

# UMD INFORMATION SCIENCE FISCAL ANALYSIS

## Fiscal Impact Analysis

For the town of New Windsor, Maryland

April 23, 2021



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Dear New Windsor Town Leadership:

The students from the University of Maryland, College Park and their Subject Matter Expert from BAE Urban Economics, Inc. (BAE), are very pleased to present to you the Fiscal Impact Analysis for the intended capital improvement upgrades to New Windsor. We would also like to express our thanks to the Town Manager, Mr. Dye, for helping us gather necessary information needed to complete the report, and all other members of New Windsor who had input for the report.

Sincerely,

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## INTRODUCTION

The town of New Windsor, Maryland is currently seeking to install upgrades to the infrastructure around their town; accomplishing this would cost no small sum of money. Based on some preliminary projections, there is potential for growth over the next 20-30 years, and it is important to consider that this growth could bring in new revenue.

The town of New Windsor has commissioned, Seniors in the Information Science program at the University of Maryland (UMD), through the PALS program, to form a team of students capable of doing so.

Through collaboration between the UMD team, the New Windsor Town Mayor and Council, the PALS program, and the subject matter expert from BAE Urban Economics, the UMD team seeks to provide the town of New Windsor with a Fiscal Impact Analysis. The analysis produced will give projections on the expected impact of growth in the town, and if it will offset the costs of planned infrastructure improvements.

## PROJECT DESCRIPTION

Our team of students at UMD, under the guidance of our subject matter expert Bilal Ali, are seeking to provide the town of New Windsor, Maryland with a fiscal impact analysis. This entails a report showing how growth will impact New Windsor and how it may be able to offset the costs of the infrastructure upgrades the town has planned in the future. Our team has figured out three different growth scenarios based upon BMC projection data as well as historical data to show how varying levels of growth each affect the fiscal impact. In addition to our growth scenarios our team has been given three priority levels for different projects, thanks to Mr. Dye for supplying us with the priority levels, and applied these priority levels to each different growth scenario the town may have, so that we may see how completing only top level priority projects affects the town budget versus how completing priority one and two projects or all priority levels will affect the town budget.

## METHODOLOGY

After meeting with our subject matter expert, our team knew where we needed to get started on the project and that was with performing and existing conditions analysis on the town so we could get a better grip on understanding what the town is like right now in many of its aspects, such as its various demographic data. To acquire this data our team took to Esri and Redfin, where we were able to extract meaningful data on the demographics and housing market within New Windsor, Carroll County, and the Baltimore Metropolitan Council, or Baltimore region we will call it. Using all this data we compared how all of three of these regions stacked up to each other.

To continue, our team then used the data extracted during the existing conditions analysis to create our three growth scenarios based upon the projections provided to us. Our three projections being based on Baltimore regions projections for Carroll County, New Windsor itself, as well as New Windsor's own historical growth rate, and applying each of these projections to New Windsor's current population from 2020. It is important to note, however, that these three scenarios will only come to fruition should the town want them to, meaning these scenarios are not likely to happen on their own, but the town should seek to make changes that will inspire growth to meet these projected growth scenarios, which are solutions to their problems with their budget and cost of infrastructure upgrades.

Proceeding, our team developed the Fiscal model to be used in our Fiscal Impact Analysis, which was based upon the 2021 Fiscal Year Budget for New Windsor. We listed out all the costs, as well as which ones were variable, and calculated the average cost per household. From here we added in all the revenues, some of which had to be independently calculated, and applied our growth scenarios to the average cost and revenue estimated for evaluation on the fiscal impact over the next 25 years. To finish, three debt scenarios were also developed to show how New Windsor may want to approach their capital improvement plans, and these scenarios were compared to the fiscal impact scenarios to show a range of outcomes.

## EXISTING CONDITIONS ANALYSIS AND GROWTH SCENARIOS

### DEMOGRAPHIC OVERVIEW (AND RELEVANCE TO REPORT)

#### SPECIFIC METHODOLOGY

To better understand New Windsor's existing conditions, we aggregated a wide array of demographic and socioeconomic data in several different categories and compared New Windsor's findings to Carroll County and the Baltimore region.

The town's revenue is significantly influenced by population growth, and an increase in residential population will yield greater revenue, offsetting the financial burden from the capital improvements. Our existing conditions serve as a foundation powering our three growth scenarios, particularly growth scenario one which is dependent on the historical growth rate for the town. By analyzing existing conditions, we can identify demographic and market trends that can provide insight into methods the town can leverage to drive population growth and increase revenue.

#### POPULATION

New Windsor contains a relatively small population with above-average annual growth in the region. With a population of 1,396 in 2010 and 1,482 in 2020, New Windsor saw a 6% growth in population, higher than in Carroll County (3%) or BMC region (5%) as a whole.

TABLE 1: POPULATION CHANGE, 2010-2020

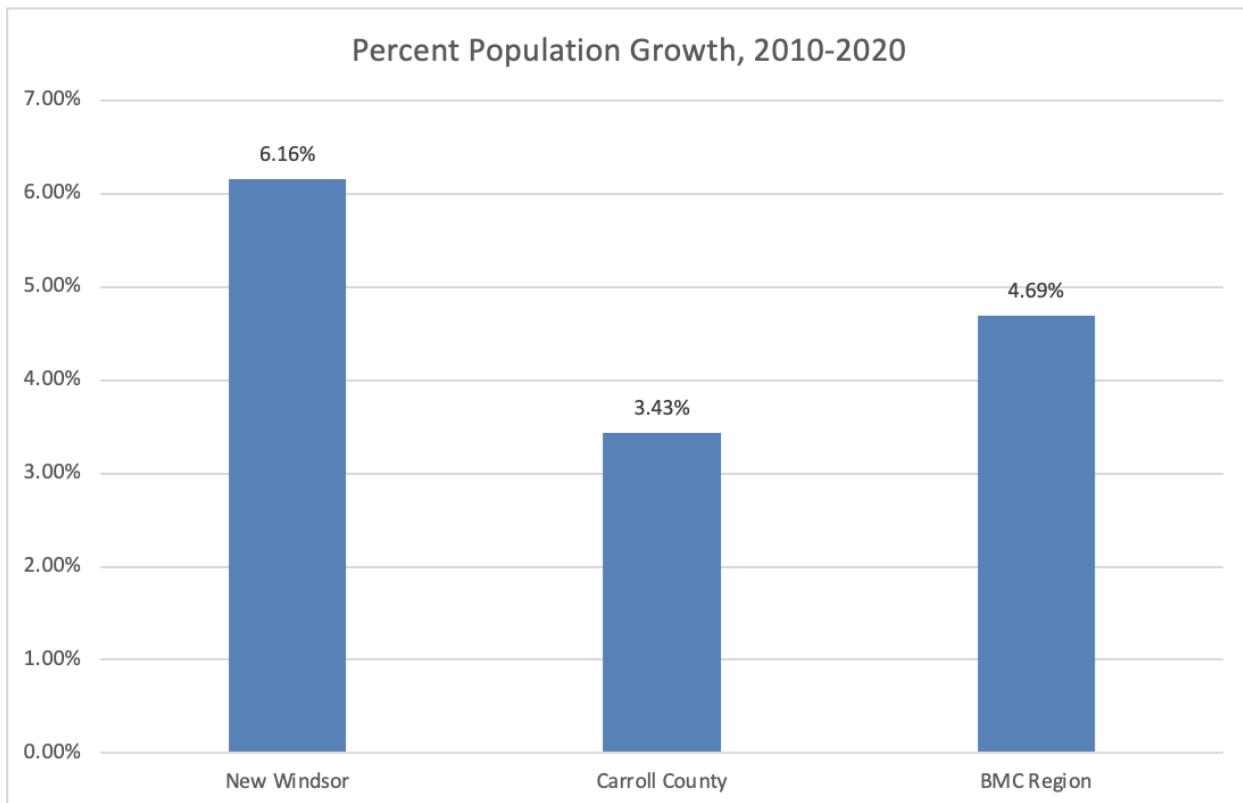
Population	2010	2020	Change 2010-2020		
			Number	Percent	Annual Change
New Windsor	1,396	1,482	86	6.2%	0.6%
Carroll County	167,134	172,874	5,740	3.4%	0.3%
BMC Region	2,763,799	2,893,368	129,569	4.7%	0.5%

Source: Esri Business Analyst, BAE 2021

2010 Data Sourced from U.S Census

2020 Data Sourced from Esri

FIGURE 1: PERCENT POPULATION GROWTH, 2010-2020



#### TOTAL HOUSEHOLDS

Between 2010 and 2020, New Windsor saw a high increase in total households relative to Carroll County and the Baltimore region. New Windsor saw an increase of 43 new total households, corresponding to an 8% increase in this decade. This is higher than the 4% growth in households in Carroll County and the 4.26% increase in the BMC. This historical growth rate for New Windsor is the basis of our first growth scenario.

**TABLE 2: TOTAL HOUSEHOLDS CHANGE, 2010-2020**

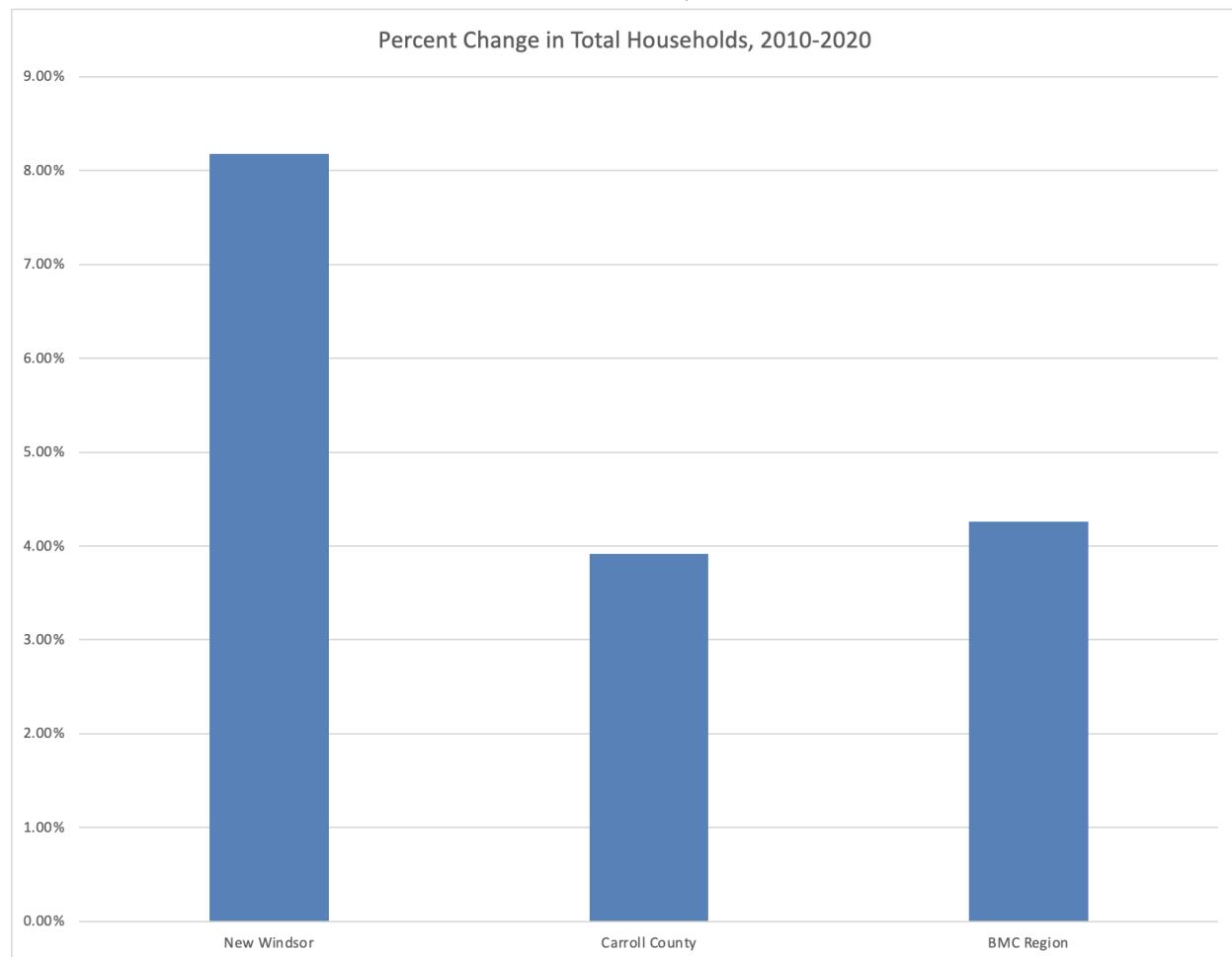
<b>Total Households</b>	<b>2010</b>	<b>2020</b>	<b>Change 2010-2020</b>		
			<b>Number</b>	<b>Percent</b>	<b>Annual Change</b>
New Windsor	526	569	43	8.2%	0.8%
Carroll County	59,786	62,125	2,339	3.9%	0.4%
BMC Region	1,057,616	1,102,659	45,043	4.3%	0.4%

Source: Esri Business Analyst, BAE 2021

2010 Data Sourced from U.S Census

2020 Data Sourced from Esri

FIGURE 2: PERCENT CHANGE IN TOTAL HOUSEHOLDS, 2010-2020



#### AVERAGE HOUSEHOLD SIZE

The average household size for the town of New Windsor decreased slightly, with the average household size decreasing from 2.65 in 2010 to 2.60 in 2020, indicating a slight trend towards smaller households in the town.

