



Incentivizing Diverse and Highly Effective Educators

As required by Section 289 of Chapter 238 of the Acts of 2024: An Act Relative to Strengthening Massachusetts' Economic Leadership, this report summarizes potential initiatives to incentivize diverse and highly effective educators to work in high-needs schools and districts, including incentives to recruit new and diverse teachers to high-needs schools and policies or practices to retain diverse and effective teachers currently teaching in high-needs schools.

June 2026

This document was prepared by the Massachusetts Department of Elementary and Secondary Education

Pedro Martinez, Commissioner

Board of Elementary and Secondary Education Members

Ms. Katherine Craven, Chair, Brookline

Mr. Matt Hills, Vice-Chair, Newton

Ms. Isabella Chamberlain, Student Member, Hudson

Dr. Ericka Fisher, Worcester

Dr. Christina Grant, Cambridge

Ms. Farzana Mohamed, Newton

Ms. Dálida Rocha, Worcester

Ms. Kristen Smidy, Westfield

Ms. Mary Ann Stewart, Lexington

Dr. Martin West, Newton

Dr. Stephen Zrike, Secretary of Education, Andover

Pedro Martinez, Commissioner

Secretary to the Board

The Massachusetts Department of Elementary and Secondary Education, an affirmative action employer, is committed to ensuring that all of its programs and facilities are accessible to all members of the public.

We do not discriminate on the basis of age, color, disability, national origin, race, religion, sex, gender identity, or sexual orientation.

Inquiries regarding the Department's compliance with Title IX and other civil rights laws may be directed to the Human Resources Director, 135 Santilli Highway, Everett, MA 02149. Phone: 781-338-6105.

© 2026 Massachusetts Department of Elementary and Secondary Education

Permission is hereby granted to copy any or all parts of this document for non-commercial educational purposes. Please credit the "Massachusetts Department of Elementary and Secondary Education."

Massachusetts Department of Elementary and Secondary Education

135 Santilli Highway, Everett, MA 02149

Phone 781-338-3000 TTY: N.E.T. Relay 800-439-2370

www.doe.mass.edu





June 1, 2026

Dear Members of the General Court:

I am pleased to submit this report, *Incentivizing Diverse and Highly Effective Educators*, pursuant to Section 289 of Chapter 238: An Act Relative to Strengthening Massachusetts' Economic Leadership.

Within this report, you will find a summary of potential initiatives to incentivize diverse and highly effective educators to work in high-needs schools and districts, including incentives to recruit new and diverse teachers to high-needs schools and policies or practices to retain diverse and effective teachers currently teaching in high-needs schools. We conclude with a recommendation to fund the regular collection and reporting of educator vacancy data, robust and comprehensive educator feedback on the state of the profession, and an evaluation of existing financial incentive programs in the state,

Sincerely,

A handwritten signature in black ink, appearing to read "Pedro Martinez", with a stylized flourish at the end.

Pedro Martinez
Commissioner of Elementary and Secondary Education

Table of Contents

Incentivizing Diverse and Highly Effective Educators.....	Error! Bookmark not defined.
Table of Contents.....	5
Introduction.....	6
Survey of Teacher Salaries.....	7
Incentive Programs.....	17
Loan Forgiveness.....	17
Housing Subsidies	18
National Board Certification	18
Master Educator Corps	19
Salary Parity.....	21
Teacher Salaries and Bonus Policies	21
Minimum Salary Policies	21
Considerations.....	23
Recommendations.....	23
References	24

Introduction

The Department of Elementary and Secondary Education (DESE; The Department) respectfully submits this Report to the Legislature: *Incentivizing Diverse and Highly Effective Educators* pursuant to Section 289 of Chapter 238: An Act Relative to Strengthening Massachusetts' Economic Leadership:

SECTION 289. (a) Notwithstanding any general or special law to the contrary, the department of elementary and secondary education shall conduct a study and report on potential initiatives to incentivize diverse and highly effective educators to work in high-needs schools and districts, including incentives to recruit new and diverse teachers to high-needs schools and policies or practices to retain diverse and effective teachers currently teaching in high-needs schools. For the purposes of this section, "high-needs schools or districts" shall mean a school or district with a high percentage of low-income students and English learners, which may include a school or district implementing a turnaround plan.

(b) Not later than October 1, 2025, the department shall file a report with the clerks of the senate and house of representatives and the joint committee on education, including any analysis or recommendations. The report shall include, but not be limited to: (i) a survey of educator salaries and benefits across school districts and charter schools; (ii) an assessment of potential incentives to attract educators to high-needs school districts, including but not limited to the establishment of loan forgiveness, scholarship and housing support programs and the status of such currently or previously existing state programs; (iii) the feasibility of financial incentives for achieving National Board certification; (iv) the feasibility of establishing a master educator corps program to be administered by the department and to incentivize educators that have achieved a certain level of mastery to transfer to high-needs school districts; (v) an assessment of a salary parity scale for educators that have switched to high-needs school districts; (vi) any other program, as determined by the department, to help meet the educator requirements of high-needs school districts; and (vii) an assessment of any additional actions necessary to achieve these objectives.

Survey of Teacher Salaries

The Department annually reports teacher salary data via the [Teacher Salaries Report](#) on its Public Profiles website and the [School Finance Dashboard](#). Table 1 summarizes the total amount spent on teacher salaries, the total teacher FTE count, and the average teacher salary by district and for the state. In SY2024, districts spent \$7,065,457,313 for 77,630.3 teacher FTEs, averaging \$91,014 per teacher. District average teacher salaries ranged from \$44,429 to \$164,619.

Table 1
A survey of teacher salaries across school districts and charter schools, SY2024

District Name	Salary Totals	Average Salary	FTE Count
Abby Kelley Foster Charter Public (District)	\$10,393,591	\$83,441	125.9
Abington	\$14,030,507	\$88,409	158.7
Academy Of the Pacific Rim Charter Public (District)	\$4,585,654	\$87,517	54.6
Acton-Boxborough	\$39,734,669	\$100,138	396.8
Acushnet	\$5,808,493	\$77,654	74.8
Advanced Math and Science Academy Charter (District)	\$6,099,473	\$75,441	85.1
Agawam	\$28,679,589	\$103,238	277.8
Alma del Mar Charter School (District)	\$5,249,607	\$58,329	85.4
Amesbury	\$15,035,285	\$88,756	169.4
Amherst	\$9,768,018	\$87,842	111.2
Amherst-Pelham	\$10,004,894	\$92,296	108.4
Andover	\$50,389,369	\$107,624	468.2
Argosy Collegiate Charter School (District)	\$4,507,633	\$91,785	47.0
Arlington	\$46,911,926	\$95,661	490.4
Ashburnham-Westminster	\$13,341,535	\$80,274	166.2
Ashland	\$20,917,446	\$94,563	221.2
Assabet Valley Regional Vocational Technical	\$11,523,431	\$101,260	113.8
Athol-Royalston	\$9,548,255	\$76,325	125.1
Atlantis Charter (District)	\$6,480,079	\$60,203	100.8
Attleboro	\$38,934,827	\$95,946	405.8
Auburn	\$16,071,554	\$86,267	186.3
Avon	\$6,396,411	\$84,497	75.7
Ayer Shirley School District	\$12,007,028	\$85,887	139.8
Barnstable	\$41,047,381	\$96,107	427.1
Baystate Academy Charter Public School (District)	\$2,698,299	\$46,147	58.0
Bedford	\$23,857,888	\$104,686	227.9
Belchertown	\$14,050,637	\$82,993	169.3
Bellingham	\$15,241,357	\$98,522	154.7
Belmont	\$32,895,557	\$111,738	294.4
Benjamin Banneker Charter Public (District)	\$1,605,673	\$76,461	21.0

