

Housing the Region's Future Workforce Policy Challenges for Local Jurisdictions

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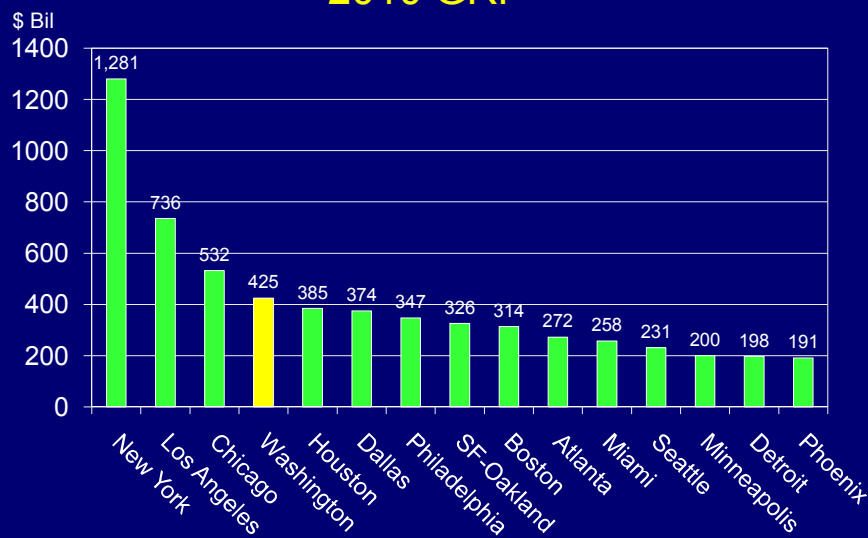


Housing the Region's Future Workforce Research Summary

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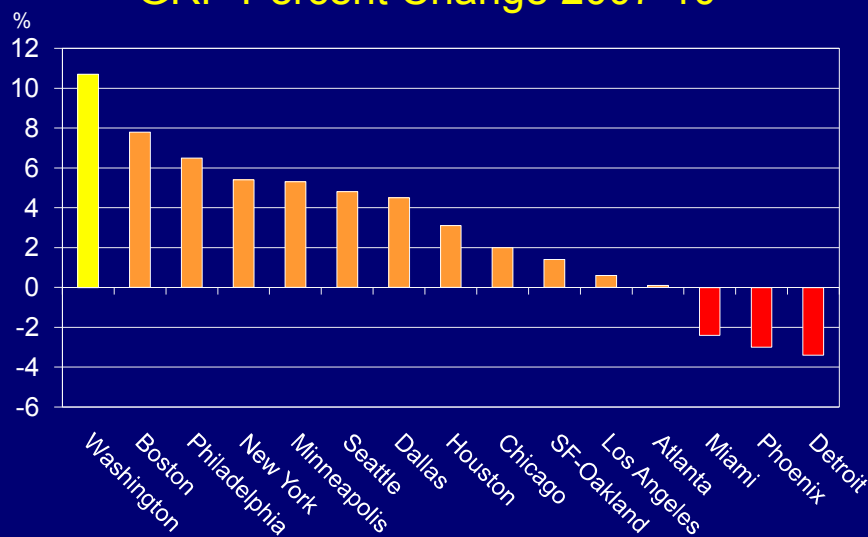
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15 Largest Metro Areas 2010 GRP



Source: BEA, GMU Center for Regional Analysis

15 Largest Metro Areas GRP Percent Change 2007-10



Source: BEA, GMU Center for Regional Analysis

Washington Metropolitan Area Growth Potential Summary: 2010 – 2030

(jobs and households in thousands)

Indicator	2010	2030	Change
GRP Growth	\$425 b	\$774.8	82.3%
Net Job Growth	2,760.6	3,814.5	1,053.9/ 38.2%
Replacement Job Growth		1,802.8	47.6%
HH Growth	2,067.8	2,623.6	555.8/ 26.9%

Housing Research Questions

- How much housing will be required to house the region's future workforce?
- What types of housing, tenure patterns and price ranges will this future workforce demand?
- How will these housing requirements vary by jurisdiction within the Region?
- What are the housing cost effects of the regulatory and infrastructure requirements and fees imposed by local governments?

