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Proposed Fueling Station
Market Need Analysis

15700 Shady Grove Road
Gaithersburg, Maryland 20877

Project #25-08-024



FOR
Wills Group
102 Centennial Street
LaPlata, MD 20646



PO Box 64
Upperco, MD 21155
443-383-0093
polestaranalysis.org

October 12, 2025

Bertha Ballew, Construction Manager
Wills Group
102 Centennial Street
LaPlata, Maryland 20646

**Subject: Proposed Fueling Station
15700 Shady Grove Road
Gaithersburg, Montgomery County, Maryland 20877**

Dear Ms. Ballew:

Enclosed please find Polestar Analysis (Polestar) report of the need for the proposed Dash In convenience store with gas pumps at the site of an existing, closed Red Lobster restaurant on the northwest side of Shady Grove Road and the northeast side of Washington National Pike (I-270), unincorporated area of Shady Grove of Montgomery County, Maryland. The analysis has been conducted in connection with your petition for a conditional use to permit gas pumps on that property.

We find that the proposed automobile fueling station will serve unmet public need for gasoline. The enclosed report summarizes our reasoning process.

It has been a pleasure working with you on this project. Please call me at (443) 383-0093 should you have any questions or comments.

Respectfully submitted,
Man With a Plan LLC, t/a Polestar Analysis

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Executive Summary

Polestar Analysis has been engaged by The Wills Group in connection with its petition to the Montgomery County Office of Zoning and Administrative Hearings (OZAH) for a conditional use permitting the development of gas pumps at the property located on the northwest side of Shady Grove Road and the northeast side of I-270, in the unincorporated Shady Grove area of Montgomery County, Maryland.

Scope of Work

Polestar Analysis has been engaged to examine evidence of the public need for a gas station at this location. Presentation of sufficient evidence of public need for gasoline sales use is required before a conditional use for that use can be granted.

Specifically, we must demonstrate compliance with the Montgomery County Zoning Code, Article 59-7 – Administration and Procedures need requirement:

§7.3.1.E.5. “... when the Hearing Examiner finds from a preponderance of the evidence of record that a need exists for the proposed use to serve the population in the general neighborhood, considering the present availability of identical or similar uses to that neighborhood.”

Polestar has found that there is significant unmet demand (“need”) of approximately 23 million gallons per annum, for the proposed use to serve the population in the general neighborhood, considering the present availability of identical or similar uses to that neighborhood.

Shady Grove Dash In

The proposed Dash In fueling facility (6 multiproduct dispensers – 12 fueling positions) is to be located on the northwest side of Shady Grove Road and the northeast side of I-270, with access only to Shady Grove Road, southbound. The proposed use would be located approximately 300 feet north of the northbound I-270 on-ramp. The site is presently improved with a closed Red Lobster restaurant and parking lot. The total site area is 86,962 square feet (two acres), proposed to be redeveloped with a convenience store of approximately 4,800 square feet, an in-bay automatic carwash of approximately 1,368 square feet, approximately 35 parking spaces and six (6) multiproduct dispensers under a canopy. The land, a parcel of the Washingtonian Industrial Park, which is also the Shady Grove Shopping Center, is zoned General Retail (GR).

Supply/Demand Issues

Trade Area

The subject’s primary trade area is defined as the geographic area within 40 census block groups, identified by Polestar Analysis and confirmed with data from Environmental Systems Research

Institute (ESRI). We believe this area demonstrates the customer base is likely to shop at the Dash In store and purchase gas. The fuel sales at large convenience store stations are largely dependent upon consumer traffic for products offered in the store.

We have delineated this area (map on page 17), between Rockville in the East, the Potomac River in the West and the stream valleys of Watts Branch in the South and Muddy Branch in the North due to the void of gasoline availability. This is a large area with virtually no gasoline services except at the Shady Grove and Rockville areas. There is a single Shell station in Darnestown, north of this trade area and no options near the Watts Branch valley. Virtually all the households in this area will migrate to the Shady Grove and Rockville area for commercial goods and services. There is also a significant commercial community in Shady Grove with a single gas station and limited convenience store. As such the trade area demographics represent only a portion of the market share occupied by this store. Some additional market is derived from pass-through traffic and daily visitors to the medical community. The data presented below is therefore conservative.

Trade Area Residents

The trade area's residential base is affluent, with an average household income estimated at \$199,916 in 2025. Homeownership at 56.3% is nearly double renting at 38.3%. Homes have an estimated value of \$958,180 in 2025. The number of vehicles per household in 2022 averaged approximately two. More than one-half of workers (53.5%) of workers drive alone to work, with nearly one-quarter (23.0%) having commute times in excess of 45 minutes.

Trade Area Demand

We find that there is strong demand within the Shady Grove trade area for gasoline fueling services. We have quantified 2025 demand for gasoline from residential, commercial and pass-through sources as at least 41.4 million gallons per year. We also find that the total demand from residential consumers is significantly bolstered by the large local medical/office complex in Shady Grove, with limited local supportive gasoline services. Therefore, the total residential demand number computed above is conservative.

Convenient/Useful

We find that the proposed fueling station is "reasonably convenient and useful to the public" because it meets the demand of Dash In shoppers for fuel service as demonstrated by:

- Dash In Patrons – Dash In is locating in an area underserved by full-service convenience stores with fresh food, therefore capturing more of the market than the average gasoline station nearby competition.
- Expedient or Reasonably Convenient – The location along a primary route with an interchange at the interstate highway and proximal to a large retail and office community provides a convenient option for both local workforce, residents and visitors.

- Useful – There are no other convenience stores of this scale, with in-store and on-site offerings, within this trade area. Consumers will find the competitive fuel pricing and food offerings at Dash In to become a destination for fueling services.

Competitive Supply

We find that there is very limited competition within the defined Shady Grove Dash In trade area for the available consumer demand for gasoline and diesel:

- Immediate Trade Area Supply – The 10 other gas stations identified within the trade area are not directly competitive with the Dash In, due to their store, service bays, location and scale. Those stations serve the residents of the trade area, but also the commuters passing through the area to employment and destinations among Rockville and Gaithersburg. Only one gas station has a modern design with the greatest consumer demand, but its location is difficult to access, thereby limiting its potential. The closest stations are an old format, “legacy” service station with an office/snack shop that is functionally obsolete, and one traditional-scale 7-11 that is under renovation but well-placed in the King Farm community. Five of the stations are in close proximity to each other along Frederick Road (MD-355) and serve commuters and a market predominantly east of this trade area.
- Current Performance – Estimating that the total existing competitive supply is now pumping approximately 18 million gallons of gasoline per year, we judge that local consumer demand for gasoline within the trade area is shaped by other factors, including the arterial road network, commuters and travelers along the I-270 corridor and the availability of convenience services in a well-lit modern environment. Performance data and traffic generation models prove that the modern convenience store will generate more customer traffic than the traditional and smaller gas stations.
- Unmet Demand – Based on the performance indicators above of the two modern stations and the five other legacy service stations, we estimate that there is unmet demand of approximately 23.4 million gallons per annum in this trade area. This is a conservative estimate, based on surveyed averages, as no local gas station will disclose their actual performance. Concern for the impact on the existing Shell station next door is tempered by the excessive unmet demand, as well as other forces that drive sales, including location, brand, loyalty programs, accessibility, visibility, etc.

Conclusions

Polestar concludes, therefore, that the public need/necessity for the proposed Shady Grove Dash In gas station is evident based on our analysis:

We find that there is an estimated residential demand for at least 41.4 million gallons of gasoline within the defined Shady Grove Dash In trade area, as determined by standard market research methodologies of residential demand. It is important to note that the availability of gas stations

in the immediate community are presently limited to 10 stations: two-thirds of which include service bays, averaging more than 40 years old, and only one with a similar scale conveniences store, albeit on a site with difficult access. Half of these stations are located on Frederick Road (MD-355), which is the eastern edge of the trade area – not conveniently accessible to residents of the west side of I-270. We find that the older and smaller stations may not capture consistent levels of demand, as industry indicators suggest that a substantial volume of trade would be handled by the more modern facilities that offer larger convenience spaces and services that are attractive to a broader market of consumers. Those older and smaller stations are also not conveniently located to serve the large medical community of Shady Grove, associated with the Adventist Health Care Shady Grove Medical Center and nearby university outposts.

