Main Street Center

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Main Street Center

5345 Sheriff Road Fairmount Heights, Maryland
by Marco Fernandez
Capstone RDEV690F

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General Context and Economic Drivers

General Market Conditions

5345 Sheriff Road in Fairmount Heights, Maryland is located ¼-mile from the DC border (Figure 1). Seventy percent of Fairmount Heights comprises owner-occupied, single-family detached homes.

Figure 1 Proximity to DC

Only 30 percent of the housing stock is rental property. Multifamily complexes are almost non-existent within Fairmount Heights. As the second oldest, majority African-American incorporated town in Prince George’s County, an overwhelming amount of the town’s housing stock dates back to the 1960s or earlier. There has been little to no new development in the area for several reasons.

Fairmount Heights is a sub-neighborhood of Capitol Heights, bordering northeast corner of Washington D.C. and Capitol Heights, Maryland. One of the development's greatest strengths is this location. Sheriff Road provides great access to Washington D.C., acting as main artery from the Beltway to downtown D.C. The site's location will save commuting time from farther distances while still providing a suburban sense of home. Many of the surrounding neighborhoods and townships of Prince George's County and Washington D.C. have had new developments and a resulting increase in their tax bases, while Fairmount Heights has not.

The site is next to Fairmount Heights Park, single-family homes, churches, businesses, and the town's library. The surrounding businesses include a gas station, a convenience store, a bar, a bail bondsman's office, a gentleman's club, and several carryout restaurants (Figure 2). These businesses are both opportunities and threats to the project and to the town of Fairmount Heights as a whole. Their unattractive appearance and the type of business being conducted surrounding the site can impede the success of new development or sway future development away from Fairmount Heights. But if investment in Fairmount Heights does

Figure 2 Local Businesses

become successful, the land values of these unfavorable businesses will rise. The business and land owners will be more willing to sell when significantly higher offers are presented to them compared to their current value, for further redevelopment.

Demographics

Fairmount Heights has a population of 1,602 but within a three-mile radius, the population swells to over 150,000. The majority population is African-American (87.9 percent). Hispanics make up 8.1 percent (1). Because most of the housing stock is single-family homes, the area's overall population is low but the demand for housing is high. *Zillow Inc.*, states that Fairmount Heights has an occupancy rate of 91.8 percent. The average house costs about $250,000 with about 2.8 persons per household. Home prices have almost doubled from an average of $125,000 to $250,000 in just over 48 months. Seventy percent of the homes in Fairmount Heights are owner-occupied. The average rent is $1,400 per month, slightly high for the area, but can be attributed to low rental inventory and that inventory limited to single-family detached homes, not apartment units (1).

Black alone	87.9%	1,313
Hispanic	8.1%	121
Two or more races	1.8%	27
White alone	1.0%	15
Asian alone	0.8%	12
American Indian alone	0.4%	6

Figure 3 Demographics

Employment

According to the *Fairmount Heights* website, the town has 708 employed persons. The largest shares of employment are administrative assistant, waste management, real estate, and scientific/tech services. Businesses such as waste management companies and Whole Foods offices are located in the Fairmount Heights neighborhood. The highest paying jobs are in transportation and warehousing at almost 64,000 and real estate at almost 63,000. The median income of Fairmount Heights is $53,261, almost identical to the national median average of $53,889 but still significantly lower than the Maryland average of $74,551.

Like home prices, wages have also dramatically increased in a very short period of time.

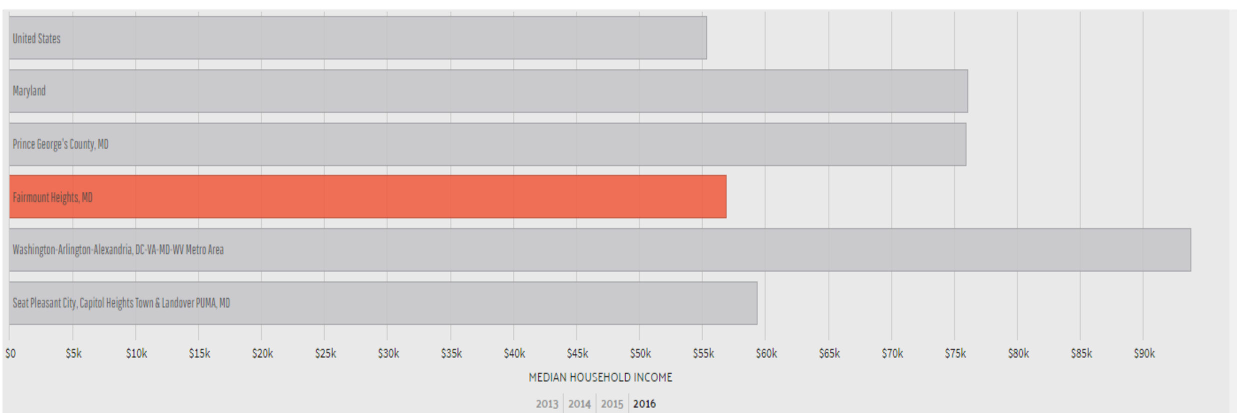


Figure 5 Income levels for State, County, and Town of Fairmount Heights

From 2014-2015 wages rose 14.1 percent (Economy).

Figure 4 safety rating

According the website *Niche*, Fairmount Heights is rated the 5th safest suburb in the state of Maryland. It averages zero murders, rapes, and assaults per

year. Burglary, theft, and robberies are well below half the national average. By comparison, the neighboring City of Bladensburg averages 41 murders per 100,000 while the national average is six and 339 robberies per 100K while the national average is 136. Overall, Prince George's County suffers from averaging 2 to 2.5 times more murders robberies and assaults than its top-ranking neighbor, Montgomery County.

Fairmount Heights is one the safest municipalities in Maryland, according to *Violent Crime and Property Crime.* Between 2007 and 2015, crime rates have been falling and recently property values have begun to rise. Fairmount Heights is long overdue for development; being one of the first to spearhead the county's sector 4 master plan is a great opportunity. However, the lack of investment in towns like Fairmount Height actually creates significant risk for investors looking to develop in areas with unproven returns.

Crime & Safety

Crime & Safety

C- Based on violent and property crime rates.

Figure 6 Crime statistics for Fairmount Heights

Calculated annually per 100,000 residents		National
Assault	**503**	283
Murder	**41**	6
Rape	**21**	41
Robbery	**339**	136

Project Vision of Proposed Uses

Proposed Use: Multi-family

When considering adding new housing stock, one must consider what already exists. According to *Fairmount Heights, MD*, the town has a low population, 1,602, compared to surrounding neighborhoods. When the radius is expanded to three miles surrounding Fairmount Heights the population grows to over well 100,000. This is due to a housing stock of mostly single-family homes. The few multi-family units found in Fairmount Heights is old, from the 1960s or earlier.

The 20743 Zip code has seen rents dramatically increase in just the last 18 months (Figure 7) and the township of Fairmount Heights has mirrored the increase. This could be a strong indicator that the location is ready for class A multi-family units. A new multi-family development could add over more than 200 class A units.

