

# Maryland Commission on Innovation and Excellence in Education



## **SUMMARY** **Gap Analysis for Building Block 2**

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# Scope of Presentation



- What we will cover at this meeting —
  - Brief summary of school funding in Maryland
  - How it compares to school funding in top performing states and countries
  - Changes we recommend to current school funding system for Commission to consider
- What will be covered at later meetings
  - Components of and implementation strategy for Maryland school reform program
  - Cost of Maryland school reform program
  - Relationship between formula funding for schools and school reform program

# School Funding in Maryland: Recent History



- 1999: Legislature convenes Thornton Commission to advise state on revisions to state funding formula to assure that all students would have the resources needed to reach state education standards
- 2001: Thornton Commission cost studies to determine the level of resources that would be needed

# School Funding in Maryland: Recent History



- Two kinds of studies conducted to provide empirical evidence on adequate level of resources:
  1. Professional judgement: Panels of expert educators estimate costs based on their experience
  2. Successful schools approach: Schools are identified that enable students from different backgrounds to reach the specified standards and associated costs are identified

# School Funding in Maryland: Recent History



- 2002: Thornton recommends foundation grant (the same for all students) supplemented by amounts for each student related to categories of need (weighted pupil funding)
- Base: \$5,969 (based on successful school study)
- Weights (based on expert judgement):
  - 1.39 for low-income students
  - 1.17 for special education students
  - 1.00 for English language learners

# School Funding in Maryland: Recent History



- Thornton recommended that:
  - calculations used to determine state and local contributions to school funding be based on a combination of assessed property tax values and taxable income; state would guarantee, however, that it would contribute no less than 15% of foundation amount, irrespective of county wealth
  - amount of grant would be adjusted for differences in cost of living among counties; formula to be adjusted for inflation beginning in 2005

# School Funding in Maryland: Recent History



- Thornton recommendations incorporated in *Bridge to Excellence in Public Schools Act of 2002*
- Weights adjusted to account for overlaps of populations in more than one category and to remove the federal and other state funds included in them
- Adjusted foundation grants in the Bridge to Excellence Act in 2002 were \$5,443 (excludes retirement); weights were:
  - .97 for low income students
  - .99 for ELL students
  - .74 for special education students

# School Funding in Maryland: Recent History



- Legislation required state to pay at least 40% of at-risk amounts; counties required to pay their share of foundation grants, but counties not required to pay their share of the weighted formula funding for at-risk students
- Localities have broad discretion with respect to how to spend the allotted funds
- In recent years, formulas have not been fully funded



# School Funding in Maryland: Recent History



- Bridge to Excellence Act required follow-up to adequacy studies in 10 years
- APA Consulting completed that study in 2016
- Authors recommended raising base funding from \$6,860 to \$8,880 (FY '15 dollars) and changing weights to:
  - .35 for low-income students
  - .35 for ELL students
  - .91 for special education students
  - And new category for pre-kindergarten with .26 weighting
- Authors argued that costs had risen, more demands were being placed on schools and poverty had become more prevalent and more concentrated
- Accepting APA recommendations would cost state an additional \$1.9 billion and localities \$1 billion

# How Does Maryland Compare to Top-Performing Countries?



- Top performing countries fund their schools much more equitably than any U.S. state; none rely on taxes on local property wealth to fund their schools
- Many use parents or just mothers' education as a metric to distribute more resources to students who need more resources to reach high standards; this help often comes in the form of a richer teacher/student ratio

