
INITIAL STRATEGY ANALYSIS

**PROPOSED HYPERMART GAS
STATION & CONVENIENCE STORE**

Prepared at the Request of
Smith Acres Neighborhood Association

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SUMMARY

The Smith Acres Neighborhood Association retained Community & Environmental Defense Services (CEDS) to assess the effects of a hypermart¹ convenience store and gas station proposed for a site abutting the 124 homes in their community. CEDS has determined that the following negative effects are likely, which are listed from most severe to least:

1. Jeopardize the health of students at the nearby school due to the harmful emissions from gas stations, encouraging more students to cross a seven-lane highway which could lead to increased vehicular injuries to pedestrians, and increasing the consumption of unhealthy foods sold in the convenience store.
2. Jeopardize those living in numerous homes located within 500 feet of the hypermart site and school faculty by exposing them to of the unhealthful effects of gas station emissions.
3. Jeopardize the economic viability of at least ten existing gas stations serving the 1.5-mile hypermart market area.
4. The closure of one or more of the existing stations could cause a blighting effect due to the difficulty of redeveloping gas stations.

As a result of these negative effects, the proposed hypermart fails to meet a number of the findings required to approve a Site Plan. CEDS can recommend experts to first verify then testify on any or all of the potential negative effects listed above. Other issues may arise should CEDS be authorized to continue research beyond this initial level.

PROJECT DETAILS

A hypermart store has been proposed by ABC Investments, for a 1.8-acre site located at 405 South Main Street in Richmond, Maryland. The proposed store building will have an area of 3,010 square feet with 12 fueling positions. The site is currently occupied by 9,000 square feet of retail space which will be demolished should the project be approved by the City of Richmond.

POTENTIAL IMPACTS

Following is an analysis of the potential negative effects of the proposed Hypermart.

Air Quality & Health Effects

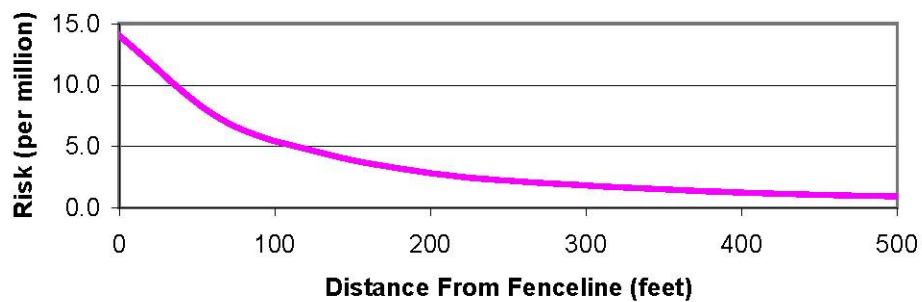
There is a large body of scientific evidence showing that those spending extended periods of time near a gas station poses a health threat, particularly for the young and elderly. The studies documenting the adverse effects of gas station emissions on health are summarized in the portion of the CEDS Convenience Stores & Gas Stations webpage at: <https://ceds.org/gas-stations-convenience-stores/#health>.

¹ A hypermart is a larger convenience store and gas station with 12 or more fueling positions and dispensing in excess of three million gallons of fuel per year. For a more detailed description of a hypermart visit: <https://en.wikipedia.org/wiki/Hypermart>

Perhaps the most clear connection between elevated health risk for schools and other sensitive uses located near a gas station is presented in the California Air Resources Board (ARB) [Air Quality and Land Use Handbook](#). Health effects range from nausea to cancer. The cancer risk posed by gas station emissions stems from benzene and other compounds released to the atmosphere while pumping gas.

The California ARB Handbook graph to the right indicates that adverse effects extend out at least 500 feet from a [hypermart](#). The Handbook describes those most vulnerable to adverse health effects and sensitive land uses as:

**Figure 1-6
Gasoline Dispensing Facility Health Risk
for 3,600,000 gal/yr throughput**



“Sensitive individuals refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses).”

