

# COG REGIONAL GROWTH PROJECTIONS – PROCESS AND FINAL FORECASTS

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## Final Round 10.0 Cooperative Forecasts

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Metropolitan Washington  
**Council of Governments**

# Cooperative Forecasting Program

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- Forecasting - purpose, history, process and performance
- New regional economic inputs and assumptions for Round 10.0
- Review and approval of the local Forecasts – COG Board of Directors – June 14, 2023

# Cooperative Forecasting Program

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- Established by COG in 1975, enables local, regional, and federal agencies to coordinate planning decisions using common assumptions about future growth
- Each series or “Round” provides forecasts of employment, population, and households by five-year increment for a period of 20 to 30 years.
- Official land use inputs for planning by the Transportation Planning Board (TPB), Metropolitan Washington Air Quality Committee (MWAQC), Climate Energy Environment Policy Committee (CEEPC), and others.

# Prior Rounds of Cooperative Forecasts

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**Round 1 – 1976**

**Round 2 – 1979**

**Round 3 – 1983**

Round 3.5 – 1985

**Round IV – 1987**

Round IV-1 – 1991

**Round 5 – January 1994**

Round 5.1 – May 1994

Round 5.2 – 1995

Round 5.3 – 1996

Round 5.4 – 1997

**Round 6a – 1998**

Round 6.1 – 1999

Round 6.2 – 2000

Round 6.3 – 2003

Round 6.4A – 2004

**Round 7.0 – 2005**

Round 7.0a – 2006

Round 7.1 – 2008

Round 7.2 – July 2009

Round 7.2A – October 2009

**Round 8.0 - 2010**

Round 8.0a – 2011

Round 8.1 – 2012

Round 8.2 – 2013

Round 8.3 – 2014

Round 8.4 – 2015

**Round 9.0 – 2016**

Round 9.1 – 2018

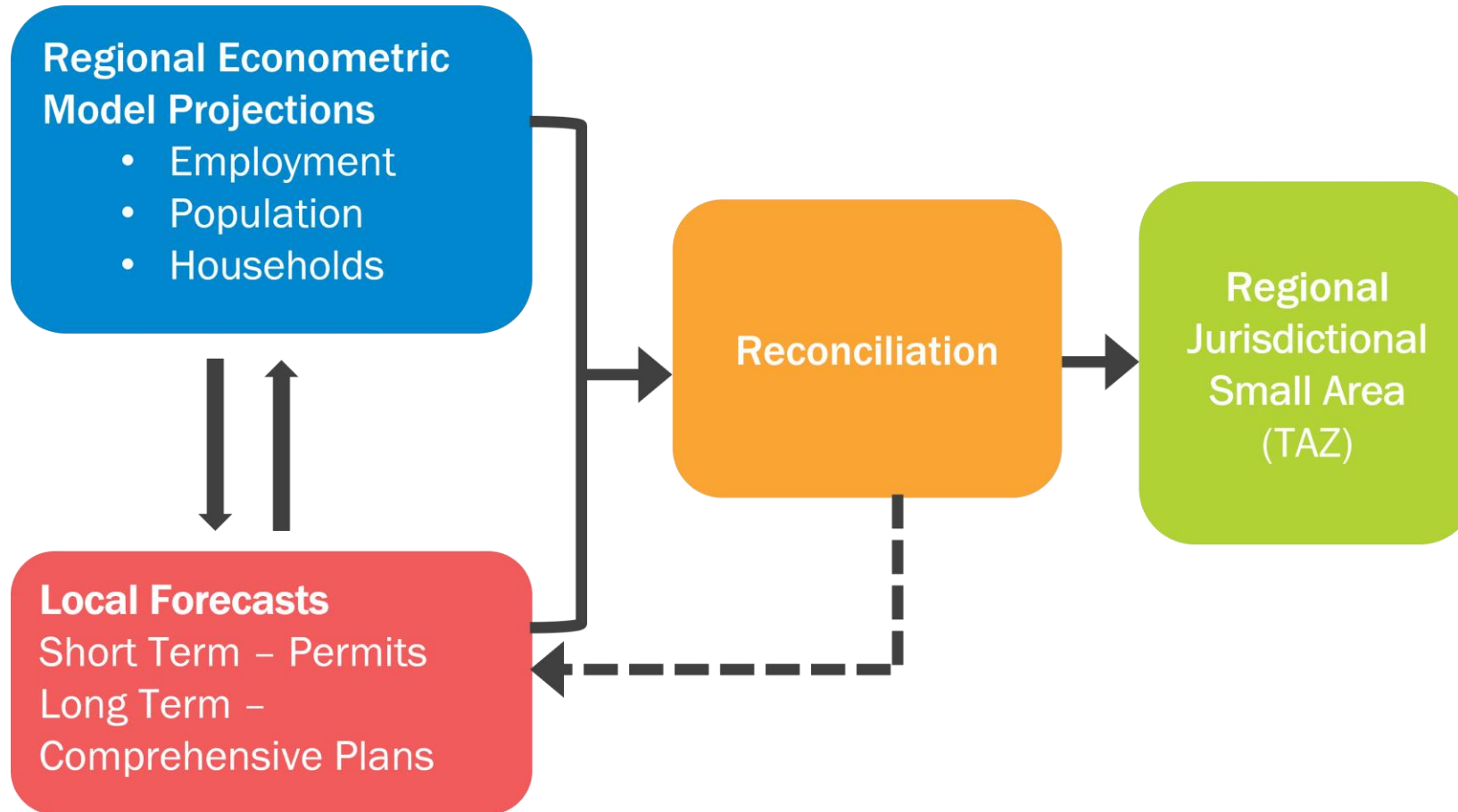
Round 9.1a – 2019

Round 9.2 – 2021

**Round 10.0 – 2023**



# COG Cooperative Forecasting Process



# Elements of Developing Round 10.0

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- Review existing economic conditions–global, national and regional
- Provide “base year” employment and housing data to member jurisdictions
- Develop “Benchmark” Regional Econometric Model Forecast to new horizon year (2050)
- Reconcile jurisdictional projections with Regional Econometric Model Forecast
- Compile local government 2020 to 2050 TAZ forecasts