Benjamin Franklin Classical Charter Public (District)	\$6,144,313	\$111,133	54.5
Berkley	\$5,809,502	\$85,059	68.3
Berkshire Arts and Technology Charter Public (District)	\$2,468,990	\$64,550	35.3
Berkshire Hills	\$10,675,206	\$90,621	117.8
Berlin-Boylston	\$7,837,913	\$85,102	92.1
Beverly	\$33,287,108	\$87,991	378.3
Billerica	\$38,942,127	\$108,203	359.9
Blackstone Valley Regional Vocational Technical	\$10,264,587	\$95,131	107.9
Blackstone-Millville	\$10,669,864	\$94,928	112.4
Blue Hills Regional Vocational Technical	\$8,709,279	\$106,601	81.7
Boston	\$583,709,620	\$133,127	4384.6
Boston Collegiate Charter (District)	\$6,283,496	\$85,520	81.8
Boston Day and Evening Academy Charter (District)	\$4,155,045	\$163,894	26.2
Boston Green Academy Horace Mann Charter School (District)	\$5,145,357	\$119,966	42.7
Boston Preparatory Charter Public (District)	\$5,098,588	\$85,336	64.0
Boston Renaissance Charter Public (District)	\$7,073,072	\$88,025	83.3
Bourne	\$13,811,016	\$94,661	145.9
Boxford	\$6,271,011	\$89,077	70.4
Braintree	\$42,505,676	\$102,103	416.3
Brewster	\$4,254,688	\$91,701	47.0
Bridge Boston Charter School (District)	\$3,461,679	\$104,899	34.0
Bridgewater-Raynham	\$34,944,121	\$100,270	348.5
Brimfield	\$2,634,034	\$93,547	27.6
Bristol County Agricultural	\$3,908,732	\$84,240	46.4
Bristol-Plymouth Regional Vocational Technical	\$11,399,136	\$109,818	103.8
Brockton	\$101,057,285	\$105,757	963.1
Brooke Charter School (District)	\$19,154,431	\$105,564	181.2
Brookfield	\$1,820,278	\$70,168	26.0
Brookline	\$71,183,253	\$122,329	581.9
Burlington	\$34,897,434	\$106,851	326.6
Cambridge	\$82,350,688	\$107,958	762.8
Canton	\$27,703,558	\$106,307	260.6
Cape Cod Lighthouse Charter (District)	\$1,828,765	\$81,329	22.5
Cape Cod Regional Vocational Technical	\$6,087,595	\$94,528	64.4
Carlisle	\$7,429,824	\$123,419	60.2
Carver	\$10,866,092	\$85,830	126.6
Central Berkshire	\$10,390,375	\$86,371	120.3
Chelmsford	\$34,325,324	\$90,640	378.7
Chelsea	\$43,935,566	\$89,573	490.5
Chesterfield-Goshen	\$1,262,151	\$85,280	14.8
Chicopee	\$55,926,123	\$90,848	615.6
Christa McAuliffe Charter School (District)	\$2,958,974	\$99,391	32.3
City on a Hill Charter Public School (District)	\$1,386,616	\$60,782	20.5
Clarksburg	\$1,267,983	\$76,847	16.5

Clinton	\$14,242,929	\$87,059	163.6
Codman Academy Charter Public (District)	\$3,664,516	\$79,754	46.2
Cohasset	\$12,916,869	\$97,046	133.1
Collegiate Charter School of Lowell (District)	\$4,529,802	\$60,616	81.2
Community Charter School of Cambridge (District)	\$3,195,715	\$113,259	30.6
Community Day Charter Public School (District)	\$8,543,485	\$65,703	135.5
Concord	\$21,193,195	\$114,372	185.3
Concord-Carlisle	\$13,247,918	\$126,051	105.1
Conservatory Lab Charter (District)	\$4,077,410	\$143,067	30.2
Conway	\$1,202,035	\$71,978	16.7
Danvers	\$26,523,813	\$97,514	272.0
Dartmouth	\$25,734,530	\$93,106	276.4
Dedham	\$25,907,062	\$105,228	246.2
Deerfield	\$2,472,569	\$74,475	33.2
Dennis-Yarmouth	\$28,706,195	\$110,664	259.4
Dighton-Rehoboth	\$19,048,403	\$91,054	209.2
Douglas	\$7,816,806	\$80,255	97.4
Dover	\$4,513,455	\$101,426	44.5
Dover-Sherborn	\$12,086,067	\$117,000	103.3
Dracut	\$20,740,093	\$84,757	244.7
Dudley Street Neighborhood Charter School (District)	\$2,231,915	\$117,469	19.0
Dudley-Charlton Reg	\$22,569,593	\$86,012	262.4
Duxbury	\$22,434,544	\$96,993	231.3
East Bridgewater	\$13,262,916	\$79,466	166.9
East Longmeadow	\$17,194,359	\$85,672	200.7
Eastham	\$1,933,908	\$106,846	18.1
Easthampton	\$8,849,917	\$75,127	117.8
Easton	\$25,331,001	\$95,625	264.9
Edgartown	\$5,037,733	\$109,042	46.2
Edward M. Kennedy Academy for Health Careers: A Horace Mann Charter Public School (District)	\$4,449,296	\$118,493	35.6
Erving	\$1,214,746	\$62,616	19.4
Essex North Shore Agricultural and Technical School District	\$14,886,938	\$97,747	152.3
Everett	\$65,017,436	\$112,487	578.0
Excel Academy Charter (District)	\$10,552,689	\$81,966	130.1
Fairhaven	\$11,264,726	\$82,224	137.0
Fall River	\$71,454,104	\$82,549	865.6
Falmouth	\$26,497,669	\$92,617	286.1
Farmington River Reg	\$1,059,067	\$74,582	14.2
Fitchburg	\$37,922,010	\$84,723	447.6
Florida	\$733,080	\$44,429	16.5
Four Rivers Charter Public (District)	\$1,496,174	\$101,236	17.7
Foxborough	\$20,626,169	\$96,519	213.7
Foxborough Regional Charter (District)	\$7,673,004	\$65,000	117.0