Our analysis in the attached report shows the net unmet demand in the Shady Grove Dash In gas station trade area is approximately 23.4 million gallons per year. Presently this demand is being met with supply from outside the immediate trade area, at gas stations located in other markets and near commuters' places of work.

There are few opportunities in the market area for customers to find fuel at a discount in a modern, well-lit environment that is in demand at this time. With three exceptions, the gas stations in the trade area are all old and/or outdated, and some do not offer a full range of fuels.

Introduction

Polestar Analysis has been engaged by The Wills Group in connection with its petition to the Montgomery County Office of Zoning and Administrative Hearings (OZAH) for a conditional use permitting the development of gas pumps at the property located on the northwest side of Shady Grove Road and the northeast side of I-270, in the unincorporated Shady Grove area of Montgomery County, Maryland.

Purpose of Assignment

The subject site is one lot of the Washingtonian Industrial Park/Shady Grove Shopping Center, formerly developed with a Red Lobster restaurant, that remains vacant at this time. The Wills Group is proposing to redevelop the site with a Dash In convenience store with a Splash In™ car wash and gasoline pumps. The site will use the existing right-in/right-out access to Shady Grove Road southbound. The site is approximately 2.0 acres.

The proposed automobile filling station is planned with six multi-product dispensers (MPD's) under a single canopy, in addition to a convenience store of approximately 4,800 square feet and a bay-style car wash and vacuum stations.

Polestar Analysis has been engaged to examine evidence of the public need for an automobile filling station at this location. Presentation of sufficient evidence of public need for the use is required before a conditional use for that use can be granted. The Montgomery County Zoning Code, Article 59-7 – Administration and Procedures defines the need requirement as:

§7.3.1.E.5. "... when the Hearing Examiner finds from a preponderance of the evidence of record that a need exists for the proposed use to serve the population in the general neighborhood, considering the present availability of identical or similar uses to that neighborhood."

A convenience store is a permitted use on this site, but a filling station requires the demonstration of public need. For purposes of this analysis, we have considered public need/necessity to mean "expedient or reasonably convenient and useful to the public" (as defined in Lucky Stores, Inc. v. Board of Appeals) and "convenient, useful, appropriate, suitable, proper or conducive to the public in the surrounding area" (as defined in Baltimore County Licensed Beverage Association, Inc. v. Kwon). In this case, we consider an automobile filling station and convenience store complex to be accommodating to the public need when it meets the demand of the public living and working within a reasonably defined trade area for fuel service, as analyzed according to standard market research methodologies.

Dash In Market

Polestar recognizes the nature of the subject as a fueling station facility which also offers a large convenience store with fresh food and an in-bay automatic car wash. The “niche market” aspect of this facility is that there are few fuel service stations with this breadth of convenience and the absence of service bays in this area. We believe it does not, therefore, compete directly against standard service stations—as is clear in its design, offerings, location and marketing.

In this analysis, we focus on the key issues of competitive demand/supply factors within the subject’s trade area and whether the proposed fueling station provides a service which is desired by the Dash In customer base.

Scope of Work

In conducting this analysis Polestar has accomplished the following tasks:

- Inspected the subject site and neighborhood;
- Reviewed the subject’s site plan;
- Defined the subject’s surrounding trade area;
- Consulted demographic and economic data for the trade area produced by ESRI (Environmental Systems Research Institute, Inc.) based on U.S. Census information, Metropolitan Washington Council of Governments and others;
- Inspected gas station properties in the trade area;
- Estimated the scale of gasoline demand within the defined trade area and arrived at certain conclusions.

Organization of Report

Following this section, Polestar’s report is organized in four sections as follows: site and location analysis; need analysis; other supply/demand; summary & conclusion.

Qualifications of Consultant

Polestar Analysis is a multifaceted land use and real estate consulting firm. The principal, Ed Steere, has more than 35 years of experience as a certified land planner, economic developer and market analyst. Mr. Steere has performed hundreds of commercial, residential and institutional studies throughout Maryland and the nation. Polestar provides clients with objective advice and practical assistance at every stage of decision-making in the spheres of land planning, economic development, and development, use or reuse of all types of real estate. Our clients include corporations, institutions, real estate owners, builders, developers, and government entities.

Site Location Analysis

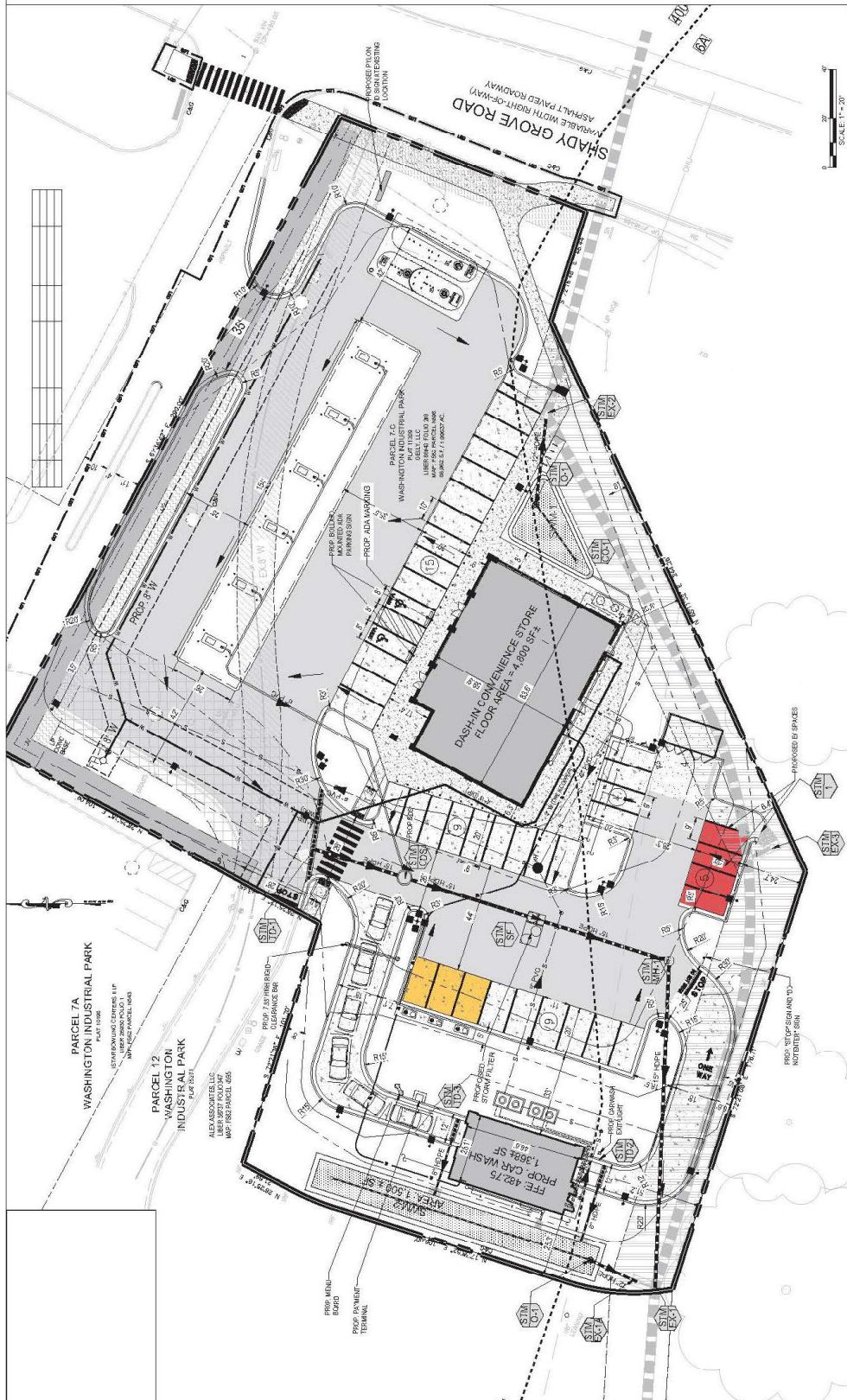
In this section, Polestar describes the proposed fueling station location, its access and surroundings in order to establish its positioning within its trade area and competitive environment generally.

