



Executive Summary

The Prince William County Department of Economic Development hired S. Patz & Associates to provide a comprehensive market study to identify grocery store needs and opportunities in Prince William County as well as to determine if certain geographic areas within the County lack the diversity of grocery stores that have become common in most growing communities. The study was commissioned in response to input from some County residents who are dissatisfied with the existing grocery store “market.” County officials have consequently requested detailed data on the Prince William County’s grocery store market in anticipation of remedying any problems that may exist.

Key Data Points

Key data points related to the grocery store market in Prince William County are as follows:

- **Existing Grocery Stores.** Prince William County, including the cities of Manassas and Manassas Park, currently houses 63 grocery stores. The most prevalent grocery store types are defined as “Mid-Level” grocery stores, which include Giant, Safeway and Food Lion. There are over 20 such grocery stores in the County. The next most common grocery store concepts are discount grocery stores, including Lidl and Aldi, of which there are 11 in the County. International grocery stores, which primarily occupy former grocery store spaces, account for over 16 percent of grocery stores in the County. In addition are five warehouse clubs (Costco, Sam’s Club, BJ’s Wholesale Club). Prince William County has only two “High End” grocery stores (Wegman’s) and one specialty grocery store (Mom’s Organic Market). The most recent store to open is Amazon Fresh, which opened in June, 2022 in Manassas.
- **Grocery Store Development Trends.** Twenty grocery stores opened prior to 2000 and remain operational. Most are “Mid-Level” grocery stores, and all have been renovated to remain competitive. Twenty-one grocery stores opened during the 2000’s and nine opened between 2010 and 2015. An additional 13 grocery stores opened during the post-2015 period. Nearly 35 percent of all existing grocery stores in Prince William County opened since 2010.
- **Grocery Store Closures.** 18 grocery stores have closed in since 2010. Within this total are five Shoppers, four Food Lions, three Giants, a Price Rite, a Safeway, a Harris Teeter

and three international grocery stores (J&J International Market, Super Q Mart and Todos Market). One of the Giant closures in Manassas involved a larger nearby replacement store. The Todos Market closure also involved a relocation. All of these were anchor tenants in multi-tenant shopping centers.

- **Planned New Grocery Stores.** Three grocery stores are planned to open in Prince William County in the near term. The new stores include a 26,300± square foot Lidl in Haymarket, which is now under construction, and a 26,300± square foot Sprouts Farmers Market, which will replace a shuttered Marshalls in Manassas. Also planned is a 39,900± square foot Whole Foods, which will break ground in 2023.
- **Grocery Store Sales.** The existing grocery stores in Prince William County generate a combined store sales total of approximately \$1.77 billion. The Woodbridge/ Dale City submarket, which has a Walmart, Target and Wegmans, has the highest combined annual sales of \$641.6 million. The Dumfries/ Triangle and Lake Ridge submarkets have the lowest annual grocery store sales totals. These two areas have the smallest number of grocery stores.

Key Conclusions

The existing grocery store market in Prince William County is in balance in terms of store sales relative to consumer expenditure. In 2020, the difference between total potential consumer grocery expenditure and grocery store sales was \$245.1 million, down from nearly \$306.9 million in 2010. This was a period in which 15 new grocery stores opened. At least three new grocery stores will open by 2025. This should satisfy grocery store demand in Prince William County, in terms of consumer expenditure potential.

Of note is that some grocery brands operate in the Washington, DC region without any Prince William County locations. Most notable is Trader Joe's, with multiple locations in the region, and Publix, which operates in the Fredericksburg area. The absence of these grocery brands in Prince William County denotes that while the County does offer a diversity in grocery types overall, this has been traditionally less true at the "upper end" or among niche grocers. This trend is now changing with the June, 2022 opening of Amazon Fresh and announced openings of Whole Foods and Spouts Farmers Market. The future success of these grocery stores could attract other brands to Prince William County.

With that said, there are some areas within Prince William County where grocery stores are not conveniently located. Specifically, the Triangle and South Woodbridge areas are prime for new grocery stores. The wider Triangle community is served by area grocery stores, but most are five miles away. This is an area where a new grocery store could be built in time, if an acceptable site is available. County staff have also identified two large mixed-use developments on the west side of the Potomac River frontage (Belmont Bay and Potomac Shores Town Center) that are regional locations to support the type of grocery stores desired.

The comprehensive report provides sufficient relevant data to help provide Prince William County staff with options to close some gaps that remain within some submarkets in the County. Care must be taken to attract the new grocery stores that are desired, rather than allowing the market to be overbuilt and not fully diversified.

Countywide Grocery Store Market Analysis
Prince William County, Virginia

Prepared for:

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June, 2022

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Attached is our updated, final report of the Prince William County grocery store market, which includes an analysis of specific sites that are under study by the Department of Economic Development and considers recently-released 2020 census data. The report to follow is a snapshot in time that is intended to be periodically updated as market conditions evolve. This update should occur every two-to-three years as market conditions evolve.

Overall, Prince William County is well served with grocery stores, as a sufficient number of stores exist to “capture” the grocery store expenditures of County residents. Additionally, the County has recently had an increased diversity of new grocery store openings, with Lidl entering the market in 2017 and opening four new stores since that time and Amazon Fresh opening the County’s first location in June, 2022. Moreover, two new grocery store brands have announced plans over the past year to enter the Prince William County market: Sprouts Farmers Market and Whole Foods.

Nevertheless, there are some communities in the County where grocery stores are not conveniently located. Specifically, the Triangle and South Woodbridge areas are prime for new grocery stores. The North Woodbridge area includes a site where a Food Lion will be replaced. This is an ideal area to attract a larger and more upscale grocery store and County staff should be active in promoting a better store option.

The wider Triangle community is served by area grocery stores, but most are five miles away. This is an area where a new store could be built if an acceptable site is available.

County staff have also identified two large mixed-use developments on the west side of the Potomac River frontage that are regional locations to support the type of grocery stores desired. Again, County staff should be aggressive, as market support would exist for new grocery stores at this location.

Overall, Prince William County's current grocery store sales and expenditures are in balance, but as will be presented in this report, there will be new development opportunities.

We trust that this report fully covers all required issues related to this study. We appreciate the opportunity to assist you in this effort.

Sincerely,



Stuart M. Patz
President



Ariel Goldring
Vice President

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Introduction

This will set forth our updated comprehensive market study identifying grocery store needs and opportunities in Prince William County, Virginia. The purpose of the study is to determine whether certain areas of Prince William County are inadequately served by the existing grocery stores. The study is also intended to determine if certain geographic areas lack the diversity of grocery stores that have become common in most urban and growing communities. The study was commissioned in response to input from some County residents who are dissatisfied with the level of “market” that exists. County officials have consequently requested detailed data on the County’s grocery store market, in anticipation of alleviating any challenges that may exist.

S. Patz & Associates was hired to undertake the analysis, and if a gap in service does exist in one or more places, the analysis is intended to provide the County’s Department of Economic Development with a strategy to provide better service, i.e., additional newer and more diversified grocery stores, where and if needed. That effort will be based on the report findings and whether area grocery stores are available and “able” to solve unmet needs. This is an update to a preliminary study that was completed in May, 2021.

The report begins with an economic and demographic analysis of Prince William County, identifying the County’s level of population and employment growth. Section I begins by delineating the County into five economic submarkets, based on where residents are most likely to conduct their grocery shopping. While politically independent from Prince William County, the cities of Manassas and Manassas Park are included in the analysis and defined as part of the geographic area under study. These communities are fully competitive for the Prince William County household expenditure potential.

The second subsection in Section I is an analysis of the County’s economic trends, with specific reference to at-place job and employment growth. These two economic indicators determine the economic stability of Prince William County and the ability of the marketplace to retain and support new grocery stores. Additionally, at-place jobs and employment are the basis for evaluating population and household growth, which are key factors in estimating consumer

expenditure potential at grocery stores. The third subsection in Section I includes the County demographic analysis related to household growth and incomes, as well as the analysis of grocery store consumer expenditure potential.

Section II begins with an overview of the 63 existing “competitive” grocery stores in Prince William County, including six grocery stores in the City of Manassas that fully compete with Prince William County locations. No grocery stores are located in the City of Manassas Park. Store characteristics include opening dates, building sizes and estimates of annual sales. Store sales data are proprietary, however estimates were made based on interviews with local commercial real estate brokers with firsthand knowledge of typical sales volumes and based on national trends of different store types. Please note that all sales data are in constant 2022 dollars and are estimates by S. Patz & Associates, based on multiple interviews, and should be considered to be “in the ballpark.”

Next, Section III analyzes the performance (or annual sales) of the existing grocery stores within each submarket. This section continues by examining (1) grocery store concepts, (2) grocery store brands, (3) grocery store sales, by brand, (4) new grocery store development pace and (5) grocery store closures. Section III also identifies the grocery stores that are under construction and planned in Prince William County. Two grocery stores are now under construction and several others are being planned.

Section IV is the Trade Area Analysis and Market Study Conclusions section. It begins with a trade area analysis for each store and sub-area. It is based on calculations made by Placer.ai, which collects geolocation and proximity data from smartphones to generate grocery store consumer trade areas. The analysis helps identify geographic areas in Prince William County that are not adequately served by grocery stores.

Section IV continues by comparing data on the existing grocery store supply with potential grocery store consumer expenditures to determine the segments of Prince William County that are oversupplied, undersupplied or in balance. This analysis is presented at the submarket level. Additionally, to the extent that some area grocery stores are not now in Prince

William County, their viability will be evaluated based on required overall store sales and community competitiveness.

Section I: Prince William County Background

Regional Setting and County Submarkets

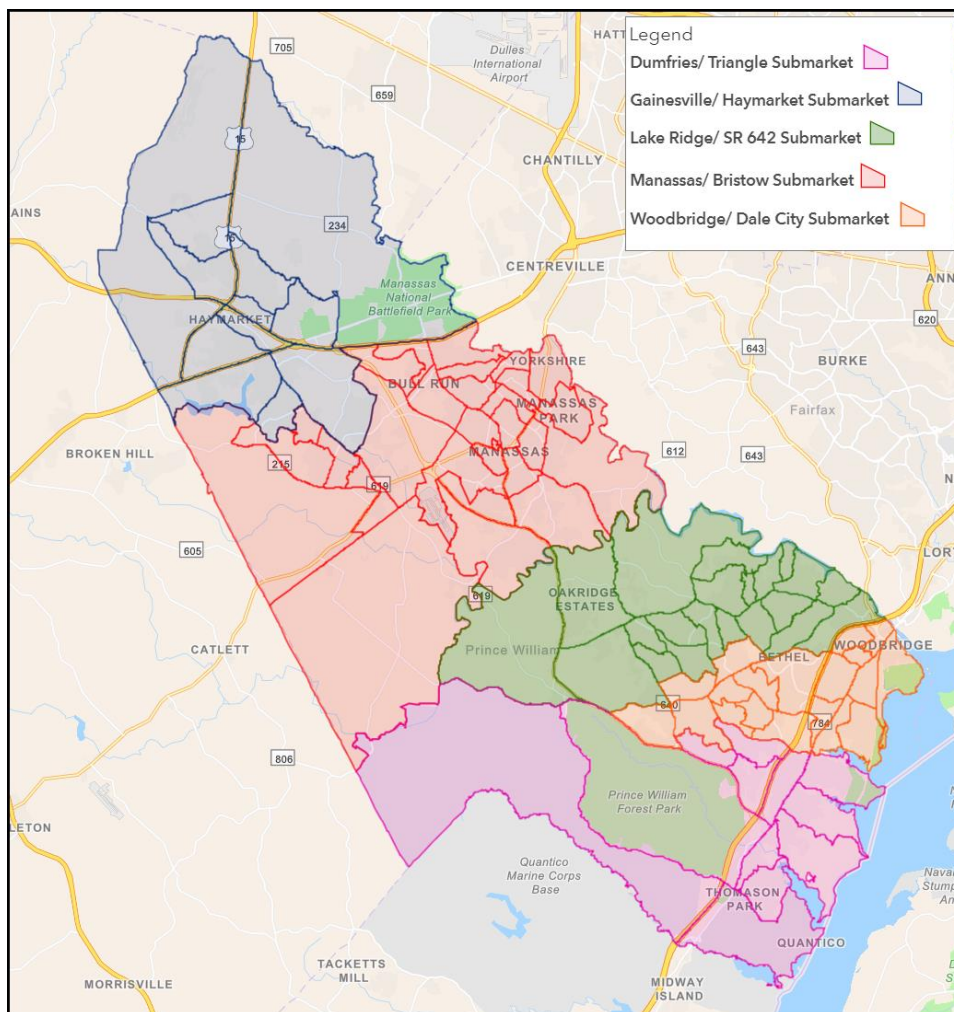
Prince William County is located approximately 35 miles southwest of Washington, DC and encompasses an area of approximately 348 square miles. Map A shows Prince William County within the Northern Virginia part of the Washington, DC Region. It shows the County to be centrally located and bisected by both Interstate 66 to the northwest and Interstate 95 in the southeast. These two portions of the County, as well as the central segments around the independent cities of Manassas and Manassas Park, generate much of the County's population growth and commercial development. As will be shown, these areas have historically attracted the largest and most diverse mix of grocery stores.



Map A - Prince William County Regional Setting

For the purpose of this study, Prince William County was subdivided into five separate submarkets, based on the locations of grocery stores in the County and area roadway systems. Map B illustrates the census tracts that comprise these submarkets.

These submarkets represent the areas where households are most likely to shop for their grocery shopping needs. Submarkets include the Dumfries/ Triangle area, Gainesville/ Haymarket area, Lake Ridge/ SR 642 area, Manassas/ Bristow area and Woodbridge/ Dale City area. The cities of Manassas and Manassas Park were included in the analysis, as part of the Manassas/Bristow submarket, as grocery stores in both cities fully compete with Prince William County locations. The submarkets' irregular shapes are due to census tract boundaries, which are the basis for determining household growth and household incomes.



Map B - Prince William County Grocery Store Submarkets

The 2020 census tracts used to delineate each of the submarkets are as follows. These were defined so that grocery store trade areas could be studied for sales expenditures.

<u>Submarket Census Tracts 1/</u>				
<u>Dumfries/ Triangle</u>	<u>Gainesville/ Haymarket</u>	<u>Lake Ridge/ SR 642</u>	<u>Manassas/ Bristow 2/</u>	<u>Woodbridge/ Dale City</u>
9008.01	9014.11	9003.01	9012.31	9001
9008.03	9014.12	9003.02	9012.32	9002.01
9008.04	9014.21	9012.08	9013.03	9002.02
9009.01	9015.03	9012.09	9013.04	9002.03
9009.04	9015.04	9012.11	9013.05	9004.03
9009.05	9015.05	9012.12	9014.03	9004.04
9010.10	9015.06	9012.19	9014.07	9004.07
9010.11	9015.07	9012.21	9014.09	9004.08
9010.12	9015.08	9012.22	9014.13	9004.09
9010.13	9015.09	9012.23	9014.14	9004.10
9010.14	9015.10	9012.24	9014.15	9005.02
9010.15	9015.11	9012.25	9014.16	9005.03
9010.16		9012.26	9014.17	9005.04
9011.01		9012.27	9014.18	9006.01
9011.02		9012.29	9014.19	9006.02
9801		9012.30	9014.20	9007.01
		9012.33	9016.01	9007.02
		9012.34	9016.02	9010.05
		9012.35	9017.02	9010.09
		9012.36	9017.03	9012.03
		9012.37	9017.04	9012.28
		9013.06	9019	

Notes: 1/ 2020 U.S. Census Tracts in Prince William County, VA.
2/ Also includes City of Manassas and City of Manassas Park.

Prince William County Economic Overview

This part of the market analysis presents an economic overview of Prince William County in terms of job and employment growth. Three economic factors are presented and analyzed: (1) at-place job growth, (2) employment and labor force trends, and (3) an evaluation of active development plans that are expected to generate new job and employment growth. These are the primary factors that show the level of economic stability in Prince William County and the ability to support new investments, particularly for new grocery stores.

The three economic factors are analyzed in the paragraphs to follow. Key to this analysis is that job growth supports growth in population and households, and therefore, consumer spending at grocery stores. Thus, the establishment of the County’s economic stability is a key issue related to future demographic growth.

At-Place Employment

At-place employment refers to jobs physically based at employers in Prince William County, whether the job is based in private sector or government offices, manufacturing facilities, schools, retail stores, restaurants, nursing home or other facilities.

As of year-end 2020, and based on data from the U.S. Bureau of Labor Statistics, Prince William County had 125,270± at-place jobs, which exceeds the 2011 total by over 17,000 jobs, or by 15.8 percent. Data in Table 1 show steady and consistent job growth in the County since 2011, with employment growing by 25,100± between 2011 and 2019, or an average of 2,790± new jobs added each year. Employment losses occurred in 2020, though this was almost entirely attributable to the impacts of the COVID-19 pandemic. Many of these job losses are expected to be temporary and concentrated within a handful of employment sectors.

Employment losses in 2020 totaled 8,000±. These losses were significant and reduced at-place employment in Prince William County to pre-2016 levels. Sectors with the heaviest job losses in 2020 included Accommodations/ Food Services (2,310± jobs lost), Retail Trade (1,510± jobs lost), Arts/ Entertainment/ Recreation (1,260± jobs lost) and Health Care (910± jobs lost).

The largest employment sector in Prince William County is the public sector, accounting for over 22 percent of countywide employment. The largest component of the public sector is Local Government with nearly 19,000 employees, as of year-end 2020. This includes County government employees as well as employees of Prince William County Public Schools. Employment in Local Government expanded by over 2,300 over the past decade, making it among the fastest growing employment sectors during this period. Much of this growth was driven by new hires by Prince William County Public Schools, the largest employer in the County. An expanding population over the past decade drove this growth. Other major public sector employers include the U.S. Department of Defense, which is the third largest employer in the County and U.S. Federal Bureau of Investigation, which is the tenth largest employer in the County. State and Federal employment has remained steady over the past decade.

Retail Trade is the second largest employment sector in Prince William County, with nearly 20,000 jobs as of 2020. Most of these jobs are situated in the Woodbridge, Manassas and Gainesville areas. Table 1 shows that this sector faced especially heavy job losses in 2020 as a result of the COVID-19 pandemic when over 1,500 jobs were eliminated. Some of these jobs have since been recovered, though it is still too soon to quantify the level of permanent job losses.

The next largest employment sector in Prince William County is the Construction sector, accounting for nearly 12 percent of countywide employment. With over 4,200 jobs added over the past decade, this has been the fastest growing employment sector in the County during this period. Although most of the employment growth occurred early in the decade, this was one of the few employment sectors that faced no job losses amid the COVID-19 pandemic.

The Health Care sector is also an important source of employment, representing over 10 percent of jobs in Prince William County. With over 4,100 new jobs added over the past decade, this has been the second fastest growing employment sector in the County. Some job losses occurred in 2020, but most of these are likely to be temporary.

Professional employment also represents major employment sectors and major sources of employment growth over the past decade. This includes Professional/ Technical services, which has added 2,250± new jobs since 2011. Many of these jobs are related to the defense industry. There were minimal job losses in this sector in 2020, as it was largely insulated from the employment impacts of the COVID-19 pandemic.

Table 1: Trends in Average At-Place Employment, Prince William County, Virginia, 2011-2020

Industry	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Net Change	Percent Change
Retail Trade	19,737	20,613	21,357	21,590	22,256	22,449	21,883	21,882	21,450	19,943	206	1.0%
Local Gov.	16,570	16,776	17,379	17,693	18,006	18,233	19,004	19,272	19,673	18,921	2,351	14.2%
Construction	10,464	11,230	12,090	12,547	12,860	13,353	13,528	14,030	14,739	14,757	4,293	41.0%
Health Care	8,849	9,630	10,071	10,648	11,135	11,504	12,266	12,758	13,894	12,985	4,136	46.7%
Accom./Food	11,454	11,832	12,687	13,074	13,213	13,941	14,056	14,305	14,267	11,960	506	4.4%
Prof./Tech.	7,729	8,257	8,546	8,673	8,890	9,161	9,323	9,858	10,093	9,976	2,247	29.1%
Federal Gov.	6,865	6,832	7,008	6,758	6,484	6,417	6,406	6,421	6,547	6,736	-129	-1.9%
Admin./Waste	5,108	5,729	5,172	5,646	6,230	6,820	6,515	6,758	7,066	6,637	1,529	29.9%
Other Services	3,458	3,655	3,782	3,911	4,202	4,401	4,513	4,527	4,538	3,971	513	14.8%
Transport./ Wareh.	2,131	1,852	1,933	2,009	2,047	2,086	2,084	2,135	2,317	2,716	585	27.5%
Wholesale Trade	2,680	2,809	2,909	2,866	2,822	2,827	2,949	2,991	3,004	2,704	24	0.9%
State Gov.	1,956	2,060	2,149	2,214	2,197	2,117	2,084	2,110	2,065	2,029	73	3.7%
Manufacturing	2,171	2,126	1,924	1,897	1,851	2,015	2,040	1,941	1,939	1,949	-222	-10.2%
Finance/Insurance	1,688	1,737	1,890	1,948	2,027	2,183	2,130	2,122	2,079	1,943	255	15.1%
Arts/Enter./Rec.	2,070	2,251	2,239	2,388	2,661	2,660	2,699	2,768	3,104	1,848	-222	-10.7%
Real Estate	1,548	1,610	1,562	1,582	1,594	1,655	1,744	1,723	1,750	1,743	195	12.6%
Education	1,167	1,330	1,342	1,340	1,346	1,730	1,658	1,661	1,587	1,396	229	19.6%
Information	1,213	1,333	1,392	1,447	1,438	1,141	1,232	1,211	1,185	1,109	-104	-8.6%
Mgmt of Co.s	726	660	685	729	754	685	804	839	839	727	1	0.1%
Agriculture	63	61	65	59	59	83	91	134	129	134	71	112.7%
Mining	84	89	86	87	91	96	97	112	105	102	18	21.4%
Utilities	404	379	375	357	355	356	392	383	404	40	-364	-90.1%
Total	108,137	112,954	116,645	119,463	122,607	126,283	127,892	130,335	133,237	125,272	17,135	15.8%

Source: United States Department of Labor, Bureau of Labor Statistics

Employment and Labor Force

Employment differs from at-place jobs as it refers to the number of residents who are employed, no matter where the job is located. At-place jobs refer to where the job is physically located, i.e., within Prince William County.

Prince William County realized a net increase in employment of 17,740± jobs over the ten-year period between 2011 and 2020. Like at-place job trends, employment grew steadily between 2011 and 2019 when it reached a peak of 242,880± jobs. 2020 saw significant job losses, with a loss of 12,890± jobs. The fact that employment losses were far heavier than at-place job losses denotes that job losses in the region impacted Prince William County residents who commute outside of the county for work.

Data in Table 2 show that employment totals are significantly larger than at-place job totals, which means net out-commuting occurs into neighboring jurisdictions. These trends are an indication of the market for housing in the County, with a high percentage of County labor force working across the Washington Region.

Data in Table 2 show that the unemployment rate was a low 2.4 percent in 2019, down from 5.6 percent in 2011. The low unemployment rate means that new job growth will require new residents for the County. The unemployment rate did grow to 6.5 percent in 2020, though this is due to the COVID-19 pandemic.