Forecasts of Housing Needed to Support Regional Economic Growth

Net New Jobs by Sub-state Region 2010-2030

	Net New Jobs	Percent Change
District of Columbia	152,130	20.8
Suburban Maryland	316,525	32.9
Northern Virginia	578,480	54.9
Washington Region	1,053,855	38.2

Source: IHS Global Insight, GMU Center for Regional Analysis

Housing the Region's Future Workforce

- How much housing is needed to accommodate new workers?
- Where should this housing be located?
- What types of housing units will be needed?
- What prices and rents will new workers be able to afford?

Housing Demand by Sub-state Region 2010-2030

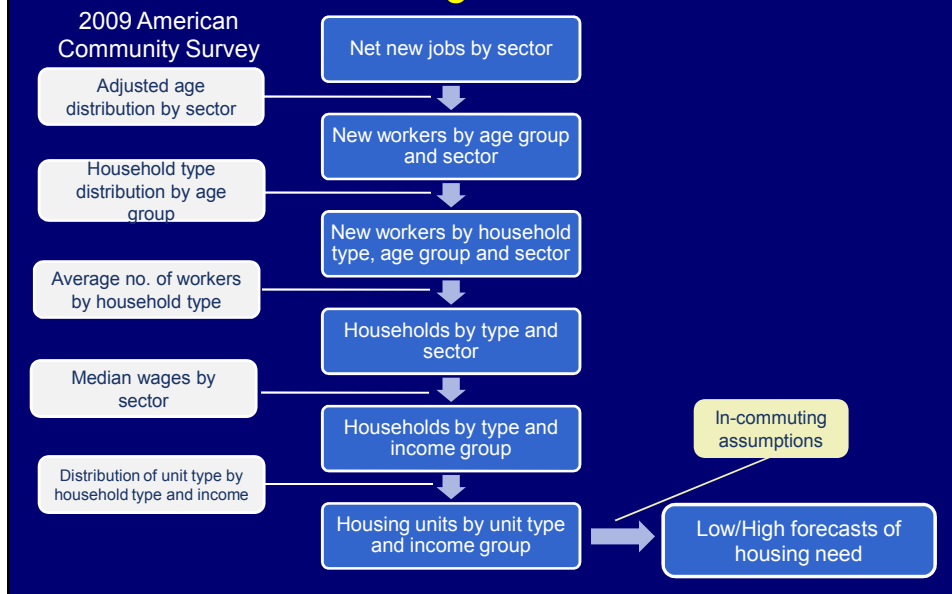
	High Estimates	Low Estimates
District of Columbia	122,613	36,784
Suburban Maryland	211,612	133,731
Northern Virginia	392,817	174,191
Washington Region	731,457	348,282

Note: The high estimates assume all workers are housed in the jurisdiction in which they work. The low estimates assume that new jobs have the same in-commuting rates as current jobs.

Housing Demand by Jurisdiction 2010-2030

Jurisdiction	High	Low	Jurisdiction	High	Low
District of Columbia	122,613	36,784	Alexandria	30,922	6,494
			Arlington	34,342	8,929
Calvert	9,764	8,007	Clarke	744	431
Charles	13,608	8,029	Fairfax	110,947	52,145
Frederick	27,336	19,956	Fauquier	6,870	4,740
Montgomery	108,522	69,454	Loudoun	98,171	51,049
Prince George's	52,382	28,286	Prince William	55,065	30,286
Suburban Maryland	211,612	133,731	Spotsylvania	30,375	13,061
			Stafford	22,680	11,793
			Warren	2,702	1,756
			Northern Virginia	392,817	174,191
			Jefferson Co WV	4,414	3,576