Montgomery County, MD² and other jurisdictions across the U.S. have adopted a requirement that new gas stations be located 500 feet or more from the nearest home.

The U.S. Environmental Protection Agency echoed the concerns about the health risk associated with fueling emissions in their [School Siting Guidelines](#). The USEPA recommended screening school sites for potential health risk when located within 1,000 feet of a high-volume gas station.

CEDS recommends retaining an expert to testify about the health threat posed by the proposed hypermart to area residents and school students. There are several highly-qualified professionals with the relevant expertise in the CEDS network. If our clients wish we can see if any would be available to testify at the upcoming hearing. Would you like us to do this?

² See Montgomery County Code Section 3.5.13C(2)(c) at: http://library.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:montgomeryco_md_mc

Aquatic Resource Impacts

For the reasons outlined below, the hypermart does not pose a significant threat to aquatic resource health.

The hypermart site is located in the Muddy Branch watershed which is designated Class I-P by the Maryland Department of the Environment ([COMAR 26.08.02.08.](#)). Class I-P waters are protected for [Water Contact Recreation, Protection of Aquatic Life, and Public Water Supply](#). The [MERLIN-Maryland Environmental Resource & Land Information Network](#) GIS site does not indicate the presence of any uniquely sensitive features in the portion of the Muddy Branch system likely to be impacted by the proposed hypermart. Furthermore, Muddy Branch is not designated [Tier II High Quality Waters](#) by MDE. Finally, the [Maryland Stream Health](#) GIS site shows that Muddy Branch is of Poor quality most likely due to the large areas of intense development in the watershed. These facts make it unlikely that a strong argument could be made that the Hypermart would have a significant impact on nearby portions of the Muddy Branch system.

Sheet 106-1 Grading, Stormdrain & Paving Plan, shows that runoff from the Hypermart will be treated with two [highly-effective stormwater Best Management Practices \(BMPs\)](#) known as Microbioretention. An argument can be made that these BMPs will resolve much of the aquatic resource impact. Plus, it appears the existing development on the site does not benefit from BMPs. If this is true then the hypermart may result in a net improvement. However, as explained in the following paragraphs, this is by no means a certainty.

Because of the high traffic volume and refueling, convenience stores with gas pumps pose an unusually severe threat to ground and surface waters. [One study](#) found that contaminant levels in convenience store-gas station runoff were 5- to 30-times higher when compared to residential runoff. These findings have prompted the USEPA and a number of states to list vehicle fueling locations as [stormwater hotspots](#).

Fuel storage tanks and pipelines pose another source of contamination, though the design of both has improved dramatically over the past couple of decades. Spillage at the pump is a more likely source of fuel release into nearby waterways. [Johns Hopkins University researchers](#) found that an average of 40 gallons of gasoline is spilled annually at the pumps of a typical gas station. The JHU researchers also found that a significant portion of the spilled gasoline can migrate through the concrete pads at many fueling stations.

[One review of scientific studies](#) indicated that a gasoline plume can travel up to 400 feet underground. Add another 100 feet for installing grout curtains or other containment measures and gas dispensers should be no closer than 500 feet to a well, wetland, spring, stream, river, pond, lake, reservoir or tidal waters.

Blighting

The need analysis presented later in this document indicates that one or more of the ten existing stations in the market area could fail once the Hypermart opens. The market area population is not large enough to support another gas station.

A [2012 New York Times](#) story documented the problems associated with converting closed gas stations into productive businesses. Because of contamination issues, the cost of removing buried tanks, and other factors, gas station redevelopment can take years.



In the meantime, the station sits boarded up, like the abandoned San Antonio station pictured above. This photo was taken in 2011 and the closed station was still present (and closed) as of April, 2016. Closed stations impart a visual blight to the area which can retard commercial-residential development and depress the value of nearby properties.

