Missing Middle Market Study
INTRODUCTION
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.
Missing Middle Market Study

• Housing Stock Analysis
• Interviews
• Entitlement Analysis
• Missing Middle and Affordability
• Market Analysis
Definitions

Photo source: Opticos Design
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.
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.
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
In the early 2000s, housing production averaged 3,500 permits a year, a number that has declined to around 2,500 in the 2010s, below what the county needs to achieve its COG housing targets.
Almost half of renters and one of five homeowners in the Plan Area are cost-burdened—spending more than 30% of their income on rent or housing costs.
“Missing Middle” already exists in the Plan Area, namely in 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 compared to downtown Silver Spring, rents are still higher in downtown Silver Spring.

2000 - 2019 Y/Y Annualized Change

- Montgomery County: 1.8%
- Downtown Silver Spring: 1.5%

Source: CoStar

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Winter 2021
The average price for a detached home in Silver Spring exceeded $700,000 for the first time in 2020, the average attached home sold price has grown at a lower rate than detached units.
While the median price for a home in zip code 20910 was $520,000 (includes both attached and detached) – 40% of homes sold for more than $600,000.

Source: MRIS

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Winter 2021
Days on Market
Zip Code 20910

57% 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.

Source: MRIS
Average Gross Floor Area of Single-Family Homes by Year Built
Zip Code 20910

Average Gross Floor Area has increased by 77 percent compared to the average home constructed before 1959.

- Before 1959: 1,597
- 1960 - 1979: 1,779
- 1980 - 1999: 2,006
- 2000 - 2020: 2,829

Source: SDAT
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.
Gross Floor Area Before and After Teardown/Rebuild
Zip Code 20910
2015-2020

GFA Before Teardown
1,191

Gross Floor Area increased by an average of 155% after the teardown was rebuilt

GFA After Teardown
3,030
Average Sales Price Before and After Teardown/Rebuild
Zip Code 20910
2015-2020

Sales Price Before Teardown
$500,827

Sales price increased by an average of 114% post teardown

Sales Price After Teardown
$1,073,193

Source: SDAT

Silver Spring Downtown and Adjacent Communities Plan
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.
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
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 single-family 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)
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 Moderately Priced Dwelling Units.
  • 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.
MISSING MIDDLE AND AFFORDABILITY
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.
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

*Zip Code 20910
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

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

* Zip Code 20910
MARKET ANALYSIS
Objective: Where Could the Private Sector Realistically Redevelop *Existing* Homes

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Winter 2021
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
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.

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
Calculation of Feasibility

1) Define Geography
   ▪ Developer Interviews
   ▪ Features typical to asset being evaluated
   ▪ Staff Knowledge

2) Identify Asset Cost
   ▪ Number of comparable sales
   ▪ Size/Features of comparable sales
   ▪ Value of comparable sales
   ▪ Estimation

3) Identify Asset Values

4) Identify Target Land Costs
   ▪ Number of target parcel sales
   ▪ Value of target parcel sales

5) Generate Results
## Model Data Sources/ Elements

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

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

<table>
<thead>
<tr>
<th>Typology</th>
<th>Density (Net/Gross per acre)</th>
<th>Size per unit/ Gross Building Area per Existing 7.5K SF Lot</th>
<th>Construction Cost per SF</th>
<th>Total Development Cost per Unit (ex. Entitlement fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Side-by-Side Duplex</td>
<td>11 – 12 / 9 – 10 (in TAZ 622)</td>
<td>1,000 SF / 2,000 SF</td>
<td>$170</td>
<td>$225K</td>
</tr>
<tr>
<td>Large Side-by-Side Duplex</td>
<td>11 – 12 / 9 – 10 (in TAZ 622)</td>
<td>1,800 SF / 3,600 SF</td>
<td>$185</td>
<td>$440K</td>
</tr>
<tr>
<td>Moderate Density Townhomes</td>
<td>17 – 18 / 20 – 21</td>
<td>1,800 SF / 5,400 SF</td>
<td>$180</td>
<td>$430K</td>
</tr>
<tr>
<td>High Density Townhomes</td>
<td>24 – 26 / 20 – 21</td>
<td>1,500 SF / 6,750 SF</td>
<td>$170</td>
<td>$340K</td>
</tr>
<tr>
<td>Stacked Triplex</td>
<td>24 – 26 / 20 – 21</td>
<td>1,000 SF / 4,500 SF</td>
<td>$205</td>
<td>$270K</td>
</tr>
<tr>
<td>Sixplex</td>
<td>35 – 36 / 27 – 28</td>
<td>800 SF / 4,800 SF</td>
<td>$205</td>
<td>$215K</td>
</tr>
</tbody>
</table>

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

- Highways
- Metro Red Line
- Metro Purple Line
- Agricultural Reserve
- Rockville & Gaithersburg
- TAZ 2009 Zones

Estimated Unit Value Per SF (1,800 SF)
- $175/SF ($315K)
- $200/SF ($360K)
- $225/SF ($405K)
- $250/SF ($450K)
- $300/SF ($540K)
- $350/SF ($630K)
- $400/SF ($720K)
- $425/SF ($765K)
- $475/SF ($855K)
- $550/SF ($990K)
- $600/SF ($1.08M)

TAZ containing no R60/90/200 not included in analysis

0 2.5 5 10 Miles

Winter 2021 45

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Property Value:
Single Family Home Value per Acre

* Value is the average price and the average parcel size of all single-family homes sold in each TAZ since 2018. Those averages are then converted to value per acre.
Results: Feasibility of Small Duplex Redevelopment (Double Existing Density)
Results: Feasibility of Small Duplex Redevelopment with no Entitlement Fees
Results: Feasibility of Large Duplex Redevelopment (Double Existing Density)
Results: Feasibility of Moderate Density Townhome Redevelopment

- Highways
- Metro Red Line
- Metro Purple Line
- Agricultural Reserve
- Rockville & Gaithersburg
- TAZ 2009 Zones
- Redevelopment is Not Possible
- Redevelopment is Not Likely
- Redevelopment has Some Potential
- Redevelopment Efforts are Likely

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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:

   Multiply land cost by desired Land Bank (75%)

2) Total Cost:

   Development Cost + Entitlement Fees + Target Land cost

3) Calculate Required Value Per Unit

4) Convert Value Per Unit into Net Annual Rent

   Multiply by a 5.5% Capitalization Rate

5) Calculate Gross Annual Rent

   Adjust for operation costs and taxes

6) Convert Gross Rent Into Rent-per-SF-per-Month
Triplex Required Rent to Generate 75% of Average Land Value
Sixplex Required Rent to Generate 75% of Average Land Value
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

*Photo source: CoStar*
## Summary of Findings for TAZ 622

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

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

Silver Spring Downtown and Adjacent Communities Plan
What Income is Required to Afford the Units Analyzed for TAZ 622?

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

* 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.
CONCLUSION AND DISCUSSION
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CONTACT

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