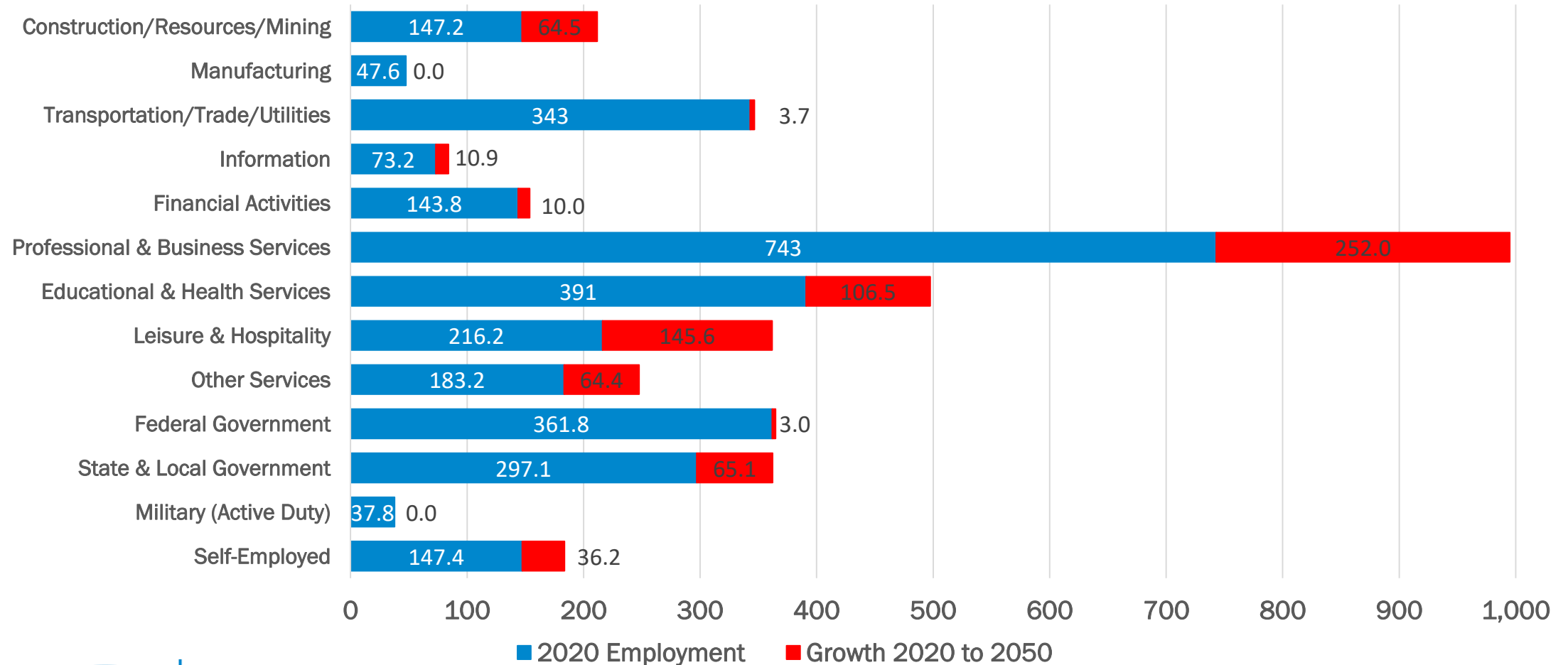
# Round 10.0 Econometric Model (S & P Global)

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- Economic projections of jobs, population and housing to 2050
  - Each state modeled individually and linked to the nation.
  - Net migration (population and household growth) driven by economic conditions.  
People will follow jobs.
  - Wage & salary job forecasts by sector for COG region
  - Population forecast by age cohort for COG region
- “Benchmark” regional growth to which COG member forecasts are reconciled

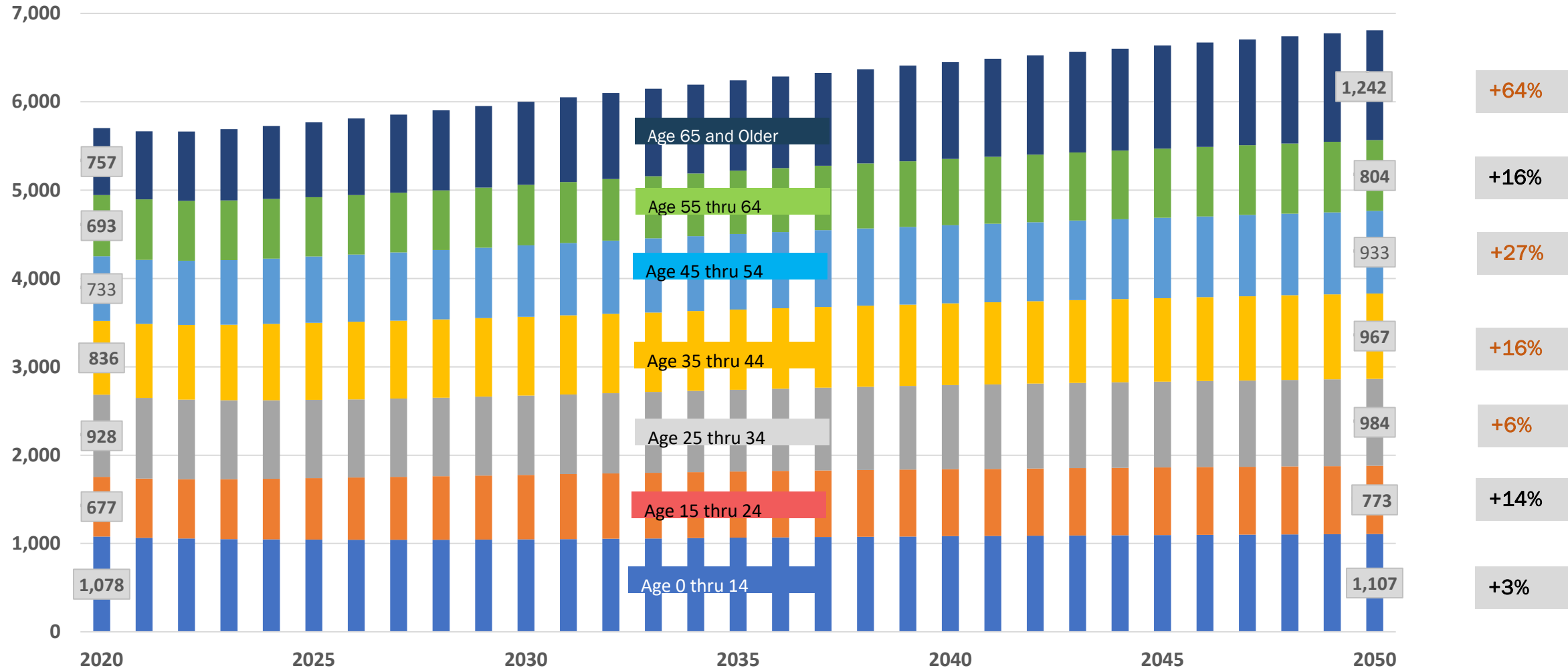
# Round 10.0 Econometric Model: Forecast Job Growth by Sector

## (Thousands of jobs)





# Round 10.0 Econometric Model: Population Forecast by Age Cohort for the COG Region, 2020 – 2050 (Thousands)



# Forecast Accuracy: Round 8.0 2020 Forecast vs Actual 2020

(Round 8.0 Cooperative Forecasts, Adopted 2010)

