# Appendix C: Housing



# Montgomery Planning

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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#### Silver Spring Downtown & Adjacent Communities Plan – Missing Middle Housing Market Study

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#### Description

The Market Study on Missing Middle Housing builds upon the 2018 *Missing Middle Study* and is a precursor to the visioning phase of the Silver Spring Downtown and Adjacent Communities Plan. The Market Study is comprised of analyses of zoning, entitlement, affordability and market feasibility of different Missing Middle typologies, as well as interviews with industry professionals to help understand the barriers and opportunities to building Missing Middle housing in Montgomery County. This Market Study aims to provide necessary background knowledge and to serve as the starting point for the visioning phase of the Silver Spring Downtown and Adjacent Communities Plan and consideration of adding new housing types and forms to the adjacent communities.

#### Background

In March 2020, the Planning Board directed Planning staff on the Silver Spring Downtown and Adjacent Communities Plan to expand the plan boundary to include portions of the adjacent single-family R-60 zoned neighborhoods within a ½ mile of the Silver Spring Metro station and the future Purple Line station at the Silver Spring Library. This was done to study the viability of introducing more diverse housing options through various multiunit typologies.

The Market Study on Missing Middle Housing is being done in support of the Silver Spring Downtown and Adjacent Communities Plan, with the intent of examining the market for new housing types and forms that could potentially be introduced into the adjacent communities.

#### Housing Stock Analysis

The Housing Stock analysis provides an introduction and assessment of the current state of the housing in Montgomery County, and the neighborhoods within and surrounding the Silver Spring Downtown and Adjacent Plan area.

Findings from the Housing Stock Analysis include:

• In the early 2000s, Montgomery County housing production averaged 3,500 building permits a year, a number that has declined to around 2,500 annually in the 2010s. This reduced level is

below what the county needs to achieve its <u>COG housing targets</u>.

- Almost half of renters and one in five homeowners in the Plan Area are costburdened- spending more than 30 percent of their income on rent or housing costs.
- "Missing Middle" already exists in the Plan Area, namely in older duplexes, triplexes, and small apartment buildings located on the edge of the CBD and in the adjacent neighborhoods.
- While rents have risen at a higher annualized rate in the county as compared to downtown Silver Spring since 2000 (1.8 percent in the county vs. 1.5 percent in downtown Silver Spring), rents are still higher per square foot and per unit in downtown Silver Spring.



**Figure 1 Plan Boundaries** 

• The average price for a detached home in zip code 20910 (the zip code that serves the Silver Spring Downtown and Adjacent Communities Plan area) exceeded \$700,000 for the first time in 2020.



Figure 2 Zip code 20910 and Plan Boundary

• While the median price for all homes sold in zip code 20910 was \$520,000 (includes both attached and detached units) – 40 percent of homes sold for more than \$600,000 in 2020.

• In zip code 201910 57 percent of homes sold in less than 10 days in 2020, and the average days on market declined to 24 days in 2020 from 30 days in 2019, signals of rising and unmet housing demand.

• The average Gross Floor Area for homes built in zip code 20910 since 2010 as increased by 77 percent compared to the average home constructed before 1959.

• Demolition of single-family detached units has been relatively rare since 2000 in zip code 20910 as

compared to western parts of the county, but there are signs that the market for custom-rebuilt homes is accelerating in recent years. in recent years.

- 61 demolition permits were issued for single-family detached units in zip code 20910 since 2000.
  - The Gross Floor Area of the subsequent new home was 155 percent larger than the structure demolished.

 Sales price increased by an average of 114 percent post teardown, from an average sold price of \$500,827 pre-teardown, to \$1,073,193 after the teardown was rebuilt.

#### Interviews

Planning staff conducted interviews with stakeholders involved in real estate and development in Montgomery County and that have experience with the Missing Middle typology. Interviewees included small-scale builders, for-profit residential developers, non-profit residential developers, architects, and brokers. The interviews focused on understanding the potential for Missing Middle to increase the supply of housing in Montgomery County; the changes that would be required to zoning, development standards, and the entitlement process to make Missing Middle an attractive investment; and the relative costs to construct different Missing Middle typologies to increase the supply of housing in Montgomery County.

The interviews identified the following findings:

- Stakeholders strongly feel that Missing Middle typologies must be allowed by-right, including a quicker and more predictable subdivision process, or builders will default to constructing profitable, by-right, new custom-homes, a quicker and more predictable subdivision process.
- Market-rate developers are most interested in townhomes (including stacked flats and 2 over 2's), the typologies that now dominate middle levels of density.
- Affordable housing developers who have an objective that is not solely focused on profits will pursue (limited) amounts of Missing Middle where allowable in order to maximize unit counts.
- Developers believe that the best opportunity currently for Missing Middle is mid-size sites (4- to 5-acres) in residential areas with obsolete uses, like unused schools or churches. Missing Middle is mid-size sites (4- to 5-acres) in residential areas with obsolete uses, like unused schools or churches.
- Stakeholders stated that attracting private sector interest in the redevelopment of existing habitable single-family homes to other building typologies will require a meaningful increase in density, particularly if the desired units are to be smaller in size to help make them less expensive.
- The existing R60 zoning/development standards do not physically accommodate Missing Middle housing, even a duplex. Lot coverage, height limits, and setbacks were the most common items mentioned in relation to challenges with development standards.
- There is heavy competition for properties in close-in Metro accessible neighborhoods, which makes it harder to acquire and assemble lots. If a house is habitable an end-user who desires to live in that house will most likely out-bid a builder interested in redeveloping the property.
- The most likely builders of Missing Middle types of housing are small firms that are currently working in the teardown, custom home market. Missing Middle products would need to be proven to be economical and scalable to be built with some regularity.
- While there are significant hurdles to building this product, taking no action will depress the supply of homes, resulting in housing continuing to get more and more expensive. With increased demand and limited supply, over time many single-family homes will be bought and through the tear-down process be replaced by larger and more expensive structures. Even small, modest numbers of duplexes, triplexes, and small apartment buildings could help combat teardowns and rebuilds.