Figure 7 Total rent increase for Fairmount Heights from 2011-2018

Currently rents for 1-bedroom apartments are under the overall market's value. There are two major factors for the area's low pricing, crime and age/class of current multi-family housing stock. According to *Niche,* the immediate neighborhood of Fairmount Heights has low crime rates but, *Violent Crime and Property Crime,* states that the encompassing zip code is well above the national average.

Figure 8 Price increase of rent for Fairmount Heights Per Square foot. From 2011-2018

In researching comparables, the most recent multi-family development was built in 2000 and is not market rate (1). Capitol Heights has not seen Class A units delivered in almost two decades and it has been much longer since it has seen one that is fully market rate.

Introducing market rate units and increasing the area's population, the goal is to raise the average income per household for the town Fairmount Heights. *Fairmount Heights, MD,* states that the average income for Fairmount Heights is $56,900 while Prince George's County and the state of Maryland averages just over $75,000. A stronger tax base could encourage additional investment as more persons with more disposable income move into the area.

Currently many of the surrounding comparables have very low vacancy rates. The majority are Class C structures and are under 2 percent vacancy. Class B units are just under 3 percent vacancy. While many of these developments are subsidized, the low vacancy rates demonstrate the market's strength due its proximity to the nation's capital.

Proposed Use: Commercial

Fairmount Heights is home to many small businesses (Figure 9) but not all of the residents' needs are met by these businesses. The low population and lack of growth in Fairmount Heights is one of the major factors why the town has not been able to attract larger or franchise types of businesses. According to *Fairmount Heights, MD,* the population has decreased by 2.31 percent from 2015 to 2016 (1).

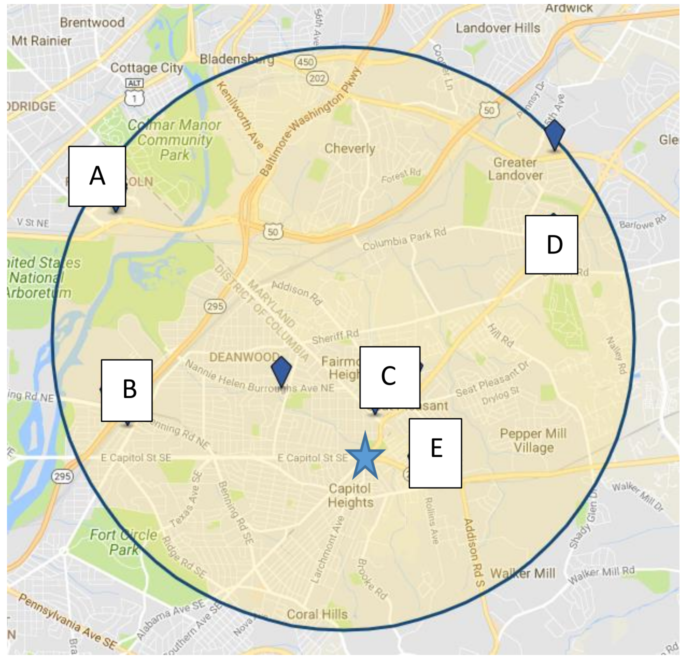


Figure 9 A= N Dakota Ave and New York Ave 2017, B =Benning Road 1977 or older, C = 1955, D = 1967, E= 1986

In the proposed 240,000 square foot development, 25,000 square feet will be set aside for retail space used to meet the needs of the Fairmount Heights residents while providing employment opportunities for the town's residents.

Sit down restaurants are more than 4.5 miles away. While there is a grocery store within 2.5 miles of the site, the next grocery store is another three miles in the opposite direction, leaving Fairmount Heights in the middle of a five-mile radius of a fresh produce food desert (Figure 10).

In the 25,000 square feet, six individual retail spaces will be created. Given the needs expressed in the community charrette, bringing sit down restaurants and fresh produce to the area are priorities. While there is not enough space to serve all of the needs of the residents, such as a full size grocery store that requires 40-50,000 square feet, having a fresh produce tenant in a 10,000- square foot space is possible.

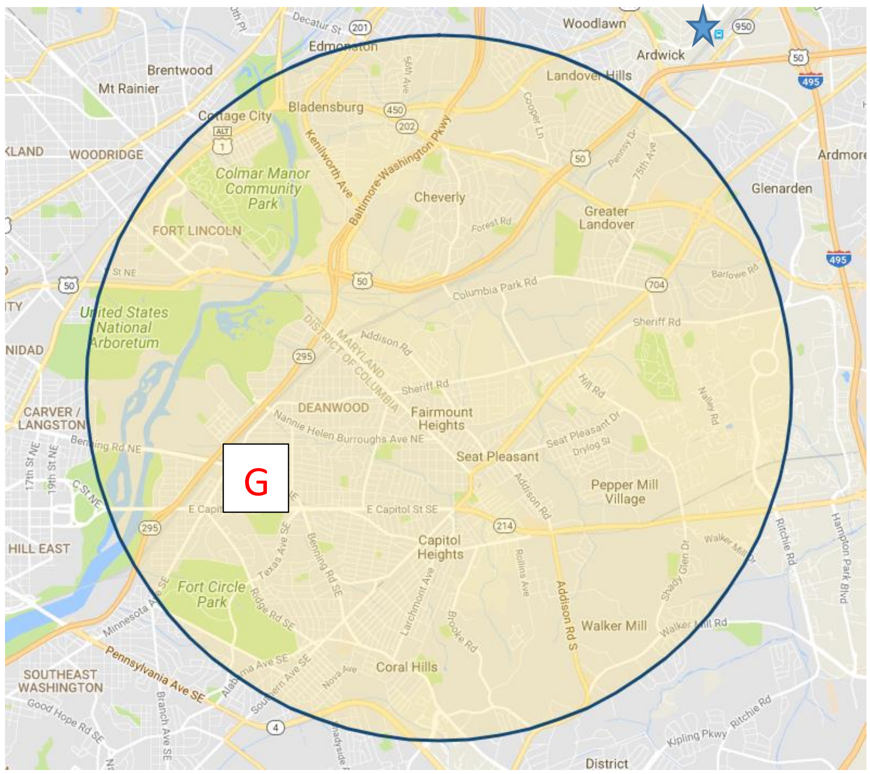
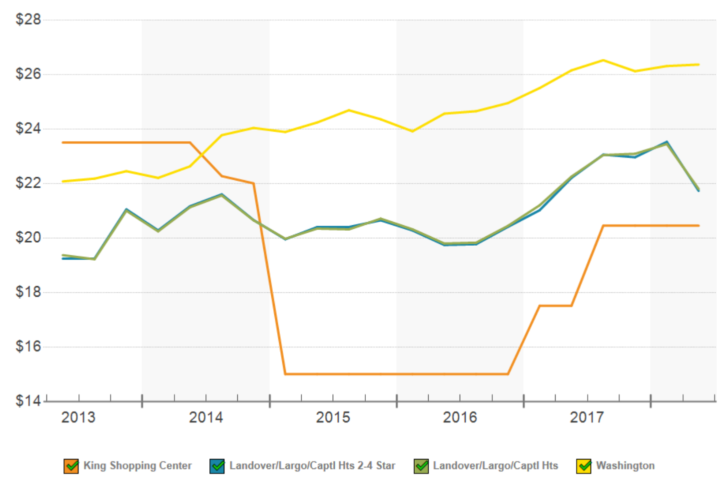


Figure 10 G = Grocery store.

