016 has greatly exceeded the 10 percent growth in the overall Baltimore Metro area.

Finally, Howard County also enjoys a reputation for its high-quality school system, which has consistently attracted young families with school-age children to relocate here. These growth pressures will continue to bring opportunities for future economic and population gain, especially along the Rt. 1 corridor. However, the County will need to balance these demands with the need for adequate public infrastructure and pace growth accordingly.

Local and Regional Data

Population

Between 2000 and 2018, Howard County's population grew by 1.7 percent annually, which is consistent with the State of Maryland and Baltimore-Washington MSA trends.

Household Income

Over half (52.5 percent) of the households in Howard County earn over $100,000/year in 2018, and this proportion is the highest among the surrounding counties, the MSA (43.5 percent) and the state (34.1 percent). **The Route 1 Corridor has been attracting households with higher education levels and higher incomes, almost on par with the county as a whole.** This indicates that the corridor is growing the number of higher-income households, which will also drive future demand for retail goods, services, restaurants and entertainment.

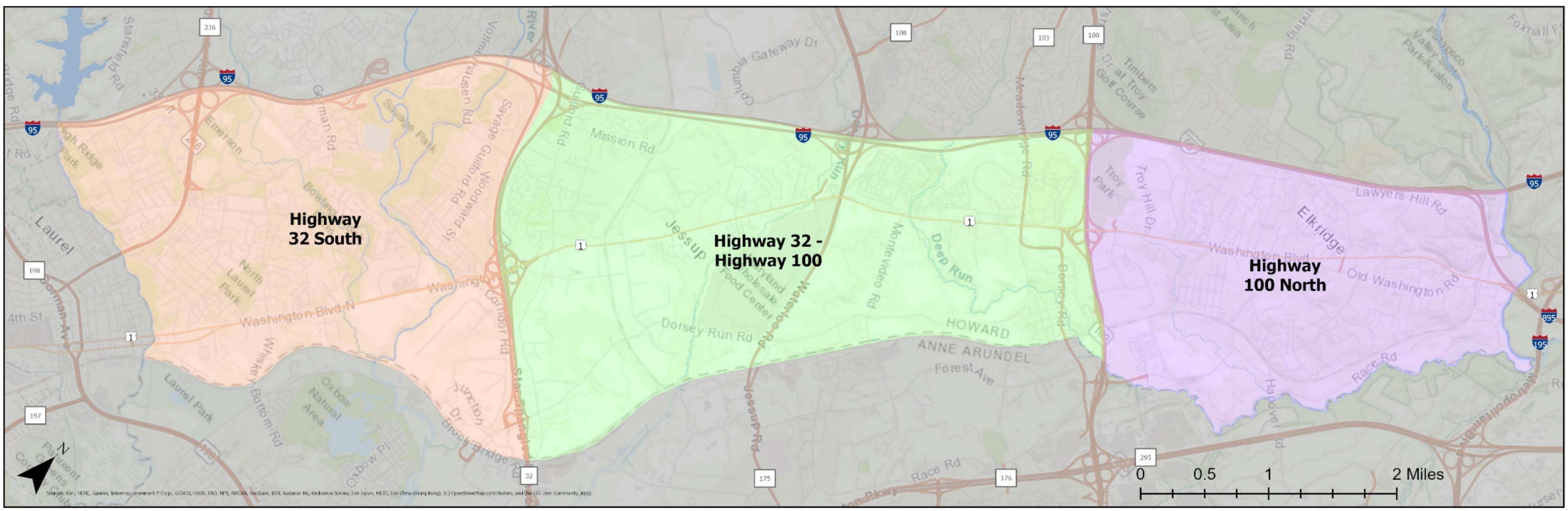
Route 1 Corridor Subareas

RKG Associates parsed the Route 1 Corridor into three distinct submarket areas. These three subareas were identified as having similar real estate market and land use characteristics, and as divided by Highway 32 and Highway 100 into natural segments.

The map below shows the three submarket areas and their place names as follows:

- Submarket 1: Highway 32 South
- Submarket 2: Highway 32-Highway 100
- Submarket 3: Highway 100 North

Map 3 Route 1 Corridor Submarket Areas



Summary of Route 1 Corridor Trends

Population by Subarea

- The population in the Route 1 Corridor has increased rapidly since 2000, increasing from 37,244 in 2000 to 54,203 in 2018. The average annual growth rate has accelerated during that period and has peaked since 2010 at 2.8 percent annually. In fact, since 2010, the Route 1 Corridor has accounted for roughly one quarter of Howard County's population growth.
- **Highway 32 South has the highest share of the Route 1 Corridor's population growth between 2000 and 2018. This subarea largely includes the community of Savage and has the largest population (24,142 in 2018) among the three subarea**s. However, since 2000, the subarea's share of the corridor's population has declined from 52.8 percent in 2000 to 44.5 percent in 2018, though the subarea has been gaining its population at a faster pace (from 1.1 percent annually between 2000 and 2010 to 1.4 percent annually between 2010 and 2018). This is largely due to the more rapid recent growth in the Highway 32-Highway 100 subarea.
- **The Highway 32-Highway 100 subarea has experienced the fastest annual population gains since 2010** (7.2 percent annually between 2010 and 2018) among the three subareas. This has been much faster than the Route 1 Corridor (2.9 percent per year) and county levels (1.8 percent per year) during the same period. This is occurring in an area impacted by the presence of industrial, trucking and automotive land uses.
- **The growth rate of the Highway 100 North subarea has been slowing**. While its population was increasing the fastest at 2.7 percent during the last decade, its pace slowed down to 2.4 percent between 2010 and 2018, and it is forecasted to maintain this downward direction between 2018 and 2023, dropping to the lowest rate of 1.9 percent among the three subareas, and lower than the Route 1 Corridor in general.

Age of Population by Subarea

- Route 1 Corridor and its subareas have higher portions of the prime-age population aged between 25 and 44 years (33.8 percent in Route 1 Corridor in 2018) than the county (31.3 percent in 2018). People aged between 25 and 44 years accounted for 34.4 percent of the total population in Highway 32-Highway 100, which is the highest among the three subareas. **These prime-age people most likely consist of recent graduates and young professionals, who are the basis of the local labor force. In general, Route 1 Corridor and its subareas are younger than the county**, as the corridor has a higher portion of its population aged under 65 years, especially under 45 years compared to the county.