# How Does Maryland Compare to Top-Performing Countries?



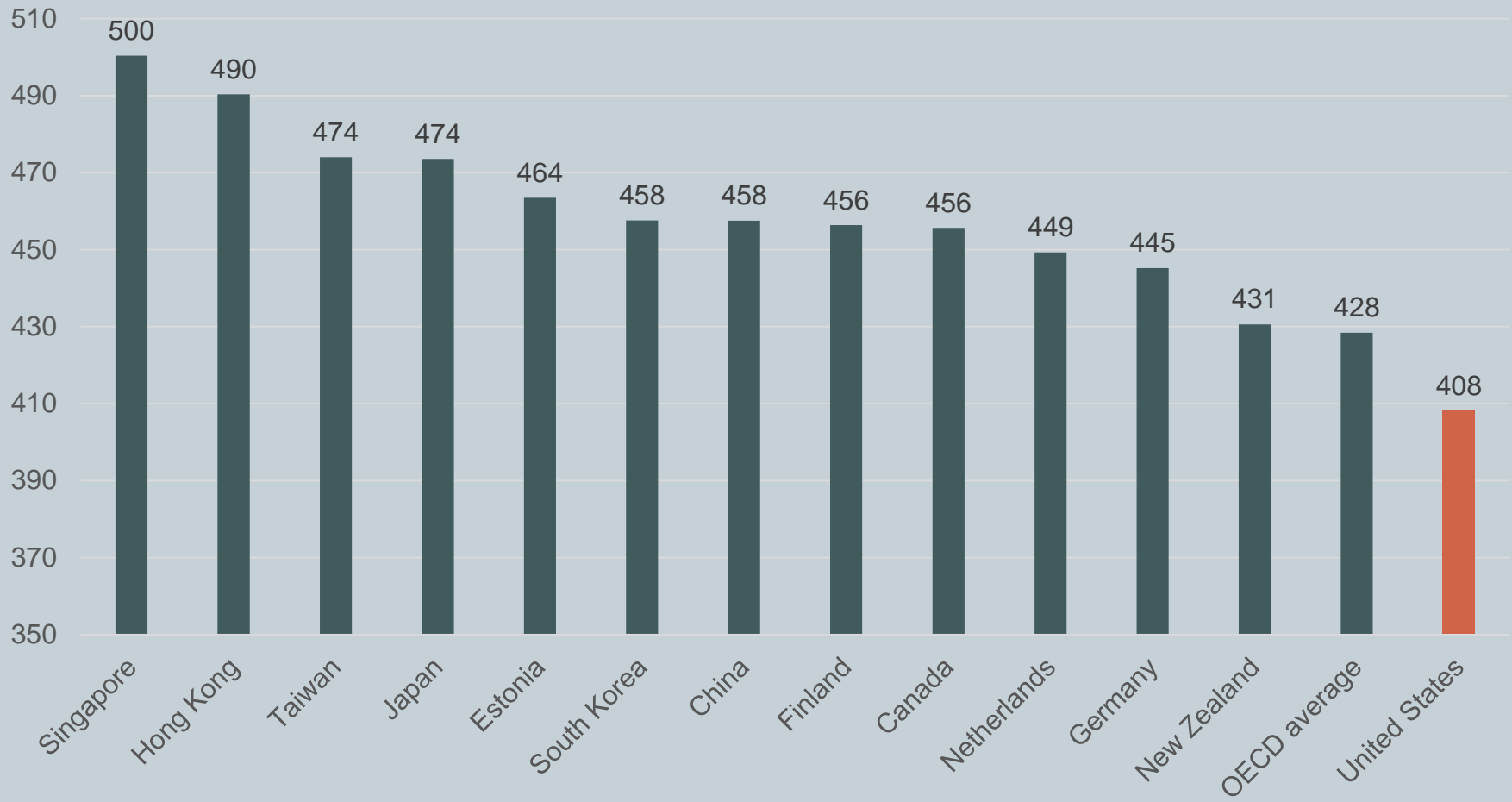
- Most of the top performing countries designate about half the proportion of their students as “special education students” compared to the United States (~5-6% as opposed to ~10-12%)
- Data show that their lowest performing students perform at significantly higher levels than ours
- This outcome appears in part to be a function of less labelling of students, which lowers expectations for their performance
- But it also reflects many specific measures discussed earlier by this Commission that provide a myriad of supports to vulnerable families and their children, before they arrive to begin compulsory education and all the way through compulsory education

# Percent of Students in Special Education



% in Special Ed	
<i>Finland</i>	38
<i>Germany</i>	7
<i>Netherlands</i>	
Primary	2
Secondary	7
<i>Ontario</i>	9 *another 8 % of students who are not formally identified receive some add'l services as a result of learning delays or falling behind
<i>Singapore</i>	4
<i>U.S.</i>	13

# PISA 2015 Mathematics Score for 25<sup>th</sup> Percentile of Students, by Country



Source: PISA 2015 Table I.5.3

# How Does Maryland Compare to Top-Performing Countries?



- Those measures include:
  - More teachers in schools serving vulnerable students
  - Career ladder policies that incentivize their best teachers and most capable principals to serve in schools serving vulnerable students
  - Financial incentives for teachers to work in high need schools
  - Qualification systems that provide more time to achieve high standards and more support for students who start to fall behind
  - Instructional systems designed to provide high levels of instructional support to students who need it

# How Does Maryland Compare to Top-Performing Countries?



- Other measures include:
  - College tuition and all costs covered by the state for very highly qualified high school graduates who commit to five years service in schools serving highly vulnerable students after they complete their training
  - Implementation of a system to identify students who start to fall behind and a system to organize multiple teachers in the school to diagnose the problem and come up with the right solution
  - Creation of an accountability system tied to progress in getting all students to the state qualification before they leave high school

