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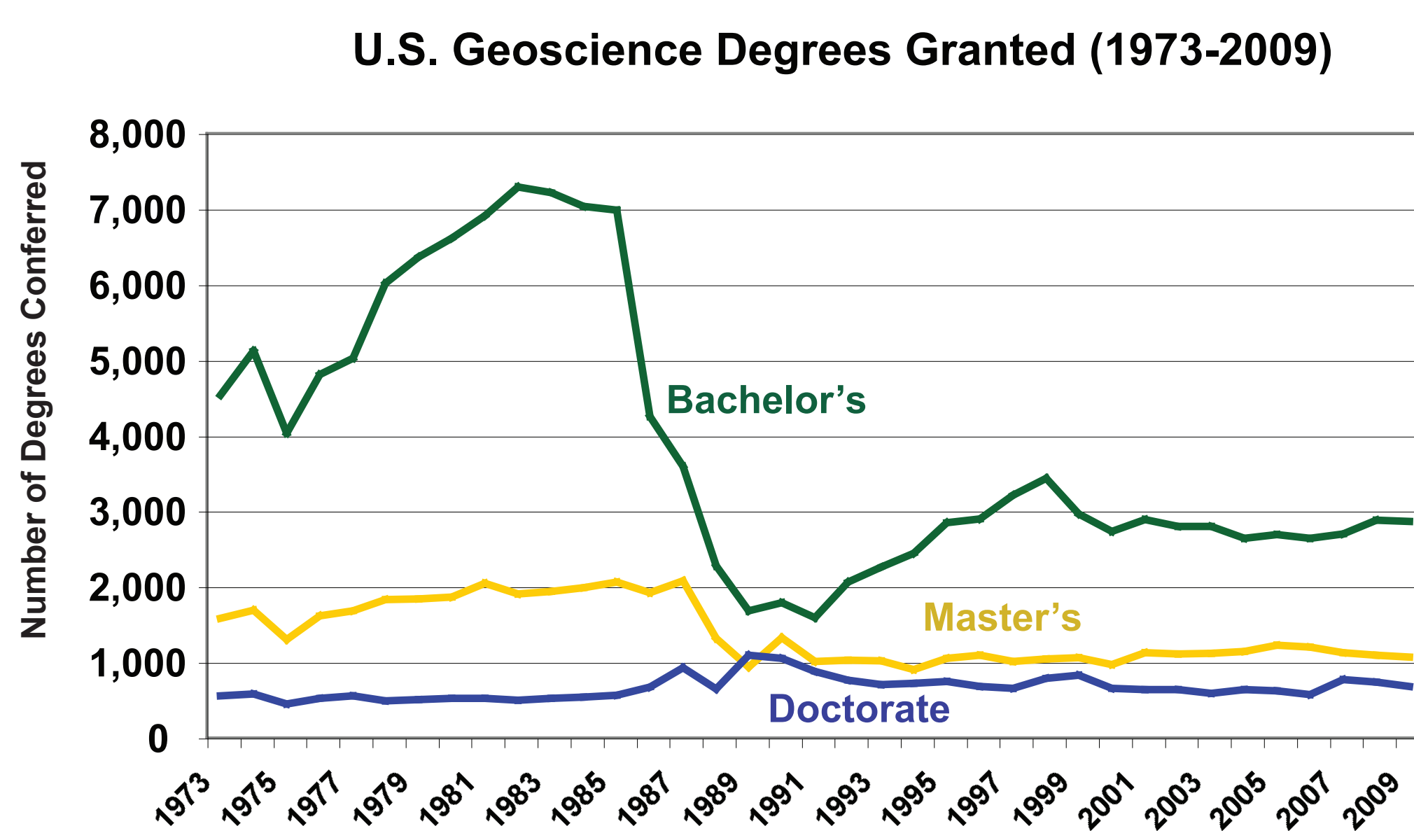
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Abstract

