

Georgia's State Water Plan

Population and Workforce

Methods for Projecting Future

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Population and Workforce

- Population – initial projections use demographic methods
- Workforce – initial projections use econometric/time series methods
- Population and Workforce projections brought into balance with each other

Population – Demographic Method

- Start with county population from 1990 and 2000 Census; and 2007 Census estimates
- Each county's population examined by
 - Age
 - Sex
 - Race/ethnicity (Black, Hispanic, White, Other)

Components of Change

- Births – fertility rates calculated using birth records and census data
- Deaths – survival rates calculated using death records and census data
- Migration – net rates of migration calculated by “surviving” cohorts from 1990 to 2000; and 2000 to 2007

Alternative Projection Scenarios

- Births – assume fertility rates unchanged
- Deaths – assume survival rates unchanged
- Migration – four alternative rates
 - a) Zero net migration—births and deaths alone, for analytical purposes
 - b) 1990-2000 rate
 - c) Half the 1990-2000 rate
 - d) 2000-2007 rate

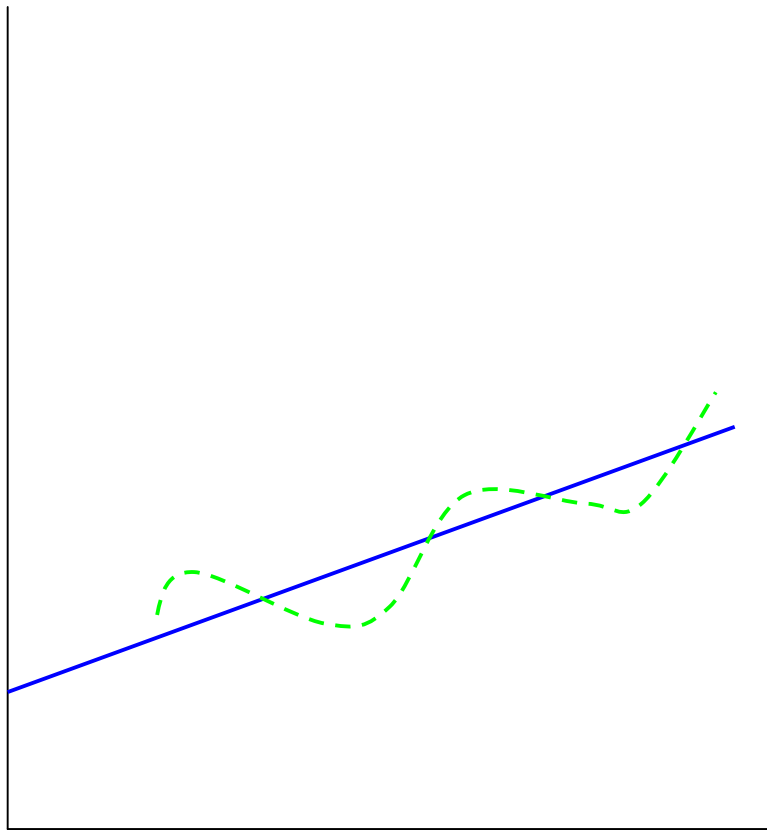
Review of Population Projections

- Maintain consistency with historical pattern
- Reduce extremes of growth and decline
- Adjust for special events affecting population change
 - Natural disaster
 - Major employment change

Econometric Method

- Start with regional employment levels from 1990 to 2008 using GA DOL employment series
- Each region's employment examined by selected industries
- Statistical model captures both trends and cycles

How Does Such a Model Work?



- Cycles of employment
- Projections are not just a straight line or constant percentage growth.

Employment Projections

- Models developed for each industry by region
- Change in each industry influenced by:
 - Change in total employment for region
 - Change in statewide employment for that industry
- Adjustments are made to capture the current recession

Population and Workforce are Balanced



- Adjustments to employment in retail and services to fit preliminary populations
- Population adjusted to fit the demand for labor based on employment

Part 1: What's Next?

- DVD with methodology & training developed by Carl Vinson Applied Demography Program
- DVD & intro letter mailed to Council Members and Local Governments (cc. letter to Chief Elected Official, Clerk, etc.)
- Local elected official consult with 'key economic informants' ('ccs' on letter, industry leaders, etc.)

Part 2: What's Next?

- View DVD on computer and offer comments
- Fairly aggressive schedule for comments and review (2-3 weeks)
- Submit comments to Carl Vinson
- Carl Vinson finalize population and workforce forecasts
- Planning Contractors use forecasts for municipal/industrial water supply and wastewater forecasting process