Site Description

The proposed Dash In station is to be located on the northwest side of Shady Grove Road, northeast of I-270. The proposed use would be located approximately 300 feet north of the northbound on-ramp to I-270. The site is Parcel 7-C of the Washingtonian Industrial Park, which includes the Shady Grove Shopping Center. This parcel is approximately two acres in size and was previously developed as a Red Lobster restaurant. The land is zoned General Retail (GR).

The improvements will include an approximately 4,800 square foot convenience store, 1,368 square foot in-bay automatic carwash (Splash In), six multiproduct dispensers under a canopy and associated parking. This design and scale of this gas station is anticipated to supply less than 3.6 million gallons of fuel per year.

As noted above, the site was previously developed with a restaurant building and associated parking. That site plan is no longer relevant to this proposal for redevelopment. The topography is relatively flat and drops gradually toward the interstate right-of-way.



LEGEND

	STORM DRAIN EASEMENT
	12' SLOPE EASEMENT
	WESC EASEMENT
	IMPRESS EGRESS EASEMENT
	IMPRESS EGRESS EASEMENT
	WASHINGTON GAS EASEMENT
	10' ADJ. & TELEPHONE EASEMENT

	VACUUM STATION
	EV CHARGING STATION

- SCOPE NOTES:**
1. THE PROPOSED PROJECT INVOLVES THE REDEVELOPMENT OF AN EXISTING SITE CURRENTLY OCCUPIED BY A RESTAURANT BUILDING. THE PLAN PROPOSES TO DEMOLISH THE EXISTING BUILDING AND CONSTRUCT A NEW BUILDING. THE DEVELOPMENT PROPOSES A FUEL CANOPY WITH SIX (6) DISPENSERS AND AN ASSOCIATED CARWASH BUILDING.
 2. THE DEVELOPMENT PROPOSES A FUEL CANOPY WITH SIX (6) DISPENSERS AND AN ASSOCIATED CARWASH BUILDING.
 3. NO BODIES OF WATER, WATER COURSES, OR 100-YEAR FLOOD PLANS EXIST ON THIS PROPERTY.
 4. NO HISTORIC RESOURCES ARE LOCATED ON THIS PROPERTY ACCORDING TO AVAILABLE TOWN RECORDS.
 5. THERE ARE NO KNOWN GRAVES OR BURIAL SITES ON THIS PROPERTY.







Subject site and shared access road from Shady Grove Road



Former Restaurant from access road (Shady Grove Rd to the left)



Shady Grove Road looking North



Shady Grove Road looking South, and East side (subject on right edge of photo)



Looking North from Subject



Bowling Alley adjacent use to the Northwest



Carvana dealership adjacent use to the West



Shell Service Station adjacent use to the North

Site Access

The subject property has excellent frontage on Shady Grove Road with a restricted, southbound access point due to the median in Shady Grove Road. There is a traffic signal approximately 400 feet north of the site access. This signalized intersection accommodates the Shady Grove Shopping Center and Choke Cherry Road. This intersection permits U-turns as well, for consumers approaching from the South and West. There is a sidewalk along this side of Shady Grove Road with crosswalks to Choke Cherry Road and direct access to the Shady Grove Shopping Center.

Surrounding Land Uses

The subject is located directly on the northeast side of I-270, with a full access to Shady Grove Road. I-270 is the primary artery connecting Frederick, Maryland and Washington, DC. Shady Grove Road is a principal arterial road that crosses through the area between Rockville and Gaithersburg, providing direct access for the King Farm planned community linking commercial nodes along Frederick Road (MD-355), as well as an extensive medical office community on the southwest side of I-270. This area of Montgomery County is well developed and offers an extensive grid pattern of roads and accessways among interconnected commercial communities.

The subject site is in the Shady Grove Shopping Center tract, platted as the Washingtonian Industrial Park. This industrial and retail district is a "triangle" bounded by Shady Grove Road, I-270 and I-370. The Shady Grove Shopping Center tenants include Home Depot, Best Buy, Nordstrom Rack, Amazon Fresh and a number of in-line resources. Immediately adjacent to the subject site, sharing the same unique access, is a Shell service station, Lucky Strike bowling alley and Carvana dealership. Across Shady Grove Road is the Mira Upper Rock luxury apartment complex, and office buildings, and a CVS Pharmacy at the corner of Choke Cherry Road. Choke Cherry Road is one of the primary access routes into the King Farm planned community.

Across I-270 from the subject along approximately 1.75 miles of Shady Grove Road is an extensive development of medical offices, including the University of Maryland, Children's Hospital of Washington, Johns Hopkins University, and numerous other offices and specialists. The Adventist HealthCare Shady Grove Medical Center anchors this area, approximately one mile southwest of the subject site.

South of the medical community is a large, planned community known as Falls Grove, with a shopping center, apartments, townhomes and single family detached homes. Moving west from this area is suburban detached lots, gradually increasing in size all the way to the Potomac River. King Farm, noted above, located east of the subject is a high density planned community primarily fronting along Frederick Road (MD-355). This is a Neo-Traditional design development, encouraging walkability and old-town urban feel, with a central commercial area with a Safeway and other in-line uses, but only one gas station, not centrally located, at the corner of Redland Boulevard and Gaither Road. This is a Shell station with a 7-11 convenience store, that is presently closed for renovation. Although King Farm is a dense, walkable community, the majority of residents must use a vehicle to access work, goods and services not available within the community.

I-370 to the North makes a significant rampart in the flow of people through this area. The only real local crossing of this interstate is at Frederick Road and Shady Grove Road, approximately 2.5 miles north of the subject. The highway effectively ends at the Great Seneca Parkway (MD-119), approximately 1.4 miles due west of the subject. I-370 is the interstate highway that feeds the Intercounty Connector (MD-200, aka ICC).

Summary

In summary, the subject property is well situated off the northwest side of Shady Grove Road, and the east side of I-270. Shady Grove Road is a principal arterial route for thousands of drivers who will travel to and from I-270 and the major commercial areas between Frederick Road and I-270.

The proposed gas station is combined with a large format convenience store and car wash planned for the redevelopment of the Red Lobster restaurant site. The facility is designed for six MPDs under canopy with a 4,800 square foot convenience store, carwash and associated parking.

The site is located within 300 feet of an I-270 Northbound access ramp, and directly across the interstate from an expansive medical community anchored by Adventist Health Care Shady Grove Medical Center. The medical community is served with only one gas station, without comprehensive conveniences services. The site will access Southbound Shady Grove Road, but available to Northbound drivers who U-turn at the Choke Cherry Road signal just north of the site.

This site will provide a unique opportunity for thousands of drivers to access fuel and convenience items prior to entering the interstate highway system, as well as workforce, customers and patients utilizing the expansive commercial area of Shady Grove.

The auto-oriented convenience services offered by the proposed Dash In gas station are, therefore, supportive of existing development nearby and transient traffic, given the role the adjacent highway network plays as a major commuter connector.

Need Analysis

In this section, Polestar reviews certain factors which are determinative of the subject fueling station's ability to accommodate the public need. We estimate total demand for gasoline within the subject's trade area, examine the proposed store's consumer characteristics and estimate the subject fueling station's usage, then draw conclusions regarding accommodation of public need.

Shady Grove Trade Area

We have defined the subject gas station and convenience store trade area as a group of 40 census block groups. We believe this area demonstrates the customer base is likely to shop at the Dash-In store and purchase fuel. The fuel sales at large convenience store stations are largely dependent upon consumer traffic for products offered in the store.

