

Planning Directors Technical Advisory Committee

Cooperative Forecasting Round 8 Econometric Forecasts

June 19, 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: top-down/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

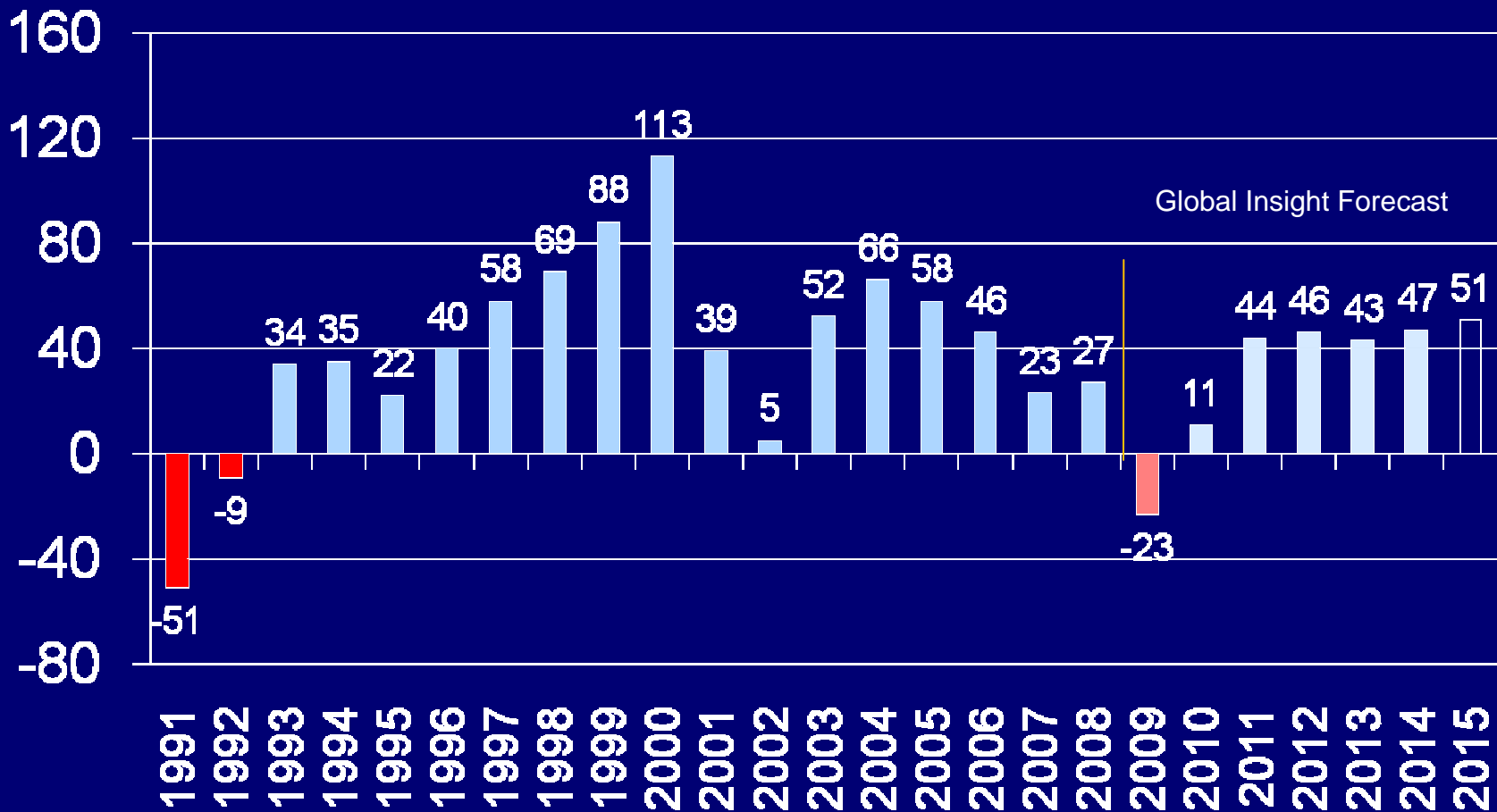
- 1983 MSA (COG + Calvert, Charles, Stafford)
- Washington Metropolitan Statistical Area (current)
- TPB Model Region (Current MSA - Warren + King George + Ann Arundel, Carroll, Howard, St Mary's)

Key Factors

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

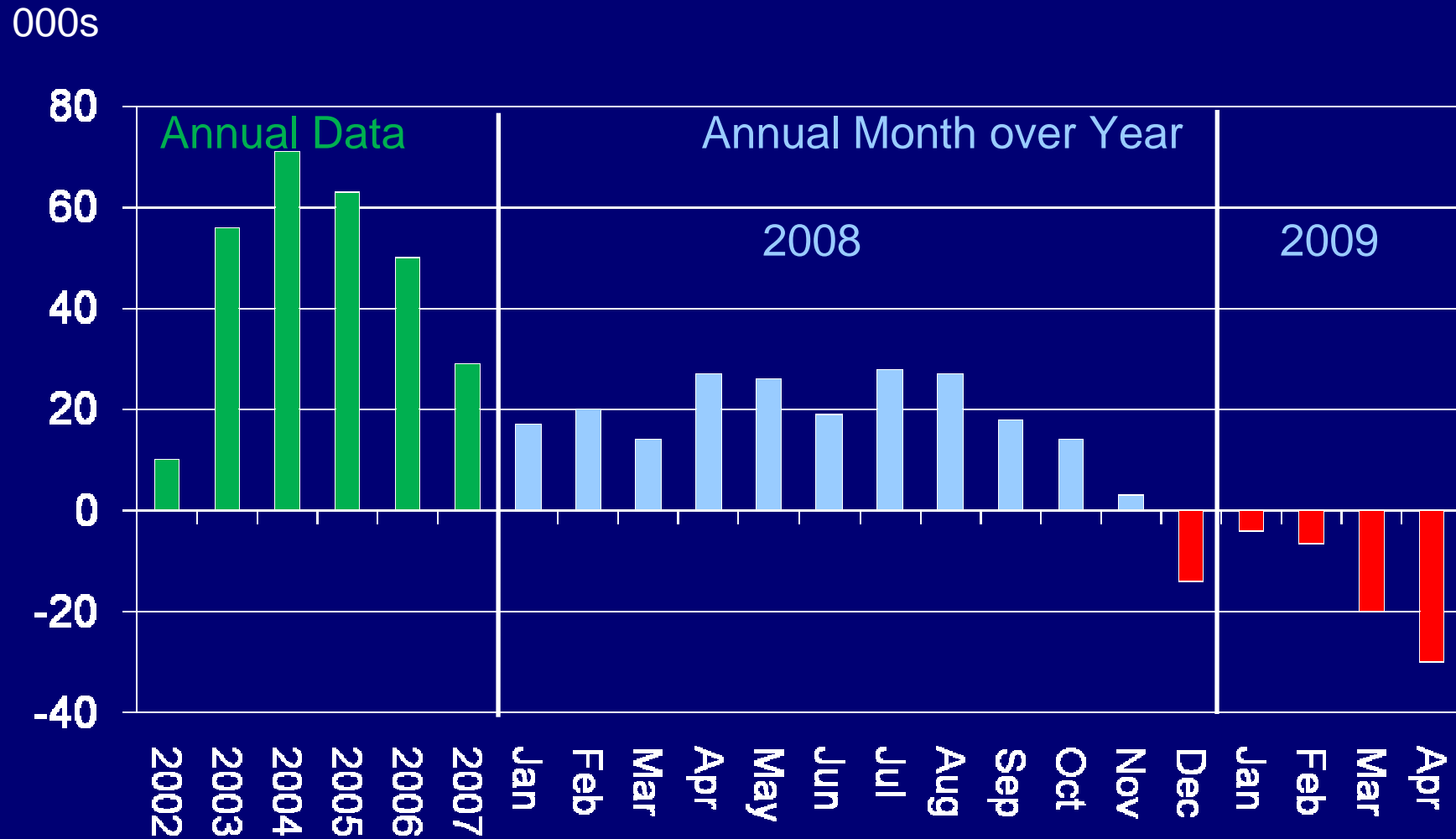
Annual Change in Jobs COG Region 1991 - 2015