According to *Costar Group*, there are no class A retail spaces within a 2.5-mile radius of the site. The best the market provides is class B or lower strip mall retail spaces. The newest space was delivered in 2017 at the North Dakota Avenue and New York Avenue shopping center, a class B strip center. Most of the retail space in the market area is stock from the mid 1980s or older (Figure 9).



Retail rents have increased in the market area by approximately 10 percent over the last five years and are currently at $23.29/square foot. By providing class A retail space, the proposed use is aiming attract name brands that local residents will enjoy, as well as attract tenants to the residential side, and commuters, as they drive home, to use and enjoy the retail space.

Figure 11 Market asking rents for commercial space

Design and Benefits

Stormwater Management

Figure 12 Current site condition with standing water

The development site contains several physical impediments that affect the health of local habitat with issues like standing water. This can cause severe issues for the development project if not handled correctly. Since this will be a wood frame construction project, standing water can destroy the construction materials. Standing water also breeds insects and mosquitoes. Finally, water is already collecting and standing on the site, the latest stormwater management regulations from the state of Maryland must be implemented to improve the area's environment.

Based on the required setback distances issued when The Maryland-National Capital Park and Planning Commission approves the project, a water diversion channel will run along the north side of the property out of public view and between the parking garage and retaining wall. By placing it at the rear of the property the water channel will not be an eyesore along the main street frontage. The channel will drain into the existing sewage system that connects at the end of the property at L Street.

Figure 13 Example of proposed water channel

The development will be made up of two buildings. Bifurcating the project into two buildings will create an improved “main street” feel to project as well as allow for a bridge over the drainage channel providing an enjoyable walkable connection from Main Street Center to the Sheriff Park.

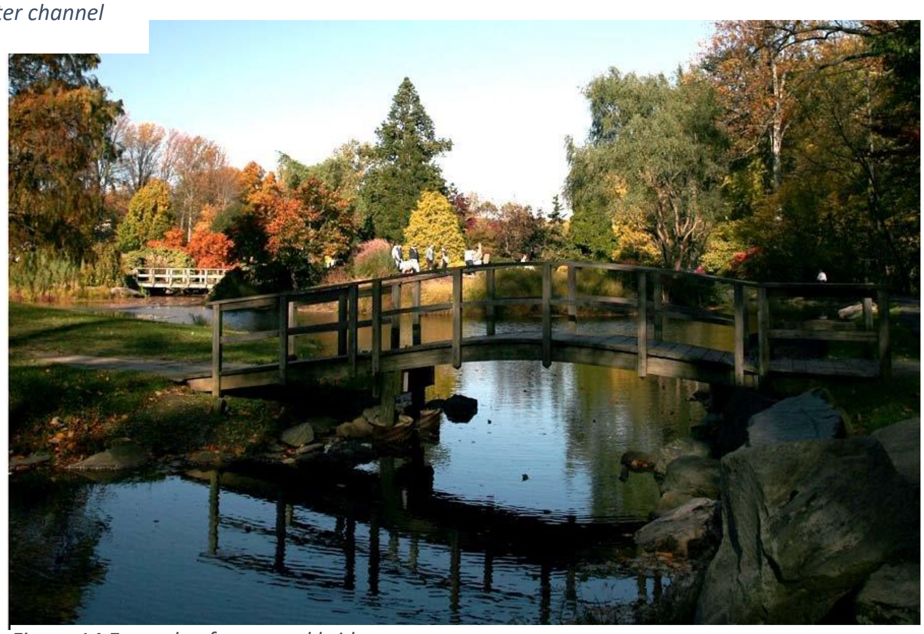


Figure 14 Example of proposed bridge

Energy Efficiency

LEED v4 for BD+C: New Construction and Major Renovation
Project Checklist

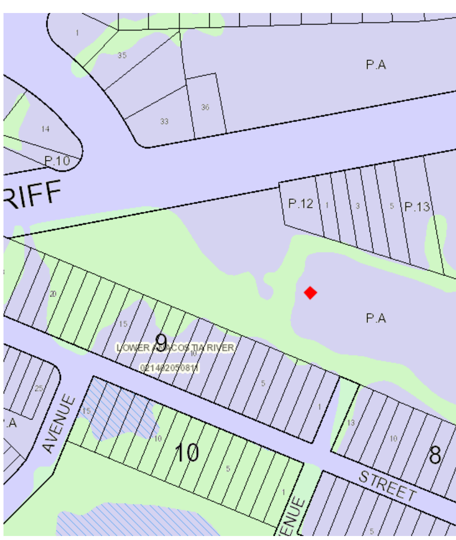
Project Name:
Date:

Y	?	N			
1			Credit	Integrative Process	1
23	**0**	**0**		**Location and Transportation**	**16**
13			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
2			Credit	High Priority Site	2
3			Credit	Surrounding Density and Diverse Uses	5
3			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
1			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1
7	**0**	**0**		**Sustainable Sites**	**10**
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1
7	**0**	**0**		**Water Efficiency**	**11**
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
4			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1
19	**0**	**0**		**Energy and Atmosphere**	**33**
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
3			Credit	Enhanced Commissioning	6
12			Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
2			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2
7	**0**	**0**		**Materials and Resources**	**13**
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
3			Credit	Building Life-Cycle Impact Reduction	5
1			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
1			Credit	Construction and Demolition Waste Management	2
11	**0**	**0**		**Indoor Environmental Quality**	**16**
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
1			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
2			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
1			Credit	Acoustic Performance	1
1	**0**	**0**		**Innovation**	**6**
			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1
3	**0**	**0**		**Regional Priority**	**4**
1			Credit	Regional Priority: Specific Credit	1
1			Credit	Regional Priority: Specific Credit	1
1			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
79	**0**	**0**		**TOTALS** Possible Points:	**110**

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

Figure 15 LEED score card

Energy efficiency will encourage public investment and reduce energy cost for tenants thus creating a more



DMV Developers

Main Street Center

successful project. While many of the county's and state's requirements equate to an almost LEED Silver rating, the development aims to go further and achieve at least a LEED Gold rating, which requires a LEED score of 60-79. While the development is currently scoring 79 points, it is not close to being able to achieve the highest of LEED rating—platinum, which requires a score of 80-110.

There is little vegetation that will need to be removed from site, resulting in more LEED points. According to PGatlas.com the site isn't in a flood plain area. It is also within a neighborhood development location, giving the project a substantial 16 point boost. The project will lose points in the categories of compact development and access to transit. Due to the narrowness of the site, providing an adequate amount of parking for a multi-family project means it can't qualify for compact development points.