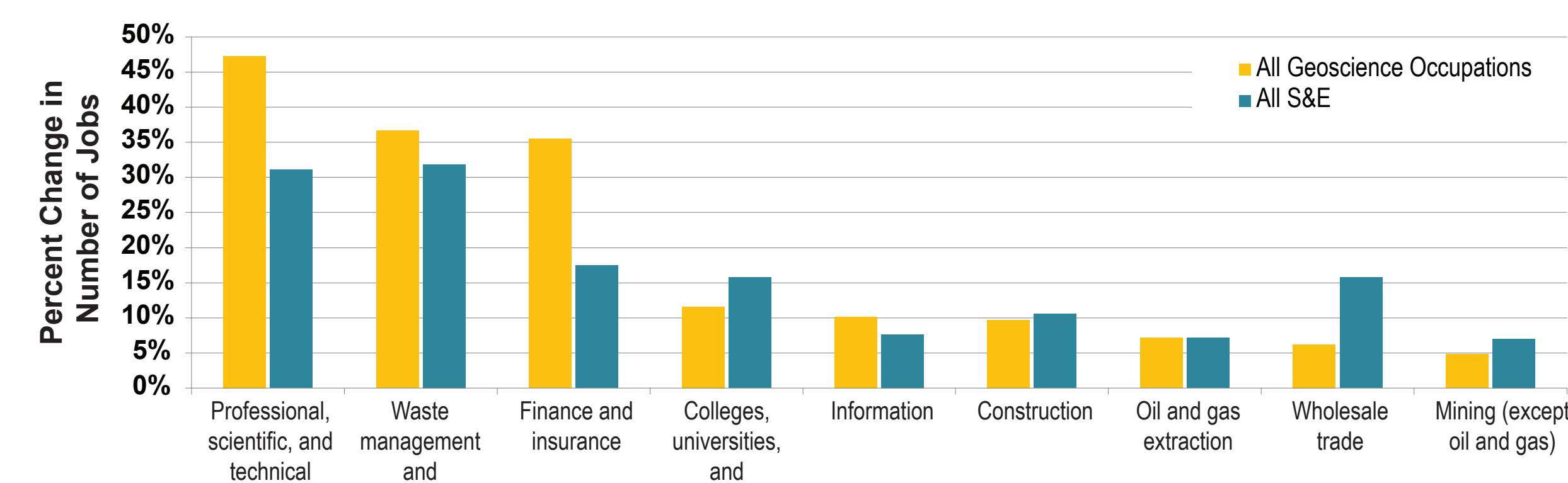
The U.S. Bureau of Labor Statistics projects an overall 19 percent increase in all geoscience-related jobs between 2006 and 2016, which is 9 percent faster than the growth rate for all U.S. occupations.

Since 1995, the number of geoscience graduate degrees conferred has averaged approximately 1,700 per year. As such, current and projected trends indicate that there are not enough geoscientists to meet existing and future demands for professionals in geoscience-employing industries.

This presentation takes a close look at the dynamics involved in the low production of new geoscience graduates. We examine the trends in structure of geoscience academic departments over the past decade. We investigate the trajectory of enrollments, degrees conferred and number of faculty in U.S. geoscience departments and explore regional trends in these areas. We also explore new models of industry demand for geoscientists, and investigate the economic linkages between industry production and geoscientist demand over the past decade.