#### Entitlement Analysis

Missing Middle housing typologies could not be built in the single-family zoning under the current standards. While many of the single-family zones in Montgomery County do allow for some types of Missing Middle housing, namely duplexes and townhouses, there are additional requirements that functionally prevent redevelopment of existing properties into Missing Middle in these zones.

#### Process:

- Missing Middle housing cannot compete with profitable single-family housing developments if the entitlement process is not by-right. Missing Middle redevelopments of existing single-family properties generate too few units to interest developers if a more complicated and risky discretionary approval process cannot compete with profitable single-family housing developments if the entitlement process is not by-right.
- Redevelopment of existing single-family properties into Missing Middle housing requires a nondiscretionary and rapid subdivision process in order to compete with by-right redevelopment of single-family homes into larger custom single-family homes. Subdivision is necessary as builders desire to sell units fee-simple rather than operate small dispersed-site rental properties.

#### Density:

- Existing single-family zones are significantly less dense than most of the Missing Middle housing typologies.
- In the Adjacent Communities portion of the Downtown Silver Spring Sector Plan single family lots average between 7,000 and 8,000 SF, a net density of 5 to 6 units per acres. MissingMiddleHousing.com reports that side-by-side duplexes, the least dense Missing Middle typology, tend to achieve between 8 and to 17 units per acre.
- To enable Missing Middle housing existing minimum lot sizes would need to be smaller and the corresponding allowable density would need to be higher.

#### **Development Standards:**

- Missing Middle housing may require a relaxation of development standards related to height, side setback, and lot coverage in to physically accommodate for-sale Missing Middle typologies.
- Existing small single-family lots are unlikely to physically accommodate the parking for multi-unit Missing Middle typologies under the current parking standards.

#### Affordable Housing:

- Currently Missing Middle could only be developed in single-family zones using the optional method of development. Optional Method requires that at that that that all projects regardless of total size provide moderately priced dwelling units to achieve Missing Middle types of housing.
- The added cost of providing dedicated affordable housing will make redevelopment of existing single-family homes into modest-sized Missing Middle housing financially infeasible.

#### Missing Middle and Affordability

Missing Middle housing is **not** the same as income-restricted affordable housing. Most Missing Middle housing is market-rate housing that will generally be more affordable than the typical new detached

single-family home due to its smaller size. The prices of Missing Middle housing, however, will be determined by what the market can bear.

The creation of Missing Middle housing may not automatically create dedicated affordable housing such as Moderately Priced Dwelling Units (MPDUs). MPDUs are the county's inclusionary zoning program, where new residential development projects of 20 units or more are required to set aside 12.5 percent of units as affordable to households earning between 65 percent and 70 percent of Area Median Income. Development projects between 11 and 19 units are required to make a payment to the Housing Initiative Fund, the county's housing trust fund.

While no MPDUs will be created for smaller infill projects, Missing Middle housing will still be helpful in increasing the supply of attainable housing in Montgomery County. There is a growing need to make sure the housing built is attainable, appropriate and suitable for the households that live here. Implicit in this idea of attainability is that a range of housing options (type, size, tenure, cost) exists in the local market to meet the size and affordability needs of people at all economic levels.

#### Summary of the Model Used to Evaluate New Development Feasibility

The redevelopment of existing habitable single-family homes in desirable markets requires the new use generate significant revenue to cover the high cost of acquiring land, constructing a new structure, paying required entitlement fees, and providing suitable profit to the builder. In order to understand where and what type of Missing Middle housing typologies might be feasible redevelopments in existing single-family zoned neighborhoods, Planning staff conducted a market study with a focus on Silver Spring.

#### Focus Geography

The residual value model evaluates the feasibility of new development in geographic zones as opposed to consideration of specific parcels. For this analysis, Planning staff used the Metropolitan Washington Council of Governments 2009 Transportation Analysis Zones (TAZ) for these analysis zones. MWCOG divides the entire region into TAZ, geographic areas usually the size of a single neighborhood, for the purpose of transportation and population forecasting. TAZ are a convenient geography for this study because they are small enough to provide results specific to individual neighborhoods, without being so small that the results imply a false level of precision.

Planning staff focused on the two TAZ that cover the bulk of the residential neighborhood adjacent to Downtown Silver Spring. The two TAZ are numbered 606 and 622, shown in Figure 3 below. The statistics regarding the size and value of single-family properties in both TAZ 606 and 622 are similar. Planning staff chose to use TAZ 622 in reporting detailed findings, but these findings apply equally to TAZ 606. Notable statistics for both TAZ 606 and 622 are listed in Table 1.

#### Table 1 Focus Geography

Statistic	TAZ 606	TAZ 622
Number of single-family	330	512
detached properties		
Average size of single-family	7,837	7,650
Properties sold 2018-2020		
(square feet)		
Average value of single-family	\$680,000	\$655,000
home sales 2018-2020		
Estimated cost to acquire an	\$4,100,000	\$3,950,000
acre of single-family property		
based on home sales 2018-2020		



Figure 3 Focus Geography Map

#### The Residual Value Model for Analysis

Staff used a residual value model to broadly understand the feasibility of different Missing Middle typologies across Montgomery County. The model is based on the underlying logic that if the value of a new building minus the cost of its development (construction, soft costs/financing, fees, profit) greatly exceeds the cost needed to acquire the land on which it would sit and where such development is legal, then attempts at development are likely. The residual, or leftover, is the difference between the expected value of the finished building and the development costs excluding land value. Developers would use this residual to try and buy suitable land. If the residual is substantially greater than the expected market price for land, it is likely builders would be able to acquire what they need. If the residual is substantially less than the average cost of land, it is correspondingly unlikely that builders could find land at a low enough cost to make the development financially feasible.