Methodology for Forecasting Housing Need

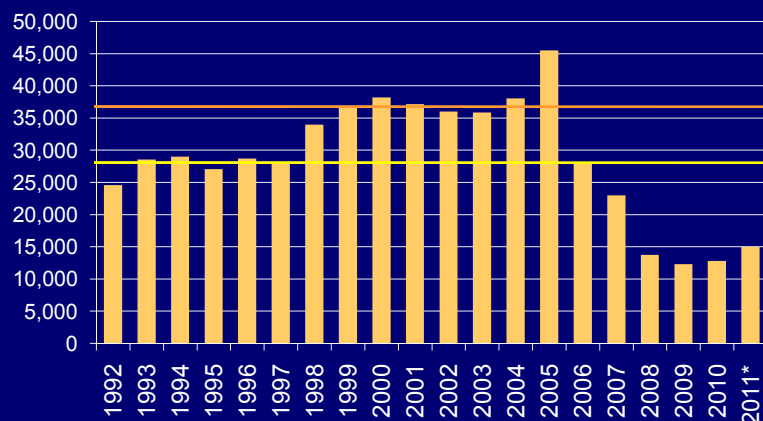


Housing Forecasts by Sub-state Region 2010-2030

	High Estimates	MWCOG Round 8	Low Estimates
District of Columbia	122,613	52,045	36,784
Suburban Maryland	211,612	186,916	133,731
Northern Virginia	392,817	304,209	174,191
Washington Region	731,457	555,818	348,282

Note: The high estimates assume all workers are housed in the jurisdiction in which they work.
The low estimates assume that new jobs have the same in-commuting rates as current jobs.

Building Permits Washington Region 1992-2010



Source: US Census Bureau
*2011 annualized based on data through June,

1992-2011 annual average = 28,600
2011-2030 needed = 38,500

Demand by Housing Type and Sub-state Region 2010-2030

	Total	Single-Family	Multi-Family
District of Columbia	122,613	9,886	112,726
Suburban Maryland	211,612	85,529	126,084
Northern Virginia	392,817	185,681	207,136
Washington REGION	731,457	283,677	447,780

Note: These estimates assume all workers are housed in the jurisdiction in which they work.

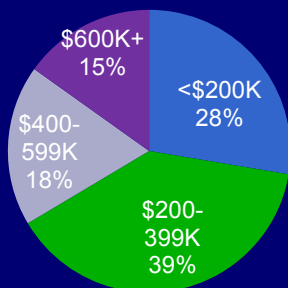
Comparing Current and Forecasted Units Single-Family vs. Multi-Family Units

	Current*		Needed for New Workers	
	SF	MF	SF	MF
District of Columbia	39%	61%	8%	92%
Suburban Maryland	70%	30%	40%	60%
Northern Virginia	72%	28%	47%	53%
Washington Region	67%	33%	39%	61%

*Source: 2009 American Community Survey

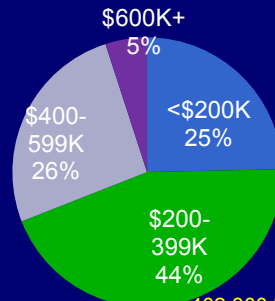
Comparing Prices of Current and Forecasted Units Owner-Occupied Units Washington Region

Current



Source: Jan-Aug 2011 Sales, MRIS

Needed for New Workers

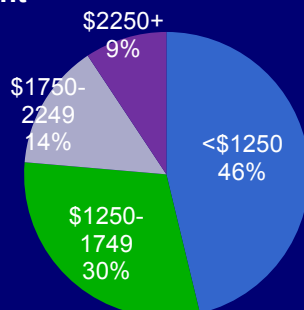


402,300 total owner-occupied units

Note: assumes all workers housed in the jurisdiction in which they work

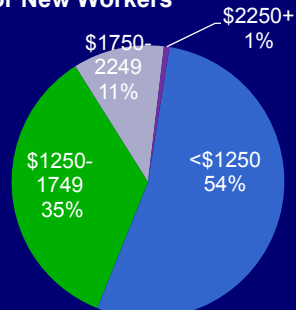
Comparing Rents of Current and Forecasted Units Renter-Occupied Units Washington Region

Current



Source: 2009 ACS

Needed for New Workers



329,200 total renter-occupied units

Note: assumes all workers housed in the jurisdiction in which they work

Housing Policy Issues

- Local jurisdictions are planning for an insufficient amount of housing to accommodate future workers.
- More housing is needed closer to jobs, in existing and growing regional employment centers.
- There is a need for more multi-family housing and smaller, more affordable owner and renter homes in the region.
- A lack of a sufficient supply of housing contributes to worsening traffic and quality of life and threatens our region's economic vitality.