Thousands



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

Annual Job Change Washington MSA

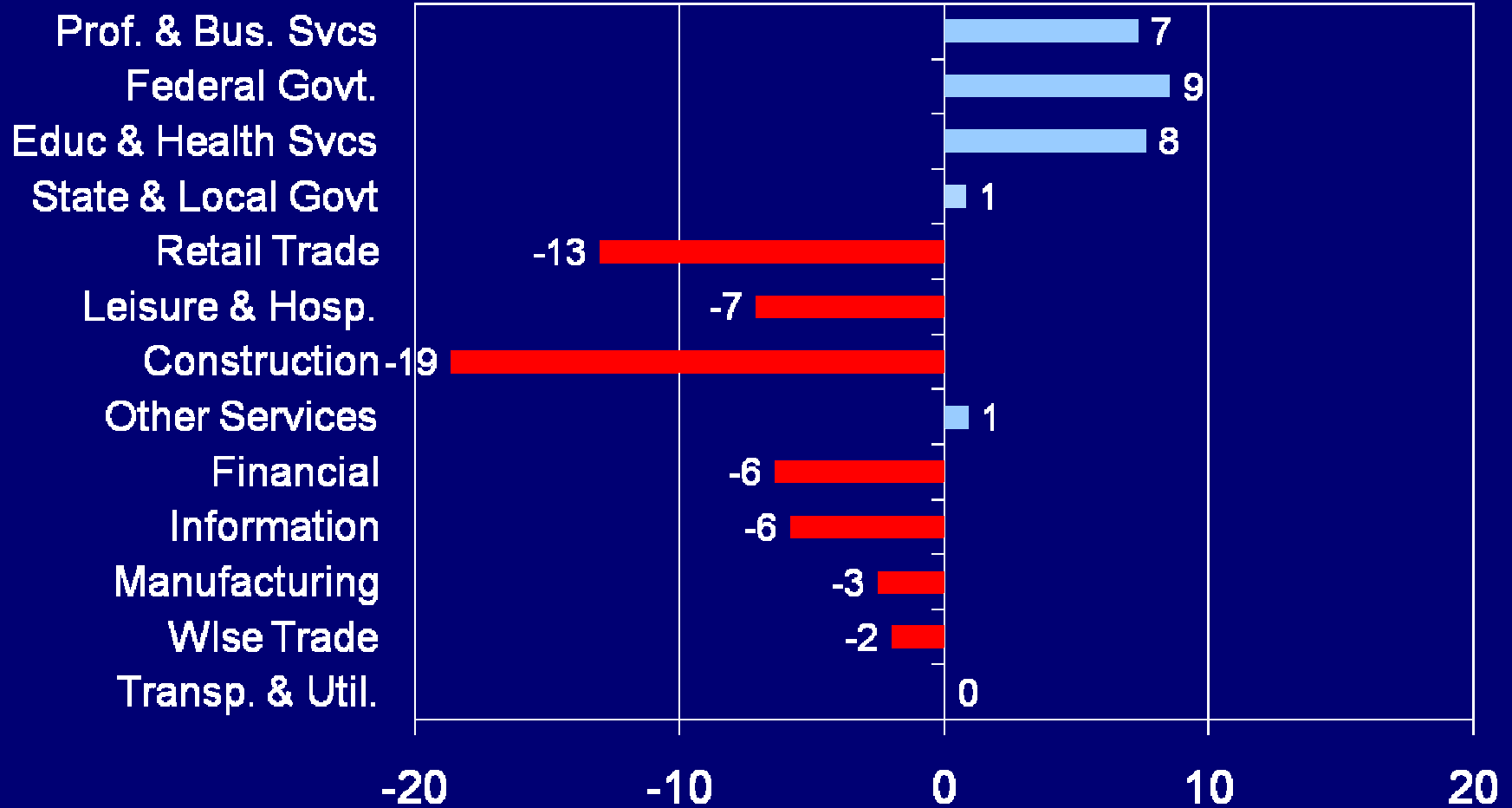


Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis

Job Change by Sector April 2008 – April 2009 Washington MSA

(000s)