The model uses a hypothetical 'prototype' of each building typology analyzed and average cost of land within each focus geography in order to understand at a high-level across a broad geography where development may occur. While the benefit of this approach is a general understanding of the real estate market and feasibility of any product type, it comes at a sacrifice to detail and understanding of development potential of any specific property. The model works best when development could occur in the future on many different properties and if each of those properties within each separate TAZ have similar value. While every home is different, most single-family properties in a neighborhood have similar dimensions, features, and values as their neighbors. This makes the residual value model well-suited to analysis of redevelopment of single-family homes.

The output of the residual value model is the ratio of the residual generated by a proposed development divided by the average cost of land in each TAZ. Planning staff then translated the output ratios into the likelihood that builders would make efforts to find land for each typology evaluated in each geographic area analyzed:

- Negative residual value: the value generated by the development is less than the cost to build the structure and the required profit before any attempt to find land. Redevelopment is not possible because the builder is guaranteed to lose money.
- Residual value generated between 0% and 75% of the average cost of land. Redevelopment is not likely because it would require a builder acquire a property that is markedly less expensive than the prevailing cost of land. Finding such a property is improbable but not necessarily impossible, so the model does not explicitly indicate that no development would ever occur.
- Residual value generated between 76% and 125% of the average cost of land. Redevelopment has potential, but because the value generated is similar to the cost required to buy land, development of the typology evaluated may not be widespread.
- Residual value generated greater than 125% of the average cost of land. Efforts to redevelop are likely due to the high potential profit. While efforts to find and acquire land are likely, this is not a guarantee that builders would be able to secure the parcel(s) needed at a profitable price or that construction would occur.

The bounds for each category above are not precise and are purposefully large, round numbers to avoid a sense of false precision. Development is a complicated process influenced by many factors. No generalized model that evaluates wide swaths of geography can do more than estimate the likelihood that builders would try and find and acquire land based on the estimated profit.

#### Forms of the Residual Value Model

Planning staff utilized two forms of the residual value model: one for building types where there are similar recently constructed product and thus an ability to estimate the potential value of the ultimate development, and another for building types where there are no recently constructed examples and thus limited understanding of the value a new unit might generate.

The model for product with similar recently built examples to compare to takes the following steps, uses the following data sources, and the following specific data metrics:

Step	Data Points	Data Sources
1) Define geographic units of	2009 Transportation Analysis	Metropolitan Washington
analysis	Zones (TAZ)	Council of Governments
2) Identify cost to build the	Cost per Square Foot of	Interviews with Builders
typology being evaluated	construction	Staff Knowledge
	Soft Costs & Financing Costs	
	Entitlement Fees	
3) Identify the value of the	Number of Comparable Sales	Maryland State Department of
developed typology	Size (Eastures of Comparable	Assessments and Taxation
	sales	property database
	Value of Comparable Sales	Staff estimation
4) Identify the cost to acquire	Number of recent sales of	Maryland State Department of
single-family zoned land in each	single-family properties	Assessments and Taxation
TAZ	Value of recent cales of single	property database
	family properties	
5) Generate Results		

#### Table 2 Data Metrics

For the evaluation of typologies where there have been no recent similar developments in Montgomery County, the process is different because it is not possible to estimate the future value of a new development. Instead, the model calculates the rents required in each TAZ to generate residual value equal to 75% of the average cost of single-family home properties in that TAZ. Staff then compared those required rents to the market rents achieved in downtown Silver Spring to assess whether it was likely that the market could support such rents.

#### Table 3 Data Metrics Continued

Step	Data Points	Data Sources
1) Define geographic units of analysis	2009 Transportation Analysis Zones (TAZ)	Metropolitan Washington Council of Governments
2) Identify the amount of residual value in each TAZ equal to 75% of the average cost to acquire single-family zoned property	Number of recent sales of single-family properties Value of recent sales of single- family properties	Maryland State Department of Assessments and Taxation property database
3) Calculate the required value each unit of the typology being evaluated must generate		
4) Convert the value per unit into a net annual rent	5.5% Capitalization Rate <sup>1</sup>	
5) Convert net rent into gross annual rent to account for vacancy, operation costs, and taxes	Net rent is assumed to be approximately 65% of the gross rent	National Apartment Association annual survey of apartment operating costs
6) Convert gross annual rent into rent-per-square foot-per month		
7) Compare results to the rents achieved in downtown Silver Spring		CoStar

#### Summary of Typologies Evaluated

Staff developed six typologies to test in the model. For each typology staff created a typical scenario in which a builder might redevelop the typical 7,000-8,000 square foot single-family parcels in TAZ 622. The details for each typology are in table 4 following the descriptions.

**Small Side-by-Side Duplex**: The redevelopment of a single-family property into two units. These units are each 1,000 square feet in size. This size is markedly lower than the average size townhome built in

<sup>&</sup>lt;sup>1</sup> A capitalization rate is a mathematical technique to convert a lump sum value into a stream of equal payments (or vice-versa). The lump sum is multiplied by a percentage; the lower the percentage the more investors are willing to pay to purchase a property and the lower the required rents to make a development feasible. Within the Washington D.C region capitalization rates of between 5% and 6% are typical.

Montgomery County in the last 10 years, which is approximately 1,800 square feet. This is however larger than the 612 square foot unit idealized example of a side-by-side duplex highlighted on the website <a href="https://missingmiddlehousing.com/types/duplex-side-by-side#documented">https://missingmiddlehousing.com/types/duplex-side-by-side#documented</a>, but is well within the range of the typical duplex specification listed on that website. Staff assume these duplexes would be one story tall, and thus construction costs are lower at \$170 per square foot than the cost of larger side-by-side duplexes.