For the purposes of this analysis, we consider the Shady Grove Dash In station trade area to include the unincorporated Shady Grove area and flow west to the Potomac River. Moving East to West, the specific area is bounded by Frederick Road (MD-355). Frederick Road is the original commercial corridor between Washington, DC and Frederick, and thus, where there has historically been the bulk of retail and other non-residential uses are focused serving central Montgomery County. We have included the King Farm community which is underserved with gasoline, bounded on the south by West Gude Drive, and then generally follow the stream valley of Watts Branch to the Potomac River. On the north side, the trade area is bounded by I-370 from Frederick Road to I-270 where the line follows the Muddy Branch stream valley to the Potomac River. Stream valleys tend to produce reasonable trade area definitions, as they present limited crossings and add distance for consumers to travel to reach commercial nodes on the opposite sides. This is a large area with virtually no gasoline services except at the Shady Grove and Rockville areas. There is a single Shell station in Darnestown, north of this trade area and no options near the Watts Branch valley. Virtually all the households in this area will migrate to the Shady Grove and Rockville area for commercial goods and services. A map of the trade area is on the following page.

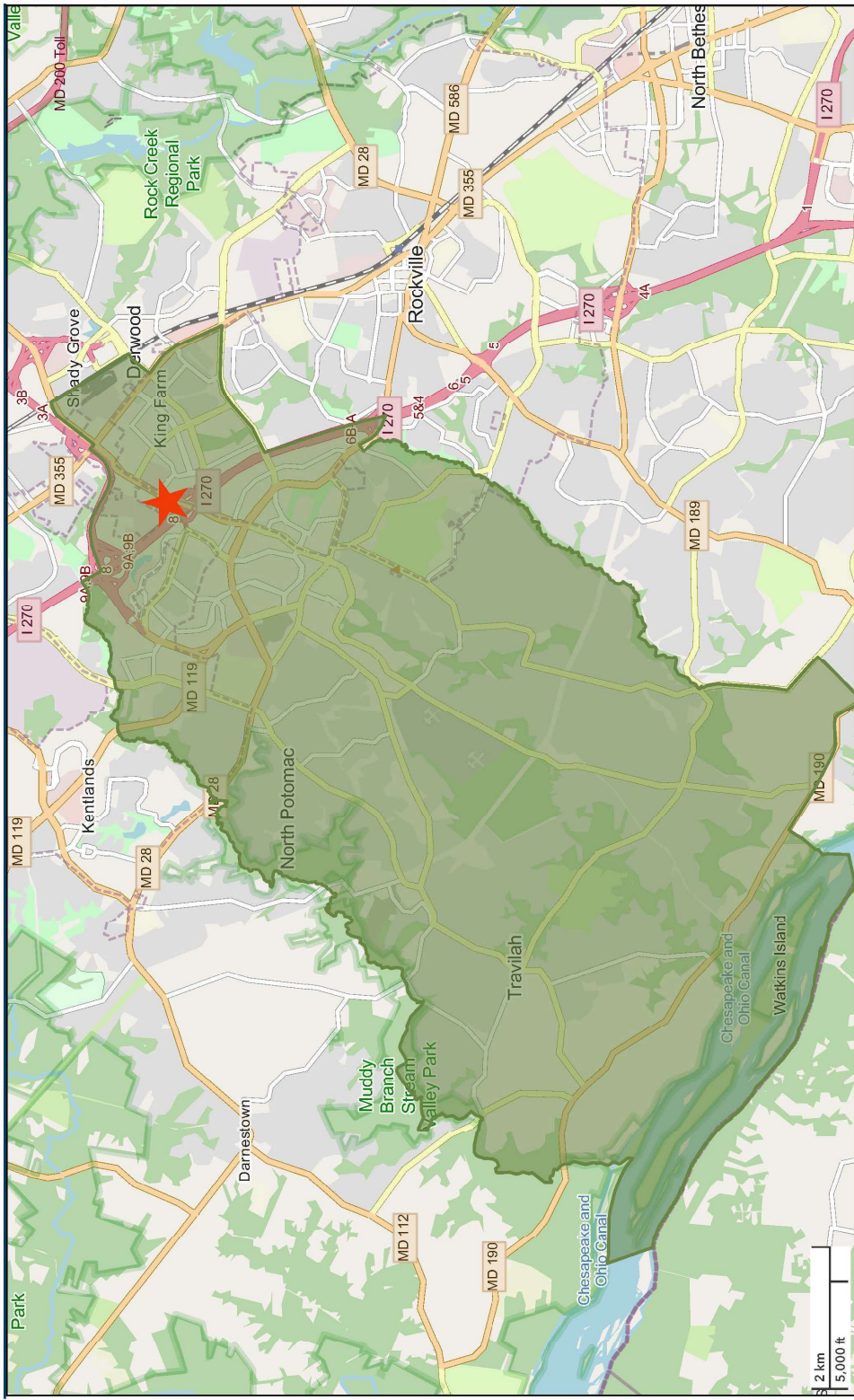
Census Block Groups:

6.061	6.062	6.063	6.081	6.082	6.083	6.084	6.171
6.181	6.182	6.183	7.181	7.182	7.183	7.184	7.281
8.281	8.291	8.361	8.362	8.373	8.381	8.382	8.391
8.392	8.393	10.061	10.063	10.071	10.072	10.073	12.112
12.115	12.117	12.118	12.201	12.202	12.211	12.212	60.071



Dash-In Shady Grove

Primary Trade Area



October 07, 2025

Residential Demand

We have compiled data obtained from Environmental Systems Research Institute (ESRI), a respected national demographic and economic research firm, describing demographic trends and socio-economic characteristics of the trade area.¹ Population trends are as follows:

Trade Area Demographic Trends				
	2010	2020	2025	2030
Population	56,320	62,315	65,388	69,270
Households	20,651	24,413	25,581	27,138

Source: 2010 and 2020 Census; ESRI estimate, 2025 and 2030.

The Census statistics and ESRI estimates find the trade area residential base to be stable and growing slowly. Those households have the following socio-economic characteristics:

Trade Area Statistics	
Average Household Income (2025)	\$199,916
Average Household Size--Persons (2025)	2.53
Homeownership Rate (2025)	56.3%
Average Owner-Occupied Home Value (2025)	\$958,180
Average Vehicles per Household (2022)	2
Household Workers with 2+ Vehicles Available	77.2%
Workers Who Drove Alone	53.5%
Travel 45+ Minutes to Work	23.0%

The trade area's residential base is affluent, with an average household income estimated at \$199,916 in 2025. Homeownership at 56.3% is nearly double renting at 38.3%. Homes have an estimated value of \$958,180 in 2025. The number of vehicles per household in 2022 averaged approximately two. More than one-half of workers (53.5%) of workers either drive alone to work, with nearly one-quarter (23.0%) having commute times in excess of 45 minutes. The final stop on the MetroRail Red Line is the Shady Grove station, approximately 1.3 miles northeast of the subject. The next stop is Rockville, approximately 2.7 miles closer to Washington, DC.

We have also consulted the Metropolitan Washington Council of Governments (MWCOG) Round 10.0 Cooperative Forecasts for population, household and employment data for the same general market area. The MWCOG data is typically more precise than Census data due to the local source information and participation.

¹ ESRI US Census estimates are based on American Community Survey (ACS) annual data derived between 2019 and 2023.

Residential Gasoline Demand

Residential consumers within the defined Shady Grove Dash In trade area are estimated to purchase approximately 41.4 million gallons of gasoline in Calendar Year 2025.