Household Income by Subarea

- Almost half (47.2 percent) of the households in the Route 1 Corridor earned $100,000 and over annually in 2018, but it is still lower than Howard County's level (59.6 percent in 2018).
- **The corridor also has a slightly higher portion of its households with annual household incomes under $35,000 in 2018 (14.2 percent) than the county (11.4 percent). This compares to the 13.6% for Anne Arundel County, 21.2% for Baltimore County and**

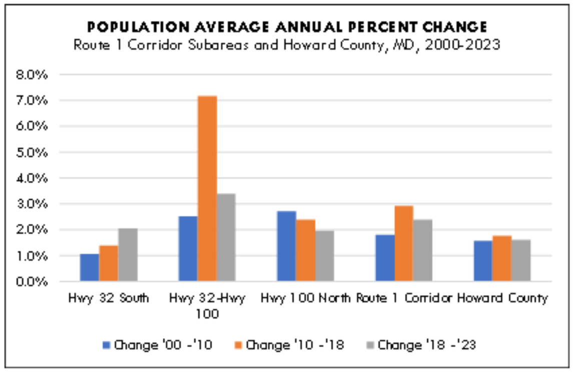
Table 1

Population Change by Decade
Surrounding Counties, Within Baltimore-Washington MSA and State (1970 - 2018)

	% Change '70-'80		% Change '80-'90		% Change '90-'00		% Change '00-'10		% Change '10-'18		% Change '00-'18	
Jurisdiction	Actual Change	Avg. Ann % Chge.	Actual Change	Avg. Ann % Chge.	Actual Change	Avg. Ann % Chge.	Actual Change	Avg. Ann % Chge.	Actual Change	Avg. Ann % Chge.	Actual Change	Avg. Ann % Chge.
Howard County	56,118	8.8%	69,518	5.8%	60,223	3.2%	39,084	1.6%	39,457	1.7%	78,541	1.7%
Anne Arundel County	72,238	2.4%	56,424	1.5%	62,793	1.5%	47,640	1.0%	40,490	0.9%	88,130	1.0%
Prince George's County	(1,231)	0.0%	60,254	0.9%	77,215	1.1%	62,710	0.8%	55,567	0.8%	118,277	0.8%
Baltimore County	32,726	0.5%	38,772	0.6%	60,816	0.9%	50,643	0.7%	35,793	0.6%	86,436	0.6%
Harford County	30,061	2.6%	37,277	2.5%	36,080	2.0%	25,443	1.2%	13,836	0.7%	39,279	1.0%
Carroll County	27,455	4.0%	27,174	2.8%	27,368	2.2%	15,756	1.0%	5,059	0.4%	20,815	0.8%
Montgomery County	56,877	1.1%	183,527	3.2%	112,002	1.5%	98,843	1.1%	86,336	1.1%	185,179	1.2%
Queen Anne's County	7,155	3.9%	8,395	3.3%	6,681	2.0%	7,072	1.7%	2,766	0.7%	9,838	1.3%
Baltimore-Washington MSA	263,001	0.8%	732,383	2.1%	690,060	1.7%	803,267	1.7%	621,224	1.4%	1,424,491	1.6%
State of Maryland	283,025	0.7%	573,581	1.4%	511,264	1.1%	477,550	0.9%	331,151	0.7%	808,701	0.8%

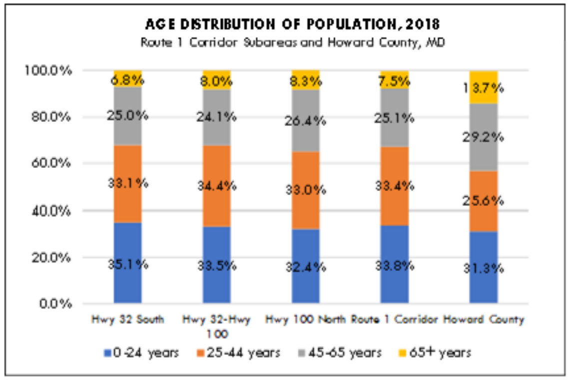
Source: Woods & Poole Economics, Inc., 2018

Figure 1



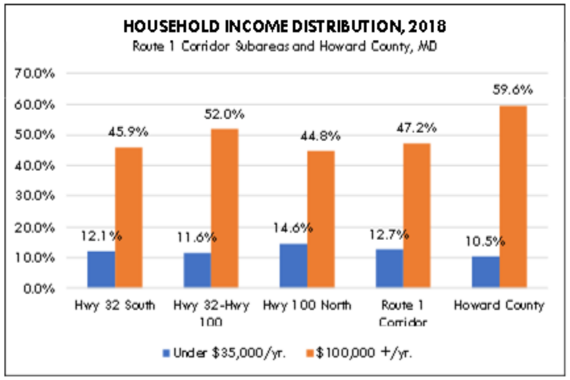
Source: ESRI and RKG Associates, Inc., 2018

Figure 2



Source: ESRI and RKG Associates, Inc., 2018

Figure 3



Source: ESRI and RKG Associates, Inc., 2018

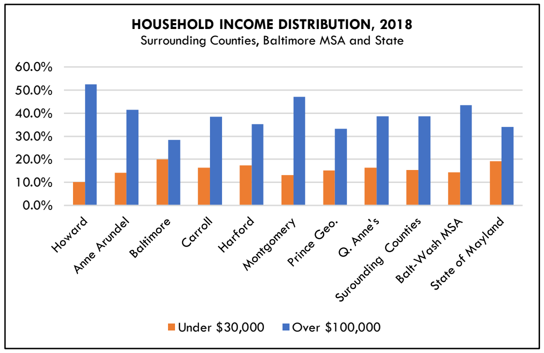
Table 2

Population Trends by Route 1 Corridor Subarea
Howard County, MD (2000-2023)

									Change '00 - '10			Change '10 - '18			Change '18 - '23		
Subarea	2000	% of Total	2010	% of Total	2018	% of Total	2023	% of Total	Persons	% of Tot. Chg.	Ann % Chg.	Persons	% of Tot. Chg.	Ann % Chg.	Persons	% of Tot. Chg.	Ann % Chg.
Hwy 32 South	19,655	52.8%	21,739	49.5%	24,142	44.5%	26,616	43.9%	2,084	31.1%	1.1%	2,403	23.4%	1.4%	2,474	38.3%	2.0%
Hwy 32-Hwy 100	7,541	20.2%	9,442	21.5%	14,847	27.4%	17,357	28.6%	1,901	28.3%	2.5%	5,405	52.7%	7.2%	2,510	38.8%	3.4%
Hwy 100 North	10,048	27.0%	12,773	29.1%	15,214	28.1%	16,696	27.5%	2,725	40.6%	2.7%	2,441	23.8%	2.4%	1,482	22.9%	1.9%
Route 1 Corridor	**37,244**	**100.0%**	**43,954**	**100.0%**	**54,203**	**100.0%**	**60,669**	**100.0%**	**6,710**	**100.0%**	**1.8%**	**10,249**	**100.0%**	**2.9%**	**6,466**	**100.0%**	**2.4%**
Howard County	**247,842**	**100.0%**	**287,085**	**100.0%**	**327,599**	**100.0%**	**354,143**	**100.0%**	**39,243**	**100.0%**	**1.6%**	**40,514**	**100.0%**	**1.8%**	**26,544**	**100.0%**	**1.6%**

Source: ESRI and RKG Associates, Inc., 2018

Figure 4



Source: Woods & Poole Economics, Inc. and RKG Associates, Inc., 2018

21.9% for the Metropolitan Statistical Areas (MSA).

