

Working Group 2

High Quality and Diverse Teachers and Leaders Preliminary Cost Estimates

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Element 2a: Teacher preparation will be much more rigorous, and induction will be integrated with teacher preparation more systematically

Baseline: Teacher candidates must complete a 100–day teacher practicum prior to earning a bachelor’s or master’s degree in teaching

Assumptions: By Year 5, prospective undergraduate teachers must complete a 180-day practicum.

All practicum experiences are the shared responsibility of school systems and higher education institutions. School districts will share accountability for finding placements for qualified candidates and will compensate qualified “supervising” or mentor teachers (using career ladder criteria as a major criteria for selection). Institutions will collaborate with supervising/mentor teachers to evaluate teacher interns and ensure the interns demonstrate all necessary competencies required of teachers. Students will not be charged a fee for the practicum.

A review of existing State teacher preparation program requirements will be undertaken by the higher education institutions, MSDE, MHEC, and local school systems to determine what requirements are no longer necessary, and what new requirements should be added. The expanded teacher practicum must be incorporated into the program, preferably within the existing 120–credit degree program and in no case more than an additional 12 credits.

The State will make one–time, multi–year grant funds available in years 1 through 5 to collaboratives of school systems, university-based teacher preparation programs, and exclusive employee representatives to provide state-of-the-art professional education for prospective teachers that reflects the best practices of the top-performing countries. An evaluation will be completed in year 5.

MSDE will increase its capacity to provide technical assistance and support to teacher preparation programs and to facilitate collaboration between school systems and higher education institutions.

Cost: The cost associated with making teacher preparation more rigorous and extending the teacher practicum are primarily a repurposing of existing funds by both higher education institutions and school systems.

State seed grants of approximately \$2.5 million will be made available to teacher preparation collaboratives over 2–5 years to develop and implement rigorous teacher preparation programs and practicums.

It is assumed that the teacher preparation program review can be completed with existing resources. MSDE one-time and ongoing administrative costs increase to build capacity (TBD).

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 4 (FY 2025)	Year 10 (FY 2030)
\$2,500,000	\$2,500,000	\$0	\$0

Element 2b: Raise standards for licensing new teachers in MD to levels comparable to the standards for teachers in the top performing nations

Baseline: Passing Praxis I and II is required for most teachers to receive a Maryland Standard Professional Certificate. A Master's degree is required by the 10th year of teaching in order to receive an Advanced Professional Certificate.

Assumptions: The State will require prospective teachers to pass a test of teaching ability (e.g. edTPA, PPAT) in order to receive an initial Maryland license. After sufficient data has been collected that demonstrates that one test is more valuable than another the State should adjust the requirement. Teachers will also be required to pass exams of teacher mastery of reading instruction and content at least on par with the rigor of Massachusetts.

Cost: It is assumed that MSDE, SBE and PSTEB can require additional teacher testing using existing resources. The MSDE capacity building costs associated with Element 2a are assumed to cover the costs of analyzing teacher testing data and making recommendations to SBE regarding teacher testing requirements.

Element 2c: Expand teaching scholarships and loan assistance for highly skilled and diverse candidates to teach in high-need schools.

Baseline: Annual funding of \$2,000,000 is mandated by Chapter 361 of 2018 for the Maryland Teaching Fellows Scholarship beginning in fiscal 2019.

The Nancy Grasmick Teacher Scholars Loan Assistance Repayment Program (LARP) provides loan repayment assistance for those who has taught for at least 2 years in a Maryland public school with a high concentration of poverty (75% eligible for free or reduced price meals) or who taught science, technology, engineering or math.

Cost: Scholarship funding increases to \$4 million in year 2, \$8 million in year 3, \$12 million in year 4 and \$18 million in year 5 and thereafter. Funding should continue at this level until a sufficient number of qualified teachers are produced and remain in the Maryland teaching profession. At such time that this occurs, the State may consider reducing the required amount of funding, but some level of scholarship funding should be maintained to ensure a diverse and qualified cadre of teachers in the State.

It is assumed that the outreach and recruitment campaign in Element 2d will include outreach to increase awareness of the Maryland Teaching Fellows Scholarship and Grasmick LARP.

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 10 (FY 2030)
0	0	\$16,000,000	\$16,000,000

Element 2d: Encourage higher education institutions to take advantage of national foundation efforts to develop highly qualified teachers and leaders from diverse backgrounds

Assumption: The State provides any required matching funds.