TABLE 3: AVERAGE HOUSEHOLD SIZE CHANGE, 2010-2020

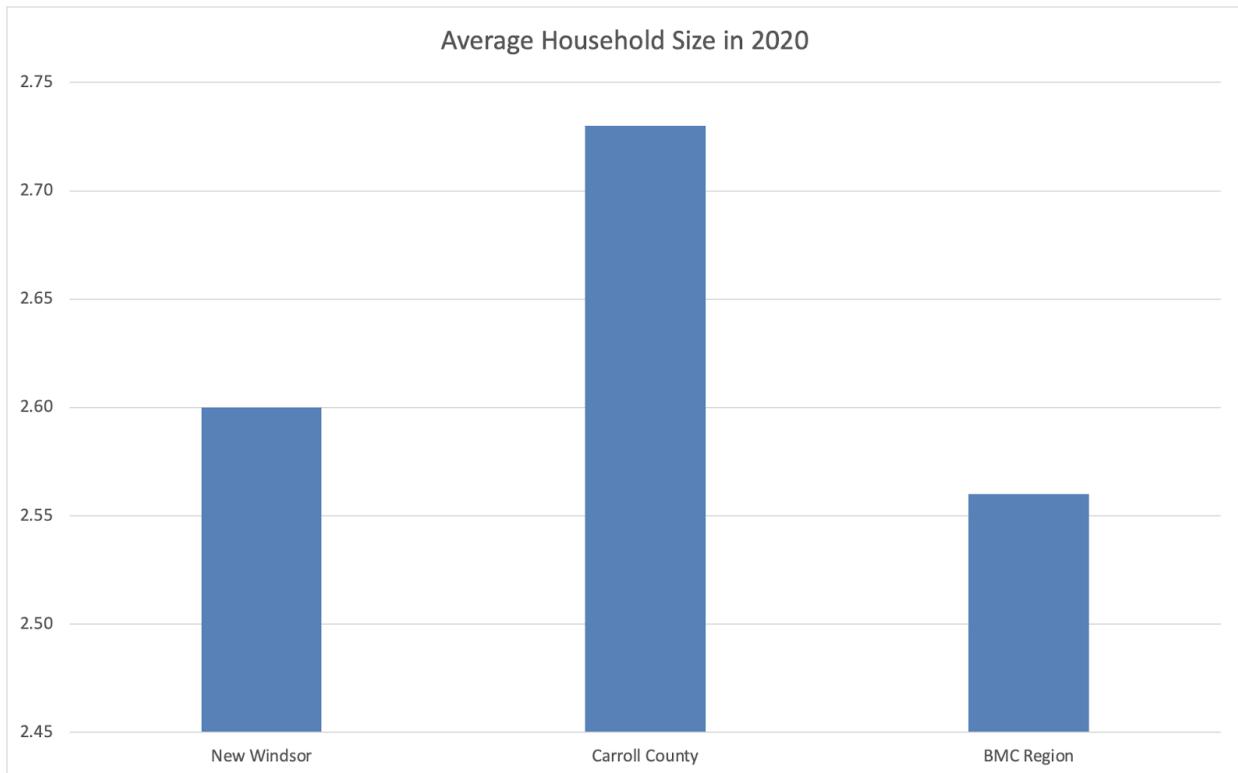
Average Household Size	2010	2020	Change 2010-2020		Annual Change
			Number	Percent	
New Windsor	2.65	2.60	-0.05	-1.89%	-0.19%
Carroll County	2.74	2.73	-0.01	-0.36%	-0.04%
BMC Region	2.55	2.56	0.01	0.39%	0.04%

Source: Esri Business Analyst, BAE 2021

2010 Data Sourced from U.S Census

2020 Data Sourced from Esri

FIGURE 3: AVERAGE HOUSEHOLD SIZE, 2020



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### AGE DISTRIBUTION

The current age distribution dynamics in New Windsor provide critical insight into market trends. The rapid growth in individuals between the ages of 65-79 suggests that New Windsor has features that are appealing to seniors. The town can leverage this finding to build upon these attributes that are attractive to seniors, thereby attracting more residents and building a larger population.

Between 2010 and 2020, New Windsor saw a rapid growth in residents aged 65-79 with a 76% increase. This is significantly higher than in Carroll County (50.54%) and the Baltimore Region (48.20%). Similarly, the town saw a relatively small contraction in the number of residents aged 35-49 over this ten-year period, with a decrease of 17%.

These findings suggest that the town is appealing to seniors, and New Windsor can utilize this to increase its population by investing in the attributes that seniors find attractive in the town. Similarly, the contraction in individuals aged 35-49 suggests that there is an opportunity for growth in this cohort, which can be especially beneficial given the fact that this age group has higher spending power than seniors.

**TABLE 4: AGE DISTRIBUTION IN NEW WINDSOR, 2010-2020**

New Windsor	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
0-19	408	29.6%	319	21.6%	-89	-21.8%
20-34	232	16.8%	278	18.8%	46	19.8%
35-49	351	25.5%	292	19.8%	-59	-16.8%
50-64	221	16.0%	322	21.8%	101	45.7%
65-79	105	7.6%	185	12.5%	80	76.2%
80+	62	4.5%	82	5.5%	20	32.3%
Total	1,379	100.0%	1,478	100.0%	99	7.2%

**TABLE 5: AGE DISTRIBUTION IN CARROLL COUNTY, 2010-2020**

Carroll County	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
0-19	43,628	26.4%	40,738	23.6%	-2,890	-6.6%
20-34	24,815	15.0%	29,769	17.2%	4,954	20.0%
35-49	39,380	23.9%	31,889	18.4%	-7,491	-19.0%
50-64	35,376	21.4%	39,609	22.9%	4,233	12.0%
65-79	15,601	9.5%	23,486	13.6%	7,885	50.5%
80+	6,208	3.8%	7,383	4.3%	1,175	18.9%
Total	165,008	100.0%	172,874	100.0%	7,866	4.8%

**TABLE 6: AGE DISTRIBUTION IN THE BMC REGION, 2010-2020**

BMC Region	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
0-19	675,948	24.8%	687,855	23.8%	11,907	1.8%
20-34	563,208	20.7%	587,721	20.3%	24,513	4.4%
35-49	589,264	21.6%	547,950	18.9%	-41,314	-7.0%
50-64	548,348	20.1%	585,132	20.2%	36,784	6.7%
65-79	247,117	9.1%	366,219	12.7%	119,102	48.2%
80+	100,128	3.7%	118,491	4.1%	18,363	18.3%
Total	2,724,013	100.0%	2,893,368	100.0%	169,355	6.2%

Source: 2010 data from American Census Survey, 2020 data from Esri Business Analyst

FIGURE 4: NEW WINDSOR AGE DISTRIBUTION, 2020

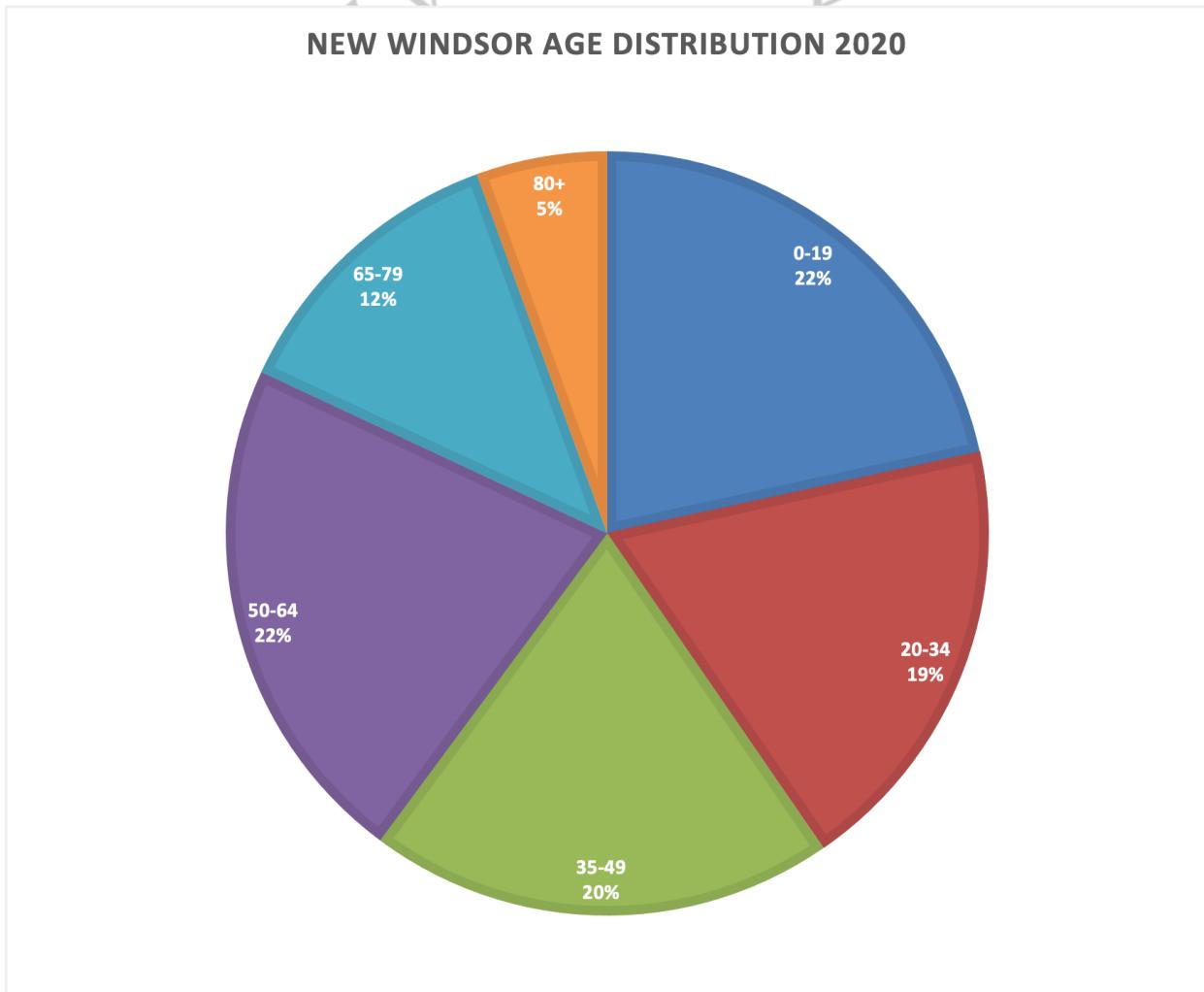
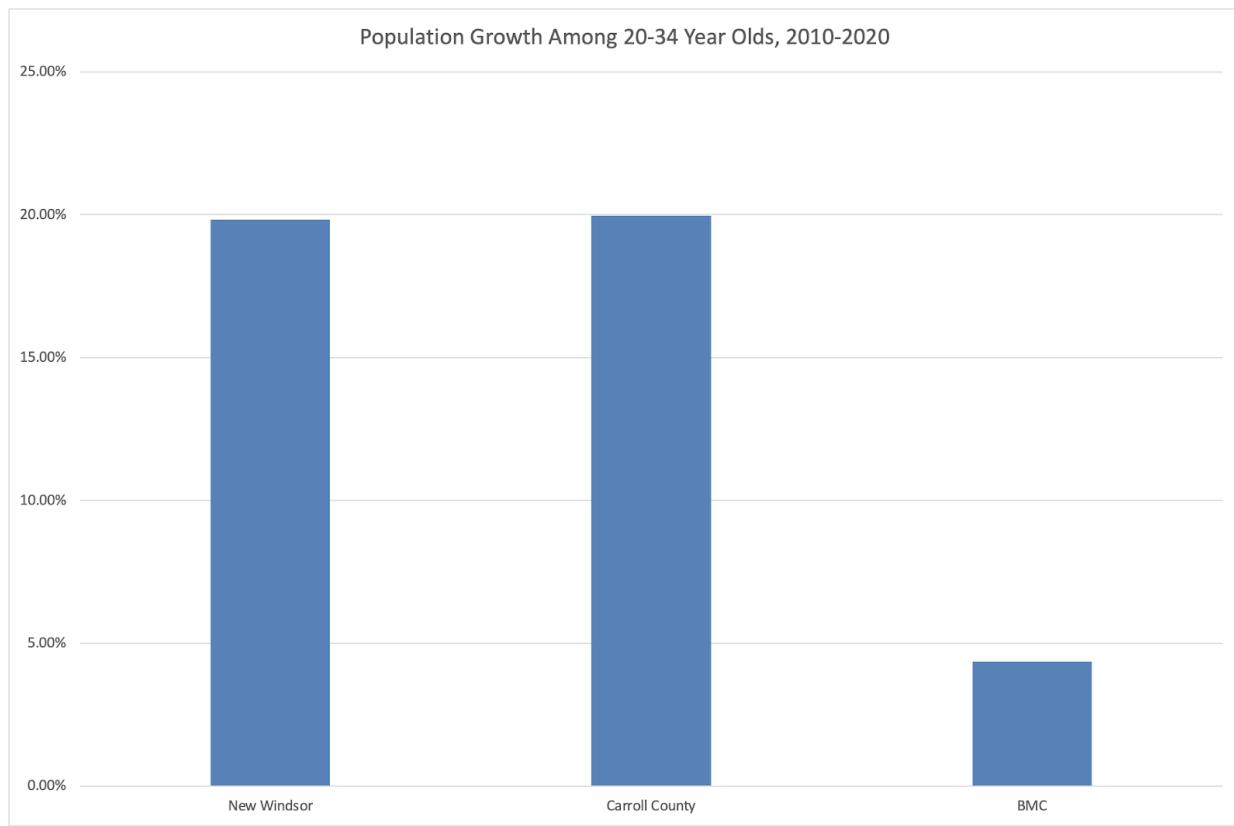