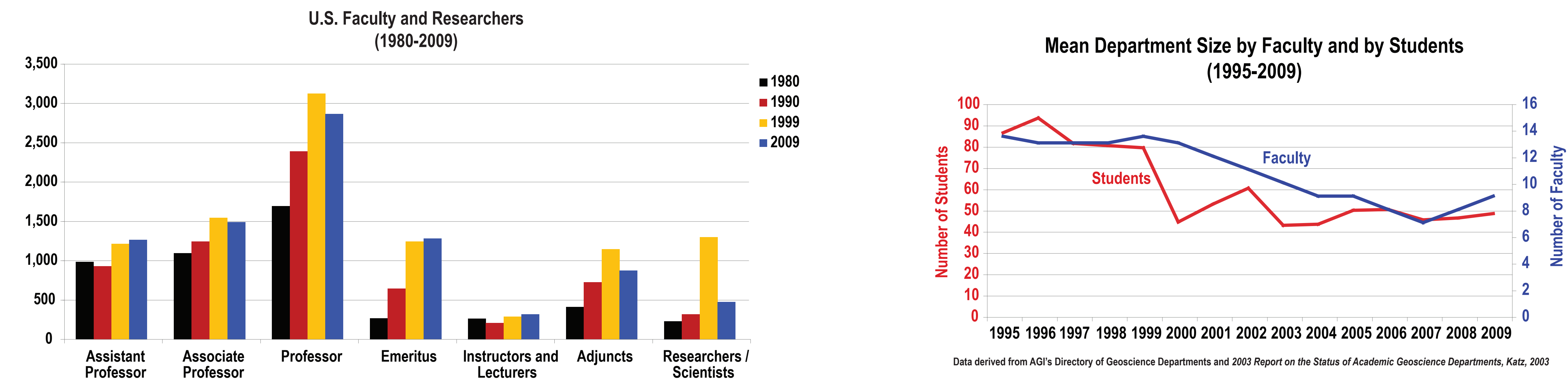


Geoscience and Science & Engineering Projected Job Growth (2006-2016)



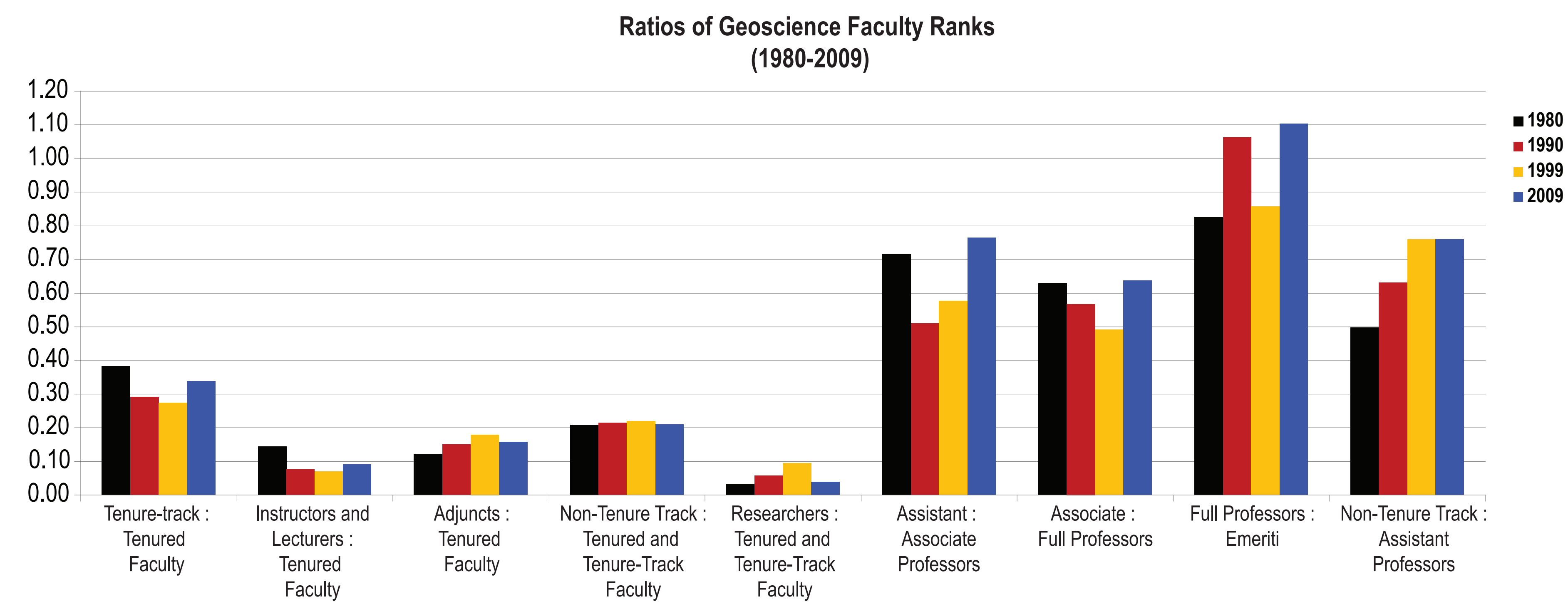
Data derived from U.S. Bureau of Labor Statistics