Cost: Unknown but assumed to be minimal.

Element 2e: Launch statewide public relations and communications initiative to rebrand teaching as an attractive career and attract students from diverse backgrounds

Baseline: Chapter 361 of 2018 established a teacher outreach and recruitment campaign to be run by the State Department of Education and requires \$250,000 annually.

Assumptions: After the Commission report is completed and adopted by the State, consider launching a statewide outreach effort to promote all of the Commission’s recommendations, including a high quality media campaign to rebrand teaching as an attractive career. Consider strategies used by top systems such as pro bono services from leading communications firms in the state and region.

The State may consider modifying the campaign by decreasing the amount of funding provided as recruitment becomes less challenging and prestige increases and targeting or limiting the funding provided to certain critical shortage areas or demographic targets, as needed.

Cost: No additional cost above the \$250,000 annual budget. It is assumed this level of funding is needed for the 10–year implementation period, and includes funding for a statewide outreach effort to educate the public about the Commission’s recommendations.

Element 2f and 2g: Raise teacher pay to make it equitable with other highly trained professionals with the same amount of education. Develop career ladders for teachers and school leaders comparable in design to the career ladders found in Singapore and Shanghai, with respect to standards for advancement and relationship to the system for compensating teachers and school leaders.

Baseline: There are no State guidelines for teacher compensation.

Assumptions:

- The model projects student enrollment, educator FTEs, and salaries and benefits, both current and proposed, from 2020 through 2029.
- **Educators Included in Model:** The model includes all teachers, assuming a similar teacher-student ratio to actual ratios from recent years, as well as guidance counselors, and librarians/media specialists. It also includes the additional public prekindergarten teachers required for expanded age 3 and 4 prekindergarten programs recommended by Work Group 1. The model does not include administrators or any expanded staffing proposed in other work groups, which may be accounted for in other elements.
- **Enrollment Estimates:** Student enrollment estimates through 2026 from Maryland Department of Planning projections, *Public School Enrollment Projections 2017-2026* (September 2017). Estimates for 2027-2029 based on three-year average enrollment increases for the years 2024-2026.
- **Number of Educator FTEs:** Estimates of the total number of teachers, guidance counselors, and librarians beyond 2018 are based on the actual average ratio of all teachers, guidance counselors, and librarians to student enrollment for the years 2014-2018.
- **Salaries:** Statewide average teacher salaries by years of experience and educational attainment were calculated for 2018 using MSDE staffing data for all staff categorized as Teacher/Instructor (implied statewide salary schedule). Base salaries used for career ladder projections are 2018 salaries inflated to 2020 using the inflation factor provided by the Department of Legislative Services. The same method was used to calculate guidance counselor and librarian salaries.
 - Proposed salaries are 2020 projected salaries increased by 10% between 2020 and 2022 and a minimum teacher salary of \$60,000 is phased-in by 2024.

- **Salary Cost Estimates:** Statewide costs of baseline and opt-out teacher salaries are estimated by progressing teachers across the implied statewide salary schedule. The model assumes an annual teacher turnover rate of 7.0% (the same assumption is used for guidance counselors and librarians). The salary schedule cells from which teachers leave and are hired into are based on averaged actual staffing data provided by MSDE. The annual number of teachers earning advanced credits and degrees is also based on averaged actual staffing data provided by MSDE.
- **Fringe Benefits:** Local teacher retirement rates use state-provided projections through 2029. (State retirement costs are not directly affected.) Non-retirement fringe benefits are estimated to be 11% of salary for all years through 2029.
- **NBPTS Participation Rates:** The rate at which teachers, guidance counselors, and librarians attempt to complete NBPTS modules (e.g. whether a teacher attempts 1, 2, 3, or all 4 modules in a given year) is based on data on the distribution of the number of modules purchased by individual educators per year provided by the NBPTS.
- **NBPTS Passing Rates:** NBPTS module passing rates are assumed to be 50% through 2019 (the current state passing rate), 45% in 2020, 40% in 2021, 45% in 2022, 50% in 2023, 55% in 2024, 60% in 2025, 65% in 2026, 69% in 2027, 73% in 2028, and 75% in 2029. The same passing rate is assumed for all modules. The reduction in passing rates beginning in 2020 is assumed due to the large increase in the number of educators pursuing NBPTS certification. The passing rate begins to increase again in 2022 on the assumption that more supports will be available to educators to achieve NBPTS certification.
- **Career Ladder Opt-In Rates:** The rate at which educators opt into the NBPTS track starts at 25% in 2021 for all educators except those with more than 30 years of experience (which is held constant at 1% for all years), increasing to 30% in 2022, 40% in 2023, 45% in 2024, 50% in 2025, 55% in 2026, 65% in 2027, 70% in 2028, and 75% in 2029. 100% of new educators are required to opt-in beginning in 2026.
- **Proposed Raise Amounts:** The following table summarizes the types and amounts of raises available to all educators who are eligible to earn NBPTS certification and opt-in to the career ladder. Once an educator earns NBPTS certification, she/he no longer receives raises according to the local salary schedule. Future raises are only earned by achieving NBPTS recertification and by cost of living raises approved by local school systems.