Framingham	\$80,559,977	\$101,833	791.1
Francis W. Parker Charter Essential (District)	\$2,791,527	\$68,472	41.3
Franklin	\$35,291,269	\$92,192	382.8
Franklin County Regional Vocational Technical	\$4,910,659	\$90,340	57.6
Freetown-Lakeville	\$18,072,051	\$84,056	215.0
Frontier	\$4,041,181	\$78,317	51.6
Gardner	\$15,417,611	\$104,103	148.1
Gateway	\$5,875,625	\$73,629	79.8
Georgetown	\$8,913,068	\$126,247	70.6
Gill-Montague	\$6,753,800	\$72,002	93.8
Global Learning Charter Public (District)	\$2,834,444	\$68,725	43.4
Gloucester	\$23,151,166	\$86,417	267.9
Grafton	\$19,565,844	\$81,934	238.8
Granby	\$4,105,060	\$70,777	58.0
Greater Commonwealth Virtual District	\$6,081,732	\$81,090	75.5
Greater Fall River Regional Vocational Technical	\$14,116,765	\$98,650	143.1
Greater Lawrence Regional Vocational Technical	\$17,216,013	\$104,339	165.0
Greater Lowell Regional Vocational Technical	\$22,166,732	\$104,314	212.5
Greater New Bedford Regional Vocational Technical	\$18,060,988	\$91,867	196.6
Greenfield	\$9,552,399	\$73,650	129.7
Groton-Dunstable	\$16,847,953	\$91,218	184.7
Hadley	\$4,112,115	\$74,766	55.0
Halifax	\$3,940,116	\$99,498	39.6
Hamilton-Wenham	\$13,868,309	\$93,642	148.1
Hampden Charter School of Science East (District)	\$3,733,229	\$86,120	47.0
Hampden Charter School of Science West (District)	\$2,687,470	\$71,466	35.6
Hampden-Wilbraham	\$18,607,416	\$91,843	202.6
Hampshire	\$5,472,654	\$78,970	69.3
Hancock	\$463,812	\$59,463	7.8
Hanover	\$20,465,754	\$104,046	196.7
Harvard	\$8,104,795	\$91,787	88.3
Hatfield	\$3,451,994	\$87,392	39.5
Haverhill	\$57,438,522	\$85,921	668.5
Hawlemont	\$877,796	\$97,533	9.0
Helen Y. Davis Leadership Academy Charter Public (District)	\$1,147,041	\$106,208	13.3
Hill View Montessori Charter Public (District)	\$1,913,259	\$83,185	22.7
Hilltown Cooperative Charter Public (District)	\$1,432,893	\$67,877	21.3
Hingham	\$32,935,922	\$107,109	307.5
Holbrook	\$8,385,173	\$82,613	101.5
Holland	\$1,694,174	\$80,675	21.0
Holliston	\$20,062,878	\$94,950	211.3
Holyoke	\$32,811,609	\$78,553	417.7
Holyoke Community Charter (District)	\$3,759,590	\$113,583	35.0
Hoosac Valley Regional	\$6,606,876	\$71,349	92.6

Hopedale	\$7,353,889	\$75,040	98.0
Hopkinton	\$31,937,006	\$109,298	292.2
Hudson	\$21,526,059	\$92,228	233.4
Hull	\$7,990,045	\$101,140	79.0
Innovation Academy Charter (District)	\$4,886,565	\$68,753	70.9
Ipswich	\$15,756,938	\$97,085	162.3
KIPP Academy Boston Charter School (District)	\$4,850,900	\$96,886	54.5
KIPP Academy Lynn Charter (District)	\$10,688,100	\$93,799	116.4
King Philip	\$12,962,682	\$91,869	141.1
Kingston	\$5,949,846	\$74,935	79.4
Lawrence	\$97,151,679	\$84,516	1149.5
Lawrence Family Development Charter (District)	\$4,045,306	\$63,208	65.0
Learning First Charter Public School (District)	\$3,649,272	\$112,296	35.0
Lee	\$5,948,983	\$82,282	72.3
Leicester	\$8,344,828	\$76,840	108.6
Lenox	\$6,934,381	\$84,669	81.9
Leominster	\$39,024,054	\$88,631	440.3
Leverett	\$907,725	\$58,563	15.5
Lexington	\$69,774,605	\$107,428	649.5
Libertas Academy Charter School (District)	\$3,413,255	\$65,637	53.1
Lincoln	\$11,475,622	\$97,169	118.1
Lincoln-Sudbury	\$15,008,028	\$116,612	128.7
Littleton	\$11,148,018	\$90,487	123.2
Longmeadow	\$20,554,822	\$84,103	244.4
Lowell	\$107,909,355	\$93,138	1158.6
Lowell Community Charter Public (District)	\$6,046,028	\$86,372	68.6
Lowell Middlesex Academy Charter (District)	\$848,073	\$113,091	6.9
Ludlow	\$16,384,497	\$84,196	194.6
Lunenburg	\$11,273,905	\$98,894	114.0
Lynn	\$131,394,358	\$100,141	1312.1
Lynnfield	\$16,561,631	\$103,446	160.1
Malden	\$49,513,196	\$106,848	463.4
Manchester Essex Regional	\$12,342,703	\$98,900	124.8
Mansfield	\$29,311,770	\$98,793	296.7
Map Academy Charter School (District)	\$1,765,154	\$68,040	25.1
Marblehead	\$22,293,150	\$90,696	245.8
Marblehead Community Charter Public (District)	\$1,311,141	\$72,845	18.0
Marion	\$3,296,803	\$100,512	32.8
Marlborough	\$35,783,645	\$87,213	410.3
Marshfield	\$29,233,798	\$89,674	326.0
Martha's Vineyard	\$10,769,407	\$135,635	79.4
Martha's Vineyard Charter Public School (District)	\$2,001,768	\$100,682	21.8
Martin Luther King, Jr. Charter School of Excellence (District)	\$2,237,318	\$64,530	31.0
Masconomet	\$14,577,270	\$111,192	131.1

Mashpee	\$11,780,798	\$87,851	134.1
Match Charter Public School (District)	\$9,952,693	\$84,266	121.6
Mattapoisett	\$3,913,981	\$106,358	36.8
Maynard	\$10,304,411	\$88,985	115.8
Medfield	\$22,625,967	\$108,310	208.9
Medford	\$39,545,304	\$98,518	401.4
Medway	\$14,517,869	\$90,793	159.9
Melrose	\$24,307,999	\$85,682	283.7
Mendon-Upton	\$14,701,401	\$91,256	161.1
Methuen	\$46,635,301	\$86,154	541.3
Middleborough	\$22,110,568	\$103,514	213.6
Middleton	\$6,257,369	\$90,294	69.3
Milford	\$41,674,638	\$105,452	395.2
Millbury	\$12,119,958	\$92,660	130.8
Millis	\$10,353,881	\$100,915	102.6
Milton	\$34,215,846	\$100,399	340.8
Minuteman Regional Vocational Technical	\$9,190,006	\$111,529	82.4
Mohawk Trail	\$5,944,685	\$86,280	68.9
Monomoy Regional School District	\$15,181,674	\$88,886	170.8
Monson	\$6,112,078	\$69,455	88.0
Montachusett Regional Vocational Technical	\$11,732,457	\$98,675	118.9
Mount Greylock	\$9,281,301	\$83,842	110.7
Mystic Valley Regional Charter (District)	\$8,131,031	\$81,359	98.4
Nahant	\$935,748	\$85,848	10.9
Nantucket	\$16,381,256	\$102,575	159.7
Narragansett	\$7,448,926	\$75,777	98.3
Nashoba	\$23,745,657	\$96,175	246.9
Nashoba Valley Regional Vocational Technical	\$6,820,325	\$101,192	67.4
Natick	\$46,071,273	\$100,680	457.6
Nauset	\$12,793,308	\$101,454	126.1
Needham	\$45,784,959	\$101,790	449.8
Neighborhood House Charter (District)	\$6,170,400	\$82,233	77.1
New Bedford	\$91,187,960	\$88,190	1034.0
New Heights Charter School of Brockton (District)	\$4,855,699	\$104,260	44.1
New Salem-Wendell	\$981,326	\$65,422	15.0
Newburyport	\$19,790,222	\$92,090	214.9
Newton	\$110,872,817	\$104,716	1058.8
Norfolk	\$8,354,973	\$96,255	86.8
Norfolk County Agricultural	\$5,343,345	\$91,810	58.2
North Adams	\$9,584,979	\$76,435	125.4
North Andover	\$31,786,143	\$94,771	335.4
North Attleborough	\$28,823,729	\$95,538	301.7
North Brookfield	\$2,855,243	\$72,468	39.4
North Middlesex	\$19,904,515	\$83,109	239.5

