Can We Get There From Here?

A presentation to Florida School Finance Officers Association Fall Conference

November 14, 2003
You Are here
More students enroll in Florida Schools than state lawmakers budgeted for. (Sun-Sentinel)

Florida Department of Education spokeswoman Francis Marine said forecasting student enrollment isn’t an exact science. “It’s always about 1 percent off….,” she said. (Sun-Sentinel)
Not Always About 1 Percent

In the 14 years prior to 2000-01, the forecast error exceeded .5% only 3 times.
But Accuracy Has Recently Changed

- The forecast error has been greater than .5% for the past two years and is expected to be so again this year.
- The actual forecast accuracy has recently changed.
Factors Influencing Patterns Have Different Effects Since 2000-01

Evidence:
Models that have worked very well for many years are now not as accurate.
WHY

Policy

Economics

Plausible Reasons

Demographics

Sept 11
Miami-Dade County Public Schools
Annual Foreign Student Registration

[Chart showing annual foreign student registration from 1996-1997 to 2003-2004]
Immigrants to the United States

In Millions

- 1821-30: 0.1
- 1831-40: 0.6
- 1841-50: 1.7
- 1851-60: 2.6
- 1861-70: 2.3
- 1871-80: 2.8
- 1881-90: 5.2
- 1891-00: 3.7
- 1901-10: 8.8
- 1911-20: 5.7
- 1921-30: 4.1
- 1931-40: 0.5
- 1941-50: 1
- 1951-60: 2.5
- 1961-70: 3.3
- 1971-80: 4.5
- 1981-90: 7.3
- 1991-98: 7.6
Florida: Rank 4th of Six Gateway States For Foreign-Born Migration From Abroad From 1995-2000

- California: 1,200,000
- New York: 584,000
- Texas: 564,000
- Florida: 477,000
- Illinois: 287,000
- New Jersey: 258,000
Foreign-Born Were More Mobile than U.S. Born

- Recent arrivals and non-citizens were the most mobile
- Africans had highest mobility rate
- Europeans had the lowest
### Migration Varied By County 1995-2000

#### Net Out-Mig of US-born

<table>
<thead>
<tr>
<th>County</th>
<th>Net Out-Mig of US-born</th>
</tr>
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<tbody>
<tr>
<td>Bay</td>
<td></td>
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<tr>
<td>Dade</td>
<td></td>
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<tr>
<td>Gadsden</td>
<td></td>
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<tr>
<td>Hardee</td>
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<tr>
<td>Hendry</td>
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<tr>
<td>Monroe</td>
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<tr>
<td>Alachua</td>
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<tr>
<td>Gilchrist</td>
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<tr>
<td>Hamilton</td>
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<tr>
<td>Liberty</td>
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<td>Okeechobee</td>
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<tr>
<td>Okaloosa</td>
<td></td>
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<tr>
<td>Madison</td>
<td></td>
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<tr>
<td>Wakulla</td>
<td></td>
</tr>
</tbody>
</table>

#### Net In-Mig of US-born

- Duval
- All Other Counties (52)

#### Net In-Mig of Foreign-Born

- Duval
- All Other Counties (52)

#### Net Out-Mig of Foreign-Born

- Duval
- All Other Counties (52)

*US Census Report 2000 Special Report CENSR-11*
Change In 2000 Estimate after Census

Age Group

-100,000  -50,000  0  50,000  100,000  150,000  200,000  250,000  300,000  350,000  400,000

0-4  5-17  18-44  45-64  65+  TOTAL
Age Distribution of Persons Entering Florida

May have changed

Evidence:

- Age distribution estimates differ pre- and post- 2000 census
- Both public and private education are growing in enrollment
### Migration Among Districts
#### Grades 1-12
#### October 2002

<table>
<thead>
<tr>
<th>Net Increase</th>
<th>Net Decrease</th>
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<tbody>
<tr>
<td>Lee</td>
<td>Miami-Dade</td>
</tr>
<tr>
<td>Volusia</td>
<td>Orange</td>
</tr>
<tr>
<td>Pasco</td>
<td>Palm Beach</td>
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<tr>
<td>Osceola</td>
<td>Hillsborough</td>
</tr>
<tr>
<td>Broward</td>
<td>Charlotte</td>
</tr>
<tr>
<td>Lake</td>
<td>Escambia</td>
</tr>
</tbody>
</table>
The Economy

May Influence

- Movement between public and private education
- Dropout rate
- Net migration to state
Dropout Rate

May have been influenced by

- Economy
- Implementation of Driver’s license law
- Greater attention to attendance
- Implementation of Learnfare
Fewer Dropout Students

![Bar graph showing percentage of dropout students from 1994-95 to 2001-02. The percentage decreases over time.]