- **The fastest-growing Highway 32-Highway 100 subarea has the highest portion (52.0 percent) of households earning $100,000 and over annually** in 2018 among the three subareas, and this figure is higher than the Route 1 Corridor level of 47.2 percent. This subarea also has the lowest percentage (11.6 percent) of households with annual incomes under $35,000 in the corridor.
- In comparison, **Highway 100 North has the lowest percentage (44.8 percent) of households earning $100,000 or over** per year and the highest portion (14.6 percent) of households with annual incomes below $35,000.

II. ROUTE 1 CORRIDOR LAND USE PATTERNS

In Howard County, Route 1 serves as an important transportation corridor connecting major employment centers in Baltimore, MD and Washington D.C. Howard County's general plan, *PlanHoward 2030*, considers Route 1 a major growth corridor and a key part of its economic base. Over the years, the *PlanHoward 2030* and other county studies have highlighted the need for the corridor's revitalization and for various safety improvements to reduce the number of vehicle and pedestrian accidents.

The Route 1 Corridor is currently characterized by a mix of heavy industrial, warehouse/distribution and newer residential uses, with additional corridor legacy uses including motels, trucking facilities and storage facilities. (See land use map on next page.) The Corridor also has a considerable amount of underutilized properties woven into these various active uses, which has a potential for redevelopment. The corridor's residential uses generally cluster south to Highway 32 and north to Highway 100. Industrial and warehouse/ distribution uses occupy the majority of the remaining corridor, mostly concentrating in the areas east to Route 1 and in between Highway 32 and Highway 100. Commercial and office uses generally gravitate along Route 1 and other major highways, which speaks to the transportation-oriented nature of the corridor.

Recent Development Activity/Corridor Wide Development Activity

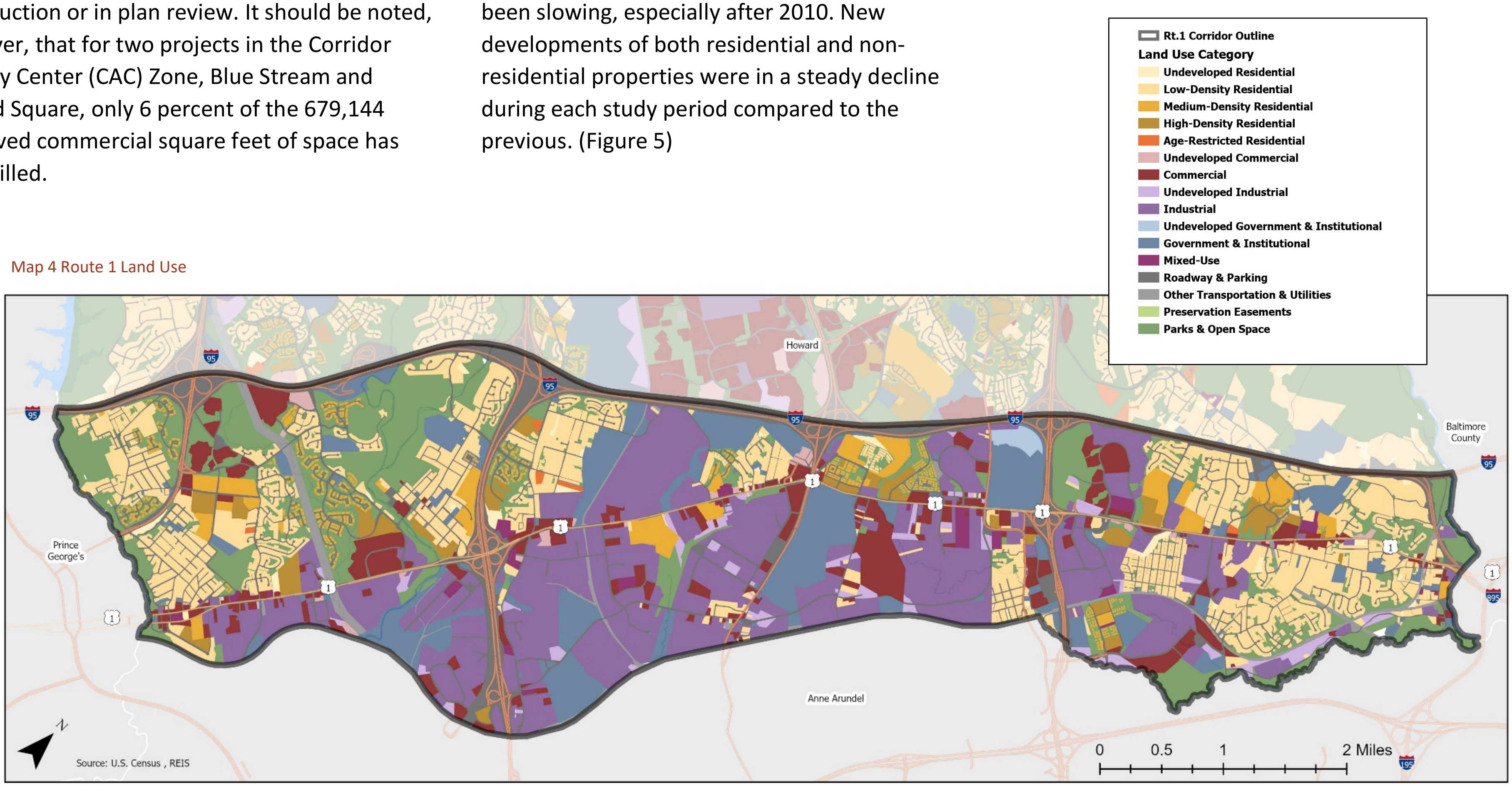
The trends of development activities can provide valuable insights into a market's land use and real estate demands and dynamics. To examine the recent development trends along the Route 1 Corridor since 1990, RKG analyzed the data obtained from the MdProperty View, which contains real property assessment records maintained by the State Department of Assessments and Taxation. The data was segmented by various land use types and was analyzed by ten-year period as of 2015. The latest property assessment records available in the MdProperty View for Howard County were documented through December 2015.

RKG examined the developments by use type, including residential and non-residential uses. Single-family homes, townhouses, condominiums, apartments, and mobile homes are categorized under residential developments. Non-residential uses include local retail, auto services, offices, industrial, warehouse/distribution, services, and restaurant/hospitality developments.

Larger scale development activity in the Route 1 Corridor has predominantly been residential between 2006 and 2020. During this time period, 8,021 residential units in 34 projects (those larger than 10 units) were built, were under construction or in plan review. 3,701,361 square feet of commercial space in 31 projects (in projects larger than 10,000 square feet) was built, was under construction or in plan review. It should be noted, however, that for two projects in the Corridor Activity Center (CAC) Zone, Blue Stream and Oxford Square, only 6 percent of the 679,144 approved commercial square feet of space has been filled.