This estimate is based on the Consumer Expenditure Surveys of 2022 and 2023 used to compute forecasts by ESRI. The projections are that each household in this trade area spends approximately \$5,111.30 per year on gasoline. This is a total of \$130,752,165 in 2025:

$$25,581 \text{ households} \times \$5,111.30 = \$130,752,165.30$$

For 2023, the Bureau of Labor Statistics Consumer Expenditure Survey and Census American Community Survey estimates that consumer households spent 3.3% of annual gross income for gasoline, with gasoline selling at an average of \$3.157 per gallon for the Washington-Arlington-Alexandria MSA at the end of 2024 according to the U.S. Energy Information Administration. We assume that driving behavior has not changed substantially. Demand for gasoline being relatively inelastic, we estimate that market area households are now buying an average of 1,619 gallons of gasoline per year:

$$\$5,111.30 \div \$3.157/\text{gal.} = 1,619 \text{ gallons per annum per household}$$

We find these estimates to be reasonable, based on the data Census has developed and distances driven to employment centers. If the average household is purchasing approximately 1,619 gallons of gas annually, that equates to 31.1 gallons per week—about two fill-ups for typical automobiles. The average number of vehicles per household in the market area is two and the majority of workers are longer-distance commuters. Understanding those factors, we judge the demand estimate to be conservative.

$$25,581 \text{ households} \times 1,619 \text{ gallons per year} = 41,415,639 \text{ gallons}$$

Other Demand

In addition to trade area residential consumers who will be the principal patrons at the subject automotive fuel station, we find that there are at least two additional identifiable groups of consumers whom the station could serve:

Workers in the Shady Grove Area

Businesses in the Shady Grove Dash In trade area employ an estimated 65,637 workers in 2025, according to estimates by the MWCOG. These estimates are made for the following 44 TAZs (Transportation Analysis Zones):

Census Block Groups

519	520	521	528	529	709	720	722	724
725	726	727	728	729	730	731	732	733
734	735	736	737	738	739	740	741	742
747	748	751	752	753	754	755	756	757
760	761	762	763	764	765	766	767	

The MWCOG TAZ areas do not specifically match the census block group mapping. However, in this area, the only variation is near MD-355 and a small suburban residential area at the southern tip, near the intersection of River Road (MD-190) and Norton Road. The large employment area to the West of the subject includes a workforce of approximately 65,000 employees in 2025, growing to 70,000 in 2030 according to the MWCOG. There are undoubtedly local residents who work within this trade area, which prevents absolute counts of residents, workers and visitors.

Transient Travelers

With a location at in interstate interchange, many drivers are passing through the area on the highway network in order to reach destinations both inside and outside the defined trade area. Given their location on the highways, trade area service stations will be convenient to some travelers for the purchase of fuel. .

Although we do not specifically quantify potential demand from the two groups in this analysis, traffic generation models show that a modern gas station with convenience stores could attract as much as 64% of morning peak hour pass-by traffic and 66% of evening peak hour pass-by traffic.² We cannot compute the individual impacts of each of these three consumer groups of local residents, commuters and local employees because the overall traffic data includes overlap among them. There are only three other existing gas stations west of I-270 in this trade area, extending all the way to the Potomac River. We believe that the actual volume of gasoline demand in the trade area far surpasses the capacity of these three stations.

Summary

In this section, Polestar has analyzed the public need for gasoline fueling stations from two principal perspectives:

Consumer Demand

We find that there is strong demand within the Shady Grove trade area for gasoline fueling services. We have quantified 2025 demand for gasoline from residential, commercial and pass-through sources as at least 41.4 million gallons per year. We also find that the total demand from residential consumers is significantly bolstered by the large local medical/office complex in Shady Grove, with no local supportive gasoline services. Therefore, the total residential demand number computed above is conservative.

² Traffic Generation Manual, 10th Edition; Institute of Traffic Engineers, September 2017.

Convenient/Useful

We find that the proposed fueling station is “reasonably convenient and useful to the public” because it meets the demand of Dash In shoppers for fuel service as demonstrated by:

- Dash In Patrons – Dash In is locating in an area underserved by full-service convenience stores with fresh food, therefore capturing more of the market than the average gasoline station nearby competition.
- Expedient or Reasonably Convenient – The location along a primary route with an interchange at the interstate highway and proximal to a large retail and office community provides a convenient option for both local workforce, residents and visitors.
- Useful – There are no other convenience stores of this scale, with in-store and on-site offerings, within this trade area. Consumers will find the competitive fuel pricing and food offerings at Dash In to become a destination for fueling services.

Other Supply/Demand Issues

In this section, Polestar reviews other issues in the competitive marketplace for gasoline service stations which might be considered relevant to the case at hand. We examine the likely demand of Dash In patrons for the subject station in the context of competition within its Shady Grove retail trade area. Polestar has surveyed automobile filling stations located within the defined trade area. In addition to our observations, we have consulted various sources including the Maryland Department of Assessments & Taxation (SDAT), CoStar Realty Group's commercial multiple list system and others to better describe the competitive supply in the Shady Grove and Rockville area.

Station types

Polestar consulted the National Association of Convenience Stores (NACS) for facts associated with the different types of motor fuel sales operations. The Shady Grove trade area has a variety of fueling stations: some with service bays, others with kiosk stores, and large convenience stores. NACS classifies these establishments as follows:³

- **Kiosk** – less than 800 square feet with fast moving retail items like tobacco, beverages and snacks. Typical customers are transients and locals stopping in to buy gasoline.
- **Mini Convenience Store** – typically 800-1,200 sq.ft.. Limited to prepared foods and serving people buying gasoline.
- **Limited Selection Convenience Store** – approximately 1,500 to 2,200 sq.ft. which is the typical conversion of a former 2-bay service station.
- **Traditional Convenience Store** – Typically 2,400 to 2,500 sq.ft. with an expanded product mix, often including more grocery items.
- **Expanded Convenience Store** – About 2,800-3,600 sq.ft. This is a popular alternative to the large grocery store and often attract more families, women and senior citizens.
- **Hyper Convenience Store** – Very large stores at 4,000-5,000 sq.ft. These stores employ more staff, offer fresh food and sit-down eating spaces. These stores attract more families, senior citizens and in some locations act as a mini-truck stop with expanded services.

We find it important to study the classification of the supply in the trade area and balance that against the customer type, or target markets in this rapidly developing community. Additionally, there are three overarching store market types: Neighborhood, Commuter and Interstate. The subject location is in the unique position to serve primarily neighborhood and commuter markets and subsequently some interstate as well.

NACS reports that convenience store operations sell approximately 80% of all consumer motor fuels in the country. The remaining 20% is sold at traditional service stations and supermarkets. They also report that consumers will drive up to 10 minutes out of their way to save pennies on gas purchases, which is why the convenience store venues are often able to sell fuel with lower

³ NACS State of the Industry of 2016 Data Fact Book.

margins, based on sales of other goods with higher margins. This Dash In is classified as a hyper convenience store.

Immediate Trade Area

We have focused on the competitive supply within southwestern Montgomery County, since those gas stations are in the trade area's core at highway locations important for serving demand derived from throughout the broader trade area geography. As available, the areas of automobile filling station improvements and parcels have been taken from SDAT assessment records for the sake of consistency. We find that there are only 10 other existing gas stations located within, or on the edges of the designated trade area:

- Shell – 15730 Shady Grove Road – This service station is on the site immediately north of the subject. The primary use is auto service. There are four MPDs (two with diesel), on two parallel islands, located close to Shady Grove Road. There is no space to bypass a vehicle at a forward pump and with the expanse of parked vehicles, it is difficult to back up and turn around. The lot is filled with parked cars, many untagged, suggesting a dealership association. The service bays face the subject site. This service station was opened in 1970 (55 years) – there is not really a convenience store associated with the gas pumps. This station is also owned by The Wills Group and once the new store opens, the gas sales at this location would likely drop off precipitously for the new modern conveniences next door.
- Shell – 1250 W Montgomery Avenue – This service station is at the far southeastern end of the trade area, near an interchange with I-270. The location is optimal for servicing this trade area as one of the few opportunities to fill up prior to entering the highway commute to the District of Columbia. The service bays are accessed on the southern face of this facility, away from the gas pumps. The site is not clogged up with parked cars awaiting service, and therefore presents better curb appeal than most service stations. This station was opened in 1973 (52 years), and is improved with eight MPDs (6, two-sided under canopy and 2 curbside with one side fuel delivery) with four diesel positions. This site is a primary competitor for the subject site for gas only – there is no comparable convenience store at this location.
- Sunoco – 10010 Darnestown Road – This is a classic 1980's gas station with a Mini-Convenience store located centrally under a canopy covering six MPDs on three islands. There are four fueling positions for diesel. This station also includes an in-bay automatic carwash. This site is in front of a shopping center and Trader Joe's that serves a large residential area to the South and West. North of the site is the Medical Center campus across Darnestown Road.
- Shell – 10003 Fields Road – This is a complex site with difficult access, but also the only other Hyper-Convenience store in the trade area. The location is optimally at the western end of I-370, which provides direct access to both I-270 and the ICC (MD-200). The store actually faces the highway, but must be accessed from Fields Road behind the building. Fields Road is a boulevard providing primary access to a large attached residential and multifamily

development and eventually turns into Medical Center Drive as it crosses MD-28. The site includes three buildings: the 4,600 square foot convenience store, an in-bay automatic carwash and a three-bay quick lube business. As noted above, access is from the rear of the site, facing the car wash exit. A consumer must pull in and make a U-turn to access gas pumps and the store, and then retreat by the same access road. This is one of the newest facilities in the trade area, built in 1998 (27 years), with six MPDs (2 with diesel).