Total - 30,300



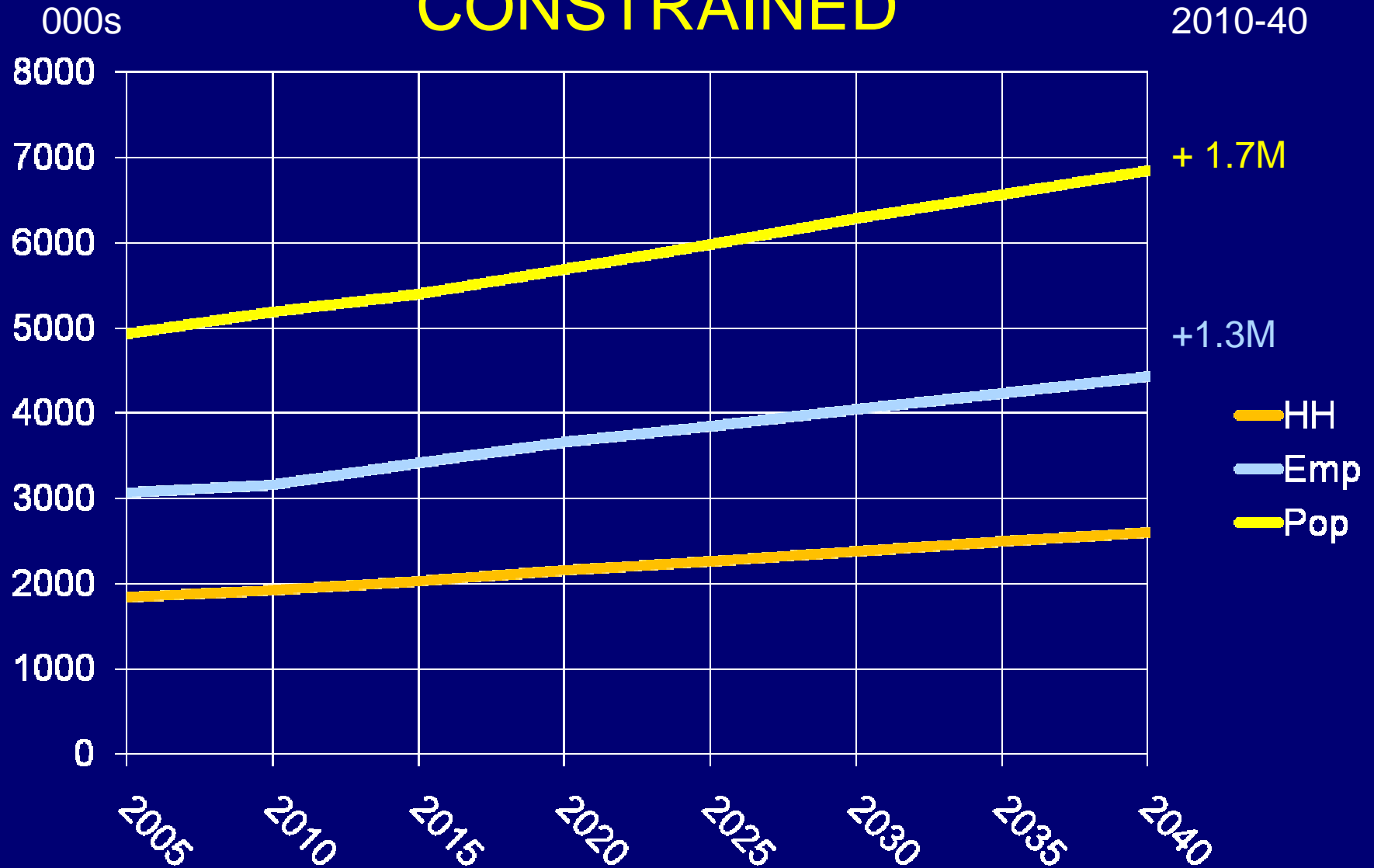
Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis

Employment/Households

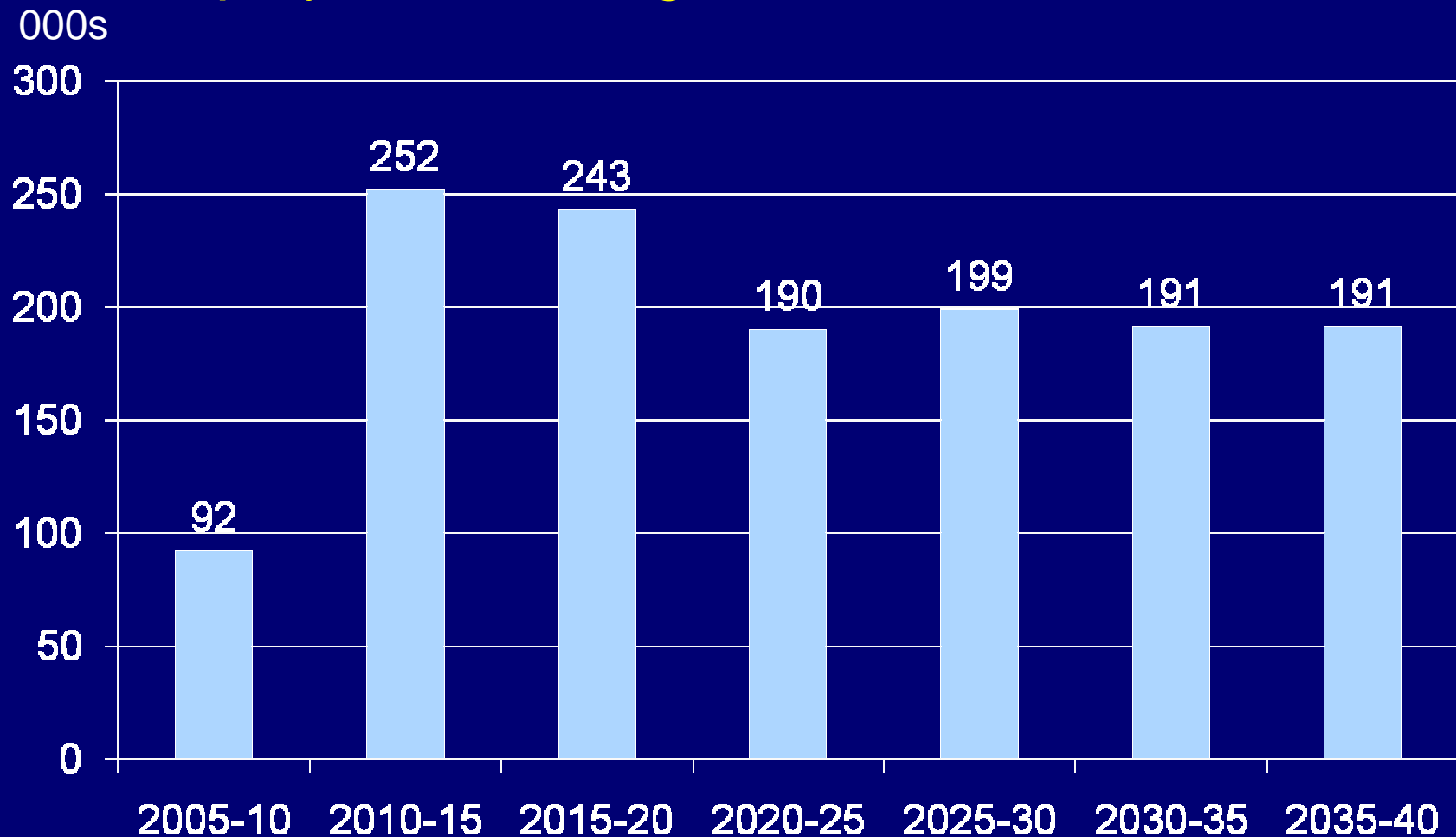
- Scenario 1 – Adjust Households and Population in Later Years, Not Enough Households to Supply Workers for Projected Jobs – Implies Significant In-Commuting. Household Growth Constrains Potential Job Growth (“Household-Constrained Scenario”)
- Scenario 2 – Employment is the Driver, and More Households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