The nearest Metro station is Deanwood, 1.1 miles away. The distance is not considered walkable but the project will make the claim for 3 out of 5 points because a public bus line runs alongside the property facing Sheriff Road as well as provide shuttle service to and from the Deanwood Metro Station during operating hours for all residents of the complex.

Stormwater management will be handled by the drainage channel constructed at the back of the property as well as with a green roof construction. The green roof will absorb rain water as well as set up a catch system that drains into the channel. The project will use other water-efficient methods, such as low-flow toilets and shower heads, to gain points in the indoor use of water as well as

Figure 16 Flood plain map of site

overall water usage score sections.

While water will be metered in total and then divided by the number of occupants, electricity will be individually metered by unit. All residential units will be fitted with heat pump HVAC systems. All windows will be double paned and filled with nitrogen gas. LED lighting will be standard throughout the project, in residential units, hallways, and retail spaces. Low energy consumption equipment will provide savings to prospective renters while also allowing the project to gain ground in the largest point category "annual energy use" (19 points).

The development will have 19,000 square feet of green space at the front of the building. Using porous paving materials for the project is not feasible. The garage is two stories tall and porous paving cannot be used. Due the high levels of pass through traffic that is expected with the increase of north and south traffic flow, porous paving would not be conducive as paving.

Recycled Materials

Recycled building materials also provide a high point yield and this project will concentrate on achieving this point yield using Tyvek, recycled stone, MDF, low VOC paint, and fiber cement siding.

According to *workflow-process-service*, Tyvek is made from 100 percent high-density polyethylene. While it isn't made of recycled materials itself, Tyvek can be recycled 4 to 5 times for other industrial uses, such as underground cable protection piping, automotive parts, blown film, packaging cores, and trays. Once the product can no longer be recycled it can be taken to a polyethylene recycler. This ensures that when the building has completed its life-cycle, many its materials will be recycled and reclaimed (1).

Many of the interior finishes will also contain recycled materials. Kitchen cabinets will consist of medium density fiberboard (MDF), a composite wood product made from recycled wood that reduces formaldehyde emissions. The units' hardwood floors will be textured vinyl flooring, which gives the feel of real wood without the carbon footprint. The project will only use low volatile organic compound (VOC) paints. VOCs are a toxic chemical released when paint dries giving off a "fresh paint smell." Low VOC paint will be beneficial to tenants in reducing asthma and other allergies.

Recycled Aggregates, states that recycled stone such as CR-6 and RC-6 stone can also help reduce the project's construction carbon footprint. CR-6 stone is reclaimed stone that comes in a variety of sizes and colors. The cheapest in cost of the recycled CR-6 stone is sorted by size but not color (1). With the site's approximate five-foot slope from its northern to southern end CR-6 stone helps level the ground for the concreate slab. CR-6 can also be used as the base layer of paved roads.

Figure 18 Example of CR-6 stone

Figure 19 Historical registered home in Fairmount Heights example of siding

Hardie Board will be used as the structure's exterior envelope. The Prince George's County Sector 4 master plan explicitly states that vinyl siding cannot be used in any new development. With a higher price per square foot, Hardie Board is fiber cement siding comprising cement, cellulose pulp, and water, which allows a building's exterior to the match the appearance of many of the historic homes in Fairmount Heights. While it is not as good an insulator as contemporary vinyl siding that contains a layer of insulating foam, Hardie Board is available in different sizes, textures, and colors and is approved by county.

Figure 20 Example of Hardie Board matching the historical look of Fairmount Heights

Using green building solutions will not only attract tenants who are seeking an eco-friendly place to live but also those that are interested in monthly savings on their energy bills. Visitors and residents of Fairmount Heights will also be able to enjoy the green solutions available at the site. The 19,000-square feet of green space will be open to the public as well as connectivity bridge pathway to the neighboring parking.

Zoning and Approvals

Zoning

While the site's zoning seems straightforward, it does have multiple zones, including mixed-use infill (M-U-I) and multi-family medium density residential (R-18), and it falls under a development district overlay. The site M-U-I zoning reverts to the R-18 multi-family medium density residential zone. The M-U-I text gives no details as to floor area ratio, setback, and height requirements. R-18 is defined as multi-family medium density residential for apartments, single-family detached, and single-family attached units. The development district overlay adds an extra layer, requiring approval from The Maryland-National Capital Park and Planning Commission (M-NCPPC).

The Maryland-National Capital Park and Planning Commission Sector 4 master plan states that the county encourages efficient use of land, in a "mix of residential, commercial, recreational, open space, employment and institutional uses in accordance with approved plans (85)."

Approvals

While many of these guidelines are vague, the Prince George's County planning office confirmed that the site's location in an overlay zone, requires approval from the M-NCPPC. For this development, there are two variances that will be requested. One for a reduction in parking and the second for an increase in density per acre. These variances will be presented to the County Council at the first reading of the proposal. Under the overlay zoning, these variances can be approved or denied in any hearing required regarding the project.

Regulatory

The town of Fairmount Heights has many goals that they would like to see addressed in future development including, increasing traffic connectivity, increasing density, and widening the variety and raising the quality of local businesses. Since the county approves any plans, it is important to address these stated goals. It is also important to keep in mind that without the town of Fairmount Height's approval first, getting M-NCPPC approval for any exemptions is out of the question.

According to *The Maryland-National Capital Park and Planning Commission,* the town would like to see future development reinforce the character of their historical neighborhood. Fairmount Heights has a number of 20th century architectural styles including Queen Anne, Craftsman, and Colonial Revival (97-161). The Queen Anne style particularly stands out throughout the town. The style contains siding for the exterior and a front porch that encompasses the entire front of the house with an awning.

While the town of Fairmount Heights states they want to reinforce the character of their historic neighborhood, *The Maryland-National Capital Park and Planning Commission*, insists that "synthetic stucco, and aluminum and vinyl siding shall not be permitted as a dominant building material." These materials can only be used as the dominant material for an attached garage (pg. 216)." Alternatives to vinyl siding, such as Hardie Board, can provide the same exterior appearance that vinyl siding provides. Unfortunately, the insulation in Hardie Board is not as effective as that found in vinyl siding.

M-NCPPC recognizes that the community is eager for a commercial "main street" type of development (pg. 34). The area is under-served by restaurants, grocery stores, and other retail establishments.

M-NCPPC states that buildings need to emphasize architectural features that shape pedestrian-friendly entrances and should have a “base, middle, cap,” style of architecture (pg. 216). This is an opportunity to incorporate the Queen Anne style where all retail at the ground level will have a wood-framed awning. The town has two other requirements regarding awnings: they cannot extend more than six feet from the face of the building and the awning cannot be back-lit (pg. 217).