North Reading	\$19,699,425	\$94,846	207.7
Northampton	\$19,192,742	\$80,036	239.8
Northampton-Smith Vocational Agricultural	\$5,077,778	\$79,340	64.0
Northboro-Southboro	\$11,101,344	\$102,790	108.0
Northborough	\$13,739,511	\$102,381	134.2
Northbridge	\$13,166,645	\$88,664	148.5
Northeast Metropolitan Regional Vocational Technical	\$13,032,243	\$108,331	120.3
Northern Berkshire Regional Vocational Technical	\$5,286,891	\$109,233	48.4
Norton	\$18,803,585	\$98,966	190.0
Norwell	\$16,976,069	\$100,868	168.3
Norwood	\$30,559,111	\$92,324	331.0
Oak Bluffs	\$5,340,266	\$101,141	52.8
Old Colony Regional Vocational Technical	\$5,271,013	\$85,016	62.0
Old Rochester	\$8,612,151	\$96,118	89.6
Old Sturbridge Academy Charter Public School (District)	\$1,853,837	\$66,197	26.3
Orange	\$3,559,440	\$84,749	42.0
Orleans	\$2,296,581	\$107,821	21.3
Oxford	\$9,950,581	\$80,053	124.3
Palmer	\$8,236,370	\$80,277	102.6
Pathfinder Regional Vocational Technical	\$5,818,285	\$80,142	72.6
Peabody	\$44,530,723	\$92,811	479.8
Pelham	\$901,847	\$70,457	12.8
Pembroke	\$18,029,966	\$96,469	186.9
Pentucket	\$15,450,261	\$83,787	184.4
Petersham	\$875,941	\$76,837	11.4
Phoenix Academy Charter Public High School, Chelsea (District)	\$992,280	\$58,028	18.2
Phoenix Academy Public Charter High School, Lawrence (District)	\$1,197,596	\$99,750	12.4
Phoenix Academy Public Charter High School, Springfield (District)	\$955,684	\$71,384	15.1
Pioneer Charter School of Science (District)	\$6,016,494	\$82,927	71.2
Pioneer Charter School of Science II (District)	\$4,061,852	\$79,925	49.0
Pioneer Valley	\$4,394,007	\$75,628	58.1
Pioneer Valley Chinese Immersion Charter (District)	\$4,941,356	\$74,657	65.1
Pioneer Valley Performing Arts Charter Public (District)	\$2,519,916	\$60,151	43.3
Pittsfield	\$38,071,003	\$74,111	513.7
Plainville	\$4,730,268	\$91,850	51.5
Plymouth	\$53,665,127	\$85,129	630.4
Plympton	\$1,809,134	\$96,745	18.7
Prospect Hill Academy Charter (District)	\$7,513,948	\$85,572	98.2
Provincetown	\$3,111,299	\$164,619	18.9
Quabbin	\$12,548,125	\$83,990	149.4
Quaboag Regional	\$7,717,447	\$87,499	88.2
Quincy	\$72,023,002	\$94,955	758.5

Ralph C Mahar	\$4,530,419	\$77,048	58.8
Randolph	\$23,608,505	\$97,920	241.1
Reading	\$28,709,271	\$96,405	297.8
Revere	\$60,450,028	\$93,765	644.7
Richmond	\$1,921,092	\$99,025	19.4
Rising Tide Charter Public (District)	\$3,723,221	\$66,593	58.1
River Valley Charter (District)	\$2,351,707	\$87,750	25.2
Rochester	\$3,528,392	\$85,433	41.3
Rockland	\$16,372,914	\$93,399	175.3
Rockport	\$7,507,680	\$91,446	82.1
Rowe	\$668,880	\$73,503	9.1
Roxbury Preparatory Charter (District)	\$8,179,301	\$147,596	48.2
Salem	\$34,497,395	\$96,388	357.9
Salem Academy Charter (District)	\$3,804,523	\$92,376	39.7
Sandwich	\$16,953,166	\$87,840	193.0
Saugus	\$16,258,884	\$89,778	181.1
Savoy	\$404,028	\$56,905	7.1
Scituate	\$25,492,203	\$107,926	236.2
Seekonk	\$16,173,090	\$91,219	177.3
Sharon	\$28,044,261	\$102,426	273.8
Shawsheen Valley Regional Vocational Technical	\$14,944,942	\$113,305	131.9
Sherborn	\$3,599,347	\$104,937	34.3
Shrewsbury	\$41,651,458	\$95,247	437.3
Shutesbury	\$1,118,209	\$63,176	17.7
Silver Lake	\$13,239,880	\$103,356	128.1
Sizer School: A North Central Charter Essential (District)	\$2,058,335	\$62,022	31.1
Somerset	\$12,450,618	\$94,038	132.4
Somerset Berkley Regional School District	\$7,135,577	\$91,835	77.7
Somerville	\$46,160,440	\$104,743	440.7
South Hadley	\$11,943,486	\$78,627	151.9
South Middlesex Regional Vocational Technical	\$8,495,475	\$93,050	91.3
South Shore Charter Public (District)	\$8,024,452	\$85,070	46.4
South Shore Regional Vocational Technical	\$7,004,862	\$108,940	64.3
Southampton	\$3,440,710	\$94,266	36.5
Southborough	\$11,024,361	\$100,404	109.8
Southbridge	\$12,962,180	\$75,714	171.2
Southeastern Regional Vocational Technical	\$13,266,845	\$102,844	129.0
Southern Berkshire	\$4,745,271	\$62,030	76.5
Southern Worcester County Regional Vocational School District	\$11,058,544	\$96,161	115.0
Southwick-Tolland-Granville Regional School District	\$9,519,730	\$79,998	119.0
Spencer-E Brookfield	\$8,514,431	\$72,463	117.5
Springfield	\$183,909,650	\$84,692	2171.5
Springfield International Charter (District)	\$7,439,803	\$86,657	79.1
Springfield Preparatory Charter School (District)	\$3,515,007	\$84,723	42.3