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

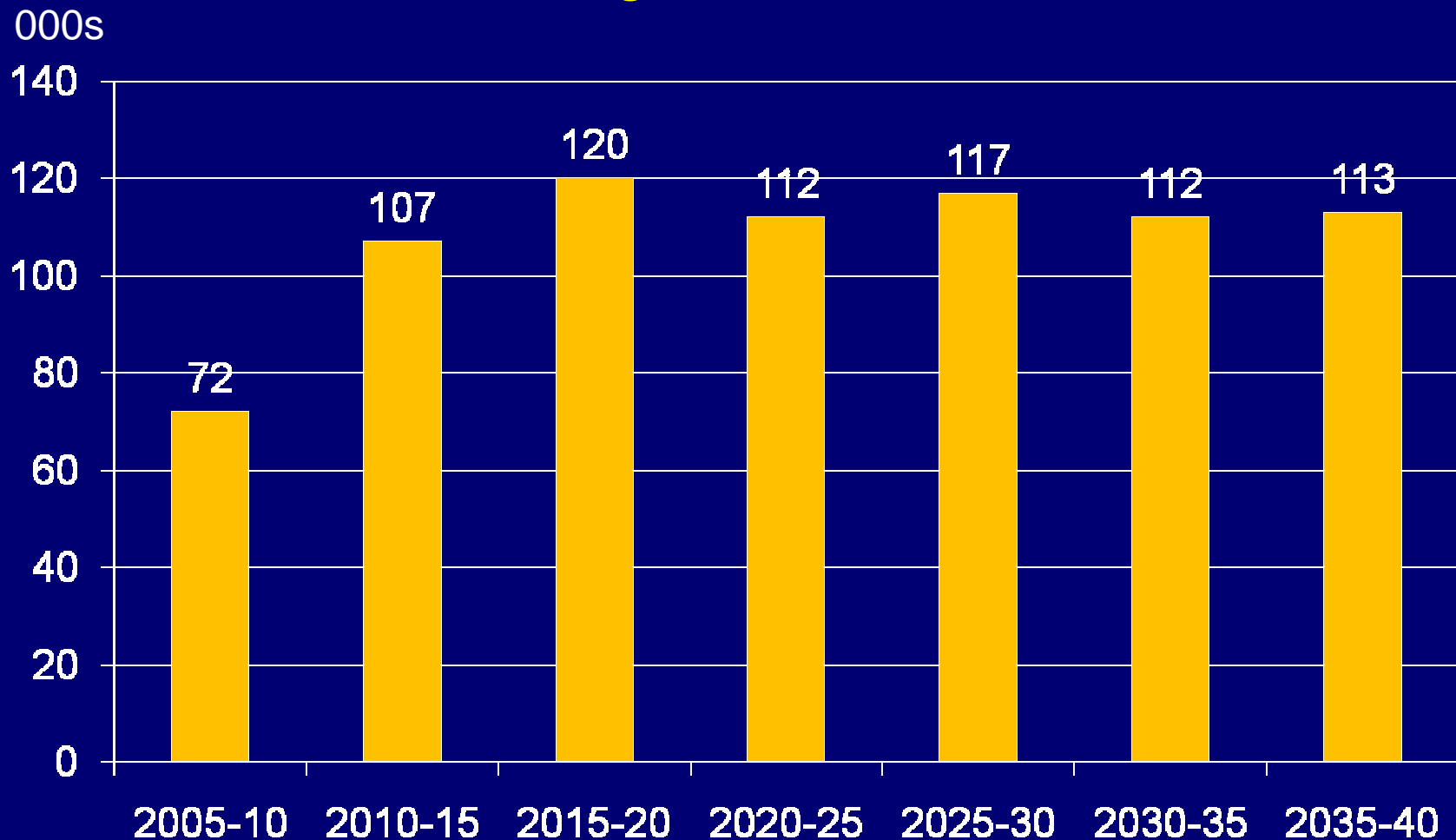
Scenario 1 – HOUSEHOLD CONSTRAINED



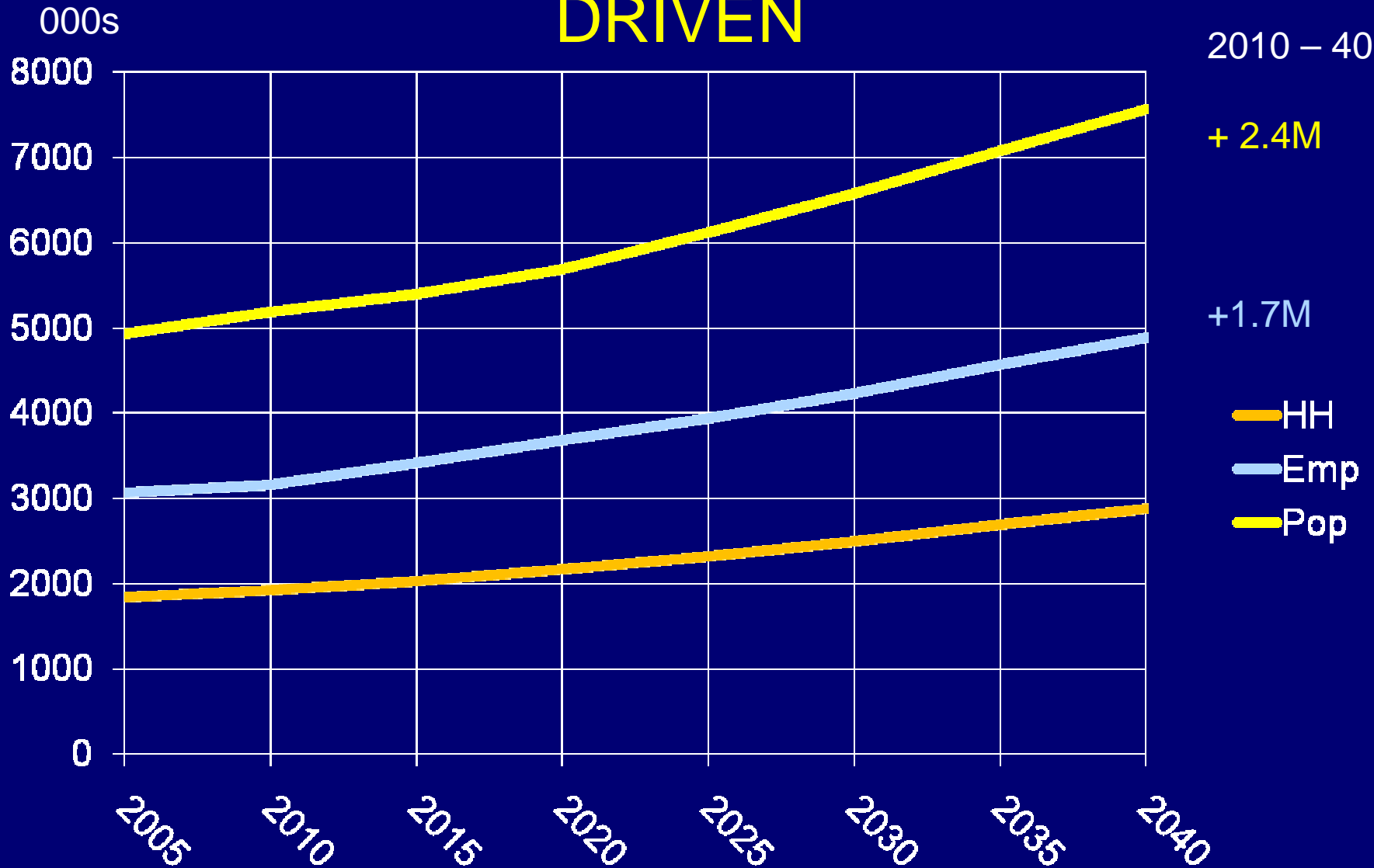
Scenario 1 – HOUSEHOLD-CONSTRAINED Employment Change in Five-Year Increments