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New Workers by Age Group and Sector Frederick County, MD

Sector	2010-2020
Total Employment	22,264
Construction, Natural Resources and Mining	2,701
Manufacturing	306
Transportation & Utilities	0
Wholesale Trade	487
Retail Trade	2,088
Information	230
Finance and Insurance	968
Real Estate and Rental and Leasing	505
Prof, scientific and technical services; management	3,757
Admin and waste services	1,717
Education	925
Health Services	3,414
Leisure and Hospitality	1,397
Other Services	433
Government/Public Administration	2,738
Military	598



Sector	<30	30-44	45-64
Total Employment	420	1,103	1,177
Construction, Natural Resources and Mining	74	123	108
Manufacturing	0	0	0
Transportation & Utilities	33	423	32
Wholesale Trade	1,193	609	286
Retail Trade	166	98	0
Information	125	500	344
Finance and Insurance	41	279	185
Real Estate and Rental and Leasing	1,118	1,439	1,200
Prof, scientific and technical services; management	568	701	448
Admin and waste services	234	386	304
Education	1,044	1,515	855
Health Services	996	395	7
Leisure and Hospitality	135	186	112
Other Services	512	1,007	1,219
Government/Public Administration	112	220	266
Military	420	1,103	1,177

- Analyze the age distribution of current workers by sector.
- Adjust the age distribution based on the age distribution of recent movers.

Workers by Household Type, Age Group and Sector Frederick County, MD

Age Group and Household Type	1 adult	1 adult/ 1 kid	2 adults	1 adult/ 2 kids	2 adults/ 1 kid	3 adults	1 adult/ 3+ kids	2 adults/ 2+kids	3 adults/ 1+ kids	4+adults
<30	0.15	0.02	0.24	0.00	0.34	0.09	0.00	0.15	0.00	0.02
30-44	0.08	0.03	0.15	0.02	0.14	0.03	0.10	0.33	0.10	0.02
45-64	0.11	0.01	0.32	0.01	0.09	0.17	0.02	0.11	0.08	0.08



Workers by Sector and Household Type	1 adult	1 adult/ 1 kid	2 adults	1 adult/ 2 kids	2 adults/ 1 kid	3 adults	1 adult/ 3+ kids	2 adults/ 2+kids	3 adults/ 1+ kids	4+adults
Prof, scientific and technical services; management	423	75	863	41	688	344	168	772	238	145

= 3,757 workers

- For each jurisdiction, analyze the distribution of household types for the three age groups.
- Assign workers in each sector to a household type based on their age group.

Households by Type and Sector Frederick County, MD

Household Type	1 adult	1 adult/1 kid	2 adults	1 adult/2 kids	2 adults/1 kid	3 adults	1 adult/3+ kids	2 adults/2+kids	3 adults/1+ kids	4+ adults
Workers per Household	1	1	1.42	1	1.72	2.08	1	1.82	2.33	2.43



Household Type	1 adult	1 adult/1 kid	2 adults	1 adult/2 kids	2 adults/1 kid	3 adults	1 adult/3+ kids	2 adults/2+kids	3 adults/1+ kids	4+ adults
Prof, scientific and technical services; management	423	75	608	41	400	165	168	424	102	60

= 2,466 households

- For each jurisdiction, analyze the average number of workers by household type.
- Divide the total workers by average number of workers to calculate the number of households in each sector.
- Assumes multiple workers in a household work in the same sector.