Supply Trends: Trajectories of Geoscience Departments

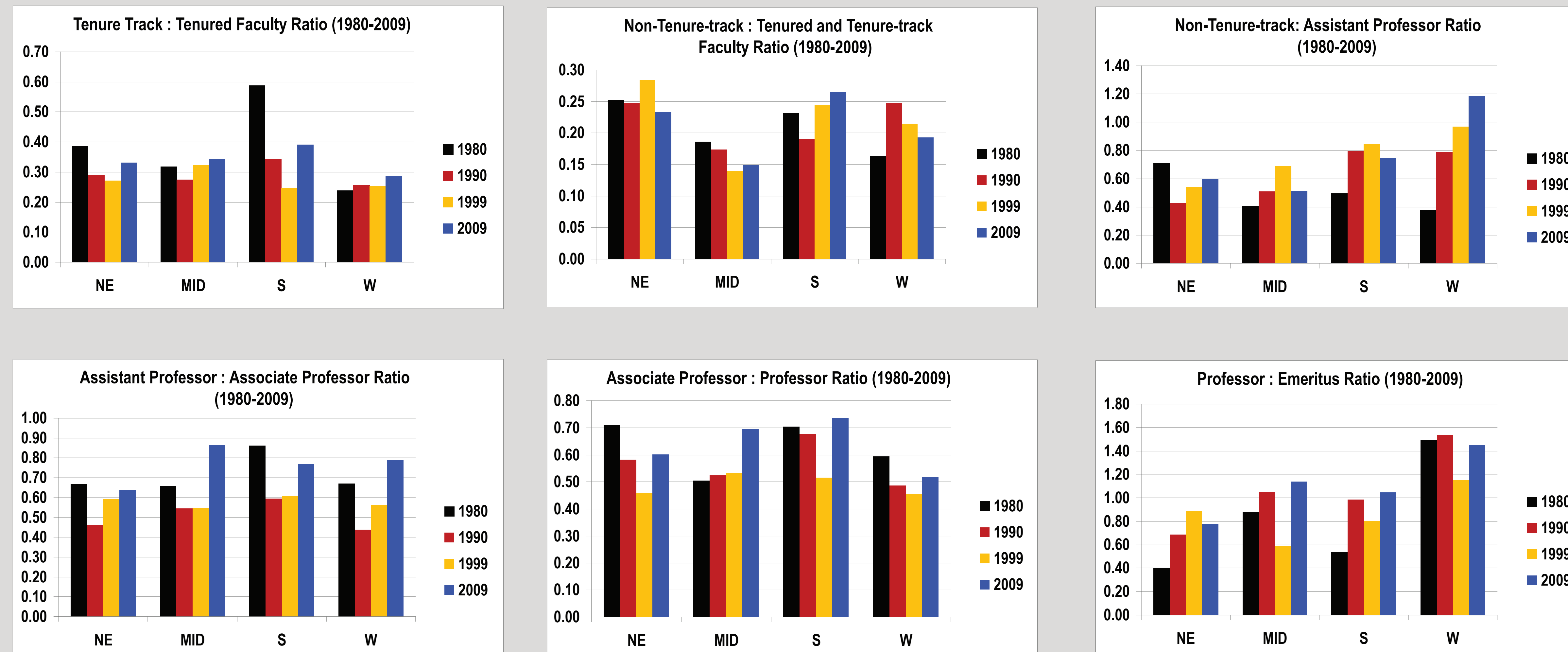


Total faculty numbers have increased by ~ 30% since 1990, and the percentage of faculty that are professors has declined by 4% while the percent of faculty that are emeriti has increased by 6%.