The retaining wall needed on the site’s north side will be made of RC-6 stone, which is in line with the town’s requirement that retaining walls cannot be bare, poured concrete, wood post, or timber ties. The M-NCPPC doesn’t state specific stormwater management requirements, only that it needs to be improved as well as “provide additional tree cover… to intercept rainwater, reduce heat islands, and improve air quality” (14).

Part of the project’s design is to a Main Street Center connected to Sheriff Road and L Street with a green space buffer between Main Street Center and the back of the houses along

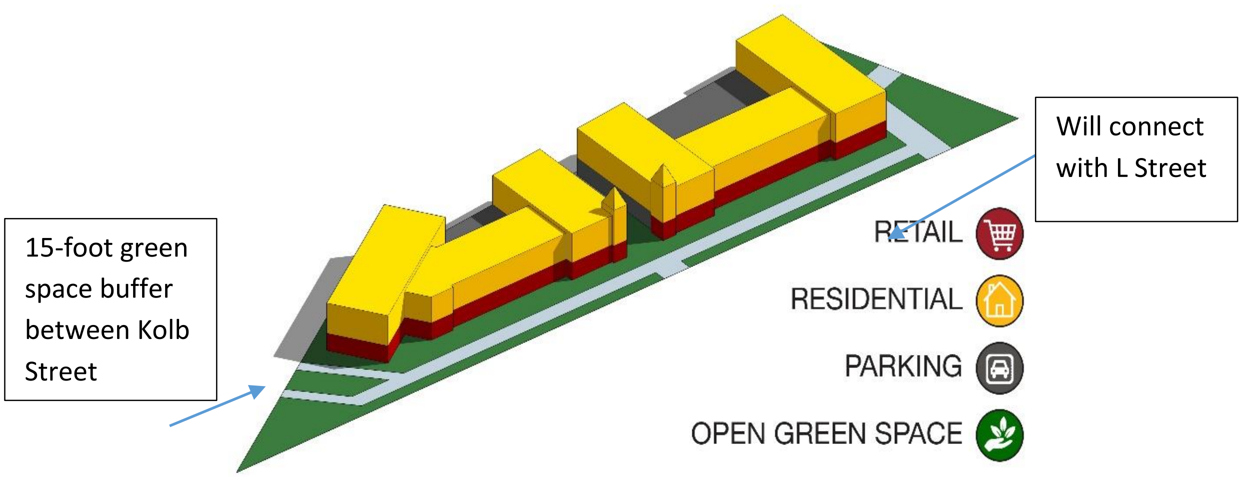


Figure 21 19,000 square feet of green space

Kolb Street. The design will have 19,000 square feet of green space along the south-facing side of the property, planted with native foliage and trees. The green space will contain picnic tables and will be open to the public; people who visit the new local businesses can share the open space. This is in accordance with the town's needs to add tree coverage as well as a north-south road connection. There are no plans to include bus traffic through Main Street Center because there is no bus route on L Street and the bus stop on Sheriff Road is less than ¼-mile from the farthest end of the site.

Due to the site's size and shape, meeting the town's parking requirements will be the greatest challenge. M-NCPPC lists the requirements as:

- Structured parking will be equal to 115% of the minimum requirement.
- Parking structures will not dominate the streetscape.
- Curb cuts will need to be minimized, when possible not more than one curb cut per block
- Parking garages cannot be taller than five stories and shall not exceed the surrounding building (55-297).


Figure 22 passage to Sheriff Road Park

Design Intent

The current conceptual design anticipates two multi-family buildings, each with ground-level retail space. The total 240,000 square feet will be 25,000 square feet of retail and 215,000 square feet of residential totaling 265 units. The maximum building height will be 58 feet with a Hardie board exterior, consistent with the Sector 4 master plan guidelines.

Meeting the requirement of 115 percent of the required amount of parking will be difficult. A parking structure can't be taller than the building itself, and the site's narrow shape makes it difficult to provide all the project amenities and achieve the required amount of parking. The project plan is for two curb cuts per block. Each of the two buildings will have a garage entrance/exit at its end. This will keep the garage out of view when looking at the project. The buildings are designed to curve toward the park, creating connectivity to the park and keeping the curb cuts off the front side of Main Street Center.

The biggest challenge expected from M-NCPPC will finding enough space, even with a parking exemption, on this narrow site for adequate parking. The parking structure's ramps will take up a significant amount of parking spaces. Another M-NCPPC issue may be the getting the parking exemption if the 19,000 square feet of park space needs to be eliminated or reduced to accommodate parking.

Figure 23 example of publicly accessible green space

Construction Costs and Schedule

Construction Costs

The project is aims to be rated four out of five stars. To achieve this rating, interior finishes and energy efficient appliances, and LEED Gold rating will play major roles in determining construction costs. Currently the development scores a 79, just a point away from achieving LEED Platinum, the highest rating possible.

The project's residential and commercial sides each have their own proforma, because retails construction costs has at a different price per square foot and will be under a conventional loan compared to retail construction, which will be funded using a HUD 221(d)4 loan. Construction costs are based on the Craftsman 2018 National Building Cost Manual.

According to the manual, there is roughly 12 percent escalator for any construction price listed in the D.C. area. For example, it lists Bethesda at 13 percent, Alexandria at 10 percent, and Laurel at 8 percent as other comparable (74). While Laurel is the only location listed in Prince George's County, it was determined that Laurel was too far from D.C. to be considered for an escalator. Alexandria was also eliminated due to its located in another state, which influences total costs due to labor laws and tax rates. The decision was made to go with a 12.5 percent escalator—an average of the D.C. and Bethesda escalators.

The manual also states that one floor of retail space costs $115.00/square foot. Adding the 12.5 percent escalator equates to an additional new construction cost of $30.00 per square foot. The 25,000 square feet of retail space with the 12.5% escalator comes to $5,149,278 (74-156).

For multi-level, multi-family wood-frame residential structure, the manual lists a cost per square foot of $143.00. Adding the $12.5 percent escalator, the new construction cost is calculated at $165.00/square foot (74-84). The 190,000 square feet of livable residential space with the escalator, the cost of construction is estimated at $49,289,833.

To reach the Costar 4-star rating, the higher level finishes will include laminate hard wood flooring (a current trend that holds up better than carpet). This will also lower costs during resident turn-over because laminate flooring doesn't need to be replaced as often as carpet. Using hardwood laminate adds the expense of soundproofing the wood-frame building, specifically, soundproofing insulation and decoupling the studs to disrupt the path of the sound traveling.

This also holds for the ground level retail. Aiming for at least two restaurant tenants makes soundproofing vital to the project's success with residential units directly above retailers. Soundproofing is also critical for residents between walls and floor-to-floor, and can decrease negative online reviews.

Schedule

Due to the site's location in an overlay zone, final approval is with M-NCPPC. We are requesting two exemptions from the County's Sector 4 master plan. First, an exemption from the total density allowed based on the site's size. Second, an exemption from the required parking spaces. Based on the county requirement and the project's unit breakdown of 95 studios, 130 one-bedroom, and 40 two-bedroom units, 366 parking spaces would be required. The project is requesting only 300 parking spaces.

