<u>Educational Attainment and the</u> <u>American Dream in Massachusetts'</u> <u>Gateway Cities</u>

Andrew Sum Center for Labor Market Studies Northeastern University Boston, Massachusetts

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<u>Disparities in Key Educational Outcomes for</u> <u>Massachusetts' High School Students in Gateway Cities and</u> <u>in Affluent Suburban Communities</u>

- A. National evidence on rising gaps in student academic achievement and educational attainment across family income groups and parental education groups.
- B. Strong links between the academic achievement of teens and their ultimate educational attainment in the U.S.
- C. Gaps in key educational outcomes between large urban school districts and affluent suburbs in Massachusetts
 - On-time high school graduation rates
 - Plans to attend college upon graduation
 - Plans to attend a four year college
 - Will graduate from 4-year college

<u>Disparities in Key Educational Outcomes</u> (Continued)

- D. Gender disparities in these educational outcomes among high school students in Gateway Cities of the state.
- E. Links between MCAS math scores of BPS high school graduates and their probability of enrolling in college and persisting through two years of college.

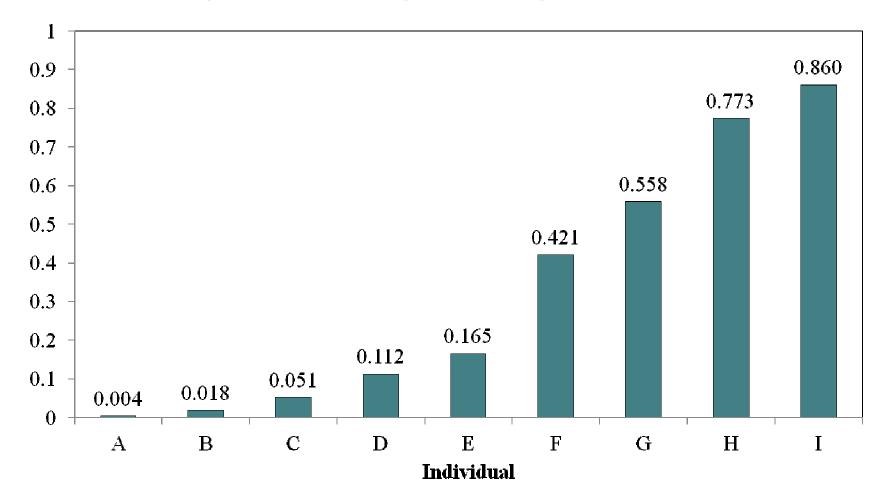
Predicted Probabilities of Selected Groups of 24-28 Year Olds Having

<u>a</u>

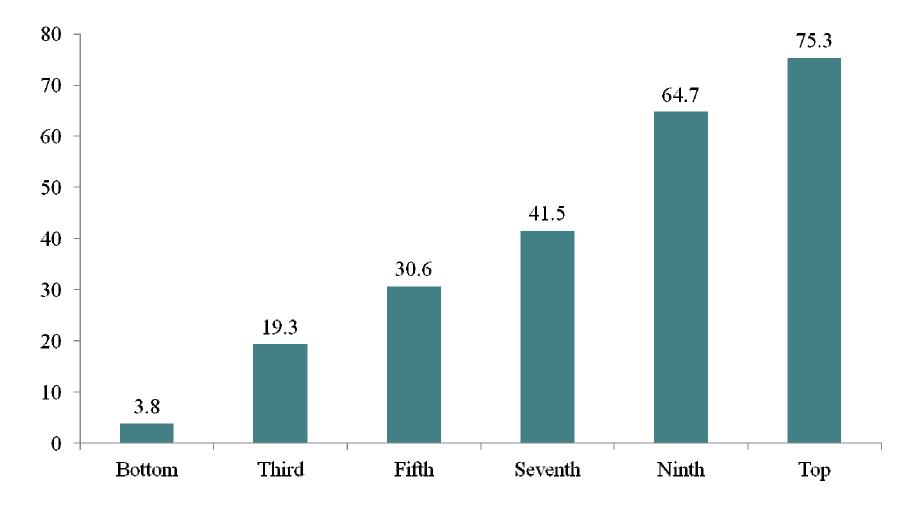
Bachelor's Degree and Working in a College Labor Market Job, 2008