Households by Type and Income Group Frederick County, MD

Household Income by Household Type	1 adult	1 adult/1 kid	2 adults	1 adult/2 kids	2 adults/1 kid	3 adults	1 adult/3+ kids	2 adults/2+kids	3 adults/1+ kids	4+adults
Prof, scientific and technical services; management	47000	47000	66740	47000	80840	97760	47000	85540	109510	114210

Sum up for all sectors



HH Income by HH Type	1 adult	1 adult/1 kid	2 adults	1 adult/2 kids	2 adults/1 kid	3 adults	1 adult/3+ kids	2 adults/2+kids	3 adults/1+ kids	4+adults	Total Households
<\$50K	1,816	386	2,126	208	1,045	347	863	1,002	135	81	8,007
\$50-74K	396	69	1,383	41	622	251	163	757	80	45	3,807
\$75-99K	0	0	38	0	740	176	0	818	180	88	2,040
\$100-124K	0	0	0	0	0	173	0	0	210	123	506
\$125-149K	0	0	0	0	0	0	0	0	0	2	2
\$150K+	0	0	0	0	0	0	0	0	0	0	0

- For each jurisdiction, calculate the median wage for each sector.
- Sum wages based on average number of workers per household to calculate household income.
- Sum up households from all sectors into six income categories.

Housing Units by Unit Type and Income Group

	1 adult	1 adult/ 1 kid	2 adults	1 adult/ 2 kids	2 adults/ 1 kid	3 adults	1 adult/ 3+ kids	2 adults/ 2+kids	3 adults/ 1+ kids	4+adults
\$50-74K										
SF-owner	0.370	0.275	0.608	0.491	0.340	0.633	0.496	0.504	0.509	0.529
SF-renter	0.026	0.117	0.039	0.029	0.151	0.041	0.270	0.107	0.069	0.150
MF-owner	0.260	0.215	0.154	0.249	0.202	0.127	0.084	0.140	0.152	0.113
MF-renter	0.344	0.393	0.199	0.230	0.307	0.200	0.149	0.248	0.270	0.209
\$75-99K										
SF-owner	0.454	0.504	0.644	0.491	0.566	0.614	0.765	0.795	0.639	0.529
SF-renter	0.064	0.000	0.045	0.029	0.123	0.063	0.081	0.045	0.121	0.150
MF-owner	0.273	0.160	0.153	0.249	0.149	0.232	0.058	0.135	0.156	0.113
MF-renter	0.209	0.336	0.158	0.230	0.162	0.091	0.096	0.025	0.085	0.209

	Single-Family		Multi-Family		
HH Income	Owner	Renter	Owner	Renter	Total
<\$50K	2,796	1,171	755	3,285	8,007
\$50-74K	1,924	316	636	932	3,807
\$75-99K	1,363	176	305	196	2,040
\$100-124K	309	48	70	79	506
\$125-149K	1	0	0	0	2
\$150K+	0	0	0	0	0
Total	6,393	1,711	1,766	4,492	14,363

- Analyze distribution of unit types by household income and household type.
- Sum up for all household types.

High/Low Forecast Depending on Commuting Assumptions

High: Assumes all county's new workers are housed in the county

	Single-Family		Multi-Family		
	Owner	Renter	Owner	Renter	Total
<\$50K	2,796	1,171	755	3,285	8,007
\$50-74K	1,924	316	636	932	3,807
\$75-99K	1,363	176	305	196	2,040
\$100-124K	309	48	70	79	506
\$125-149K	1	0	0	0	2
\$150K+	0	0	0	0	0
Total	6,393	1,711	1,766	4,492	14,363

Low: Assumes current in-commuting rate for new jobs

	Single-Family		Multi-Family		
	Owner	Renter	Owner	Renter	Total
<\$50K	2,041	855	551	2,398	5,845
\$50-74K	1,404	231	464	680	2,779
\$75-99K	995	128	223	143	1,489
\$100-124K	226	35	51	58	370
\$125-149K	1	0	0	0	2
\$150K+	0	0	0	0	0
Total	4,667	1,249	1,289	3,279	10,485