Figure 24 registered historical home in Fairmount Heights MD

To gain approval, we will work with the residents of Fairmount Heights. During a charrette

Figure 18 Frontage of Main Street Center

many of them stated an interest in maintaining the town’s historic appearance. When researching Fairmount Heights’ historic houses, it was discovered that many of them have plank siding exteriors. The schedule includes three to six months to garner the support of town; we hope they will become advocates for the project when it is presented to M-NCPPC.

The Deanwood Metro Station is 1.1 miles away, which is considered outside of walking distance for a daily commuter. As an amenity, the development will provide residents with shuttle service to and from the Deanwood Metro Station during Metro operating hours. Throughout the D.C. market this is a highly sought after amenity when Metro stations are not within walking distance.

It is expected to take three months to create project advocates from the residents of Fairmount Heights. With their backing, it is expected to take another three to six months to gain M-NCPPC approval. From there the construction schedule is estimated at 14 months barring issues with weather or material acquisition.

Approval and Construction schedule	
Process	Time in Months
Gain Community Support	3
Project Approval	3 to 6
Construction	14
Total Time	20 to 23

Proforma Impact

If the two exemptions are not approved, it will impact the proforma. An additional 60 parking spaces will increase the residential project costs by $1,020,000. It will also consume much of the green space set aside for the residents and patrons of Main Street Center.

If the density exemption is not approved the development will not be viable. At the current maximum density of 120 units, the overall residential site would decrease to 97,500 square feet. Using the same cost per square foot of $165.00, the maximum IRR would fall from 16.7 percent to 1.6 percent.

Marketing and Management

Marketing

Project marketing will be in three phases. Phase One will target residents of Fairmount Heights. With the uses proposed and the increased community benefits such as walkability, public access to green spaces, sit-down restaurants, and a fresh produce store, the goal is to gain an overwhelming amount of support from the town's residents as we enter Phase Two.

Phase Two, will market the project for approval by M-NCPPC. This is the most critical phase; without Commission approval, the entitlement process will not be complete and there will be no project. Their approval is targeted based on meeting Sector 4 master plan goals, such as creating a historical physical appearance for the structure, hiring local residents, and meeting the stormwater management requirements.

Finally, Phase Three will market the project to the general public for lease-up using the shuttle service as the vehicle of promotion. During construction, the shuttle will be at several Orange Line Metro stations during morning and afternoon rush hours promoting Main Street Center with the logo and phrase "We bring our residents home."

Phase One

The first step in Phase One will be town hall meetings that present the project to residents. During the initial meeting, we will ask residents to form a Friends of Fairmount Heights community group comprised of Fairmount Heights residents. They will propose and schedule future community meeting about the project. This group will provide residents with a sense of ownership in their town's future. The group will be funded by the developer who seek local insight in expanding the message to get more local residents involved in the meetings. The goal is to have a substantial number of local residents who support the project prior to the request for M-NCPPC approval.

At Friends of Fairmount Heights meetings, images of the historical register homes and current site conditions will be shown alongside the proposed project for a direct visual comparison to allow residents to see that their requested features are included in the project—walkability, public access to green spaces, sit-down restaurants, and a fresh produce store. It will be emphasized that their support will help provide these amenities.

The two critical exemptions that are being requested, parking reduction and density increase, depend on local support. The project will be requesting a reduction in the required amount of parking, according to *Municode Library* of 425 space (Sec 27A-703). During the charrette, local residents stated an interest in roadways that connect east-west traffic. The project is designed to deliver just that, connecting L Street and Leroy Gorham Drive. The project will also provide shuttle service to and from the Deanwood Metro Station during Metro operating hours. This service will emphasize to residents how connecting L Street and Leroy Gorham Drive, as well as providing shuttle service will reduce the traffic in and around the project.

The project's walkable design, in conjunction with shuttle service, will be marketed to residents as well as to potential tenants, expecting that a good portion of leaseholders will not be car owners and that a reduction of 30 percent in the required amount of parking is feasible. The plan is to emphasize to future tenants that, with the provided shuttle service and rising popularity of ride hailing services like Uber, they will have all their transportation needs met, from daily work commute via shuttle to Metro or a short Uber ride away from downtown night life.

Phase Two

The marketing plan's second phase will present the support garnered from local residents to support approval for the requested exemptions. The cases will be presented to state just as they were to the Friends of Fairmount Heights organization. Due to the town's aging population, the development team will provide door-to-door pick-up and drop-off for residents interested in attending the hearings. The Metro shuttle will be purchased at this time and used through the project's life span for Fairmount Heights residents attending planning meetings, to market at the Orange Line Metro station during lease-up, and for its final intended purpose of shuttling tenants to and from the Deanwood Station. Shuttle service is expected to cost $60,000/year.

Project presentation to staff and the Planning Board will emphasize how increasing the allowed density will spur future development as outlined in the Sector 4 master plan. Currently, Fairmount Heights has an average median income of about $57,000. With a density increase to create 265 new market-rate units, the goal is to increase the town's median income. By doing so, future developers and investors will see the viability of investment in retail space and housing stock.

Phase Three

In Phase Three, the marketing will use typical approaches but specific to the product being presented to the public. Signs promoting the new property will be placed along Sheriff Road, at the intersection of MD-704, southbound on Sheriff Road inside the beltway, and at Addison Road and several Orange Line Metro stations. The objective is to attract millennial professionals or couples entering the city via the major thoroughfares interested in moving closer to the city, to reduce their commutes, while still enjoying a family-oriented historic suburb.

A one-month concession is being appropriated for all new leases of 12 months. This is expected to cost $47,500 annually. Social media marketing will be used to target the millennial professional demographic, particularly Instagram and Facebook. A promotional raffle ticket will be offered to every resident each time they make a positive social media post about their experience living at Main Street Center. At the end of the of the month winners will be drawn for home products prizes such as a knife set, blender, or the free painting of an accent wall.