## 2020 Employment

Round 8.0 Forecast: 3.6 million

Actual 2020: 3.2 million

***Difference:*** +~300,000 jobs or +7.4%

## 2020 Population

Round 8.0 Forecast: 5.6 million

2020 Census: 5.7 million

***Difference:*** - ~130,000 people or -2.4%

## 2020 Households

Round 8.0 Forecast: 2.14 million

2020 Census: 2.12 million

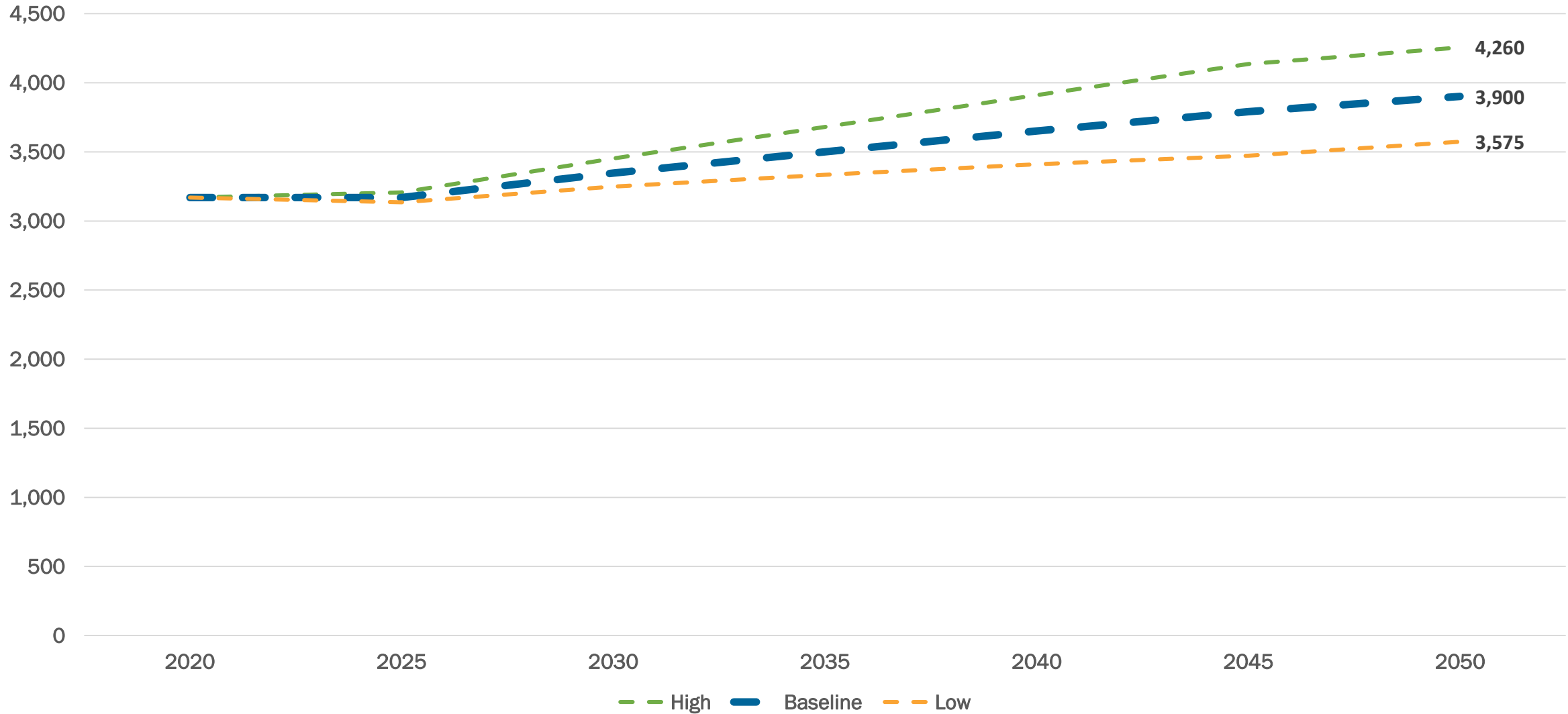
***Difference:*** +~20,000 households or +0.9%

# Round 10.0 ICF Tasks to Support COG

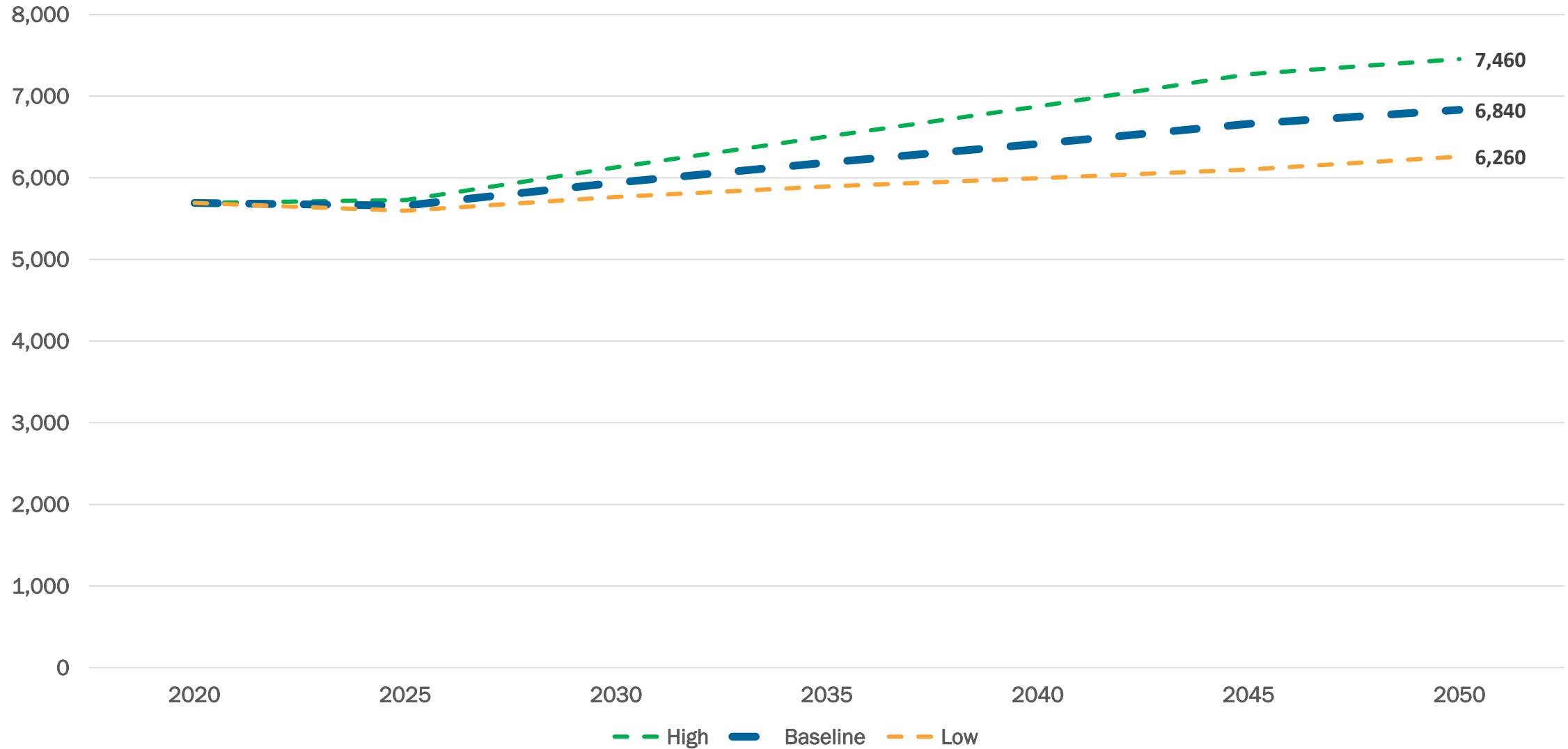
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- Estimating potential long-term COVID impacts to growth
  - Develop a “range” of regional econometric model forecasts
  - Estimate changes to commercial space use
  - Assess potential changes to future housing in the region
  - Project likely changes to future average household size