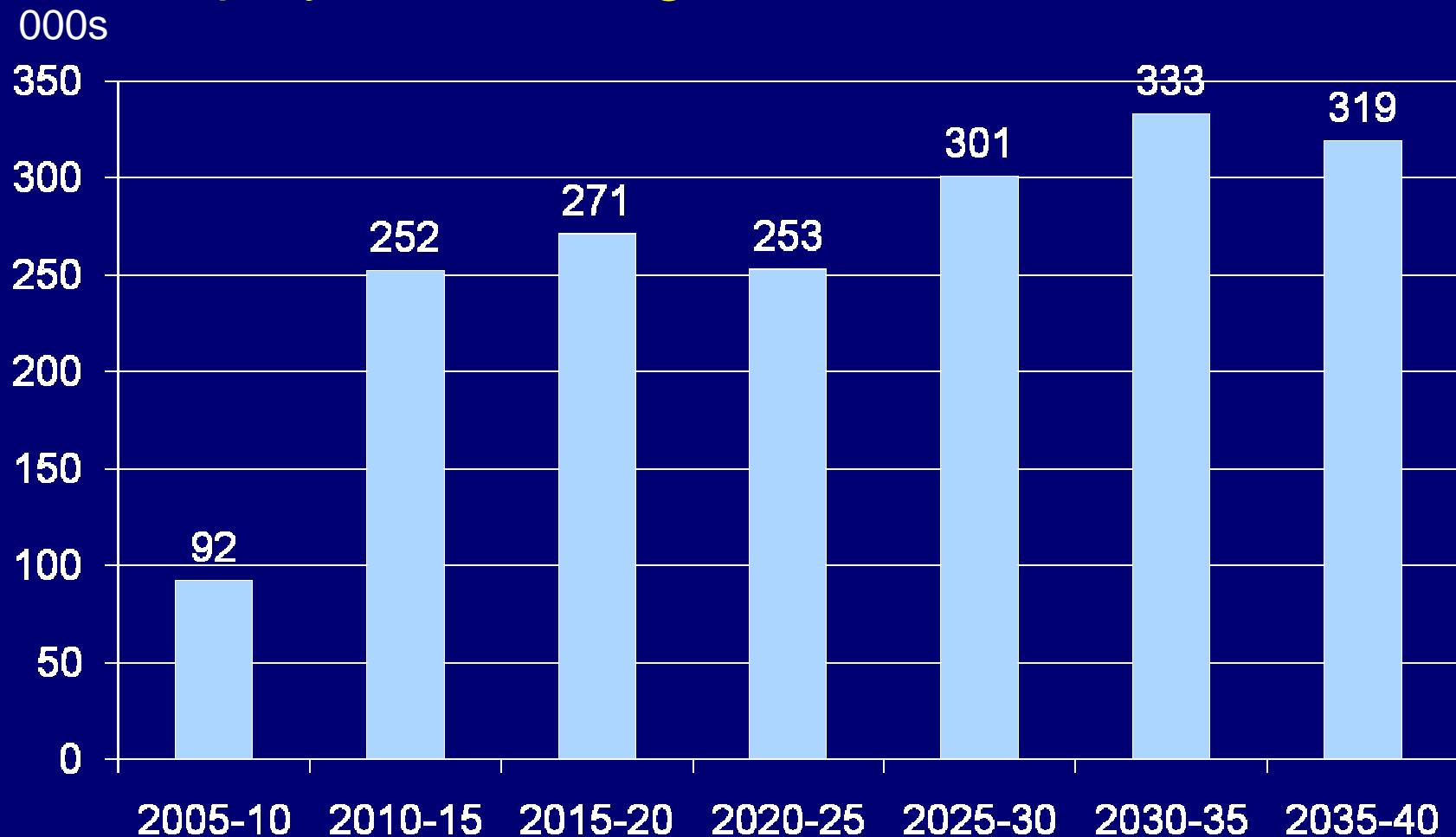
Scenario 1 – HOUSEHOLD-CONSTRAINED Household Change in Five-Year Increments