**Large Side-by-Side Duplex**: The redevelopment of a single-family property into two units. These units are each 1,800 square feet in size, similar to the average size of townhomes developed in Montgomery County in the last 10 years. In addition, this is slightly larger than the recently built Railroad Cottages project in Falls Church, a much-publicized recent example of a cottage court, which are around 1,500 square feet each. Construction costs for this duplex were assumed to be \$185 per square foot, similar to the expected cost to construct a moderate number of townhome units.

**Moderate Density Townhomes**: The redevelopment of two or three adjacent single-family properties into six to nine 1,800 square foot townhome units. This size is similar to the idealized townhome layout listed for the townhome typology on the website <u>missingmiddlehousing.com/types/townhouse</u> which is 1,750 square feet. As a result of building additional units, Staff assumed a small discount in construction costs, estimated to be \$180 per square foot, as compared to the large side-by-side duplexes.

**High Density Townhomes**: The redevelopment of four or more adjacent single-family properties into 18 or more 1,500 square foot townhomes. The size of the units is reduced compared to the moderate density townhome scenario to ensure that the program would physically fit into the existing dimensions of typical single-family properties. The density per acre and size of these townhomes is comparable with some recent developments in Montgomery County, but does assume that the acquired properties are all highly developable with few environmental restrictions. Each unit is considered to be a separate structure and thus this typology is required to comply with the International Residential Code, a less rigorous building code than the International Building Code that applies to commercial development and buildings that contain three or more residential units. For this typology Staff assumed a discount in construction costs, estimated to be \$170 per square foot, compared to the moderate density townhomes due to the efficiencies in building multiple units.

**Stacked Triplex**: The redevelopment of two adjacent lots into nine total units in three separate buildings. This combination and re-subdivision of property reflects the process needed to convert the existing R-60 zoning with the minimum 60' lot width to a dimension more suitable to the triplex typology; The optimal width for a triplex property according to <u>missingmiddlehousing.com/types/triplex</u> is 40' wide. Staff assumed each unit would be 1,000 square feet, the same size as the units in the idealized example at the missingmiddlehousing.com website. This size is similar to the average unit size, 1,200 square feet, of the four triplex buildings built in the Washington, D.C region since 2000 according to real estate database CoStar. The Construction of multiple stacked units in a single building would need to conform to the International Building Code, and thus construction costs are more expensive per square foot than townhome and duplex scenarios. Staff assumed a construction cost per square foot of \$205.

**Sixplex**: The redevelopment of an existing lot into a six-unit apartment building. Staff assumed each unit would be 800 square feet, similar to the 765 square foot units depicted on <u>misingmiddlehousing.com/types/multiplex-medium</u> as the idealized layout for a medium-sized multiplex building. This size is smaller than the average unit size of the 24 six-unit buildings constructed in the

Washington D.C region since the year 2000, which was 1,300 square feet according to the real estate database CoStar. As with the triplex, this building would need to comply with the International Building Code and staff assumed a per square foot construction cost of \$205.

#### **Details of Typologies Evaluated**

The summary details of each typology evaluated and the development cost per unit excluding fees are in the following table. Entitlement fees were included in the model for each TAZ. The applicable transportation and school fees for development at the geometric center of each TAZ was assumed to apply to all properties within that TAZ. Entitlement fees vary based on different 'zones' of the county, and in some places are discounted to attract growth. Staff assumed that the triplex and sixplex buildings would be subject to the entitlement fees for the 'multifamily low-rise' category, while duplex and townhome buildings would be subject to the fees for the fees for the 'single family attached' category.

Typology	Density	Size Per Unit/	Construction Cost	Total
	(net/gross per	Gross Building	Per SF	Development
	acre) <sup>2</sup>	Area per existing		Cost per Unit
		7.5K SF lot		(excluding
				Entitlement Fees)
Small Sida by Sida	11 12/0 10		ć170	έρουν
Small Side-by-Side	11 - 12/9 - 10	1,000 SF / 2,000	\$170	ŞZZ5K
Duplex	(IN TAZ 622)	SF		
Large Side-by-Side	11 – 12 / 9 – 10	1,800 SF / 3,600	\$185	\$440K
Duplex	(in TAZ 622)	SF		
Moderate Density	17 – 18 / 20 – 21	1 800 SE / 5 400	\$180	\$430K
Townhomes	1, 10,20 21	1,000 51 7 5,400 SF	\$100	φ <del>-</del> σοκ
Townhomes		51		
High Density	24 – 26 / 20 – 21	1,500 SF / 6,750	\$170	\$340K
Townhomes		SF		
Stacked Triplex	24 – 26 / 20 – 21	1,000 SF / 4,500	\$205	\$270K
		SF		
Sixplex	35 – 36 / 27 – 28	800 SF / 4,800 SF	\$205	\$215K

#### Table 4 Details of Typologies Evaluated

#### Estimated Value of Newly Constructed Units

In order to estimate the residual value created by new development, Planning staff estimated the value a new duplex and townhome unit would generate in each TAZ. Staff reviewed all sales occurring from 2018 to 2020 of townhomes built since 2010 and accounted for the size of the units. Townhomes were

<sup>&</sup>lt;sup>2</sup> Net density is the density of units on just the developable area, or the area that is contained within privatelyowned parcels. Gross density is the density of units within an area including the public-right-of-way and other public properties. Public right-of-way accounts for approximately 20% of the land area in TAZ 622.

selected as the comparison because they are also attached-for-sale product. Based on this review, staff assigned an estimated value per square foot of new development to each TAZ outside of the agricultural reserve that contains single-family residential zoning. The value per square foot of new space and per 1,800 square foot townhome unit assigned each TAZ in Montgomery County is shown in the following map, figure 4. TAZ 606 and TAZ 622 were assumed to generate \$475 per square foot of new attached for-sale development, or \$855,000 for a 1,800 square foot townhome.