Convenience Stores & Student Health

The hypermart convenience store site is opposite of and clearly visible from high school. In addition to the adverse [health effects of gas station emissions](#), there is a substantial body of evidence indicating that convenience stores in close proximity to a school can exacerbate health issues due to tobacco use and poor diets. Following is a sampling of these studies.

- A [California study](#) noted a 50% increase in smoking among adolescents exposed to tobacco advertising during weekly visits to small grocery, convenience or liquor stores,
- An [East Harlem study](#) found that children with a convenience store on their block were significantly more likely to have a high Body Mass Index, and
- A higher rate of obesity was associated with the presence of [convenience stores within a 10-minute walk of a school](#).

It appears that convenience stores do not presently exist in such close proximity to the high school. The nearest food establishments are the Smith's Market and the Jones Deli & Restaurant which appear to serve healthier fare than found in most hypermart stores.

Need: Will the Hypermart Force Existing Stations to Close

Increasing miles per gallon and changes in driving habits has caused gasoline sales to decline. As a result, the number of gas stations in the U.S. has declined from more than 200,000 in 1994 to just slightly more than 150,000. This ongoing trend means that every time a new station is opened an

existing business within the same market area will likely experience a decline in sales and possibly close.

The proposed Hypermart store meets the definition of a *hypermart*, which are large combination convenience stores with sit-down space and numerous fueling positions. A [study conducted in the Tucson, AZ area](#) documented that:

On average, if a gas station is located within 0.5 road miles of a hypermart, the stations price is pushed down about 2.1 cents, and if it's located between 0.5 and 1.5 miles, the price is lowered by 1.2 cents. This effect of a hypermart is substantially greater than the effect of the addition of a traditional gas station in the areas.

In the [Nashville, TN area](#) researchers found that hypermarts:

...do in fact place statistically and economically significant downward pressure on the prices of nearby gas stations. The magnitude of the price impact implies the entrance of a hypermart into a local market will cut an average gas station's profit in half. The findings reaffirm others who have noted the sizable impact large, low-priced firms have on their smaller competitors.

Following is an initial analysis of the effect of the proposed hypermart station on existing gas station within a 1.5- mile market area. The following analysis indicates a need does not exist for another gas station within the 1.5- mile market area.

1.5 Mile Market Area

- A. The proposed Hypermart is located in Montgomery County, MD.
- B. The U.S. Census Bureau estimated a [2017 population of 1,039,198 people](#) for Montgomery County.
- C. According to the [U.S. Census Bureau Business Patterns database](#), there were 162 gas stations in Montgomery County as of 2016.
- D. Based on these figures a population of 6,414 is needed to support one gas station in Montgomery County ($1,039,198 \text{ people} \div 162 \text{ gas stations} = 6,414 \text{ people/station}$).
- E. Market analysis experts believe that most customers live within 1.5 miles of the station where they buy gas.
- F. Several data sources indicate that there are 10 gas stations within 1.5 miles of the proposed hypermart site.
- G. To accommodate an eleventh station a population of $(11 \times 6,414)$ or 70,554 people would need to exist within the 1.5-mile market area.
- H. With a [2017 population of 67,417](#) and an area of [10.4 square miles](#), the City of Richmond has a population density of 6,482 persons per square mile ($67,417 \div 10.4 \text{ sq mi} = 6,482 \text{ people/sq mi}$).
- I. A circle with a 1.5-mile radius from the Hypermart site would encompass an area of 7.1 square miles which would have a population of 46,025 people ($7.1 \text{ sq mi} \times 6,482 \text{ people/sq mi} = 46,025$).
- J. As stated above, a minimum population of 70,554 residents must exist within the market area to support another gas station. Since the actual population within this area is only

46,025 residents a need does **NOT** exist for another gas station. In fact, this data may indicate the 1.5-mile market area is already over saturated with gas stations.