Stoneham	\$17,160,952	\$81,293	211.1
Stoughton	\$30,932,060	\$96,092	321.9
Sturbridge	\$6,783,207	\$94,211	72.0
Sturgis Charter Public (District)	\$7,598,034	\$86,960	88.1
Sudbury	\$23,115,163	\$102,734	225.0
Sunderland	\$1,720,474	\$71,986	23.9
Sutton	\$8,930,592	\$91,128	98.0
Swampscott	\$17,205,995	\$91,473	188.1
Swansea	\$13,664,283	\$90,913	150.3
TEC Connections Academy Commonwealth Virtual School District	\$10,329,982	\$135,921	125.5
Tantasqua	\$12,501,542	\$83,678	149.4
Taunton	\$54,009,360	\$97,034	556.6
Tewksbury	\$23,703,455	\$93,284	254.1
Tisbury	\$4,355,084	\$109,424	39.8
Topsfield	\$5,607,135	\$102,507	54.7
Tri-County Regional Vocational Technical	\$9,387,938	\$109,289	85.9
Triton	\$20,811,130	\$98,538	211.2
Truro	\$1,332,680	\$82,775	16.1
Tyngsborough	\$11,515,772	\$90,962	126.6
UP Academy Charter School of Boston (District)	\$4,241,758	\$132,555	32.0
UP Academy Charter School of Dorchester (District)	\$7,125,583	\$128,389	55.5
Up-Island Regional	\$5,553,424	\$104,782	53.0
Upper Cape Cod Regional Vocational Technical	\$7,486,834	\$86,254	86.8
Uxbridge	\$12,221,530	\$90,262	135.4
Veritas Preparatory Charter School (District)	\$4,160,111	\$73,138	64.4
Wachusett	\$43,925,799	\$93,919	467.7
Wakefield	\$27,240,233	\$94,881	287.1
Wales	\$703,896	\$65,176	10.8
Walpole	\$27,938,881	\$91,393	305.7
Waltham	\$53,812,563	\$97,434	552.3
Ware	\$6,921,289	\$77,593	89.2
Wareham	\$16,041,240	\$90,119	178.0
Warwick	\$266,800	\$51,308	5.2
Watertown	\$26,633,054	\$100,692	264.5
Wayland	\$27,842,977	\$115,723	240.6
Webster	\$12,749,359	\$89,344	142.7
Wellesley	\$43,047,451	\$109,899	391.7
Wellfleet	\$1,041,655	\$82,671	12.6
West Boylston	\$7,122,331	\$89,252	79.8
West Bridgewater	\$8,608,470	\$83,254	103.4
West Springfield	\$28,502,881	\$83,026	343.3
Westborough	\$31,495,422	\$94,609	332.9
Westfield	\$34,357,523	\$82,215	417.9
Westford	\$33,341,992	\$90,677	367.7

Westhampton	\$1,141,665	\$67,157	17.0
Weston	\$22,150,604	\$127,449	173.8
Westport	\$10,335,657	\$83,017	124.5
Westwood	\$26,946,312	\$113,220	238.0
Weymouth	\$43,547,647	\$94,979	458.5
Whately	\$933,384	\$59,451	15.7
Whitman-Hanson	\$25,818,797	\$101,369	254.7
Whittier Regional Vocational Technical	\$12,172,602	\$98,008	124.2
Williamsburg	\$1,285,297	\$76,506	16.8
Wilmington	\$25,167,924	\$95,988	262.2
Winchendon	\$7,593,599	\$83,722	90.7
Winchester	\$35,387,846	\$103,352	342.4
Winthrop	\$12,996,770	\$82,467	157.6
Woburn	\$38,045,640	\$99,232	383.4
Worcester	\$207,413,094	\$101,529	2042.9
Worthington	\$471,379	\$51,237	9.2
Wrentham	\$7,192,358	\$90,215	80.0
State Totals	\$7,065,457,313	\$91,014	77630.3

Incentive Programs

States and school districts have offered a variety of financial incentives for teachers to work in high-needs schools. In this section, we discuss non-salary alternative methods of compensation, including loan forgiveness and housing support, as well as salary parity policies that place statutory minimums on teacher salaries throughout a state and bonus programs that provide additional salaries for teachers working in high-needs schools or districts. Each subsection explores the national perspective of the incentive program and includes Massachusetts context, when available and relevant.

Loan Forgiveness

Loan forgiveness programs typically forgive some percentage of the loans taken out to finance teacher preparation program enrollment conditional on some length of service in a high-needs school or district. Currently, about half the states operate some loan forgiveness program (Education Commission of the States, 2023; Reaching Higher NH, 2024). These policies typically forgive a fixed amount of student loans for each year a teacher works in a high-needs school or subject area, up to a certain number of years. In addition to these programs, the federal government offers loan forgiveness to teachers working in low-income schools through the TEACH Grant program.

The empirical research on loan forgiveness programs has examined their effects both on initial employment outcomes and teachers' persistence in targeted schools or districts. Some studies have found that eligibility for loan forgiveness programs affects teachers' initial job choice by encouraging them to seek positions in high-needs schools (Steele et al., 2010; Walker, 2025). These results are consistent with other evidence on student loan forgiveness, which suggests that it affects initial career choice toward lower-paying, public-sector jobs (Field, 2009; Rothstein & Rouse, 2011). Evidence on teacher persistence during the probationary period is more mixed. Jacob et al. (2024) find no evidence that eligibility increases teacher retention, which they attribute in part to the complexity of the loan forgiveness program. Walker (2025) finds that eligible teachers have higher retention during the period where they qualify for loan forgiveness. However, the existing empirical evidence is consistent that teachers who have had their loans forgiven attrit at similar (or higher) rates than other teachers (Jacob et al., 2024; Steele et al., 2010; Walker, 2025). These programs may therefore improve teacher recruitment outcomes or encourage entry into the teaching profession, but they are unlikely to have effects on teacher retention beyond the first few years in the classroom.

In Massachusetts, the Educator Loan Repayment Assistance Program, administered through the Office of Student Financial Assistance in the Department of Higher Education, is designed to assist educators with the repayment of educational loans acquired to support their college expenses. The program prioritizes the recruitment and retention of a racially, culturally, ethnically, and linguistically diverse educator workforce consistent with M.G.L. chapter 132 of the acts of 2019 to diversify the educator workforce. Applicants who are currently part of the educator workforce in a public school in Massachusetts may be eligible to receive up to \$7,500 towards their outstanding loan

debt. In SY2024, 56 educators received \$275,696. In SY2025, 83 educators received \$474,979.

The Tomorrow's Teacher Scholarship Program, also administered by the Office of Student Financial Assistance in the Department of Higher Education, supports eligible individuals who intend to obtain their teaching license with up to \$25,000 per year toward their college education. In SY2024, 189 students were awarded \$2,688,249. In SY2025, 258 students were awarded \$4,948,614. In SY2026, an estimated 273 students are expected to be awarded approximately \$2,457,000.