The development pace in Route 1 Corridor has been slowing, especially after 2010. New developments of both residential and non-residential properties were in a steady decline during each study period compared to the previous. (Figure 5)

Map 4 Route 1 Land Use



(Figure 3-1).

Warehouse/Distribution, Industrial and Auto Services have been the major types of new non-residential developments as the corridor struggled to attract other non-residential development types. These three use types combined accounted for 50 percent and above of all new non-residential developments during each study period (Figure 6).

Office developments have proportionally increased, especially since 2000. Office construction increased from 11.5 percent of all new non-residential developments between 1990 and 1999 to 41.7 percent between 2010 and 2015. This indicated a rising demand for new office spaces in the corridor during this period (Figure 7).

Non-residential developments in Route 1 yielded much lower building value per square foot than residential development. The average building assessed value per square foot of 180 non-residential properties built between 1990 and 2015 is $61.25, almost half of the value ($106.99) of the 6,187 residential properties developed during the same period. This suggests that Route 1 should seek to attract higher value-added non-residential development types such as office and high-quality retail to better balance the resulting development mix (Figure 8).

Figure 5

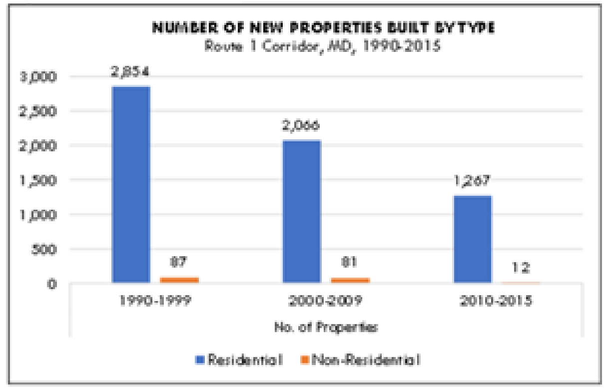


Figure 6

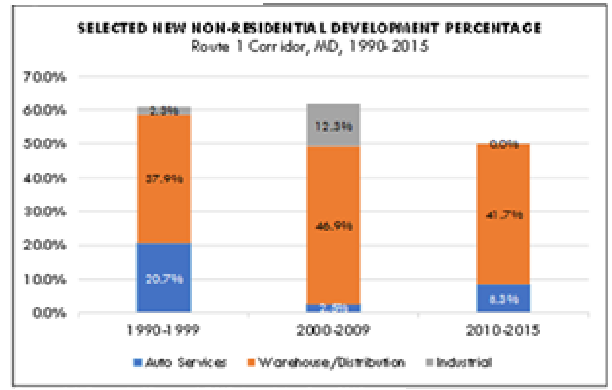
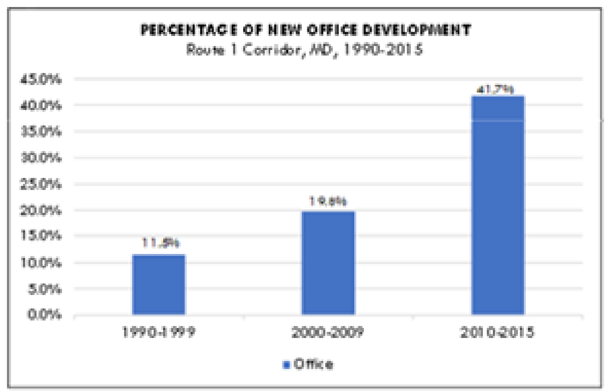
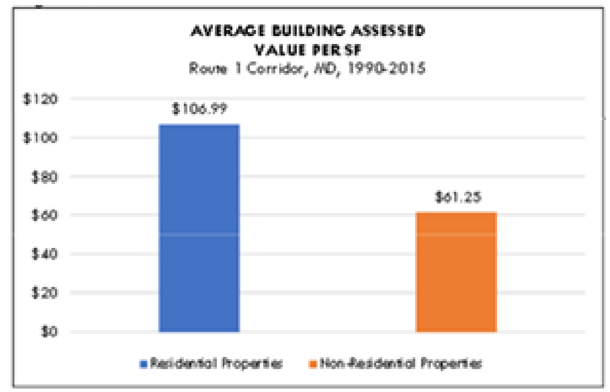


Figure 7



Source: MdProperty View and RKG Associates, Inc., 2018

Figure 8



Source: MdProperty View and RKG Associates, Inc., 2018

III. MARKET OVERVIEW

County and Regional Context

This section presents the historical trends and projections of the following markets defining the Route 1 Corridor and they include:

- apartment,
- retail,
- office,
- industrial, and
- warehouse/distribution.

The RKG studied the five-year periods between 2000 and 2015, and the most recent four-year period between 2015 and 2019. RKG also analyzed existing land uses, building conditions, and value of the land parcels within the Route 1 Corridor. The data used for this analysis was obtained from several sources, including the primary source, REIS Real Estate Solutions, a division of Moody's Analytics and a purveyor of real estate market data. RKG also analyzed the county property assessment records for the corridor and used the same segmentation approach presented earlier.

Submarket trend data presented in this section follows REIS submarket boundaries as determined by the firm and not RKG Associates, Inc. The Route 1 Corridor study area in Howard County is not tracked as its own submarket. However, all or parts of the study area are included in REIS' submarket geography and will be presented in this section. It's important to note, that even though the REIS submarket boundaries do not always align closely with the Route 1 Corridor study area, it's often part of a larger submarket area that has an influence on the study area's market factors. As such, the data presented in this analysis should be viewed in this larger market context.

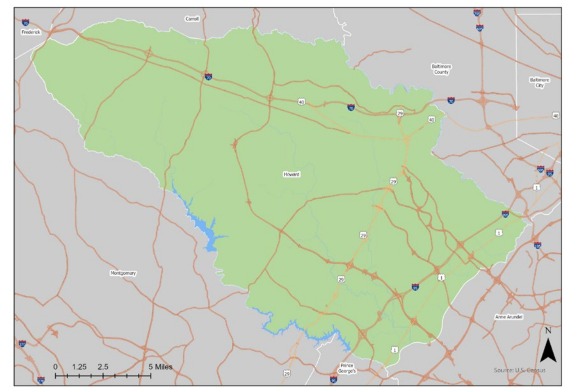
Finally, this section summarizes the most important market factors that set the stage for future redevelopment opportunities. Because urban redevelopment often takes years, if not decades to implement, it is important to note that recent historical trends and current market conditions can't predict the future potential for an area. However, they can provide insight into the opportunities and constraints that might exist in the future, if the market continues on its current path. Another unknown factor relates to what steps Howard County might take to change the study area dynamics. That can occur through zoning changes, site-specific redevelopment initiatives, new funding programs or any number of actions that induce a private sector.