# How Does Maryland Compare to Top-Performing Countries?



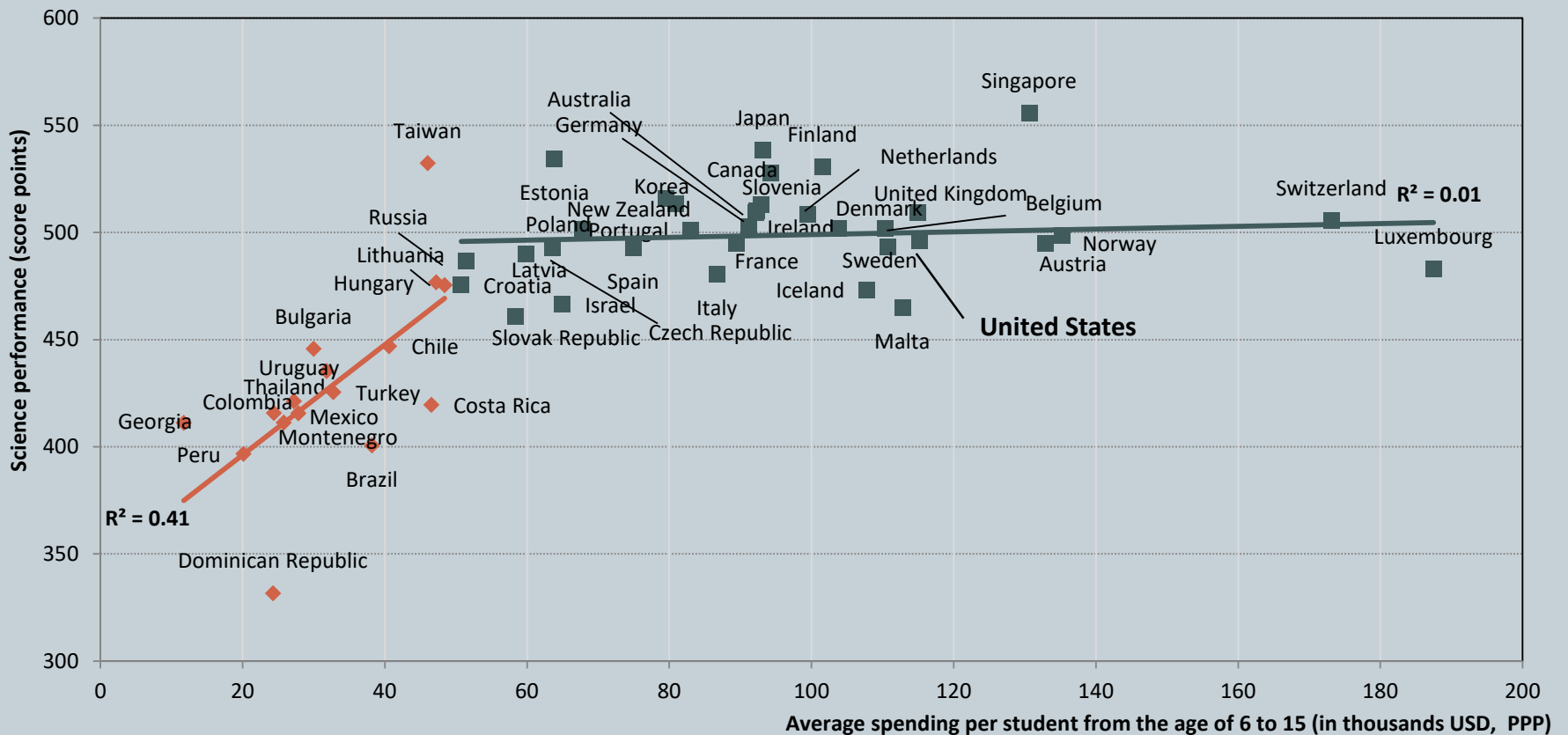
- What the data shows:
  - In developing countries—strong correlation between amount spent per student and student achievement, up to point that \$50,000 is spent on students' total elementary and secondary education
  - Above that amount:
    - ✦ Within countries, there is a correlation between amount spent and student achievement
    - ✦ But, across countries, there is very little correlation
  - Conclusion: Money matters, but how it is spent matters greatly



# Spending per Student from the Age of 6 to 15 and Science Performance



- ◆ Countries/economies whose cumulative expenditure per student in 2013 was less than USD 50 000
- Countries/economies whose cumulative expenditure per student in 2013 was USD 50 000 or more



# Spending per Student from the Age of 6 to 15 and Science Performance



	<b>Expenditure per student from the age of 6 to 15</b>	<b>Mean score in Science</b>
Japan	\$93,200	538
Estonia	\$63,858	534
Taiwan	\$46,009	532
Finland	\$101,527	531
Canada	\$94,254	528
South Korea	\$79,517	516
New Zealand	\$80,890	513
Germany	\$92,214	509
Netherlands	\$99,430	509
United States	\$115,180	496

