Update on CFWI Regional Water Supply Plan (RWSP)

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Steering Committee

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Bureau of Economic and <u>Business</u> <u>Research (BEBR)</u>

Mission

- To collect, analyze and generate economic and demographic data on Florida and its local areas;
- To conduct economic and demographic research that will inform public policy and business decision making;
- To distribute data and research findings throughout the state and the nation.

Central Florida Water Initiative

BEBR

- Founded in 1929
- Produces Florida's official state and local population estimates and projections.
 - Florida Statute 373.709 (2)(a)1: "...the district shall consider the University of Florida's Bureau of Economic and Business Research (BEBR) medium population projections..."
- Conducts Florida's monthly consumer confidence survey and surveys.
- Produces Florida's price, wage, and retail indexes and a county price level index.
- Published the Florida Statistical Abstract each year since 1967.
- Provides employment and training for many graduate and undergraduate students.

BEBR & Projection Accuracy

Warrington College of Business Administration

Bureau of Economic and Business Research

Special Population Reports Number 9



An Evaluation of Population Forecast Errors for Florida and Its Counties, 1980 – 2010

Stanley K. Smith, Population Program Director Stefan Rayer, Research Demographer

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BEBR & Projection Accuracy

- 1. Report evaluates the forecast accuracy of state and county projections for launch years 1980, 1985, 1990, 1995, 2000, and 2005.
- 2. Errors generally increased (ignoring the direction of error) as the horizon became longer.
- 3. Averaged across all launch years, state level errors were:
 - 3% for 5-year horizons, 4% for 10-year horizons, 6% for 15-year horizons, 9% for 20-year horizons, 11% for 25-year horizons, and 16% for 30-year horizons
- 4. Other state studies have reported average errors (ignoring the direction of error) ranging between:
 - 5% and 8% for 10-year horizons and between 10% and 15% for 20-year horizons.
- 5. Errors for the Florida projections have thus been somewhat smaller than those reported in other studies of state population projections.

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State Projections

Table 1. Forecast Errors for State Projections, Launch Years 1980–2005								
Launch Year								
Horizon	1980	1985	1990	1995	2000	2005	Ave. 1	Ave. 2
5 Years	-2.1	-2.6	0.8	-3.6	-2.3	6	2.9	-0.9
10 Years	-5.1	-4.1	-1.6	-6.5	-0.1	_	3.5	-3.5
15 Years	-7.3	-7.6	-4.7	-5.2	_	_	6.2	-6.2
20 Years	-10.8	-11.4	-3.7	_	_	_	8.6	-8.6
25 Years	-11.2	-11.2	_		_	_	11.2	-11.2
30 Years	-16.3	_	_	_	_	_	16.3	-16.3
Ave. 1: Average ignoring the direction of error								
Ave 2: Average accounting for the direction of error								

- Do the negative errors seen indicate that current and future projections of the Florida population will also tend to be low?
- No, we note that the 2010 projection for launch year 2005 turned out to be substantially too high. We believe BEBR's current and future projections of Florida's population are as likely to be too high as too low.

BEBR & Projection Accuracy

- BEBR's county projections are based on simple techniques that extrapolate historical trends into the future.
- Evidence strongly suggests that more complex techniques cannot produce more accurate forecasts of total population than can be achieved using simple extrapolation techniques
- To account for uncertainty, ranges are produced.

BEBR & Projection Accuracy

CONCLUSION

- State-level forecast errors have averaged 3% for 5-year horizons, 4% for 10-year horizons, 6% for 15-year horizons, and 9% for 20-year horizons
- County-level forecast errors have averaged 5%, 8%, 11%, and 15% for those horizons, respectively
- Based on comparisons with other studies, this is a good record of forecast accuracy.

QUESTIONS