Figure 4: Estimated value of a new townhome in each TAZ in Montgomery County outside of the agricultural reserve that contains single family residential zoning

#### Model Results

Staff used the residual model described to evaluate the likelihood that builders would attempt to acquire property to develop the different typologies detailed. The model demonstrates that redevelopment of existing single-family homes requires generation of substantial new value due to the high cost of land and the high cost of construction. Less intense uses even when valued at the high level of new townhome product may not generate the new value needed to enable provision of many additional units.

Table 5 lists the results of the analysis for TAZ 622, which are similar to the results in TAZ 606. To enable a comparison of like-size projects, the results are harmonized at a hypothetical one-acre of development. The cost to assemble multiple parcels into one acre of land in TAZ 622 is approximately \$3.95 million. As noted in the description of each typology, not every development type requires an acre of land or acquisition of multiple properties. All numbers have been rounded to avoid providing a perception of false precision.

#### Table 5

Typology	Total Development Costs (1 acre)	Total Value Created (1 acre)	Residual Value	Ratio of Residual Value divided by Cost to Acquire 1 Acre	Feasibility of Potential Development
Small Side- by-Side Duplex	\$2.75 million	\$5.4 million	\$2.6 million	0.65	< 0.75
Large Side- by-Side Duplex	\$5.3 million	\$9.7 million	\$4.5 million	1.10	0.75 < X < 1.25
Moderate Density Townhomes	\$7.9 million	\$15.0 million	\$7.1 million	1.80	> 1.25
High Density Townhomes	\$9.0 million	\$17.8 million	\$8.8 million	2.20	> 1.25

Staff adjusted the model to calculate the rents required for the triplex and sixplex product to generate 75% of the average cost of land in TAZ 622. Table 5 shows the results. Again, to enable a comparison of a like-size projects, the results are harmonized at a hypothetical one-acre of development. All numbers have been rounded to avoid providing a perception of false precision.

#### Table 6

	Triplex	Sixplex
Cost to Acquire 1 acre	\$3.0 million	\$3.0 million
Total Development Cost	\$7.0 million	\$8.2 million
Total Value Development must Generate	\$10.0 million	\$11.1 million
Value Each Unit must Generate	\$400K	\$309K

Net annual Profit Required per Unit <sup>3</sup>	\$22.0K	\$17.0K
Gross Annual Profit required per Unit <sup>4</sup>	\$33.8K	\$26.1K
Rent per SF per Month	\$2.82	\$2.72
Required Monthly Rent per Unit	\$2,800	\$2,200

The results reported here are required to generate residual value equal to 75% of the average cost of attaining land in TAZ 622, the lower bound of where development efforts are considered likely. Currently CoStar reports that the 10 mid-rise developments built since the year 2000 in Downtown Silver Spring<sup>5</sup> achieved a high of \$2.50 per square foot in the second quarter of 2018, and currently are asking around \$2.30 per square foot. CoStar reports that the eight high-rise developments achieved a similar high of \$2.50 per square foot in the second quarter of 2019, and currently achieve rents of around \$2.30 per square foot. The most expensive high-rise in downtown Silver Spring, 8250 Georgia Avenue, achieves rents of \$2.82 per square foot and offers a more central location and more in-building amenities than the hypothetical triplex and sixplex units. These data indicate that the market for triplex and sixplex units is unlikely to support the rents required to make efforts to build this type of product in the neighborhood adjacent to Downtown Silver Spring likely to succeed at this time.

#### Income Required to Afford the Unit Typologies Evaluated

The analysis did not focus strictly on the provision of units that are dedicated affordable, so to understand the affordability of the new development Planning staff calculated the amount households would need to earn to spend less than 30% of income on housing. This analysis assumes the payment of a 30-year fixed-rate mortgage at 4% interest for the for-sale products. This analysis did not include the costs of taxes, insurance, utilities, and other costs that might be part of a more comprehensive understanding of total housing cost. Thus, the estimates in Table 7 may be lower than the total amount households must earn to spend less than 30% of income on housing.

#### Table 7

Typology	Value of Unit/Monthly	Annual	Required Annual
	Rent	Mortgage/Rent	Income
Custom Home	\$1.05 million	\$60K	\$200K - \$201K

<sup>&</sup>lt;sup>3</sup> The conversion of total value to the net annual profit is done using an assumed 5.5% capitalization rate. For an explanation of capitalization rates, see footnote 1 under Table 3

<sup>&</sup>lt;sup>4</sup> Gross rent includes portion of the rent paid by tenants that goes to operation of the property, insurance, taxes, and other fees. For formula used to convert net profit to gross profit, see step 5 in Table 3

<sup>&</sup>lt;sup>5</sup> Dedicated affordable product was filtered from this search to ensure comparison of like-product.