- Shell/7-Eleven – 700 Gaither Road – This store is the only gasoline option within the King Farm planned community, although near the edge, at the intersection of Gaither Road and Redland Boulevard. This is a Traditional-scale 7-Eleven convenience store on the corner, with six MPDs on a narrow lot. At the time of our inspection, this store was closed for a complete renovation, but the gas pump facility was open. It is the closest gas station to the subject. This facility was constructed in 1999 at approximately 3,000 square feet.
- BP – 16210 Frederick Road – This is a traditional service station with four MPDs (two with diesel) and a combination office and snack selection, and three service bays. The site is located on the southwest side of Frederick Road just south of I-370. This is the only station on the west side of Frederick Road in this trade area. The site is also a U-Haul rental center with a variety of trucks and trailers on the small lot. This station was opened in 1970.
- 7-Eleven – 15821 Frederick Road – This facility is located on a corner of Frederick Road and Redland Road, providing excellent access, as compared to most of the gas stations along Frederick Road. Built in 1994, this is one of the newer stores in the trade area, classified as a Mini-Convenience store at 1,216 square feet. The store is like the Sunoco above, located under the canopy, with six MPDs on three islands. There are two MPDs with diesel.
- Shell – 15701 Frederick Road – This gas station is located on the northeast corner of Frederick Road and Paramount Drive, with excellent visibility to consumers heading North on Frederick Road. The site was constructed in 1981, in traditional service station format with a small office and three service bays. This site has four MPDs on two islands, with diesel available at two positions.
- Marathon – 15805 Frederick Road – This station is the smallest facility in the trade area, with only three MPDs on three islands under canopy. The building is a small kiosk at the back of the lot. Likely a former Hess station with a small 420 square foot building built in 1967. This lot is openly tied to a Wendy's restaurant on the north side, but also permits the parking of a large food truck on the south side. Our inspection of this site was approximately at a lunch hour and access to the lot was compromised by customers shopping food at the truck.
- Exxon – 15211 Frederick Road – This Exxon service station is located on the southeast corner of MD-355 and E. Gude Drive. However access is restricted to Northbound Frederick Road and Eastbound E. Gude Drive due to medians and the signalized intersection. This station has four service bays, uniquely served with double overhead doors, presenting the service

component as a major influence on the site. Ironically this site has MPDs on five of six canopy pedestals, and there is no diesel available. The placement of this station makes it minimally competitive with the subject, if at all. The facility was constructed in 1990.



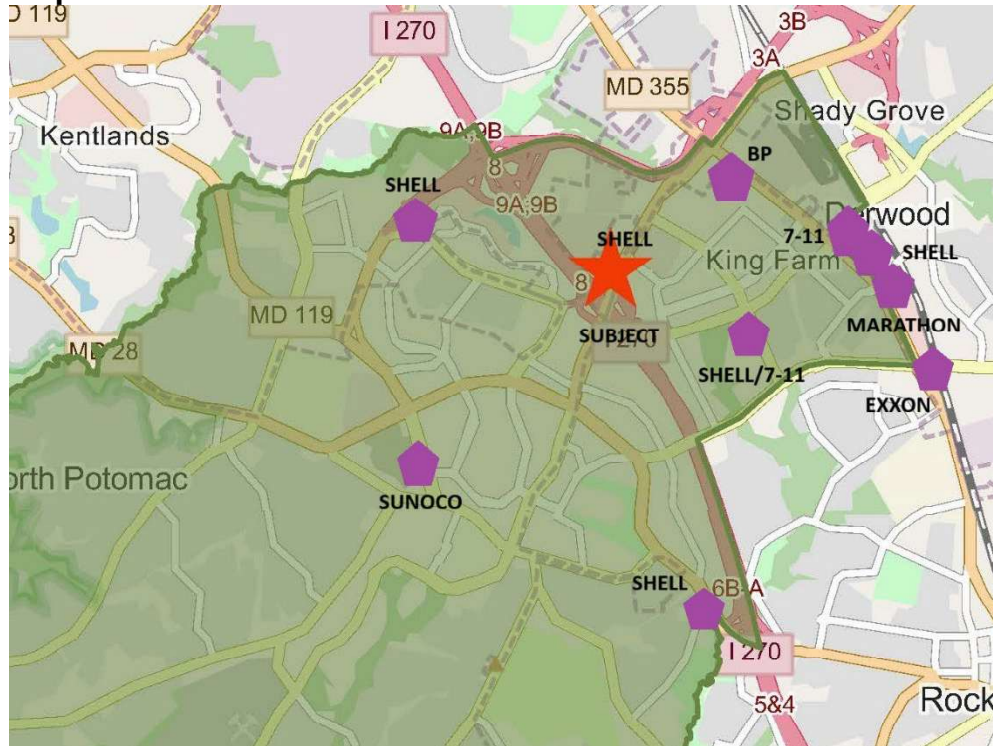
NAME	#	STREET	Year Built	Gasoline		Diesel		Unique Positions	Features			Comments	
				MPD	Fueling Positions	Diesel MPD	Gas/Diesel MPD		Fueling Positions	Convenience Store	Effective SF		Carwash
Shell/7-11	700	Gaither Rd	1999	6	12		2	2	12	Traditional	3,041		Gas open, store renovation
Shell	1250	W Montgomery Ave	1973	8	14		2	2	14	Kiosk Office	564		Clean site
Shell	10003	Fields Rd	1998	6	12		2	4	12	Hyper	4,600	Y	drive thru oil change in separate building
Sunoco	10010	Darnestown Rd	1987	6	12		2	4	12	Mini	912	Y	At Shopping Center entrance
Exxon	15211	Frederick Rd	1990	5	10				10	Kiosk Office	609		No Diesel
Shell	15701	Frederick Rd	1981	4	8		2	4	8	Kiosk Office	398		
Shell	15730	Shady Grove Rd	1970	4	8		2	4	8	Kiosk Office	452		Untagged vehicles everywhere; No space to bypass pumps
Marathon	15805	Frederick Rd	1967	3	6		1	2	6	Kiosk	420		Food Truck onsite, attached to Wendy's lot
BP	16210	Frederick Rd	1970	4	8		2	4	8	Kiosk Office	457		U-Haul rentals
7-Eleven	15821	Frederick Rd	1994	6	12		2	4	12	Mini	1,216		
Totals				52	102		0	17	102			2	6

Evaluation

At the time of our survey on Tuesday, August 19, the busiest gas stations were the modern gas stations with convenience. However, approximately one-third of the stations surveyed in the greater Shady Grove, Rockville and Gaithersburg area were more traditional “legacy” service stations, with multiple service bays, and parking lots filled with vehicles in need of service, sale or lease. Lot sizes along MD-355 are generally too small for the modern hyper convenience store model that consumers demand in the 21st century. The Dash In with Splash In proposed here fits the consumer demand model. Other similar large facilities are located north of Rockville, where we find Wawa, Sheetz and Royal Farms. There is only one hyper convenience store in the Shady Grove trade area at the Shell on Fields Road, just off of I-370. This site is awkward to access, from the rear of the store, and includes a car wash and three-bay quick lube service. The Shady Grove area is underserved with modern gasoline/convenience options – the other stations are an outdated service stations: with mostly small snack shops associated with the service office, a food truck in the parking lot and limited space for maneuverability. We make the following observations:

- There are 10 gas stations within this Shady Grove trade area, offering the following:
 - 6 stations with service bays
 - 1 service station is immediately adjacent to the subject
 - 1 site is a hyper convenience store like the subject
 - 6 are Kiosk-scale stores, 2 are Mini c-stores, and 1 is a Traditional-scale
 - 2 have carwashes
 - Average age of gas stations is greater than 40 years.
- The only comparable store in this trade area is a Shell on Fields Road at the western end of I-370. The site has a single ingress/egress on divided Fields Road, making for awkward access to the site. Fields Road is behind the store site, creating a “blind” entrance to the site, facing the carwash exit.
- The Shell station on the site next door to the subject is a service station with collection of untagged vehicles parked all around the site. The gas pumps are on two islands between the store and Shady Grove Road, with no room to bypass the vehicle at the forward MPD, nor room to back up and turn around to exit the site.
- Shady Grove Road is a primary arterial route through Shady Grove, providing access to Adventist Healthcare Shady Grove Medical Center and a large supply of university and medical offices along the road. This road also has full directional access to I-270.
- Newer stations, on redeveloped sites or newly developed sites offer modern convenience and accessibility presently not available in the area.

