



# Oregon's Quality Education Model

Quality Education Commission

John Rexford, Chair

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3:00 PM

# Topical Agenda

- Overview of the QEM
  - History
  - Elements
  - Methodology
- Additional Model Improvements Needed
- Questions

# Brief History of the QEM

- The Legislative Council on the Quality Education Model (QEM) was appointed by Speaker of the House Lynn Lundquist in 1997
- The QEM report was first published in June of 1999 and is now published every two years, in August of even-numbered years
- In 2001, the legislature created the Quality Education Commission (QEC) in statute
- 2002 through 2022, the QEC has updated and enhanced the QEM to incorporate current effective practices and evaluate education policy proposals

# QEM Elements

- Years
- Raw Data
- Student Assumptions
- Salary History
- Per Student Expenditures
- Local and Federal Revenues
- Growth Factors
- Payroll & Benefits
- Other Staffing Assumptions
- Computer Assumptions
- Cost Shares
- Enrollment
- Revenue Forecasts
- Elementary School Detail
- Middle School Detail
- High School Detail
- K-12 Assumptions
- Scale-Up
- K-12 Output Tables
- Staffing Class Size Report
- Diagnostics
- Salary Assumptions

# QEM Estimates

The QEM estimates the statewide cost of delivering a system of K-12 education for:

## Current Service Level (CSL)

- a baseline case that is based on providing status quo levels of school expenditure, adjusted for input cost and enrollment changes

## The fully implemented QEC model scenario

- Reflects the cost of providing the QEC's recommended levels of educational inputs to achieve the statutory quality goals.
- The fully implemented model takes into account effective educational practices in determining the level of resources required to run highly effective schools and estimates the costs of getting to high levels of achievement in all Oregon schools.

# QEM Methodology

## **The QEM is a Professional Judgment Model Enhanced with Statistical Analyses**

- The costing component of the model is based on student, staffing, and financial data
- The student performance component is based student performance data
- The link between funding and student performance is based on professional judgment
- Statistical analyses are added to supplement the professional judgment

## **Prototype Schools**

- Three prototype schools: Elementary, Middle, and High
- Estimate per-student costs at the school level, then scale up to the state level

## **Initially a relatively low level of detail, but increasing detail over time**

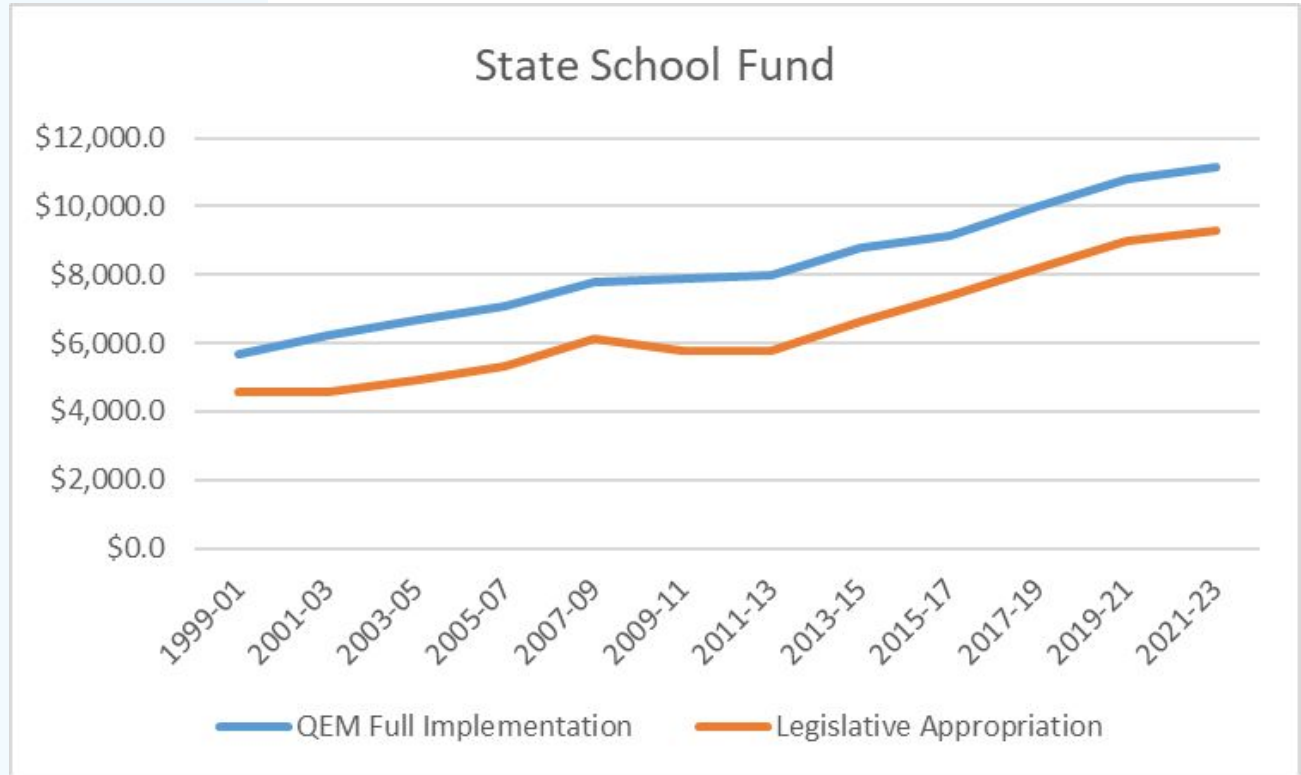
- Higher level of detail allows more accurate estimates
- Allows estimates of a broad range of impacts and costs of policy proposals