Small Side-by-Side Duplex	\$475K	\$27K	\$90K - \$95K
Large Side-by-Side Duplex	\$855K	\$50K	\$160 - \$165K
Moderate Density Townhomes	\$855K	\$50K	\$160 - \$165K
High Density Townhomes	\$712K	\$40K	\$135 - \$140K
Stacked Triplex	\$2,800 per month in rent	\$35K	\$110K - \$115K
Sixplex	\$2,300 per month in rent	\$28K	\$85K - \$90K

#### Conclusion

The market study made the following significant findings about redevelopment of existing single-family properties into Missing Middle housing in the Adjacent Silver Spring neighborhoods:

- Due to the high cost of land and high cost of construction new Missing Middle housing would be expensive to live in. However, it would be far smaller per unit and much less expensive than the new custom homes built near downtown Silver Spring in recent years.
- Enticing developers to attempt to build Missing Middle housing would require significant changes to the entitlement and subdivision process to reduce their discretionary nature. Builders strongly feel that any desired typology must be allowed by-right if it is to be an attractive alternative to building a new custom home.
- Allowing Missing Middle typologies to physically fit on the existing properties in the Adjacent Silver Spring neighborhoods would require substantial changes to the existing development standards.
- Feasible redevelopment of habitable single-family homes in the Adjacent Silver Spring neighborhoods requires generating significant new value which at existing market values for the typologies evaluated requires a substantial increase in density.
- The community faces a central decision about its future:
  - If no action is taken, over time the existing housing stock will be slowly transformed byright under the existing zoning code and development standards into larger custom homes that are less affordable. This will likely reduce the diversity that the Silver Spring community values and increase the socioeconomic gap between the Adjacent Communities and downtown.
  - Enabling the private sector to create comparatively less expensive new housing options that are accessible to a more diverse segment of the population requires substantial changes to the zoning code, subdivision process, and entitlement process. However, this may more quickly and dramatically change the neighborhood's physical character.



## Missing Middle Market Study

Montgomery Planning

Winter 2021

# 

## Missing Middle Study Purpose

- Building upon the 2018 Missing Middle Study, the Missing Middle Market Study is a precursor to the visioning phase of the Silver Spring Downtown & Adjacent Communities Plan.
- Comprised of analysis of zoning, entitlement, and market, as well as interviews with industry professionals, the Missing Middle Market Study aims to provide background knowledge and serve as the starting point for the subsequent visioning exercises.

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## Missing Middle Market Study

- Housing Stock Analysis
- Interviews
- Entitlement Analysis
- Missing Middle and Affordability
- Market Analysis

## Definitions



## Definitions

- **Missing Middle Housing**: "Missing Middle" housing refers building types that are compatible in scale, form and construction with single-family homes, but include multiple housing units (example: duplex, triplex, and small multifamily buildings).
- **Single-Family Zones:** In Montgomery County, the Zoning Code refers to single-family zones as Residential Detached Zones. These zones include the RE-2, RE-2C, RE-1, R-200, R-90, R-60 and R-40 zones.
  - The development standards of these zones vary (i.e. usable area, setbacks, lot coverage), but the predominant use in the Residential Detached Zones is a single-family detached dwelling unit.
- **Subdivision**: the act of dividing land into separate saleable parcels , usually via a plat.

## Definitions

- Entitlement Process: The process through which a real estate developer or landowner seeks the right to develop (or redevelop) property with government approvals for zoning, density, design, use, and occupancy permits. Upon securing all necessary entitlements from the applicable government(s), the real estate developer is entitled to build what was proposed and approved.
- **By-Right:** A streamlined approval process in which projects that comply with the zoning standards forego discretionary review by the planning department and may proceed straight to securing a building permit and then construction.
- **Attainable:** Unsubsidized market housing that is appropriate and suitable for the households that live here. Implicit in this idea of attainability is the idea that a range of housing options (type, size, tenure, cost) exists in the local market.

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## Key Takeaways

- There are significant non-zoning barriers to providing missing middle housing in the single family "R Zones"
- Enabling missing middle housing to compete with rebuilt single-family homes would require significant reduction in the level of discretion of and the duration of the entitlement and subdivision review process
- Missing Middle housing would be more affordable compared to rebuilt single family homes, due to the smaller size and lot area.
- Making redevelopment of habitable single-family homes in 'Adjacent Silver Spring' broadly feasible requires a substantial increase in the amount/intensity of existing building area.

## **The Central Decision**

- If no action is taken, over time the existing housing stock will be slowly transformed by-right into larger custom homes that are less affordable. This will likely reduce the diversity that the Silver Spring community values and will increase the socioeconomic gap between the adjacent communities and downtown.
- Enabling the private sector to create comparatively less expensive new housing options that are accessible to a more diverse segment of the population requires substantial changes to the zoning code, subdivision process, and entitlement process.
  - However, this may more quickly and dramatically change the neighborhood's physical character.
  - One could also argue that custom homes are also currently changing the neighborhood's physical character dramatically.

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## How Bold Should this Plan be?

- Zoning change with no change to development standards and the entitlement process that produces few additional units because redevelopment cannot fit within the existing development standards
- Limited development of additional ADUs tucked into existing properties that has modest impact on the supply of housing
- Zoning changes and adjustments to the entitlement process to encourage surgical provision of some missing middle forms
- Zoning and process change that enables redevelopment of the neighborhood with the full range of missing middle



















## Teardown/Rebuilds Zip Code 20910

- Demolitions permits for single-family detached units has been relatively rare since 2000 as compared to western parts of the county, but there are signs of the market picking up in recent years.
- 61 demolition permits for single-family detached units in zip code 20910 since 2000.
  - Alteration permits, which is a permit for partial demolitions, were not included in this analysis. There may be sizeable alternations/additions that may increase this number.







## Stakeholders Interviewed

- Market-Rate Housing Developers
- Not-for-Profit Housing Developers
- Custom Home Builders
- Real Estate Brokers
- Architects

## Interview Findings

- Desired missing middle typologies must be allowed by-right, including the subdivision process, or developers will default to constructing the profitable new custom homes that *are* allowed by-right.
- Market-rate developers are most interested in townhomes (including stacked flats and 2 over 2's), the typology that now dominates middle levels of density.
- Affordable housing developers will pursue (limited) amounts of missing middle where allowable in order to maximize unit counts.
- The best opportunity currently for missing middle is mid-size sites (4- to 5-acres) in residential areas with obsolete uses, like unused schools or churches.
- Attracting private sector interest in the redevelopment of existing, habitable, detached single-family homes to other building typologies requires a meaningful increase in density to generate sufficient profits.