Dash In Comps



Current Performance

Petroleum retail industry sources including the Maryland Motor Fuel Tax & Motor Carrier Tax (IFTA) Annual Report and "National Petroleum News" and our experience indicate that the average gasoline fuel service station pumps about 93,943 gallons of gasoline per month or 1.44 million gallons per year. Yet 80% of that volume was from convenience stores. In this trade area, there is only one modern hyper-convenience store. The supply in the Shady Grove area is limited to 10 gas stations, but the limited availability of modern conveniences leaves them likely performing at or above the average for their type of store. Service station sites are models of low performance with service bays and limited convenience store offerings.

The 2019 NACS State of the Industry Report places surveyed stations into one of four quartiles based on store operating profit. The most profitable 25% of stations make up the top quartile. The store operating profit metric is used to represent store performance as it eliminates the influence of corporate general and administrative expenses, asset sales or income from other operations. NACS also provides data based on whether the store sells both gasoline and diesel as well as if they sell privately branded or oil company fuels. Each performance quartile corresponds with an average motor fuel gallonage sold per month, per store.

NACS Performance Quartiles			
Rank	Quartile	Gal/mo.	Annual Gallons
4	0-25%	88,191	1,058,292
3	26-49%	120,759	1,449,108
2	50-74%	136,255	1,635,060
1	75-100%	229,831	2,757,972

The variation between the highest and lowest suppliers in the trade area is not explicitly available due to proprietary secrecy in reporting. Therefore, we observe conditions that are important to the marketing of goods and services, such as clean, well-lit facilities, quality and fresh food products, site access and traffic volumes. The following fueling station productivity analysis measures each station's anticipated quartile performance relative to industry standards. We have derived our estimates of productivity for each location based on a rating system and our own proprietary database. Based on an assessment of these conditions, we have placed each station into a performance quartile which we believe is most appropriate. However, the performance quartiles are broad and although we categorized most of the supply as quartile 3, performing at 1.5 million gallons per year, we fully suspect that these small stations are not even reaching that goal, primarily since there are so many along MD-355 trying to capture the same customer. Based on assessment of these conditions, we have determined that the stores range across the spectrum on quartile rankings.

Store	Address	Fueling Positions	Store Size	Store Appeal	Fuel Position Ratio	Daily Traffic (Primary Road)	Performance Quartile
Shell/7-11	700 Gaither Rd	12	3,041	Above Average	1 per 253 sq.ft.	Below Average	3
Shell	1250 W Montgomery Ave	14	564	Above Average	1 per 40 sq.ft.	Above Average	1
Shell	10003 Fields Rd	12	4,600	Above Average	1 per 383 sq.ft.	Average	2
Sunoco	10010 Darnestown Rd	12	912	Average	1 per 76 sq.ft.	Average	3
Exxon	15211 Frederick Rd	10	609	Below Average	1 per 61 sq.ft.	Above Average	3
Shell	15701 Frederick Rd	8	398	Below Average	1 per 50 sq.ft.	Above Average	3
Shell	15730 Shady Grove Rd	8	452	Below Average	1 per 56 sq.ft.	Above Average	1
Marathon	15805 Frederick Rd	6	420	Below Average	1 per 70 sq.ft.	Above Average	3
BP	16210 Frederick Rd	8	457	Below Average	1 per 57 sq.ft.	Above Average	3
7-Eleven	15821 Frederick Rd	12	1,216	Average	1 per 101 sq.ft.	Above Average	1

Nationally, gas station performance is based on other factors such as price and the presence of a convenience store, accessibility, and perceived safety and accessibility, and more recently, loyalty programs and associations with grocery stores. The stores within the subject site trade area vary widely in regard to these other factors and some are so antiquated that they do not draw the same volumes of customers as the newest offerings. On the other hand some legacy stations, like the Shell next door at 15730 Shady Grove Road perform better than average due to proximity to the highway and loyalty programs.

Based on ITE traffic generation models, a hyper convenience store has a daily customer traffic of 3,350 vehicles, whereas a traditional service station generates 1,200 ADT (35.8%).⁴ ITE classifies the super convenience station as one with greater than 3,000 sq.ft. of retail space and at least 10 fueling positions. Within our trade area there are only two super convenience stations at the 7-11/Shell on Gaither Road and the Shell on Fields Road. Factoring the 36% rate of traffic generation among smaller stations to the hyper station, we can further refine the supply to be limited by a factor of 2:1, suggesting that the modern gas station with convenience services will draw more customer traffic than the outdated competitive supply. The National Association of Convenience Stores (NACS) has surveyed that more than 50% of fuel customers prefer to go inside the store for additional purchases.

In addition to the other variables listed above, each of the competitive stations serves a different local market or trade area, based on a traditional 5-minute or 10-minute drive time. Most of the stations are situated along MD-355 and therefore compete directly with their neighbors for local pass-by traffic. When presented with so many choices in a small area, they tend to choose based on factors such as conveniences in the store, cleanliness, loyalty programs and accessibility. Just as the subject will serve a trade area west of Rockville, the MD-355 stores tend to serve consumers from the East side more than the West. Given the complications of traffic congestion throughout the area, it is not likely for consumers from the East and North to venture southwest to find gas. It is also clear that the unmet local demand in this trade area is being met with supply in other distant markets, thereby increasing traffic and volumes of production at other stations.

Summary

We find that there is very limited competition within the defined Shady Grove Dash In station trade area for the available consumer demand for gasoline and diesel.

Immediate Trade Area Supply

The 10 other gas stations identified within the trade area are not directly competitive with the Dash In, due to their store, service bays, location and scale. Those stations serve the residents of the trade area, but also the commuters passing through the area to employment and destinations among Rockville and Gaithersburg. Only one gas station has a modern design with the greatest consumer demand, but its location is difficult to access, thereby limiting its potential. The closest stations are an old format service station with an office/snack shop that is functionally obsolete, and a traditional-scale 7-11 that is under renovation and well-placed in the King Farm community. Five of the stations are in close proximity to each other along Frederick Road (MD-355) and serve commuters and a market predominantly east of this trade area.

Current Performance

Estimating that the total existing competitive supply is now pumping approximately 18 million gallons of gasoline per year, we judge that local consumer demand for gasoline within the trade area is shaped by other factors, including the arterial road network, commuters and travelers along the I-270 corridor and the availability of convenience services in a well-lit modern environment.

⁴ Trip Generation Manual, 10th Edition, Institute of Traffic Engineers; September 2017

Performance data and traffic generation models prove that the modern convenience store will generate more customer traffic than the traditional and smaller gas stations.

Unmet Demand

Based on the performance indicators above of the two modern stations and the five other legacy service stations, we estimate that there is unmet demand of approximately 23.4 million gallons per annum in this trade area. This is a conservative estimate, based on surveyed averages, as no local gas station will disclose their actual performance. Concern for the impact on the existing Shell station next door is tempered by the excessive unmet demand, as well as other forces that drive sales, including location, brand, loyalty programs, accessibility, visibility, etc.

Summary & Conclusion

In this section, Polestar summarizes our findings and draws conclusions regarding the proposed Shady Grove Dash In gas station and convenience store on the west side of Shady Grove Road at between Choke Cherry Road and I-270 in the unincorporated area of Shady Grove (Gaithersburg zip code), Montgomery County, Maryland.

