

# MARYLAND DEPARTMENT OF PLANNING

## PROJECTIONS METHODOLOGY: EMPLOYMENT

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# PROJECTIONS

Planning's Projections and State Data Center produces projections that include

- **Total Population**
- **Household Population**
- **Number of Households**
- **Average Household Size**
- **Labor Force**
- **School Enrollment**
- **Total Employment**
- **Employment by Industry**
- **Personal Income**
- **Per Capita personal Income**

# EMPLOYMENT PROJECTIONS

Planning's Projections and State Data Center provides projections on employment in support of comprehensive planning efforts. These projections include:

- Total Jobs by Place of Work by Jurisdiction
- Total Jobs by Place of Work by Industry

# EMPLOYMENT PROJECTIONS - SOURCE DATA

- Bureau of Economic Analysis (BEA)
- Maryland Department of Labor (DLLR)
- U.S. Bureau of Labor Statistics (BLS)
- Baltimore Metropolitan Council (BMC)
- Metropolitan Washington Council of Governments

# EMPLOYMENT PROJECTIONS - METHODOLOGY

## Process

- Deriving Projected County Employment Totals for Jurisdictions
  - Develop regression equation(s) to determine growth rates which are then applied to most recent county total.
  - Projected employment is a function of time, labor force growth rates, and labor force participation rates.

# EMPLOYMENT PROJECTIONS - METHODOLOGY

## Labor Force and Labor Force Participation Rate

- Inputs

- Population 16 years and over (by discrete age cohorts)
- Labor Force Participation rates from American Community Survey (ACS) and US Bureau of Labor Statistics (BLS).

- Equations

Labor Force = Population 16 years and over \* projected Labor Force Participation Rates by discrete age groups (data accessed from BLS)

Labor Force Participation Rate = Labor Force / Population 16 years

# EMPLOYMENT PROJECTIONS - METHODOLOGY

## Process

- Produce Historical Series
  - Wage & Salary jobs data from BEA
  - Use Fratar method to address non-disclosed employment in any industry.
  - The Fratar method is borrowed from transportation modeling where it is used to predict the distribution of future trips.

# EMPLOYMENT PROJECTIONS - METHODOLOGY

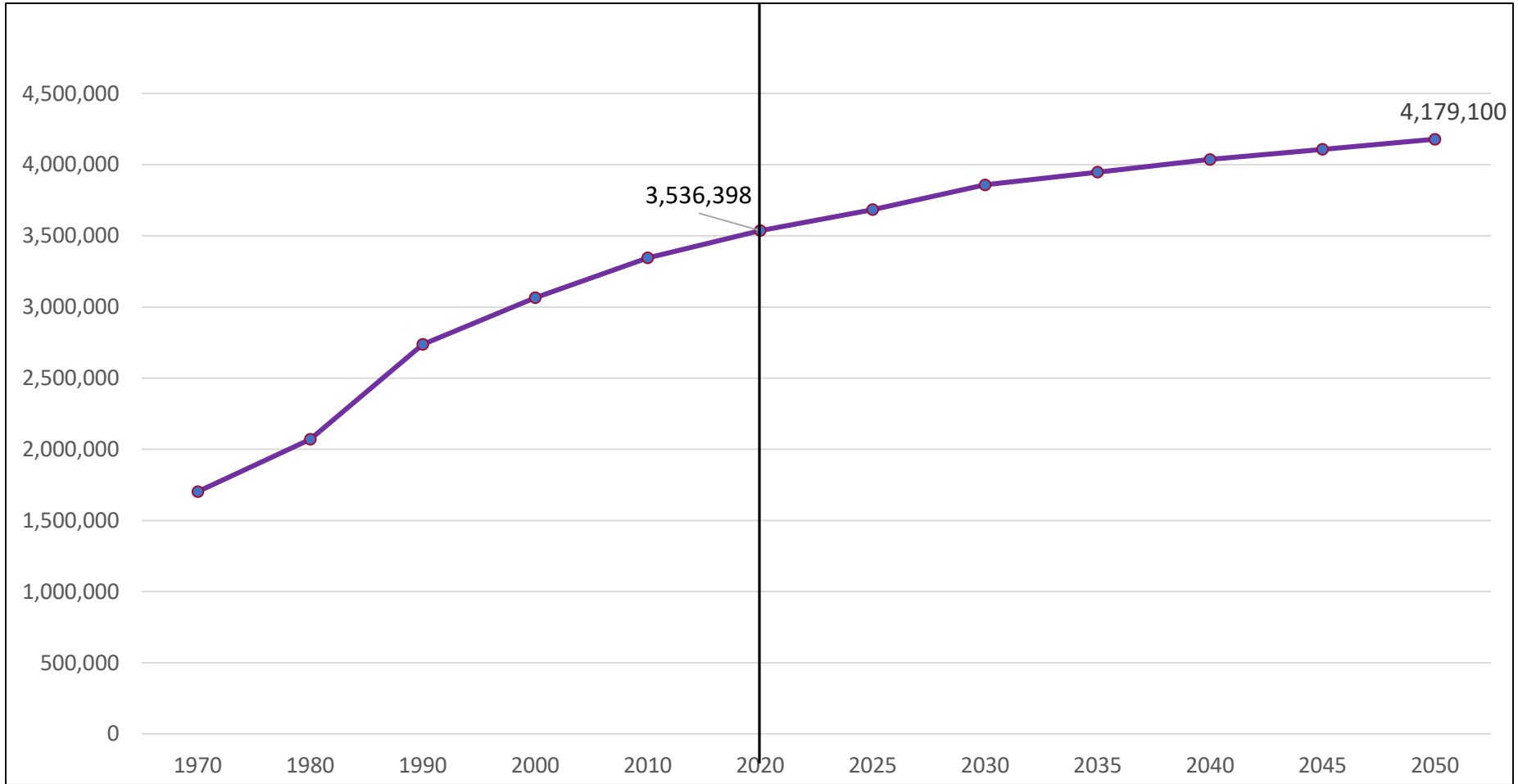
## Process

- Total Jobs by Place of Work by Industry
  - Examine the Maryland Department of Labor's employment trends for each industry in each county over time.
  - Derive the proportion of industry employment and apply to county totals.



# TOTAL EMPLOYMENT PROJECTIONS - MARYLAND

## 1970 - 2050



# WEBSITE AND CONTACT

Maryland State Data Center Projections website

[https://planning.maryland.gov/MSDC/Pages/s3\\_projection.aspx](https://planning.maryland.gov/MSDC/Pages/s3_projection.aspx)

## CONTACT

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