FIGURE 5: POPULATION GROWTH AMONG 20-34 YEAR OLDS, 2010-2020



#### RACE AND ETHNICITY

New Windsor has not seen much change in the racial demographic distribution over the past 10 years, apart from the Hispanic community, which has seen significant growth at 117% over the past ten years. However, this statistic still only represents a small proportion of the town population. The ethnic makeup in Carroll County and the Baltimore region has remained relatively stable over the course of the past ten years.

TABLE 7: RACE AND ETHNICITY DISTRIBUTION IN NEW WINDSOR, 2010-2020

New Windsor	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
Hispanic	23	1.6%	50	3.4%	27	117.4%
White	1,288	92.3%	1,319	89.0%	31	2.4%
Black/African American	54	3.9%	62	4.2%	8	14.8%
American Indian	1	0.1%	1	0.1%	0	0.0%
Asian	15	1.1%	16	1.1%	1	6.7%
Pacific Islander	6	0.4%	7	0.5%	1	16.7%
Two or more races	26	1.9%	27	1.8%	1	3.8%
Total	1,396		1,482			

2010 Source: American Census Survey

2020 Source: Esri Business Analyst

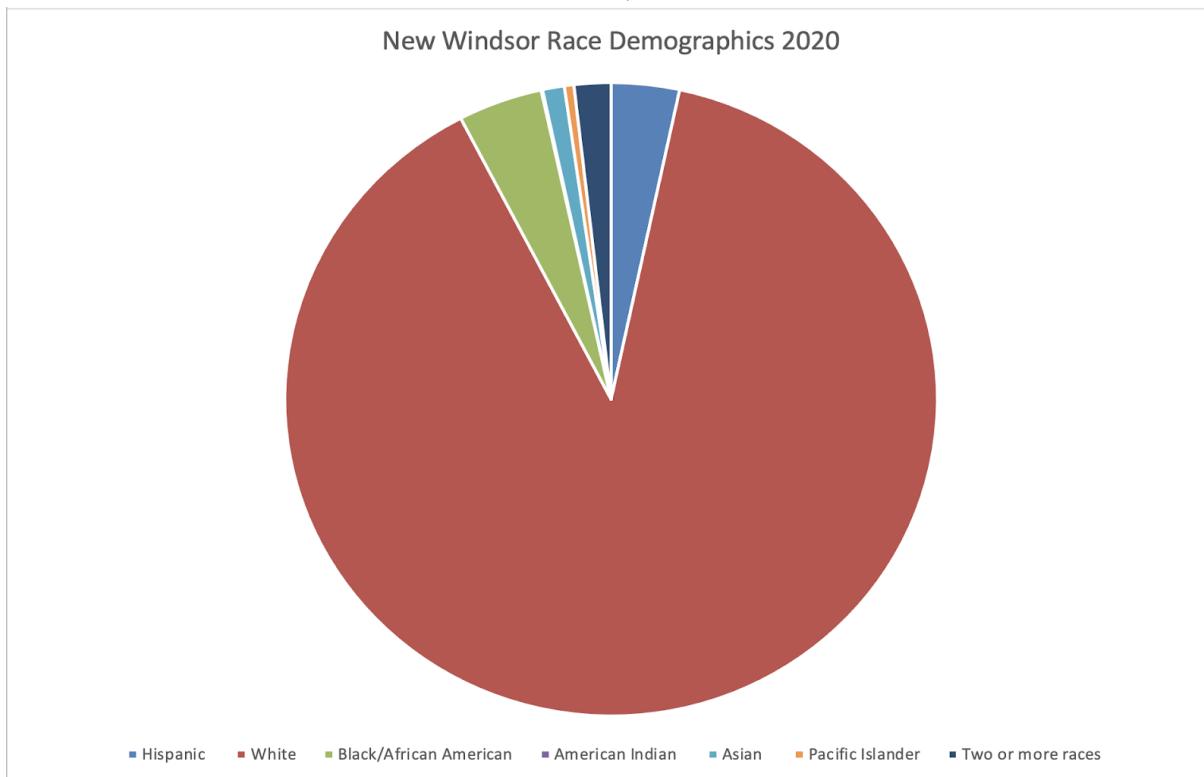
TABLE 8: RACE AND ETHNICITY DISTRIBUTION IN CARROLL COUNTY, 2010-2020

Carroll County	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
Hispanic	4,363	2.6%	7,114	4.1%	2,751	63.1%
White	155,282	91.2%	151,700	87.8%	-3,582	-2.3%
Black/African American	5,332	3.1%	6,499	3.8%	1,167	21.9%
American Indian	328	0.2%	313	0.2%	-15	-4.6%
Asian	2,418	1.4%	3,595	2.1%	1,177	48.7%
Pacific Islander	56	0.0%	124	0.1%	68	121.4%
Two or more races	2,519	1.5%	3,374	2.0%	855	33.9%
Total	170,298		172,874			

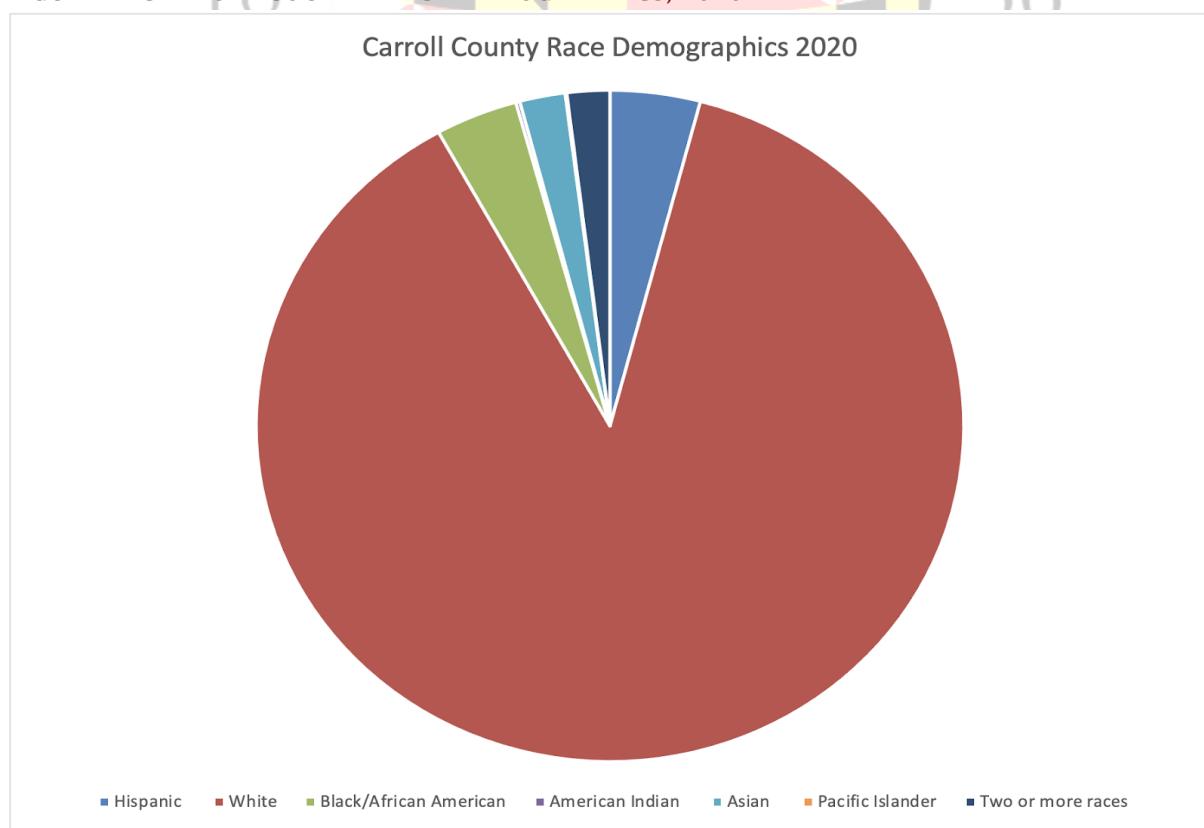
TABLE 9: RACE AND ETHNICITY DISTRIBUTION IN THE BMC REGION, 2010-2020