Source: PISA 2015 Figure II.6.2

# How Does Maryland Compare to Other States?



- MD's median incomes highest in the nation, but spending 10<sup>th</sup> highest among states, 16<sup>th</sup> highest when adjusted for regional cost differences
- MD's per pupil foundation grant of \$6,964 (FY '17) is lower than foundation grant level in either MA (\$6,927-\$8,637 depending on level, but average is higher) or NJ (\$11,195)

# How Does Maryland Compare to Other States?



- **MD's weights:**
  - **Low-income weight:** higher than the benchmark states and among the highest in the U.S.
  - **ELL weight:** much higher than the benchmark states, highest nationally
  - **Special education weight:** lower than MA and NJ, but higher than NH; lower than most states among all those that use pupil-weighted finance systems

# How Does Maryland Compare to Other States?



- MD does not do well on funding equity
  - Spends 4.9% less on poor school districts than wealthy ones when state and local spending combined, lower than all the benchmark states, 16<sup>th</sup> most regressive among all states
  - When federal funds added, MD spends 1.5% more per pupil on poor districts than wealthy ones, 41 states spend more
- Localities do not fully fund their share of the weights
- Teacher equity lower in MD than in benchmark states on many measures

# How Does Maryland Compare to Other States?



## States' 2015 Equity Profiles

	Percent of teachers in their first year of teaching		Percent of teachers without certification or licensure		Percent of classes taught by teachers who are not highly qualified		Percent of teachers absent more than 10 days		Adjusted average teacher salary	
	HPQ	LPQ	HPQ	LPQ	HPQ	LPQ	HPQ	LPQ	HPQ	LPQ
<b>MA</b>	7.8	4.4	3.3	3.7	4.5	.9	24.8	24.4	\$68,825	\$66,848
<b>NH</b>	4.2	2.8	2	0.5	1.6	2.1	34.5	26.9	\$49,479	\$48,998
<b>NJ</b>	5.8	5.2	0.8	0.9	0.3	0	30.3	18	\$63,343	\$65,710
<b>MD</b>	7.3	3.1	5.1	1.9	14.2	4.2	29.1	28.8	\$54,480	\$61,208

HPQ: High poverty quartile; LPQ: low poverty quartile

# How Does Maryland Compare to Other States?



## States' 2017 Equity Updates

	Gap between low-income students in Title I schools and non-low income students in non-Title I schools		
	Percent taught by out-of-field teachers	Percent taught by ineffective teachers	Percent taught by inexperienced teachers
MA	8.8	4.3	5.3
NH	NA	NA	NA
NJ	8.5	8.4	0.24
MD	3.8	4.3	3.9

# Recommendations



- Use the school finance framework developed by the Thornton Commission and enacted by the state legislature, but:
  - Consider raising the weight for special education to bring it into line with other states with pupil-weighted funding systems
  - Consider requiring the localities to fully fund their share of the weighted formulas for at-risk students
  - Consider adding funds for districts with concentrated poverty (by changing the formulas or adding teachers)



# Recommendations



- **And also:**
  - Consider changing the way local wealth is calculated for the purpose of determining the local contribution by rewarding districts that make a larger tax effort with more state aid
  - Consider eliminating the feature of the formula that adjusts the state contribution on the basis of the cost of living; this feature makes it hard for rural districts to get teachers for the same reason it is hard for them to attract doctors
  - Consider focusing special education funding on students who have specific cognitive or physical impairments, staying within the requirements of IDEA

# Recommendations



- **Further**
  - We recommend that the Commission consider the amount of the foundation per student grant at a subsequent meeting, in the context of its discussion of the shape and size of the program intended to implement the reform program it decides on
  - That program will, among other things, return to earlier Commission discussions concerning those aspects of the *9 Building Blocks* that are related to measures that would contribute directly to the likelihood that all students will be able to reach the high standards the Commission has discussed in the context of the new qualifications system

# Recommendations



- **These include:**
  - Strengthening the early childhood education system
  - Strengthening Maryland's capacity to assist families with young children and vulnerable school-age children with wrap-around services, community school services and integrated services
  - Providing more high quality teachers to high needs schools
  - Providing incentives to teachers to teach in high-need and rural schools including pay bonuses and advancement on a career ladder for successful service in high-need schools

# Recommendations



- **And**
  - Providing tuition grants to top-achieving students who commit to teaching in high-need or rural schools
  - Creating a system for teachers and school leaders from successful schools to work in partnership with high-need schools
  - Allocating additional teachers and other resources to schools using the results from an early warning system that identifies students who are not on track.
  - Change the way work is organized in schools to allow for more time for teachers to systematically improve instruction for struggling students and provide those students with individual attention

# Maryland Commission



Thank You!