Housing Subsidies

Many districts – particularly those in high-cost-of-living areas – have experimented with housing support in recent years. There is some descriptive evidence that housing costs are a significant issue for teachers in some areas. One survey reported that about 11% of teachers would be more likely to remain in the profession if they had subsidized housing (Sawchuk, 2022). Dizon-Ross et al. (2019) surveyed teachers working in San Francisco public schools and found that anxiety over cost-of-living issues predicted job satisfaction and turnover. In response, districts have adopted a few different housing policies. Some districts, particularly in California, have built housing directly. As of 2022, at least four districts in California had built housing on district-owned land and then rented it to teachers at below-market rates (Center for Cities + Schools et al., 2022). Other locations have offered other forms of housing assistance, including support for down payments (Knight, 2016; Perry-Brown, 2019). However, to date, there is very little rigorous empirical evidence on the effects of these policies on recruitment or retention (Medlin et al., 2024).

National Board Certification

The National Board for Professional Teaching Standards (NBPTS) offers a voluntary certification process for teachers. Eligible teachers complete a portfolio-based assessment process that includes an assessment of content knowledge and other artifacts of effective classroom practice. Submissions are scored by expert educators, and those judged to demonstrate effective practice are awarded the National Board certification. The process costs \$1,900 to complete and takes approximately one school year.

Researchers have examined the effectiveness of National Board Certified Teachers (NBCTs) in several states and contexts. They have generally found that NBCTs outperform other classroom teachers with similar experience (Clotfelter et al., 2007, 2010; Cowan & Goldhaber, 2016; Goldhaber & Anthony, 2007); typical estimates indicate that the difference in contributions to student test scores between NBCTs and non-NBCT certified teachers is somewhere between 50% and 100% of the difference in effectiveness for first and second-year teachers, with somewhat larger estimates in higher grades than in elementary grades (Clotfelter et al., 2007, 2010; Cowan &

Goldhaber, 2016).¹ Research has found that the certification process used by NBPTS does identify more effective applicants (Cantrell et al., 2008; Cowan & Goldhaber, 2016; Goldhaber & Anthony, 2007). However, there is little evidence that participation in the certification itself improves teacher practice. Most studies have found that teachers are similarly effective before and after the certification process (Clotfelter et al., 2007, 2010; Goldhaber & Anthony, 2007; Harris & Sass, 2009).

Many states offer financial incentives for teachers to obtain board certification. In a few states, NBCTs receive additional incentives to work in high-needs schools. One such state is Washington, which offers NBCTs a \$5,000 bonus to work in schools with high rates of students receiving free- and reduced-price lunch. Cowan and Goldhaber (2018) find that the bonus policy increased the proportion of new teachers with board certification and reduced the attrition of board-certified teachers. Over the first six years of the policy, each year of bonus eligibility increased the proportion of current teachers who were board certified by about 1 percentage point.

However, there are two other features of this policy worth noting. First, in the Washington case, about half of the increase in NBCTs was explained by increased certification rates among incumbent teachers. Relative to other incentive policies, this feature tends to weaken the positive effects because it directs incentives towards teachers already working in the school. Whether this is desirable depends in part on whether participation in the certification process itself is beneficial; the existing research has not found this to be the case, although it is not possible to rule out small positive effects. Second, although most of the literature finds that NCBTs are more effective than other teachers, the signal is weaker than some other policy levers. For instance, the teacher quality signal in the Talent Transfer Initiative (TTI) discussed below is about 5-10 times stronger than the NBCT signal.

Master Educator Corps

States and districts have experimented with several different master educator models with substantially differing incentive structures. An early example of this model is the Teacher Advancement Program (TAP), developed by the Milken Institute. This program includes four components: professional advancement opportunities for high-performing teachers; team-based professional development; teacher accountability measures; and performance-based compensation (What Works Clearinghouse, 2015). There have been a variety of related models, but the key principles include providing high-performing teachers with additional compensation to serve in mentorship and instructional leadership roles (e.g., BEST NC, 2022; Johnson et al., 2010; Public Impact, 2018).

Several research teams have examined the effects of these initiatives on school achievement. The research findings are somewhat mixed and depend in part on the

¹ Some research has found weak or inconsistent results (e.g., Harris & Sass, 2009), although these tend to occur in studies with smaller samples of NBCTs.

analytical choices used. The key concern when analyzing school-level reforms, such as master educator programs, is that schools that are more effective at raising student achievement will choose to adopt them. Stronger evaluations therefore either randomize schools to implement these models or examine changes in student achievement outcomes when schools newly implement these models. The results of these analyses have been somewhat mixed in terms of their efficacy in improving student achievement.

Glazerman & Seifullah (2012) examined the Chicago implementation of TAP. Chicago Public Schools implemented a model that provided high-performing teachers with \$15,000 or \$7,000 to become lead or mentor teachers, respectively. The study relied on randomizing the timing in which schools were allowed to implement the model. Although they found positive effects on self-reported mentoring and professional development outcomes, there was little evidence of any positive impact on student achievement. There was some evidence that the master educator model improved teacher retention in the first year of implementation, although the results were insignificant in later years. Other evaluations of reforms modeled on TAP have also yielded mixed findings (Springer et al., 2014).

Edwards et al. (2025) studied the North Carolina Advanced Teaching Role (ATR) model. This program provides additional compensation to teachers who assume greater responsibility for student learning, either through larger classrooms or leadership of other teachers. Comparing schools that adopted this model to similar schools that did not, they found that it increased student achievement in math and science by about 0.05 standard deviations, or roughly the difference in achievement between a novice and third-year teacher. These positive achievement findings are consistent with earlier research in the state on similar master educator programs (Backes & Hansen, 2018).

There has been less research on master teaching programs as an incentive to transfer to high-needs schools. The most well-known example of a master educator corps structured around a signing bonus is the Talent Transfer Initiative (TTI). TTI was a large-scale, federally sponsored initiative to encourage high-performing teachers to transfer into hard-to-staff schools. Participating districts identified the highest-performing 20% of teachers in their districts according to value-added measures in grades 3-8. These teachers were offered a \$20,000 incentive paid out over two years to transfer into low-performing schools in the district. The signing bonuses successfully attracted high-performing teachers to targeted schools. These staffing changes translated into improvements in test scores in elementary schools, although there were no measured effects in middle schools (Glazerman et al., 2013; Protik et al., 2015).

However, retention of targeted teachers was not measurably different than other teachers after the conclusion of the incentive payments. These findings are in line with theoretical predictions. Because the transfer incentives only target the initial move to high-needs schools, they should not be expected to affect the rate of retention. To the extent that master educator programs provide transfer incentives, they should be understood as an effort to affect the candidate pool and not the ongoing retention of effective teachers in these schools.

Salary Parity

The relationship between teacher salaries and retention is one of the most-studied topics in teacher labor market research. Teachers' retention decisions are sensitive to the salaries offered by other potential employers, including those offered by nearby school districts and those offered by non-education employers. Researchers often characterize the magnitude of salary effects on teacher retention as *elasticities*, or the percentage change in retention caused by a one-percent increase in teacher salaries. Elasticities facilitate comparisons of policy effects in locations where salary levels and turnover rates differ. Overall, the existing evidence suggests that a 1% increase in teacher salaries relative to other potential employers reduces teacher attrition by about 1-4% (Clotfelter et al., 2008; Cowan & Goldhaber, 2018; Hendricks, 2014; Imazeki, 2005; Nguyen et al., 2019).

