

WHAT WE KNOW: COST SAVINGS

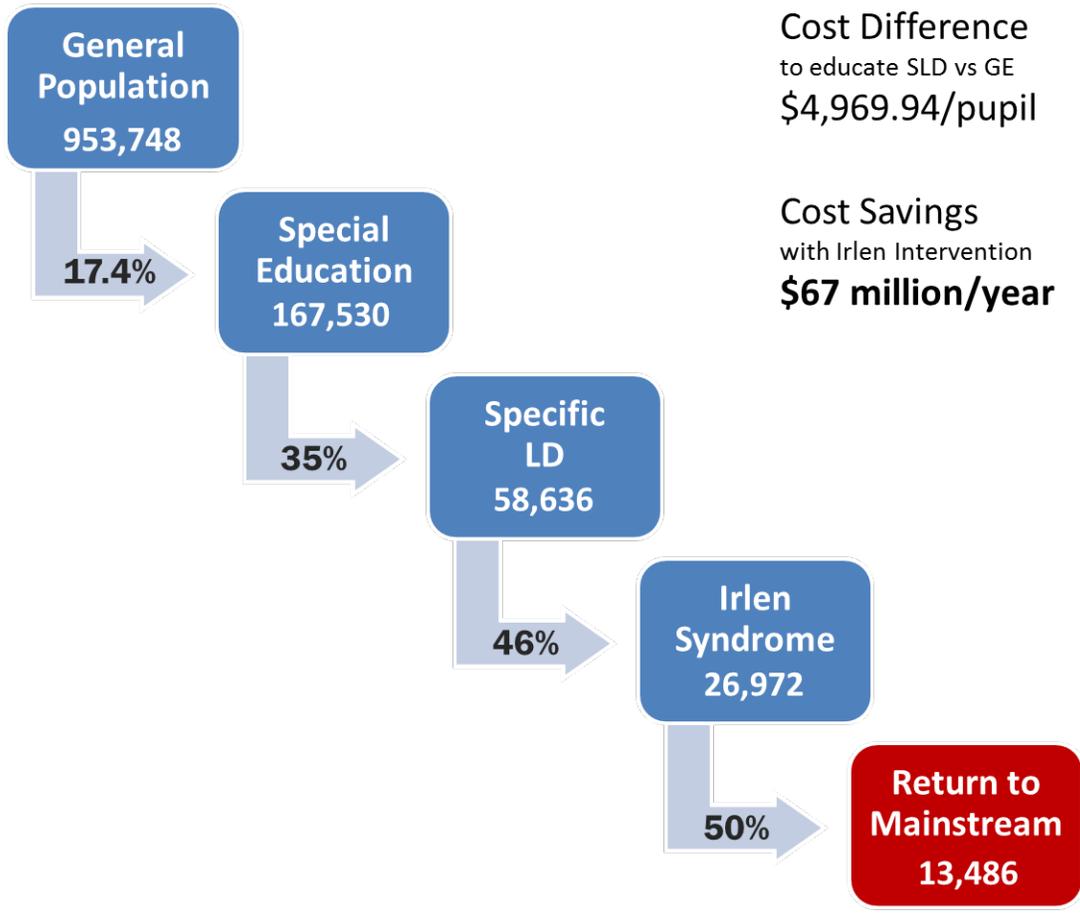
- In 2000, the cost to educate a General Ed student was \$6,556, compared to \$12,474 to educate a SPED student. Difference=\$5918; 1.91 times greater. (*Special Education Expenditure Project*, Center for Special Education Finance (CSEF), in conjunction with the American Institute for Research (AIR).
- In a related report, SEEP reported the cost to educate students with specific learning disabilities to be the lowest, at \$10,558, still 1.61 times greater than the cost to educate a General Ed student without any disabilities (figures based on 1999-2000 data).
- Specific Learning Disabilities (SLD) comprises 35% of all SPED students (NCES, 2016: https://nces.ed.gov/programs/coe/indicator_cgg.asp).
- In 2004, the cost to educate a GE student had increased to \$7552, and the cost to educate a SPED student had increased to \$16,921 (Difference=\$9369), an increase of 36% since 2000. The cost to educate GE students only increased 15% during this time. (The National Education Association (NEA), 2004)
- In 2015, Massachusetts had 265,560 students receiving SPED services, and spent a total of \$2,607,036,312 on SPED, an expenditure of **\$15,561.61 per SPED student**.
- If \$15,561.61 is 1.91 times greater than the cost to educate a GE student, then the cost to educate a GE student in 2015 was \$8,147.44, and the cost to educate a student with Specific Learning Disability (SLD) is \$13,117.38 (1.61 times greater than the GE cost)
- Based on the more conservative figure for SLD, incidence data from several studies from around the world showing the incidence of Irlen Syndrome among reading and learning disabled populations is 46%, and the data reported in the Pioneer Valley Project showing that 50% of SPED students with Irlen Syndrome no longer required SPED services when using Irlen Colored Overlays, we can extrapolate the following savings for 2016-17:
 - 167,530 received SPED services in 2016-17
 - 58,635 classified as SLD (167,530 x 35%)
 - Approximately 26,972 with SLD suffer from Irlen Syndrome (58,635 x 46%)
 - If 50% (13,486) were mainstreamed through the use of Irlen Colored Overlays, it would save Massachusetts **\$67,024,610.84 in one year** for these students
$$13,486 \times (13,117.38 - 8,147.44) = \$67,024,610.84$$
 - Note. The state would incur a cost of \$52,595 to provide colored overlays to SLD students with Irlen Syndrome who remain in SPED

THE BOTTOM LINE:

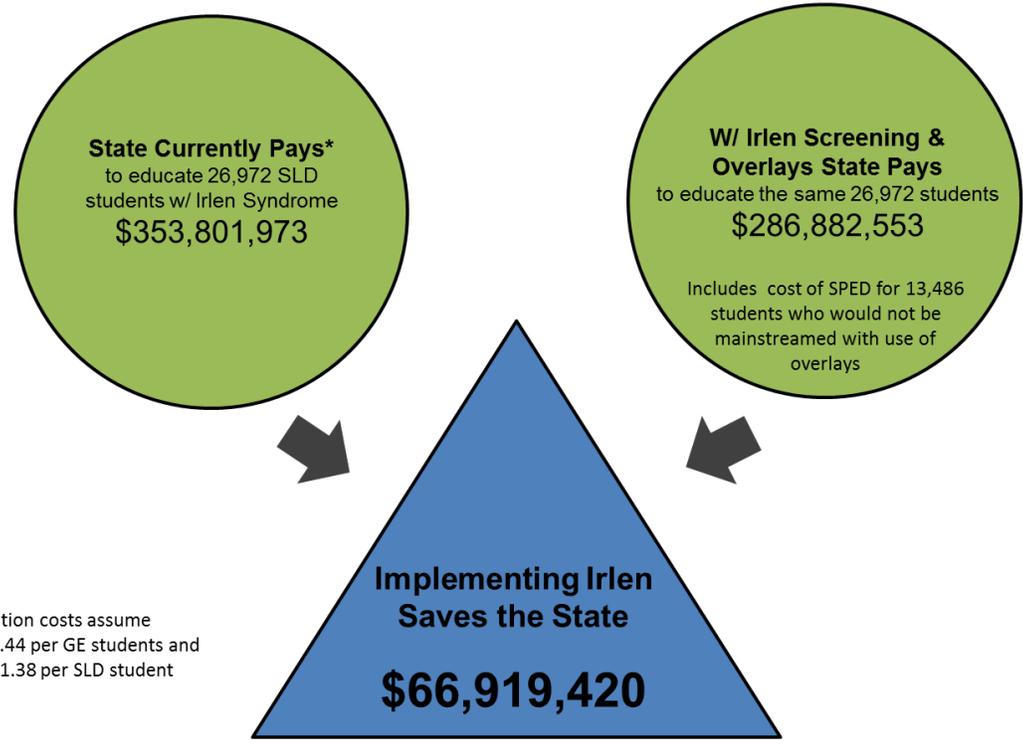
Massachusetts would save at least \$67 million per year* if it implemented Screenings and Overlays to address Irlen Syndrome. And, if the intervention had been implemented in 2008, to date, the state would have saved over \$600,000,000.

*This conservative figure assumes only the cost of tier 1 (lowest cost) SPED students. It does not include SPED students from other categories who tend to cost the district more, or any students not in SPED but who have 504 plans and are currently in RSP classes.

A Walk Though the Numbers in Pictures:



Annual Cost Savings of Irlen Intervention for SPED Students in MA



*Education costs assume \$8,147.44 per GE students and \$13,111.38 per SLD student

Steps for Implementation and Estimated Cost of Screening and Overlays for Irlen Syndrome

- Train screeners at the district or school level (2-day workshop)
 - Option 1: 1 screener per district (N=404) - Training and materials \$250,000 (one-time startup cost)
 - Option 2: 1 or more screeners per school (\$\$ dependent on number of educators trained)
- Districtwide in-service for teachers and administrators (2-hour seminar)
 - Conducted by the trained screener at a one-time district event or
 - Conducted one each school campus individually
- Overlays (2 per student x 26,972) \$1.95 per overlay when purchased in bulk
 - \$105,190.80 per year

Annual Cost to Implement Irlen Intervention for SPED Students in MA

<u>YEAR 1</u>	
Training One-time Cost to Train 1 Screener Per District (N=404)	\$250,000
Overlays for 26,972 SLD students	\$105,190
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TOTAL	\$355,190

<u>SUBSEQUENT YEARS</u>	
Overlays for 26,972 SLD students	\$105,190
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TOTAL	\$105,190

NAEP SCORES: Massachusetts and Mississippi

- **In 2015, 50% of 4th graders in Massachusetts were not proficient in reading (scoring Basic or Below Basic on NAEP)**
- **In 2015, 75% of 4th graders in Mississippi were not proficient in reading (scoring Basic or Below Basic on NAEP)**

Implementing Irlen Screening and Overlays in Mississippi:

- **In 2014, the Bay St. Louis/Waveland School District embarked on a pilot study implementing Irlen Screening and Colored Overlays with 3rd graders. It was one of many interventions the district decided to implement as a way of combating the 3rd Grade Gate, a newly instituted policy that requires all third graders to be reading at or above grade level by the end of the third grade in order to progress to 4th grade. Based on past data, the district estimated that more than 25% of their third graders would not qualify to progress to 4th grade and would need to be held back.**
- **Certified Irlen Screeners screened all 3rd grade students at one school, and students identified as having Irlen Syndrome were placed in either a test or control group. Children in the test group were given their prescribed Irlen Colored Overlay to use in class for three months, while the control group did not receive a colored overlay. All children's reading performance was tested at the beginning of the year, and then again after the 3-month intervention period using the NWEA standardized assessment given to all children in the district in the fall, winter, and spring. Results after 3 months showed that whereas only 51% of the test group met the national norm in the fall, 70% of the test group met the national norm in the winter (after using their Irlen Colored Overlays for 3 months). In contrast, there was no increase in the percent of the control group meeting the state norm on the NWEA from fall to winter (50% met the norm at both testing points).**
- **Based on the promising results of this pilot study, the Bay St. Louis/Waveland School District has approved an expansion of their Irlen Screening project to screen all children in the district (grades K-12). In 2016, the district reported 100% passage rates for all 3rd graders for the second year in a row.**