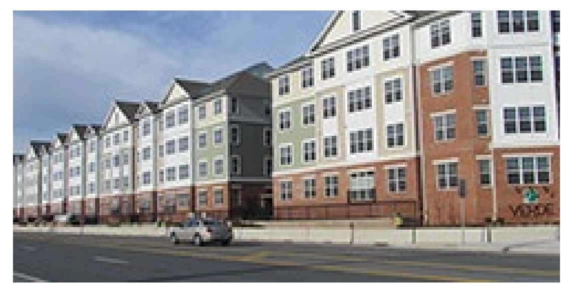
Apartment Sector Overview (Tightening Supply)

The closest REIS apartment submarket that includes the Route 1 study area is the Columbia/Howard County submarket, which encompasses the entire county. The study area is located in the far southeastern part of the county where multi-family development is concentrated.

Apartment inventory growth in the Columbia/Howard County submarket has accelerated since 2010, especially between 2010 and 2014 with an average annual growth rate of 3.3 percent. Roughly 2,076 new apartment units were added to the submarket between 2010 and 2014, compared to 674 units between 2005 and 2009. The Route 1 Corridor accounted for around 369 new units between 2010 and 2014, compared to roughly 119 new units between 2005 and 2009.

Map 5 Apartment and Office Submarket
Columbia/Howard County





Since 2014, 1,825 new apartment units have been added to the Columbia/Howard County submarket. This equates to an average annual growth rate of 2.5 percent and results in the capture of 17.1 percent of the metro area's apartment growth during that period. Approximately 324 new apartment units have been constructed along the Route 1 Corridor during the same period. While this recent construction activity demonstrates that the apartment market is still strong, annual additions to the inventory are slowing slightly. Developers will have increased difficulty finding suitably-sized land parcels to construct large projects along the Route 1 Corridor. In most cases, this will have to occur through protracted land assemblage and the redevelopment of existing underutilized parcels. This is very expensive and difficult for a private developer although data suggests that confidence has remained in the apartment market in the metro area after 2015. New apartment development activities in the Columbia/Howard County have cooled slightly down during the same period.

Though apartment inventory expanded rapidly in the Columbia/Howard County submarket between 2010 and 2014, the submarket did not fully absorb the newly added apartment units quickly during this period. As a result, both the vacancy rate and the vacant stock in the submarket increased since 2015, and the vacancy rate (4.6 percent) exceeded the metro area level (4.0 percent) with being comparatively low rates. Vacant stock in the submarket grew from 499 units to 822 units (approximately from 79 units to 146 units within Route 1 Corridor).

The apartment construction boom during 2010 and 2014 spurred an actual rise in demand and the ability to absorb new units during the same period. However, the net absorption declined faster than the slow-down in the development activities. After 2015, net absorption slowed, and vacancies actually increased in 2018.

Route 1 Market Prospects

Over the next ten years, based on available land and current zoning, Howard County projects the potential of 3,235 apartment units in the Route 1 Corridor, accounting for 25 percent of all housing unit gains during the period. With another 2,684 units of single-family detached and attached housing, the total new housing could equal 5,919 new units.

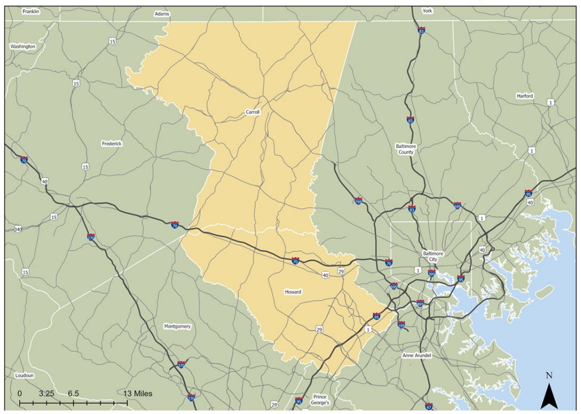
The 2020 COVID-19 pandemic and the partial economic shutdown of the U.S. economy will likely have profound effects on Howard County markets for several years. If the economic decline persists beyond a few months, housing vacancies and foreclosures could start to occur in large numbers as unemployed workers are unable to make their rent and mortgage payments. Eventually, state restrictions will be removed, and evictions and foreclosures will start the resorting of the housing market. These economic and housing market disruptions will be uneven, as the housing market will remain stable for those segments of the work force in less impacted employment sectors. This will likely result in some housing types and price points continuing while a slowdown occurs in those segments serving workers from the impacted employment sectors.

Rent rates and home values would likely drop during the recovery period but the region's existing housing shortage would act as a counterbalance to maintain some demand for housing. If attempts to jump start the economy are successful over the next three to six months, much of the worst impacts could be blunted.

Retail Sector Overview (Slow Growth)

The retail inventory in the Howard/Carroll County submarket has been expanding since 2000, increasing from 4.4 million square feet in 2001 to 5.5 million square feet in 2019. In the Route 1 Corridor, the retail inventory has grown from 571,626 square feet to 711,307 square feet during the same period. Average annual growth rates for new retail space has been declining since 2015, which mirrors the Baltimore Metropolitan Area and national trend.

Map 6 Retail Submarket Howard/Carroll County



Between 2000 and 2019, total new retail completions (1,181,000 square feet) were 1.18 times the total net absorption (1,002,000 square feet) in the submarket, as compared to 1.2 times in the Metro area. This indicates that as slowdowns in retail construction have occurred, new construction has outpaced the rate of absorption, and this has resulted in increased retail vacancies.

While retail vacancy rates in the Howard/Carroll County submarket have been rising, it has remained lower than the Metro area level (5.6 percent compared to 7.6 percent in 2019) but has been increasing faster than the Metro area.

In order to project the demand for new retail in the Route 1 Corridor, RKG utilized the current number of households to estimate retail demand per household for each merchandise category based on how much local households spend each year. The analysts projected future retail demand for the

2019 and 2029 period using Howard County Department of Planning and Zoning's (DPZ) housing unit projection data. These new housing units will generate increased demand for retail goods and services, which will result in additional demand for retail square footage over the next 10 years.

Route 1 Retail Market Prospects

According to some real estate professionals, the Route 1 Corridor is not currently viewed as a viable retail shopping destination. This is largely due to the existence of the competing retail centers within three to five miles of the corridor. However, RKG believes that corridor population increases, more retailers will become interested in serving this growing population as long as there is land available in locations viable for retail to succeed (high visibility, strong traffic counts, easily accessible to the target customers, etc.).

Assuming 5,721 new housing units are constructed and occupied within proximity to the Route 1 Corridor over the next ten years, RKG projects an increase of $276 million in retail demand from these new households (expressed in 2018 dollars). At this level of household spending, RKG estimates that over 566,000 square feet of new retail space could be supported. These are "order of magnitude" estimates and not all of this retail spending will be captured within the Route 1 Corridor, but the potential does exist. Today, there are very few larger parcels along Route 1 that are suitable for larger retail developments and there are likely limited retail friendly parcels for centers in the 50-150k range.