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## Why do we need zoning changes?

- Many of the existing Missing Middle housing structures could not be built under the current standards in single-family zones.
- Many of the single-family zones in Montgomery County do allow for some types of Missing Middle housing, namely duplexes and townhouses, but there are additional requirements that functionally prevent redevelopment of existing properties into Missing Middle in the single-family zones. These additional requirements include:
  - Process
  - Density
  - Development Standards
  - Affordable Housing Requirements

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## Process

- By-right entitlement: redevelopment with missing middle projects are too small to interest many developers if there is discretionary review
- Non-discretionary and quick subdivision process
  - Subdivision is necessary as developers desire to sell units fee-simple: Small site rentals are not widely realistic, and the process to create a condo regime is cumbersome

## Density

- Even at their densest in optional method, many of the singlefamily zones are significantly less dense than most of the Missing Middle housing typologies.
- Maximum Units Per Acre & Minimum Lot Size
  - Townhomes built countywide since 2011 average 1,800 SF gross building area on a 1,600 SF lot: 27 units per acre (not including common areas like roadways)
  - Densest single-family zones in Montgomery County tend to be 5K-6K SF lots: 7-9 units per acre (not including public land/roadways)

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## Development Standards

- Usable Area Requirements (current usable area requirements too large for infill development)
- Height (current 30-35' heights may not be sufficient per interviews with developers)
- Lot coverage (35% coverage may not be sufficient)
- Side Setbacks (0' needed)
- Parking (little space on existing properties to accommodate additional parking)

## Affordable Housing

- The Montgomery County Zoning Ordinance requires optional method projects to fulfill an affordable housing requirement of <u>Moderately</u> <u>Priced Dwelling Units</u>.
  - MPDUs are the county's inclusionary zoning program, which requires 12.5%-15% of all new units be set aside as affordable to households in developments 20 units or more.
- Projects are required to provide MPDUs in optional method projects even if under 20 units.
- This added cost to small projects will often make it too costly, or infeasible to build.

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## Attainable Housing

- Missing Middle housing is **not** income-restricted affordable housing.
- Most Missing Middle housing is market-rate housing that will be more affordable than the typical new detached single-family home due to its smaller gross floor area and lot area.
- Missing Middle housing will not result in any MPDUs unless project produces 20 units or more.

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## Yes, New Missing Middle May Be More Expensive than Existing Homes

#### **CHELSEA HEIGHTS**

- Average Sales Price (2015-2021): \$800,000
- Average Parcel Size: 1,000 SF
- Average Gross Floor Area: 1,500S-2500sf
- Year Built: 2015-2016



#### **EXISTING HOMES\***

- Average Sales Price (2015-2021): \$600,000
- Average Parcel Size: 8,000sf
- Average Gross Floor Area: 1,600SF
- Year Built: 1950s-1960s



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## But, New Missing Middle is Less Expensive Than Custom Rebuilt Homes

#### **CHELSEA HEIGHTS**

- Average Sales Price (2015-2021): \$800,000
- Average Parcel Size: 1,055 SF
- Average Gross Floor Area: 1,500S-2500sf



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#### **CUSTOM HOMES\***

- Average Sales Price (2015-2021): \$1,000,000
- Average Parcel Size: 8,000sf
- Average Gross Floor Area: 3,000SF



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## Objective: Where Could the Private Sector Realistically Redevelop <u>Existing</u> Homes



## The Residual Value Model

If the *value of a new building* minus the *cost of creating that building* (construction, soft costs/financing, fees, developer fee) greatly exceeds the *cost of acquiring land* (where such development is legal), then attempts at development are likely.

'Residual' is the delta between asset value and cost of development.

#### Formula

Value of new building – Cost of development >> Cost of Land = Development Efforts Likely

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## The Residual Value Model

Redevelopment is not Possible: Residual Value is negative (before purchasing a single-family home)

Redevelopment is not likely: Residual value is positive but less than 75% of the value of an average home

Redevelopment has potential with the right property: Residual value is between 76% and 125% of the value of an average home

Efforts to redevelop are likely: Residual Value is greater than 125% of the value of an average home

Caveat: Property is not a commodity and many factors influence availability and price. It is possible that builders may find developable parcels at low costs even if a market-wide analysis indicates that development is not likely. Conversely, It is possible that developers are unable to secure land even if the residual value far exceeds land values.

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## Calculation of Feasibility



## Model Data Sources/ Elements

Category	Data Source	Data Metric
Development Costs	Interviews with developers and builders	<ul> <li>Cost per SF of Construction</li> <li>Soft Costs</li> <li>Financing Costs</li> <li>Fees</li> </ul>
Asset Value	Comparable Sales (SDAT) Staff estimation	<ul> <li>Sale value per SF of gross building area of townhomes built since 2011</li> <li>All sales since 2018</li> </ul>
Land Value of Single-Family Homes	Sales Data (SDAT)	<ul> <li>Sales value per acre of single-family homes sold since 2018</li> </ul>
Geography		<ul> <li>2009 Transportation Analysis Zones (TAZ)</li> </ul>
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## Focus Geography: TAZ 622

- Number of Single-Family Detached Properties: 512
- Average Parcel size: 7,650 SF
- Density of Single-Family Homes: 5-6/acre (net), 4-5/acre (gross)
- Average value of Single-Family Homes sold since 2018: \$655K
- Average Price to Acquire an Acre of Single-Family Homes Sold Since 2018: \$3.95 million

\* TAZ 606 has sufficiently similar home sizes and prices as TAZ 622 that conclusions drawn from analysis of TAZ 622 are valid for TAZ 606 as well.