Teacher Salaries and Bonus Policies

In this section, we focus on research policies that provide bonuses to teachers in a high-needs area or highly effective teachers to work in hard-to-staff schools. Clotfelter et al. (2008) studied a policy in North Carolina that awarded bonuses of \$1,800 to teachers working in high-needs fields (math, science, and special education) in high-poverty or low-achieving schools. Cowan and Goldhaber (2018), described in more detail above, studied a policy awarding \$5,000 annual bonuses to National Board Certified Teachers working in high-poverty schools in Washington State, and Springer et al. (2016) studied a policy awarding \$5,000 bonuses to teachers receiving high evaluation scores in low-performing schools in Tennessee. The Talent Transfer Initiative (TTI) described above is also an example of a master educator corps structured around a signing bonus.

Despite the different designs and contexts of these bonus policies, the results were quite similar. They all suggest that a 1% increase in teacher salaries from bonuses reduces attrition among targeted teachers by about 3-4% (Clotfelter et al., 2008; Cowan & Goldhaber, 2018; Springer et al., 2016). The fact that these retention effects are toward the larger end of the range of effects observed in the literature might reflect the fact that these are school-level incentives. Because it is frequently easier to transfer within districts than across them, teachers might be less responsive to salary differentials across school districts. We might therefore expect the retention effects of district salary initiatives to be somewhat smaller than indicated by these studies.

Minimum Salary Policies

Since 2019, at least 10 states have implemented salary floor policies that aim to reduce disparities in teacher pay between school districts (Education Commission of the States, 2025).² These initiatives generally place common, statewide statutory minimums on teacher salaries. They therefore induce salary increases in the lowest-paying districts.

² These include AK, IL, IN, IA, ME, MD, MO, NM, SD, and TN.

Because teacher salaries tend to be closely connected to regional differences in the cost of living (Walden & Sogutlu, 2001), the targeted districts tend to be rural. Analyzing the Arkansas policy change, Zamarro et al. (2024) found the largest increases in salaries among rural and, to a lesser extent, low-income districts. Anglum et al. (2024) found similar patterns based on a simulation of a policy change in Missouri, although they also found that these policies would tend to favor districts with more White teachers. Overall, these policies do not target disparities in teacher salaries in higher cost-of-living regions, such as those between urban and suburban school districts (Lankford et al., 2002).

Although there is an emerging empirical literature on the effects of these policies, the research base is currently quite small. Zamarro et al. (2024) find that teacher retention improved in districts with low salaries following the introduction of the Arkansas policy, although it is not clear whether this represents the effect of the salary floor initiative or shifts in the teacher labor market following the COVID-19 pandemic. The existing evidence on teacher salaries suggests that these policies should improve teacher retention in targeted districts relative to higher-paying districts. However, because these policies tend to influence policies throughout rural regions of the implementing states, they may tend to raise salaries in multiple, contiguous districts simultaneously. Under these circumstances, the improvements in retention may be less than expected from the extant literature. This is because a general improvement in salaries across the board tends to affect teachers' outside options (salaries in neighboring districts) in a similar way as their current salary offer (Imazeki, 2005).

Considerations

The financial incentive programs described above have mixed evidence of effectiveness with regards to building and sustaining a diverse and effective educator workforce. Some, like housing subsidies and bonus policies, target teacher recruitment with relatively little expected effect on teacher retention. Others, like loan forgiveness and minimum salary policies, affect cross-district geographical swaths with reduced expected effects on targeted district teacher recruitment. Most have outcomes that are directly related to policy implementation choices, like the federally-sponsored Talent Transfer Initiative (TTI) that combined Master Educator Corps and salary bonus incentives to motivate the highest-performing teachers to transfer to low-performing schools.

There is no simple, blanket state policy solution to recruit and retain educators, as factors as varied as local context and the broader economic market affect the choices of current and future educators to enter and remain in the profession. In addition to the incentives listed in the legislation and described in this report, research and survey results have consistently shown school culture and climate to be an important factor in teacher retention. Related incentive programs could include fostering supportive school cultures, developing school leadership, and strengthening teachers' working conditions. Any incentives-based policy that Massachusetts develops will be most effective when targeted to a specific locality and to specific educator licensure roles.

Recommendations

To continue to advance work in this area, the Department recommends funding an evaluation of existing state initiatives and establishing an annual budget line item to support related data collection and reporting so that the agency can be most responsive in crafting policies that will help support and sustain educators in the profession.

- *Evaluation on Financial Incentives.* An evaluation of the two incentive programs offered by the Office of Student Financial Assistance in the Department of Higher Education for loan forgiveness and teacher scholarships, and based on the results of this evaluation, decisions can be made about increasing and targeting future financial investments for one or both incentives programs.
- *Educator hiring and vacancy rates by region and role.* An annual, targeted report based on job postings that would provide meaningful demand-side data to support educator pipelines, particularly in our most high-needs areas.
- *Educator feedback.* A statewide feedback survey that would enable the Department to hear directly from educators on the issues most impacting them in their work, similar to the previously administered Massachusetts Teaching, Learning and Leading Survey (Mass TeLLS; [2013 Mass TeLLS report](#)).

References

- Anglum, J.C., Manion, A., & Varkey, S. (2024). Increasing Minimum Teacher Salaries: Opportunities and Drawbacks Across Geography and Race. *Urban Affairs Review* 60(6), 1931–55. 10.1177/10780874241237412.
- Backes, B., & Hansen, M. (2018). *Reaching further and learning more? Evaluating public impacts of Opportunity Culture* (CALDER Working Paper No. 181). National Center for Analysis of Longitudinal Data in Education Research (CALDER). https://caldercenter.org/sites/default/files/2024-11/WP%20181_0.pdf
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2013). Analyzing the Determinants of the Matching of Public School Teachers to Jobs: Disentangling the Preferences of Teachers and Employers. *Journal of Labor Economics*, 31(1), 83–117. <https://doi.org/10.1086/666725>
- Business for Educational Success and Transformation (BEST NC). (2022). *Advanced Teaching Roles in North Carolina: Meaningful career pathways for education professionals* [Policy brief]. <https://www.bestnc.org/wp-content/uploads/2022/07/Advanced-Teaching-Roles-Policy-Brief-2022.pdf>
- Cantrell, S., Fullerton, J., Kane, T. J., & Staiger, D. O. (2008). *National board certification and teacher effectiveness: Evidence from a random assignment experiment* (No. w14608). National Bureau of Economic Research.
- Center for Cities + Schools, cityLAB, and Turner Center for Housing Innovation. (2022). *Education Workforce Housing in California: Developing the 21st Century Public School Campus*. Berkeley and Los Angeles: University of California.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26(6), 673–682. <https://doi.org/10.1016/j.econedurev.2007.10.002>
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2010). Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effects. *Journal of Human Resources*, 45(3), 655–681. <https://doi.org/10.3368/jhr.45.3.655>
- Clotfelter, C., Glennie, E., Ladd, H., & Vigdor, J. (2008). Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina. *Journal of Public Economics*, 92(5–6), 1352–1370. <https://doi.org/10.1016/j.jpubeco.2007.07.003>
- Cowan, J., & Goldhaber, D. (2016). National board certification and teacher effectiveness: Evidence from Washington State. *Journal of Research on Educational Effectiveness*, 9(3), 233–258.
- Cowan, J., & Goldhaber, D. (2018). Do bonuses affect teacher staffing and student achievement in high poverty schools? Evidence from an incentive for national board certified teachers in Washington State. *Economics of Education Review*, 65, 138–152. <https://doi.org/10.1016/j.econedurev.2018.06.010>