- 1994-95: 5%
- 1995-96: 6%
- 1996-97: 6%
- 1997-98: 5%
- 1998-99: 4%
- 1999-00: 3%
- 2000-01: 2%
- 2001-02: 1%
Dropouts Lower Across Grades

![Bar chart showing dropouts across grades for 1998-99, 1999-00, and 2000-01.]
Change in FL Unemployment Rate Vs Growth in Regular Term Enrollment
Change in FL Economic Data Vs Growth in Regular Term Enrollment

Regular Term Enrollment Growth
Change in FL Unemployment Rate
Change in NonAg Jobs
Ratio of FL to US Unemployment Rate Vs Growth in Regular Term Enrollment

Regular Term Enrollment Growth

Ratio of FL Unemployment Rate to US Unemployment Rate
September 11

- Possibly decreased the net migration into the state
- Weakened the economy
Factors Interact

- Sept 11
- Weakened economy
  - Decreased Foreign immigration
- Economy
  - Florida jobs
  - Strong economy tends to increase private share

Demographics-Migration Patterns
- Strong economy increases net migration
- Public vs Private Share
Possible Policy Factors

- Increase in Choice Options
  - Public School Choice
  - Charter Schools
  - McKay & Opportunity Scholarships
  - Corporate Income Tax Scholarships
  - Online Education

- Accelerated Graduation
High School Grades Levels Have Become “FUZZY”

- In the past, a student progressed sequentially through the grades based on number of course credits.
- Now, some students may stay in the ninth or tenth grades until ready to pass the FCAT and then skip a grade to rejoin their age cohorts.
Longer Time in High School

Some may take longer to complete standard high school due to testing.

Some ESE students may spend longer time in K-12 education.

Some may or may not have accelerated graduation option

Who will receive state-funded education?
What kind of services will they receive?
When will these services be provided?
Where will these services be provided?
Why are these services provided?
# FEFP Categories

<table>
<thead>
<tr>
<th>Year</th>
<th>Basic K-12, AT-Risk, ESOL</th>
<th>ESE</th>
<th>K-12 Voc</th>
<th>Adult</th>
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</thead>
<tbody>
<tr>
<td>1981</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>16</td>
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<tr>
<td>1991</td>
<td>10</td>
<td>15</td>
<td>10</td>
<td>19</td>
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<tr>
<td>2001</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Where is State-Funded Education Provided?

Prior to late 1990’s

- Public Schools

Since late 1990s

- Public Schools
- Private Schools
- Home
- Online
Public Vs Private

“Fuzzier”

- Private school and home school students can receive some services at public schools.
- Some students are counted in both public and private education (McKay and Opportunity students).

Affected By

- the economy
- the choice options
Corporate Tax Credit Program Dollars

In Oct 2003 the Appr limit for 2003-04 was reduced from $88 million to $50 million.
Corporate Tax Credit Program Students

Students as of Nov 13, 2003

- 2002-03: Approximately 16,000
- 2003-04: Approximately 14,000
What Does The Future Hold?

[Graph showing forecast errors with labels for hurricane Andrew and years 1986-2004, with lines indicating .5% overforecast, .5% underforecast, 1% overforecast, and 1% underforecast.]
Partial Explanations for Recent Forecast Errors

2000-01 and 2001-02 Underforecasts
- Increasing migration into the state
- Decreasing dropout rate

2002-03 Overforecast
- Sept 11 decreased migration into state
- Decision to not adjust for Corporate Tax Credit Program

2003-04 Underforecast
- Possible partial recovery of Sept 11 effect
- Decision to adjust for Corporate Tax Credit Program
Future Forecast Errors

- Accuracy of economic and demographic models will likely improve if the definition of the target population remains constant.
- Policy Changes may continue to increase the forecast error.
Forecasting Enrollment

High Importance

Increasing Difficulty
Recommended Strategies For Districts -- I

- Audit the input data
- Follow forecasting instructions
- Use a committee
Recommended Strategies For Districts -- II

- Anticipate that models will eventually adjust to change
- Don’t over-react to prior errors
- But plan for forecast error
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