Public School Enrollment in Wisconsin
Past, Present, & Future

Presentation to the
Applied Demography Convention

January 9, 2014
Wisconsin’s Public School Enrollment

Outline

- Examine current public school enrollment trends in the State of Wisconsin.
- Explore the broader demographic trends which influence public school enrollment.
- Generate public school enrollment projections statewide and by grade grouping, locale, and race/ethnicity.
Public School Enrollment History
Wisconsin 1965/66 - 2012/13

Baby Boom

Baby Bust

Boomlet

881,720

Number of Students

700,000 750,000 800,000 850,000 900,000 950,000 1,000,000 1,050,000 1,100,000

- Statewide enrollment declined by 0.1% in a five year period.
- 59% of districts declined.
- 90 districts (21%) declined by 10% or more.
- 40% of districts increased.
- 53 districts (12%) increased by 10% or more.
K-12 and 4K-12 Public School Enrollment
Wisconsin, 2005/06-2012/13

Graph showing the enrollment in K-12 and 4K-12 public schools from 2005/06 to 2012/13.
School Districts by Locale

Number of Districts
- Urban: 34%
- Suburban: 61%
- Rural: 5%

District Enrollment
- Urban: 35%
- Suburban: 38%
- Rural: 27%
Students by Location, 2005/06-2012/13

<table>
<thead>
<tr>
<th>Place</th>
<th>Change</th>
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<tbody>
<tr>
<td>Urban</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Suburban</td>
<td>9.9%</td>
</tr>
<tr>
<td>Rural</td>
<td>-5.7%</td>
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</table>
2012-13 Enrollment by Race/Ethnicity

- **Urban** – Greatest diversity. African American and Hispanic students are 22%.

- **Suburban** – Largest minority is Hispanic (5.8%). Other minority students range from 2.2 to 3.7%.

- **Rural** – Largest minority is Hispanic (6.1%). Second largest is Native American (2.5%).
What can we learn from broader demographics in Wisconsin?

- Births
- Age Structure
- Migration
Net Migration Rates by Race/Ethnicity, 2000s

- Non-Hispanic White
- Non-Hispanic Black
- Hispanic
- Total

Age

Net Migration Rate
Summary of State Demographics

- Since the late 1990s births increased, but in 2007 total births began to decline.
  - Births of non-Hispanic whites have been declining, while minority births leveled off and only just decreased in 2010.

- The state’s age structure and recession contributed to low births over the last few years.
  - Women of prime child-bearing years delayed having children.

- Net in-migration of all ages except young adults in the 2000s.
  - Out-migration of young adults (age 25-29) occurred during the 1990s and 2000s except in the Hispanic population.
School Enrollment Projections

- Cohort component (survival) method

- Grade progression ratios for Grades $1^{st}$ to $12^{th}$
  - Average ratio of previous year $1^{st}$ graders to current year $2^{nd}$ graders

- Birth to Kindergarten
  - 5 Year Trend model, 3 Year Trend model, & Fertility Rate model

- Projections statewide and by grade grouping

- Projections by race/ethnicity

- Projections by urban/suburban/rural locale
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<tbody>
<tr>
<td>5 Year Trend</td>
<td>0.861</td>
<td>1.000</td>
<td>0.998</td>
<td>1.003</td>
<td>1.005</td>
<td>1.002</td>
<td>1.008</td>
<td>1.009</td>
<td>1.005</td>
<td>1.113</td>
<td>0.953</td>
<td>1.010</td>
<td>0.989</td>
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<tr>
<td>3 Year Trend</td>
<td>0.854</td>
<td>1.000</td>
<td>0.998</td>
<td>1.004</td>
<td>1.005</td>
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<td>1.009</td>
<td>1.007</td>
<td>1.109</td>
<td>0.957</td>
<td>1.010</td>
<td>0.990</td>
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<tr>
<td>Fertility Rate</td>
<td>0.861</td>
<td>1.001</td>
<td>0.999</td>
<td>1.004</td>
<td>1.006</td>
<td>1.002</td>
<td>1.010</td>
<td>1.011</td>
<td>1.005</td>
<td>1.116</td>
<td>0.950</td>
<td>1.008</td>
<td>0.987</td>
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Grade Progression Ratios, by Model
Non-Hispanic White Students
4K-12 Enrollment History and Projections

500,000
520,000
540,000
560,000
580,000
600,000
620,000
640,000
660,000
680,000
700,000

Non-Hispanic White Students

Fertility Rate
Actual

5 Year Trend
3 Year Trend

05-06 06-07 07-08 08-09 09-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23
Enrollment Projections for Wisconsin

- Total statewide public school enrollment will increase over time.
- Elementary schools will increase for 2 years then decline over time.
- Middle and high schools projected to decline for 1-2 years then increase for the foreseeable future.
- Non-Hispanic white population projected to continue to decline.
- Hispanic and Asian population projected to increase while African and Native American population projected to remain steady.
- Suburban districts projected to increase, urban districts projected to increase slightly after a year of decline, and rural districts projected to continue to decline.
## Comparison of actual & projected

### Enrollment Projections Error (2013-14)

#### State of Wisconsin

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<thead>
<tr>
<th></th>
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<th>percent</th>
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<tbody>
<tr>
<td><strong>Actual (2013/14)</strong></td>
<td>868,182</td>
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<tr>
<td><strong>5 Year Trend</strong></td>
<td>857,181</td>
<td>-1.3%</td>
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<tr>
<td><strong>3 Year Trend</strong></td>
<td>856,886</td>
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<tr>
<td><strong>Fertility Rate</strong></td>
<td>857,373</td>
<td>-1.2%</td>
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<td><strong>Actual (2013/14)</strong></td>
<td>299,482</td>
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<tr>
<td><strong>5 Year Trend</strong></td>
<td>292,204</td>
<td>-2.4%</td>
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<tr>
<td><strong>3 Year Trend</strong></td>
<td>292,430</td>
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<tr>
<td><strong>Fertility Rate</strong></td>
<td>292,100</td>
<td>-2.5%</td>
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<td>319,819</td>
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<tr>
<td><strong>5 Year Trend</strong></td>
<td>315,938</td>
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<td><strong>3 Year Trend</strong></td>
<td>315,666</td>
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<td><strong>Fertility Rate</strong></td>
<td>316,180</td>
<td>-1.1%</td>
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<tr>
<td><strong>Actual (2013/14)</strong></td>
<td>248,881</td>
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<tr>
<td><strong>5 Year Trend</strong></td>
<td>243,535</td>
<td>-2.1%</td>
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<tr>
<td><strong>3 Year Trend</strong></td>
<td>243,243</td>
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</tr>
<tr>
<td><strong>Fertility Rate</strong></td>
<td>243,579</td>
<td>-2.1%</td>
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Past, Present, & Future

Sarah Kemp
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K-5 Enrollment History and Projections

Year Trend

Fertility Rate

5 Year Trend

3 Year Trend

Actual
6-8 Enrollment History and Projections

Year Trend

Fertility Rate

Actual

Enrollment History and Projections

5 Year Trend

3 Year Trend

170,000 - 195,000

05-06 06-07 07-08 08-09 09-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23