# History of QEM Funding Estimates

| Dollars in Millions |   |                                   |           |             |  |
|---------------------|---|-----------------------------------|-----------|-------------|--|
| Biennium            | QEM Full Implementation<br>Level of State School<br>Funding Resources | Legislative SSF<br>Appropriation* | Gap       | Percent Gap |  |
| 1999-01             | \$5,654.2   | \$4,562.0                         | \$1,092.2 | 23.9%       |  |
| 2001-03             | \$6,215.6   | \$4,573.9                         | \$1,641.7 | 35.9%       |  |
| 2003-05             | \$6,659.2   | \$4,907.6                         | \$1,751.6 | 35.7%       |  |
| 2005-07             | \$7,096.7   | \$5,305.2                         | \$1,791.5 | 33.8%       |  |
| 2007-09             | \$7,766.2   | \$6,131.0                         | \$1,635.2 | 26.7%       |  |
| 2009-11             | \$7,872.8   | \$5,756.9                         | \$2,115.9 | 36.8%       |  |
| 2011-13             | \$8,004.9   | \$5,799.0                         | \$2,205.9 | 38.0%       |  |
| 2013-15             | \$8,775.0   | \$6,650.4                         | \$2,124.6 | 31.9%       |  |
| 2015-17             | \$9,158.4   | \$7,376.3                         | \$1,782.1 | 24.2%       |  |
| 2017-19             | \$9,971.0   | \$8,200.0                         | \$1,771.0 | 21.6%       |  |
| 2019-21             | \$10,773.9  | \$9,000.0                         | \$1,773.9 | 19.7%       |  |
| 2021-23             | \$11,170.5  | \$9,300.0                         | \$1,870.5 | 20.1%       |  |

\*SSA Funds distributed through the State School Fund began being included in the Legislative SSF Appropriation beginning in the 2019-21 Biennium

# The SSF/QEM Funding Gap





# Historical Updates to the QEM

- Added a “Base Case” scenario to the model (2002)
- Added more detail in the expenditure categories to increase accuracy (2004)
- Extended the model so it can forecast out two biennia (2008)
- Added more detail to staffing and compensation data (2012)
- Added a simple Pre-K component to the model (2014)
- Adopted high school graduation as the key outcome measure for the model (2014)
- Improved the accuracy of the model by improving estimation methods for key parameters used in the model (2018)

# Additional Model Improvements Needed

- Considerations regarding equity
- Multiple measures of student success (i.e., not just 4-year cohort graduation rate)
- Accounting for the expansion of online education programs (district and charter)
- Inability of current model to provide valid estimates of outcomes from the current funding level or recommended practices
- Potential impact of declining enrollment on the QEM and how that differs from the effect of declining enrollment in a local district or school

# Thank you

For links to QEC reports and more information:

- Visit the [QEC Webpage](#)
- Chair John Rexford