The retail market, including restaurants and bars, could be the hardest hit industry due to COVID-19. Even a brief shutdown of the economy could cause widespread business failures, particularly among establishments with no e-commerce sales options. Exceptions would include grocery stores, convenience stores, pharmacies and other businesses providing essential goods and services. In many ways COVID is accelerating structural changes in the retail sector that were already underway. Legacy businesses nearing bankruptcy will fail faster; e-commerce and the blending of online and in-person shopping will occur sooner; and restaurants will reevaluate whether full service, in-person dining is sustainable at a price point acceptable to consumers. These changes will mean that vacant retail boxes and lower-performing shopping centers may be more likely to be redeveloped than repurposed, and new retail spaces will be necessary to accommodate growing businesses.

Office Sector Overview (Higher Vacancy)

Like the retail sector, the office inventory in the Howard County/Columbia submarket declined from 11.3 million square feet to 11.2 million between 2013 and 2015. Since 2015, the submarket has increased by 1.2 million square feet, with average office completions per year between 2015 and 2019 almost twice the level between 2013 and 2014. The Route 1 study area, while not a true office employment center, has the potential to increase its office presence in the future if the corridor can be repositioned to attract office users.

In both the submarket and in the Metro area, the office vacancy rates escalated before 2019, rising from 15.2 percent in 2013 to 18.5 percent in 2018. Metro area office vacancies have risen from 16.6 percent to 18.2 percent during the same period. These high vacancies reflect that some existing office may be becoming obsolete or need reinvestment.

During 2013 and 2019, the new office completion, in terms of building square feet, were 1.6 times the total net absorption in the submarket, and 1.8 times in the Metro area. As expected, absorption is lagging new construction, but the submarket is performing similar to the Metro area.

RKG Associates analyzed those employment sectors most likely to generate demand for future office space. These sectors include 1) Information, 2) Finance & Insurance, 3) Real Estate, Rental & Leasing, 4) Professional, Scientific & Tech Services, 5) Management of Companies & Enterprises, 6) Administrative & Support & Waste Management & Remediation Services, and 7) Public Administration. According to EMSI, the total employment in these seven industries in the Howard County/Columbia submarket is equal to 78,980 jobs. It is estimated that 13,632 (17.3 percent) of those jobs are located within the Route 1 Corridor study area.

Route 1 Office Market Prospects

Much of the new office space built within the Route 1 study area has located off the main corridor on larger parcels east of Route 1.

Historically, the Route 1 Corridor has not been conducive to high-quality office development. The area is dominated by industrial, warehouse distribution, industrial flex and other land uses not typically considered attractive and lacks a draw for office development. With this broad mix of uses, the corridor has not produced a location with a concentration of the types of amenities that office users are attracted to such as walking paths, nearby restaurants and transit.

Additionally, the corridor competes with the office market in nearby downtown Columbia and Gateway. However, the corridor's prime location and proximity to I-95 lends itself to new office development if the physical and land use characteristics along the corridor became more conducive for it. In order to achieve this, the character and appearance of potential office locations in the corridor must change over time.

These opportunities are likely to emerge in the future, but they are possible at the right locations where natural amenities are present and adjacent land use impacts would not deter office development. The short-term potential will be limited to individual parcels, but large-scale office development will require the assemblage of larger lots to create a project of scale.

Due to COVID-19, the county's office market has experienced vacancy rates in excess of 18 percent and vacancies could increase further if there are large numbers of business closures. Severe conditions could occur if the shutdown persists beyond the length of most Federal stimulus programs designed to sustain businesses and their workforce. The relocation of office workers to their homes could fundamentally change how companies deploy their employees, which could reduce the demand and need for office space, except for those corporate functions that require team-building and collaboration or other specialized accommodations. Over time, the county may experience office growth because it supports a large white-collar population that works in office settings, but it may be some time before the Rt. 1 Corridor can attract significant office.

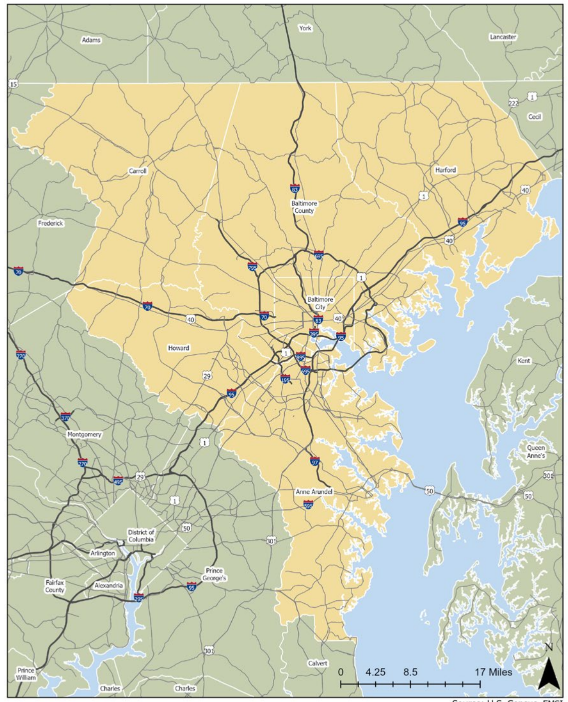
Industrial Sector Overview (Rapid Growth)

Based on EMSI data, RKG Associates estimates that there were roughly 11,214 industrial sector jobs located within the Route 1 study area in 2018. This number accounts for 8.4 percent of the total industrial base in the Baltimore metropolitan area (133,112 jobs), not including warehouse and distribution jobs.

The industrial inventory in the Baltimore metro area has been growing steadily since 2000. The supply

Map 7

Industrial Submarket Baltimore Metropolitan Area



Source: U.S. Census, EMSI

has increased from 127.2 million square feet to 156.8 million square feet. The rate of expansion has been 1.5 percent annually between 2015 and 2019.

Industrial completions in the metro area have been uneven over the past 19 years. Industrial completions in 2014 peaked at roughly 4.7 million square feet and then dropped to 650,000 square feet in 2015. This is typical, as many industrial projects in the Baltimore area have been large structures, some in excess of one million square feet. In 2018 and 2019, new industrial buildings delivered to the market were two million and 2.1 million respectively.

The vacancy rate of the industrial sector fluctuated between 12 percent and 15 percent from 2000 to 2013. However, since 2013, it has been steadily moving downwards from 12.2 percent in 2013 to 7.5 percent in 2019 and is projected to further decline by 2022. The net absorption of industrial space peaked in 2014 at 4.8 million square feet, which aligns closely with the inventory changes.

