Anatomy of a Housing Shortage:
Sources of Housing Demand and Likely Supply in
Montgomery County

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What is a Housing Forecast?

- Employment – driven demand
- Demographic – driven demand
- Capacity and Pipeline
- Development Cycle

Housing Demand

Supply
Housing Demand in Montgomery: 2015 - 2040
Montgomery County 2015-2040

+104,030 Net New Jobs (+21%)
+170,360 Positions Opened by Retirement
+274,390 Total Positions

Source: IHS Economics; The Stephen S. Fuller Institute at the Schar School, GMU
Job Growth → Households

Total:
+2.14M Jobs →
+1.13M HHs

Montgomery:
+274,390 Jobs →
+139,300 HHs

Source: The Stephen S. Fuller Institute at the Schar School, GMU
Work in the Region, Live Outside

Total: +2.14M Jobs → +1.13M HHs

Montgomery: +274,390 Jobs → +139,300 HHs

215,800 commuter HHs w/ a main job in the region

Minus 10,500 Commuter HHs w/ a main job in Montgomery = 128,800 HHs

Source: The Stephen S. Fuller Institute at the Schar School, GMU
Intra-Regional Commuting Profiles → Demand from New Worker Households

- Have Job Outside Montgomery, Live Inside: +35,500 Households
- Live & Work in Montgomery: +82,200 Households
- Have Job Inside Montgomery, Live Outside (in region): +46,600 Households

Source: The Stephen S. Fuller Institute at the Schar School, GMU
Demand from “Non-Working” Households, Montgomery County

- Retirees
- Students
- Interns, Volunteers
- Some Self-Employed

Source: U.S. Census Bureau (American Community Survey); The Stephen S. Fuller Institute at the Schar School, GMU
## Housing Demand
### Montgomery County, 2040

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015-2040 Increase</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worker Households</td>
<td>294,000</td>
<td>117,700</td>
<td>411,700</td>
</tr>
<tr>
<td>Non-Worker Households</td>
<td>77,400</td>
<td>38,400</td>
<td>115,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>371,400</td>
<td>156,100</td>
<td>527,500</td>
</tr>
</tbody>
</table>

Source: The Stephen S. Fuller Institute at the Schar School, GMU
Housing Demand
Montgomery County, 2040

- New Worker Households: 117,700
- Existing Worker Households: 294,000
- Non-Worker Households: 115,800

Source: Metropolitan Washington Council of Governments; The Stephen S. Fuller Institute at the Schar School, GMU
Housing Demand and Supply
Montgomery County, 2040

New Worker Households: 115,800
Existing Worker Households: 294,000
Non-Worker Households: 117,700
Potential Unmet Demand: 76,600
MWCOG 9.0 Forecast: 450,900

Source: Metropolitan Washington Council of Governments; The Stephen S. Fuller Institute at the Schar School, GMU
Historic Housing Supply vs. Likely Demand

- **Permits**: 3,200 per year
- **MWCOG 2015-2040**: 3,200 per year
- **GMU 2015-2040**: 6,200 per year

Sources: U.S. Census Bureau, The Stephen S. Fuller Institute at the Schar School, GMU
What Does this Difference Mean?
Housing Forecast

- Employment-driven demand
- Demographic-driven demand
- Capacity and Pipeline
- Development Cycle

Housing Demand

Supply
Housing Demand: Changes to Key Assumptions?

- Local and Regional Employment Growth
- Commuting Patterns
- Housing Preferences
- Other assumptions: age, wages, and household composition of future workers; in- and out-migration rates; retirement rates
What Is Unmet Demand?
Median Gross Rent
Montgomery County

Sources: U.S. Census Bureau (American Community Survey and Decennial Census); The Stephen S. Fuller Institute at the Schar School, GMU

+81.2%
Average Sales Price
Existing Homes, Montgomery County

Sources: Metropolitan Regional Information Systems (MRIS); The Stephen S. Fuller Institute at the Schar School, GMU
Montgomery County Workers by Commute Time
Job located in Montgomery County

Sources: U.S. Census Bureau (American Community Survey); The Stephen S. Fuller Institute at the Schar School, GMU
Questions?

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Methodology Overview
## How do GMU’s forecasts differ?

<table>
<thead>
<tr>
<th></th>
<th>2013 Model</th>
<th>2015 Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source of Demand:</strong></td>
<td>- Net new payroll jobs</td>
<td>- Net new payroll jobs;</td>
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<tr>
<td></td>
<td></td>
<td>- Jobs vacated by retirees;</td>
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<tr>
<td></td>
<td></td>
<td>- Existing workforce;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Households w/out a payroll job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(retirees, students and self-employment)</td>
</tr>
<tr>
<td><strong>Supply Constraint?</strong></td>
<td>No</td>
<td>Yes, MWCOG 8.4 Forecasts</td>
</tr>
<tr>
<td><strong>Forecast Period:</strong></td>
<td>2012 - 2032</td>
<td>2013 - 2023</td>
</tr>
<tr>
<td><strong>Main Research Question:</strong></td>
<td>How much more housing should the region build to meet demand?</td>
<td>What investments need to be made to house the future households living in the region?</td>
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</tbody>
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Employment-Driven Portion of Housing Demand
Demographic-Driven Portion of Housing Demand