Table 2: Trends in Employment and Unemployment, Prince William County, Virginia, 2011-2020				
	Labor Force	Employment	Unemployment	Percent Unemployed
2011	224,848	212,158	12,690	5.6%
2012	228,525	216,702	11,823	5.2%
2013	231,198	219,435	11,763	5.1%
2014	232,639	221,468	11,171	4.8%
2015	232,296	222,831	9,465	4.1%
2016	235,285	226,848	8,437	3.6%
2017	240,516	232,404	8,112	3.4%
2018	243,624	237,019	6,605	2.7%
2019	248,954	242,881	6,073	2.4%
2020	245,929	229,901	16,028	6.5%
Net Change	21,081	17,743	3,338	0.9%
Source: United States Department of Labor, Bureau of Labor Statistics				

COVID-19 and Employment

Table 3 shows monthly employment data up to February, 2022 in Prince William County to illustrate the local employment impact of the COVID-19 pandemic. This is the date for which the most recent data are available. Trend data show that since January, 2020, employment has fallen by nearly 8,400, with the number of unemployed growing by just under 400 people during that period. The labor force has also contracted by nearly 8,000 people, meaning that many of those who have lost their jobs have retired or quit searching for employment altogether. Data show some employment improvements since the pandemic began, with over 15,000 jobs recovered since April, 2020.

**Table 3: Trends in Employment and Unemployment,
Prince William County, Virginia, 2020-2022**

	<u>Labor Force</u>	<u>Employment</u>	<u>Unemployment</u>	<u>Percent Unemployed</u>
January, 2020	252,471	245,967	6,504	2.6%
February, 2020	253,518	247,723	5,795	2.3%
March, 2020	252,763	246,088	6,675	2.6%
April, 2020	250,366	222,218	28,148	11.2%
May, 2020	245,285	220,126	25,159	10.3%
June, 2020	251,464	225,951	25,513	10.1%
July, 2020	250,393	227,361	23,032	9.2%
August, 2020	248,921	229,816	19,105	7.7%
September, 2020	243,857	228,440	15,417	6.3%
October, 2020	243,544	230,093	13,451	5.5%
November, 2020	240,680	228,349	12,331	5.1%
December, 2020	238,863	227,590	11,273	4.7%
January, 2021	239,647	227,557	12,090	5.0%
February, 2021	241,093	229,344	11,749	4.9%
March, 2021	241,829	230,577	11,252	4.7%
April, 2021	241,366	231,464	9,902	4.1%
May, 2021	241,858	231,684	10,174	4.2%
June, 2021	243,990	232,886	11,104	4.6%
July, 2021	245,492	235,201	10,291	4.2%
August, 2021	242,336	232,628	9,708	4.0%
September, 2021	240,161	232,042	8,119	3.4%
October, 2021	241,169	234,005	7,164	3.0%
November, 2021	241,517	234,854	6,663	2.8%
December, 2021	241,174	234,675	6,499	2.7%
January, 2022	243,149	235,156	7,993	3.3%
February, 2022 1/	244,485	237,595	6,890	2.8%
Net Change	-7,986	-8,372	386	0.2%

Notes: 1/ Preliminary data. Subject to change.

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

The purpose of the analysis of employment and job growth is to illustrate that Prince William County’s population is projected to grow, once the economic impacts of the COVID-19 pandemic are surmounted. That will lead to new demand for more grocery stores, which in turn, can be used to evaluate the types of grocery stores that can be supported in the County. Of note is that employment at grocery stores in Prince William County remained essentially steady at year-end 2020, up by 40± people compared to year-end 2019. This is a period in which overall employment declined in Prince William County due to the pandemic.

Economic Development Activity

The paragraphs below briefly detail the larger job-generating economic developments that are under development or in planning in Prince William County. This list excludes smaller

office leases and expansions that generate a considerable number of new jobs but are not tracked by any state or local agencies. Also excluded are several data center proposals in various stages of planning. These announcements should generate at least 3,500 new jobs over the next few years but likely undercounts the level of future job growth as many expansions are smaller in scale and not publicly reported.

- **SES Americom**, a Luxembourg-based telecommunications company, announced in April, 2021 that it would establish a new U.S. hub facility at 8050 Piney Branch Lane in the Piney Industrial Park in Prince William's Bristow area. The facility will merge its satellite and network operations and is expected to create up to 200 new jobs by 2026.
- **Ceres Nanosciences** announced in March, 2021 that it would increase manufacturing of its reagent product used in COVID-19 testing. The project will create 50 jobs in engineering, advanced manufacturing and materials science by 2024.
- **International Gourmet Foods**, a wholesale distributor of gourmet specialty products, announced in the summer of 2020 that it would relocate its headquarters from Springfield to Woodbridge. The company will move to a 130,000± square foot development at 13405 Telegraph Road. The company will be adding 169 jobs.
- **JK Moving Services**, the nation's largest independently owned and operated moving company, announced in early-2020 that it would expand on a site off Wellington Road near Manassas where it will employ 300 people, including administrative, sales, driver and warehouse positions
- **Planet Direct**, a full-service marketing company and production facility, announced in the summer of 2020 that it would move to a new 110,000± square foot headquarters building at 94665 Discover Boulevard in the Innovation Park. The company employs 120 people and will have room to expand by at least 100 new employees.
- **Stack Infrastructure** announced in early-2020 that it would build a 700,000± square foot data center near Manassas.
- **CTP-I LLC** plans on constructing a data center east of Haymarket at the intersection of Catharpin Road and John Marshall Highway. Once open, the data center will employ 200 people.
- **Amazon** opened two new delivery stations in Prince William County in March, 2021, creating more than 200 new jobs. Located in Manassas and Gainesville, the stations power Amazon's "last-mile" capabilities to speed up deliveries for customers around Northern Virginia. The Gainesville facility is located at 5533 Wellington Road and measures 75,000± square feet. The Manassas facility is located at 11920 Balls Ford Road and measures 164,000± square feet.

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- **F1 Computer Solutions**, an IT company, announced in 2000 that it would expand its Prince William County operations with a new headquarters at 10611 Balls Ford Road in Manassas. The facility will add 27 new jobs.
 - **Haymarket Town Center**. This is a proposal for a mixed-use development at the intersection of Antioch Road and John Marshall Highway, just west of Haymarket. Plans call for two 100-room hotels, a 7,600± square foot restaurant and 3,000 square foot office building.
 - **Riverside Station**. This is a proposal for a mixed-use development at the corner of Route 1 and Occoquan Road. in Woodbridge. Plans call for 160,000± square feet of retail space, restaurants, bars, grocery stores as well as 900 apartment units.
 - **Neabsco Center**. This is a proposed 100,000± square foot shopping center to be built at 15807 Jefferson Davis Highway.
 - **Innovation Town Center**. This is a proposed mixed-use development to include 80,000± square feet of retail space, 750 homes, 250 hotel rooms, and 333,000± square feet of office space.
 - **Bayshore Moving and Storage** announced in July, 2020 that it would open a location in Prince William County where it would employ 13 people.
 - **Rosies Gaming Emporium**, a 19,000± square foot gaming center opened in January, 2021 with 95 video slots in the Triangle Shopping Center in Dumfries. It employs 120 people.
 - **N to N Fiber**, which designs fiber optic cables, announced in March, 2020 that it would expand its Prince William County location by adding 25 new jobs.
 - **Independent Hill**. This is a proposed mixed-use development on 544 acres of land between the county landfill on Route 234. Plans call for 122 new homes and 80,000± square feet of retail space.
 - **Giant Food** announced in November, 2021 that it would open an 80,800± square foot distribution hub at Parkway 66, an industrial building in Manassas.
 - **Granules Pharmaceuticals** announced in late-2021 that it had leased 79,000± square feet of industrial space at 7413 Cushing Road in Manassas.
 - **PRP** announced in April, 2022 that it had purchased 22 acres at 7816 Bethlehem Road near Manassas, where it intends to build three shell data buildings and one substation, ranging between 660,000± and 900,000± square feet of development
 - **NCS Technologies**, which designs and manufactures computers, announced in September, 2021 that it would expand its Prince William County facility and hire 20 new employees.

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- **Villagio Hospitality** announced in early-2022 that it would expand its beer-making capacity and construct a boutique hotel at its Farm Brew Live campus near Manassas. Plans call for a 21,000± square foot canning and distilling facility alongside a 60-room hotel.
 - **The Rose**. Construction is ongoing on this entertainment venue that will include a hotel and conference center with 175,000± square feet of gaming space and eight restaurants on the former site of the Dumfries landfill. The project's first phase includes a 155 hotel rooms and an 80-acre public park. It is expected to open in late-2023. The Rose will replace the Rosie's Gaming Emporium that currently operates historical horse-racing machines in Dumfries. The facility is expected to employ 736 people.

Demographics and Grocery Store Consumer Expenditure Potential

Demographic Analysis

Table 3 shows the demographic trends and projections for Prince William County, delineated by each of the five grocery store submarkets in the County, as defined above, and including the City of Manassas and City of Manassas Park. These data will be the basis for calculating potential grocery store consumer expenditures across the County and within each of the five submarkets. Data show steady population and household growth across all five submarkets. It also shows trends and projections of average household income.

The County (including the City of Manassas and City of Manassas Park) had a population of 454,100± at the time of the 2010 Census. This follows a ten-year period of rapid population growth when the County added 127,860± residents, an increase of 39.2 percent. Since 2010, and based on recently-released census data, the County's population has continued to grow, albeit at a slower yet consistent pace. The population expanded by 100,100± between 2010 and 2020, or at an average pace of 10,010± each year. Recent population growth occurred across all five submarkets in Prince William County, but was most pronounced in the central and eastern portions of the County.

Population projections to 2025 are based on population trends, anticipated employment growth and development patterns. The County's official population projections have not yet taken into account the recently-released 2020 census data, and thus could understate the level of

recent and future population growth. Based on these variables, the County is projected to house a population of 571,070± by 2025. Thus, the County's population is projected to grow by 16,870± over the next five years. This is a slightly slower pace compared to the 2010's decade but is a conservative estimate.

Table 4 also shows the steady growth in total households within the County, consistent with population growth. As of 2020, the County is estimated to have approximately 175,640± households, an increase of about 27,820± households from 2010 and 55,100± households compared with the Census figure of 61,180± in 2000. The net increase of households over the past two decades is the result of the level of new housing unit construction. By 2025, the County is projected to have 184,970± households.

One point to note is that the County's average household size expanded since 2000. Average household size was 2.95 in 2000 and reached 3.05 by 2010. By 2020, average household size is estimated to have reached 3.07. This continued growth is due in part to the large number of families with children moving to the County during that period. Average household size is projected to remain relatively steady by 2025.

The final set of data shown in Table 4 are the trends and projections of average household income, reported in constant 2022 dollars. The average household income grew from \$123,762 to \$138,140 between 2000 and 2010. It grew slightly over the past decade, reaching \$144,147 in 2020. To be conservative, average household income is projected to remain steady between 2020 and 2025.

The highest average household incomes are in the Gainesville/ Haymarket Submarket and Lake Ridge/ SR 642 Submarket. The Dumfries/ Triangle Submarket and Woodbridge/ Dale City Submarket have more modest incomes. Nevertheless, average household incomes are high across all submarkets in the County, exceeding \$100,000.

**Table 4: Demographics Trends and Projections, By Submarket,
Prince William County, Virginia, 2000-2025**
(Constant 2022 Dollars)

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
<u>Dumfries/ Triangle Submarket</u>				
Total Population	41,340	57,630	74,690	78,670
Household Population	39,930	56,820	73,750	77,680
Total Households	13,440	18,720	24,020	25,300
Average Household Income	\$108,495	\$121,099	\$126,365	\$126,365
<u>Gainesville/ Haymarket Submarket</u>				
Total Population	13,660	58,520	71,050	74,840
Household Population	13,560	58,350	70,860	74,630
Total Households	4,880	19,020	22,860	24,070
Average Household Income	\$158,484	\$176,896	\$184,588	\$184,588
<u>Lake Ridge/ SR 642 Submarket</u>				
Total Population	89,810	100,980	111,710	117,660
Household Population	89,580	100,870	111,580	117,530
Total Households	30,110	33,760	37,070	39,050
Average Household Income	\$140,695	\$157,040	\$163,869	\$163,869
<u>Manassas/ Bristow Submarket 2/</u>				
Total Population	110,400	143,600	173,850	183,110
Household Population	109,200	142,340	172,380	181,570
Total Households	37,450	46,260	55,790	58,760
Average Household Income	\$119,173	\$133,018	\$138,802	\$138,802
<u>Woodbridge/ Dale City Submarket</u>				
Total Population	70,490	93,380	110,890	116,800
Household Population	70,280	93,160	110,640	116,530
Total Households	23,410	30,060	35,350	37,230
Average Household Income	\$108,305	\$120,887	\$126,144	\$126,144
<u>Prince William County Total 1/ 2/</u>				
Total Population	326,240	454,100	554,200	571,070
Household Population	322,990	451,530	539,220	567,840
Total Households	109,580	147,820	175,640	184,970
Average Household Income	\$123,762	\$138,140	\$144,147	\$144,147
Notes: 1/ Numbers may not add up due to rounding. 2/ Includes City of Manassas and City of Manassas Park.				
Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Weldon Cooper Center for Public Service; Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.				

Grocery Store Consumer Expenditure Potential

Data in Table 5 detail the demographic trends and projections as they relate to grocery store expenditure potential across all of Prince William County. The key variable in Table 5 is the steady growth in households and the corresponding expansion of annual consumer expenditure. Also of note is the gradual increase in average household incomes, particularly over the past decade and expressed in constant 2022 dollars.

The multiplication of total households by average household income generates total household income within Prince William County. These variables are Census Bureau figures. The 2025 household totals and average household incomes are forecasts derived from recent trends and other sources identified in the footnotes in Table 5. Given the type and scope of ongoing residential and commercial development and in active planning, these growth projections may be conservative.

In 2020, countywide combined household income (including the cities of Manassas and Manassas Park) totaled approximately \$25.5 billion. This total is projected to reach \$26.9.0 billion by 2025, reported in constant 2022 dollars. This growth will be primarily driven by the 9,330± new households expected to move to Prince William County, Manassas and Manassas Park during this period. This County's total income is increased by 15 percent to account for inflow sales from residents who live outside of Prince William County (primarily commuters) and make grocery store purchases.

Annual consumer expenditure is calculated based on Bureau of Labor Statistics (BLS) data on how typical consumers in the Washington, DC metropolitan statistical area (MSA) allocate their spending. This MSA includes Prince William County and is the smallest and most relevant geographic unit for which the BLS estimates consumer expenditure.

Approximately 78.8 percent of household income in the Washington, DC MSA is spent on housing, education, cash contributions, insurance, consumer goods, and restaurant purchases. Nearly 30 percent of this total is spent on consumer goods and restaurants, the type of spending most relevant to this analysis.

Due to the steady growth in online purchases as a percentage of total expenditure, adjustments were made to account for these evolving spending behaviors. The purpose of these adjustments is to avoid overstating consumer expenditure within the County. These adjustments build on Census Bureau calculations related to trends in online and traditional retail sales. In 2000, just one percent of consumer expenditure is estimated to have occurred online. This total

has grown to 11.4 percent, as of 2020. Based on recent trends, this total is projected to reach 14.8 percent by 2025. These adjustments are reflected in the potential consumer expenditure calculations in Table 5 as Total Potential Retail Consumer Expenditure.

Within the Total Potential Retail Consumer Expenditure, the breakdown by expenditure type is 6.2 percent for restaurants and 23.5 percent for general retail. Retail expenditures related to housing, which include household operations, housekeeping supplies, and furniture, represent the largest component of retail-related consumer expenditure. This component was adjusted to exclude rent and mortgage payments. Other major retail expenditures include entertainment and apparel. These totals include all consumer expenditures, as the BLS does not classify grocery store purchases as a unique spending category.

The County's total potential retail consumer expenditure equaled nearly \$6.1 billion in 2020, which is an increase of nearly \$767 million over the 2010 total. This increase is largely a function of household growth, at an average rate of approximately 2,780± households per year since 2010. This growth is also attributable to the increase in average household income across all submarkets in the County. By 2025, this total is projected to grow by over \$78 million and reach approximately \$6.2 billion. Part of the reason for the projected slower growth is the conservative forecast that average household incomes will remain steady in the near term. County staff also expect a slower pace of household growth compared to the past decade.

The final and key point shown in Table 5 is potential grocery store expenditure, which is estimated at 32.2 percent of total retail expenditure. This calculation is derived from BLS estimates of consumer expenditure in the Washington, DC Region, as described above. Total consumer expenditure in the grocery store category is estimated at \$1.96 billion for 2020, up from \$1.71 billion in 2010. It is projected to reach \$1.98 billion by 2025, an increase of approximately \$25 million.

The steady increase of consumer expenditure on groceries, driven principally by household growth, should fully offset sales revenue leakages from online purchases. This growth should provide adequate consumer demand to sustain most existing grocery stores and generate supplementary demand to support new grocery stores in Prince William County, in time.

Table 5: Grocery Store Consumer Expenditure Potential, Prince William County, Virginia, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Households	109,580	147,820	175,640	184,970
Average Household Income 2/	\$123,762	\$138,140	\$144,147	\$144,147
Total Income	\$13,466,350,070	\$20,720,493,882	\$25,528,047,529	\$26,887,704,030
Total Income + Inflow Sales (+15%)	\$15,486,302,581	\$23,828,567,964	\$29,357,254,659	\$30,920,859,635
Potential Consumer Expenditure (78.8%)	\$12,208,166,445	\$18,784,543,459	\$23,142,919,323	\$24,375,540,842
Annual Consumer Expenditure 3/	\$12,086,084,780	\$17,920,454,460	\$20,504,626,521	\$20,767,960,797
Housing (6.8%) 4/	\$740,408,319	\$1,097,828,934	\$1,256,138,471	\$1,272,270,651
Food Away from Home (6.2%)	\$746,642,499	\$1,107,072,567	\$1,266,715,058	\$1,282,983,070
Food at Home (6.1%)	\$147,365,396	\$218,503,752	\$250,012,512	\$253,223,342
Entertainment (4.6%)	\$823,309,645	\$1,220,749,587	\$1,396,784,574	\$1,414,723,026
Apparel and Services (3.0%)	\$365,296,401	\$541,637,564	\$619,742,986	\$627,702,145
Personal Care Products & Services (1.4%)	\$555,903,129	\$824,256,729	\$943,116,505	\$955,228,645
Alcoholic Beverages (1.2%)	\$168,588,136	\$249,971,439	\$286,017,914	\$289,691,150
Reading (0.2%)	\$20,028,960	\$29,697,630	\$33,980,098	\$34,416,494
Tobacco & Smoking Supplies (0.2%)	\$19,498,392	\$28,910,938	\$33,079,963	\$33,504,799
Total Potential Retail Consumer Expenditure	\$3,587,040,878	\$5,318,629,140	\$6,085,588,084	\$6,163,743,320
Total Potential Grocery Store Expenditure 5/	\$1,153,913,499	\$1,710,947,316	\$1,957,669,979	\$1,982,811,701

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Table 6 details potential grocery store expenditures, delineated by each of the five submarkets. The full calculations are provided in the Appendix. It shows the highest expenditure potential in the Lake Ridge/ SR 642 submarket and Manassas/ Bristow submarkets. The key point is that expenditure potential is projected to increase in all five submarkets, driven by household and income growth.

Table 6: Grocery Store Expenditure by Submarket, Prince William County, Virginia, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Dumfries/ Triangle Submarket	\$124,948,874	\$187,190,686	\$232,718,815	\$235,707,547
Gainesville/ Haymarket Submarket	\$66,271,775	\$277,820,701	\$323,522,065	\$327,676,954
Lake Ridge/ SR 642 Submarket	\$363,005,139	\$437,773,802	\$465,840,651	\$471,823,292
Manassas/ Bristow Submarket 2/	\$382,430,964	\$508,103,478	\$593,676,242	\$601,300,633
Woodbridge/ Dale City Submarket	<u>\$217,256,748</u>	<u>\$300,058,649</u>	<u>\$341,912,207</u>	<u>\$346,303,275</u>
Total Potential Grocery Store Expenditure	\$1,153,913,499	\$1,710,947,316	\$1,957,669,979	\$1,982,811,701

Notes: 1/ All data reported in constant 2022 dollars.

2/ Includes City of Manassas and City of Manassas Park.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Weldon Cooper Center for Public Service; Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Section II: Prince William County Grocery Stores by Type

Characteristics of Prince William County Grocery Stores

Table 7 to follow lists all of the existing full-service grocery stores in Prince William County and the City of Manassas. Except for Mom’s Organic Market in the Woodbridge submarket, all grocery stores listed in Table 7 are over 15,000 square feet in size, which denotes a more competitive store. Mom’s Organic Market was included in the analysis as it competes with these larger grocery stores.

Excluded from the analysis are a large number of smaller retailer grocery stores that marginally compete for the County’s grocery store market. Most are “dollar stores” or part of pharmacies or fueling stations. These include retailers such as 7-Eleven, Family Dollar, Dollar General, Dollar Tree, Wawa, CVS, Walgreens and Sheetz. While these stores do generate grocery sales, they offer a limited variety of “fresh” products. These smaller stores represent an estimated additional 10 to 15 percent of annual grocery store sales within Prince William County.

The analysis separates the larger grocery stores by submarket within the County. Five submarkets were identified based on the geographic clusters of existing grocery stores. The Manassas and Woodbridge areas have the largest concentration of grocery stores and include an abundance of discount grocery stores. The greater Lake Ridge and Gainesville areas offer the widest mix of grocery store types. Walmart operates four “supercenters” in the County, each with a full-service grocery store.

Data on store sizes and opening dates are from marketing brochures, assessment data, interviews with local commercial brokers, media reports, interviews with commercial real estate brokers and other local sources. Store sales data are based on input from commercial brokers and estimates derived from store size and type.

The Prince William grocery store market is diverse and has evolved considerably over the past two decades. Grocery stores are delineated by nine types to show the “quality” and store concepts within Prince William County. Each is briefly described in the paragraphs below.

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- **Big Box Mix.** These are grocery stores within big box retailers that are not exclusively defined as “discount” big box stores. The grocery offerings at these stores are generally equivalent to traditional, Mid-Level grocery stores. They do not have on-site butchers and delis. The only grocery stores of this type in Prince William County are within three Targets located in the Gainesville, Manassas and Woodbridge. Target added these grocery offerings nationwide beginning in 2010.
 - **Discount.** The only two discount grocery brands in Prince William County are Aldi and Lidl, both of which are German-based businesses that have expanded rapidly across the Washington Region in recent years. These are the two largest discount grocers in the world. Lidl is one of the few grocery chains that builds new, free-standing grocery stores. Their approach is no-frills, “pass-the-savings-to-the-consumer” model with minimal staffing and a wide array of branded products. A large proportion of items sold are branded products. There are 14 discount grocery stores in Prince William County, mostly concentrated in the Manassas/ Bristow submarket. This includes an Aldi that opened in December, 2021 in Haymarket.
 - **Discount Big Box.** All discount big box retailers within Prince William County are Walmart Supercenters with a hybrid model that houses a full-service grocery store within a larger Walmart store. These stores do not have delis or butchers on site. The items in the stores are marketed as being priced below other area grocery stores. Also offered are a wide range of branded products. There are five Walmart Supercenters in Prince William County. These are spread across all of the submarkets except for Lake Ridge/ SR 642.
 - **High-End.** The only “high-end” grocery store in Prince William County is Wegmans, which operates one store in Gainesville and one store in Woodbridge. These are large-format stores of over 100,000 square feet that target higher income households. There are no small or mid-sized high-end grocery stores in Prince William County.
 - **International.** There are 11 international grocery stores in Prince William County that sell both American and international products targeting the County’s large and expanding immigrant community. These include both locally- and internationally-owned grocery stores. The largest concentration of international stores is in the Manassas/Bristow submarket and Woodbridge/ Dale City submarket. Most recent to open is a 52,000± square foot Fresh World, which opened in July, 2021. Additionally, Todos Market relocated to a new, larger space in March, 2022. Its former space in Dumfries was replaced by another international brand, U Mart.
 - **Mid-Level.** This is the most prevalent type of grocery store in Prince William County and includes Giant, Safeway and Food Lion. There are 22 Mid-Level grocery stores in Prince William County, spread across all submarkets. Most have butchers and delis, and all sell branded products. This includes a new Amazon Fresh, which opened in June, 2022, and a Giant, which opened in November, 2021.