Individual A:	Male, White, bottom quintile ASVAB skills, lived with mother	.004
	only as a teen, mother a high school dropout, does not know	
	father's education, poor	
Individual B:	Male, White, third decile ASVAB, lived with mother only, mom	.018
	high school graduate, father high school graduate, 1-2 times poor	
Individual C:	Male, White, fourth decile ASVAB, lived with both parents,	.051
	mom and dad are high school graduates, 2-3* poverty	
Individual D:	Male, White, fifth decile ASVAB, lived with both parents, mom	.112
	some college, dad some college, 3-4* poverty	
Individual E:	Male, White, sixth decile ASVAB, lived with both parents, mom	.165
	college graduate, dad some college, 4-6* poverty	
Individual F:	Male, White, eighth decile ASVAB, lived with both parents,	.421
	mom college graduate, father college graduate, 6-8* poverty	
Individual G:	Male, White, eighth decile ASVAB, lived with both parents,	.558
	mom and dad both college graduates, 8 or more * poverty	
Individual H:	Female, White, ninth decile ASVAB, lived with both parents,	.773
	mom college graduate, dad college graduate, 8 or more * poverty	
Individual I:	Female, Asian, tenth ASVAB, lived with both parents, mom	.860
	college graduate, dad college graduate, 8 or more times poverty	

<u>Predicted Probabilities of 24-28 Year Olds with Specified Demographic</u> <u>Traits, ASVAB Test Scores, and Family Background Traits Having a</u> <u>Bachelor's Degree and Working in a College Labor Market Job, 2008</u>



Percent of 24-28 Year Olds Who Held an Associate's or Higher Degree in Selected ASVAB Deciles, U.S., 2008



<u>4-Year Graduation Rates of the Class of 2009,</u> <u>Massachusetts Public High Schools</u>

Group	Graduation Rate
All	81.5
• Urban	67.1
• Non-Urban	89.2
Low Income	66.9
Non-Low Income	90.1
Limited English Proficient	57.5

<u>4-Year Cohort Graduation Rates for the Class of 2009 in</u> <u>Ten Large Urban School Districts in Massachusetts</u>

School District	Class of 2009 Graduation Rate
Lawrence	48.1
Chelsea	49.7
Fall River	62.5
Holyoke	48.5
Springfield	54.5
Fitchburg	69.4
Chicopee	71.1
New Bedford	55.7
Boston	61.4
Lowell	70.0
Unweighted Mean	59.1

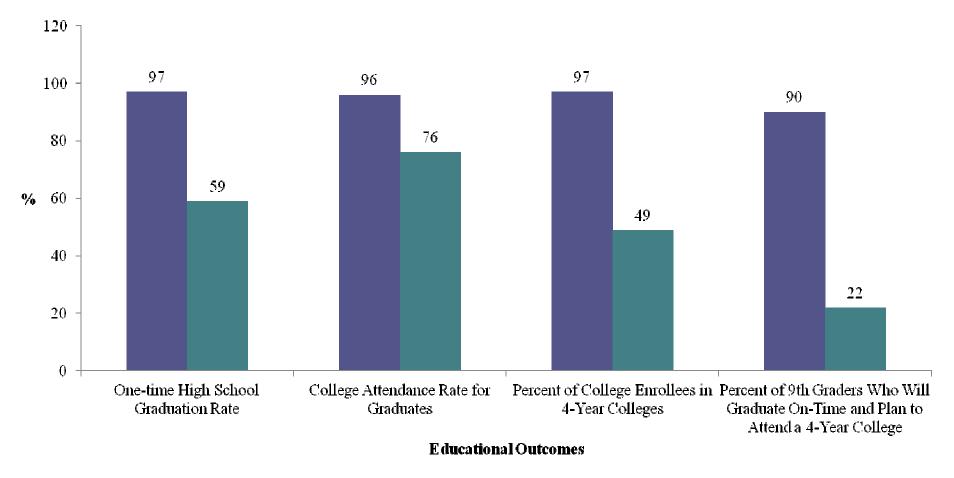
<u>4-Year Cohort Graduation Rates for the Class of 2009 in Ten</u> <u>Affluent School Districts in Massachusetts</u>

	Class of 2009
School District	Graduation
	Rate
Acton-Boxborough	96.6
Concord-Carlisle	95.8
Dover-Sherborn	100.0
Medfield	97.3
Needham	96.9
Sharon	93.6
Wayland	98.2
Wellesley	95.5
Weston	97.1
Westwood	96.7
Unweighted Mean	96.8

Estimating the Percent of Incoming High School Freshmen Who Will Graduate from High School on Time, Plan to Attend College in the Fall Following Graduation from High School, And Expect to Attend a Four Year College or University upon Graduation, Class of 2009

% of Ninth Graders	= Four Year, On	* Percent of Graduates	* Percent of College
Who Will Plan to	Time High School	Planning to Attend	Attendees Who
Attend a Four Year	Graduation Rate,	College in Fall	Plan to Attend a
College or	Class of 2009		Four Year College
University			

<u>Comparisons of Average (Mean) Educational Outcomes for</u> <u>Ten Affluent, Suburban School Districts and Ten Urban School</u> <u>Districts, Graduating Class of 2009 (in %)</u>



■Affluent ■Urban

<u>Percent of Incoming Ninth Grade High School Students, in 10 Large</u> <u>Urban School Districts Who Will Graduate from High School On-time and</u> <u>Plan to Enroll in a Four Year College or University, Class of 2009</u>