To verify the relationship between hypermarkets and closure of existing gas stations, CEDS carried out the following analysis:

1. A listing of [52 hypermart stores in Maryland](#) that serve gas was compiled.
2. The date when each Hypermart store was built was determined using:
 - a. [State Department of Assessments & Taxation Property Records](#), and
 - b. Historical Google Earth aerial photos.
3. The [Maryland Department of the Environment \(MDE\) Underground Storage Tank \(UST\) database](#) was used to identify existing and closed gas station on the same street and city (or zip code) as each of the 52 hypermart stores.
4. The MDE-UST database provided the date that tanks were removed from stations, which was the basis for the year assumed as the station closure date.

This analysis showed:

- There were 173 stations located in the vicinity of the 52 hypermart stores,
- Of these 173 stations, 47% had closed, and
- 38% of the stations closed **after** a Hypermart store opened in the vicinity.

To put these findings in context, U.S. Census Bureau data shows that in 2005 there were 1,693 gas stations in Maryland. By 2016, the number had dropped to 1,537 for a decrease of 9%. However, 38% of gas stations in the vicinity closed after a Hypermart store opened. In other words, gas stations in the vicinity of Hypermart stores closed at a rate four times higher than the statewide average.

Pedestrian Safety

Montgomery County Police data was used to compile the locations of 2015-18 crashes in the vicinity of the hypermart site. The hypermart site and school are located at the same intersection. There were 20 crashes at this intersection between 2015 to 2018 according to [Montgomery County Police data](#).

The Federal Highway Administration publication [How to Develop a Pedestrian Safety Action Plan](#) states:

“pedestrian crash risk increases on wide roads (four lanes or more) with high motor vehicle speeds and/or volumes.”

The highway separating the hypermart from the school is seven lanes wide or almost twice as wide as the four lanes cited above by FHWA. The hypermart site is proposed for this intersection opposite the high school. It is likely that more students will cross highway to reach the hypermart once it is built. The result could be an increase in the number of students injured while crossing highway.

I suggest allowing CEDS to pose the following questions to traffic and pedestrian safety experts:

1. Is it likely high school students will be attracted to the hypermart store?
2. If yes, to reach the hypermart students must cross the seven lane highway. Does this pose an unusually high safety risk for the students?
3. Are the number of crashes on the portion of the highway unusually high? If yes, is it likely the proposed hypermart will exacerbate crashes?

Traffic

In a letter dated July 6, 2018, the applicant's traffic consultant, proposed a scope of a study to conform to the City of Richmond Department of Public Works Traffic Impact Study Standards and Regulations. Table 1, which appeared on page two of the July 6th letter, compared traffic generated by the existing and proposed land use.

Existing Land Use & Traffic Volume

The generation rates were based on the [10th Edition of Trip Generation](#) by the [Institute of Transportation Engineers](#) (ITE).

Existing traffic was assumed to be for a 9,000 square foot retail building or ITE Land Use Code 820 (Shopping Center). A quick Google search indicated the site was last occupied by Smith Realty. We should ask a traffic professional if 820 is the appropriate code for a real estate firm.

According to the 10th Edition of Trip Generation, Land Use Code 820 generates 37.75 daily trips per 1,000 square feet or 340 trips per day for the 9,000 square foot existing building. Table 1, states Average Daily Traffic (ADT) for the existing use is 1,170 trips per day which is 3.4 times that based on Trip Generation. We should also ask a traffic professional to see if they can resolve this discrepancy.

Proposed Hypermart & Traffic Volume

ITE Land Use Code 945 is for a Gas Station & Market which generates 198.16 trips per day per fueling position or 3,171 trips daily for the 12 proposed fueling positions. Table 1, on page two of the July 6th letter, gives Average Daily Traffic (ADT) as 3,101 trips per day for the proposed Hypermart, which is 2% lower than ITE.

Sight Distance

Based on the Google Earth Street Views, [sight-distance](#) of the hypermart entrance is not appear to be obstructed along the affected portion of the highway.