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- **Specialty**. These grocery stores fill niche markets, such as for organic products. The only specialty grocery store under study is Mom’s Organic Market, located in Woodbridge.
 - **Upper Mid-Level**. These grocery stores fall between the Mid-Level and High-End grocery stores in terms of pricing and offerings. The only Upper Mid-Level grocery store in Prince William County is Harris Teeter. There are four Harris Teeters in Prince William County.
 - **Warehouse Clubs**. These are large retail stores that sell a variety of merchandise, including groceries, in bulk. Customers are required to pay annual membership fees to shop in these stores. Within Prince William County, these include Costco, Sam’s Club and BJ’s Wholesale Club. There are five warehouse clubs in Prince William County, with the largest concentration located in the Woodbridge/ Dale City submarket. The sales data shown in Table 7 for these stores was reduced by half to exclude non-grocery sales.

Of note is that Prince William County has an abundance of grocery stores and over 20 different brands. At present, there are no Trader Joe’s, Publix, Whole Foods Markets or Sprouts Farmers Market in Prince William County.

Data in Table 7 also show the annual estimated sales at each of the grocery stores within the five submarkets. These estimates are based on input from local commercial realtors who are involved in grocery store leases in the County and region.

Data show that most of the standard grocery stores generate annual sales of between \$9 million and \$28 million. The older and smaller grocery stores, such as the smaller Food Lions, generate lower annual sales volumes, while the newer more high-end grocery stores, such as Harris Teeter have higher annual sales volumes. These data show that the “upper end” groceries generate higher annual sales compared to the more modest grocery stores.

Aldi and Lidl, the two discount grocery stores, typically generate annual sales of between \$10 and \$13 million. These stores have far lower operating costs than the others in the County. They typically have fewer employees than traditional grocery stores.

The two Wegmans stores are somewhat outliers, as they are far larger than the other grocery stores at over 100,000 square feet, capture a higher-income demographic and attract

shoppers willing to travel longer distances. The stores are estimated to generate annual sales of around \$75 and \$89 million.

In addition, Table 7 also shows sales data for non-traditional grocery stores, including hybrid models, i.e. big box retailers with full grocery offerings such as Target and Walmart. These stores generate at least \$26 million in annual grocery sales. The three warehouse clubs – Costco, Sam’s Club and BJ’S Wholesale Club – are estimated to generate over \$100 million in annual grocery sales.

Table 7: Characteristics of Grocery Stores by Location, Prince William County Study Area, Virginia, May, 2022 ^{1/}

	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Grocery Sales (Millions)</u>
<u>Dumfries/ Triangle</u>					
Aldi	17010 Jefferson Davis Hwy	Discount	2016	16,650	\$11.96
Food Lion	5227 Waterway Dr	Mid-Level	1998	33,000	\$9.10
Food Lion	17120 Jefferson Davis Hwy	Mid-Level	1998	37,240	\$11.18
Lidl	16601 Dumfries Rd	Discount	Sep-2018	20,000 4/	\$10.40
Shoppers	4174 Fortuna Center Plaza	Discount	2005	68,870	\$18.20
Target	4310 Fortuna Center Plaza	Big Box Mix	2008	123,740	\$26.00
Todos Market	16593 River Ridge Blvd	International	Mar-2022	64,890	\$16.00
U Mart	17987 Dumfries Shopping Plz	International	Dec-2021	18,000 4/	\$10.40
Walmart Supercenter	17041 Jefferson Davis Hwy	Discount Big Box	2010	176,660	\$26.00
<u>Gainesville/ Haymarket</u>					
Aldi	15201 Washington St	Discount	Dec-2021	12,000 4/	\$11.96
BJ's Wholesale Club	5100 Wellington Rd	Warehouse Club	2012	80,000	\$104.00
Giant	5581 Merchants View Sq	Mid-Level	2005	73,350	\$40.30
Giant	7575 Linton Hall Rd	Mid-Level	1999	69,680	\$54.60
Harris Teeter	13901 Heathcote Blvd	Upper Mid-Level	2015	53,000	\$22.10
Target	13301 Gateway Center Dr	Big Box Mix	2004	174,700	\$26.00
Walmart Supercenter	6530 Trading Sq	Discount Big Box	2012	150,000	\$26.00
Wegmans	8297 Stonewall Shops Sq	High-End	2008	140,000	\$75.40
<u>Lake Ridge/ SR 642</u>					
Food Lion	13490 Dumfries Rd	Mid-Level	1990	35,000 4/	\$11.70
Food Lion	6306 Hoadly Rd	Mid-Level	2005	38,270	\$11.18
Food Lion	12420 Dillingham Sq	Mid-Level	1990	45,250	\$13.00
Giant	5469 Mapledale Plaza	Mid-Level	1989	37,400	\$23.40
Giant	12445 Hedges Run Dr	Mid-Level	1987	52,710	\$28.60
Harris Teeter	12745 Galveston Ct	Upper Mid-Level	2007	52,410	\$26.00
Lidl	2070 Tacketts Village Sq	Discount	Jan-2018	20,000 4/	\$11.96
Safeway	2205 Old Bridge Rd	Mid-Level	1973	36,760	\$22.10
Safeway	4240 Merchant Plaza	Mid-Level	1991	54,730	\$24.70
<u>Manassas/ Bristow</u>					
Aldi	10294 Portsmouth Rd	Discount	2008	21,590	\$11.96
Aldi 3/	9714 Liberia Ave	Discount	2008	15,950	\$11.96
Amazon Fresh	7807 Sudley Rd	Mid-Level	Jun-2022	45,000	\$18.00
Costco	10701 Sudley Manor Dr	Warehouse Club	1992	130,580	\$117.00
Food Lion 3/	9121 Centerville Rd	Mid-Level	1997	37,970	\$10.40
Fresh World 3/	9540 Liberia Ave	International	2016	35,490	\$10.40
Giant	8025 Sudley Rd	Mid-Level	1968	52,150	\$28.60
Giant 3/	10100 Dumfries Rd	Mid-Level	1995	67,280	\$22.10
Giant	10864 Sudley Manor Dr	Mid-Level	Nov-2021	60,000	\$22.10
Global Food	10320 Festival Ln	International	1986	51,020	\$18.20
Harris Teeter	10438 Bristow Center Dr	Upper Mid-Level	2007	56,300	\$26.00
Harris Teeter 3/	10060 Market Circle Hastings	Upper Mid-Level	2008	56,000	\$21.58
H-Mart 3/	8819 Centerville Rd	International	2015	49,000	\$23.40
Lidl	9795 Liberia Ave	Discount	Apr-2021	20,000 4/	\$11.96
Lidl	11782 Sudley Manor Dr	Discount	Sep-2017	20,000 4/	\$13.00
Megamart	8328 Shoppers Square	International	2011	47,000	\$20.80
Oh! Market	7412 Stream Walk Ln	International	Nov-2020	47,000	\$16.64
Safeway	12821 Braemar Village Plaza	Mid-Level	2003	57,860	\$24.70
Target	9900 Sowder Village Square	Big Box Mix	2008	170,000	\$26.00
Walmart Supercenter	8386 Sudley Rd	Discount Big Box	2009	203,090	\$26.00
Walmart Supercenter	9401 Liberia Ave	Discount Big Box	2003	156,140	\$26.00
<u>Woodbridge/ Dale City</u>					
Aldi	13291 Gordon Blvd	Discount	2005	16,530	\$11.96
Aldi	13782 Smoketown Rd	Discount	2005	15,960	\$15.86
BJ's Wholesale Club	14123 Noblewood Plaza	Warehouse Club	1991	107,280	\$104.00
Costco	2700 Potomac Mills Cir #200	Warehouse Club	2007	152,000	\$122.20
Food Lion	5592 Staple Mill Plaza	Mid-Level	2000	30,000	\$11.18
Food Lion	14641 Jefferson Davis Hwy	Mid-Level	2013	34,960	\$9.10
Food Lion	13414 Jefferson Davis Hwy	Mid-Level	1979	33,000 4/	\$13.00
Fresh World	2042 Daniel Stuart Square	International	Jul-2021	52,000	\$15.00
Giant	4309 Dale Blvd	Mid-Level	1978	39,190	\$20.80
Global Food	13813 Foulger Square	International	1997	56,000	\$18.20
Mom's Organic Market	14470 Smoketown Rd	Specialty	2015	12,000	\$10.40
Safeway	4215 Cheshire Station Plaza	Mid-Level	2002	55,160	\$16.90
Sam's Club	14050 Worth Ave	Warehouse Club	1993	133,760	\$104.00
Target	2460 Prince William Pkwy	Big Box Mix	1996	127,900	\$26.00
Todos Market	13905 Jefferson Davis Hwy	International	2011	50,000	\$18.20
Wegmans	14801 Dining Way	High-End	2007	138,500	\$98.80
Walmart Supercenter	14000 Worth Ave	Discount Big Box	1992	148,120	\$26.00

Notes: 1/ Excludes smaller retailers: 7-Eleven (61), CVS (18), Walgreens (10), Dollar Tree (10), Sheetz (8), Family Dollar (6) Dollar General (5), Wawa (5).
Excludes Quantico MCB Commissary where data is not available.

3/ Located in the City of Manassas.

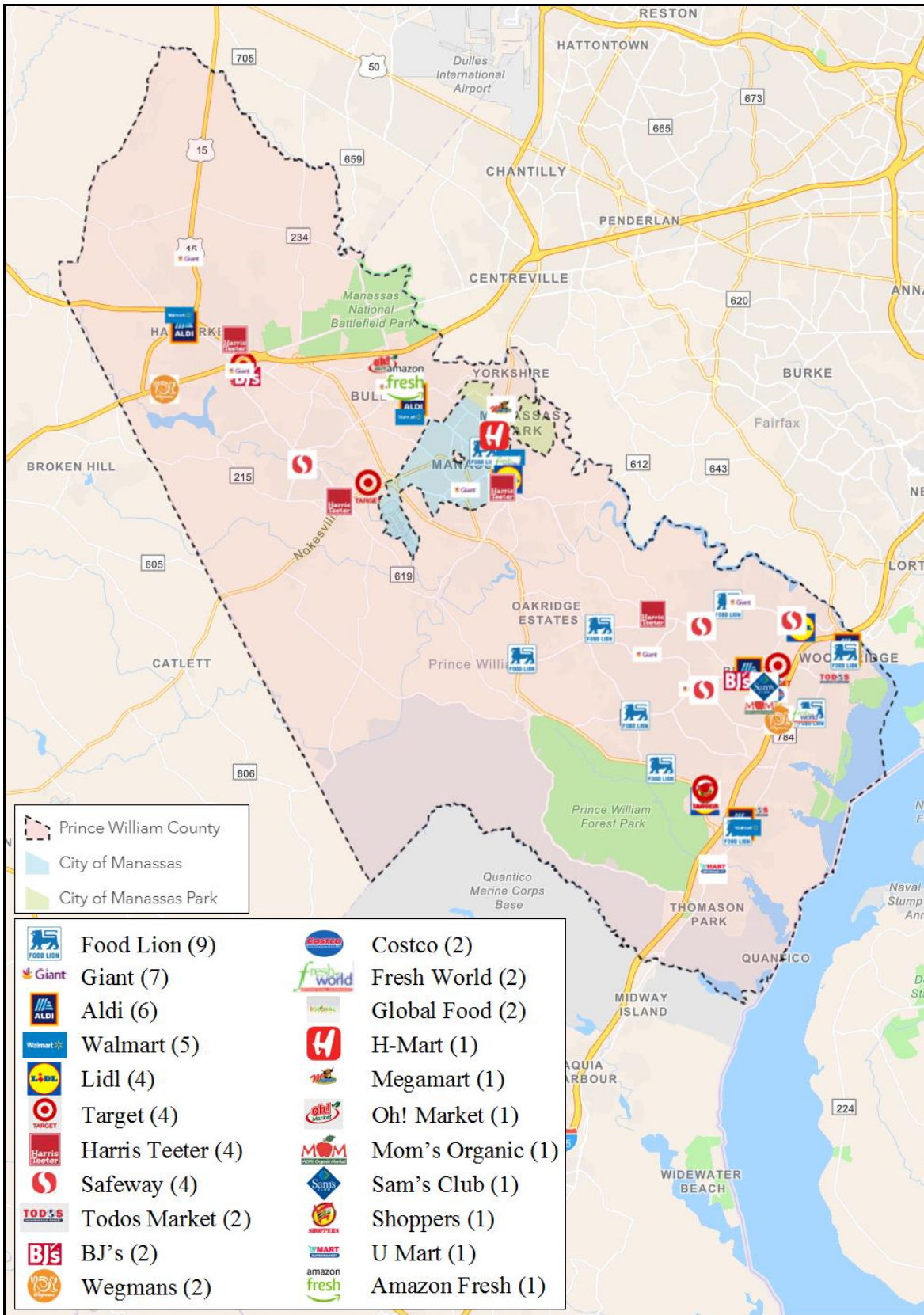
4/ Estimate

Source: S. Patz & Associates, Inc.

Table 8 below shows that the grocery stores that comprise the competitive grocery store “market” exclude smaller convenience stores. The larger grocery stores generate a combined annual store sales total of about \$1.77 billion, based on national trends and our local research. The Woodbridge/ Dale City submarket, which has a Walmart, Target and Wegmans, has the highest combined annual sales of \$641.6 million. The Dumfries/ Triangle and Lake Ridge/ SR 642 areas have the lowest annual grocery store sales totals. These two areas have the smallest number of grocery stores.

Table 8: <u>Estimated Annual Grocery Store Sales, by Submarket, Prince William County, Virginia</u>		
	<u>Estimated Annual Sales</u>	<u>Percent of Total</u>
Dumfries/ Triangle	\$139,240,000	7.8%
Gainesville/ Haymarket	\$360,360,000	20.3%
Lake Ridge/ SR 642	\$172,640,000	9.7%
Manassas/ Bristow 1/	\$460,200,000	25.9%
Woodbridge/ Dale City	<u>\$641,600,000</u>	<u>36.2%</u>
Total	\$1,774,040,000	100.0%
Notes: 1/ Includes stores in the City of Manassas. Total annual sales excluding the City of Manassas is \$378,360,000.		
2/ Excludes Amazon Fresh, which opened in June, 2022.		
Source: S. Patz & Associates, Inc.		

Map C shows the locations of the County’s existing grocery stores. These are scattered throughout much of the County, but the expansive southern and western portions of the County have no grocery stores. These areas are largely in the County’s “Rural Area.” There are no grocery stores in Triangle and areas to the south of this community.



Map C - Locations of Prince William County Grocery Stores

Shown next are photos of each of the grocery store brands in Prince William County. Apart from Lidl, all of which are located in new construction, free-standing buildings, all of the traditional grocery stores anchor multi-tenant shopping centers. The one exception is the Aldi in Dumfries, which is a standalone grocery store.

The hybrid stores (Target and Walmart) also anchor multi-tenant shopping centers. The international grocers are generally located in older shopping centers, occupying spaces that formerly housed Mid-Level grocery stores. The warehouse clubs are all in free-standing buildings, but within areas with a high concentration of other retailers.



Aldi

(9714 Liberia Ave)



(13291 Gordon Blvd)



BJ's Wholesale Club

(5100 Wellington Rd)



(14123 Noblewood Plaza)



(10701 Sudley Manor Dr)



(2700 Potomac Mills Cir #200)

Costco



(5227 Waterway Dr)



(12420 Dillingham Sq)

Food Lion



(9540 Liberia Ave)



(2042 Daniel Stuart Square)

Fresh World



(10864 Sudley Manor Dr)



Giant

(12445 Hedges Run Dr)



(10320 Festival Ln)

Global Food



(13813 Foulger Square)



H-Mart (8819 Centreville Rd)



Megamart (8328 Shoppers Square)



Harris Teeter
(13901 Heathcote Blvd)



Harris Teeter
(12745 Galveston Ct)



Lidl
(16601 Dumfries Rd)



Lidl
(11782 Sudley Manor Dr)



Oh! Market (7412 Stream Walk Ln)



Mom's Organic Market (14470 Smoketown Rd)



(12821 Braemar Village Plaza)



(4215 Cheshire Station Plaza)

Safeway



Sam's Club (14050 Worth Ave)



Shoppers (4174 Fortuna Center Plaza)



(9900 Sowder Village Sq)



(2460 Prince William Pkwy)

Target



Todos Market
(13905 Jefferson Davis Hwy)



Todos Market
(16911 Jefferson Davis Hwy)



Walmart Supercenter
(8386 Sudley Rd)



Walmart Supercenter
(6530 Trading Sq)



Wegmans
(8297 Stonewall Shops Sq)



Wegmans
(14801 Dining Way)



U Mart (17987 Dumfries Shopping Plaza)



Amazon Fresh (7807 Sudley Rd)

Section III: Grocery Store Supply (by Submarket)

The subsection to follow describes the grocery store chains in each of the five defined submarkets. It will show an abundance of grocery stores, of various types, in each submarket. This analysis is required to evaluate any “gaps” that may exist in terms of various service areas.

Dumfries/ Triangle Submarket Grocery Inventory

Nine grocery stores are located in the Dumfries/ Triangle submarket, including an Aldi, two Food Lions, the County’s only remaining Shoppers, a Lidl, a Target, a Walmart Supercenter and two international grocery stores called U Mart and Todos Market that opened over the past year. The Shoppers is expected to remain in place in the near term, but the chain is unlikely to operate in the region on a long-term basis.

There are no “high-end” grocery stores in this area. Apart from the nearly 65,000 square foot Todos Market, which replaced a smaller Todos Market that has since been re-occupied by U Mart, the Lidl opened most recently in September, 2018 as the only discount grocery store in the submarket. Both Food Lions are older, having opened in the late-1990’s. The Shoppers and Target both opened in the mid-2000’s. The Walmart Supercenter opened in 2010. Combined, these grocery stores generate annual sales of over \$128 million.

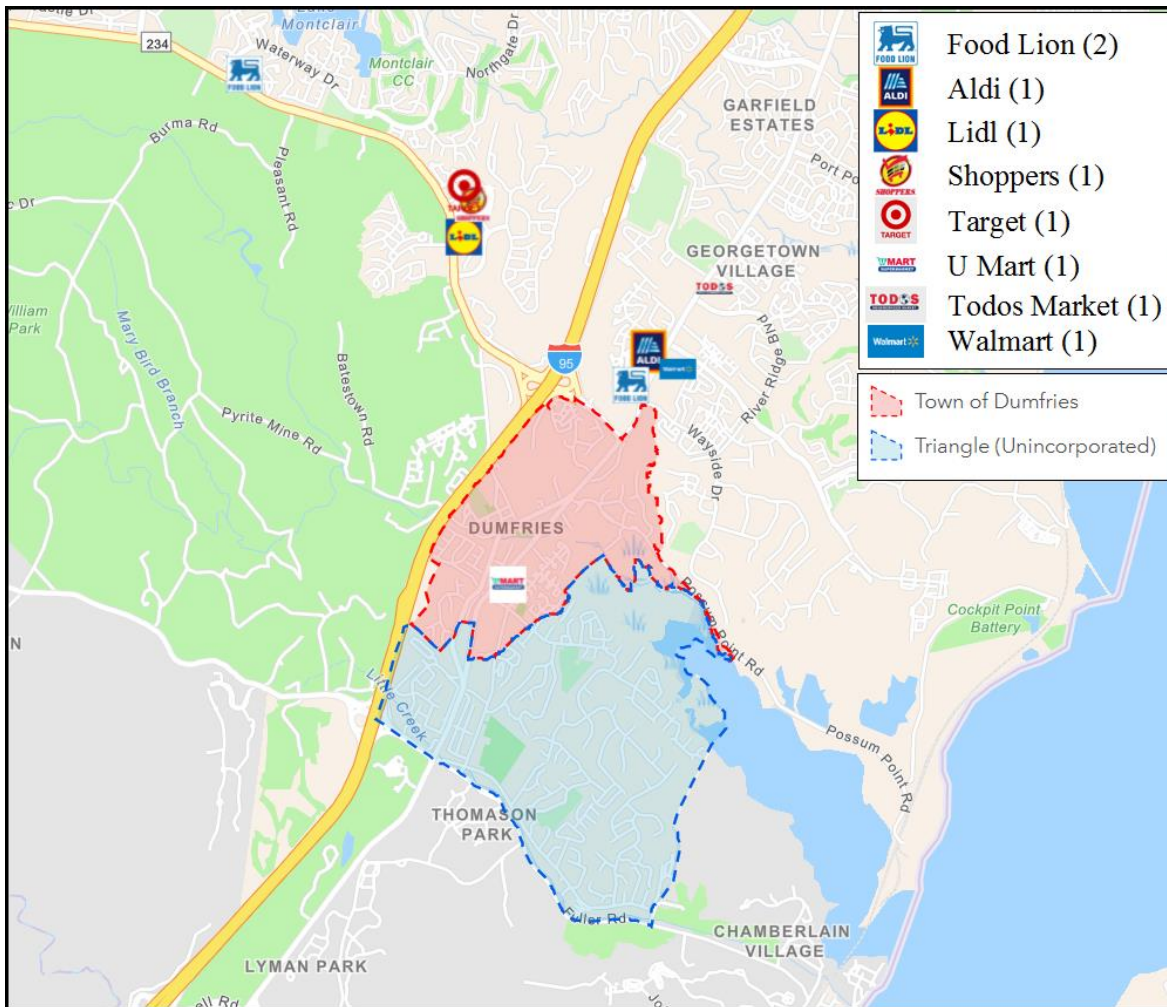
Table 9: Characteristics of Grocery Stores, Dumfries/ Triangle Submarket, Prince William County, VA, June, 2022

	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Sales (Millions)</u>
Aldi	17010 Jefferson Davis Hwy	Discount	2016	16,650	\$11.96
Food Lion	5227 Waterway Dr	Mid-Level	1998	33,000	\$9.10
Food Lion	17120 Jefferson Davis Hwy	Mid-Level	1998	37,240	\$11.18
Lidl	16601 Dumfries Rd	Discount	Sep-18	20,000 1/	\$10.40
Shoppers	4174 Fortuna Center Plaza	Discount	2005	68,870	\$18.20
Target	4310 Fortuna Center Plaza	Big Box Mix	2008	123,740	\$26.00
Todos Market 2/	16593 River Ridge Blvd	International	Mar-22	64,890	\$16.00
U Mart	17987 Dumfries Shopping Plz	International	Dec-21	18,000	\$10.40
Walmart Supercenter	17041 Jefferson Davis Hwy	Discount Big Box	2010	<u>176,660</u>	<u>\$26.00</u>
Total				559,050	\$139.24

Notes: 1/ Estimate
2/ Replaced smaller Todos Market at 17987 Dumfries Shopping Plaza.

Source: S. Patz & Associates, Inc.

Map D shows the locations of the eight grocery stores in the Dumfries/Triangle submarket. These grocery stores are located along SR 234 just north of the Town of Dumfries. None are located in Triangle. Todos Market had previously operated a store in south of Quantico Creek in the Town of Dumfries, but it has since relocated to a larger space. U Mart has since leased this location.