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## **Redevelopment Scenarios Evaluated**

	Units Created out of an Existing 7.5K Square Foot	
Name	Lot	Scenario in TAZ 622
Small Side-by-Side Duplex	2	Development of two 1,000 SF units on a single lot
Large Side-by-Side Duplex	2	Development of two 1,800 SF units on a single lot
Moderate Density Townhomes	3	Acquisition of two or three adjacent lots and development of 6 or 9 townhomes
High Density Townhomes	4.5	Acquisition of four (or more) adjacent lots and development of 18 (or more) townhomes
Stacked Triplex	4.5	Acquisition of 2 (or more) adjacent lots and development of 9 (or more) stacked units
Sixplex	6	Redevelopment of an existing lot into a six-unit apartment building
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## **Redevelopment Scenarios Evaluated**

Typology	Density (Net/Gross per acre)	Size per unit/ Gross Building Area per Existing 7 5K SE Lot	Construction Cost per SF	Total Development Cost per Unit (ex. Entitlement fees)
Small Side-by-Side Duplex	11 – 12 / 9 – 10 (in TAZ 622)	1,000 SF / 2,000 SF	\$170	\$225K
Large Side-by-Side Duplex	11 – 12 / 9 – 10 (in TAZ 622)	1,800 SF / 3,600 SF	\$185	\$440K
Moderate Density Townhomes	17 – 18 / 20 – 21	1,800 SF/ 5,400 SF	\$180	\$430K
High Density Townhomes	24 - 26 / 20 - 21	1,500 SF/ 6,750 SF	\$170	\$340K
Stacked Triplex	24 - 26 / 20 - 21	1,000 SF/4,500 SF	\$205	\$270K
Sixplex	35 – 36 / 27 – 28	800 SF/ 4,800 SF	\$205	\$215K

Net Density: Total number of units divided by the developable land (parcels only, not including ROW or public land) Gross Density: Total number of units divided by the total land area (includes ROW and public land which comprise approximately 20% of TAZ 622)

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# Asset Value: Estimated Value per square foot of New Attached For-Sale Units



#### Property Value: Single Family Home Value per Acre



#### Results: Feasibility of Small Duplex Redevelopment (Double Existing Density)



## Results: Feasibility of Small Duplex Redevelopment with no Entitlement Fees



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## Results: Feasibility of Large Duplex Redevelopment (Double Existing Density)



#### Results: Feasibility of Moderate Density Townhome Redevelopment



#### **Results: Feasibility of High Density Townhome Redevelopment**



## Triplex & Sixplex Feasibility Approach – **Calculation of Required Rent**

With no comparable modern triplex or sixplex product in Montgomery County, estimation of the value of a new triplex or sixples is not possible. Instead, the analysis calculates the required rent to attract development and compares this to existing rental product nearby.

1) Target Value Creation:

2) Total Cost:

#### 3) Calculate Required Value Per Unit

4) Convert Value Per Unit into Net Annual Rent

Annual Rent

5) Calculate gross 6) Convert Gross

**Rent Into Rent**per-SF-per-Month

Multiply land cost by desired Land Bank

Development Cost + Entitlement Fees + Target Land cost

Multiply by a 5.5% Capitalization Rate costs and taxes

Adjust for operation

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#### Triplex Required Rent to Generate 75% of Average Land Value



#### Sixplex Required Rent to Generate 75% of Average Land Value



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# Is a Sixplex or Triplex Likely to Achieve the Required Rents in TAZ 622?

- Triplex: What rents nearby for \$2.82 per SF per month?
- Sixplex: What rents nearby for \$2.72 per SF per month?
- Only one property in downtown Silver Spring rents for more than \$2.70 per SF per month
  - 2850 Georgia Avenue
  - 338-unit high-rise apartment building built in 2020
  - Average unit size: 723 SF
  - Asking rent: \$2.81 per SF per month
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Photo source: CoStar

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## Summary of Findings for TAZ 622

Typology	Total Development Costs (1 acre)	Total Value Created (1 acre)	Residual Value	Ratio of Residual Value divided by Cost to Acquire 1 Acre*	Feasibility of Potential Development
Small Duplex	\$2.75M	\$5.4M	\$2.6M	0.65	0.65 < 0.75
Large Duplex	\$5.3M	\$9.7M	\$4.5M	1.10	0.75 < 1.10 < 1.25
Moderate Density Townhomes	\$7.9M	\$15.0M	\$7.1M	1.80	1.80 > 1.25
High Density Townhomes	\$9.0M	\$17.8M	\$8.8M	2.20	2.20 > 1.25
Stacked Triplex					
Sixplex					

\* Estimated cost to acquire one-acre of single-family detached properties in TAZ 622: \$3.95 million

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# What Income is Required to Afford the Units Analyzed for TAZ 622?

Name	Purchase Value Per Unit	Annual Mortgage/Rent*	Required Income*
Custom Home	\$1.05M	\$60K	\$200K - \$210K
Small Duplex	\$475K	\$27K	\$90K - \$95K
Large Duplex	\$855K	\$50K	\$160K - \$165K
Moderate Density Townhomes	\$855K	\$50K	\$160K-\$165K
High Density Townhomes	\$712K	\$40K	\$135K - \$140K
Stacked Triplex*	\$2,800 per month (rent)	\$35K	\$110K-\$115K
Sixplex*	\$2,330 per month Rent	\$28K	\$85K - \$90K

\* Income spent on housing assumed to be 30% of total income

Mortgage assumed to be a 30-year fixed rate loan at 4% interest. Calculation does not include the cost of tax and escrow payments Rents set to generates residual value equal to 75% of the average cost of land

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