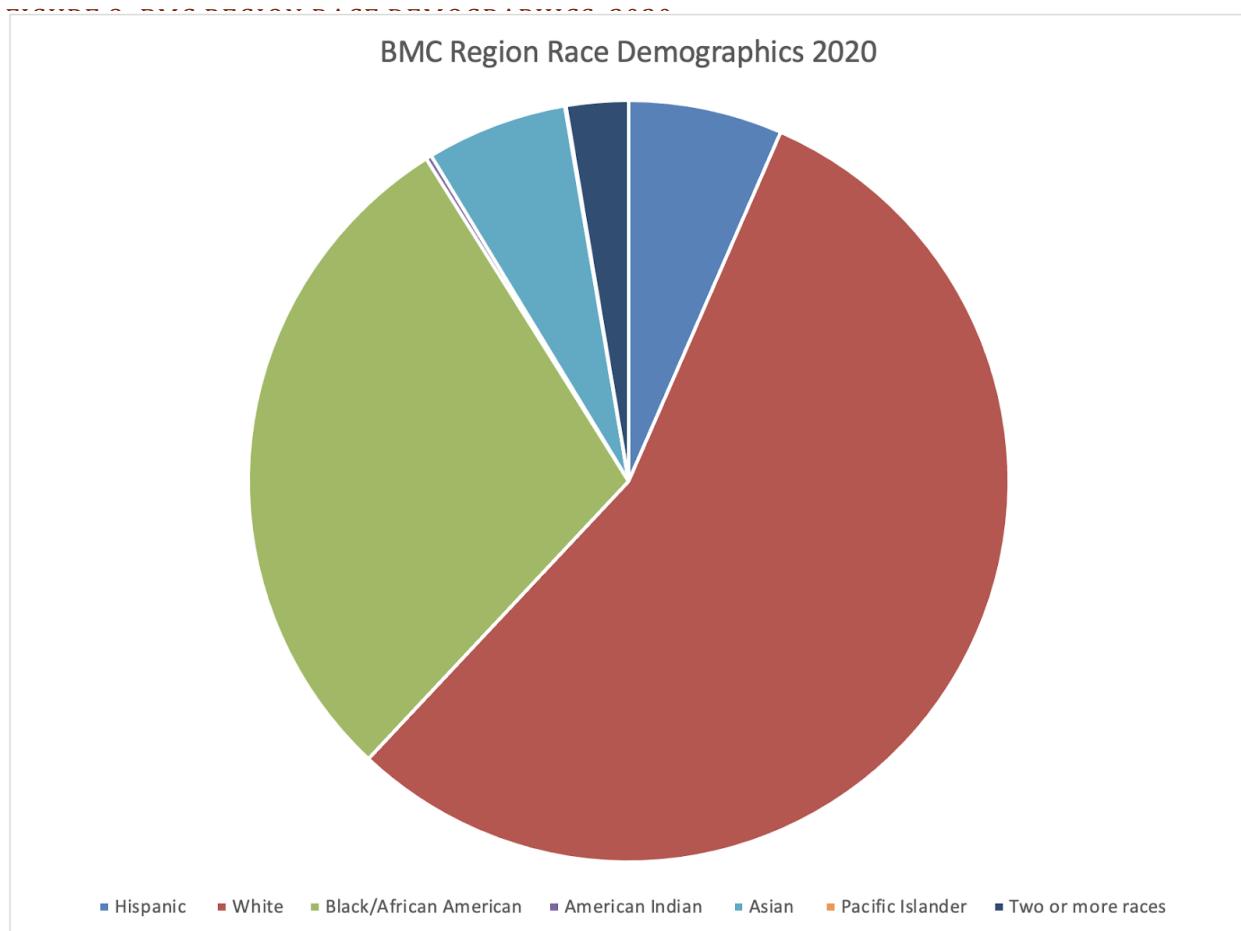
BMC Region	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
Hispanic	125,709	4.5%	189,176	6.5%	63,467	50.5%
White	1,732,228	62.7%	1,601,700	55.4%	-130,528	-7.5%
Black/African American	781,865	28.3%	839,847	29.0%	57,982	7.4%
American Indian	8,662	0.3%	7,035	0.2%	-1,627	-18.8%
Asian	123,539	4.5%	173,249	6.0%	49,710	40.2%
Pacific Islander	1,503	0.1%	1,449	0.1%	-54	-3.6%
Two or more races	69,011	2.5%	76,230	2.6%	7,219	10.5%
Total	2,763,799		2,893,368			

FIGURE 6: NEW WINDSOR RACE DEMOGRAPHICS, 2020



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FIGURE 7: CARROLL COUNTY RACE DEMOGRAPHICS, 2020





## INCOME

Carroll County and the Baltimore region have seen an increase in median income. This is especially true of Carroll County, which saw a significant increase in its median income. This growth suggests an opportunity for New Windsor, as it can leverage the increase in income in Carroll County to attract higher-income earners if it offers products tailored to this group.

Between 2010 and 2020, New Windsor saw a 3% decrease in median income. Meanwhile, Carroll County saw a 20% increase in its median income, while the Baltimore region saw a 7% increase. Despite this, New Windsor remains quite affluent, with income earners in the \$100,000-\$149,000 bracket being the largest cohort in the town.

The decrease in New Windsor's median income suggests that the town is an outlier relative to its surrounding regions and presents an opportunity to capture the higher income earners in Carroll County. If New Windsor presents a product tailored to the higher-income cohort, the town can capture a significant proportion of individuals in this demographic, thereby benefiting from an increased population with a higher spending power. Furthermore, the decrease in median income in New Windsor may be due to the increase in the senior population, as this segment is often on limited income.

TABLE 10: CATEGORICAL INCOME DISTRIBUTION, 2020

Categorical Incomes	New Windsor		Carroll County		BMC	
	Number	Percent	Number	Percent	Number	Percent
Less than \$15,000	43	7.6%	3,774	6.1%	97,692	8.9%
\$15,000 - \$24,999	21	3.7%	3,060	4.9%	65,108	5.9%
\$25,000 - \$34,999	33	5.8%	3,174	5.1%	64,710	5.9%
\$35,000 - \$49,999	61	10.7%	4,801	7.7%	109,618	9.9%
\$50,000 - \$74,999	95	16.7%	8,311	13.4%	173,020	15.7%
\$75,000 - \$99,999	117	20.6%	8,431	13.6%	144,850	13.1%
\$100,000 - \$149,000	125	22.0%	14,329	23.1%	203,742	18.5%
\$150,000 - \$199,999	41	7.2%	8,747	14.1%	112,618	10.2%
\$200,000 or greater	33	5.8%	7,498	12.1%	131,237	11.9%

2010 Source: ACS | 2020 Source: Esri Business Analyst

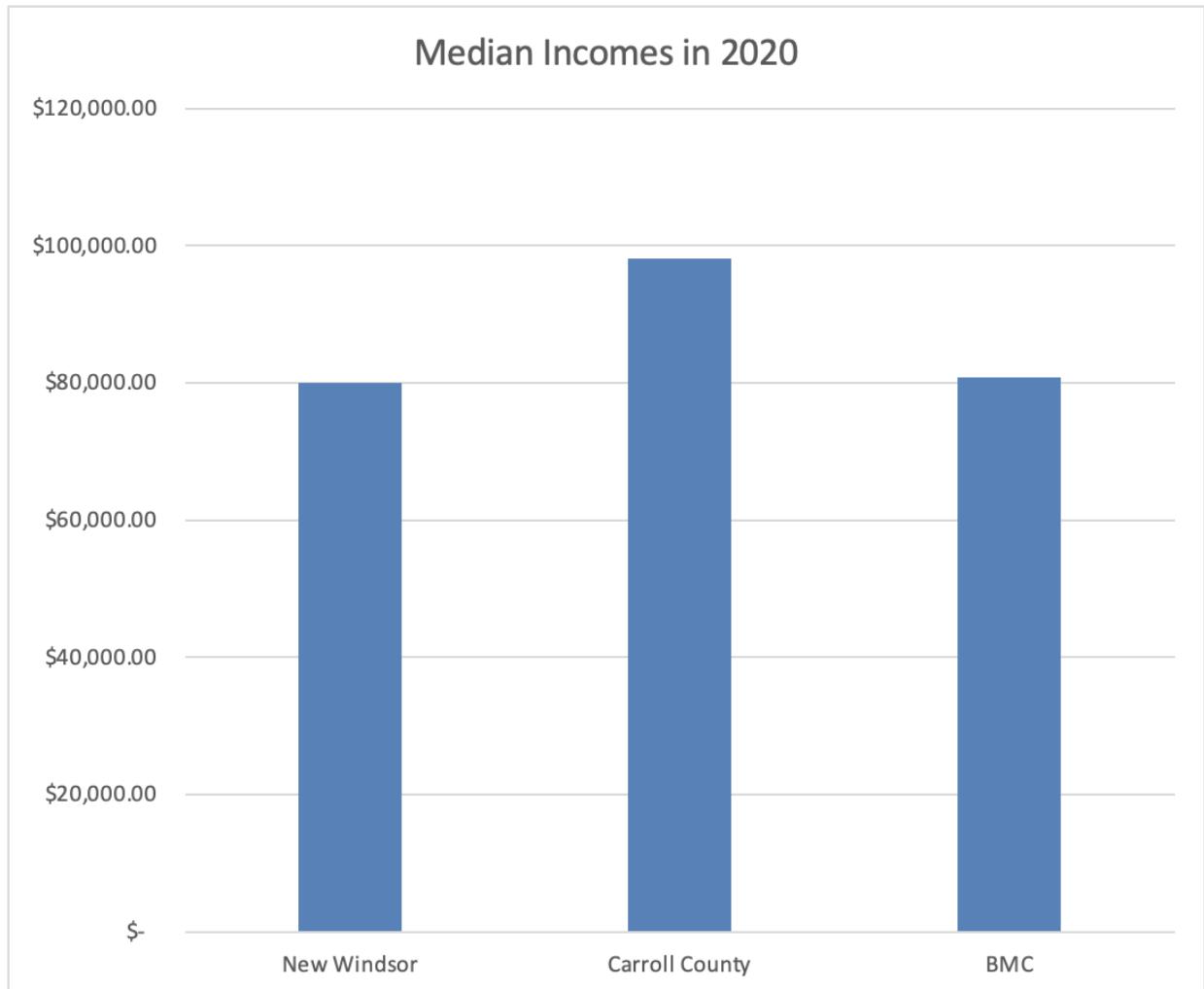
Median Incomes	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
New Windsor	\$ 82,841		\$ 80,063		\$ (2,778)	-3.4%
Carroll County	\$ 81,621		\$ 98,145		\$ 16,524	20.2%
BMC	\$ 75,686		\$ 80,750		\$ 5,064	6.7%

FIGURE 9: INCOME DISTRIBUTION IN NEW WINDSOR, 2020



TABLE 11: MEDIAN INCOMES, 2010-2020

FIGURE 10: MEDIAN INCOMES, 2020



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## VACANCY

New Windsor saw a relatively high increase in renter-occupied units over the past ten years, while also seeing an increase in the number of vacant properties.

Between 2010 and 2020, the proportion of occupied households in New Windsor grew by 8%, while the proportion of renter-occupied households grew at 24%, suggesting a significant increase in the number of residents renting out their housing units for additional income. Meanwhile, the number of vacant properties increased by 15%, less than the rate increase in Carroll County (20%) and slightly higher than in the Baltimore Region (12%).

The relatively high renter-occupied proportion in the town suggests that residents are seeking additional income. However, the mentioned increase in vacancy rate is not a major concern due to similar trends being observed in Carroll County and the Baltimore region. It is important to note that our growth projections do not consider vacant properties. All housing units are expected to be filled. Therefore, are numbers for the number of housing units that need to be built may be underestimates.