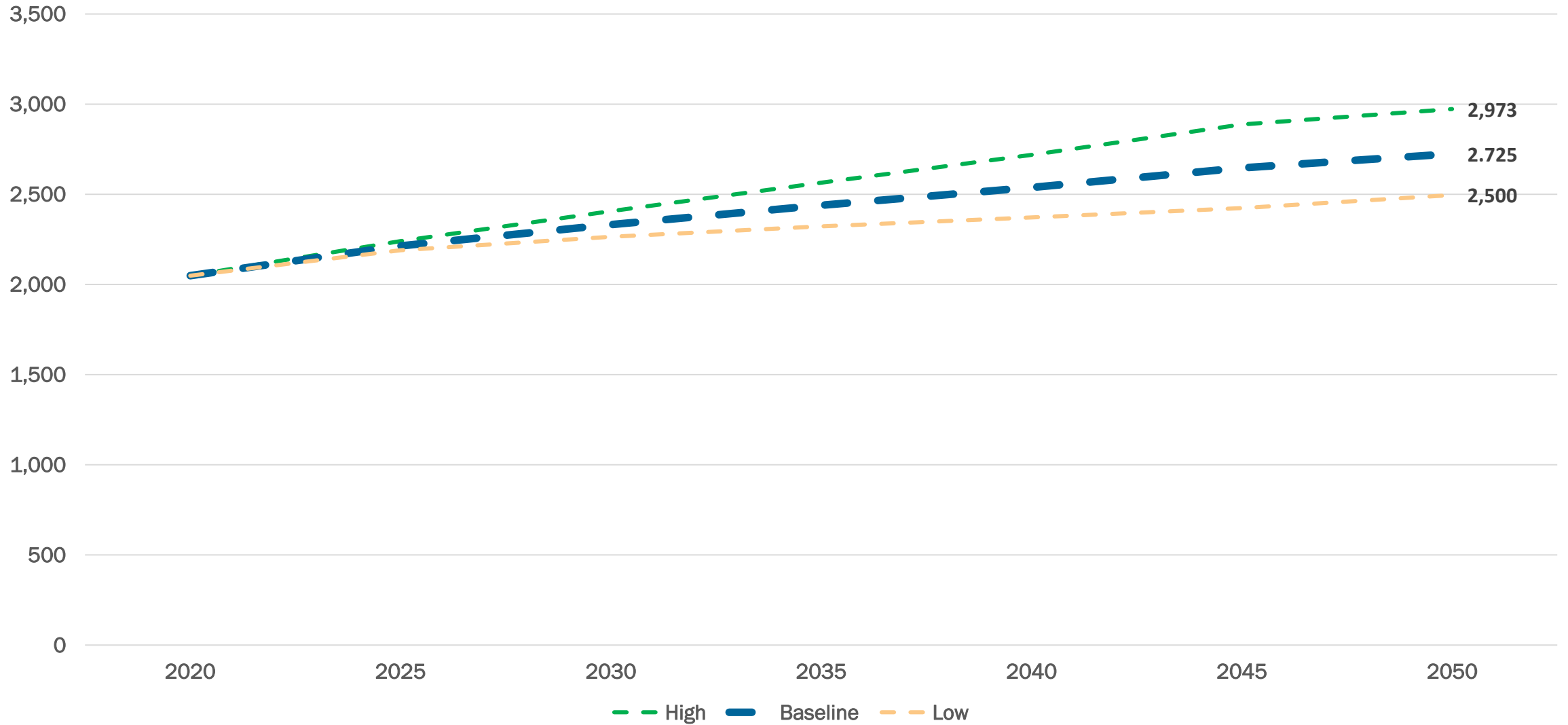
# ICF Estimate of Regional Employment Change due to COVID (000s)



# ICF Estimate of Regional Population Change due to COVID (000s)



# ICF Estimate of Regional Households Change due to COVID (000s)



# Return to Office and Impact on Central Business Districts

Source: ICF 2022

- **April 2022:** daily Metrorail boardings were 36% of pre-pandemic levels
- **March 2022:** regional traffic levels returned to 91% of 2019 levels
- Weekly office activity in the Washington region has only returned to 37% of pre-pandemic levels
- Office vacancy rates in downtown D.C. increased by 56% (from 11.1% to 17.5%) from 2019 to 2022; in February 2022, the DowntownDC BID reported 9.7M square feet of vacant office space
- Significant potential for office-to-residential conversions (2.3M SF being targeted as of 2021)

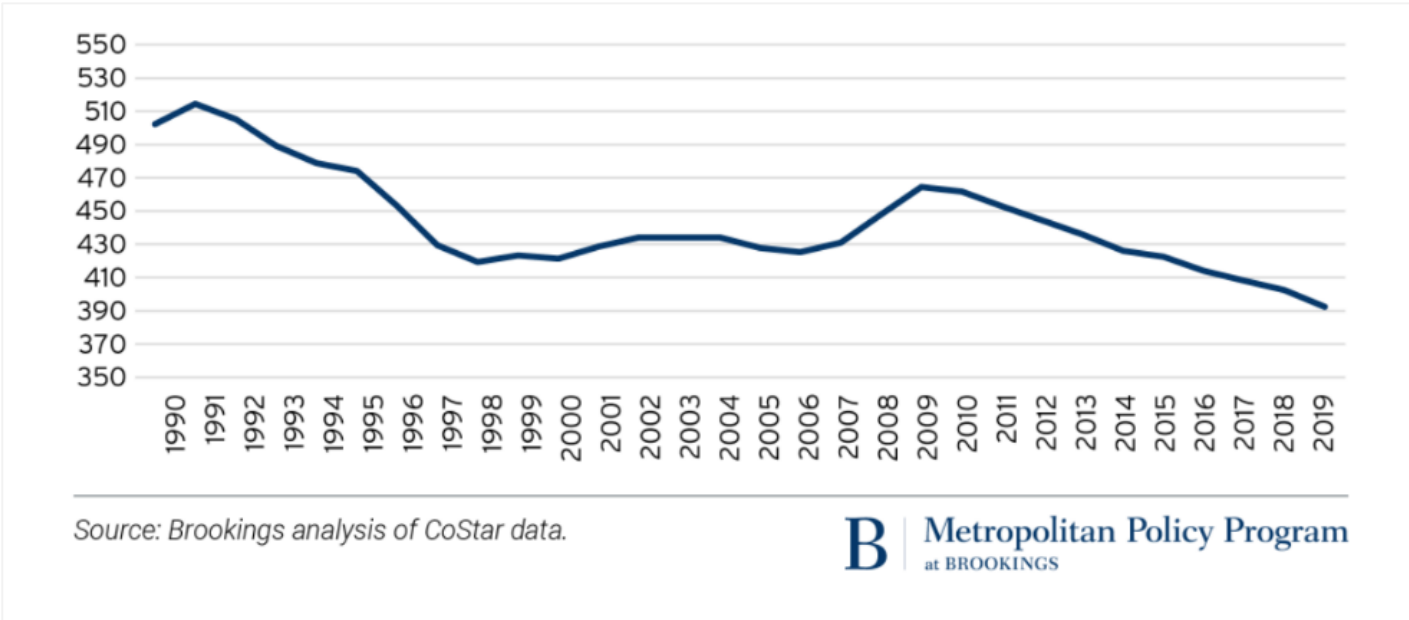
Weekday office activity %  
(compared to 2019)

	May 25	June 1	% Change
Chicago metro	40.0%	37.2%	2.7% ▼
Austin metro	58.5%	56.1%	2.4% ▼
Houston metro	56.0%	53.8%	2.1% ▼
San Francisco metro	33.6%	31.6%	2.0% ▼
<b>Washington D.C. metro</b>	<b>39.1%</b>	<b>37.3%</b>	<b>1.8% ▼</b>
San Jose metro	33.9%	32.1%	1.8% ▼
<b>Average of 10</b>	<b>42.9%</b>	<b>41.2%</b>	<b>1.7% ▼</b>
Philadelphia metro	38.1%	36.7%	1.4% ▼
New York metro	38.0%	36.6%	1.4% ▼
Dallas metro	51.3%	50.2%	1.1% ▼
Los Angeles metro	41.0%	40.5%	0.5% ▼

