



# CF Round 8 Development of Regional Totals

June 2, 2009





#### Pew Research Center

- Change in US Working Age Population, 2005-2050:
  - Immigrants and descendants +76,000,000
  - Non-immigrants
     7,000,000









### Global Insight Methodology

- Each economic area (metro and state) modeled individually and then linked into national: topdown/bottom-up
- Methodology captures internal growth dynamics and differential business cycle response
- Initial forecasts from econometric models with analyst judgments to make refinements due to behavioral relationships – Focus on judgements is short-term (5-8 years), econometric thereafter.





### Three Regional Definitions

- COG Region (1983 MSA + Calvert, Charles, Stafford) = COG
- Washington Metropolitan Statistical Area (current) = MSA
- TPB Model Region (Current MSA Warren + King George + Ann Arundel, Carroll, Howard, St Mary's) = TPB





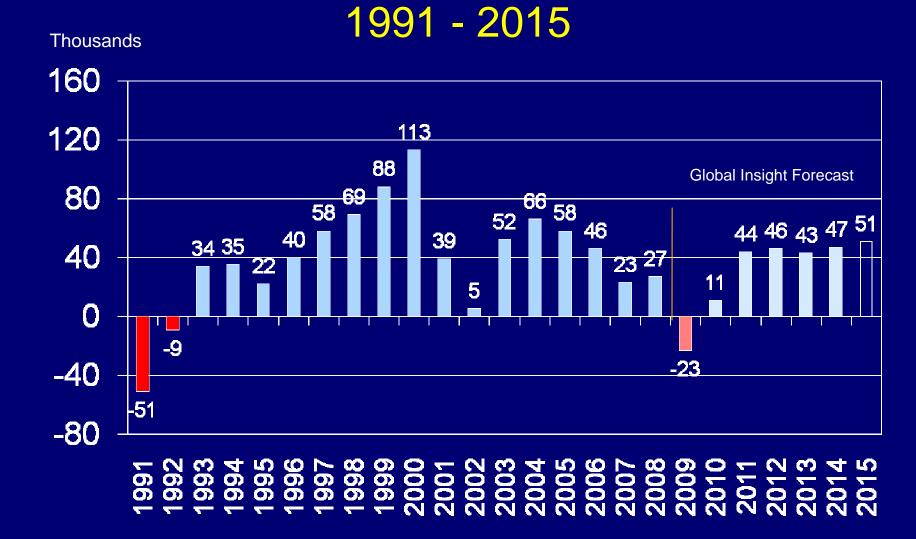
### **Key Factors**

- Short-Term Forecasts Given Economic Cycle
- Total Employment Account for selfemployed
- Forecasts by NAICS
- Employment / Household Relationship including in-commuting













## Annual Job Change Washington MSA



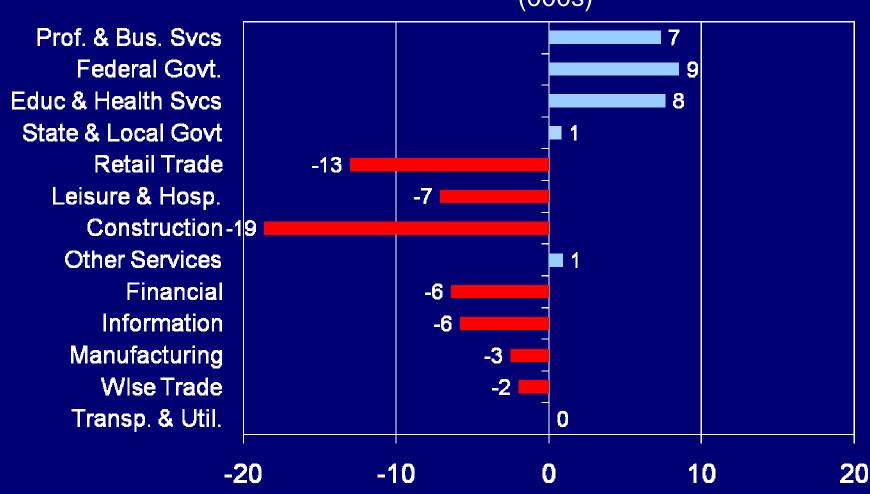
Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis





#### Job Change by Sector April 2008 – April 2009 Washington MSA (000s)

Total - 30,300



Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis





#### Employment/Households

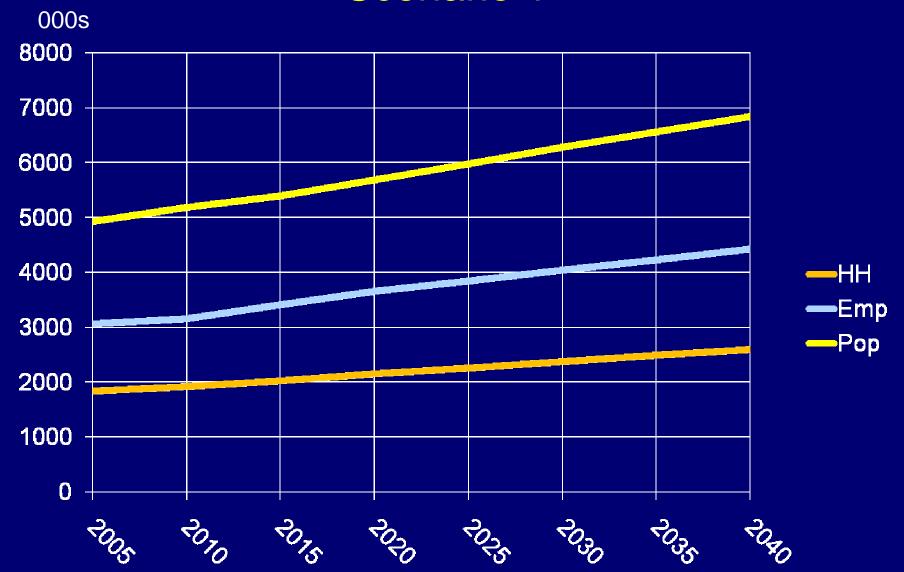
- Scenario 1 Adjust Households and Population in Later Years, Not Enough Households to Supply Workers for Projected Jobs – Implies Significant In-Commuting. Household Growth Constrains Potential Job Growth
- Scenario 2 Employment is the Driver, and More Households Needed to Provide the Workers for the Jobs