	WG 2 Plan
Total raise for earning NBPTS certification	\$12,000
Module 1	\$4,000
Module 2	\$2,000
Module 3	\$2,000
Module 4	\$4,000
Modules 1 & 2	\$6,000
Modules 1, 2 & 3	\$8,000
Modules 3 & 4	\$6,000
Modules all 4	\$12,000
Additional raise for low-performing Schools	\$5,000
Raise for earning 1 st recertification	\$8,000
Raise for earning 2 nd recertification	\$7,000
Raise for earning 3 rd + recertifications	\$6,000
Raise for lead teacher	\$5,000
Raise for master teacher	\$10,000
Raise for professor master teacher	\$15,000
Raise for earning MA/APC	3.0%
Raise for master principal	\$15,000

Cost:

Total increased cost for **teacher compensation**, including guidance counselors and librarians, and the career ladder. Cost includes fringe benefits.

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 9 (FY 2029)
\$212,795,261	\$357,168,690	\$984,527,238	\$1,346,132,933

Average Teacher Salary	FY 2018	FY 2020	FY 2021	FY 2025	FY 2029
Current	\$69,557	\$71,696	\$72,007	\$73,545	\$75,055
Proposed	\$69,557	\$74,353	\$76,578	\$86,695	\$93,137

Additional public prekindergarten teachers, including fringe benefits (Working Group 1 cost estimates will be adjusted downward)

- The model incorporates the additional public prekindergarten teachers recommended by Work Group 1 as enrollment of three and four-year-olds in prekindergarten programs is increased over time. By 2029 an additional 1,565 teachers will be required.

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 9 (FY 2029)
\$24,392,655	\$63,406,503	\$96,595,277	\$146,812,689

School Leaders Career Ladder – Master Principals

- The additional cost of a \$15,000 raise paid to principals achieving the master principal level is included in the model. The estimate assumes a maximum of 360 master principal FTEs, which are phased-in between 2023 and 2026.

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 9 (FY 2029)
N/A	\$890,074	\$3,107,970	\$6,198,660

National Board for Professional Teaching Standards (NBPTS) Fees

- The model includes the cost of NBPTS fee reimbursement, assuming that educators participating in NBPTS certification will be reimbursed for the costs of the Board’s registration fee (\$75), the \$475 fee per module (only reimbursed if successfully passed), and for renewal or Maintenance of Certification (this fee has not yet been established by the Board, but Board literature claims it will be significantly less than the previous \$1,000 recertification fee. A fee of \$475 is assumed for this estimate).

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 9 (FY 2029)
\$430,512	\$474,059	\$4,790,404	\$5,484,693

Element 2h: Train the State Superintendent and the 24 local superintendents, their senior, instruction–related staff, State and local board of education members, and school principals to give them the vision, motivation, skills, and knowledge they will need to implement the recommendations made in the Commission’s report.

Assumptions:

- Based on national programs that train school leaders, a cohort of district leaders and the State Superintendent of Schools will be trained with the knowledge, skills, and tools to design and lead district-wide, coherent aligned systems of instruction and learning. This assumes an 18-month engagement that includes 20 days (120 hours) of face-to-face executive development, plus more than 24 hours of self-study and online work.
 - 25 participants (24 district superintendents + State Superintendent of Schools) x \$18,000 per participant = \$450,000 (Year 0)
- State and district leadership teams will be trained to create high-performance organizations that can scale and sustain dramatic improvements in instruction and student learning and develop a research-based plan to redesign their district as a system to dramatically improve student achievement, equitably and efficiently. Each partnership team involves 14 or more days of face-to-face executive development delivered to district leadership teams, plus district-led work that occurs in between and after sessions.
 - 25 district partnership teams (24 districts + state department team) x \$160,000 per partnership = \$4 million (\$1 million Year 0 and \$3 million in Year 1)
- Training to provide the knowledge, skills, and tools for school leaders to become instructional leaders and drive school-wide improvements in instruction and student learning. Principal training will involve 24 half days of face-to-face executive development typically delivered during the course of a year (12 two-day units, usually delivered once a month, plus a half day orientation) delivered using a train-the-trainer model. This will enable Maryland to build the State's capacity to deliver the training cost-effectively by training a cadre of local facilitators, who in turn will deliver the training to subsequent cohorts of principals across the State. Based on an estimated 1,350 principals in the State.
 - Train-the-Trainer (locally facilitated, with some delivery by national content facilitators):
 - Train 150 principals at \$13,500 per participant = \$2,025,000 (Year 1)
 - 1 online course for 150 principals (Year 2) (no additional cost)
 - Train and certify 50 local facilitators (4 facilitator certification institutes x \$42,000) = \$168,000 (Year 1)
 - Train remaining 1,200 principals at \$5,250 using local facilitators = \$6,300,000 (\$2.1 million in each of Years 2, 3, and 4)
 - Total Train-the-Trainer Cost Option: \$8.5 Million (Year 0–4)

Cost:

Primarily one-time costs spread over multiple years; some ongoing cost to train new superintendents and principals

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 4 (FY 2024)	Year 10 (FY 2030)
\$1,450,000	\$5,193,000	\$2,100,000	\$200,000

Element 2i: Change the way schools are organized and managed to increase the amount of time available for teachers to tutor students who need intensive help and work together in teams to use data and observation to identify students who are falling behind and collaborate on getting them back on track, develop highly engaging and effective lesson plans, mentor new and struggling teachers and systematically improve the school’s instructional program using applied research. Train teachers in the effective use of the career ladder and additional collaborative time.

Additional Teacher Time Assumptions:

- Teachers’ instructional time is reduced to provide additional time for collaboration beginning in 2021. All teachers’ instructional time is reduced by 25% (from 80% to 60% instructional time of the contract day). This estimate of additional teachers excludes 13% of teachers, assuming that certain teaching positions, including teachers without regular classroom responsibilities (such as tutors); and music, dance, theater, art, and physical education teachers; have adequate flexibility in their daily schedules to incorporate the increased collaboration time. The estimate also assumes that principals and assistant principals, who will have limited teaching responsibilities (20% for assistant principals and 10% for principals) will offset some of the need for additional teachers.
- Instructional time for teacher leaders is also reduced to the following levels: lead teachers – 50%, master teachers – 40%, and professor master teachers – 20%.
- These reductions in instructional time will require an additional 14,685 teachers by 2029 to continue providing the same number of classes.
- The number of teachers eligible for additional collaboration time is phased-in through 2029 on the following schedule: 2021 – 10% of teachers, 2022 – 15% of teachers, 2023- 20% of teachers, 2024 – 35% of teachers, 2025 – 50% of teachers, 2026 – 65% of teachers, 2027 – 75% of teachers, 2028 – 90%, 2029 – 100%. The phase-in is by school based on performance, need, and number of new teachers employed.
- The cost of the additional public prekindergarten teachers required to provide increased collaboration time for prekindergarten teachers (the same reduction of instructional time from 80% to 60% as all other teachers) is also estimated in the model. By 2029 an additional 249 teachers will be required.

Additional Teacher Time Cost:

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 9 (FY 2029)
\$0	\$112,519,056	\$632,192,792	\$1,293,807,448

Teacher Training Assumptions:

- Teacher training on the career ladder and effective use of collaborative time will be delivered through a development effort to design and create materials and tools for a new system of professional development tied to the career ladder.
- MSDE will need technical assistance to support and build capacity to develop a suite of experiences (in person, on–line) to prepare teachers to succeed on the career ladder and in schools that are reorganized.

- One-time costs to develop the materials and design the training approximate \$3 million over 3 years
- Delivery of the training might be a range of different methods that would have different costs: a video that all teachers watch, a webinar series, traditional workshops delivered by district staff using tools and materials developed in the first three years as well as a train-the-trainer model. It is assumed that these costs are about \$2 million annually.

Teacher Training Cost:

Year 0 (FY 2020)	Year 1 (FY 2021)	Year 5 (FY 2025)	Year 10 (FY 2030)
\$1,000,000	\$1,000,000	\$2,000,000	\$2,000,000