# Office Utilization Trends

(Source: ICF, Brookings, and COG)

## Median office square feet per worker (top 10 US metropolitan areas)

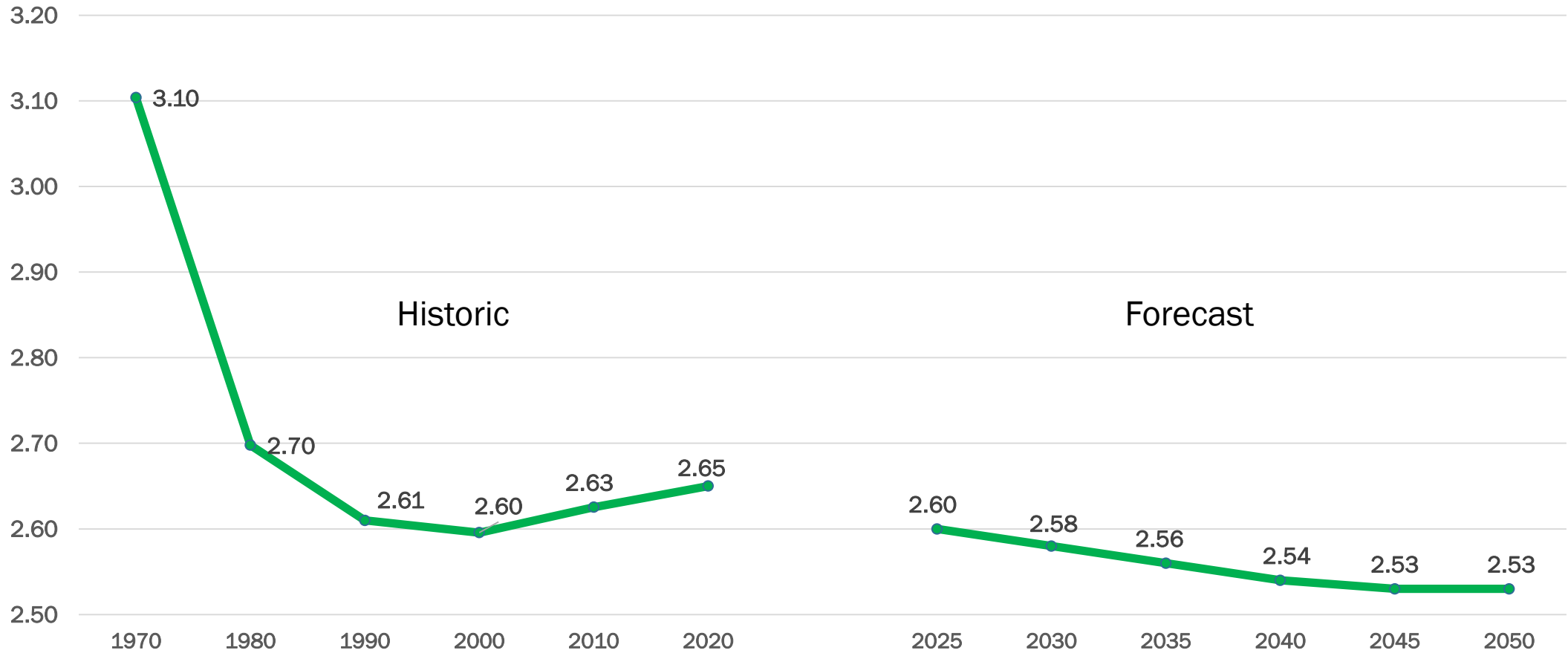


- With fewer employees returning to the office full-time, private sector companies are reevaluating space needs and the location of offices.
- Remote work is firmly established as the “new normal” and will have permanent effects on both office space use and travel patterns in the region.
- With fewer employees in the office full-time, companies are shifting to “hotel” models where space is collectively shared and reserved when employees are in the office (Source: ICF Technical Report).



# Historic Average Household Size 1970 – 2020 And Forecast Household Size, 2025 – 2050

(Source: ICF and COG)



# Summary of Final Round 10.0 Cooperative Forecasts

## COG Region (Millions)

	2020	2025	2030	2035	2040	2045	2050	2020 to 2050	
								Number	%
Employment	3.2	3.4	3.5	3.7	3.9	4.0	4.2	1.0	31%
Population	5.7	6.0	6.2	6.5	6.7	7.0	7.2	1.5	25%
Households	2.1	2.3	2.4	2.5	2.6	2.7	2.8	0.7	32%

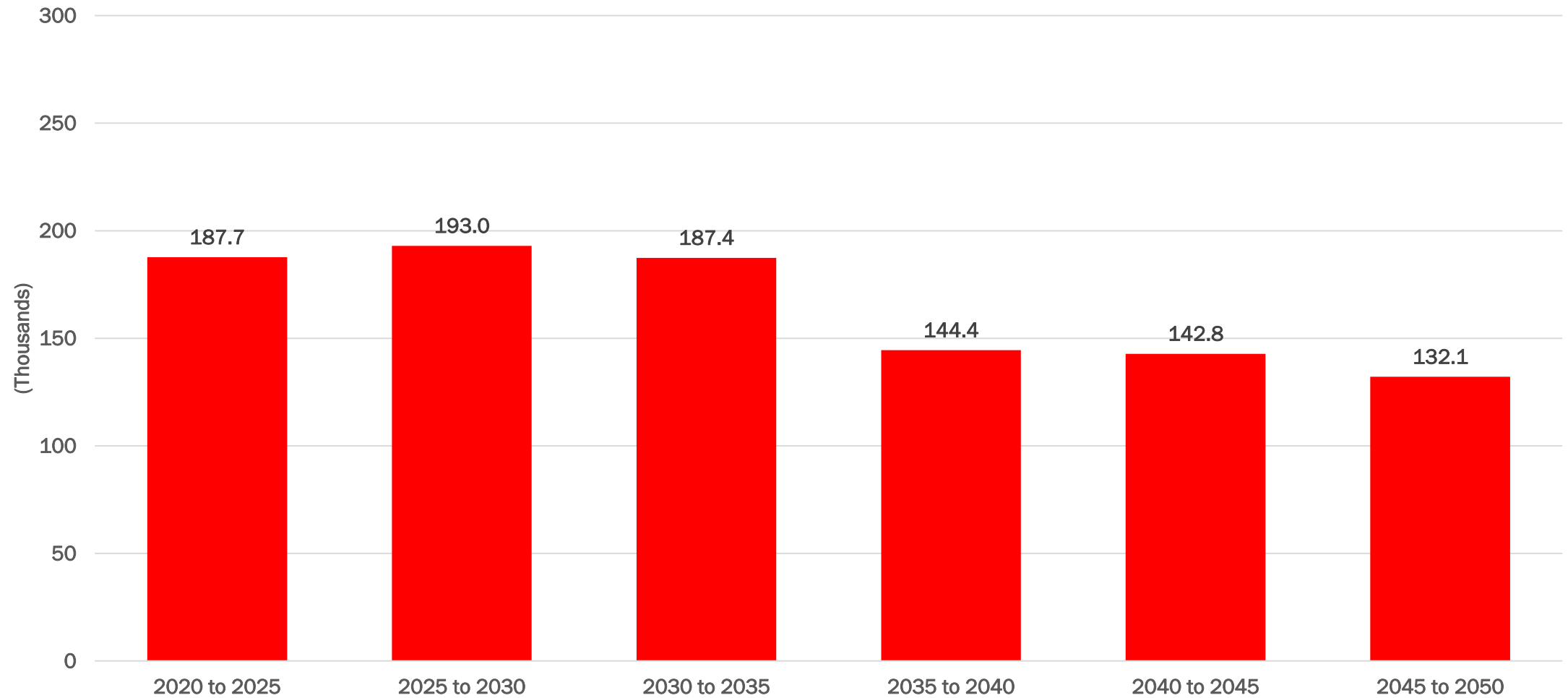
# Comparison of Forecasts: Round 10.0 vs Round 9.2