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TABLE 12: VACANT PROPERTIES IN NEW WINDSOR, 2010-2020

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New Windsor	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
<b>Occupied</b>	526	92.9%	569	92.5%	43	8.2%
<b>Owner-Occupied</b>	392	69.3%	402	65.4%	10	2.6%
<b>Renter-Occupied</b>	134	23.7%	167	27.2%	33	24.6%
<b>Vacant</b>	40	7.1%	46	7.5%	6	15.0%
<b>Total</b>	566		615		49	8.66%

2010 Data: ACS

2020 Data: Esri Business Analyst

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TABLE 13: VACANT PROPERTIES IN CARROLL COUNTY, 2010-2020

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Carroll County	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
<b>Occupied</b>	59,786	95.8%	62,125	95.4%	2,339	3.9%
<b>Owner-Occupied</b>	49,028	78.6%	49,182	75.5%	154	0.3%
<b>Renter-Occupied</b>	10,758	17.2%	12,943	19.9%	2,185	20.3%
<b>Vacant</b>	2,620	4.2%	3,017	4.6%	397	15.2%
<b>Total</b>	62,406		65,142		2,736	4.38%

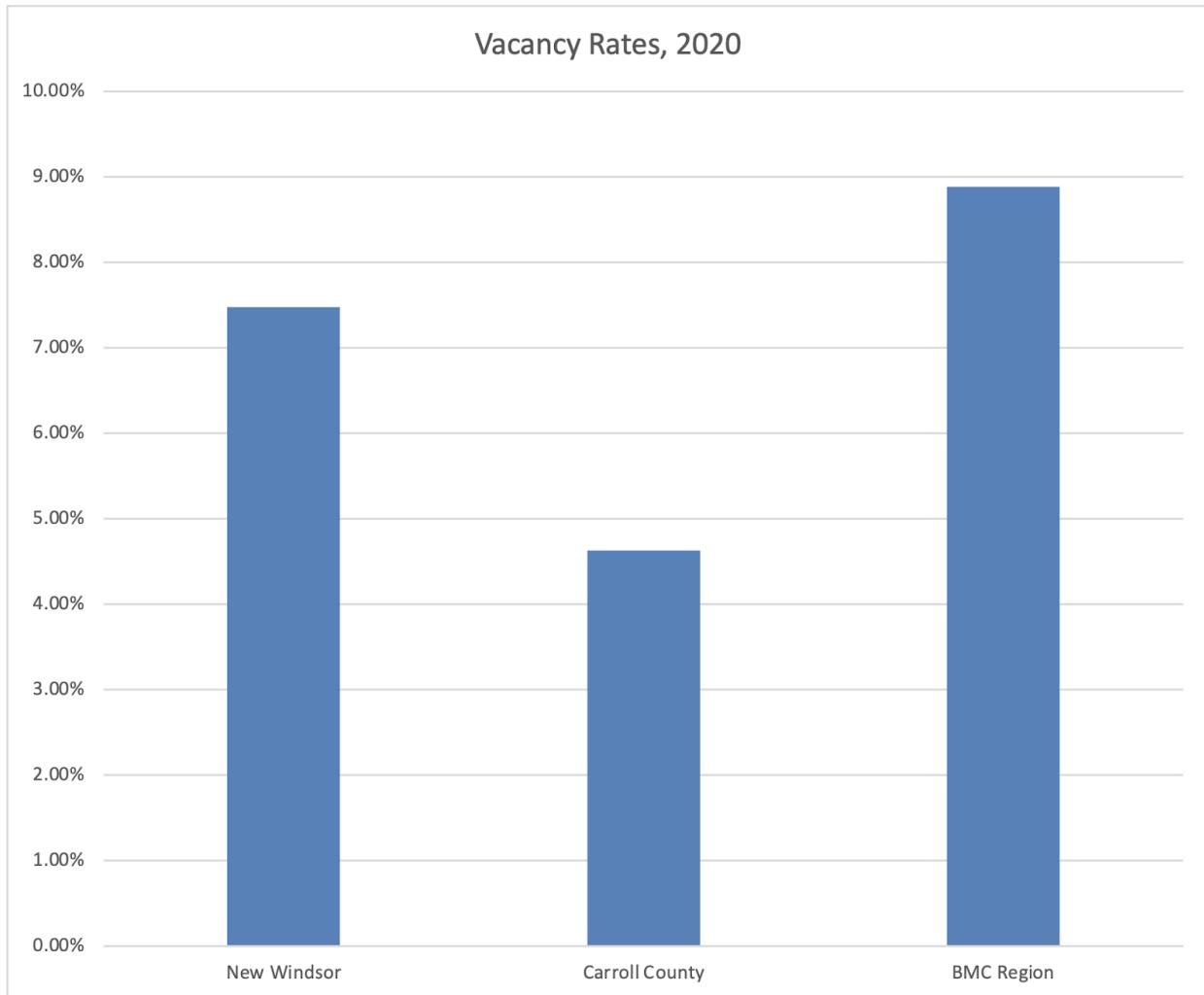
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TABLE 14: VACANT PROPERTIES IN THE BMC REGION, 2010-2020

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BMC Region	2010		2020		Change, 2010-2020	
	Number	Percent	Number	Percent	Number	Percent
<b>Occupied</b>	1,057,616	91.7%	1,102,659	91.1%	45,043	4.3%
<b>Owner-Occupied</b>	703,815	61.0%	737,206	60.9%	33,391	4.7%
<b>Renter-Occupied</b>	353,801	30.7%	365,453	30.2%	11,652	3.3%
<b>Vacant</b>	95,598	8.3%	107,527	8.9%	11,929	12.5%
<b>Total</b>	1,153,214		1,210,186		56,972	4.94%

FIGURE 11: VACANCY RATES, 2020



#### TENURE

Between the years of 2010 and 2020, New Windsor saw a significant increase in the number of family households. In fact, every new household that moved to New Windsor over the ten-year period was a family household.

In 2010, family households comprised 69% of the total households, while in 2020 family households consisted of 72% of the total households. However, all 43 of the newly added households in this ten-year period were family households. This rate of growth in family households is far higher than in Carroll County or the Baltimore Region.

This is a significant growth that suggests New Windsor has features attractive to families. The town can capitalize on this finding to deliver products that are tailored to families, helping drive an increase in population among this demographic.

TABLE 15: TENURE IN NEW WINDSOR, 2010-2020

<b>New Windsor</b>	<b>2010</b>		<b>2020</b>		<b>Change, 2010-2020</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Family Households	364	69.2%	410	72.1%	46	12.6%
Nonfamily Households	162	30.8%	159	27.9%	-3	-1.9%
Total Households	526		569		43	8.2%

2010 Data: ACS

2020 Data: Esri

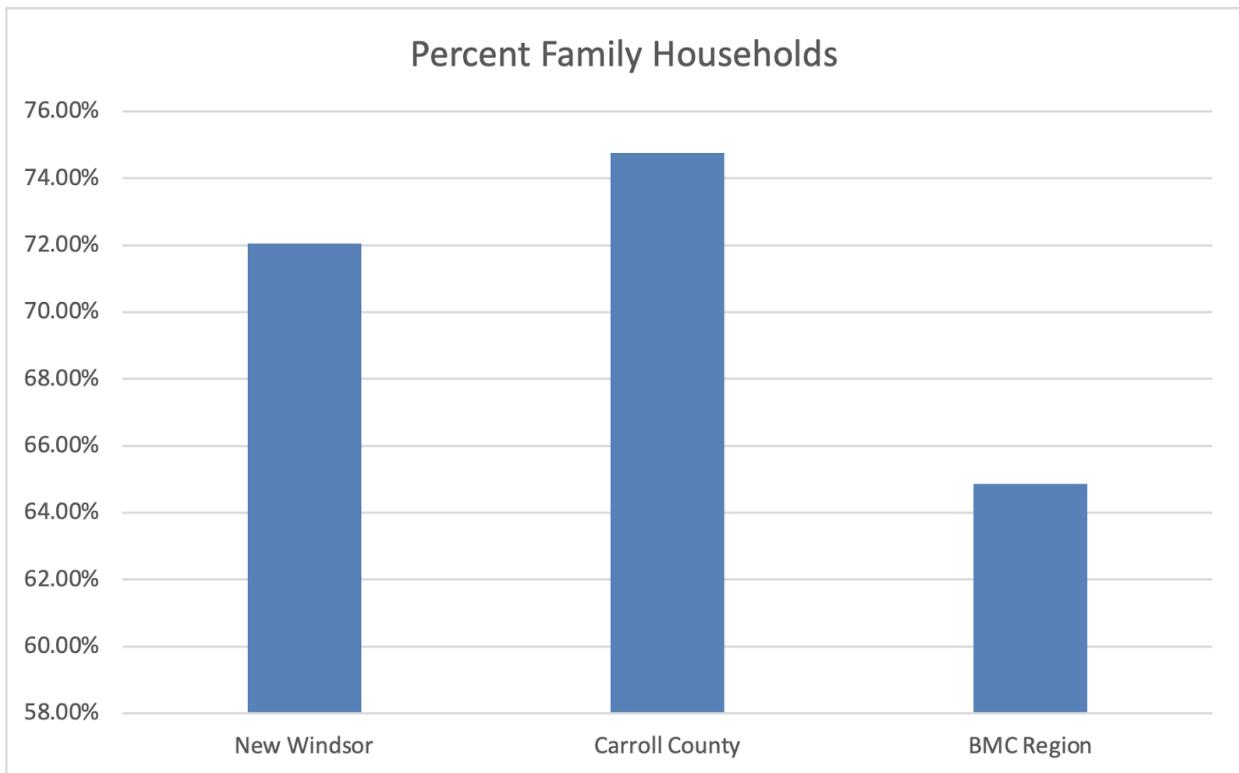
TABLE 16: TENURE IN CARROLL COUNTY, 2010-2020

<b>Carroll County</b>	<b>2010</b>		<b>2020</b>		<b>Change, 2010-2020</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Family Households	45,163	75.5%	46,443	74.8%	1,280	2.8%
Nonfamily Households	14,623	24.5%	15,682	25.2%	1,059	7.2%
Total Households	59,786		62,125		2,339	3.9%

TABLE 17: TENURE IN THE BMC REGION, 2010-2020

<b>BMC Region</b>	<b>2010</b>		<b>2020</b>		<b>Change, 2010-2020</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Family Households	692,925	65.5%	715,280	64.9%	22,355	3.2%
Nonfamily Households	364,691	34.5%	387,379	35.1%	22,688	6.2%
Total Households	1,057,616		1,102,659		45,043	4.3%

FIGURE 12: PERCENT FAMILY HOUSEHOLDS, 2020



#### YEAR BUILT

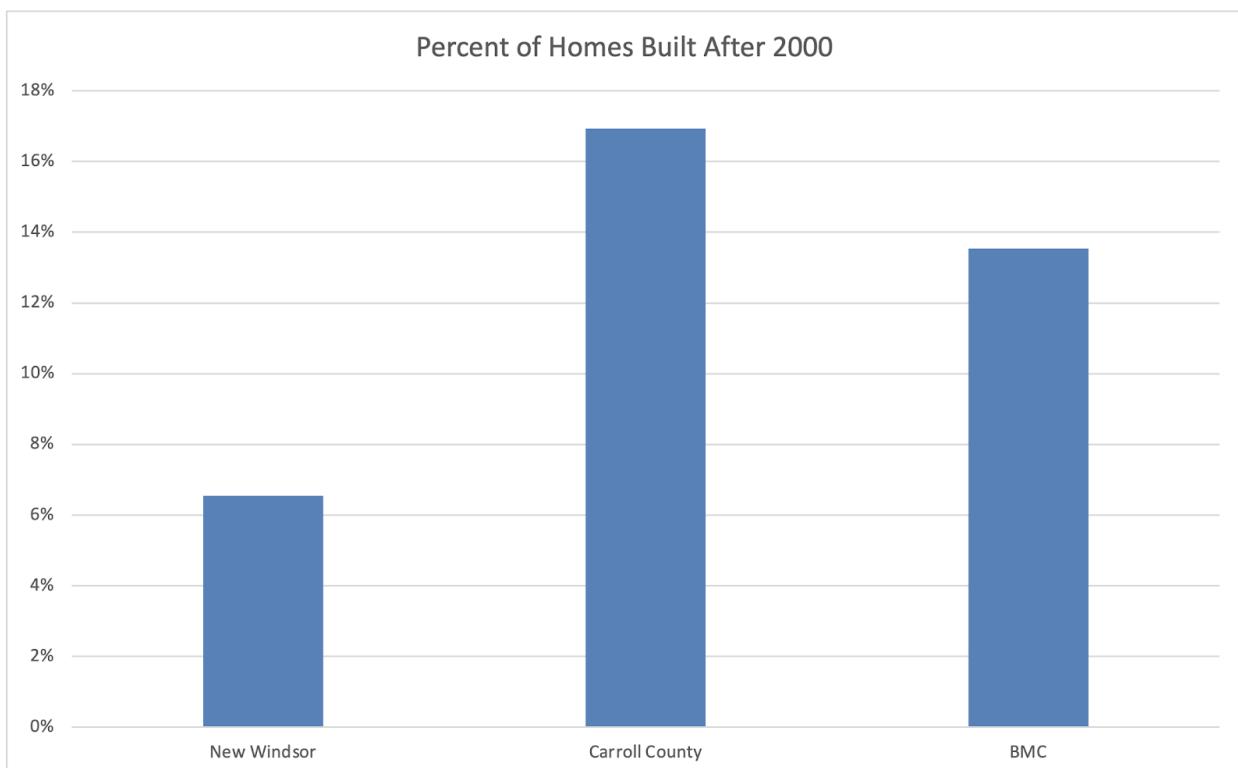
New Windsor saw relatively high rates of housing development in the 1960's and 1990's, the number of homes built between 2000 and 2009 was 6% of the total housing units, lower than the rate in Carroll County (14%) and the Baltimore region (10%). 0.37% of houses in New Windsor were built between 2010 and 2013, while no new homes were built in 2014 or later.