Truck Turning Conflicts

Site Plan Sheet 113-1 shows how delivery trucks would navigate the proposed hypermart. This plan indicates that trucks would clip a curb and drive off of vehicle travel areas at several points. The

plan also shows that entering and exiting trucks would block all three north bound lanes of Highway. A traffic professional should be consulted to determine if these are significant issues.

PERMITS & OTHER APPROVALS

Site Plan approval is required for the proposed hypermart. The notice on the City of Richmond Projects [website](#) states: “A joint public hearing for the SDP application has been scheduled to go before the Mayor & City Council and Planning Commission on Monday, April 3, 2019, at 7:00 p.m.”

The City of Richmond interactive zoning map shows the site is zoned CD – Corridor Development. The regulations regarding development in this zone, including the criteria for reviewing a Site Plan application, can be found in Division 22, of the City of Richmond Zoning Ordinance.

Site Plan Required Findings

Section 24-150, states:

“(b) The city council may approve a Site Plan or concept plan only upon the finding that:

(1) The plan is substantially in accord with architectural, signage, lighting, streetscape, parking and other regulations, requirements and guidelines adopted by the city council for the applicable corridor area.

CEDS Analysis: As noted below, the hypermart plan conflicts with a number of regulations, requirements and guidelines adopted by the city council.

(2) The plan meets or accomplishes the purposes, objectives and minimum standards and requirements of the zone; and

CEDS Analysis: The purpose of the CD zone appears in Section 24-150A, of the City of Richmond Code and are:

(a) Encourage a form of development, consistent with the goals and provisions of the respective master plans for the city that will achieve the physical characteristics necessary to enhance the economic vitality, planned visual character and quality of life within an identified transportation corridor in the city.

CEDS Analysis: The hypermart poses a threat to economic vitality through the possibility that it will cause existing gas stations to close as described in the [Need](#) section of this document. It is likely that closed gas stations will sit idle for several years causing a negative visual impact as described in the [Blighting](#) section of this document. Quality of life of school students will be harmed through the negative effects the hypermart will have to their health as described in the [Air Quality](#) and [Student Health](#) sections. The quality of life of area residents will also be jeopardized by [gas station emissions](#).

(b) Create a more attractive and cohesive development pattern and to enhance the city's sense of place through the creation of individual character associated with the corridor in the applicable corridor master plan.

CEDS Analysis: It is likely the hypermart will degrade the sense of place and corridor character due to the likely effect of causing existing gas stations to close as described in the [Need](#) section of this document. It is likely that closed gas stations will sit idle for several years causing a negative visual impact as described in the [Blighting](#) section of this document.

(c) Encourage development and redevelopment and renovation of declining or underutilized properties along the corridor.

CEDS Analysis: The hypermart could stifle redevelopment and increase the number of declining or underutilized properties in the corridor by causing existing gas stations to close as described in the [Need](#) section of this document. It is likely that closed gas stations will sit idle for several years causing a negative visual impact as described in the [Blighting](#) section of this document.

(d) Encourage the use of consistent, compatible and attractive architecture, streetscape and visual themes.

(e) Create a streamlined process for zoning and plan approvals.

(f) Provide an appropriate scale of development and mix of retail, service, employment and residential uses as recommended in the applicable corridor plan.

CEDS Analysis: The hypermart is an inappropriate use due to the close proximity to the high school and numerous homes. It is inappropriate because students will be harmed through the negative effects the hypermart will have to their health as described in the [Air Quality](#) and [Student Health](#) sections of this document. Area residents will be harmed through the contaminants released to the [air causing negative health effects](#).

(3) The plan is in accord with the area master plan and any accompanying special condition or requirements contained in said master plan for the area under consideration; and

CEDS Analysis: The City of Richmond has adopted 13 visions to guide master planning and growth. The proposed Hypermart conflicts with the following visions:

- **Has safe, livable neighborhoods with a variety of housing types and styles served by diverse transportation options.** By exposing residential neighborhoods within 500 feet to unhealthful gasoline emissions the hypermart will make nearby neighborhoods less livable.
- **Has excellent learning opportunities that meet the needs of the community.** Placing a convenience store across a seven-lane highway would jeopardize the health and safety of high school students and thereby impair learning.