The increase in the ratio of non-tenure track professors to assistant professors is driven strongly by the increase in adjunct professors over the past 30 years. Currently, assistant professors comprise 16% of the geoscience professoriate whereas adjunct professors comprise 11%.

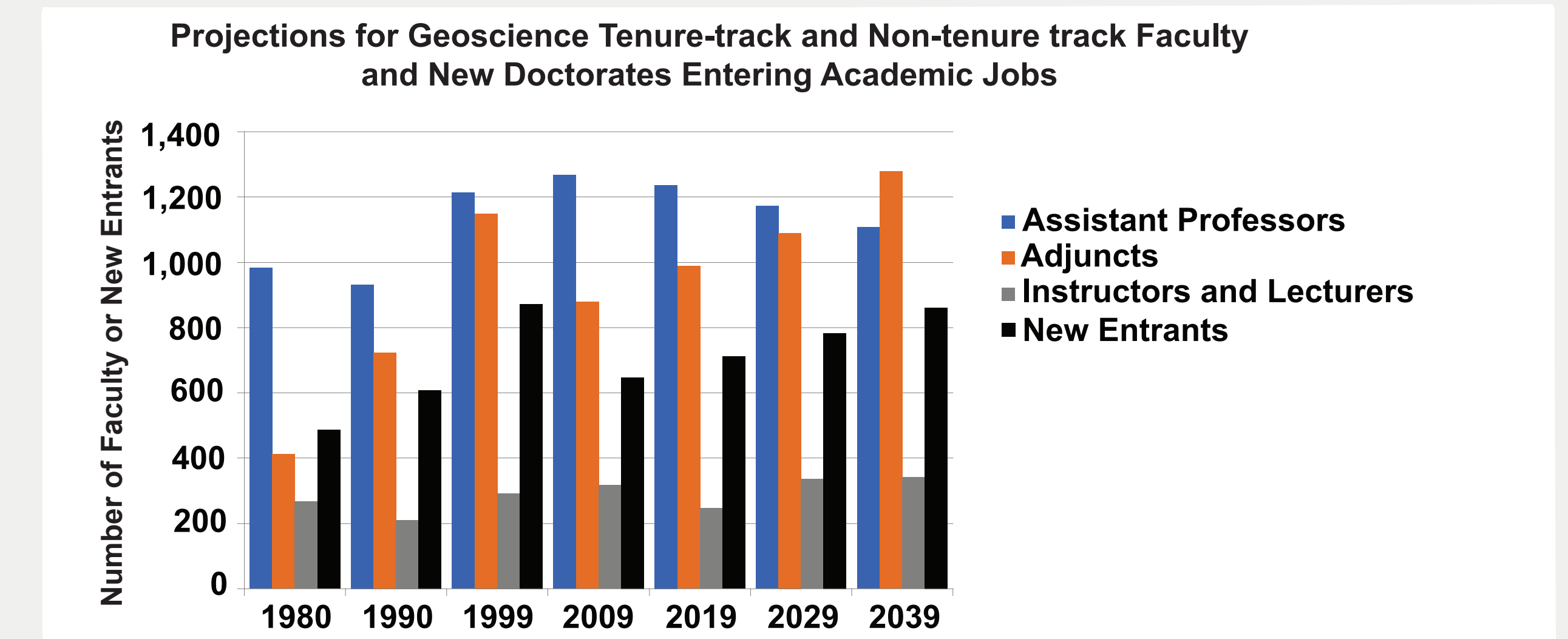
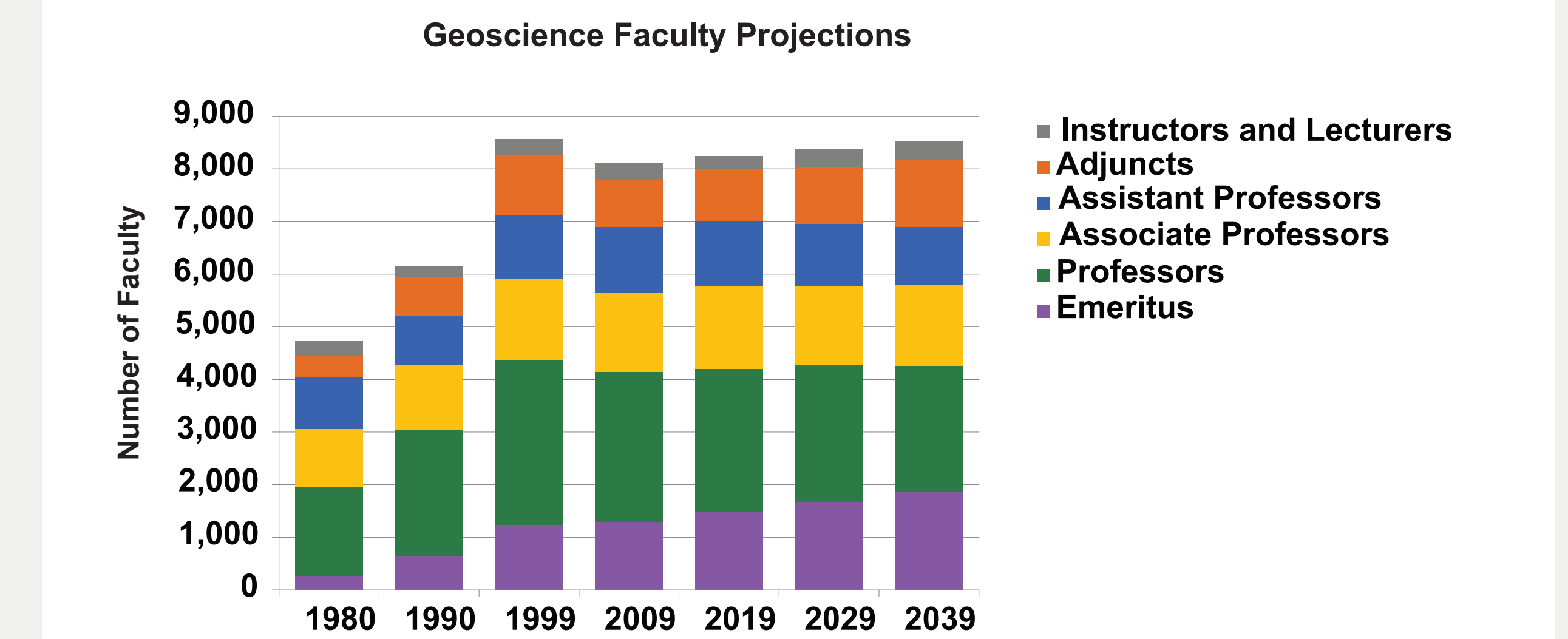
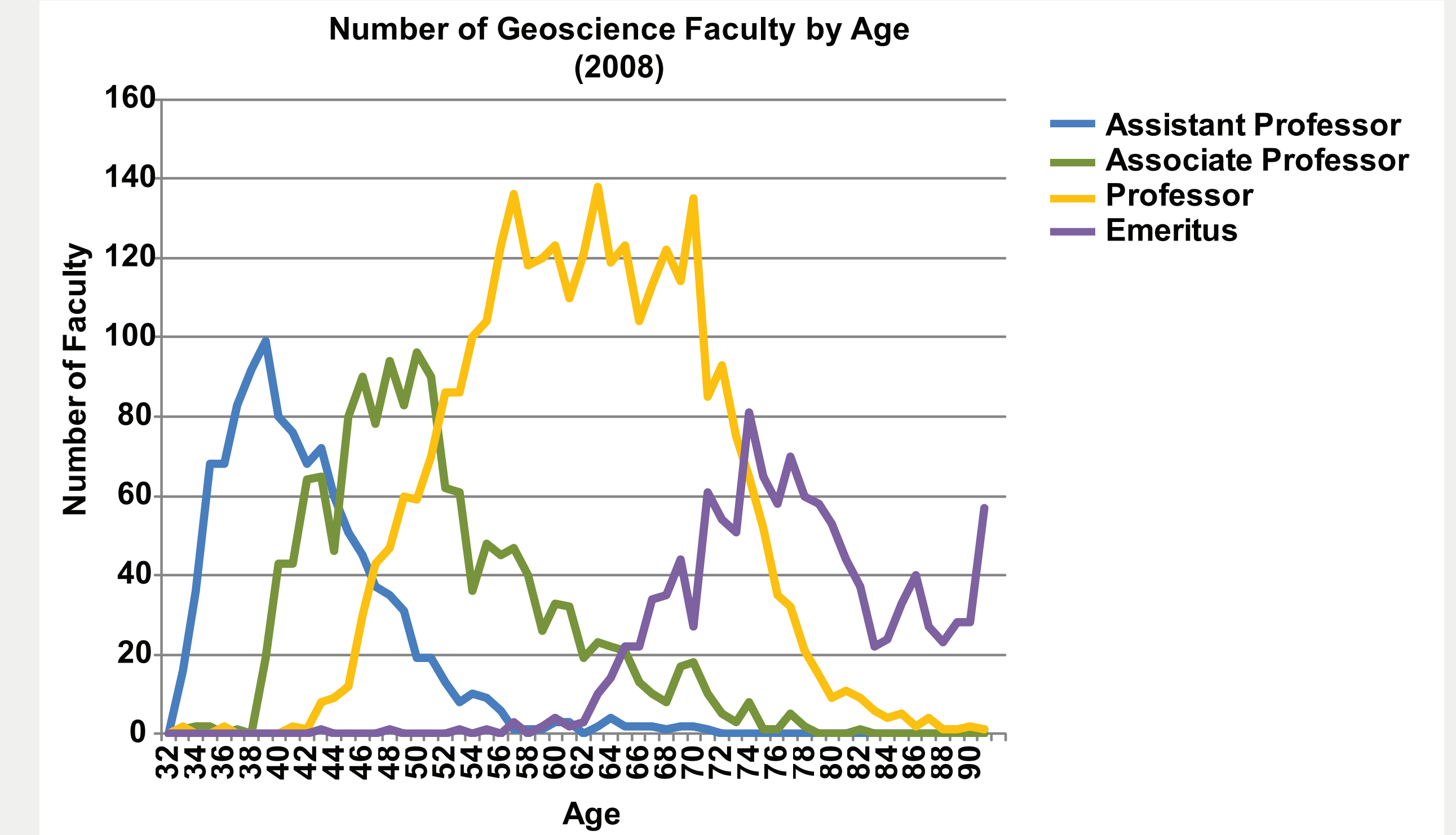