Route 1 Industrial Market Prospects

The Route 1 Corridor is projected to increase by roughly 1,531 industrial jobs between 2018 and 2028 according to ESMI employment projections. Assuming each industrial employee occupies, on average, 575 square feet of building space, the corridor could expect an additional 800,000 to 900,000 square feet of new building space during that period.

With the limited availability of large industrially-zoned properties, the county should closely manage how this limited resource is developed over time. The goals of retaining industrial land and creating a safe, attractive and higher functioning corridor can often work against each other. PlanHoward 2030 includes policies for protecting industrially zoned land for future job and business growth opportunities to protect a diverse job base (not requiring a college degree) and a diverse property tax base. It recognizes that with Rt.1's location along major east coast transportation routes, the corridors' proximity to BWI and the Maryland Port, that the corridor is positioned to take advantage of continued changes in industrial land uses.

Due to the profound implications from the 2020 COVID pandemic, the industrial market is expected to pause in the short term due to the decreased demand for most goods. Once pandemic related restrictions are permanently lifted, pent up demand for all goods and materials should drive demand for the foreseeable future.

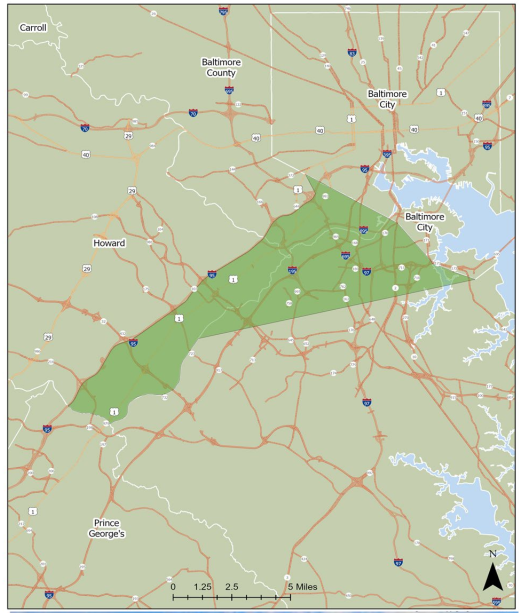
Warehouse/Distribution Sector Overview (Rapid Growth)

RKG estimates that the Route 1 study area added 5 million SF of new warehouse/distribution space between 2000 and 2015, according to Howard County property assessment records. Based on national standards of 1,500 SF of building space per warehouse/distribution worker, it is estimated that this industry added roughly 3,333 new employees in the study area.

Route 1 Warehouse/Distribution Market Prospects

According to EMSI, the Route 1 Corridor is projected to experience an increase of roughly 279

Warehouse/Distribution Submarket US 1/BWI



additional warehouse/distribution jobs between 2018 and 2028. Based on an average of 1,500 SF per warehouse/distribution worker, that may result in approximately 420,000 SF of new building space.

The Route 1 study area is constrained by the lack of available land for large distribution facilities. However, there are hundreds of acres of industrial zoned land utilized by vehicle remarketing service companies adjacent to Dorsey Run Road.

An intense competition for new distribution space is occurring within a 15-mile radius of the Route 1 study area driven by demands in the e-commerce industry. BWI Airport has a robust distribution presence anchored by international air facilities. North of the study area in southern

Baltimore County, over 15 million SF of new warehouse/distribution space will be constructed by 2024 at the Tradepoint Atlantic development, formerly known as Sparrows Point. Regional distribution facilities for Under Armour, Home Depot, Floor & Décor, Federal Express and Amazon are completed.

As a result of the 2020 pandemic, the warehouse/distribution market should experience accelerated growth due to the profound shifts occurring in consumer spending patterns from point-of-sale locations to e-commerce sites. Social distancing requirements have shut down many restaurant and retail operations and could curtail their operations into the future potentially creating opportunities for smaller distribution spaces. Consumers have relied more heavily on e-commerce purchases, in part due to perceptions of increased safety over in-store purchases. The demand for warehousing and distribution space will continue to increase as e-commerce continue to take market share from traditional retailers.

IV. EMPLOYMENT TRENDS

This section analyzes the employment trends in the Route 1 Corridor. RKG obtained the employment cluster data from OnTheMap, a web-based mapping tool developed by the U.S. Census Bureau that shows where workers are employed and where they live, which is based on the 2002-2017 LEHD Origin Destination Employment Statistics (LODES). The data of employment trends by industry is acquired from EMSI, a U.S. labor market analytics and economic data provider

Howard County's employment base largely clusters around the urban centers of Columbia and Ellicott City, as well as along the Route 1 Corridor, east of I-95. Route 1 and I-95 is a major economic corridor linking Washington D.C. to the City of Baltimore.

Between 1970 and 2018, Howard County employment grew by 20.7 percent annually, more than six times the rate of the Baltimore-Washington MSA (3.6 percent). During this period, county employment increased from 22,000 to over 244,000 jobs. This increase is more than twice the rate of population gain (10.4 percent), which speaks to the county's highly desirable regional business location. The Route 1 Corridor accounts for roughly 55,000 jobs, nearly 9,300 jobs classified as wholesale trade and warehouse/distribution. Other large employment sectors include public administration, retail, hospitality and food and beverage places.

Growth Trend Implications

The Route 1 Corridor has a higher share of young families who are being attracted by Howard County's high-quality public education system.

The corridor seems to lack the basic neighborhood amenities such as parks, open spaces and sidewalks and other public recreational facilities that other neighborhoods enjoy. Affordable housing opportunities are also in short supply and should be part of any future redevelopment plan. For example, within the corridor, the strongest growth has occurred recently in the Highway 32-Highway 100 subarea, which is currently characterized by industrial, transportation and auto service land uses that cannot meet the rising demand for more retail, community service, restaurant, recreational and entertainment options. The county should tap into these new demands to prepare for the long-term economic development in the county and the Route 1 Corridor.

V. IMPLICATIONS FOR IMPLEMENTATION

Aided by the vision of the Route 1 Corridor in Howard County this assessment report provides the framework for the transportation and land use assessments which will support the vision of targeted "activity centers" along the corridor where development could be supported in the future.

The following are corridor considerations that should be explored in the general plan update.

Consideration 1:

Target redevelopment opportunities in activity centers to attract private investment

Possible Strategies

a. Identify a series of activity centers based on desired redevelopment sites, the existing road system, current land use, recent catalytic development and market demand.

b. Cluster future employment uses and redevelopment densities to build transit supportive densities.

c. Plan and encourage the relocation of certain Route 1 land uses to alternative business sites off the corridor.

d. Incentivize land assemblage to create meaningful development/redevelopment with appropriate densities, public spaces, parking and other site amenities.

Consideration 2.

Create a critical mass of retail and service activity, targeting activity centers

Possible Strategies

a. Develop strategies to attract the retail and service activity current being met outside the RT.1 market area.

b. Provide opportunities for development of special commercial areas through zoning tools. Such facilities may include consolidated food truck areas, food halls, etc. to celebrate the identity of the Route 1 Corridor for food distribution facilities.