	Percent Who Will Graduate	
	On-time and Plan to Enroll in a	
School District	Four Year College or University	
Lawrence	14.1	
Chelsea	15.1	
Fall River	15.5	
Holyoke	16.6	
Springfield	18.3	
Fitchburg	19.8	
Chicopee	23.8	
New Bedford	24.1	
Boston	28.9	
Lowell	32.5	
Unweighted Mean	21.0	

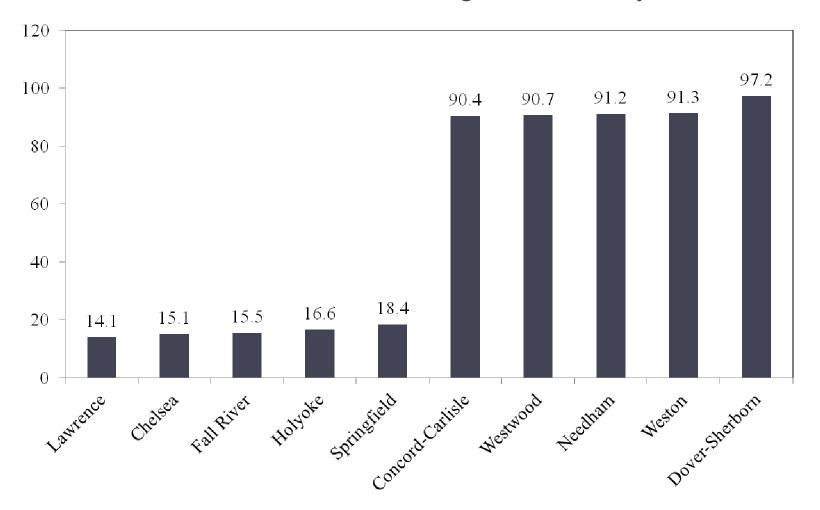
Percent of the Initial Cohort of 9th Graders in Ten Affluent School Districts Who Will Graduate from High School On-Time and Plan to Attend a Four Year College or University in the Fall Following Graduation, Class of 2009

	Percent Who Will Graduate On-time and Plan to Enroll in a	
School District	Four Year College or University	
Acton-Boxborough	89.0	
Concord-Carlisle	90.4	
Dover-Sherborn	97.2	
Medfield	89.9	
Needham	91.2	
Sharon	86.6	
Wayland	89.6	
Wellesley	89.3	
Weston	91.3	
Westwood	90.7	
Unweighted Mean	90.5	

<u>Percent of Incoming High School Freshmen Who Will</u> <u>Graduate from High School On-time and Plan to Enroll in a</u> <u>Four Year College or University Upon Graduation, Class of 2009</u>

Percent of Startin	
District	9 th Graders
Dover-Sherborn	97.2
Weston	91.3
Westwood	90.7
Concord-Carlisle	90.4
Acton-Boxborough	89.0
Springfield	18.4
Holyoke	16.6
Fall River	15.5
Chelsea	15.1
Lawrence	14.1

Percent of Incoming High School Freshmen in Five Affluent and Five Large Urban Districts Who Will Graduate from High School on Time and Plan to Enroll in a Four Year College or University, Class of 2009



<u>Percent of Initial High School Freshmen in 10 Large Urban</u> <u>School Districts Who Will Graduate from High School On-</u> <u>time and Plan to Enroll in a Four Year College or</u> <u>University, by Gender</u>

School District	(A) Males	(B) Females	(C) Females - Males
Lawrence	9.6	20.4	+10.8
Fall River	13.6	18.0	+4.4
Springfield	15.4	22.2	+6.8
Chelsea	15.6	18.8	+3.2
Fitchburg	16.2	24.4	+8.2
Holyoke	16.2	18.3	+2.5
Boston	20.8	37.1	+16.3
New Bedford	20.9	32.4	+11.5
Worcester	20.9	35.6	+14.7
Lowell	33.9	32.5	-1.4

<u>Projecting the Ultimate Bachelor Degree Attainment Rate of High</u> <u>School Graduates from Five Affluent and Five Urban School Districts</u>

	(A)	(B)	(C)
	Percent of First-Time		
	High School Freshman		BA Degrees as
	in a Four Year College	Projected Four Year	% of Initial High
School Districts	Upon Graduation	College Graduation Rate	School Freshmen
Five Affluent School Districts	91.7	80.0	73.4
Five Lower Performing Urban School Districts	16.0	52.0	8.3

Percent of BPS Class of 2008 Graduates Who Were Enrolled In College in Both the Fall of 2008 and the Fall of 2010 By Score on the MCAS Math Exam

Math Score Range	(A) Enrolled in a 4-Year College in 2008 and 2010	(B) Enrolled in a 2-Year or 4- Year College in 2008 and 2010
Needs Improvement	16.2	26.0
Proficient	45.7	51.4
Advanced	74.7	76.1
All	32.8	39.9