## COG Region (Thousands)

	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>	<u>2045</u>	<u>2050</u>
<b>Employment</b>	-194.7	-214.1	-220.1	-212.9	-228.9	-219.9	n/a
<b>Population</b>	31.5	-43.0	-44.4	-39.8	-23.2	-9.1	n/a
<b>Households</b>	-2.3	0.7	9.5	22.3	39.1	50.9	n/a

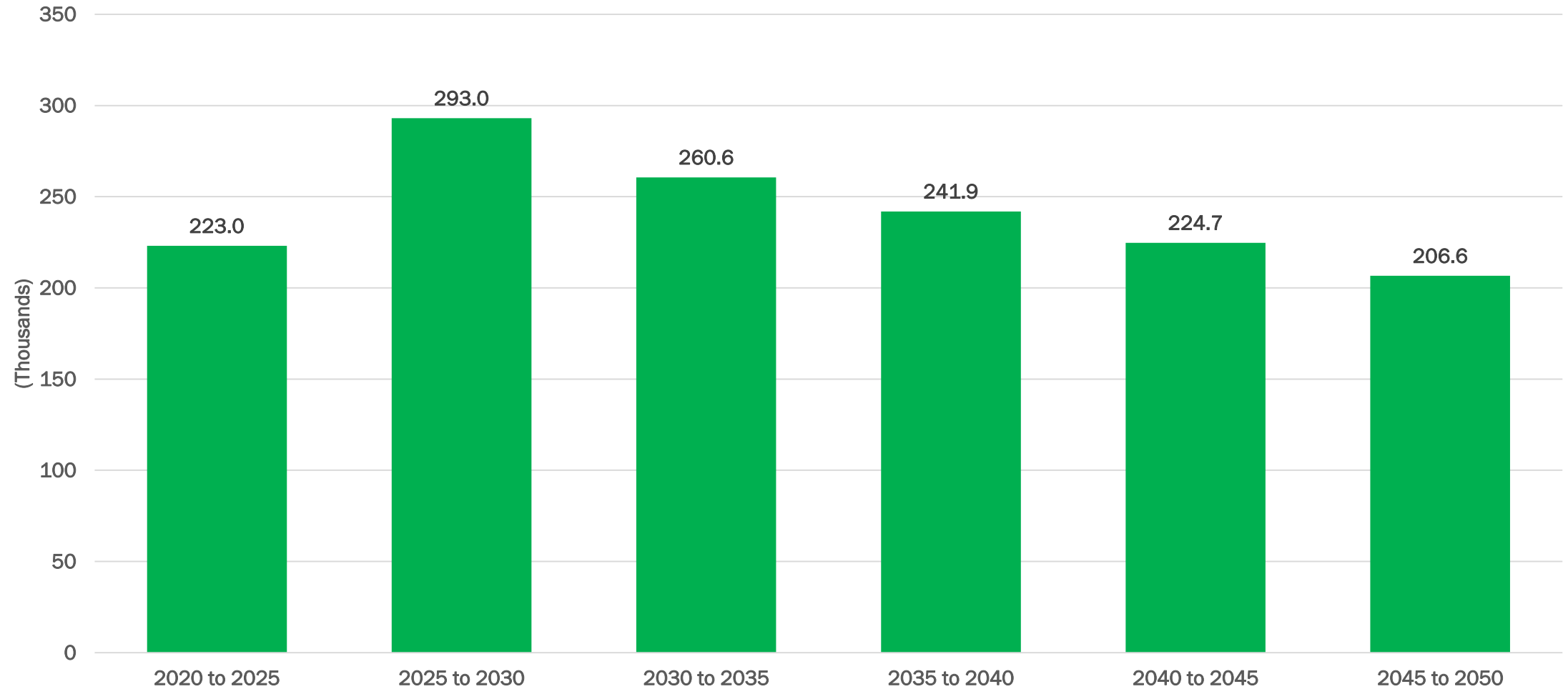
# Forecast Regional Employment Growth by 5-year Interval

## Final Round 10.0 Cooperative Forecasts



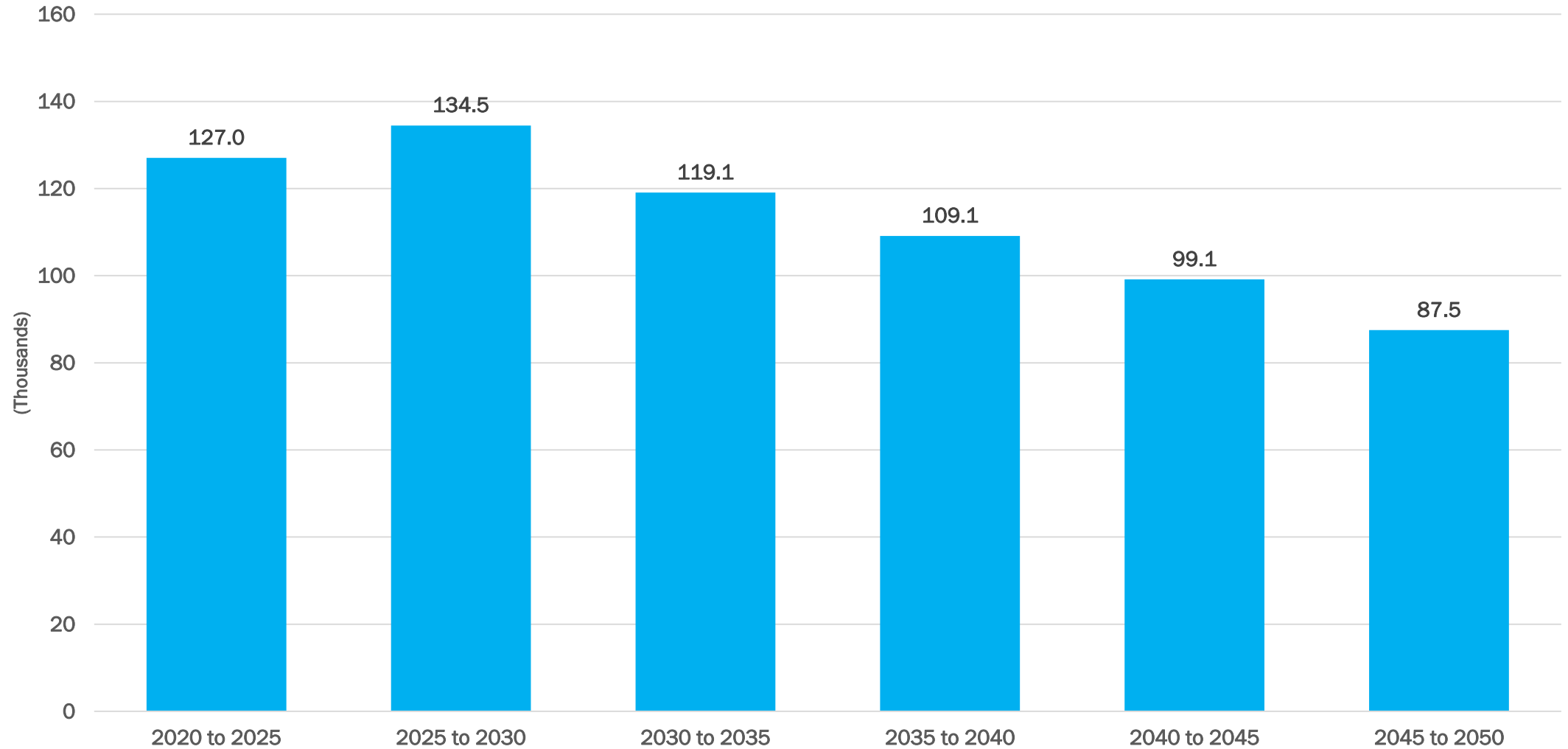
# Forecast Regional Population Growth by 5-year Interval