- Dizon-Ross, E., Loeb, S., Penner, E., & Rochmes, J. (2019). Stress in Boom Times: Understanding Teachers' Economic Anxiety in a High-Cost Urban District. *AERA Open*, 5(4), 2332858419879439. <https://doi.org/10.1177/2332858419879439>
- Education Commission of the States (ECS) State Education Policy Tracking Database. (2025). <https://www.ecs.org/state-education-policy-tracking-new/>, retrieved 02/05/2026.
- Edwards, C., Bausell, S., Thrasher, E., Birkett, J., & Pham, L. (2025). *Advanced Teaching Roles: Annual Evaluation Report* (Report prepared for the North Carolina Department of Public Instruction). The William and Ida Friday Institute for Educational Innovation, North Carolina State University. https://www.ednc.org/wp-content/uploads/2025/10/2025_ATR_Evaluation_Report_Final_446874a42mnvjd0z03zslnoyfpjpg-1.pdf
- Field, E. (2009). Educational Debt Burden and Career Choice: Evidence from a Financial Aid Experiment at NYU Law School. *American Economic Journal: Applied Economics*, 1(1), 1–21. <https://doi.org/10.1257/app.1.1.1>
- Glazerman, S., & Seifullah, A. (2012). *An evaluation of the Chicago Teacher Advancement Program (Chicago TAP) after four years: Final report* (Report No. ED530098). Mathematica Policy Research. <https://files.eric.ed.gov/fulltext/ED530098.pdf>
- Glazerman, S., A. Protik, B. Teh, J. Bruch, J. Max. (2013). *Transfer Incentives for High-Performing Teachers: Final Results from a Multisite Experiment* (NCEE 2014-4003).
- Goldhaber, D., & Anthony, E. (2007). Can teacher quality be effectively assessed? National board certification as a signal of effective teaching. *The Review of Economics and Statistics*, 89(1), 134-150.
- Harris, D. N., & Sass, T. R. (2009). The effects of NBPTS-certified teachers on student achievement. *Journal of Policy Analysis and Management*, 28(1), 55–80. <https://doi.org/10.1002/pam.20402>
- Hendricks, M. D. (2014). Does it pay to pay teachers more? Evidence from Texas. *Journal of Public Economics*, 109, 50-63.
- Imazeki, J. (2005). Teacher salaries and teacher attrition. *Economics of Education Review*, 24(4), 431-449.
- Jacob, B. A., Jones, D., & Keys, B. J. (2024). The Value of Student Debt Relief and the Role of Administrative Barriers: Evidence from the Teacher Loan Forgiveness Program. *Journal of Labor Economics*, 42(S1), S261–S292. <https://doi.org/10.1086/728468>
- Johnson, S. M., Papay, J. P., Fiarman, S. E., Sick Munger, M., & Qazilbash, E. K. (2010). *Realizing the potential of Peer Assistance and Review (PAR)*. Center for American Progress. <https://cdn.americanprogress.org/wp-content/uploads/issues/2010/05/pdf/par.pdf>

- Knight, H. (2016, October 8). City helps 2 teacher couples buy homes in SF. *San Francisco Chronicle*. <https://www.sfchronicle.com/bayarea/article/City-helps-2-teacher-couples-buy-homes-in-SF-9957067.php>
- Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37–62. <https://doi.org/10.3102/01623737024001037>
- Medlin, L., Eacott, S., Gilbert, C., MacDonald, K., & Pettit, C. J. (2024). Housing the Teacher Workforce: A Scoping Review. *Education Sciences*, 14(5), 537. <https://doi.org/10.3390/educsci14050537>
- Nguyen, T. D., Pham, L., Springer, M. G., & Crouch, M. (2019). *The Factors of Teacher Attrition and Retention: An Updated and Expanded Meta-Analysis of the Literature*. EdWorkingPapers. <https://doi.org/10.26300/CDF3-4555>
- Perry-Brown, N. (2019, October 30). *Mayor announces partnership to help DCPS teachers buy homes* [News article]. UrbanTurf. <https://dc.urbanturf.com/articles/blog/mayors-office-announces-partnership-to-help-dcps-teachers-buy-homes/16077>
- Protik, A., Glazerman, S., Bruch, J., & Teh, B. (2015). Staffing a Low-Performing School: Behavioral Responses to Selective Teacher Transfer Incentives. *Education Finance and Policy*, 10(4), 573–610. https://doi.org/10.1162/EDFP_a_00174
- Public Impact. (2018). *Career paths and pay in an Opportunity Culture: A practical guide*. <https://files.eric.ed.gov/fulltext/ED589364.pdf>
- Rothstein, J., & Rouse, C. E. (2011). Constrained after college: Student loans and early-career occupational choices. *Journal of Public Economics*, 95(1–2), 149–163. <https://doi.org/10.1016/j.jpubeco.2010.09.015>
- Sawchuk, S. (2022, July 27). Better pay would keep teachers from quitting. But there's more to it. *Education Week*. <https://www.edweek.org/teaching-learning/better-pay-would-keep-teachers-from-quitting-but-theres-more-to-it/2022/07>
- Springer, M. G., Ballou, D., & Peng, A. (2014). Estimated effect of the Teacher Advancement Program on student test score gains. *Education Finance and Policy*, 9(2), 193–230.
- Springer, M. G., Swain, W. A., & Rodriguez, L. A. (2016). Effective Teacher Retention Bonuses: Evidence From Tennessee. *Educational Evaluation and Policy Analysis*, 38(2), 199–221. <https://doi.org/10.3102/0162373715609687>
- Steele, J. L., Murnane, R. J., & Willett, J. B. (2010). Do financial incentives help low-performing schools attract and keep academically talented teachers? Evidence from California. *Journal of Policy Analysis and Management*, 29(3), 451–478. <https://doi.org/10.1002/pam.20505>
- Walden, M. L., & Sogutlu, Z. (2001). Determinants of intrastate variation in teacher salaries. *Economics of Education Review*, 20(1), 63–70. [https://doi.org/10.1016/S0272-7757\(99\)00055-2](https://doi.org/10.1016/S0272-7757(99)00055-2)

- Walker, S. (2025). Teaching on Borrowed Time: How the Teacher Loan Forgiveness Program Delays, But Does Not Prevent, Teacher Attrition. Unpublished manuscript. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- What Works Clearinghouse. (2015). *TAP™: The system for teacher and student advancement (WWC Intervention Report, Teacher Training, Evaluation, and Compensation)*. Institute for Education Sciences, U.S. Department of Education. https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_tap_072815.pdf
- Zamarro, G., Camp, A., McGee, J., Wilson, T., & Vernon, M. (2024). Teacher Salary Raises and Turnover: Evidence from the First Year of the Arkansas LEARNS Act. EdWorkingPaper No. 24-972. *Annenberg Institute for School Reform at Brown University*.