**TABLE 18: YEARBUILT**

Year Built	New Windsor		Carroll County		BMC Region	
	Number	Percent	Number	Percent	Number	Percent
1939 or earlier	218	40.7%	7,149	11.3%	194,684	16.5%
1940-1949	19	3.6%	1,500	2.4%	72,829	6.2%
1950-1959	6	1.1%	3,846	6.1%	152,430	12.9%
1960-1969	54	10.1%	5,046	8.0%	120,483	10.2%
1970-1979	4	0.7%	12,175	19.2%	152,884	13.0%
1980-1989	18	3.4%	11,573	18.3%	162,326	13.8%
1990-1999	181	33.8%	11,376	17.9%	162,167	13.8%
2000-2009	33	6.2%	9,028	14.2%	116,402	9.9%
2010 - 2013	2	0.4%	1,161	1.8%	28,074	2.4%
2014 or later	0	0.0%	545	0.9%	14,990	1.3%
Total Housing Units	535		63,399		1,177,269	

Source: American Census Survey 5 year 2014-2019; University of Maryland 2021

FIGURE 13: PERCENT OF HOMES BUILT AFTER 2000



#### SINGLE FAMILY HOME SALES

The trend in single family home sales indicates that families are moving to New Windsor at rates higher than other groups and find the town appealing.

Most single-family homes sold in New Windsor between 2019 and 2021 featured four bedrooms or more, with a median sale price of \$450,000.

As such, larger units seem to be more popular among residents. Larger properties at similar prices should be the target, as the town can capitalize on family households moving to the town by offering larger products tailored to their needs.

TABLE 19: SALE PRICE RANGES ACROSS SINGLE FAMILY HOMES IN NEW WINDSOR, MARCH 2019-MARCH 2021

Sales Price Range	1 Bedroom	2 Bedrooms	3 Bedrooms	4+ Bedrooms	Total	Percent of total
Less than \$200,000	1	1	8	3	13	8.39%
\$200,000-\$399,999	1	8	47	28	84	54.19%
\$400,000-\$599,999	0	0	11	31	42	27.10%
\$600,000 or more	0	0	1	15	16	10.32%
Total	2	9	67	77	155	100%
Percent of total (%)	1.29%	5.81%	43.23%	49.68%	100.00%	
Median Sale Price (\$)	\$ 193,250	\$ 280,000	\$ 320,000	\$ 450,000	\$ 348,000	
Average Sale Price (\$)	\$ 193,250	\$ 277,611	\$ 336,310	\$ 464,108	\$ 385,739	
Average Unit Size (SF)	\$ 625	\$ 1,593	\$ 1,890	\$ 3,002	\$ 2,394	
Median Price per SF(\$)	\$ 309	\$ 192	\$ 177	\$ 158	\$ 170	
Average Price per SF(\$)	\$ 309	\$ 187	\$ 179	\$ 159	\$ 173	

Single family home sale price distribution, New Windsor March 2019-March 2021 - Source: Redfin; University of Maryland 2021

FIGURE 14: AVERAGE PRICE PER SF (\$)



## TOWNHOUSE SALES

In a methodology like the single-family home sales, we analyzed the townhouse sale price distribution for the town of New Windsor between March 2019 and March 2021, with data sourced from Redfin. This information was split by the sale prices range, as well as the size of each apartment sold, with the median sale price, average sale price, average unit size in square foot, median price per square foot, and average price per square foot analyzed.

Townhouse sales in New Windsor saw a relatively high proportion of 3-bedroom properties sold at a median sale price of \$361,745, though overall figures are quite low.

TABLE 20: SALE PRICE RANGES ACROSS APARTMENTS IN NEW WINDSOR, MARCH 2019-MARCH 2021

Sales Price Range	1 Bedroom	2 Bedrooms	3 Bedrooms	4+ Bedrooms	Total	Percent of total
Less than \$200,000	1	6	0	1	8	38.10%
\$200,000-\$399,999	0	2	9	1	12	57.14%
\$400,000-\$599,999	0	0	1	0	1	4.76%
\$600,000 or more	0	0	0	0	0	0.00%
Total	1	8	10	2	21	100.00%
Percent of total (%)	4.76%	38.10%	47.62%	9.52%	100.00%	
Median Sale Price (\$)	\$ 150,000	\$ 196,000	\$ 361,745	\$ 296,200	\$ 324,990	
Average Sale Price (\$)	\$ 150,000	\$ 224,998	\$ 358,144	\$ 296,200	\$ 291,610	
Average Unit Size (SF)	\$ 971	\$ 1,111	\$ 1,111	\$ 3,330	\$ 1,813	
Median Price per SF(\$)	\$ 154	\$ 202	\$ 167	\$ 88	\$ 172	
Average Price per SF(\$)	\$ 154	\$ 199	\$ 167	\$ 88	\$ 171	

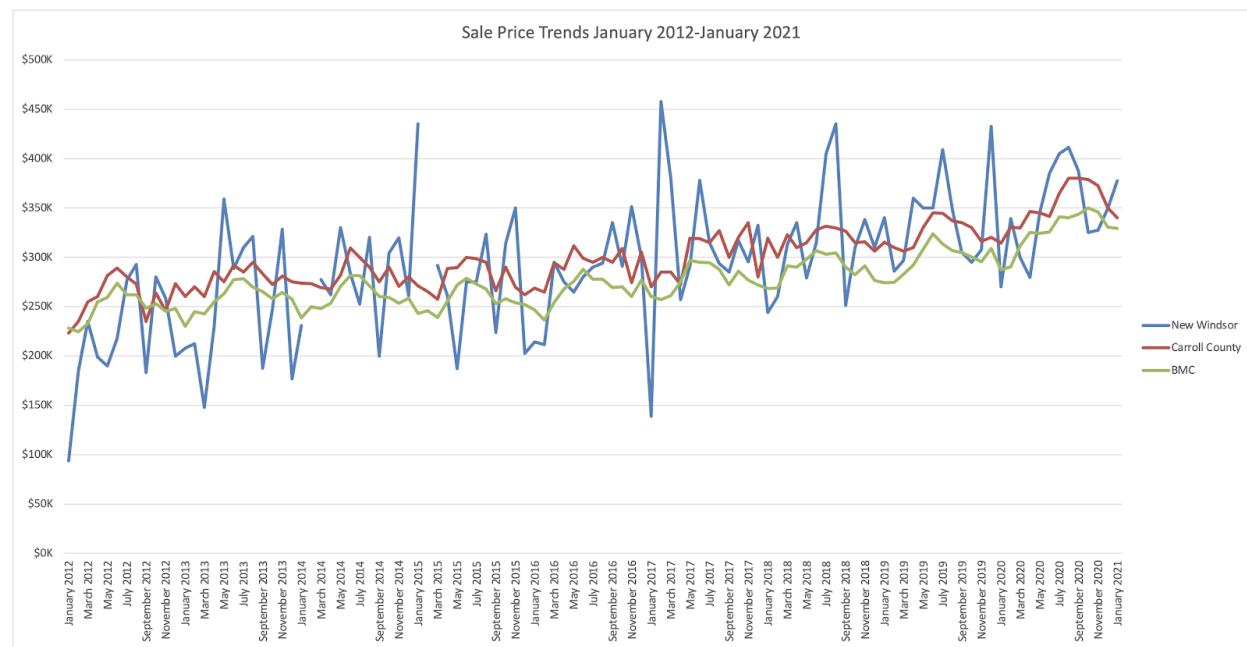
Apartment sale price distribution, New Windsor March 2019-March 2021 - Source: Redfin

## SALE PRICE TRENDS

The sale price trends for New Windsor, Carroll County and the Baltimore region all saw a consistent upwards trend in real estate prices. All three areas have generally increased in tandem, swapping prices but generally moving in the same upwards trajectory.

FIGURE 15: SALE PRICE TRENDS JANUARY 2012-JANUARY 2021

Source: Data obtained from Redfin, 2012-2021 Monthly



## PROJECTION METHODOLOGIES

This report analyzes demographic trends in the Study Area, New Windsor town. Demographic data for this analysis are drawn from Esri. Growth rates of future projections of population, households and average household size were provided by Baltimore Metropolitan Council (BMC) and Maryland Department of Planning (MDP).

Data describing New Windsor is compared to Carroll County and the Baltimore Region to provide context for the report, and to provide a sense of scale for trends around this area. For the projections we made for the Baltimore Region, Carroll County, and New Windsor in next 25 years, we calculated the estimated growth rates of TAZ1032, TAZ1033, Carroll County, and Baltimore Region using projections from the BMC and the MDP, then apply those growth rates to the 2020 estimates for population, households, and average household size that we obtained from Esri. For the estimated growth rate of New Windsor, we used TAZ-level data from the BMC because it does not provide town-level projections and New Windsor is part of TAZ1032 and TAZ1033.

By evaluating the trends of demographic growth around this area, we can get a general idea of the potential for demographic growth in New Windsor.



## DEMOGRAPHIC PROJECTIONS

For demographic projections, we have five projections from Baltimore Metropolitan Council (BMC) and Maryland Department of Planning (MDP). For BMC projections, we have all town, county, and region levels, but the town level projection is based on TAZ1032 and TAZ1033 because there is no projection for New Windsor. In this way, we took data from TAZ1032 and TAZ1033 to make the projection for town level since New Windsor is part of TAZ1032 and TAZ1033. For MDP projections, we only have projections for county and region levels.

### BMC PROJECTIONS

The BMC's projection growth rate for Baltimore Region's population from 2020-2045 is 9.0%, the number of households grows 11.5%, and average household size grows -2.2%. The BMC's projection growth rate for Carroll County's population from 2020-2045 is 9.4%, the number of households grows 12.2%, and average household size grows -2.5%. The BMC's projection growth rate for New Windsor's population from 2020-2045 is 3.5%, the number of households grows 7.2%, and average household size grows -3.5%. New Windsor's population, households, and average household size growth rates are slower than both Carroll County and the Baltimore Region. Carroll County's population and household's growth rate are faster than the Baltimore Region, but its growth rate for average household size is slower than the Baltimore Region.