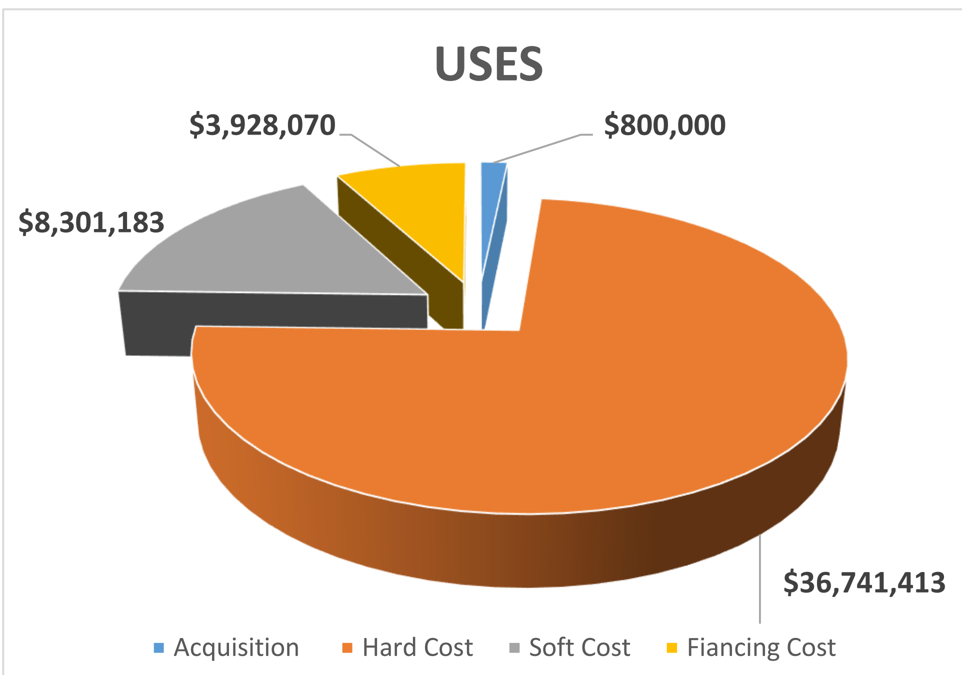
Management

Property management will be held in-house by DMV Developers. This is a long-term hold project for the development company and they would like display their long-term investment in the area by managing their own property. As local developers, they have a good pulse reading of what their potential residents will want while maintaining a strong relationship with current residents of Fairmount Heights through the Friends of Fairmount Heights community group. Also, it will give the developers the ability to expand their portfolio in their own back yard.

The proposed staff will comprise one community manager, one assistant community manager, and one leasing agent with office salaries totaling $170,000. Staff will also include one maintenance supervisor and one maintenance technician. The turning the units and groundskeeping will out-sourced. Maintenance and vendor turning costs are estimated at $150,000.

Financial Analysis

Residential Component



The major source of financing for the project's residential portion will come from the HUD 221(d)4 loan. This program will cover 83 percent ($41,247,292) of financing and only require 17 percent ($8,042,541) to be provided from private investors. The HUD loan is based on a conservative 4.5 percent interest rate and a mortgage insurance premium of 0.45 percent. There project is based on a conservative cap rate of 6 percent.

Developments with similar proximity to Washington D.C. generally have a cap rate of 6 percent or lower.

The HUD loan has a debt coverage ratio of 1.2, due to the program's 40-year term. The Loan to Cost percentage is 83 percent. The combination of the maximum loan amount from the HUD loan with the conservative 6 percent cap rate prompts an LTV of 87 percent. If the cap rate were 5.5 percent on sites with the same proximity to Washington D.C., the LTV would be 79 percent.

The proposed financing structure is based on a joint venture partnership that will generate the remaining 17 percent of capital to complete the development's financing. The developer has elected to defer their developer's fee of $4,551,887 until the property is refinanced at year 9 or 10. The private investors will need to invest $3,490,654 for a profit from cash flow of 70 percent for them and 30 percent for the developer; the private investors will be able to obtain a 10.7 percent IRR.

Commercial Component

To finance the project's commercial aspect, the developers have teamed up with Revere Bank. The total cost of development will be $6,079,275. Revere will take on 81.12 percent of this debt and the private investors from the residential side will be participating. The debt coverage ratio is healthy at 1.30. The commercial loan has a shorter amortization and a shorter 25-year term (comparison to the residential loan's 40-year term).

The commercial component will also be measured with a conservative 6.5 percent cap rate, which results in an 18.9 percent profit ratio and is extremely close to the 20 percent goal. Going under the conservative cap rate by just one percent increases the value at year 1 by $113,013 and gets the development to a 20.8 percent profit ratio. The development team feels that this is a feasible goal since the cap rate is being held back.

The private investor taking on 18.8 percent of the debt will provide $1,147,772 in funds for the commercial development. The developer will not be deferring their fee of $707,555 and will enter into a 90/10 cash flow split with the private investor, giving the investors a 10.5 percent IRR.

Exit Strategy

The developer is interested in a long-term hold for the site. The private investor is also comfortable with a long-term hold position, therefore we will negotiate their entire investment as early as year 4 and as late as year 10. Even with no change to the 6 percent cap rate, the development's NOI supports the investor repayment and the deferred developer's fee as early as year 4. This will be based on the investor's willingness to negotiate as well as interest rates at the time. The goal is to mezzanine the deal by refinancing in the future. The refinancing will be done when the best interest rates are available. The project can support refinancing as early as year 4, but this may not be in the investor's interest based on cash flow or in the developer's interest if refinancing interest rates are not in their favor.

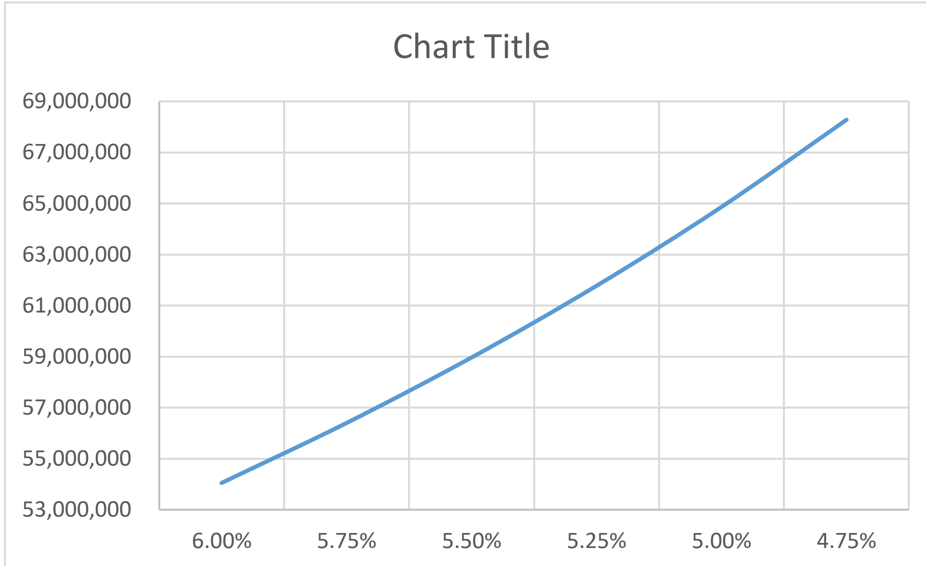
Sensitivity

IRR							
		Investor Take of Cash Flow					
		50%	60%	70%	80%	90%	100%
Interest Rate	4.00%	7.2%	8.6%	10.0%	11.3%	12.7%	14.0%
	4.25%	7.6%	9.1%	10.5%	11.9%	13.3%	14.7%
	4.50%	7.8%	9.3%	10.7%	12.2%	15.2%	16.7%
	4.75%	6.3%	7.6%	8.8%	9.9%	11.1%	12.3%
	5.00%	5.0%	6.0%	7.0%	7.9%	8.9%	9.8%

The overall goal is to be able to work with an investor at 10 percent IRR. The HUD 221(d)4 requirement of a max loan-to-cost ratio of 83 percent, a lower interest rate, does not necessarily produce a great return due to the rising costs of construction and rents projected to stay flat. At the lowest projected interest rate of 4 percent, the investor's IRR is 10 percent compared to 10.7 percent at a 4.5 percent interest rate with a 70/30 distribution. At the highest projected interest rate of 5 percent, the investor never reaches 10 percent IRR even at 100 percent distribution of cash flow to the investor. The maximum interest rate supported is 4.75 percent at a 90/10 distribution, resulting in 11.1 percent IRR for the investor. The development can, at the most, afford an investor at 16.7 percent IRR at a 4.5 percent interest rate with 100% of the cash flow going to the investor.