For both Scenarios, E/HH = 1.70 is Assumed In Adjusting the Forecasts





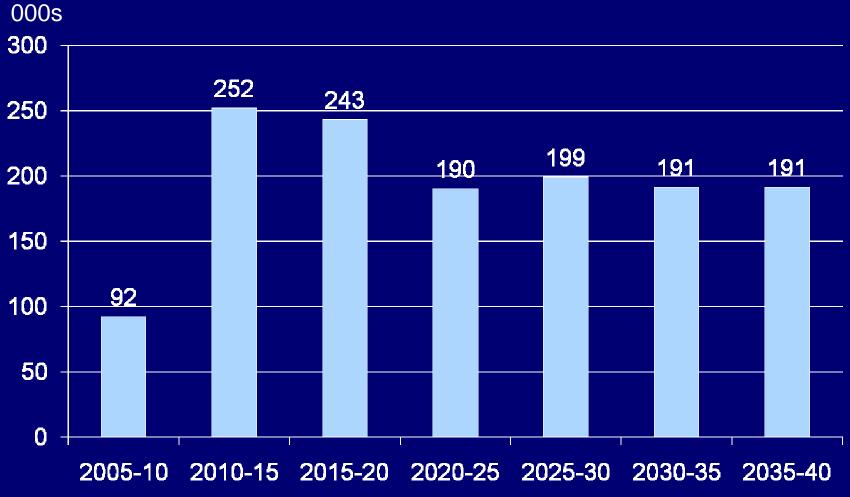
#### Scenario 1







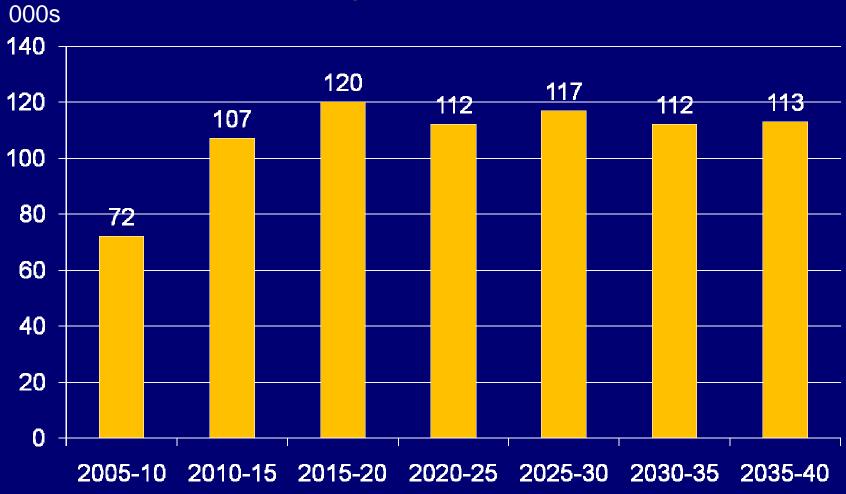
## Scenario 1 Employment Change in Five-Year Increments







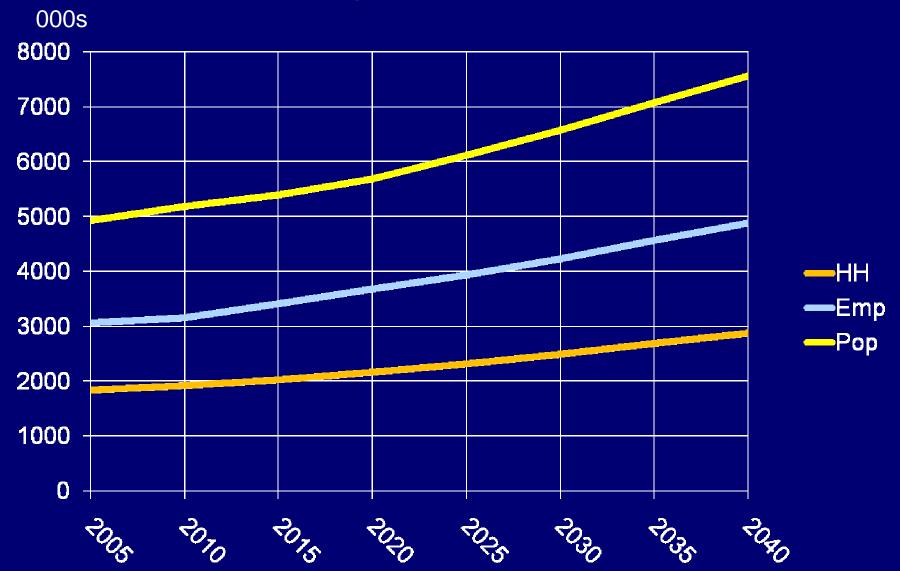
## Scenario 1 Household Change in Five-Year Increments