Shady Grove Dash In

The proposed Dash In fueling facility is to be located on the northwest side of Shady Grove Road and the northeast side of I-270, with access only to Shady Grove Road, southbound. The proposed use would be located approximately 300 feet north of the northbound I-270 on-ramp. The site is presently improved with a closed Red Lobster restaurant and parking lot. The total site area is 86,962 square feet (two acres), proposed to be redeveloped with a convenience store of approximately 4,800 square feet, an in-bay automatic Splash In carwash of approximately 1,368 square feet, approximately 35 parking spaces and six (6) multiproduct dispensers under a canopy. The land, a parcel of the Washingtonian Industrial Park, which is also the Shady Grove Shopping Center, is zoned General Retail (GR).

Supply/Demand Issues

Trade Area

The subject's primary trade area is defined as the geographic area within 40 census block groups, identified by Polestar Analysis and confirmed with data from Environmental Systems Research Institute (ESRI). We believe this area demonstrates the customer base is likely to shop at the Dash In store and purchase gas. The fuel sales at large convenience store stations are largely dependent upon consumer traffic for products offered in the store.

We have delineated this area, between Rockville in the East, the Potomac River in the West and the stream valleys of Watts Branch in the South and Muddy Branch in the North due to the void of gasoline availability. This is a large area with virtually no gasoline services except at the Shady Grove and Rockville areas. There is a single Shell station in Darnestown, north of this trade area and no options near the Watts Branch valley. Virtually all the households in this area will migrate to the Shady Grove and Rockville area for commercial goods and services. There is also a significant commercial community in Shady Grove with a single gas station and limited convenience store. As such the trade area demographics represent only a portion of the market share occupied by this store. Some additional market is derived from pass-through traffic and daily visitors to the medical community. The data presented below is therefore conservative.

Trade Area Residents

The trade area's residential base is affluent, with an average household income estimated at \$199,916 in 2025. Homeownership at 56.3% is nearly double renting at 38.3%. Homes have an

estimated value of \$958,180 in 2025. The number of vehicles per household in 2022 averaged approximately two. More than one-half of workers (53.5%) of workers drive alone to work, with nearly one-quarter (23.0%) having commute times in excess of 45 minutes.

Trade Area Demand

We find that there is strong demand within the Shady Grove trade area for gasoline fueling services. We have quantified 2025 demand for gasoline from residential, commercial and pass-through sources as at least 41.4 million gallons per year. We also find that the total demand from residential consumers is significantly bolstered by the large local medical/office complex in Shady Grove, with limited local supportive gasoline services. Therefore, the total residential demand number computed above is conservative.

Convenient/Useful

We find that the proposed fueling station is “reasonably convenient and useful to the public” because it meets the demand of Dash In shoppers for fuel service as demonstrated by:

- Dash In Patrons – Dash In is locating in an area underserved by full-service convenience stores with fresh food, therefore capturing more of the market than the average gasoline station nearby competition.
- Expedient or Reasonably Convenient – The location along a primary route with an interchange at the interstate highway and proximal to a large retail and office community provides a convenient option for both local workforce, residents and visitors.
- Useful – There are no other convenience stores of this scale, with in-store and on-site offerings, within this trade area. Consumers will find the competitive fuel pricing and food offerings at Dash In to become a destination for fueling services.

Competitive Supply

We find that there is very limited competition within the defined Shady Grove Dash In gas station trade area for the available consumer demand for gasoline:

- Immediate Trade Area Supply – The 10 other gas stations identified within the trade area are not directly competitive with the Dash In, due to their store, service bays, location and scale. Those stations serve the residents of the trade area, but also the commuters passing through the area to employment and destinations among Rockville and Gaithersburg. Only one gas station has a modern design with the greatest consumer demand, but its location is difficult to access, thereby limiting its potential. The closest stations are an old format, “legacy” service station with an office/snack shop that is functionally obsolete, and one traditional-scale 7-11 that is under renovation but well-placed in the King Farm community. Five of the stations are in close proximity to each other along Frederick Road (MD-355) and serve commuters and a market predominantly east of this trade area.

- Current Performance – Estimating that the total existing competitive supply is now pumping approximately 18 million gallons of gasoline per year, we judge that local consumer demand for gasoline within the trade area is shaped by other factors, including the arterial road network, commuters and travelers along the I-270 corridor and the availability of convenience services in a well-lit modern environment. Performance data and traffic generation models prove that the modern convenience store will generate more customer traffic than the traditional and smaller gas stations.
- Unmet Demand – Based on the performance indicators above of the two modern stations and the five other legacy service stations, we estimate that there is unmet demand of approximately 23.4 million gallons per annum in this trade area. This is a conservative estimate, based on surveyed averages, as no local gas station will disclose their actual performance. Concern for the impact on the existing Shell station next door is tempered by the excessive unmet demand, as well as other forces that drive sales, including location, brand, loyalty programs, accessibility, visibility, etc.

Conclusions

Polestar concludes, therefore, that the public need/necessity for the proposed Shady Grove Dash In gas station is evident based on our analysis:

We find that there is an estimated residential demand for at least 41.4 million gallons of gasoline within the defined Shady Grove Dash In trade area, as determined by standard market research methodologies of residential demand. It is important to note that the availability of gas stations in the immediate community are presently limited to 10 stations: two-thirds of which include service bays, averaging more than 40 years old, and only one with a similar scale conveniences store, albeit on a site with difficult access. Half of these stations are located on Frederick Road (MD-355), which is the eastern edge of the trade area – not conveniently accessible to residents of the west side of I-270. We find that the older and smaller stations may not capture consistent levels of demand, as industry indicators suggest that a substantial volume of trade would be handled by the more modern facilities that offer larger convenience spaces and services that are attractive to a broader market of consumers. Those older and smaller stations are also not conveniently located to serve the large medical community of Shady Grove, associated with the Adventist Health Care Shady Grove Medical Center and nearby university outposts.

Our analysis in the attached report shows the net unmet demand in the Shady Grove Dash In gas station trade area is approximately 23.4 million gallons per year. Presently this demand is being met with supply from outside the immediate trade area, at gas stations located in other markets and near commuters' places of work.

There are few opportunities in the market area for customers to find fuel at a discount in a modern, well-lit environment that is in demand at this time. With three exceptions, the gas stations in the trade area are all old and/or outdated, and some do not offer a full range of fuels.

APPENDIX A

Consultant Qualifications

Polestar Analysis

Polestar Analysis is a multifaceted land use and real estate consulting firm. Polestar provides clients with objective advice and practical assistance at every stage of decision-making in the spheres of land planning, economic development, and development, use or reuse of all types of real estate. Our clients include corporations, institutions, real estate owners, builders, developers, and government entities.

The principal-in-charge of this assignment has been Edward Steere, AICP, MSRE, Senior Managing Director. He has 35 years of planning, real estate development, and consulting experience. He has successfully completed market studies and economic and fiscal analyses for many development opportunities throughout the Mid-Atlantic in Maryland, Pennsylvania, Delaware and Virginia on behalf of public and private clients.

Edward M. Steere, AICP

Edward M. Steere, AICP, is the senior consultant who completed this assignment. Mr. Steere has a broad professional background in planning and real estate acquired over 35 years in the industry including: site design, entitlement, research, sales and marketing, development, financing and appraisal. His advisory assignments have encompassed: market and financial feasibility analyses of major real estate projects; land acquisition and marketing for residential development; tax-motivated and conventional financing for single family and multifamily residential projects; and advising public, non-profit and private clients concerning real estate decision-making.

Mr. Steere is qualified in analyzing the multitude of issues relating to residential and commercial real estate development, including: demographic and economic trends, financial analysis and property valuation, economic and fiscal impacts.

Mr. Steere has conducted real estate and market feasibility analyses throughout the Washington-Baltimore region. He has testified and has been accepted as an expert witness before administrative bodies concerning the public need for various kinds of commercial facilities and other planning issues in many of the jurisdictions in the Washington-Baltimore region, including the Montgomery County Office of Zoning and Administrative Hearings.