Map D - Locations of Dumfries/Triangle Market Grocery Stores

Gainesville/ Haymarket Submarket Grocery Inventory

This submarket includes eight existing grocery stores in the Town of Haymarket. The submarket has a wide mix of grocery store types, including one of the County’s two large Wegmans. Apart from a Giant that opened in 1999, all of the existing grocery stores in this submarket are relatively new, having opened since 2004. This includes a new 12,000± square foot

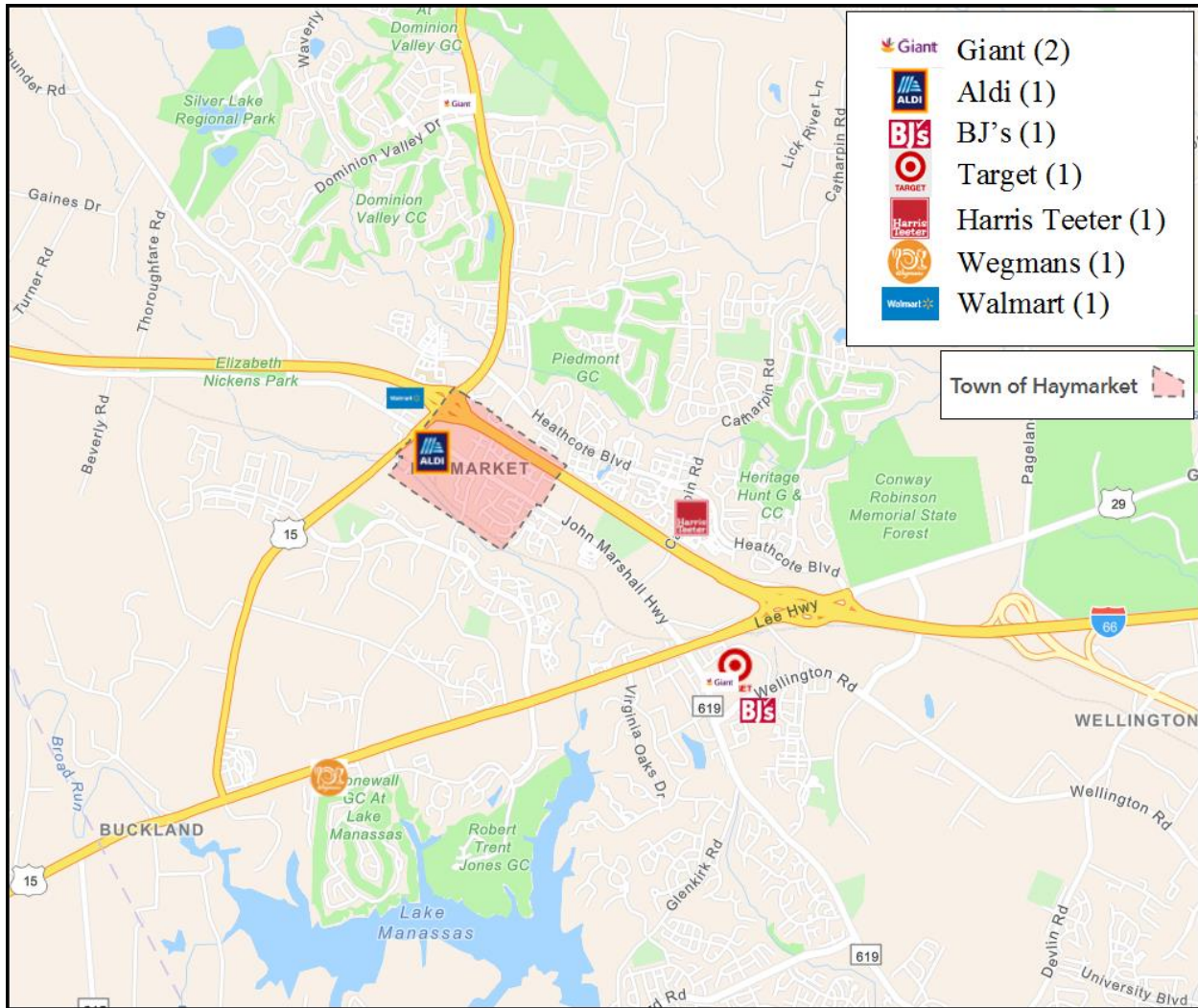
Aldi that opened in December, 2021 in former Food Lion space. Total annual grocery sales in the Gainesville/ Haymarket submarket total \$360.36 million.

Table 10: Characteristics of Grocery Stores, Gainesville/ Haymarket Submarket, Prince William County, VA, June, 2022

	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Sales (Millions)</u>
Aldi	15201 Washington St	Discount	Dec-21	12,000	\$11.96
BJ's Wholesale Club	5100 Wellington Rd	Warehouse Club	2012	80,000	\$104.00
Giant	5581 Merchants View Sq	Mid-Level	2005	73,350	\$40.30
Giant	7575 Linton Hall Rd	Mid-Level	1999	69,680	\$54.60
Harris Teeter	13901 Heathcote Blvd	Upper Mid-Level	2015	53,000	\$22.10
Target	13301 Gateway Center Dr	Big Box Mix	2004	174,700	\$26.00
Walmart Supercenter	6530 Trading Sq	Discount Big Box	2012	150,000	\$26.00
Wegmans	8297 Stonewall Shops Sq	High-End	2008	140,000	\$75.40
Total				752,730	\$360.36

Source: S. Patz & Associates, Inc.

Map E shows the locations of the nine existing and planned grocery stores in the Gainesville/ Haymarket submarket. Aldi is the only grocery store in the Town of Haymarket and recently replaced a portion of the vacant Food Lion on Washington Street. Lidl will be a new construction development. A Walmart Supercenter is located just outside of the Town of Haymarket, while a Giant is located further north. The other grocery stores are located in and around Gainesville.



Map E - Locations of Gainesville/ Haymarket Market Grocery Stores

Lake Ridge/ SR 642 Submarket Grocery Inventory

Nine grocery stores are located in this largely residential submarket, including three Food Lions, two Giants, two Safeways, a Harris Teeter and a Lidl. The Lidl, which opened most recently in January, 2018, is the only discount store in the submarket. All of the remaining grocery stores are Mid-Level and Upper Mid-Level grocery stores. Compared to the rest of the County, these are older grocery stores with six of nine having opened prior to 2000. Total annual grocery sales in this submarket are estimated at \$172.64 million.

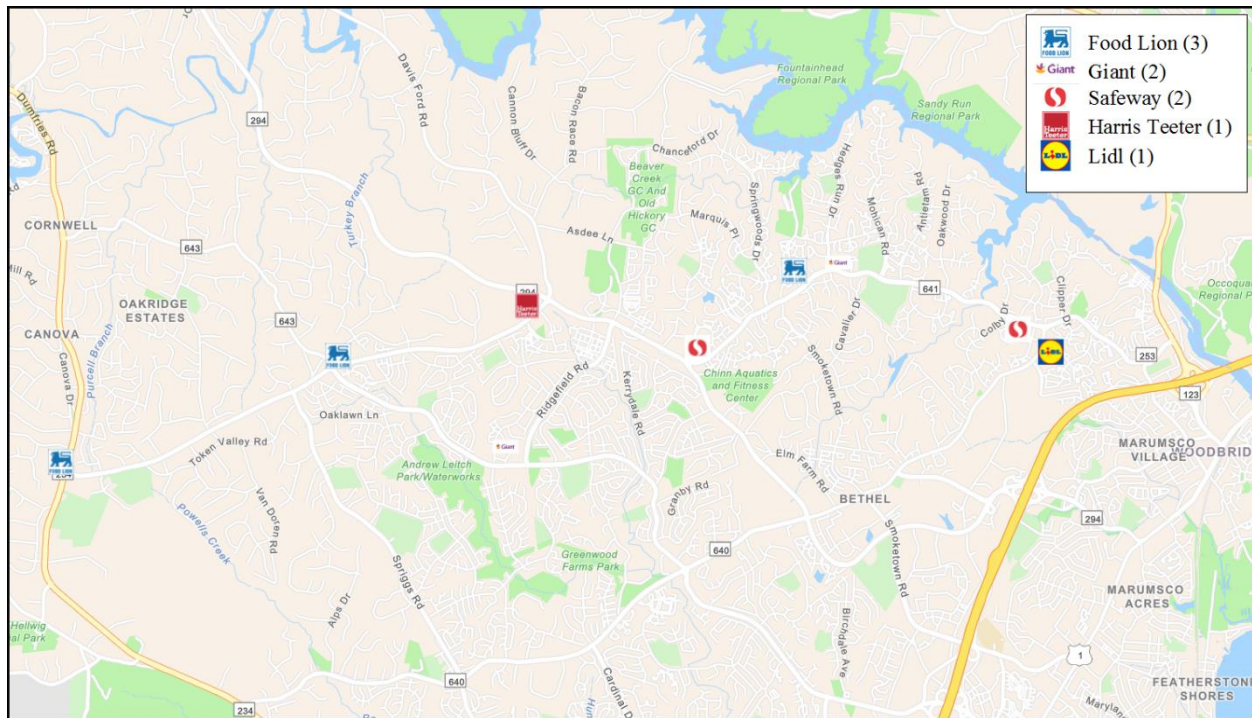
Table 11: Characteristics of Grocery Stores, Lake Ridge/ SR 642 Submarket, Prince William County, VA, June, 2022

	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Sales (Millions)</u>
Food Lion	13490 Dumfries Rd	Mid-Level	1990	35,000 1/	\$11.70
Food Lion	6306 Hoadly Rd	Mid-Level	2005	38,270	\$11.18
Food Lion	12420 Dillingham Sq	Mid-Level	1990	45,250	\$13.00
Giant	5469 Mapledale Plaza	Mid-Level	1989	37,400	\$23.40
Giant	12445 Hedges Run Dr	Mid-Level	1987	52,710	\$28.60
Harris Teeter	12745 Galveston Ct	Upper Mid-Level	2007	52,410	\$26.00
Lidl	2070 Tacketts Village Sq	Discount	Jan-2018	20,000 1/	\$11.96
Safeway	2205 Old Bridge Rd	Mid-Level	1973	36,760	\$22.10
Safeway	4240 Merchant Plaza	Mid-Level	1991	<u>54,730</u>	<u>\$24.70</u>
Total				372,530	\$172.64

Notes: 1/ Estimate

Source: S. Patz & Associates, Inc.

Map F shows the locations of the nine grocery stores in the Lake Ridge/ SR 642 submarket. Essentially all are clustered along SR 642.



Map F - Locations of Lakeridge/ SR 642 Market Grocery Stores

Manassas/ Bristow Submarket Grocery Inventory

With 20 existing grocery stores, this submarket is the location of the largest concentration of grocery stores. Six of these are located within the City of Manassas. The submarket has a diverse mix of grocery stores, though none serve the high-end market. This is also a highly active

grocery market with one new store opening in 2022 (Amazon Fresh), two new store openings in 2021 (Giant and Lidl) and one new store opening in 2020 (Oh! Market). Four grocery stores opened in this submarket between 2010 and 2019. Apart from the Giant that opened most recently, all of the new grocery stores to open since 2008 have either been discount or international grocery stores. Total annual sales in the Manassas/ Bristow submarket are \$460.20 million, excluding the recently-opened Amazon Fresh.

This submarket clearly has an abundance of grocery stores and a wide variety of stores. There are two large Walmarts in addition to seven Giants. This area also has an abundance of discount grocery stores.

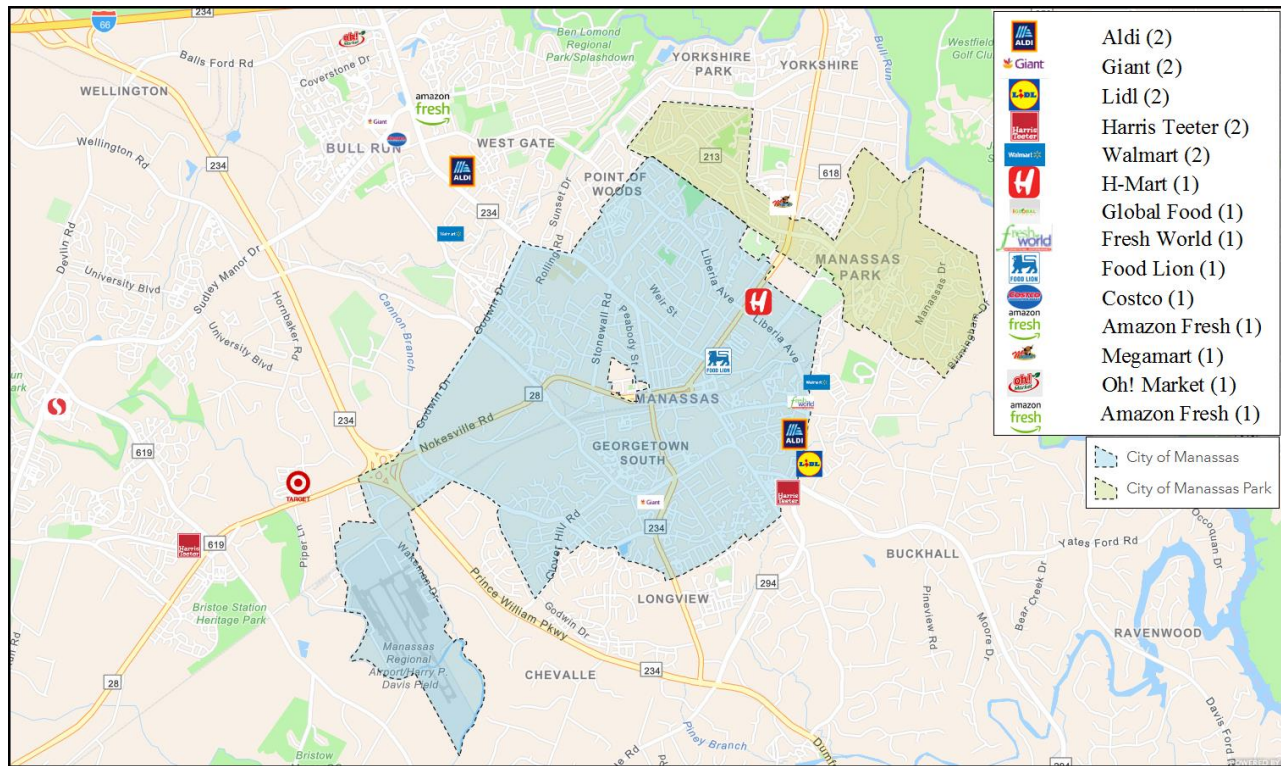
Table 12: Characteristics of Grocery Stores, Manassas/ Bristow Submarket, Prince William County, VA June, 2022

	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Sales (Millions)</u>
Aldi	10294 Portsmouth Rd	Discount	2008	21,590	\$11.96
Aldi 2/	9714 Liberia Ave	Discount	2008	15,950	\$11.96
Costco	10701 Sudley Manor Dr	Warehouse Club	1992	130,580	\$117.00
Amazon Fresh	7807 Sudley Rd	Mid-Level	Jun-2022	45,000	\$18.00
Food Lion 2/	9121 Centerville Rd	Mid-Level	1997	37,970	\$10.40
Fresh World 2/	9540 Liberia Ave	International	2016	35,490	\$10.40
Giant 2/	10100 Dumfries Rd	Mid-Level	1995	67,280	\$22.10
Giant	10864 Sudley Manor Dr	Mid-Level	Nov-21	60,000	\$22.10
Global Food	10320 Festival Ln	International	1986	51,020	\$18.20
Harris Teeter	10438 Bristow Center Dr	Upper Mid-Level	2007	56,300	\$26.00
Harris Teeter 2/	10060 Market Circle Hastings	Upper Mid-Level	2008	56,000	\$21.58
H-Mart 2/	8819 Centreville Rd	International	2015	49,000	\$23.40
Lidl	9795 Liberia Ave	Discount	Apr-21	20,000 1/	\$11.96
Lidl	11782 Sudley Manor Dr	Discount	Sep-17	20,000 1/	\$13.00
Megamart	8328 Shoppers Square	International	2011	47,000	\$20.80
Oh! Market	7412 Stream Walk Ln	International	Nov-20	47,000	\$16.64
Safeway	12821 Braemar Village Plaza	Mid-Level	2003	57,860	\$24.70
Target	9900 Sowder Village Square	Big Box Mix	2008	170,000	\$26.00
Walmart Supercenter	8386 Sudley Rd	Discount Big Box	2009	203,090	\$26.00
Walmart Supercenter	9401 Liberia Ave	Discount Big Box	2003	156,140	\$26.00
Total				1,302,270	\$460.20 3/

Notes: 1/ Estimate
2/ Located in the City of Manassas.
3/ Excludes recently opened Amazon Fresh.

Source: S. Patz & Associates, Inc.

Map G shows the locations of the 20 grocery stores in the Manassas/ Bristow submarket. Essentially all are clustered along SR 234. Three are located in the Bristow area. Six are located in the City of Manassas. Most of the remaining grocery stores are located north of the City of Manassas along SR 234 and near I-66.



Map G - Locations of Manassas/ Bristow Market Grocery Stores

Woodbridge/ Dale City Submarket Grocery Inventory

Seventeen grocery stores are located in this submarket, making this the second most active submarket under study. As with the Manassas/ Bristow submarket, the greater Woodbridge area offers a wide mix of grocery stores. It is the location of one of the County's large Wegmans. Apart from a Fresh World that opened in July, 2021, no new grocery stores have opened in this submarket since 2015 when Mom's Organic Market entered the market. Prior to that, Food Lion opened in 2013 and Todos Market opened in 2011. Total annual sales at these grocery stores is estimated at \$641.6 million.

Table 13: Characteristics of Grocery Stores, Woodbridge/ Dale City Submarket, Prince William County, VA, June, 2022

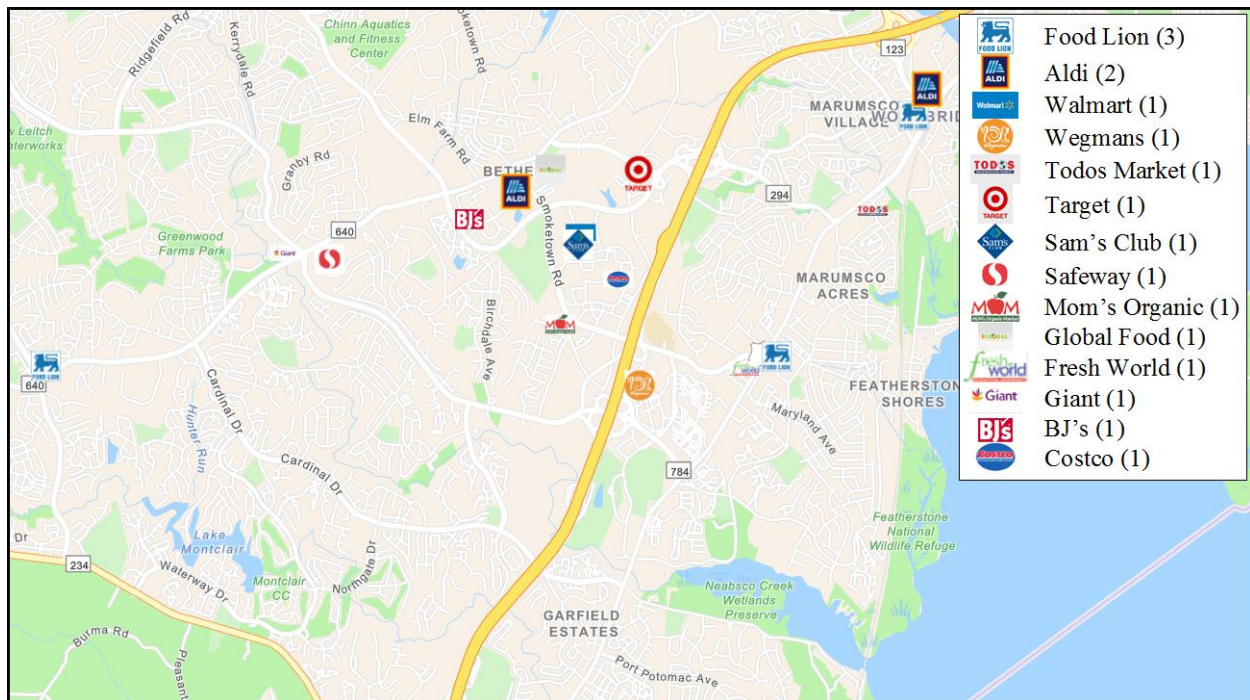
	<u>Address</u>	<u>Store Type</u>	<u>Opening Date</u>	<u>Store Size (Sq. Ft.)</u>	<u>Estimated Annual Sales (Millions)</u>
Aldi	13291 Gordon Blvd	Discount	2005	16,530	\$11.96
Aldi	13782 Smoketown Rd	Discount	2005	15,960	\$15.86
BJ's Wholesale Club	14123 Noblewood Plaza	Warehouse Club	1991	107,280	\$104.00
Costco	2700 Potomac Mills Cir #200	Warehouse Club	2007	152,000	\$122.20
Food Lion	5592 Staple Mill Plaza	Mid-Level	2000	30,000	\$11.18
Food Lion	14641 Jefferson Davis Hwy	Mid-Level	2013	34,960	\$9.10
Food Lion 2/	13414 Jefferson Davis Hwy	Mid-Level	1979	33,000 1/	\$13.00
Fresh World	2042 Daniel Stuart Square	International	Jul-21	52,000	\$15.00
Giant	4309 Dale Blvd	Mid-Level	1978	39,190	\$20.80
Global Food	13813 Foulger Square	International	1997	56,000	\$18.20
Mom's Organic Market	14470 Smoketown Rd	Specialty	2015	12,000	\$10.40
Safeway	4215 Cheshire Station Plaza	Mid-Level	2002	55,160	\$16.90
Sam's Club	14050 Worth Ave	Warehouse Club	1993	133,760	\$104.00
Target	2460 Prince William Pkwy	Big Box Mix	1996	127,900	\$26.00
Todos Market	13905 Jefferson Davis Hwy	International	2011	50,000	\$18.20
Wegmans	14801 Dining Way	High-End	2007	138,500	\$98.80
Walmart Supercenter	14000 Worth Ave	Discount Big Box	1992	148,120	\$26.00
Total				1,202,360	\$641.60

Notes: 1/ Estimate

2/ Proposed to be redeveloped with 160,000 SF of commercial space and 900 apartment units in multiple phases (Riverside Station). The new development will include a Food Lion.

Source: S. Patz & Associates, Inc.

Map H shows the locations of the 17 grocery stores in the Manassas/ Dale City area. Most are located west of I-95. Six stores are, including the Wegmans, are located east of I-95.



Map H - Locations of Woodbridge/ Dale City Market Grocery Stores

Grocery Store Concepts

Table 14 details the types of grocery store brands, by submarket. There are ten grocery store “types” within Prince William County, as described above. The most prevalent grocery store types are defined as Mid-Level grocery stores, which include Food Lion, Giant and Safeway. These have been the longest running grocery store concepts in the County, as essentially all of the older grocery stores are of this type. These grocery stores are spread across all parts of Prince William County. There are over 20 Mid-Level grocery stores in the County, or over 33 percent of all grocery stores in the County.

The next most prevalent grocery store concepts are Discount stores, which in Prince William County include Aldi and Lidl. These have represented much of the growth for new grocery stores in recent years. There are 11 discount grocery stores in Prince William County.

Also of note is the large number of international grocery stores in Prince William County, which are largely clustered in the Manassas and Woodbridge areas. There are ten international grocery stores in the County, many of which have opened over the past decade.