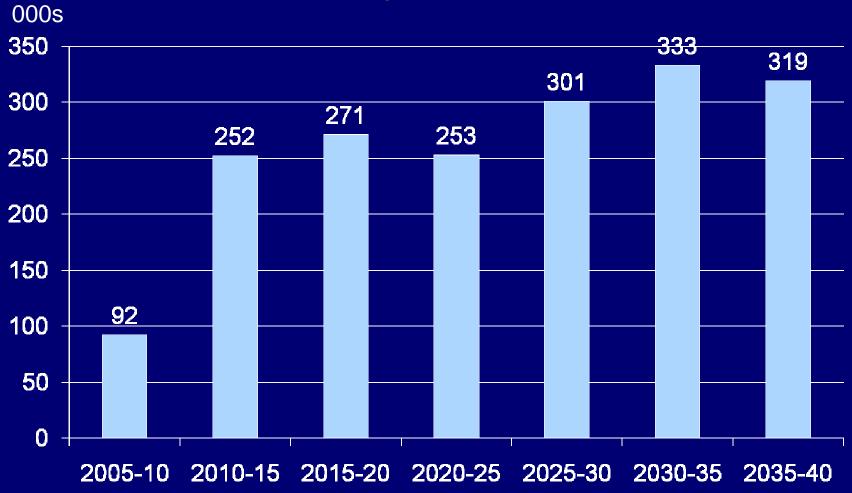
#### Scenario 2







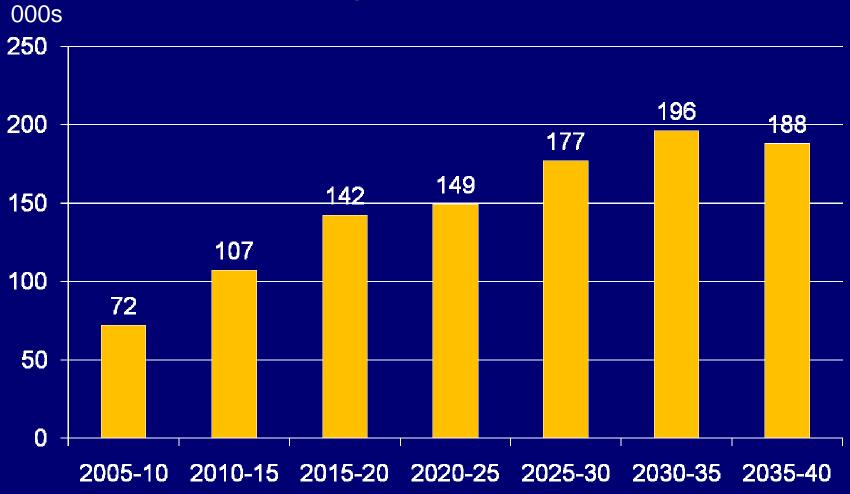
## Scenario 2 Employment Change in Five-Year Increments







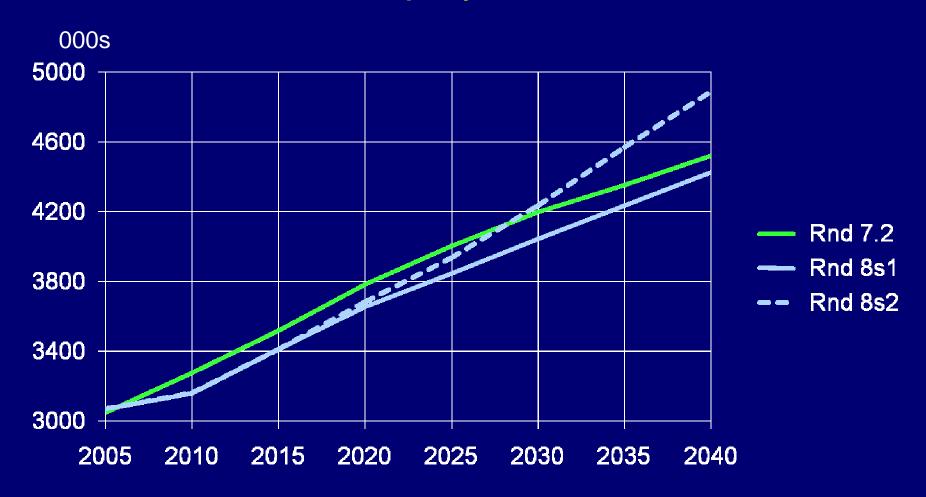
## Scenario 2 Household Change in Five-Year Increments