## Final Round 10.0 Cooperative Forecasts

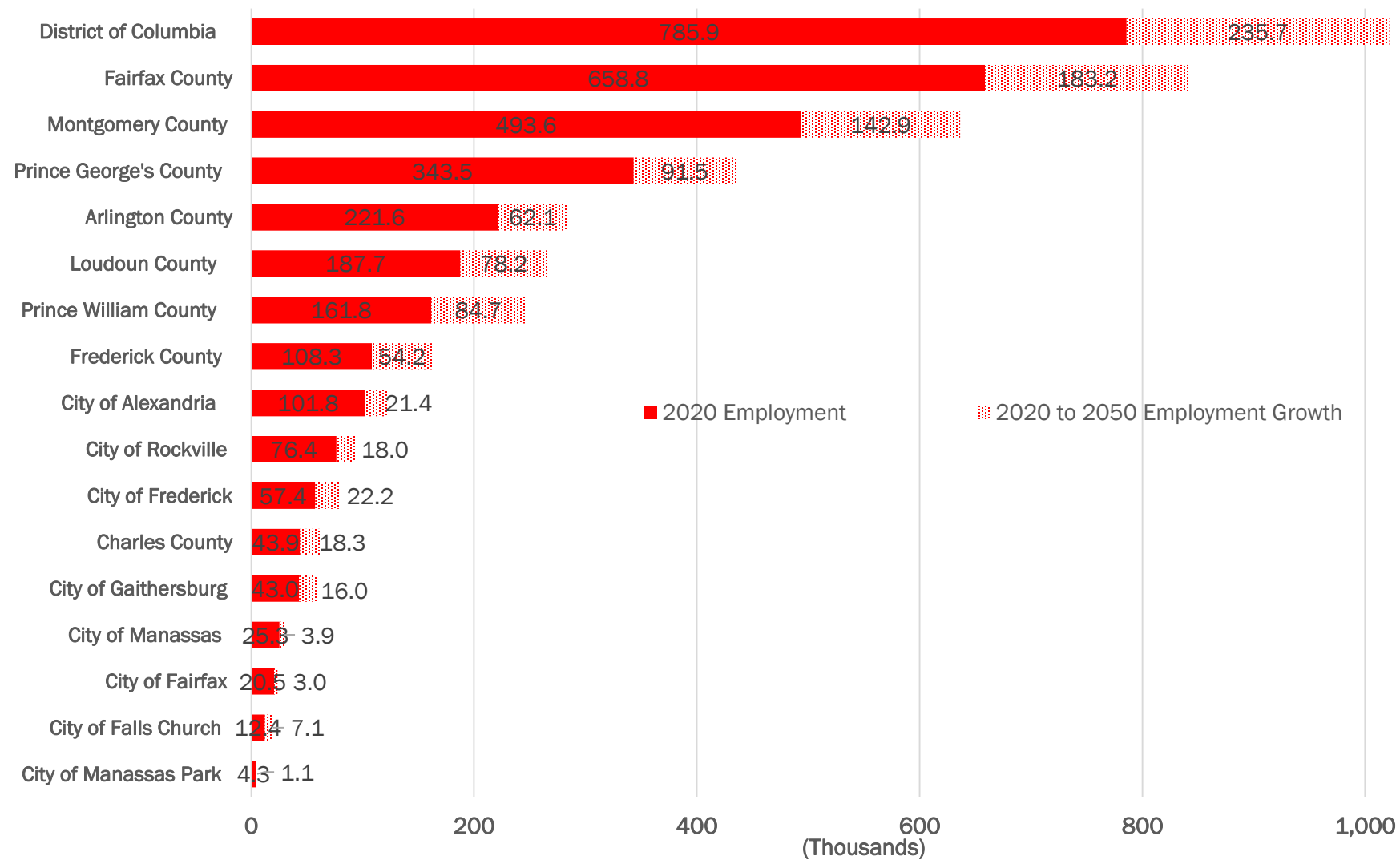


# Forecast Regional Household Growth by 5-year Interval

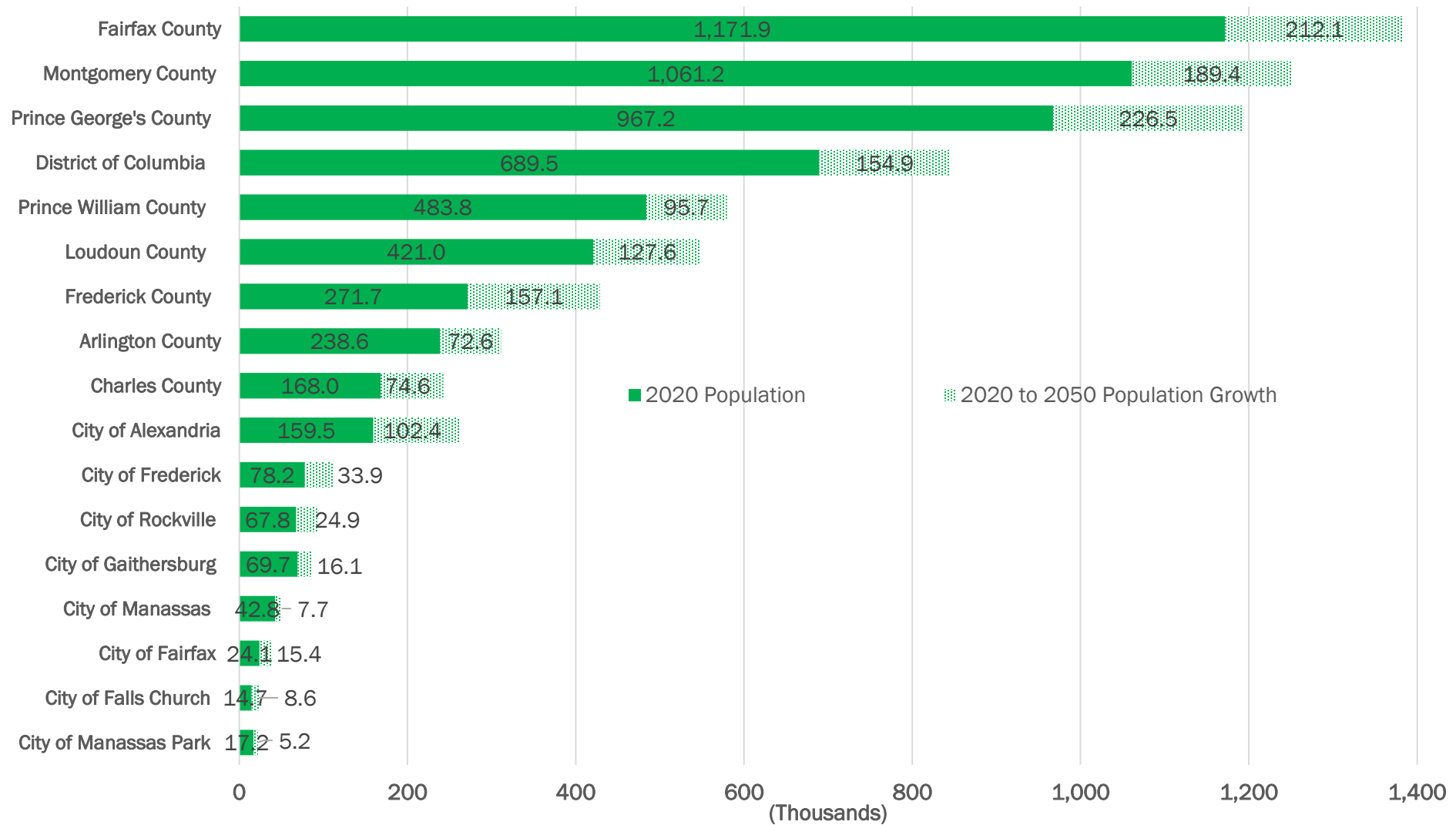
## Final Round 10.0 Cooperative Forecasts