	<u>Dumfries/ Triangle</u>	<u>Gainesville/ Haymarket</u>	<u>Lake Ridge/ SR 642</u>	<u>Manassas/ Bristow</u>	<u>Woodbridge/ Dale City</u>	<u>Total</u>
Big Box Mix	1	1	0	1	1	4
Discount	3	1	1	4	2	11
Discount Big Box	1	1	0	2	1	5
High-End	0	1	0	0	1	2
International	2	0	0	5	3	10
Mid-Level	2	2	7	5	5	21
Specialty	0	0	0	0	1	1
Upper Mid-Level	0	1	1	2	0	4
Warehouse Club	0	1	0	1	3	5
Total	9	8	9	20	17	63

Source: S. Patz & Associates, Inc.

Grocery Store Brands

Table 15 identifies the grocery store brands within each submarket. As noted in Table 14, Mid-Level grocery stores are the most prevalent store type in the County. This includes nine Food Lions, seven Giants and four Safeways that are spread across all of the five submarkets.

There are also several discount grocery store brands, including six Aldis and four Lidl's. Target and Walmart account for a total of nine stores. Table 15 also shows a large number of international grocery stores that primarily serve the Latino and Asian population. These include U Mart, Fresh World, Global Food, H-Mart, Megamart, Oh! Market and Todos Market. Overall, Prince William County offers a diverse mix of grocery brands.

Table 15: Grocery Stores by Brand and Submarket, Prince William County, Virginia, June, 2022

	<u>Dumfries/ Triangle</u>	<u>Gainesville/ Haymarket</u>	<u>Lake Ridge/ SR 642</u>	<u>Manassas/ Bristow</u>	<u>Woodbridge/ Dale City</u>	<u>Total</u>
Aldi	1	1	0	2	2	6
Amazon Fresh	0	0	0	1	0	1
BJ's Wholesale Club	0	1	0	0	1	2
Costco	0	0	0	1	1	2
Food Lion	2	0	3	1	3	9
Fresh World	0	0	0	1	1	2
Giant	0	2	2	2	1	7
Global Food	0	0	0	1	1	2
H-Mart	0	0	0	1	0	1
Harris Teeter	0	1	1	2	0	4
Lidl	1	0	1	2	0	4
Megamart	0	0	0	1	0	1
Oh! Market	0	0	0	1	0	1
Mom's Organic Market	0	0	0	0	1	1
Safeway	0	0	2	1	1	4
Sam's Club	0	0	0	0	1	1
Shoppers	1	0	0	0	0	1
Target	1	1	0	1	1	4
Todos Market	1	0	0	0	1	2
U Mart	1	0	0	0	0	1
Walmart Supercenter	1	1	0	2	1	5
Wegmans	0	1	0	0	1	2
Total	9	8	9	20	17	63

Source: S. Patz & Associates, Inc.

Grocery Store Sales by Brand

Table 16 details estimated annual grocery sales at each of the existing grocery brands, based on our research. Apart from the wholesale clubs that generate a considerable level of sales, Giant generates the most grocery store sales, accounting for 11.9 percent of total sales. Although Food Lion operates more stores in the County than any other brand, these store locations are typically smaller and have relatively lower annual sales volumes. The nine Food Lions account for 5.6 percent of countywide grocery sales. Walmart and Target generate 13.2 percent of total grocery sales. The two discount chains, Aldi and Lidl, generate a combined 7.0 percent of total

grocery store sales in Prince William County. The four Harris Teeters generate 5.4 percent of total grocery store sales. The ten international grocery stores make up 9.4 percent of total grocery sales in the County.

Table 16: Grocery Store Sales, by Brand, Prince William County, Virginia, June, 2022

	<u>Number of Stores</u>	<u>Store Type</u>	<u>Estimated Annual Grocery Sales (Millions)</u>	<u>Percent of Total</u>
Aldi	6	Discount	\$75.66	4.3%
Amazon Fresh	1	Mid-Level	\$18.00	--
BJ's Wholesale Club	2	Warehouse Club	\$208.00	11.7%
Costco	2	Warehouse Club	\$239.20	13.5%
Food Lion	9	Mid-Level	\$99.84	5.6%
Giant	7	Mid-Level	\$211.90	11.9%
Harris Teeter	4	Upper Mid-Level	\$95.68	5.4%
International Stores 1/	10	International	\$167.24	9.4%
Lidl	4	Discount	\$47.32	2.7%
Mom's Organic	1	Specialty	\$10.40	0.6%
Safeway	4	Mid-Level	\$88.40	5.0%
Sam's Club	1	Warehouse Club	\$104.00	5.9%
Shoppers	1	Discount	\$18.20	1.0%
Target	4	Mix Big Box	\$104.00	5.9%
Walmart Supercenter	5	Discount Big Box	\$130.00	7.3%
Wegmans	2	High-End	\$174.20	9.8%
Total	63		\$1,774.04 2/	100.0%

Notes: 1/ Includes Fresh World (2), Todos Market (2), Megamart, Oh! Market, H-Mart, U Mart, and Global Food (2).
 2/ Excludes recently opened Amazon Fresh.

Source: S. Patz & Associates, Inc.

Grocery Store Development Pace

Trends in New Grocery Stores

Table 17 shows the opening date for each of the 63 existing grocery stores in Prince William County. Twenty grocery stores opened prior to 2000 and remain operational. Most are Mid-Level grocery stores. All have been renovated since that time to remain competitive. Twenty-one grocery stores opened during the 2000's and nine opened between 2010 and 2015. An additional 13 grocery stores opened during the post-2015 period. Thus, nearly 35 percent of all existing grocery stores in Prince William County opened since 2010.

Table 17: Grocery Stores by Opening Date, Prince William County, Virginia, June, 2022

	<u>Dumfries/ Triangle</u>	<u>Gainesville/ Haymarket</u>	<u>Lake Ridge/ SR 642</u>	<u>Manassas/ Bristow</u>	<u>Woodbridge/ Dale City</u>	<u>Total</u>	<u>Percent of Total</u>
Prior to 1990's	0	0	3	1	2	6	9.5%
1990's	2	1	3	3	5	14	22.2%
2000's	2	3	2	8	6	21	33.3%
2010-2015	1	3	0	2	3	9	14.3%
2016 and Later	<u>4</u>	<u>1</u>	<u>1</u>	<u>6</u>	<u>1</u>	13	20.6%
Total	9	8	9	20	17	63	100.0%

Source: S. Patz & Associates, Inc.

Characteristics of Recent Store Openings

Next shown, in Table 18, are the 22 grocery store openings that occurred since 2010 in Prince William County. Six of these grocery stores are discount concepts (Aldi and Lidl), while seven are international grocery stores. Only three stores are Mid-Level stores (Giant, Food Lion and Amazon Fresh) and only one is an Upper Mid-Level store (Harris Teeter). All of the international grocery stores leased spaces that were formerly occupied by other grocery stores.

The Food Lion that opened in 2013 replaced a Bottom Dollar Food location, the Giant that opened in November, 2021 occupies a former Shoppers Food storefront. This Giant grocery store replaced a smaller and outdated nearby location. The new Aldi, which opened in December, 2021, replaced a portion of an old Food Lion. All of the other grocery stores were in newly built retail spaces. Amazon Fresh replaced a former Kmart.

Table 18: Grocery Store Openings, By Type and Submarket, Prince William County, Virginia, 2010-2022 YTD

	<u>Opening Date</u>	<u>Type</u>	<u>Store Type</u>	<u>Submarket</u>
Walmart Supercenter	2010	New Construction	Discount Big Box	Dumfries/ Triangle
Megamart	2011	Lease Existing Space	International	Manassas/ Bristow
Todos Market	2011	Lease Existing Space	International	Woodbridge/ Dale City
BJ's Wholesale Club	2012	New Construction	Wholesale Club	Gainesville/ Haymarket
Walmart Supercenter	2012	New Construction	Discount Big Box	Gainesville/ Haymarket
Food Lion	2013	Lease Existing Space	Mid-Level	Woodbridge/ Dale City
Harris Teeter	2015	New Construction	Upper Mid-Level	Gainesville/ Haymarket
H-Mart	2015	Lease Existing Space	International	Manassas/ Bristow
Mom's Organic Market	2015	Lease Existing Space	Specialty	Woodbridge/ Dale City
Fresh World	2016	Lease Existing Space	International	Manassas/ Bristow
Aldi	2016	New Construction	Discount	Dumfries/ Triangle
Lidl	Sep-17	New Construction	Discount	Manassas/ Bristow
Lidl	Jan-18	New Construction	Discount	Lake Ridge/ SR 642
Lidl	Sep-18	New Construction	Discount	Dumfries/ Triangle
Oh! Market	Nov-20	Lease Existing Space	International	Manassas/ Bristow
Lidl	Apr-21	New Construction	Discount	Manassas/ Bristow
Fresh World	Jul-21	Lease Existing Space	International	Woodbridge/ Dale City
Giant 1/	Nov-21	Lease Existing Space	Mid-Level	Manassas/ Bristow
Aldi	Dec-21	Lease Existing Space	Discount	Gainesville/ Haymarket
U Mart	Dec-21	Lease Existing Space	International	Dumfries/ Triangle
Todos Market 1/	Apr-22	Lease Existing Space	International	Dumfries/ Triangle
Amazon Fresh	Jun-22	Lease Existing Space	Mid-Level	Manassas/ Bristow

Notes: 1/ Replaced older, smaller store.

Source: S. Patz & Associates, Inc.

Grocery Stores Closures

Table 19 lists the 18 grocery stores that have closed in Prince William County and the City of Manassas since 2010. Within this total are five Shoppers, four Food Lions, three Giants, a Price Rite, a Safeway, a Harris Teeter, and three international grocery stores (J&J International Market, Super Q Mart and Todos Market). One of the Giant closures in Manassas involved a larger nearby replacement store. The Todos Market closure also involved a relocation. All of these were anchor tenants in multi-tenant shopping centers.

Key points in Table 19 are as follows:

- The most recent grocery closure was Todos Market, which relocated from its Dumfries location. This store has since been re-occupied by U Mart, an international grocery store.
- The other 2021 grocery store to close was the 52,150± square foot Giant at the Westgate Shopping center at 8025 Sudley Road in Manassas. The grocery store closed in November, 2021 when a new 60,000± square foot Giant opened in Bull Run Plaza, less than a mile

from its old location. The new Giant replaced a Shoppers, which closed in 2020 in the wake of its owner, United Natural Foods Inc., selling off many of its grocery stores across the Washington region.

- Only one discount grocery store, Price Rite, has closed since 2010. The 2019 closure occurred amid a wider string of company-wide store closures across the East Coast. The Woodbridge Price Rite location was a limited assortment store, similar to Aldi. It was the chain's only Virginia location and had only been operational for seven years. Fresh World, a Korean-based international grocery store, signed a lease for the space five months after Price Rite closed.
- The closure of the Food Lion in Downtown Haymarket in 2019 was due to it being an "underperforming" location, according to store management. The store had been in operation for nearly two decades, briefly being rebranded as a Bloom in the 2000's before being converted back to a Food Lion in 2012. The store is now being subdivided, with approximately half of the space now occupied by Aldi.
- Most of the grocery closures were outdated stores that were not upgraded to remain fully competitive with new area competition.
- The only grocery space that remains vacant is the Shoppers location in Gainesville that closed 2011 and the recently vacated Giant storefront in Manassas. At the time, Shoppers attributed its closure to modest sales.
- Non-grocery anchor tenants replaced four of the closed grocery stores. These include Gabe's, Hobby Lobby and Habitat for Humanity ReStore.
- Apart from the Harris Teeter in Gainesville, the four grocery stores that closed in 2019 and 2020 were replaced by other grocery stores.
- Apart from the new Giant in Manassas, all of the re-leased grocery store space has been occupied by discount grocers, international grocers, or non-grocery tenants.
- International grocery stores have accounted for the bulk of the replacement tenants for these shuttered stores. Seven of the closed stores were replaced by international grocery stores. One reason for this is lower lease rates for such a large space compared to newly built, anchor space that are large enough to accommodate a full-service grocery store.

Table 19: Characteristics of Closed Grocery Stores, Prince William County, Virginia, 2010-2022

<u>Former Grocery Tenant</u>	<u>Store Location</u>	<u>Closure Year</u>	<u>Store Size (Sq. Ft.)</u>	<u>Replacement Tenant</u>
Todos Market	17987 Dumfries Shopping Plz (Dumfries)	Dec-2021	18,000 8/	U Mart
Giant	8025 Sudley Road (Manassas)	Nov-2021	52,150	Vacant-Available for Lease 6/
Shoppers	10864 Sudley Manor Dr (Manassas)	2020	60,000	Giant
Harris Teeter	7910 Crescent Park Dr (Gainesville)	2020	52,160	Vacant
J&J International Market	16593 River Ridge Blvd (Woodbridge)	2020	64,890	Todos Market
Price Rite	2042 Daniel Stuart Sq (Woodbridge)	2019	52,000	Fresh World 3/
Food Lion	15201 Washington St (Haymarket)	2019	37,520	Aldi (Subdivided) 2/
Food Lion	8313 Sudley Road (Manassas)	2018	44,720	Gabe's 4/
Shoppers	9540 Liberia Ave (Manassas) 7/	2016	35,490	Fresh World
Food Lion	14055 Noblewood Plaza (Woodbridge)	2016	28,170	Habitat for Humanity ReStore 4/
Shoppers	14000 Shoppers Best Way (Woodbridge)	2016	63,970	Hobby Lobby 4/
Food Lion	10159 Hastings Dr (Manassas) 7/	2013	38,540	Habitat for Humanity ReStore 4/
Safeway	2042 Daniel Stuart Sq (Woodbridge)	2013	52,000	Price Rite 3/
Giant	8819 Centreville Rd (Manassas) 7/	2012	49,000	H-Mart
Shoppers	7471 Somerset Crossing Dr (Gainesville)	2011	67,050	Vacant-Available for Lease 5/
Super Q Mart	16593 River Ridge Blvd (Woodbridge)	2011	64,890	J&J International Market 3/
Shoppers	8328 Shoppers Sq (Manassas)	2010	47,000	Megamart
Giant	13905 Jefferson Davis Hwy (Woodbridge)	2010	50,000	Todos Market

Notes: 1/ Excludes conversions of Bloom and Bottom Dollar Food to Food Lion.

2/ Aldi occupies approximately half of former Food Lion. Seeking commercial tenant for remaining half.

3/ No longer tenant. The store front at 16593 River Ridge Blvd opened as a Giant before becoming Super Q Mart and J & J International Market. The storefront recently reopened as a Todos Market, replacing an older location in Dumfries. The storefront at 2042 Daniel Stuart Square opened as a Safeway and later became a Price Rite. It has since been converted into a Fresh World.

4/ New tenant not a grocery store.

5/ Store has been vacant since store closing in 2011.

6/ Replaced by a nearby Giant.

7/ Located in the City of Manassas.

8/ Estimate

Source: S Patz & Associates, Inc.

Grocery Store Pipeline

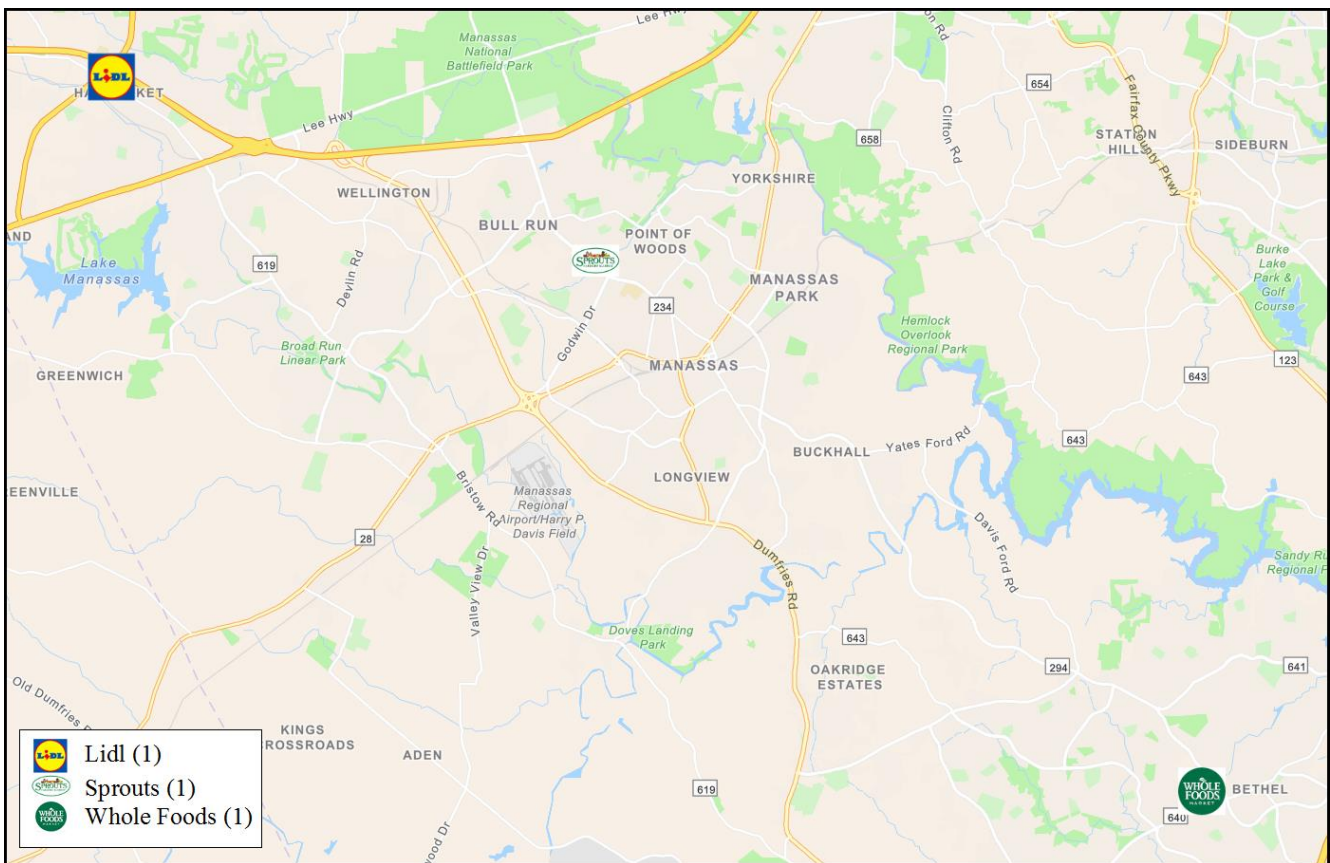
Table 20 details the three grocery stores that are planned to open in Prince William County in the near term. The new stores include 26,300± square foot Lidl in Haymarket, which is now under construction. In addition is a 26,300± square foot Sprouts Farmers Market, which will replace a shuttered Marshalls in Manassas, and a 39,900± square foot Whole Foods, which is expected to break ground in 2023.

Table 20: Characteristics of Planned New Grocery Stores, Prince William County, Virginia, June, 2022

	Location	Store Type	Size	Opening Date	Notes
Lidl	Haymarket	Discount	31,500	2022	New Construction
Sprouts Farmers Market	Manassas	Specialty	26,300	2022/23	Replacing Marshalls
Whole Foods	Woodbridge	High-End	<u>39,900</u>	2024/25	New Construction
Total			97,700		

Source: S. Patz & Associates, Inc.

Map I shows the locations of the four planned grocery stores. Sprouts Farmers Market will open near the City of Manassas, but in Prince William County. Lidl will open in the Town of Haymarket. Whole Foods will be located in Woodbridge but near the Lake Ridge/ SR 642 submarket.



Map I - Locations of Planned Grocery Stores

The paragraphs below briefly detail the three planned grocery stores that will open in Prince William County in the near term. No new grocery stores are planned or under construction in the cities of Manassas or Manassas Park.

- **Lidl** is currently building a 31,500± square foot free-standing grocery store within the mixed-use Crossroads Village Center at 15150 Washington Street in the Town of Haymarket. The store is likely to open by the end of 2022. In addition to 187 townhome and two-over-two condo units, retailers that have signed leases for the shopping center include Popeyes, Starbucks, Taco Bell and Europe Nails & Spa. The store will open in 2023.
- **Sprouts Farmers Market** announced in February, 2022 that it would open a location in Manassas. The organic-centric grocery store signed a lease in early-2022 for 26,300± square feet of a former Marshalls at the 250,000± square foot Manaport Plaza at 8345-8443 Sudley Road. The shopping center is proposed to be fully renovated as well. The other Sprouts location in the Washington region is in the Town of Herndon in Fairfax County.
- **Whole Foods** announced in January, 2022 that it would anchor the proposed Quartz District development in Woodbridge. Construction on the 39,900± square foot grocery store is planned to begin in early- or mid-2023 and open in late-2024 or early-2025 following the completion of a \$70 million upgrade to the intersection of Prince William Parkway and Minnieville Road.

Shown next are photos of the Lidl and Sprouts Farmers Market sites. The photos show that construction is still in the early stages at the Lidl. The former Marshalls that Sprouts Farmers Market has leased has been vacated, but construction has not yet begun. Site work has not yet begun on the proposed Whole Foods.



Lidl (Haymarket)



Sprouts Farmers Market (Manassas)

In addition to the above is a planned 23,550± square foot free-standing Lidl to be built within a new shopping center called Promenade at Bristow Village at 10302 Bristow Station Drive in Bristow. The grocery store is still in the early stages of planning and according to area

commercial brokers, there is no firm development timeline. Lidl would not comment on the status of the proposal.

Also planned is the redevelopment of the Food Lion-anchored Station Plaza Shopping Center at 13414 Jefferson Davis Highway in Woodbridge as part of a new mixed-use community called “Riverside Station.” The proposal also involves the redevelopment of the adjacent Cowles Property. Construction on Phase I, which includes only the Cowles Property, is expected to begin in 2023 or 2024. The Food Lion is planned to occupy a newly-built space in a second or third phase. This new space is not expected to be larger than the existing store. Thus, this appears to be a longer-term proposal.

Grocery Store Supply Summary

As will be shown in Table 22 on Page 61, the 2020 countywide comparison of household grocery expenditures compared with estimated grocery store sales is close to being in balance. This was not the case in 2010, when expenditure potential greatly exceeded grocery sales. The number of new grocery stores has “leveled off” this comparison to a point where the Prince William County grocery market is almost 10± percent underserved. With all of the estimates and rounding, this comparison generally “suggests” a balanced market county wide.

By 2025, with new pipeline stores and new household growth, the balance will be lower, and the “market” will be able to support additional stores over and above the current pipeline. That means that demographic growth, along with an increase in grocery store sales, will require more stores than currently in planning.

This is a countywide conclusion not a submarket area conclusion. Table 21 below shows that current pipeline stores could generate nearly \$70 million in annual grocery sales, reported in constant 2022 dollars.

Table 21: Projected Annual Grocery Sales of Planned Grocery Stores, Prince William County, Virginia
(Constant 2022 Dollars)

	<u>Projected Annual Sales</u>
Lidl	\$13,000,000
Sprouts Farmers Market	\$16,500,000
Whole Foods Market	<u>\$40,000,000</u>
Total	<u>\$69,500,000</u>
Notes: 1/ Expected increase of sales compared to existing location that will be replaced.	
Source: S. Patz & Associates, Inc.	

Section IV: Trade Area Analysis and Market Study Conclusions

The last section to follow analyzes trade areas for the larger grocery stores in Prince William County. A sample of grocery stores was used in the analysis, utilizing a mix of store concepts from each of the five submarkets. The trade areas were generated by Placer.ai, a data location provider that tracks consumer data via smartphone apps. To do this, Placer.ai observes a representative sample of the visiting customer to specific Prince William County grocery stores. As with any statistical survey, these data are aggregated and used to generate insights into consumer shopping patterns, in this case where grocery customers originate. The purpose of the analysis is to identify areas in Prince William County that are not well-served by grocery stores.