Baltimore							Overall
Region	2020	2025	2030	2035	2040	2045	2020-2045
<b>Population</b>	<b>2,893,368</b>	<b>2,957,985</b>	<b>3,007,593</b>	<b>3,063,346</b>	<b>3,120,068</b>	<b>3,154,845</b>	<b>261,477</b>
% Change							
Overall		2.2%	1.7%	1.9%	1.9%	1.1%	9.0%
Avg. Annual		0.4%	0.3%	0.4%	0.4%	0.2%	0.3%
<b>Households</b>	<b>1,102,659</b>	<b>1,137,231</b>	<b>1,165,488</b>	<b>1,194,504</b>	<b>1,216,181</b>	<b>1,229,435</b>	<b>126,776</b>
% Change							
Overall		3.1%	2.5%	2.5%	1.8%	1.1%	11.5%
Avg. Annual		0.6%	0.5%	0.5%	0.4%	0.2%	0.4%
<b>Household Size</b>	<b>2.62</b>	<b>2.60</b>	<b>2.58</b>	<b>2.56</b>	<b>2.57</b>	<b>2.57</b>	<b>-0.06</b>
% Change							
Overall		-0.9%	-0.8%	-0.6%	0.0%	0.0%	-2.2%
Avg. Annual		-0.2%	-0.2%	-0.1%	0.0%	0.0%	-0.1%

							<b>Overall</b>
<b>Carroll County</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2020-2045</b>
<b>Population</b>	<b>172,874</b>	<b>175,428</b>	<b>178,953</b>	<b>182,376</b>	<b>185,748</b>	<b>189,170</b>	<b>16,296</b>
% Change							
Overall		1.5%	2.0%	1.9%	1.8%	1.8%	9.4%
Avg. Annual		0.3%	0.4%	0.4%	0.4%	0.4%	0.4%
<b>Households</b>	<b>62,125</b>	<b>63,837</b>	<b>65,946</b>	<b>67,387</b>	<b>68,520</b>	<b>69,723</b>	<b>7,598</b>
% Change							
Overall		2.8%	3.3%	2.2%	1.7%	1.8%	12.2%
Avg. Annual		0.5%	0.7%	0.4%	0.3%	0.3%	0.5%
<b>Household Size</b>	<b>2.78</b>	<b>2.75</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>-0.07</b>
% Change							
Overall		-1.2%	-1.3%	-0.3%	0.2%	0.1%	-2.5%
Avg. Annual		-0.3%	-0.3%	-0.1%	0.0%	0.0%	-0.1%

							<b>Overall</b>
<b>New Windsor</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2020-2045</b>
<b>Population</b>	<b>1,482</b>	<b>1,481</b>	<b>1,487</b>	<b>1,499</b>	<b>1,506</b>	<b>1,534</b>	<b>52</b>
% Change							
Overall		-0.1%	0.4%	0.8%	0.5%	1.8%	3.9%
Avg. Annual		0.0%	0.1%	0.2%	0.1%	0.4%	0.2%
<b>Households</b>	<b>569</b>	<b>576</b>	<b>589</b>	<b>595</b>	<b>600</b>	<b>610</b>	<b>41</b>
% Change							
Overall		1.2%	2.2%	1.1%	0.8%	1.8%	7.2%
Avg. Annual		0.2%	0.4%	0.2%	0.2%	0.3%	0.3%
<b>Household Size</b>	<b>2.60</b>	<b>2.57</b>	<b>2.53</b>	<b>2.52</b>	<b>2.51</b>	<b>2.51</b>	<b>-0.09</b>
% Change							
Overall		-1.3%	-1.7%	-0.3%	-0.3%	0.1%	-3.5%
Avg. Annual		-0.3%	-0.3%	-0.1%	-0.1%	0.0%	-0.1%

Source: 2020 Data Sourced from Esri

### MDP PROJECTIONS

The MDP's projection growth rate for Baltimore Region's population from 2020-2045 is 8.7%, the number of households grows 10.3%, and average household size grows -1.9%. The MDP's projection growth rate for Carroll County's population from 2020-2045 is 9.0%, the number of households grows 11.0%, and average household size grows -3.0%. Carroll County's population, household's growth rates are faster than the Baltimore Region, but its growth rate for average household size is slower than the Baltimore Region.

Baltimore		Overall					
Region	2020	2025	2030	2035	2040	2045	2020-2045
<b>Population</b>	<b>2,893,368</b>	<b>2,947,195</b>	<b>2,999,619</b>	<b>3,052,326</b>	<b>3,104,195</b>	<b>3,143,697</b>	<b>250,329</b>
% Change							
Overall		1.9%	1.8%	1.8%	1.7%	1.3%	8.7%
Avg. Annual		0.4%	0.4%	0.3%	0.3%	0.3%	0.3%
<b>Households</b>	<b>1,102,659</b>	<b>1,129,494</b>	<b>1,157,963</b>	<b>1,181,319</b>	<b>1,199,402</b>	<b>1,216,694</b>	<b>114,035</b>
% Change							
Overall		2.4%	2.5%	2.0%	1.5%	1.4%	10.3%
Avg. Annual		0.5%	0.5%	0.4%	0.3%	0.3%	0.4%
<b>Household Size</b>	<b>2.56</b>	<b>2.55</b>	<b>2.53</b>	<b>2.52</b>	<b>2.52</b>	<b>2.51</b>	<b>-0.05</b>
% Change							
Overall		-0.4%	-0.8%	-0.4%	0.0%	-0.4%	-1.9%
Avg. Annual		-0.1%	-0.2%	-0.1%	0.0%	-0.1%	-0.1%

		Overall					
Carroll County	2020	2025	2030	2035	2040	2045	2020-2045
<b>Population</b>	<b>172,874</b>	<b>175,636</b>	<b>178,142</b>	<b>181,559</b>	<b>184,944</b>	<b>188,371</b>	<b>15,497</b>
% Change							
Overall		1.6%	1.4%	1.9%	1.9%	1.9%	9.0%
Avg. Annual		0.3%	0.3%	0.4%	0.4%	0.4%	0.3%
<b>Households</b>	<b>62,125</b>	<b>64,163</b>	<b>65,604</b>	<b>66,697</b>	<b>67,617</b>	<b>68,959</b>	<b>6,834</b>
% Change							
Overall		3.3%	2.2%	1.7%	1.4%	2.0%	11.0%
Avg. Annual		0.6%	0.4%	0.3%	0.3%	0.4%	0.4%
<b>Household Size</b>	<b>2.78</b>	<b>2.73</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.70</b>	<b>-0.08</b>
% Change							
Overall		-1.9%	-0.8%	0.0%	0.0%	-0.4%	-3.0%
Avg. Annual		-0.4%	-0.2%	0.0%	0.0%	-0.1%	-0.1%

Source: 2020 Data Sourced from Esri

## SCENARIOS

We came up with three scenarios with how the town will grow. Those three scenarios are based on New Windsor's growth rates from BMC's projection, Carroll County's growth rates from BMC's projection, and New Windsor's historical growth rates. We see an increase for both population and households in all three scenarios. Among those three scenarios, using New Windsor's historical growth rates for the projection will have a maximum increase in both numbers of households and population, which are increasing 21.7% and 16.1% for next 25 years. And using New Windsor's growth rates from BMC's projection will have a minimum increase in both households and population, which are increasing 7.2% and 3.5% for next 25 years. For all of three scenarios, growth rates for the number of households are greater than growth rates for the number of populations. That means the average household size in New Windsor will be most likely to get smaller and smaller in the future.

TABLE 26: PROJECTED GROWTH SCENARIOS

				Overall	Avg. Annual
Scenario 1 (a)	2020	2045	Difference	% Change	% Change
Households	569	610	41	7.2%	0.3%
Population	1,482	1534	52	3.5%	0.1%
				Overall	Avg. Annual
Scenario 2 (b)	2020	2045	Difference	% Change	% Change
Households	569	639	70	12.2%	0.5%
Population	1,482	1622	140	9.4%	0.4%
				Overall	Avg. Annual
Scenario 3 (c)	2020	2045	Difference	% Change	% Change
Households	569	693	124	21.7%	0.8%
Population	1,482	1721	239	16.1%	0.6%

Note:

- (a) Use BMC's projection growth rate for New Windsor to project the number of households and population for New Windsor from 2020-2045.
- (b) Use BMC's projection growth rate for Carroll County to project the number of households and population for New Windsor from 2020-2045.
- (c) Use the historic growth rate for New Windsor from 2010-2020 to project the number of households and population for New Windsor from 2020-2045.

For the growth scenarios, there are three scenarios to project households and population growth for New Windsor in 2020 to 2045. Those three scenarios are based on New Windsor's growth rates from BMC's

projection, Carroll County's growth rates from BMC's projection, and New Windsor's historical growth rates. Among those three scenarios, using New Windsor's historical growth rates for the projection will have a maximum increase in both numbers of households and population, which are increasing 21.7% and 16.1% for next 25 years. And using New Windsor's growth rates from BMC's projection will have a minimum increase in both households and population, which are increasing 7.2% and 3.5% for next 25 years. For all of three scenarios, growth rates for the number of households are greater than growth rates for the number of populations. That means the average household size in New Windsor will be most likely to get smaller and smaller in the future.



## FISCAL IMPACT ANALYSIS OF GROWTH SCENARIOS

### METHODOLOGY

All the cost numbers used in the Fiscal Impact Analysis came from the 2021 Fiscal Year budget. Once we listed out all the possible costs, we determined which ones were ‘variable’. A variable cost is one that is expected to increase as population and housing units increase. Those that were not variable did not add up to the final cost as we are examining the fiscal impact of growth. Once we determined which costs were variable, we divided the total cost by the number of households to determine what the average cost per household was for each category in the budget. For the revenue projections, most of the figures also came from the budget, however it should be noted as far as taxes go, our team chose only to use residential tax. A few revenue sources required independent calculations. For example, for revenues to the water utility, we confirmed the rates and fees and average consumption to create a projection. Next, we applied our growth scenarios to the average cost and revenue estimates to evaluate the fiscal impact over the next 25 years. Finally, we developed three different debt scenarios provide a range of perspectives on how New Winsor can approach its capital improvement projects. The debt scenarios are compared to the fiscal impact scenarios, providing a range of outcomes that are analyzed for policy implications.



## CAPITAL IMPROVEMENT PLAN

### CAPITAL IMPROVEMENTS IMPACT

There are numerous projects that are being considered to improve the town of New Windsor. We asked the Town Manager to give a priority score for each capital improvement project. This way New Windsor can see the impact of only the most important projects, but also see the impact of all the projects should they go through with all of them. The debt service per projects is a monthly cost that would be spent paying back the loans for taking out these projects. All capital improvement projects were applied a 0.4% interest rate and were calculated with the assumption that monthly payments would occur across 10 years.

Name	Loan Term (Years)	Payments per Year	Loan Amount	Interest rate assumption	Debt Service per Project
Water System Evaluation (GMB's services)	10	12	\$75,000	0.40%	\$638
WL upgrade	10	12	\$3,000,000	0.40%	\$25,507
Construction Management & Inspection	10	12	\$500,000	0.40%	\$4,251
WL upgrade engineering	10	12	\$5,600	0.40%	\$48
elevated tank cleaning & maintenance	10	12	\$20,000	0.40%	\$170
hydrant flushing & repairs/ replacement (GMB's services)	10	12	\$5,000	0.40%	\$43
WTP SCADA system upgrade	10	12	\$5,000	0.40%	\$43
elevated pedestal tank - maint. & repairs (exterior)	10	12	\$5,000	0.40%	\$43
WWTP upgrade	10	12	\$1,250,000	0.40%	\$10,628
BR pump station upgrade- construction	10	12	\$200,000	0.40%	\$1,700
BR pump station upgrade - final design	10	12	\$45,000	0.40%	\$383
chlorination/contact tank - alltued valve R/R	10	12	\$15,000	0.40%	\$128
Denning Well - controls phone modem, booster antenna	10	12	\$10,000	0.40%	\$85
Hillside Well - #2 well evaluation & repairs	10	12	\$5,000	0.40%	\$43
Hillside Well - control panel reconfig. & transducer repair/replace	10	12	\$5,000	0.40%	\$43
manhole thermal ring protection (35 MH's)	10	12	\$10,000	0.40%	\$85
Main Spring WL Replacement	10	12	\$5,000,000	0.40%	\$42,512
leak detection - yearly or as needed	10	12	\$2,000	0.40%	\$17
Total for Debt Service 1			\$5,110,600		\$43,453
Total for Debt Service 2			\$5,155,600		\$43,835
Total for Debt Service 3			\$10,157,600		\$86,365

### DEBT SERVICE IMPACT

The debt service is more than the cost of expanding New Windsor. Should New Windsor look to expand, expect the bulk of the costs to come from paying off loans. The most important capital improvement projects were the ones that deal with upgrading the sewer and water system for the town of New Windsor. Most of these projects were priority one projects, meaning they are very likely to occur. Debt service 2 is not too far off from debt service one in terms of cost. The cost for debt service three, or completing all projects, is almost twice as much as the cost of debt service one. This is due to the main spring replacement being the most expensive project by far. This project alone is almost double of the total cost for priority one and two projects.

### EVALUATION OF CAPITAL UPGRADES ON TOWN BUDGET

Since debt service two has a near identical cost of debt service one, it is advised to go through with both at the bare minimum. This would greatly improve the sewer and water system for the town of New Windsor, which is expected to become the highest source of revenue for the town. The expected revenue will be enough to cover the costs for all projects, therefore it is likely that New Windsor can continue with all projects. The growth scenarios and expected revenue numbers must be met to afford all capital projects. It is also important to note that should the town meet growth scenario one, getting sewer and water hooked up to every household in the town may be a worthy investment and even allow for the completion of all priority levels of projects.