- **Has a community that encourages individual health and wellness.** The hypermart would jeopardize health and wellness of those living in nearby homes and high school students due to gas station emission, pedestrian safety, and negative dietary effects.
- **Has a commitment to sustainable practices that promote social equity, environmental health and economic prosperity.** The hypermart will exceed the need for gas stations threatening the economic viability of up to ten existing gas station in the same market area. Hypermart would jeopardize environmental health and wellness of those living in nearby homes and high school students due to gas station emission.

Section F. on page 8, of the *City of Richmond Special Study Area Land Use Plan: A Master Plan Element*, states the following with regard to parcel 123 – the hypermart site – and other nearby parcels:

“This new land use designation, with corresponding CD zoning, will allow for the upgrade of the housing stock and permit redevelopment of the area to either multi-family units, light commercial uses, or office uses. Development is recommended to be in keeping with the residential character of this portion of the Corridor.”

Of all the commercial uses allowed in the CD District, gas stations are the most intense with regard to health impacts to the people living in this part of the corridor. Therefore, the hypermart gas station is not in keeping with the residential character of this portion of the Corridor.

(4) The plan will be internally and externally compatible and harmonious with existing and planned land uses in the CD zoned area and adjacent areas; and

CEDS Analysis: The hypermart is not compatible or in harmony with existing uses due to the close proximity to the high school and numerous homes. It is incompatible because students will be harmed through the negative effects the Hypermart will have to their health as described in the [Air Quality](#) and [Student Health](#) sections of this document. Area residents will be harmed through the contaminants released to the air which will result in negative health effects. Both factors will degrade the existing harmony with adjacent areas.

(5) The existing or planned public facilities are adequate to service the proposed development contained in the plan; and

CEDS Analysis: It is likely that the hypermart will increase the number of high school students crossing the seven lanes of highway to reach the convenience store. The Federal Highway Administration has noted that “pedestrian crash risk increases on wide roads (four lanes or more) with high motor vehicle speeds and/or volumes.” The plan does not contain any measures to resolve the inadequacy of pedestrian safety facilities.

(6) The development staging or phasing program if any, is adequate in relation to the provision of public facilities and private amenities to service the proposed development; and

CEDS Analysis: It is likely that the hypermart will increase the number of high school students crossing the seven lanes of highway to reach the convenience store. The Federal Highway Administration has noted that “pedestrian crash risk increases on wide roads (four lanes or more) with high motor vehicle speeds and/or volumes.” The plan does not contain any measures to resolve the inadequacy of pedestrian safety facilities.

(7) The plan, if approved, would be in the public interest.

CEDS Analysis: The hypermart is not in the public interest because:

- It could stifle redevelopment and increase the number of declining or underutilized properties in the corridor by causing existing gas stations to close as described in the [Need](#) section of this document.
- It is likely that closed gas stations will sit idle for several years causing a negative visual impact as described in the [Blighting](#) section of this document.
- School students will be harmed through the negative effects the hypermart will have to their health as described in the [Air Quality](#) and [Student Health](#) sections.
- Area residents will be harmed through the contaminants released to the air resulting in negative health effects.

(8) The existing buildings with historic significance are considered for preservation and retention pursuant to the city's historic preservation ordinance.”

Other Requirements

[Section 24-1](#), of the City of Richmond Zoning Ordinance contains the following definition:

“Automobile filling station. A building or lot having pumps and storage tanks at which fuel, oil or accessories for the use of motor vehicles are dispensed, sold or offered for sale at retail, where repair service is incidental and no storage or parking space is offered for rent.”

The Zoning Ordinance does not appear to contain any regulations applicable to the CD District and automobile filling stations or any other relevant keywords or phrases. There are requirements for automobile filling stations in the following zones: C-1, C-3, C-P, and H-M.