Map J identifies the sample of grocery stores, displaying major clusters along I-95 in the east, (generally in the greater Woodbridge area), in and around Manassas (in the central portion of the County), and in the greater Gainesville area (in the western portion of the County). The color schemes on Map J show where customers originate from related to each grocery store that they visit.

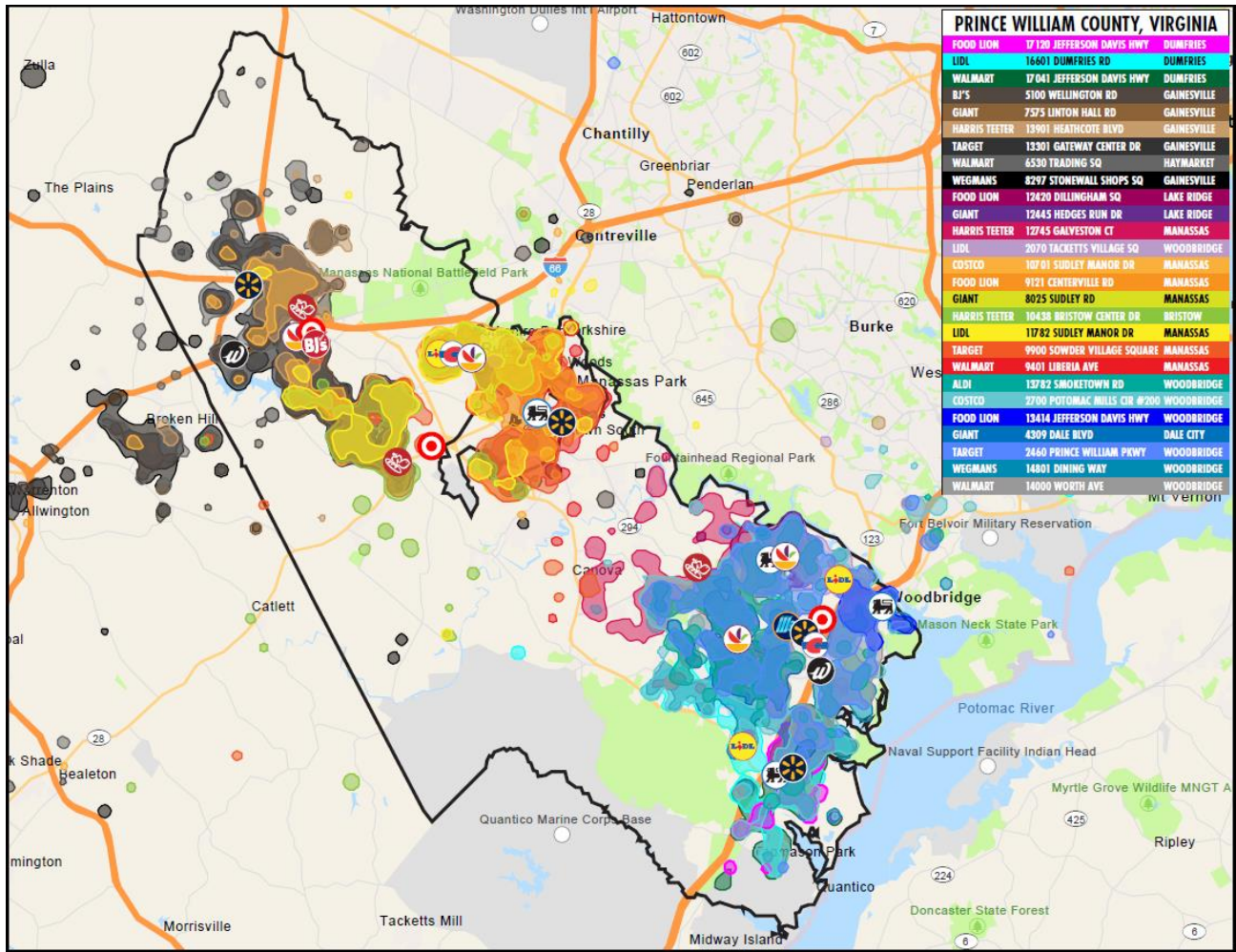
The map shows that essentially all population clusters in Prince William County are well-served by existing grocery stores, which is consistent with the analysis of a balanced market. Most County residents are not driving long distances to reach a grocery store. This is due to the abundance of grocery stores in Prince William County, located near all population centers. Not only do most County residents have quick access to grocery stores, most also have quick access to a wide mix of grocery store types.

The areas that require the longest drives are in the County's "Rural Area," generally in the western and northern parts of the County. These are areas that would not support a grocery store due to limited population and zoning restrictions. Additionally, these are areas with few low-income households. Thus, most of the population in these portions of the County appear to have adequate access to several grocery stores.

Of note is that considerable overlap exists between the grocery store trading areas. Residents of some submarkets conduct their grocery shopping outside of their submarkets. This is especially true when preferred grocers are not located nearby, not because of barriers to grocery store access in general. The Woodbridge/ Dale City grocery stores, for instance, attract customers from a wide geographic area that includes the Lake Ridge/ SR 642 submarket that has a limited mix of grocery store concepts. The Wholesale Clubs and the two Wegmans also draw from a relatively wide geographic area.

Map J also shows that most grocery store inflow sales are generated from residents of neighboring Fauquier County at stores in the Gainesville/ Haymarket submarket. Wegmans, Target and Costco capture most of these sales, as these popular store brands do not operate in Fauquier County. Neighboring areas of Fairfax County, to the north, are adequately served by grocery stores. The neighboring portions of Loudoun County to the north are rural and with small populations. Thus, they also generate a low amount of grocery sales in Prince William County.

A minimal amount of grocery sales is generated from residents of Stafford County to the south. Marine Corps Base Quantico, with a very small residential population, occupies several thousand acres south of Prince William County along I-95. Inflow sales were accounted for in the calculations of grocery store consumer expenditure potential in Table 5.



Map J - Grocery Store Heat Map

Market Study Conclusions

Supply/ Demand Analysis

Table 22 shows the supply-demand calculation, delineated for each of the five submarkets under study. This calculation is done by comparing potential grocery store consumer expenditure, as summarized in Table 6, with the estimates of annual grocery sales within the County's existing and future grocery stores that were detailed in Table 7 and Table 21. The projection date of 2025 takes into account the expected annual sales of the four new grocery stores that are likely to open during this period. These estimates are derived from sales at other existing grocery stores as well as from interviews with area retail brokers.

Data in Table 22 show a balanced market up to at least 2025. As of 2020, two of the submarkets (Gainesville/ Haymarket and Woodbridge/ Dale City) have a surplus of annual sales relative grocery store expenditures. This disparity is largely due to inflow sales from outside of the submarket and County. Three of the submarkets – Manassas/ Bristow, Dumfries/ Triangle and Lake Ridge/ SR 642 – have a surplus of potential grocery store expenditures relative to annual grocery store sales.

Countywide, the number of grocery stores is sufficient to support resident expenditure potential. As noted, there is an abundance of Giant and Food Lion stores, plus discount and international stores, which represent much of the new growth.

Amazon Fresh recently entered the market and is the first new “concept” outside of the German-based discount stores (Aldi and Lidl). Also planned is the County’s first Sprouts Farmers Market and Whole Foods. These new grocery stores and the Lidl under construction in Haymarket will satisfy much of the future grocery store demand by 2025. Trader Joe’s and Publix are the only major grocery chain that operate in the Washington Region but with no existing or planned locations in Prince William County.

**Table 22: Supply-Demand Calculation, By Submarket,
Prince William County, Virginia, 2010-2025**
(Constant 2022 Dollars)

	<u>2010</u>	<u>2020</u>	<u>2025</u>
<u>Dumfries/ Triangle Submarket</u>			
Potential Grocery Store Expenditure	\$187,190,686	\$232,718,815	\$235,707,547
Annual Grocery Store Sales	\$90,480,000	\$112,840,000	\$139,240,000
<i>(Difference)</i>	<i>(\$96,710,686)</i>	<i>(\$119,878,815)</i>	<i>(\$96,467,547)</i>
<u>Gainesville/ Haymarket Submarket</u>			
Potential Grocery Store Expenditure	\$277,820,701	\$323,522,065	\$327,676,954
Annual Grocery Store Sales	\$196,300,000	\$348,400,000	\$373,360,000
<i>(Difference)</i>	<i>(\$81,520,701)</i>	<i>(-\$24,877,935)</i>	<i>(-\$45,683,046)</i>
<u>Lake Ridge/ SR 642 Submarket</u>			
Potential Grocery Store Expenditure	\$437,773,802	\$465,840,651	\$471,823,292
Annual Grocery Store Sales	\$160,680,000	\$172,640,000	\$172,640,000
<i>(Difference)</i>	<i>(\$277,093,802)</i>	<i>(\$293,200,651)</i>	<i>(\$299,183,292)</i>
<u>Manassas/ Bristow Submarket 1/</u>			
Potential Grocery Store Expenditure	\$508,103,478	\$593,676,242	\$601,300,633
Annual Grocery Store Sales	\$367,900,000	\$452,140,000	\$520,700,000
<i>(Difference)</i>	<i>(\$140,203,478)</i>	<i>(\$141,536,242)</i>	<i>(\$80,600,633)</i>
<u>Woodbridge/ Dale City Submarket</u>			
Potential Grocery Store Expenditure	\$300,058,649	\$341,912,207	\$346,303,275
Annual Grocery Store Sales	\$588,900,000	\$626,600,000	\$681,600,000
<i>(Difference)</i>	<i>(-\$288,841,351)</i>	<i>(-\$284,687,793)</i>	<i>(-\$335,296,725)</i>
<u>Prince William County 1/</u>			
Potential Grocery Store Expenditure	\$1,710,947,316	\$1,957,669,980	\$1,982,811,701
Annual Grocery Store Sales	\$1,404,260,000	\$1,712,620,000	\$1,887,540,000
Difference	\$306,687,316	\$245,049,980	\$95,271,701
Notes: 1/ Includes City of Manassas and City of Manassas Park			
Source: S. Patz & Associates, Inc.			

Market Study Findings

The market study conclusions are as follows:

1. Countywide, the current grocery store market is in balance in terms of store sales relative to consumer expenditure. In 2020, the difference between total potential consumer grocery expenditure and grocery store sales was \$245.1 million, down from nearly \$306.9 million in 2010. This was a period in which 15 new grocery stores opened. At least three new grocery stores will open by 2025. This should satisfy Countywide demand, in terms of consumer expenditure potential.
2. The rural western and northern part of Prince William County (Rural Area) have no grocery stores, however this is an area devoid of commercial zoning and with low population growth, so prospects for a grocery store in this segment of the County are low. Moreover, this is an area of high car ownership and incomes, so distance is not considered a barrier.

-
3. At the outset of the study, there was concern that unincorporated Triangle area had insufficient grocery stores for their population. Data does not support that. The greater Triangle area has nine grocery stores, including a Walmart Supercenter as well as a Lidl that opened in 2018. While not within the unincorporated area of Triangle, these grocery stores are located nearby in or just north of the Town of Dumfries and are less than a ten-minute drive from Triangle. The submarket has no Giant, Wegmans or Harris Teeter.
 4. Based on data from Plaicer.ai, we did not identify any locations that have unmet grocery store needs.
 5. Some grocery stores with a presence in the Washington, DC region do not currently operate in Prince William County. Most notable is Trader Joe's, which typically selects locations based on high levels of educational attainment, which correlates closely with household income. Publix, with its closest locations in the greater Fredericksburg area, has not yet entered the Prince William County grocery market, but is expected to at some point.

The absence of these grocery store brands in Prince William County denotes that while the County does offer a diversity in grocery types overall, this has been historically less true at the “upper end” or among niche grocers. This trend is now changing with the announced opening of Whole Foods and Spouts Farmers Market. The future success of these grocery stores could attract other brands, such as Trader Joe's, to Prince William County.

Section V: Specific Geographic Recommendations

This final section responds to comments from Prince William County staff related to specific area recommendations. County staff has identified the desire for more grocery diversity, specifically the addition of new stores, such as Publix and Trader Joe's. Of note is that two new grocery brands, Sprouts Farmers Market and Whole Foods, announced plans in 2022 to open locations in Prince William County. Also of note is the County's first Amazon Fresh that opened in June, 2022. Thus, these new announcements that were made over the past year partially satisfies the County's desire for increased grocery store diversity.

Two other major grocery store brands without locations in Prince William County include Publix and Trader Joe's. Staff have expressed particular interest in these grocery stores. Each is briefly described below.

- **Publix**, the Florida-based grocery chain, opened a 48,390± square foot store along the I-95 corridor at the Embrey Mill Town Center in Stafford County. Thus, the grocery brand is moving north and will likely establish sites in Northern Virginia in a few years, once they establish a distribution center to serve Northern Virginia. Prince William County is a likely and logical next location for this grocery store. Most Publix stores are between 40,000 and 60,000 square feet. Area commercial brokers report that land and labor costs may slow the pace of Publix's northern expansion.

It is recommended that County staff start negotiations with the real estate department of Publix to clarify sites/ locations for them. County staff should use this report as a basis for educating the grocery store company on the Prince William County market.

- **Trader Joe's** usually locates in an urban setting with a high population density, high levels of educational attainment and a "higher" income population. There are clearly several ideal new locations for this type of store with 10,000± to 15,000± square feet of space, and the same marketing strategy is recommended here.

The following analysis provides additional clarity on several geographic areas and four specific sites in Prince William County that County staff have identified as locations that could secure a new grocery store. Each is analyzed for its potential to attract a grocery store. Care needs to be taken, as the County's grocery store market is in balance and limited "extra" expenditure potential exists over the next few years.

Yorkshire

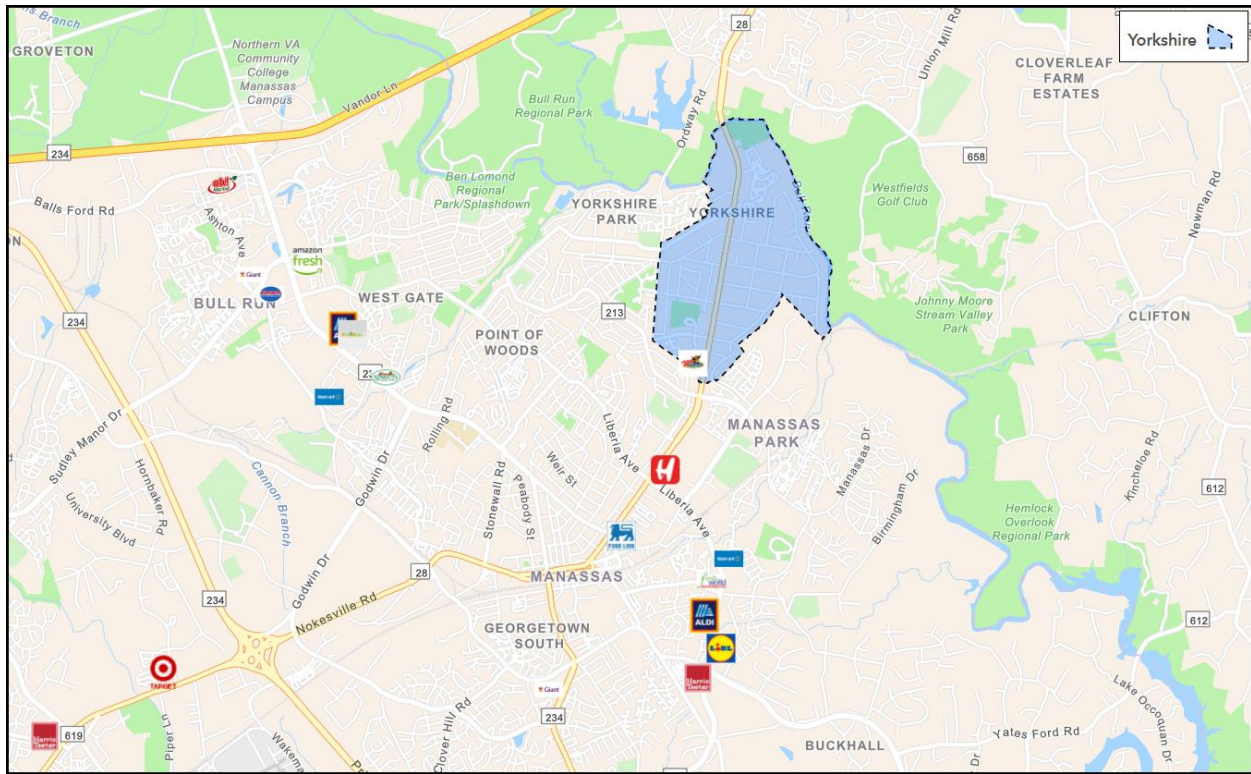
Yorkshire is a small community that flanks SR 28, between the City of Manassas Park in the south and Prince William County-Fairfax County border in the north. The area spans approximately 1,150 acres. Most of the area is built out, with commercial development flanking SR 28 and single-family homes occupying much of the remaining space. Although most of the area's housing stock is mature, newer developments include the 368-unit Orchard Bridge Apartments, which opened in 2014. The complex is proposed to be expanded by 404 new apartment units.

Map K shows the Yorkshire setting as well as the existing area grocery stores. The only grocery store in Yorkshire is the 47,000± square foot Megamart, which opened in 2011. Several grocery stores are located south of Yorkshire in the City of Manassas, including Food Lion, Giant, Walmart, Lidl, Aldi and H-Mart. These stores are located about five miles from Yorkshire.

The Yorkshire location may be a challenge to attract a new grocery store for several reasons:

- It is a largely built-out community and not expected to generate considerable population growth in the near- or mid-term. Manassas Park, to the south, and Yorkshire Park, to the west, are also essentially built-out. Population centers to the north and east, in Fairfax County, are served by a wide range of grocery stores in Centreville.
- There is an abundance of grocery stores in the Manassas area, as previously noted. This includes the new Amazon Fresh, which opened in June, 2022, and Giant, which opened in November, 2021. This is also the location of a future Sprouts Farmers Market. These grocery stores should fully serve the area.
- The only existing multi-tenant shopping center in Yorkshire is already anchored by a successful grocery store (Megamart).
- The Megamart is an indication that national chains have bypassed this location. However, Megamart generates estimated annual sales of over \$20 million and likely loses sales to nearby grocery stores.

This location could recapture lost sales with a new store. A discount store, such as Aldi or Lidl, could be viable given the area's limited potential for new demographic growth.



Map K - Yorkshire

Triangle

Map L shows the boundaries of Triangle, which is an unincorporated community at the southeastern edge of Prince William County. It is bounded to the south and east by Marine Corps Base Quantico. Its northern boundary is the Town of Dumfries, while its western boundary is I-95. County staff have been made aware of growing community interest in securing a new grocery store in the area. Map L also shows the locations of nearby grocery stores.

The closest supermarket to Triangle is U Mart, which is located in the Dumfries Shopping Plaza. This store replaced an older Todos Market that has since relocated to a new 64,890± square foot space on River Ridge Boulevard in the River Oaks Shopping Center, which is further away from Triangle.

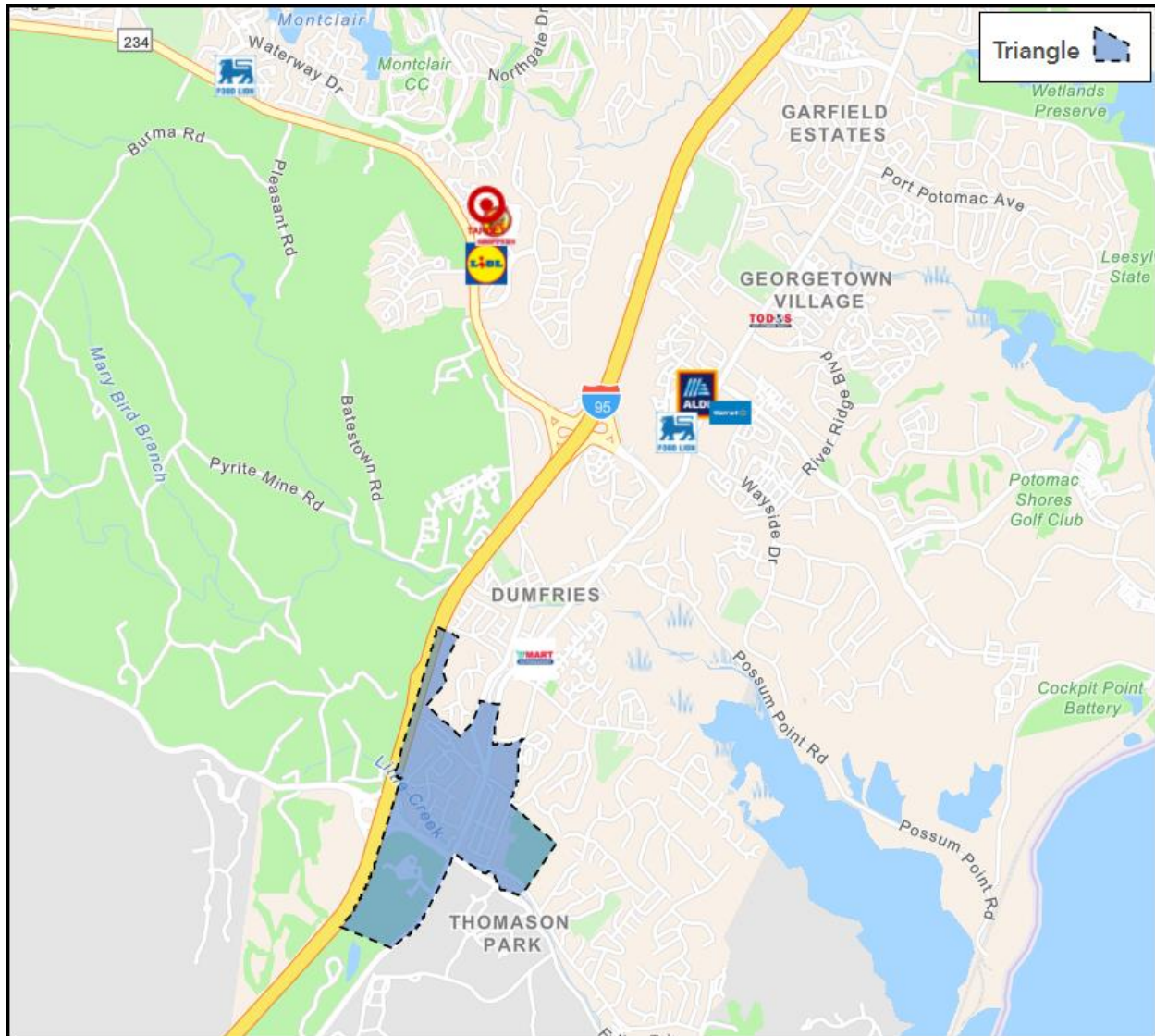
The next closest grocery store cluster to Triangle is just north of the Town of Dumfries near the intersection of SR 234 and US Route 1, three miles from the community. This is the

location of a Food Lion, Aldi and Walmart Supercenter. A Target, Lidl and Shoppers are also located nearby. These locations are all shown in Map L.

Our research does not support the assertion that the greater Triangle has insufficient grocery stores for their population. However, it is also clear that these stores are not conveniently located for Triangle residents. Several grocery stores of different types are located nearby. Most of these grocery stores are located within five miles of Triangle.