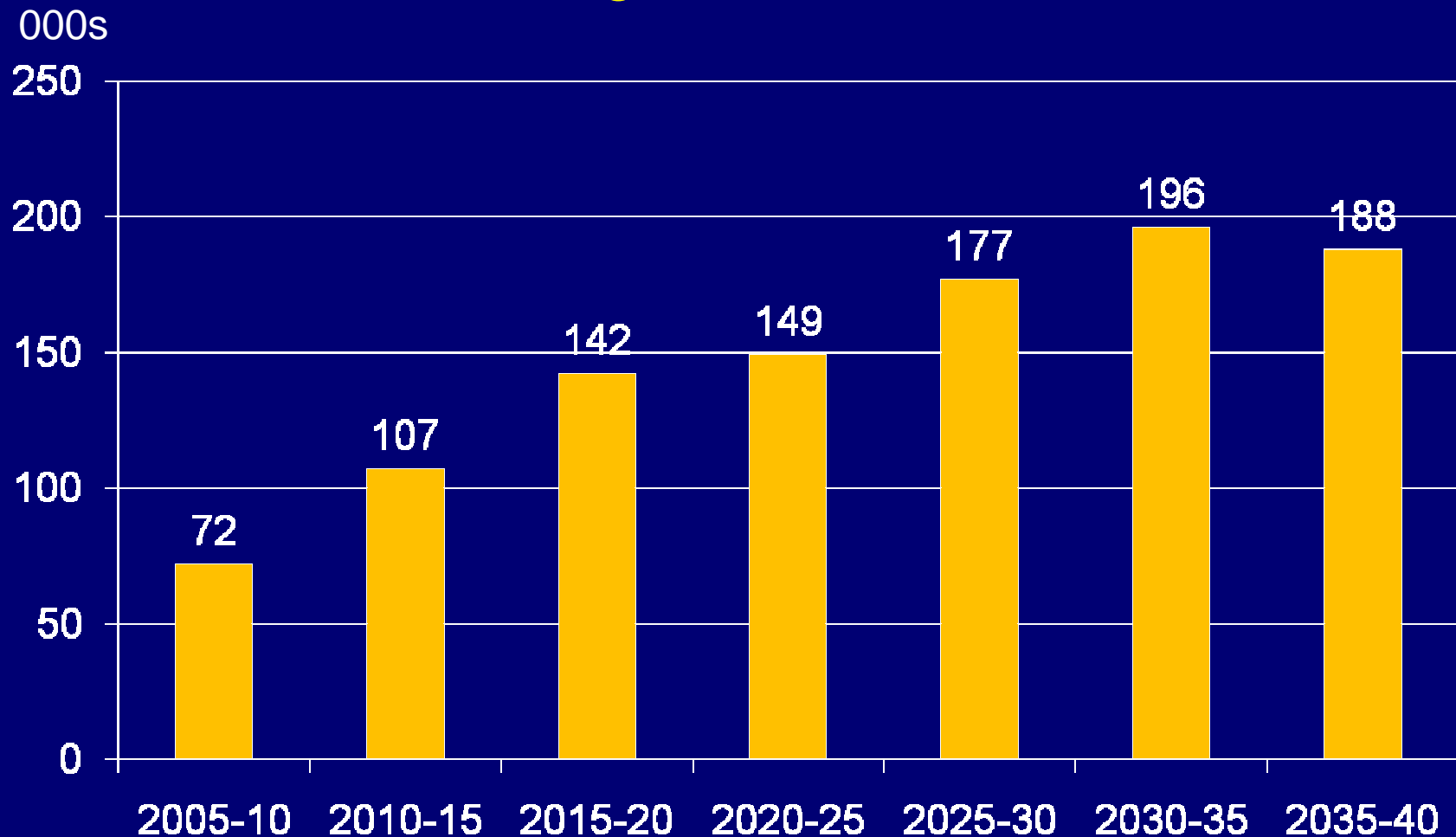
Scenario 2 – EMPLOYMENT-DRIVEN



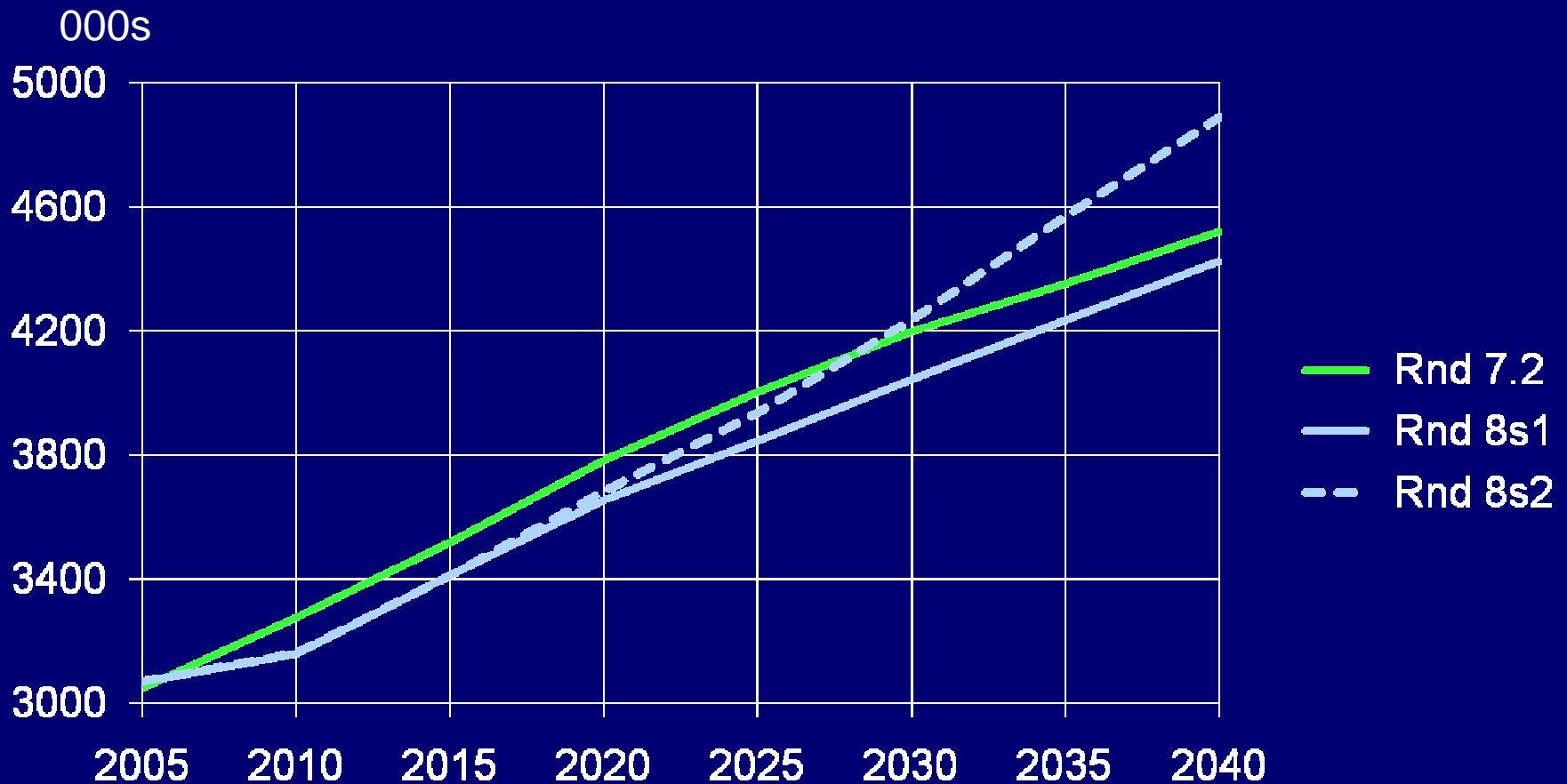
Scenario 2 – EMPLOYMENT-DRIVEN Employment Change in Five-Year Increments