Applications have also been submitted regarding stormwater management, sediment and erosion control, and traffic.

Open-Closed Gas Stations in the Vicinity of Maryland Hypermart Gas Stations

Street Address	City	Number	SDAT ¹ Year Built ²	GOOGLE EARTH AERIAL PHOTOS ²		MDE UST DATABASE & GAS STATIONS ON SAME STREET & CITY OR ZIP³		STATION CLOSURES RELATIVE TO HYPERMART OPENING	
				Last Photo Date Hypermart Was Not Present	First Date Photo Date Hypermart Was Present	Number of Open Stations <i>(Besides Hypermart)</i>	Number of Closed Stations	Closed Before	Closed After
231 N Philadelphia Blvd.	Aberdeen	567	2000	4/1/1994	12/31/2001	4	2	0	1
3500 Woodsdale Road	Abingdon	581	2003	4/7/1994	3/12/2004	4	1	0	1
321 Buschs Frontage Road	Annapolis	569		4/7/1994	12/31/2001	0	0	NA	NA
628 Admiral Drive	Annapolis	549		No Gas Pumps		1	0	NA	NA
4017 North Point Blvd	Baltimore	578	2007	5/27/2006	6/5/2007	2	2	1	0
2845 Rolling Rd	Baltimore	598		5/29/2009	8/1/2010	3	0	NA	NA
6541 Eastern Ave	Baltimore	8502		11/1/2011	10/23/2014	4	0	NA	NA
15150 E. Churchville Road	Bel Air	557	2001	No earlier photo	4/7/1994	1	5	1	4
709 Bel Air Road	Bel Air	553	1999	4/7/1994	12/31/2001	1	3	2	1
2300 East Churchville Road	Bel Air	582	?	4/7/1994	3/12/2004	1	5	1	4
601 Hoagie Drive	Bel Air	586	2003	12/31/2001	3/12/2004	1	4	3	1
10515 Baltimore Ave	Beltsville	5930		8/1/2010	6/3/2011	2	0	NA	NA
16410 Mckendree Road	Brandywine	580	2002	3/31/2002	6/7/2005	4	1	0	1
23141 Three Notch Rd	California	592		4/7/1993	11/1/2004	1	0	NA	NA
601 Sunburst Highway	Cambridge	563	2001	3/24/1995	6/7/2005	0	1	0	1
1401 Hampton Park Blvd	Capitol Heights	Unn 1		5/29/2009	8/1/2010	1	0	NA	NA
30320 Three Knotch Rd	Charlotte Hall	588	2002	4/1/1993	12/30/2004	3	2	1	1
10111 York Rd.	Cockeysville	8506	?	5/1/2015	2/17/2017	2	4	4	0
10245 Kirksville Lane	Dunkirk	573	2005	12/2/2004	6/7/2005	5	1	1	0
8118 Ocean Gateway	Easton	589	2007	6/7/2005	2/28/2007	3	5	4	1
3166 Soloman Island Road	Edgewater	577	?	3/31/2005	6/7/2005	2	1	1	0