The issue is that these stores “capture” much of Triangle’s grocery store expenditures and that eight different stores are located in the area. Most of these grocery stores are not convenient for Triangle residents.

This is a difficult “call,” but if land exists, this could be an ideal location for a new grocery store, with its I-95 setting. This grocery store could help generate new growth in the area. The issue of concern is that a new store will draw sales from nearby locations.



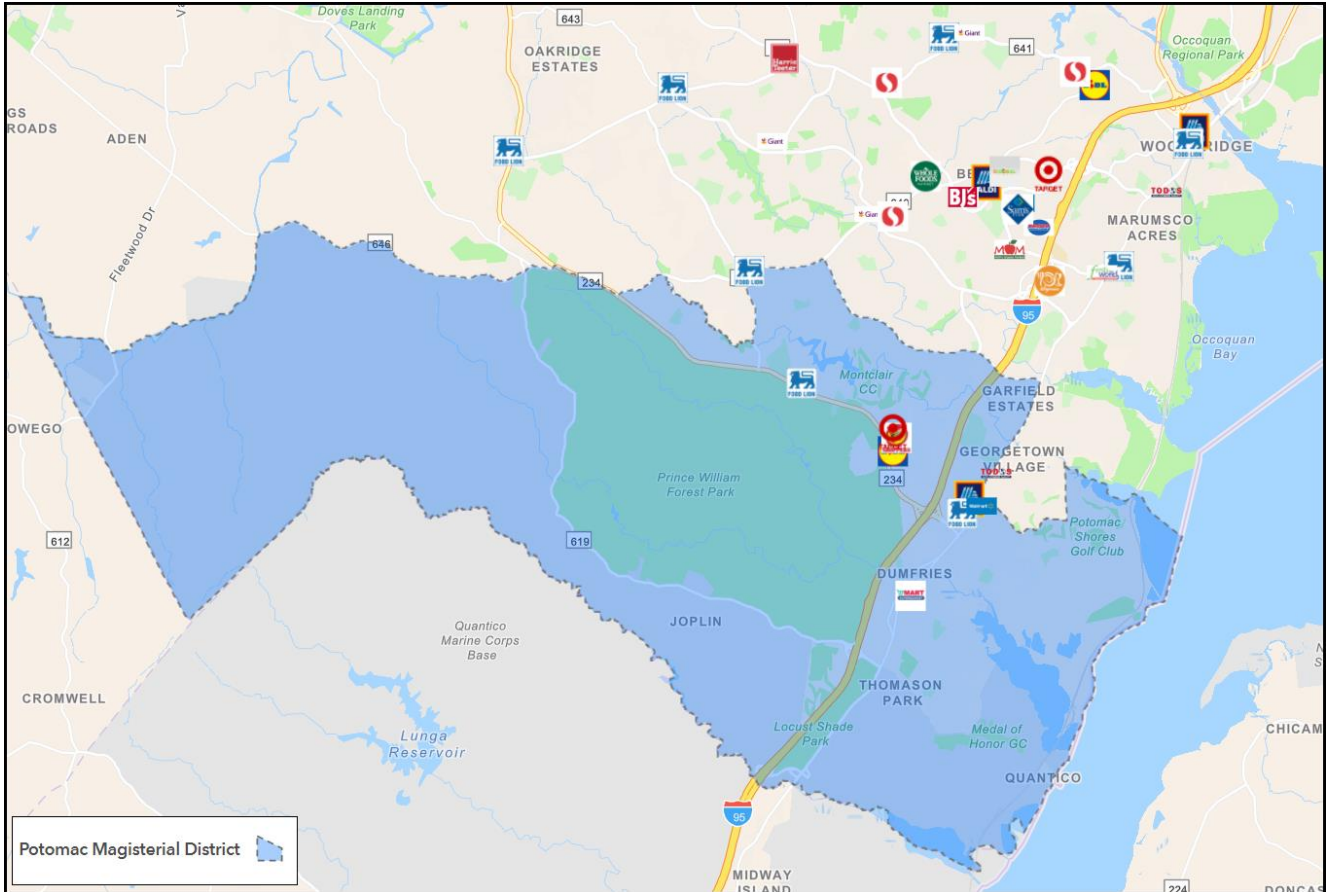
Map L - Triangle

Potomac Magisterial District

The Potomac Magisterial District encompasses the southeastern portion of Prince William County, including the Prince William Forest Park and portions of Quantico Marine Corps Base. The population centers are generally clustered along I-95 and the southern portions of SR 234. This district includes Dumfries and Triangle. This area shown in Map M below.

The area almost entirely aligns with the Dumfries/ Triangle submarket studied in the body of this report. The submarket was not shown to have a need for new grocery stores, as it would likely draw business away from existing stores. Eight grocery stores are located within the

boundaries of the Potomac Magisterial District, though some of are not well-located. This area is also located near Woodbridge, which has an even greater number of grocery stores, including a Wegmans proposed Whole Foods.



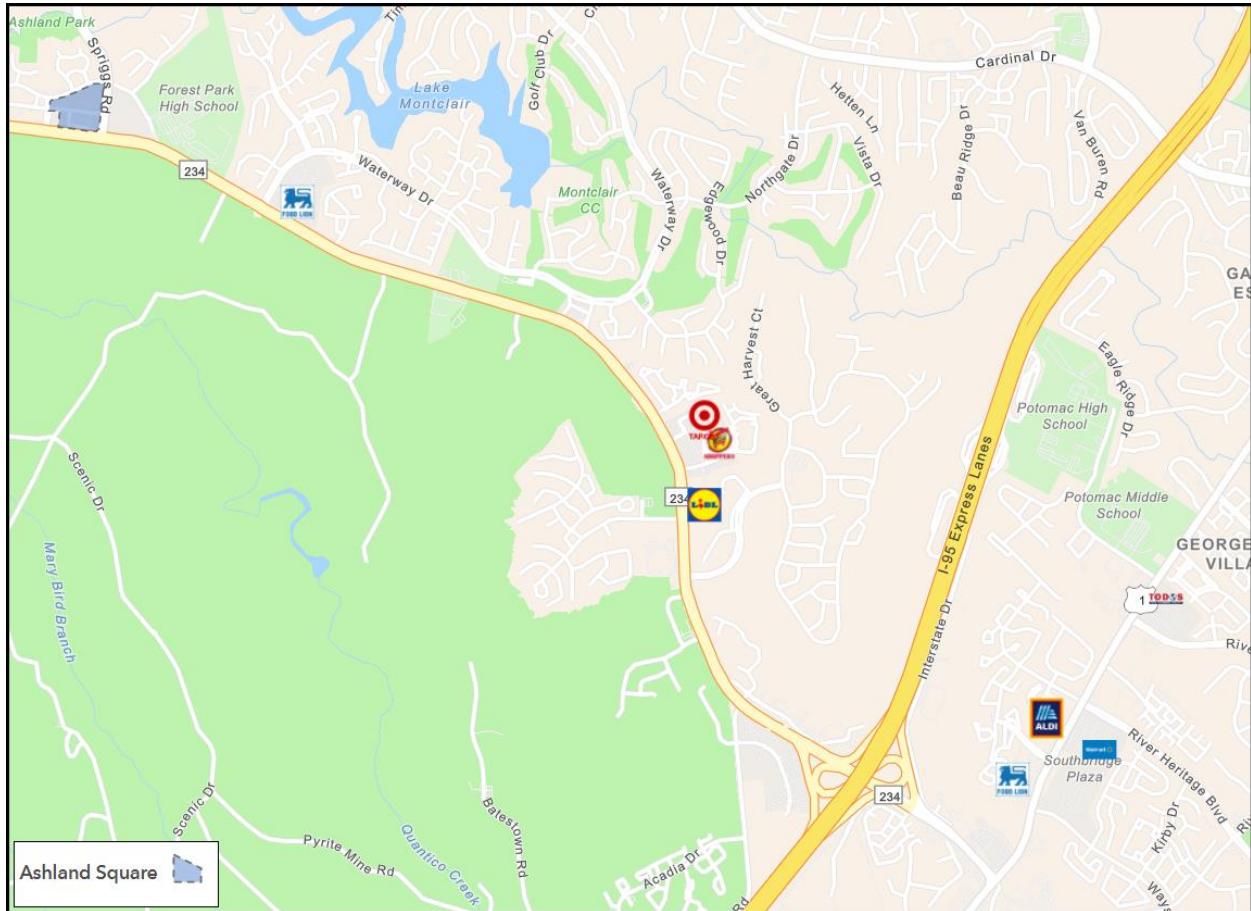
Map M - Potomac Magisterial District

With other areas within this Potomac Magisterial District under study for new grocery stores, any new grocery stores planned for this area should be in Triangle.

Ashland Square

Ashland Square is a proposed commercial development site at the southwestern intersection of Fincastle Drive and Spriggs Road, just north of SR 234. The site could be developed with up to 95,000 square feet of retail space, including a grocery store anchor. The owner of the property, Saul Centers, acquired the land in 2004 and has been marketing it to grocers and other retail businesses for several years. A development timeline has yet to be finalized.

The site setting, approximately four miles west of the I-95/ SR 234 intersection, is shown below in Map N. This is the location of eight grocery stores within the Triangle/ Dumfries submarket, that, as described above, is fully served at this time. There does not appear to be sufficient market support to attract a new grocery store without capturing sales from existing area grocers. The fact that the retail center site has not been developed is an indication that market support may not exist.



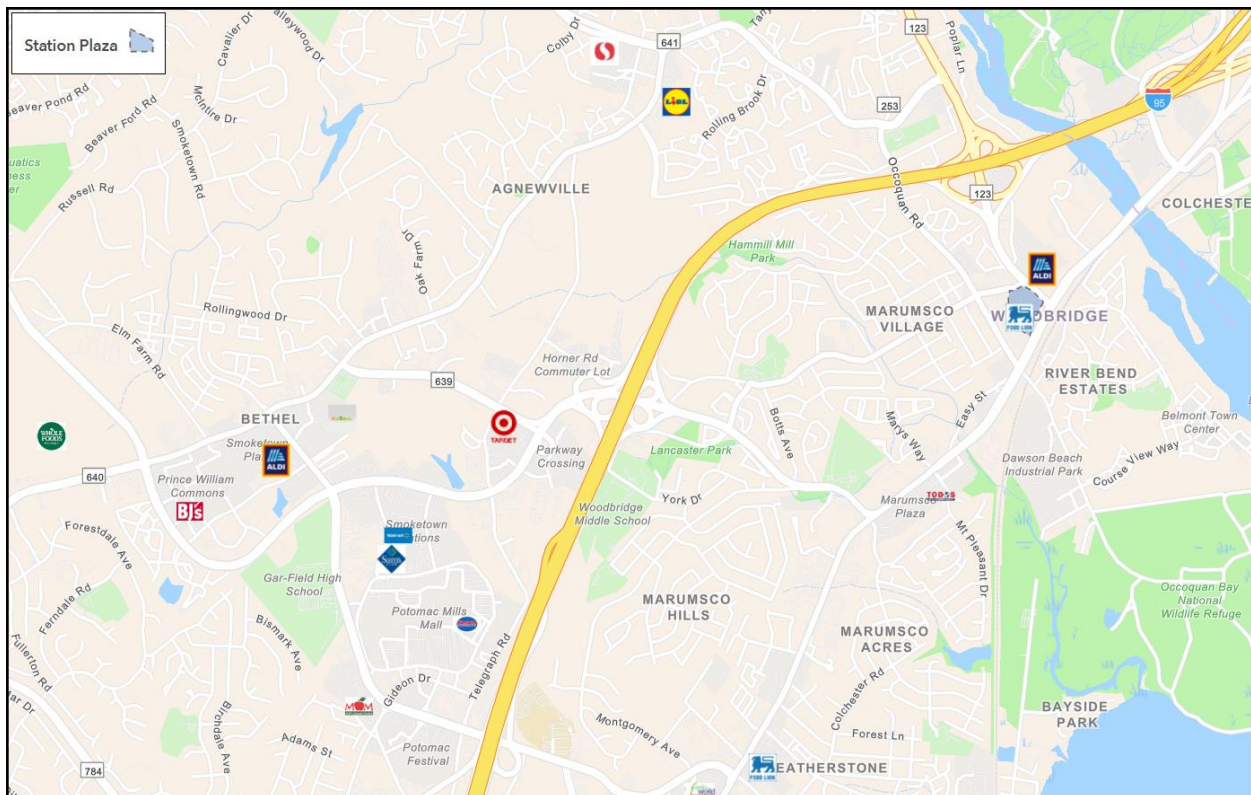
Map N - Ashland Square

Riverside Station

Station Plaza is an existing Food Lion-anchored shopping center located at 13408 Jefferson Davis Highway in the northeastern edge of Woodbridge. The shopping center is proposed to be demolished and redeveloped into a new mixed-use development called Riverside Station. The project, to be built in phases, is master planned for 160,000± square feet of retail and restaurant

space and 900 apartment units. The redevelopment is proposed to include a new, space for the Food Lion. The new space is not expected to be larger.

A replacement grocery store would likely perform well at this location, especially considering (1) the number of new housing units planned for the site and nearby, (2) the fact that it would replace an existing outdated grocery store, and (3) that there are few non-discount grocery stores nearby. Additionally, the site enjoys excellent visibility along Jefferson Davis Highway.



Map O – Station Plaza (to be Riverside Station)

Map O shows no nearby grocery stores near the current Food Lion. Of all of the additional study sites, this site has the most potential to attract a new grocery store without adverse impacts on nearby stores, except for the following two PUDs.

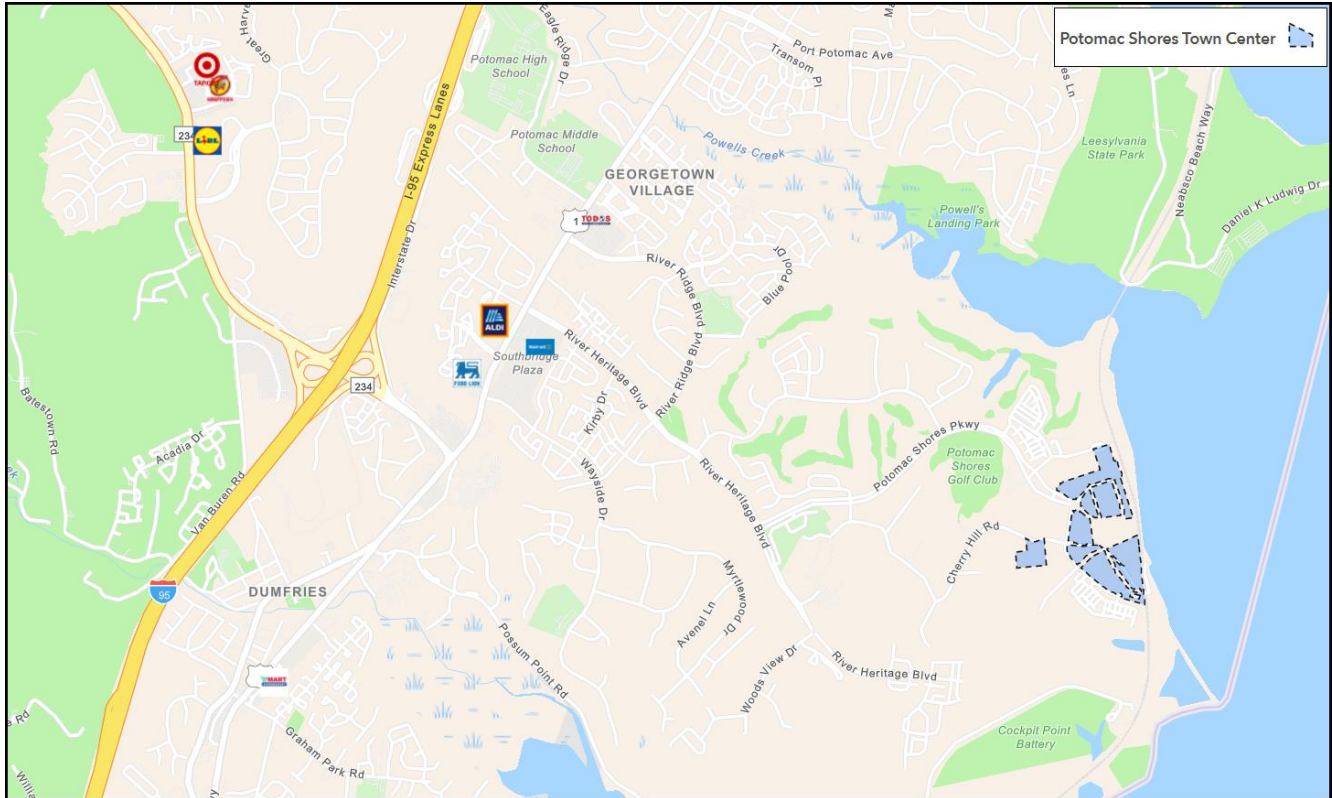
Potomac Shores Town Center

This is an approved town center of 1,920± acres with a Jack Nicklaus Signature Golf Course located along the Potomac River within the Cherry Hill peninsula in Prince William County. Its location, near Dumfries and Triangle, is shown in Map P.

The planned community is approved for up to 3,800 residential units and 3.7 million square feet of commercial space, including a hotel and 800,000 square feet of commercial space. Also proposed are 771 acres of natural open space, elementary and middle school sites and 55 acres of active recreation area. Over 1,000 single-family homes and townhomes have been built there since 2013, when home development began. A Virginia Railway Express (VRE) station with a 550-space parking garage is set to open at the site in 2023.

Map P shows the closest grocery cluster to be three miles west of Potomac Shores Town Center. This is an ideal location for one or more grocery stores, as the residential component evolves. It is a good site for a Trader Joe's, along with another upscale grocery store, as development continues.

Under normal trends, the development of the planned community will build commercial space as the "market" expands. Input from County staff on the type of grocery store desired is appropriate, as this development should attract a higher-end grocery store.

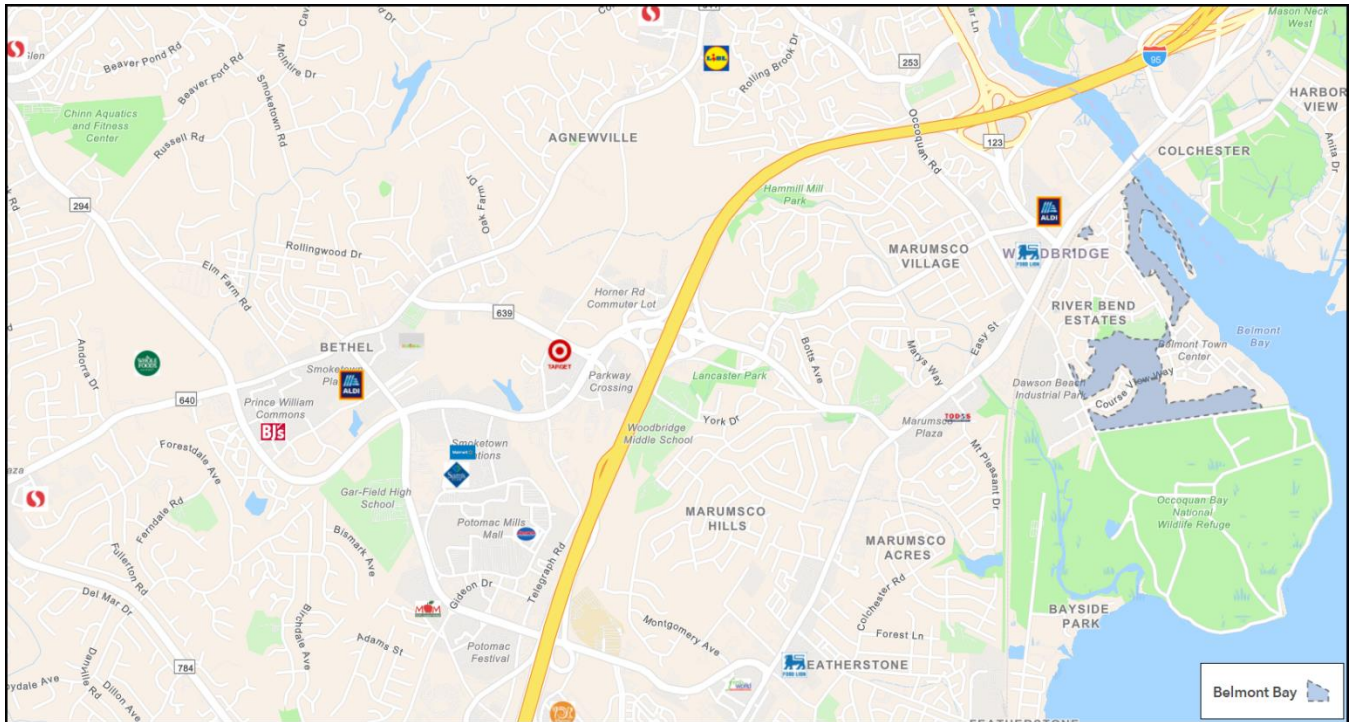


Map P - Potomac Shores Town Center

Belmont Bay

This is a proposed 170-acre development site off Dawson Beach Road in northern Woodbridge. The site is proposed to be developed over multiple phases with 1,400 homes and 90 acres of parkland. The plans center on a mixed-use marina district that would sit between George Mason University’s Potomac Science Center and the Belmont Bay Harbor marina. The site is currently vacant.

The development is still in its early stages of planning, with the Prince William Planning Commission likely to hold public hearings on the plan by the end of 2022. Thus, development is several years out. In time, the large number of new homes would clearly support a new upscale grocery store and possibly two stores. This too would be an ideal location for a new, upscale or specialty grocery store.



Map Q - Belmont Bay

Final Thoughts

The proposed new communities detailed above offer ideal locations for new grocery stores, particularly the grocery brands not currently operating in Prince William County. County staff should work with the developers to secure the types of stores desired. There are sufficient data in this report to convince certain brands that the potential in the County exists.

The other specific areas under study clearly have locations where grocery stores are not geographically convenient to the entire population, but overall are adequately served. There are opportunities in Triangle and South Woodbridge for more upscale grocery stores without negatively impacting the existing grocery stores. County staff need to be conservative in marketing these locations to the types of stores desired.