# Final Round 10.0 Employment Forecasts by Jurisdiction (2020 to 2050)

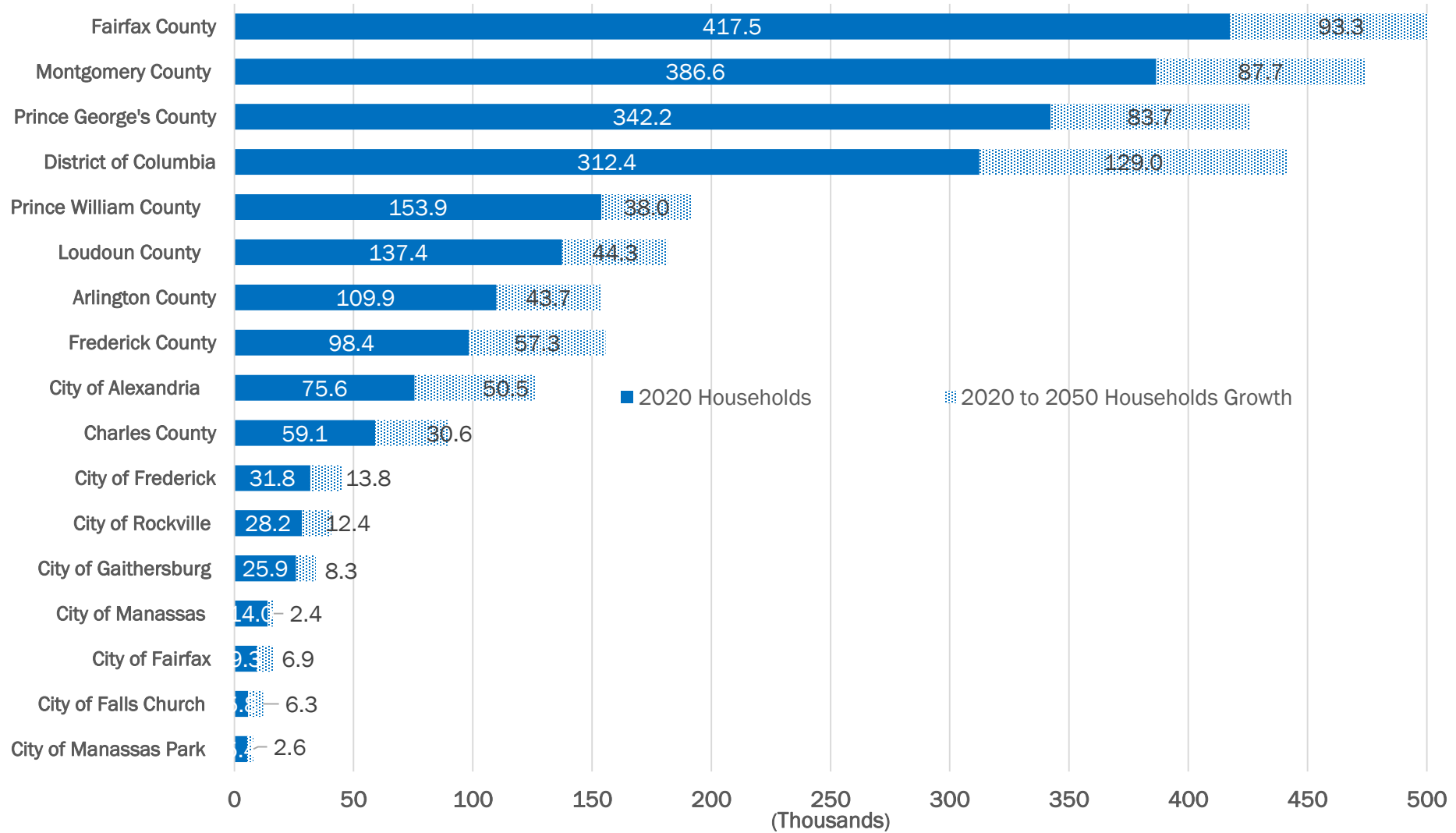


# Final Round 10.0 Population Forecasts by Jurisdiction (2020 to 2050)





# Final Round 10.0 Household Forecasts by Jurisdiction (2020 to 2050)



# Trends in the Final Round 10.0 Forecast

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- The region is expected to add about 1 million jobs between 2020 and 2050. The largest increase in employment is anticipated between 2025 and 2030 when nearly 193,000 new jobs are expected.
  - Employment in all future years is approximately 200,000 fewer jobs than foreseen in Round 9.2, largely due to demographics and near-term COVID challenges.
- Three of every four new jobs (75%) are expected to be in “Service” industries. Business services would see the largest growth with 252,000 new jobs.
- The region’s population is expected to grow by nearly 1.5 million people during that same period, with the largest increase expected between 2025 and 2030 when nearly 293,000 people would be added.

# Trends in the Forecast, continued

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- Steady population growth is foreseen in nearly all age cohorts; but the region's population is aging with the fastest rate of growth expected (+64%) in persons aged 65 years and above.
- Nearly 700,000 new households are expected with the greatest increase expected between 2025 and 2030 when nearly 134,500 new households are foreseen.
- Average household size – which fell significantly from 1970 through 2000, then grew slightly through 2020 – is expected to decline again beginning in 2025

# Final Steps

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- April 12, 2023 – COG Board of Directors briefed on the Cooperative Forecasting program and Round 10.0 regional projections
- April 21, 2023 – COG Planning Directors review and act on draft Round 10.0 jurisdictional forecasts
- May 10, 2023 – COG Board briefed on and plans to adopt the jurisdictional Round 10.0 Cooperative Forecasts at the June 2023 meeting.

Upon approval in June 2023, the Round 10.0 Cooperative Forecasts will be used extensively as the official growth projections for the COG region, including as the official land use growth assumptions for the Visualize 2050 Long-range Transportation Plan update.

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