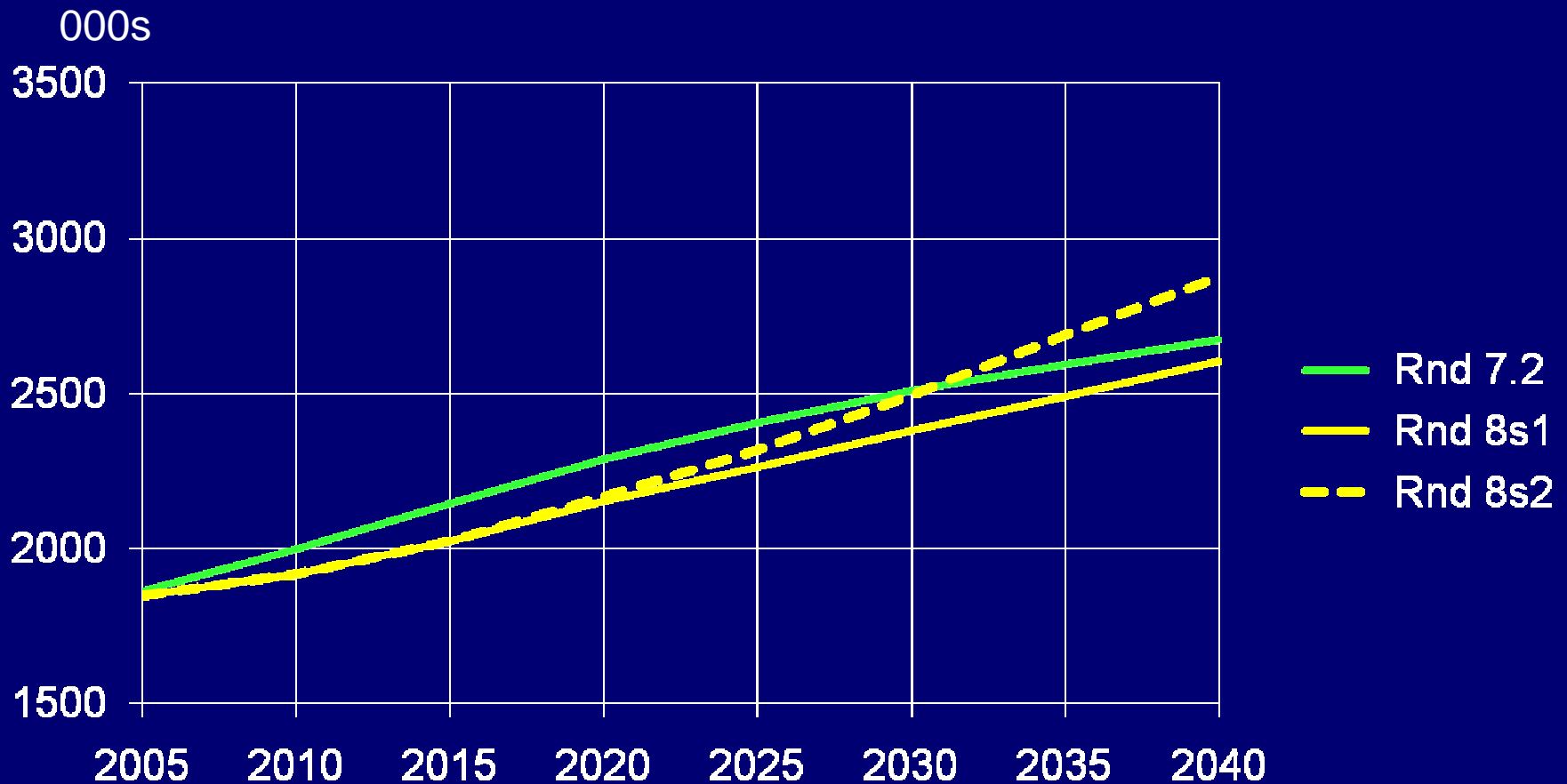
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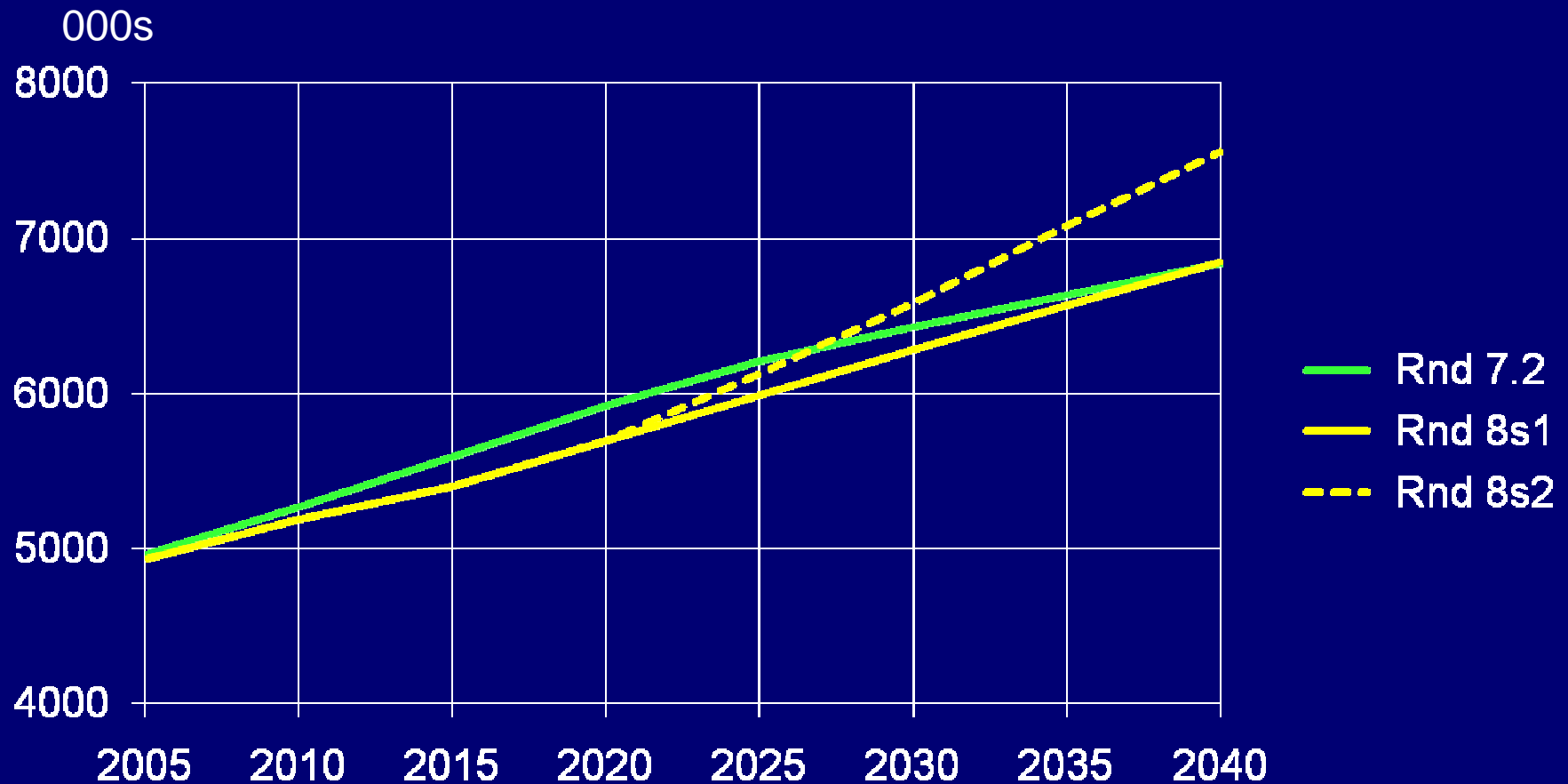
Forecast Comparisons Employment