Appendix I: Consumer Expenditure Potential, by Submarket

Table A-1: Consumer Expenditure Potential, Dumfries/ Triangle Submarket, 2000-2025 ^{1/}

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Income	\$1,458,172,800	\$2,266,980,066	\$3,034,657,027	\$3,196,286,747
Total Income + Inflow Sales (+15%)	\$1,676,898,720	\$2,607,027,076	\$3,489,855,581	\$3,675,729,759
Potential Consumer Expenditure (78.8%)	\$1,321,933,275	\$2,055,172,324	\$2,751,123,942	\$2,897,652,326
Annual Consumer Expenditure ^{3/}	\$1,308,713,942	\$1,960,634,397	\$2,437,495,813	\$2,468,799,782
Housing (6.8%) ^{4/}	\$80,173,415	\$120,110,859	\$149,323,971	\$151,241,691
Food Away from Home (6.2%)	\$80,848,469	\$121,122,182	\$150,581,267	\$152,515,134
Food at Home (6.1%)	\$15,957,124	\$23,905,977	\$29,720,339	\$30,102,028
Entertainment (4.6%)	\$89,150,195	\$133,559,315	\$166,043,334	\$168,175,775
Apparel and Services (3.0%)	\$39,555,282	\$59,259,281	\$73,672,199	\$74,618,348
Personal Care Products & Services (1.4%)	\$60,194,694	\$90,179,973	\$112,113,358	\$113,553,194
Alcoholic Beverages (1.2%)	\$18,255,179	\$27,348,782	\$34,000,496	\$34,437,153
Reading (0.2%)	\$2,168,790	\$3,249,147	\$4,039,398	\$4,091,275
Tobacco & Smoking Supplies (0.2%)	\$2,111,339	\$3,163,077	\$3,932,394	\$3,982,897
Total Potential Retail Consumer Expenditure	\$388,414,486	\$581,898,593	\$723,426,757	\$732,717,493
Total Potential Grocery Store Expenditure ^{5/}	\$124,948,874	\$187,190,686	\$232,718,815	\$235,707,547

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Table A-2: Consumer Expenditure Potential, Gainesville/ Haymarket Submarket, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Income	\$773,401,920	\$3,364,558,387	\$4,218,732,851	\$4,443,427,965
Total Income + Inflow Sales (+15%)	\$889,412,208	\$3,869,242,145	\$4,851,542,779	\$5,109,942,160
Potential Consumer Expenditure (78.8%)	\$701,141,684	\$3,050,202,065	\$3,824,569,580	\$4,028,271,054
Annual Consumer Expenditure 3/	\$694,130,267	\$2,909,892,770	\$3,388,568,648	\$3,432,086,938
Housing (6.8%) 4/	\$42,523,268	\$178,263,586	\$207,587,855	\$210,253,839
Food Away from Home (6.2%)	\$42,881,311	\$179,764,552	\$209,335,729	\$212,024,160
Food at Home (6.1%)	\$8,463,517	\$35,480,266	\$41,316,752	\$41,847,369
Entertainment (4.6%)	\$47,284,473	\$198,223,232	\$230,830,852	\$233,795,338
Apparel and Services (3.0%)	\$20,979,771	\$87,950,182	\$102,417,942	\$103,733,263
Personal Care Products & Services (1.4%)	\$31,926,732	\$133,841,399	\$155,858,241	\$157,859,878
Alcoholic Beverages (1.2%)	\$9,682,385	\$40,589,935	\$47,266,959	\$47,873,993
Reading (0.2%)	\$1,150,307	\$4,822,250	\$5,615,508	\$5,687,626
Tobacco & Smoking Supplies (0.2%)	\$1,119,835	\$4,694,509	\$5,466,753	\$5,536,961
Total Potential Retail Consumer Expenditure	\$206,011,598	\$863,629,911	\$1,005,696,591	\$1,018,612,426
Total Potential Grocery Store Expenditure 5/	\$66,271,775	\$277,820,701	\$323,522,065	\$327,676,954

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Table A-3: Consumer Expenditure Potential, Lake Ridge/ SR 642 Submarket, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Income	\$4,236,326,450	\$5,301,676,625	\$6,074,569,466	\$6,398,108,815
Total Income + Inflow Sales (+15%)	\$4,871,775,418	\$6,096,928,119	\$6,985,754,886	\$7,357,825,137
Potential Consumer Expenditure (78.8%)	\$3,840,519,380	\$4,806,332,105	\$5,507,012,274	\$5,800,322,800
Annual Consumer Expenditure 3/	\$3,802,114,186	\$4,585,240,828	\$4,879,212,875	\$4,941,875,026
Housing (6.8%) 4/	\$232,922,160	\$280,897,455	\$298,906,542	\$302,745,302
Food Away from Home (6.2%)	\$234,883,346	\$283,262,589	\$301,423,311	\$305,294,393
Food at Home (6.1%)	\$46,359,104	\$55,907,752	\$59,492,148	\$60,256,186
Entertainment (4.6%)	\$259,001,764	\$312,348,711	\$332,374,222	\$336,642,796
Apparel and Services (3.0%)	\$114,917,167	\$138,586,813	\$147,471,984	\$149,365,919
Personal Care Products & Services (1.4%)	\$174,879,393	\$210,899,540	\$224,420,874	\$227,303,038
Alcoholic Beverages (1.2%)	\$53,035,483	\$63,959,274	\$68,059,874	\$68,933,945
Reading (0.2%)	\$6,300,832	\$7,598,623	\$8,085,791	\$8,189,635
Tobacco & Smoking Supplies (0.2%)	\$6,133,923	\$7,397,335	\$7,871,598	\$7,972,691
Total Potential Retail Consumer Expenditure	\$1,128,433,174	\$1,360,858,093	\$1,448,106,343	\$1,466,703,904
Total Potential Grocery Store Expenditure 5/	\$363,005,139	\$437,773,802	\$465,840,651	\$471,823,292

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Table A-4: Consumer Expenditure Potential, Manassas/ Bristow Submarket, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Income	\$4,463,028,850	\$6,153,406,888	\$7,741,547,594	\$8,153,872,332
Total Income + Inflow Sales (+15%)	\$5,132,483,178	\$7,076,417,921	\$8,902,779,733	\$9,376,953,181
Potential Consumer Expenditure (78.8%)	\$4,046,040,595	\$5,578,483,784	\$7,018,241,845	\$7,392,042,393
Annual Consumer Expenditure 3/	\$4,005,580,189	\$5,321,873,530	\$6,218,162,275	\$6,298,020,119
Housing (6.8%) 4/	\$245,386,736	\$326,024,474	\$380,932,218	\$385,824,407
Food Away from Home (6.2%)	\$247,452,873	\$328,769,575	\$384,139,637	\$389,073,018
Food at Home (6.1%)	\$48,839,961	\$64,889,500	\$75,817,932	\$76,791,637
Entertainment (4.6%)	\$272,861,962	\$362,528,469	\$423,584,069	\$429,024,022
Apparel and Services (3.0%)	\$121,066,835	\$160,851,201	\$187,941,119	\$190,354,786
Personal Care Products & Services (1.4%)	\$184,237,874	\$244,781,184	\$286,006,257	\$289,679,342
Alcoholic Beverages (1.2%)	\$55,873,619	\$74,234,523	\$86,736,806	\$87,850,738
Reading (0.2%)	\$6,638,015	\$8,819,365	\$10,304,687	\$10,437,027
Tobacco & Smoking Supplies (0.2%)	\$6,462,173	\$8,585,739	\$10,031,716	\$10,160,550
Total Potential Retail Consumer Expenditure	\$1,188,820,047	\$1,579,484,030	\$1,845,494,440	\$1,869,195,527
Total Potential Grocery Store Expenditure 5/	\$382,430,964	\$508,103,478	\$593,676,242	\$601,300,633

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

Table A-5: Consumer Expenditure Potential, Woodbridge/ Dale City Submarket, 2000-2025 1/

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2025</u>
Total Income	\$2,535,420,050	\$3,633,871,917	\$4,458,540,591	\$4,696,008,172
Total Income + Inflow Sales (+15%)	\$2,915,733,058	\$4,178,952,704	\$5,127,321,679	\$5,400,409,398
Potential Consumer Expenditure (78.8%)	\$2,298,531,511	\$3,294,353,182	\$4,041,971,681	\$4,257,252,269
Annual Consumer Expenditure 3/	\$2,275,546,196	\$3,142,812,935	\$3,581,186,910	\$3,627,178,933
Housing (6.8%) 4/	\$139,402,740	\$192,532,560	\$219,387,885	\$222,205,413
Food Away from Home (6.2%)	\$140,576,500	\$194,153,669	\$221,235,114	\$224,076,365
Food at Home (6.1%)	\$27,745,690	\$38,320,257	\$43,665,342	\$44,226,122
Entertainment (4.6%)	\$155,011,252	\$214,089,860	\$243,952,097	\$247,085,094
Apparel and Services (3.0%)	\$68,777,346	\$94,990,088	\$108,239,741	\$109,629,829
Personal Care Products & Services (1.4%)	\$104,664,436	\$144,554,633	\$164,717,776	\$166,833,193
Alcoholic Beverages (1.2%)	\$31,741,469	\$43,838,926	\$49,953,780	\$50,595,321
Reading (0.2%)	\$3,771,016	\$5,208,244	\$5,934,713	\$6,010,931
Tobacco & Smoking Supplies (0.2%)	\$3,671,122	\$5,070,277	\$5,777,503	\$5,851,701
Total Potential Retail Consumer Expenditure	\$675,361,573	\$932,758,513	\$1,062,863,952	\$1,076,513,970
Total Potential Grocery Store Expenditure 5/	\$217,256,748	\$300,058,649	\$341,912,207	\$346,303,275

Notes: 1/ All data reported in constant 2022 dollars. 2020 average household size estimates based on calculations from the Prince William County Department of Information Technology's Geospatial Technology Services.

2/ Based on average of submarkets, not countywide average.

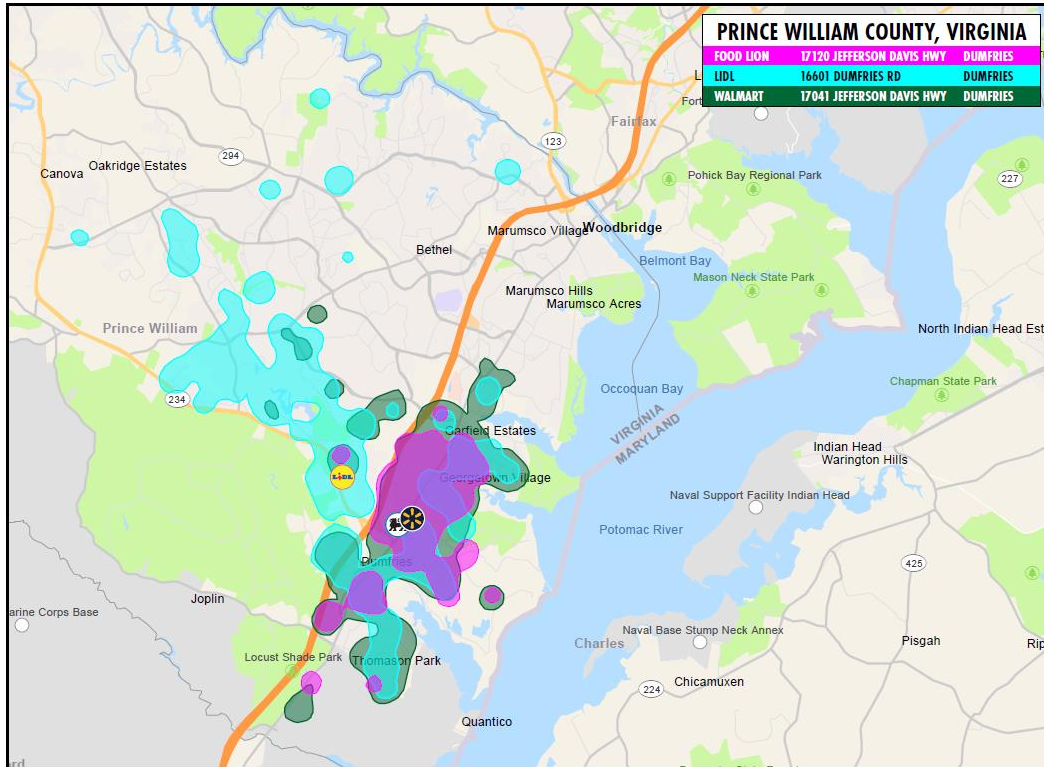
3/ Less e-commerce sales. Based on U.S. Census Bureau Retail Indicators Branch Supplemental Quarterly E-Commerce Tables. E-commerce sales as a percentage of total retail sales are as follows: 11.4 percent in Q1 2020, 4.6 percent in 2010, and 1.0 percent in 2000. Projections reflect past trends.

4/ Adjusted to include only retail-related housing expenses (household operations, housekeeping supplies and household furnishings & equipment). Excludes mortgage and rental expenditures.

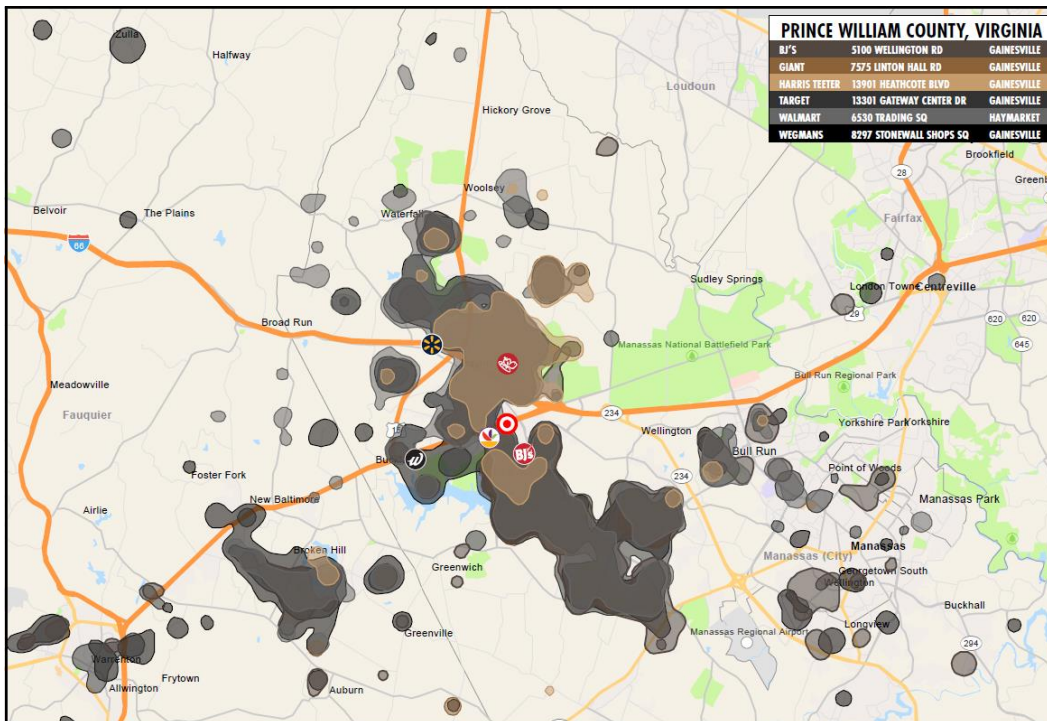
5/ Reflects the following retail expenditures: Housing, Food Away from Home, Alcoholic Beverages, Personal Care Products & Services and Tobacco & Smoking Products.

Source: U.S. Bureau of the Census; Consumer Expenditure Survey (CEX); Prince William County Department of Information Technology's Geospatial Technology Services; S. Patz & Associates, Inc.

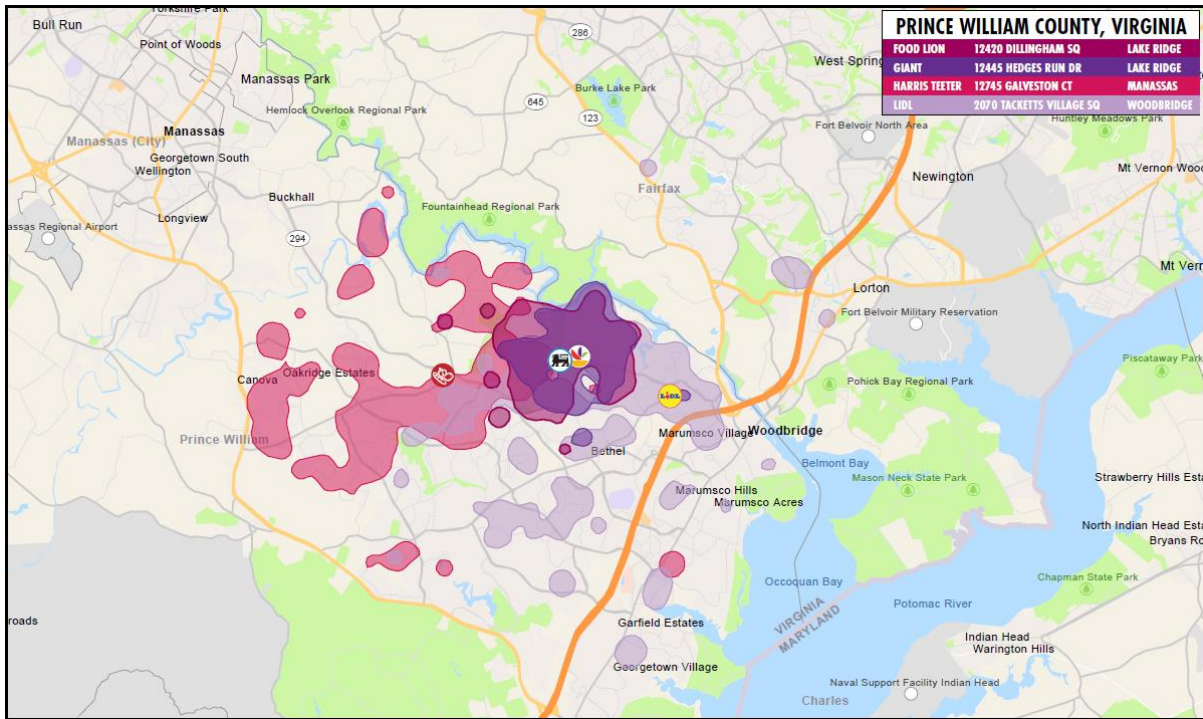
Appendix II: Placer.ai Trade Areas



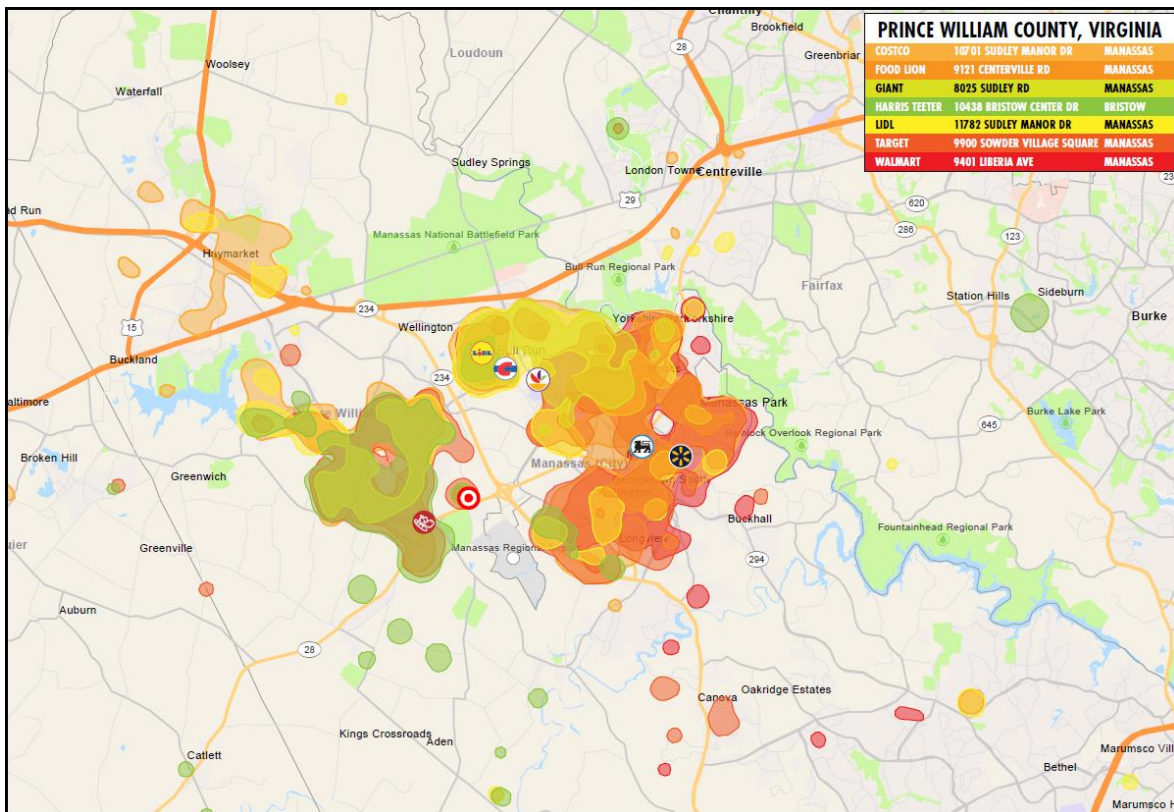
Map A-1: Dumfries/ Triangle Trade Areas



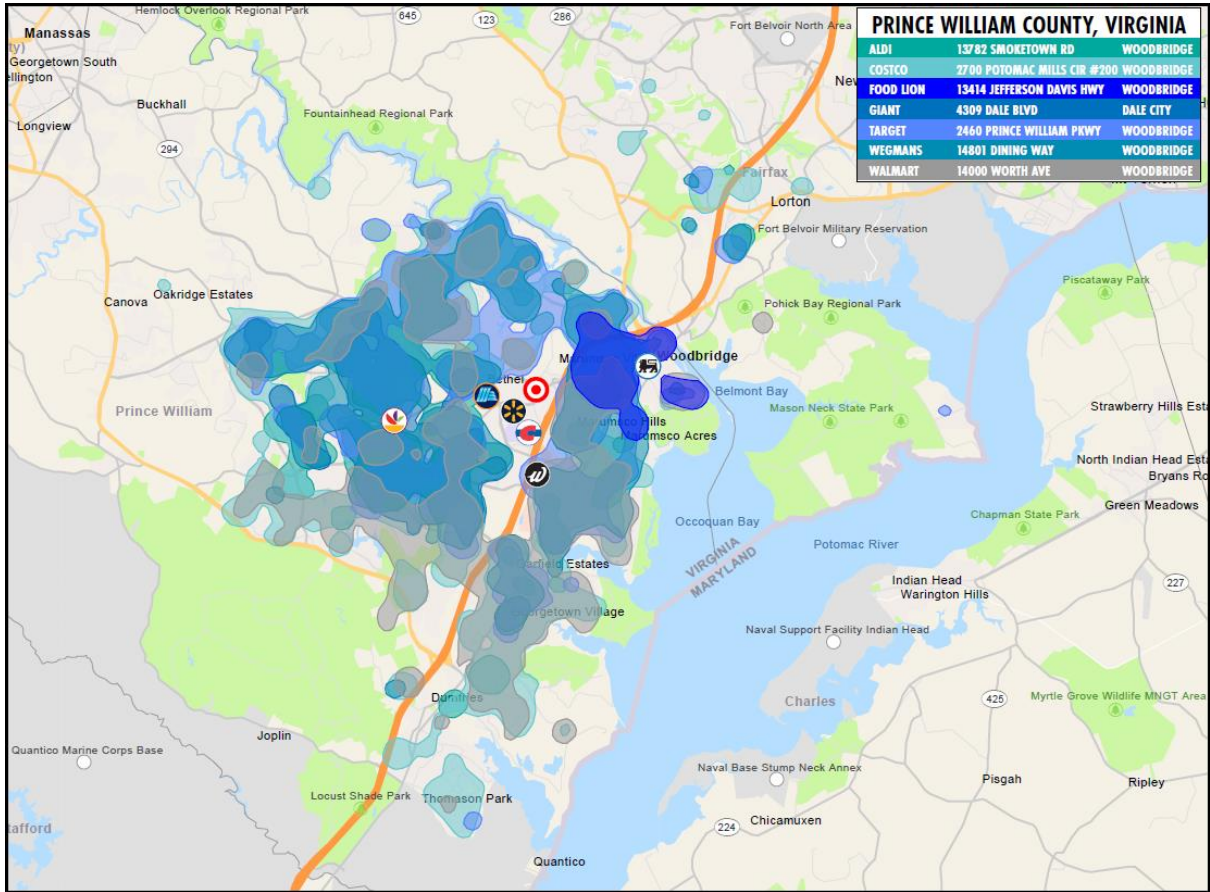
Map A-2: Gainesville/ Haymarket Trade Areas



Map A-3: Lake Ridge/ SR 642 Trade Areas



Map A-4: Manassas/ Bristow Trade Areas



Map A-5: Woodbridge/ Dale City Trade Areas