### COSTS

TABLE 27: SUMMARY OF COSTS

The summary of costs is the culmination of all the costs for the town of New Windsor, Maryland summed up in one neat table showing both the total costs combined for each growth scenario as well as the total without EEF, or sewer and water, costs included. We decided to also include the total without EEF costs as the EEF costs also came with a lot of assumptions for the numbers on our part as such are not guaranteed to be completely accurate, and in addition it is also important to note that a utility like water or sewer is usually revenue neutral, so in an even where the town could make a lot of money they could cut their costs and revenues for EEF, and this extra total is supposed to accomplish showing just that.

As can be seen below in table 27, the highest expenditures are on water and sewer, as well as public works, as every house needs constant access to water and sewer, and public works are usually always an ongoing expenditure needed to keep improving the town. Cutting out the water and sewer expenditure alone as we can see in table 27 reduces the total cost in fiscal year 2021 per household by almost half, and furthermore drastically reduces costs for each growth scenario as cutting out the EEF costs in our fiscal model also cuts out the existing debt service and water and sewer.

#### FY21 Summary of Costs

Costs	FY 2021 Average Costs per household	Growth Scenario 1	Growth Scenario 2	Growth Scenario 3
Parks	\$20	\$829	\$1,415	\$2,506
Legislative Expenditures	\$0	\$0	\$0	\$0
Executive Expenditures	\$0	\$0	\$0	\$0
Professional Services Expenditures	\$0	\$0	\$0	\$0
Municipal Building Expenditures	\$0	\$0	\$0	\$0
Planning and Zoning Expenditures	\$7	\$306	\$523	\$926
Public Works Expenditures	\$449	\$18,408	\$31,428	\$55,672
Public Safety Expenditures	\$39	\$1,585	\$2,707	\$4,794
Miscellaneous Expenditures	\$151	\$6,193	\$10,574	\$18,731
Water Expenditures	\$421	\$17,247	\$29,446	\$52,161
Existing Water Debt Service	-	\$104,000	\$104,000	\$104,000
Sewer Expenditures	\$441	\$18,101	\$30,903	\$54,743
Existing Sewer Debt Service	-	\$72,000	\$72,000	\$72,000
EEF Personnel Expenditures	\$259	\$10,635	\$18,157	\$32,164
Total	\$1,788	\$249,303	\$301,151	\$397,697
Total without EEF costs	\$926	\$37,956	\$64,802	\$114,793

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## REVENUES

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TABLE 28: SUMMARY OF REVENUES

The summary of revenues is the culmination of all revenues summarized in one neat table. This table also includes a total without EEF revenues for the same reason that the total costs without EEF costs was implemented in table 27. Any revenues listed as \$0 are revenues that are deemed not variable and as such will not increase with growth.

As can be viewed in table 28, the largest contributors to revenue by a large margin are the EEF revenues, making up roughly 95% of all revenues in each growth scenario, however the assumptions made with the EEF revenues are generous, and if the town were to make a lot of money off the EEF revenues it would go back down to zero anyways, since the EEF revenues are supposed to be revenue neutral. Therefore, it is worth looking at the revenues without EEF included, where we can see that residential real property tax calculations end up making the bulk of the revenues, as when talking about growth these numbers are going to be highly variable since more people means more households which in turn will increase residential tax revenues a lot. New Windsor would, however, need to take action to build these new properties that folk would want to move in to in order to increase this residential tax revenue.

Certain revenue sources required calculations to obtain an accurate number. The building permits revenue was found by multiplying the building permit fee times the number of projected households depending on the growth scenarios. The building permit fee is a one-time fee that is calculated each time a new household is built. Impact fee revenues were found using the same method, except using the impact fee instead of the building permit fee. For property tax revenues, only residential property calculations were found. We did not include any offices or other retail buildings for property tax calculations. We conducted our fiscal impact with the idea that no new office or retail buildings would be found, only households. We also did not apply the vacancy rate to these new projected households. We assumed all new households would be 100% filled.

Income tax revenues were found by first multiplying the 2020 median income by the projected population increase. This number was then multiplied by the income tax rate and divided by 100 because the income tax rate is found per \$100 of assessed value. Sewer and Water Revenues were found by first confirming the charges and rates with the town manager. We multiplied these rates and charges with the average water usage per household and then multiplied it by 25 to give an estimate of how much revenue sewer and water will generate across the 25 years of projected growth.

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### FY21 Summary of Revenues

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Sources of Revenue	Growth Scenario 1	Growth Scenario 2	Growth Scenario 3
Building Permits	\$6,970	\$11,900	\$21,080
Licences, Permits, & Other Revenues	\$1,585	\$2,707	\$4,794
Intergovernmental Revenues	\$0	\$0	\$0
Service Fee Revenues	\$122	\$209	\$370
Miscellaneous Revenues	\$0	\$0	\$0
Residential Real Property Tax Calculations	\$37,311	\$63,701	\$112,842
Income Tax Calculations	\$1,261	\$3,396	\$5,798
EEF Revenues	\$1,305,019	\$2,227,712	\$3,945,830
Impact Fees	\$21,853	\$37,310	\$66,092
Total	\$1,374,122	\$2,346,935	\$4,156,807
Total without EEF revenues	\$69,103	\$119,223	\$210,977

## NET FISCAL

TABLE 29: NET FISCAL IMPACT

Within table 29 is the Net Fiscal Impact, in which is detailed how the town will be fiscally impacted in regards to each growth scenario and with each priority level of projects completed. As we can see in the table, in each scenario the town stands to make between one and four million dollars on an annual basis, which is a pretty optimistic view of the situation. Each of these scenarios having the town making between one and four million dollars on an annual basis is actually a rather unlikely even to come to pass, however the most likely of them all would be growth scenario one based on our finding from the existing conditions analysis where New Windsor's growth rate has been slowing down compared to its historical growth rate. So with EEF revenues included our most likely scenario is for the town to make roughly one million dollars on an annual basis, and again it must be emphasized that this level of growth in scenario one, or any scenario for that matter, is something the town should strive for, and not something that we think is likely to occur naturally.

### Net Fiscal Impact

Fiscal Impact with priority 1 projects		Fiscal Impact with priority 1 & 2 projects		Fiscal Impact with priority 1, 2, & 3 projects	
Growth Scenario 1		Growth Scenario 1		Growth Scenario 1	
Revenues	\$1,374,122	Revenues	\$1,374,122	Revenues	\$1,374,122
Costs	\$249,303	Costs	\$249,303	Costs	\$249,303
New Debt Service 1	\$43,453	New Debt Service 2	\$43,835	New Debt Service 3	\$86,365
Net Fiscal Impact	\$1,081,366	Net Fiscal Impact	\$1,080,983	Net Fiscal Impact	\$1,038,454
Growth Scenario 2		Growth Scenario 2		Growth Scenario 2	
Revenues	\$2,346,935	Revenues	\$2,346,935	Revenues	\$2,346,935
Costs	\$301,151	Costs	\$301,151	Costs	\$301,151
New Debt Service 1	\$43,453	New Debt Service 2	\$43,835	New Debt Service 3	\$86,365
Net Fiscal Impact	\$2,002,331	Net Fiscal Impact	\$2,001,948	Net Fiscal Impact	\$1,959,419
Growth Scenario 3		Growth Scenario 3		Growth Scenario 3	
Revenues	\$4,156,807	Revenues	\$4,156,807	Revenues	\$4,156,807
Costs	\$397,697	Costs	\$397,697	Costs	\$397,697
New Debt Service 1	\$43,453	New Debt Service 2	\$43,835	New Debt Service 3	\$86,365
Net Fiscal Impact	\$3,715,657	Net Fiscal Impact	\$3,715,275	Net Fiscal Impact	\$3,672,745

**TABLE 30: NET FISCAL IMPACT WITHOUT EEF COSTS & REVENUES**

Table 30 as seen below is our Net Fiscal Impact for the town, but excluding the EEF costs and revenues from our calculations. This is a very important table to include as we believe these to be more realistic scenarios for the town than any of the previous scenarios as suggested by the Net Fiscal Impact with the EEF costs and revenues included. Since water and sewer revenues are usually revenue neutral, anytime the town would stand to make a profit off them, in the end it would reduce back to zero anyways, so this provides for a far more realistic look into what the fiscal impact that growth will have on New Windsor will probably look like. Our most realistic scenario of them all is growth scenario one, which can be seen below in table 30 puts New Windsor in the red as far as offsetting costs with growth goes. Our next scenario, scenario two sees New Windsor standing to make a profit up until they implement their third priority projects, and our final scenario of scenario three is the best outcome for New Windsor where they make revenue even with all projects completed. Should the town want to have their growth offset their costs of these projects, then scenario two would be the most realistic for New Windsor to pursue but would require the town to more aggressively increase their growth as well as skip out on completing their lowest priority projects in order to hit these numbers.

#### Net Fiscal Impact without EEF Costs & Revenues

Fiscal Impact with priority 1 projects	Fiscal Impact with priority 1 & 2 projects	Fiscal Impact with priority 1, 2, & 3 projects
Growth Scenario 1	Growth Scenario 1	Growth Scenario 1
Revenues \$69,103	Revenues \$69,103	Revenues \$69,103
Costs \$37,956	Costs \$37,956	Costs \$37,956
New Debt Service 1 \$43,453	New Debt Service 2 \$43,835	New Debt Service 3 \$86,365
Net Fiscal Impact -\$12,306	Net Fiscal Impact -\$12,688	Net Fiscal Impact -\$55,218
Growth Scenario 2	Growth Scenario 2	Growth Scenario 2
Revenues \$119,223	Revenues \$119,223	Revenues \$119,223
Costs \$64,802	Costs \$64,802	Costs \$64,802
New Debt Service 1 \$43,453	New Debt Service 2 \$43,835	New Debt Service 3 \$86,365
Net Fiscal Impact \$10,968	Net Fiscal Impact \$10,585	Net Fiscal Impact -\$31,944
Growth Scenario 3	Growth Scenario 3	Scenario 3
Revenues \$210,977	Revenues \$210,977	Revenues \$210,977
Costs \$114,793	Costs \$114,793	Costs \$114,793
New Debt Service 1 \$43,453	New Debt Service 2 \$43,835	New Debt Service 3 \$86,365
Net Fiscal Impact \$52,732	Net Fiscal Impact \$52,349	Net Fiscal Impact \$9,819

## SUMMARY OF FINDINGS

The exploratory analysis on the town's demographic data gave our team significant insight towards our understanding of the town and itself and modeling growth scenarios. New Windsor's small rural community is appealing to many upper-middle class households and retired or near retirement older couples and individuals. This analysis indicates that the town is experiencing an aging population with a higher emphasis on smaller household sizes. The existing conditions analysis indicated that New Windsor had a historic household growth rate of around 8% over the last decade, which gave us a good baseline growth rate for our projections. The team created five projections from Baltimore Metropolitan Council (BMC) and Maryland Department of Planning (MDP). For the BMC projections, all town, county, and region levels are included, and the town level projection is based on TAZs, or Traffic Analysis Zones, data. For MDP projections, projections were only included for county and region levels. Growth rates were calculated from BMC and MDP for corresponding areas, and then applied to 2020 data from Esri. Three resulting scenarios were produced to project households and population growth for New Windsor in the next 25 years. The three scenarios are based on New Windsor's growth rates from BMC's projection, Carroll County's growth rates from BMC's projection, and New Windsor's historical growth rates. Among those three scenarios, using New Windsor's historical growth rates for the projection will have a maximum increase in both numbers of households and population and using New Windsor's growth rates from BMC's projection will have a minimum increase in both households and population.

The fiscal models produced in this report gives the town estimations on how it would be impacted fiscally after applying different growth scenarios. The model takes in estimated costs and revenues based on these projections along with the town's wanted capital improvements and can be used by the town in the future to calculate new net impacts if any information changes. Our model concluded that it would be difficult for the town to pay for improvements if it follows its current growth trend (scenario 1). If the town expands growth minimally, as seen in scenario 2, it can expect to afford some but not all the improvements. Lastly, growth scenario 3, which projects the highest amount of growth, is the only scenario that could fully cover the cost of these improvements but would require massive policy changes on the town's end to account for said growth. It is important to once again emphasize that these three scenarios are not likely to happen on their own but are baselines if the town decides to implement change regarding population growth.