Street Address	City	Number	SDAT ¹ Year Built ²	GOOGLE EARTH AERIAL PHOTOS ²		<u>MDE UST DATABASE & GAS STATIONS ON SAME STREET & CITY OR ZIP³</u>		STATION CLOSURES RELATIVE TO HYPERMART OPENING	
				Last Photo Date Hypermart Was Not Present	First Date Photo Date Hypermart Was Present	Number of Open Stations <i>(Besides Hypermart)</i>	Number of Closed Stations	Closed Before	Closed After
Liberty Road nr. Sykesville Road (Rt 32)	Eldersburg	8529		Under construction					
1741 Elkton Road	Elkton	547		10/19/2009	6/29/2011	1	0	NA	NA
302 E. Pulaski Hwy	Elkton	8512		Unbuilt?		1	6		
204 Connolly Rd	Fallston	8500	2010	8/1/2010	11/1/2011	2	1	1	0
5833 Ballenger Creek Pike	Frederick	554		4/4/1988	6/7/2005	0	0	NA	NA
5440 Urbana Pike	Frederick	8505	2014	5/1/2013	9/10/2015	1	2	1	0
1001 W. Patrick Street	Frederick	8513	2016	9/10/2015	No more recent photos	2	1	1	0
701 Annapolis Rd	Gambrills	Unn 2		10/1/2008	5/29/2009	1	0	NA	NA
7124 Ritchie Hwy	Glen Burnie	8503	2012	11/1/2011	10/23/2014	2	4	4	0
7800 Parke West Drive	Glen Burnie	8507		5/3/2015	2/1/2017	0	0	NA	NA
101 Hissey Rd.	Grasonville	8518		5/1/2013	6/30/2018	0	0	NA	NA
3716 Washington Blvd	Halethorpe	8504		6/3/2011	10/1/2014	1	0	NA	NA
7710 Milestone Parkway	Hanover	8525		Unbuilt?					
1419 S. Mountain Rd	Joppa	Unn 3	2010	Unbuilt?		1	0	NA	NA
5955 Crain Highway	LaPlata	584	2002	4/6/1993	9/1/2002	1	6	4	2
22530 Three Notch Rd	Lexington Park	587	2002	1/10/2003	11/1/2004	2	4	2	2
27605 Three Notch Road	Mechanicsville	583	2001	4/7/1993	9/1/2005	2	1	0	1
8300 Veterans Highway	Millersville	572	2001	4/3/1994	12/31/2001	3	1	0	1
Route 40 & Mechanics Valley Rd.	Northeast	585	2007	6/7/2005	9/1/2007	4	2	1	0
12001 Coastal Highway #A	Ocean City	566	2000	4/1/1989	9/1/2005	5	4	3	1
305 Market Square Drive	Prince Frederick	591		5/27/2006	4/1/2007	1	0	NA	NA

Street Address	City	Number	SDAT ¹ Year Built ²	GOOGLE EARTH AERIAL PHOTOS ²		<u>MDE UST DATABASE & GAS STATIONS ON SAME STREET & CITY OR ZIP³</u>		STATION CLOSURES RELATIVE TO HYPERMART OPENING		
				Last Photo Date Hypermart Was Not Present	First Date Photo Date Hypermart Was Present	Number of Open Stations <i>(Besides Hypermart)</i>	Number of Closed Stations	Closed Before	Closed After	
516 Main Street	Reisterstown	8501		11/1/2011	10/23/2014	1	4	3	1	
8731 Pulaski Highway	Rosedale	558		12/31/2001	6/7/2005	1	0	NA	NA	
668-682 S. Salisbury Blvd.	Salisbury	555	1998	4/13/1989	6/7/2005	2	2	2	0	
2740 North Salisbury Blvd	Salisbury	561	1999	4/1/1989	6/7/2005	0	1	0	1	
3530 Conowingo Road	Street	559	2001	4/7/1999	3/12/2004	1	1	1	0	
1300 E. Joppa Rd.	Towson	8510		2/17/2017	12/30/2016	1	0	NA	NA	
163 S.E. Crain Highway	Upper Marlboro	562	1999	4/7/1993	5/15/2002	4	1	1	0	
11505 Berry Road	Waldorf	565		4/19/1988	3/31/2002	2	0	NA	NA	
12502 Ocean Gateway	West Ocean City	556	1999	4/11/1989	6/7/2005	2	3	1	1	
805 Leidy Road	Westminster	590	2003	4/2/1995	9/1/2005	2	1	0	1	
AVERAGE						TOTAL	91	82	44	27
						PERCENT	53%	47%	62%	38%

1. [SDAT = State Department of Assessments & Taxation Property Records.](#)

2. The date highlighted yellow is the most reliable for when the hypermart was built.

3. Maryland Department of the Environment Underground Storage Tank database.