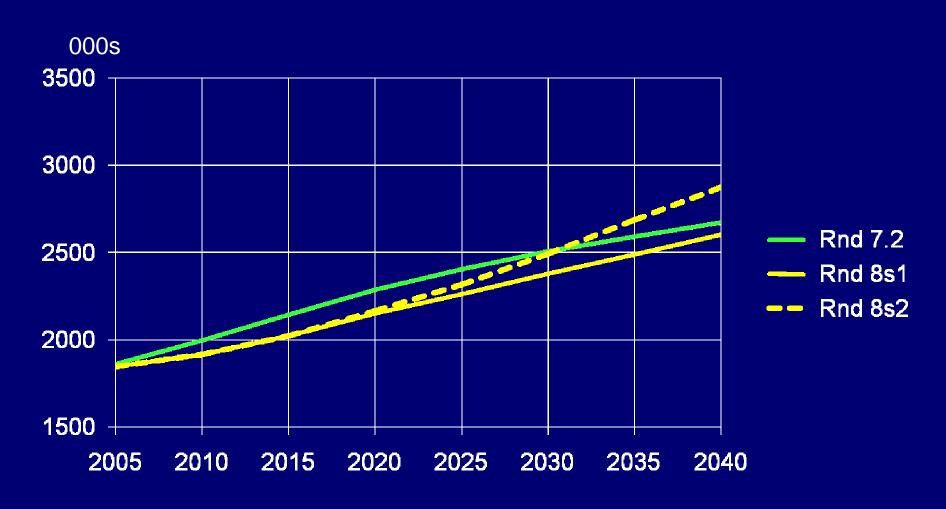
### Forecast Comparisons Employment







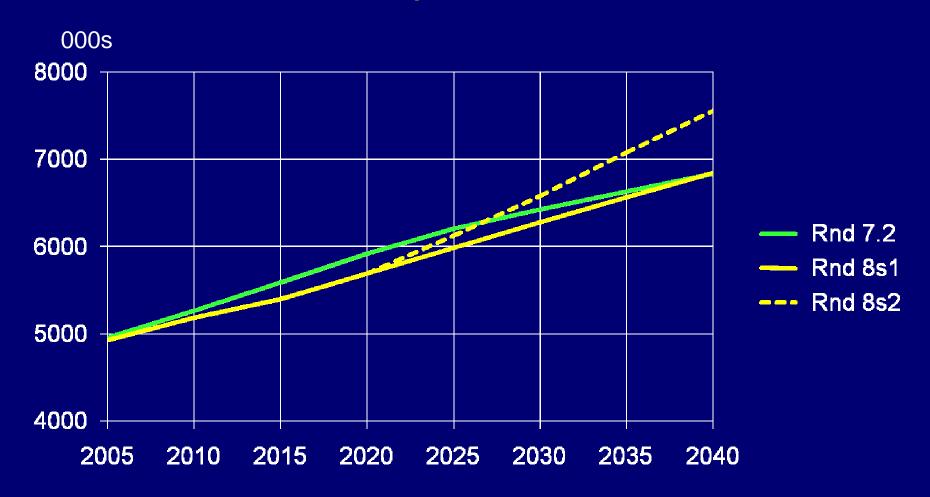
## Forecast Comparisons Households







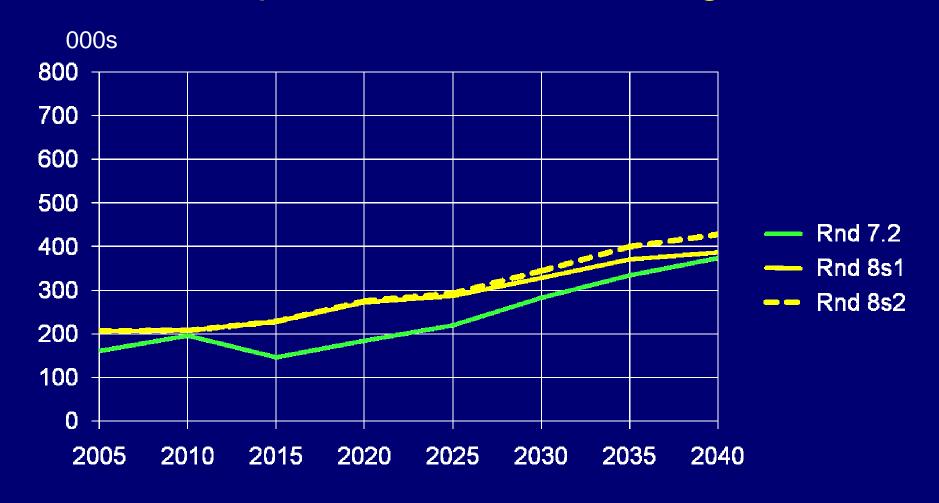
# Forecast Comparisons Population







# Forecast Comparisons Imputed Net In-Commuting







### Additional Adjustments?

Federal Employment







Administration	Period	Wash. Metro	U.S.
Eisenhower	1953 – 1960	- 22,200	-158,000
Kennedy-Johnson	1961 – 1968	+ 80,200	+490,000
Nixon-Ford	1969 – 1976	+ 36,000	+ 11,000
Carter	1977 – 1980	+ 18,000	+ 12,000
Reagan	1981 – 1988	- 6,200	+195,000
Bush 1	1989 – 1992	+ 23,500	+ 21,000
Clinton	1993 – 2000	- 41,500	-341,000
Bush 2	2001 – 2008	+ 18,500	-35,000



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