Consideration 3.

Support and retain the existing industrial and manufacturing base.

Possible Strategies

a. Promote development of new format of higher-quality light industrial and flex spaces within the existing industrial sites along Route 1, through guidelines, zoning updates and county incentives.
b. Work with Office of Workforce Development to develop a workforce development strategic Plan.
c. Develop and require more effective buffers between new residential developments and existing manufacturing.

Consideration 4.

Identify possible small business grants and programs for property owners in the corridor.

Possible Strategies

a. Modify, expand and extend the County's Route 1 Tax Credit program to entice more building renovations.

b. Encourage HCEDA to define the economic development goals for the corridor to include existing businesses (similar to Gateway/DTC).

c. Explore or study other tax credit programs for building rehabilitation or redevelopment.

d. Host a Howard County Procurement Technical Assistance Program (PTAP) for existing Route 1 businesses to receive counseling on competing for government contracts similar to the program done by the Baltimore Development Corporation.

e. Partner with MEDCO to bring new financing and development tools to the corridor.

Consideration 5.

Capitalize on the expansion of office and flex space to accommodate cybersecurity and information systems companies.

Possible Strategies

a. Encourage HCEDA to define the cyber and information technology goals for the corridor.

b. Work with the Office of Workforce Development to develop a cyber and IT workforce development strategic Plan.

Consideration 6.

Improve the housing to job ratio in the corridor.

Possible Strategies

a. Encourage the rehabilitation of existing housing.

b. Encourage the construction of new housing developments of various types, densities and price points at targeted locations along the Route 1 Corridor.

Consideration 7.

Reduce blight and poorly maintained properties.

Possible Strategies

a. Consider flexible zoning districts and stricter non-conforming use regulations to phase out obsolete/legacy land ses.

b. Establish a package of incentives to encourage the redevelopment of blighted or underutilized properties along the Route 1 Corridor.

c. Create a more coordinated code enforcement and policing strategy to address offending property owners operating in violation of local ordinances.

d. Work with offending property and business owners to address violations and provide tax credit assistance if owners want to rehabilitate their properties.

Questions for the General Plan Update to Answer

Housing

Over the next sixteen years, PlanHoward 2030 projections include 3,750 new apartment units in the Route 1 Corridor, accounting for 56.4 percent of all new housing units during the period. With another 2,891 units of single-family detached and attached housing, the total new housing could equal 6,641 new units.

1. ***With the job growth projected for the corridor, how do we get more housing to balance the housing to jobs ratio without hurting the industrial and warehousing market?***
2. ***How do we address affordable and workforce housing needs within the corridor?***
3. ***What is the current and future demand for housing and what type?***
4. ***Does residential development threaten the economic role of the Route 1 Corridor? If not, where should it be located and what form should it take?***

Retail

Assuming 5,721 new housing units are constructed and occupied within proximity to the Route 1 Corridor over the next ten years, RKG projects an increase of $276 million in retail demand from these new households (expressed in 2018 dollars). At this level of household spending, RKG estimates that over 566,000 square feet of new retail space could be supported. These are “order of magnitude” estimates and not all of this retail spending will be captured within the Route 1 Corridor, but the potential does exist. Today, there are very few larger parcels along Route 1 that are suitable for larger retail developments.

1. ***What scale of retail would best serve the corridor (i.e. large scale, community scale, nodal-serving, etc.)?***
2. ***How much commercial/retail space can be supported and where, and what form should it take?***
3. ***Should commercial/retail development be clustered and if so can it stand alone or need support from mixed-use residential development?***

Office

Much of the new office space built within the Route 1 study area has located off the main corridor on larger parcels east of Route 1. Historically, the Route 1 Corridor has not been conducive to high-quality office development. The non-residential development in the area is dominated by industrial, warehouse/ distribution, and industrial flex. However, the corridor’s prime location and close proximity to I-95 could lend itself to new office development. A high-quality office/business park development would be consistent with Howard County’s workforce, which is largely comprised of white-collar professionals and would add more diverse and higher-paying employment options along the Route 1 Corridor.

1. ***Is there a large-scale office market such as a high-quality office/business park development on Route 1?***
2. ***What will the office market look like in a post-COVID world?***
3. ***What existing and/or emerging industries play an important role in the corridor? If so, how should they affect land use decisions?***

Industrial

The Route 1 Corridor is projected to increase by roughly 1,531 industrial jobs between 2018 and 2028 according to ESMI employment projections. Assuming each industrial employee occupies, on average, 575 square feet of building space, the corridor could expect an additional 800,000 to 900,000 square feet of new building space during that period.

1. ***Where along the corridor should the county prioritize industrial preservation needs be considered?***

With the limited availability of large industrially-zoned properties, the county should closely manage how this limited resource is developed over time. However, in order for the Route 1 Corridor to redevelop, industrial uses may not be compatible with the community's redevelopment goals to create a safe, functional and higher value mixed-use corridor.

1. ***How do we encourage industrial compatibility with the new residential development?***

Warehouse

According to EMSI, the Route 1 Corridor is projected to experience an increase of roughly 279 additional warehouse/distribution jobs between 2018 and 2028. Based on an average of 1,500 SF per warehouse/distribution worker, that may result in approximately 420,000 SF of new building space.

1. ***Should the county prioritize warehouse/ distribution uses? If so, how should it be best accommodated along the corridor?***

An intense competition for new distribution space is occurring within a 15-mile radius of the Route 1 study area driven by demands in the e-commerce industry. BWI Airport has a robust distribution presence anchored by international air facilities. North of the study area in southern Baltimore county, over 15 million SF of new warehouse/ distribution space will be constructed by 2024 at the Tradepoint Atlantic development, formerly known as Sparrows Point. Regional distribution facilities for Under Armour, Home Depot, Floor & Décor, Federal Express and Amazon are completed. The Route 1 study area is somewhat constrained by the lack of available land for large distribution facilities. However, there are hundreds of acres of industrial zoned land adjacent to Dorsey Run Road utilized by vehicle remarketing service companies that provide an intermediary service for used car sales.

Remaining Questions for General Plan

1. ***What is the potential 20-year outlook for the underutilized land in the corridor?***
2. ***How does the county maximize development potential in greenfield areas, major industrial parks, mixed-use opportunity sites?***
3. ***What are successful examples from around the country that can be used as potential templates for development on Route 1?***
4. ***What revitalization tools, including financial incentive programs, could augment or supplant the current tax credit program?***
5. ***How can the county best facilitate change using various funding strategies and tools?***
6. ***What partnerships and organizational changes should be explored to help realize a vital future for Route 1?***
7. ***What kinds of changes to zoning regulations would address underutilized properties, while effectuating the long terms redevelop goals for the corridor?***