Forecast Comparisons Households

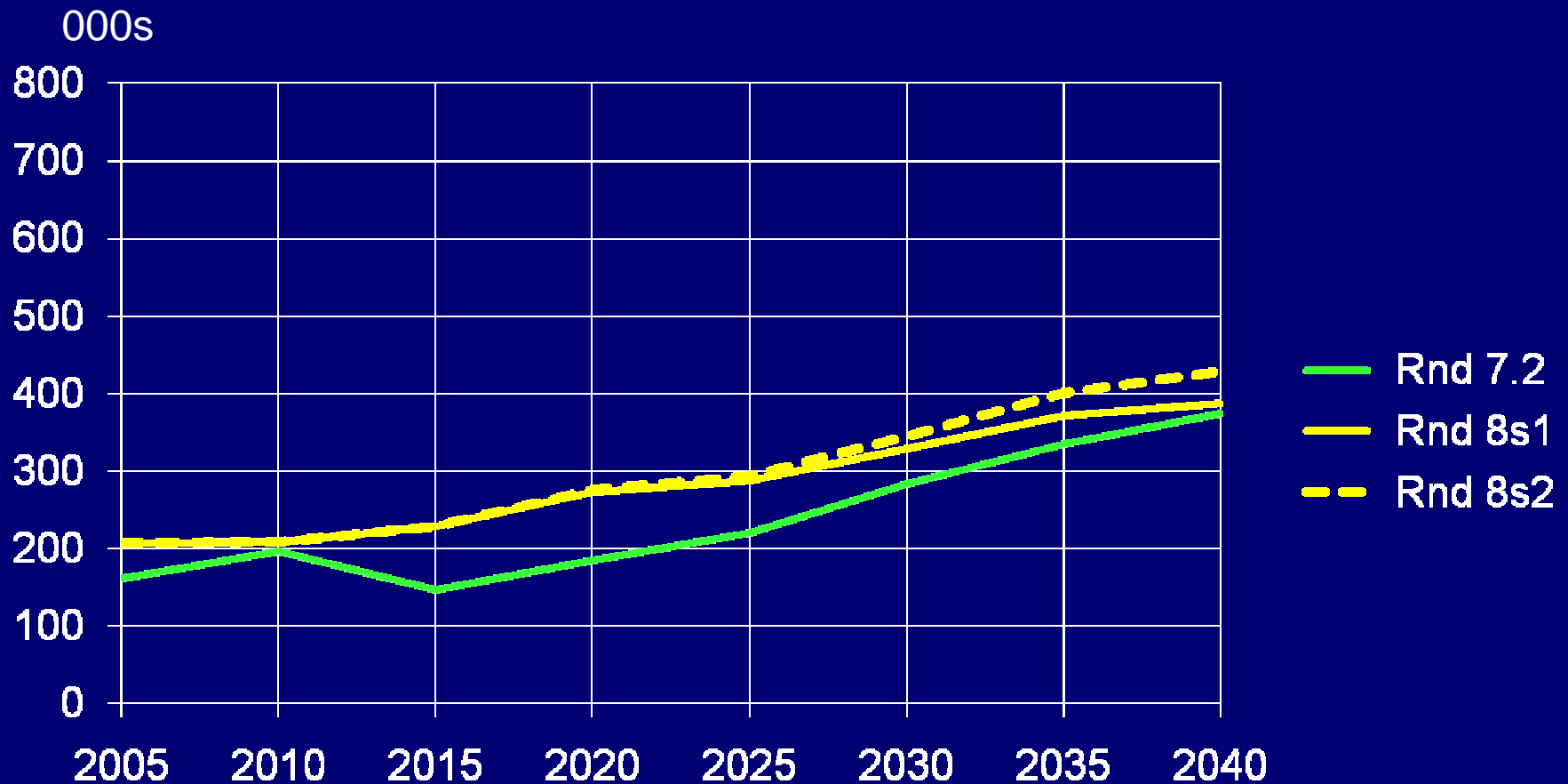


Forecast Comparisons Population



Forecast Comparisons

Imputed Net In-Commuting



Cooperative Forecasting and Data Subcommittee Discussion June 2

- HH-Constrained Scenario indicates significant and healthy job growth even with downward adjustments in the outer years
- Employment-Driven Scenario has very strong job growth in outer years – will they be attainable in light of technology advancements re: workplace locations?

Cooperative Forecasting and Data Subcommittee Discussion June 2

- Employment-Driven Scenario will likely mean significant local policy changes for more residential at higher densities – possible but more difficult
- Changes in job and household relationships re: workers are in flux with housing market-gas prices-recession effects. These changes will be better understood with 2010 Census and other data and can be incorporated in the next major round of Cooperative Forecasting

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Additional Adjustments?

- Federal Employment

Change in Federal Employment by Administration

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