Many aspects of the Sector 4 master plan remain to be developed, making it difficult to calculate the cap rate for the Fairmount Heights area in 10 years. If the cap rate were to stay flat, at 6 percent, the Main Street Center would have a perceived calculated value of

$54,056,942 in year 10. In the case of an extremely optimistic cap rate at year 4, Main Street Center will have a perceived calculated value of $68,282,453. The $14,225,511 swing is subject to Main Street Center's success and the excitement it creates for future investment to complete the Sector 4 master plan.



Development Summary			
Address	20743		
	Residential	Retail	Total
Effective Gross Income	$ 4,409,761	$ 606,813	$ 5,016,574
Operating Expenses	$ 1,565,343	$ 136,212	$ 1,701,554
Net Operating Income	$ 2,844,419	$ 470,601	$ 3,315,019
Debt Services	$ 2,410,032	$ 368,300	$ 2,778,332
Cash Flow	$ 434,387	$ 102,301	$ 536,688
Investor Max IRR	10.7%	11.6%	$ 536,688

Profroma

Residential

Income

Source	Quantity	Size	Rent	Annual Income	Rent Per SQFT
studio	95	550	$1,270	$ 1,447,800	$ 2.31
1 bedroom	130	700	$1,400	$ 2,184,000	$ 2.00
2 bedroom	40	1,000	$1,650	$ 792,000	$ 1.65
Misc	na	na	na	$ 295,627	na

Loan Amortization

NOI after Reserves	$ 2,844,419
Minimum DCR	1.20
Max Allowable Debt Service	$ 2,370,349
Term	40
Interest Rate	4.50%
MIP	0.45%
Mortage Constant	5.75%
All In Rate	4.95%
Loan Amount	$ 41,247,292
ANNUAL DEBT SVC (P+I+M	$ 2,370,349
MONTHLY PAYMENT (P&I)	$ 185,432

Expenses

Type	Annual Amount
Administrative Expenses	$ 478,934
Utility Expensis	$ 42,294
Operating Expenses	$ 352,626
Taxes and Isurance	$ 598,739
Reserve Expenses	$ 92,750
Total	$ 1,565,343

USES		
Type	Ammount	
Total Construction Costs	$	36,302,031
Total Fees	$	1,740,000
Total Financing Fees and Charges	$	3,928,070
Total Developer's Fee	$	4,551,887
Total Uses of Funds	$	49,289,833

Sources	
Type	Amount
HUD 221D4	$ 41,247,292
Private Investor	$ 3,490,654
Deffer Dev Fee	$ 4,551,887
Total	$ 49,289,833

Development Summary		
Type	Amount	
Effective Gross Income	$	4,409,761
Operating Expenses	$	1,565,343
Net Operating income	$	2,844,419
Debt Services	$	2,410,032
Cash Flow	$	434,387
Investor		16.7%

Commerical

Income & Expenses		
Income	$	553,375
Expenses	$	83,243

Loan Amortization	
NOI After Reserves	$ 470,132
Minimum Debt Cover Ratio	1.30
Maximum Allowable for Debt Service	$ 361,640
Term	25
Interest Rate	5.00%
MIP	0.45%
Mortgage Constant	7.33%
All-in Rate	5.45%
Loan Amount	$ 4,931,502
ANNUAL DEBT SVC (P+I+MIP)	$ 361,640
MONTHLY PAYMENT (P&I)	$ 28,829

Uses		
Type	Amount	
Total Construction Costs	$	4,051,575
Total Fees	$	386,000
Total Financing Fees and C	$	611,703
Total Developer's Fee	$	707,555
Reserves & Land	$	322,442
Total Uses of Funds	$	6,079,275

Development Summary		
Type	Amount	
Effective Gross Income	$	606,813
Operating Expenses	$	83,243
Net Operating income	$	470,601
Debt Services	$	368,300
Cash Flow	$	102,301
Investor		11.6%

Sources	
Type	Amount
Conventional Loan	$ 4,931,502
Prvate Investor	$ 1,147,772
Total	$ 6,079,274

Works Cited

CoStar Group Customer Gateway, property.costar.com/Property/RetailSearch/SearchPage/Index/US?ModifyMode=Change.

"Fairmount Heights, Maryland." *Anderson, Indiana (IN) Profile: Population, Maps, Real Estate, Averages, Homes, Statistics, Relocation, Travel, Jobs, Hospitals, Schools, Crime, Moving, Houses, News, Sex Offenders*, www.city-data.com/city/Fairmount-Heights-Maryland.html

"Fairmount Heights, MD." *Data USA*, datausa.io/profile/geo/fairmount-heights-md/.

Moselle, Ben. *National Building Cost Manual 2018*. Craftsman Book Company, 2017.

Municode Library, library.municode.com/md/prince_george's_county/codes/code_of_ordinances?nodeId=PTIITI17PULOLAPRGECOMA_SUBTITLE_27AURCECONODEZOCO_PT7PALOST_S27A-703REPASP.

The Maryland-National Capital Park and Planning Commission, and Prince George's County Planning Department. "Approved Subregion 4 Master Plan and Sectional Map Amendment." 14741 Governor Oden Bowie Drive Upper Marlboro, MD 20772 , 14741 Governor Oden Bowie Drive Upper Marlboro, MD 20772 , June 2010.

"Recycled Aggregates." *Laney Recycling Recycled Aggregates Comments*, www.laneyrecycling.com/maryland-recycled-aggregates.php.

User, Niche. "Living in Fairmount Heights." *Niche*, 7 Sept. 2016, www.niche.com/places-to-live/fairmount-heights-prince-georges-md/.

"Violent Crime & Property Crime by County: 1975 to Present | Open Data." *Maryland Domestic Migration: 2000-2016 | Open Data*, data.maryland.gov/Public-Safety/Violent-Crime-Property-Crime-by-County-1975-to-Pre/jwfa-fdxs.

workflow-process-service. “Tyvek® Brand | DuPont USA.” *DuPont*, www.dupont.com/products-and-services/fabrics-fibers-nonwovens/protective-fabrics/brands/tyvek.html.

Zillow, Inc. “Fairmount Heights MD Home Prices & Home Values | Zillow.” *Premier Agent Resource Center*, Zillow, www.zillow.com/fairmount-heights-md/home-values/.