Regional Analysis of Faculty Ratios 1980-2009



Demand Trends and Models

Academic Projections

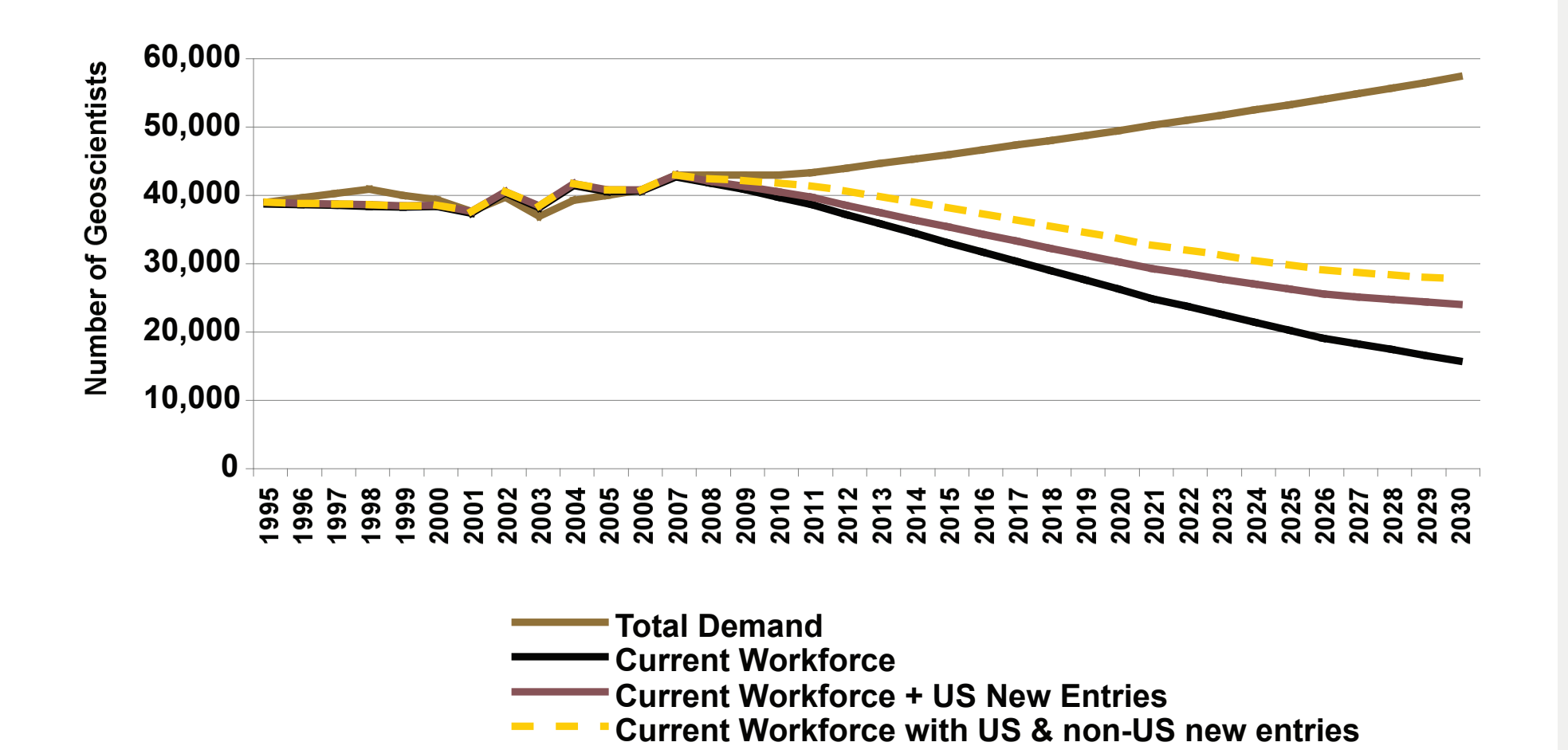


Projections based on extension of faculty rank percentages of total faculty numbers from 1980 to 2009. Total faculty growth is estimated at 1.7% per year.

New entrants are considered to be 80% of total geoscience doctoral recipients. New entrant growth rate is estimated at 1% per year.

Industry Projections

Oil & Gas Industry Demand for Geoscientists (1995-2030)



Projections based on a 3% increase in graduate geoscientists entering the petroleum industry and a 2% growth in annual demand for geoscientists after 2011.