

Metro North STEM Regional Network & Data for STEM Plan 2.0 Goals (2-28-14)

Metro North: *newly created – website coming soon*



Arlington
Belmont
Brookline
Cambridge
Chelsea

Chestnut Hill
Everett
Malden
Medford
Melrose

Revere
Saugus
Somerville
Stoneham
Wakefield

Watertown
Winchester
Winthrop
Woburn

MA STEM Pipeline Fund

<http://www.mass.edu/forinstitutions/prek16/pipeline.asp>

For more information please contact:

Metro North Regional Network

TBD

MA STEM Pipeline Fund

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STEM Data

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Goal 1: Increase Student STEM Interest – Metro North Data

Total Interest in STEM: All STEM Majors	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All SAT-Takers	35.8%	37.5%	39.3%	41.0%	47.0% by 2016
Female SAT-Takers	32.9%	37.1%	41.4%	45.6%	
Male SAT-Takers	39.7%	38.0%	36.3%	34.6%	
Asian SAT-Takers	50.9%	48.5%	46.1%	43.8%	
Black SAT-Takers	40.3%	43.1%	45.8%	48.5%	
Hispanic SAT-Takers	40.8%	46.2%	51.7%	57.1%	
White SAT-Takers	32.4%	32.3%	32.3%	32.3%	
SAT-Takers from Low-Income Schools (75% or more)	<i>N too small to report.</i>				
SAT-Takers from High-Income Schools (25% or less)	32.1%	32.3%	32.5%	32.7%	
Interest in Architecture & Engineering	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All SAT-Takers	9.2%	8.9%	8.6%	8.3%	Reduce Gaps
Female SAT-Takers	2.7%	2.6%	2.5%	2.3%	
Male SAT-Takers	17.8%	16.3%	14.9%	13.4%	
Asian SAT-Takers	13.9%	9.3%	4.6%	0.0%	
Black SAT-Takers	5.5%	7.6%	9.8%	11.9%	
Hispanic SAT-Takers	12.7%	9.8%	7.0%	4.2%	
White SAT-Takers	8.5%	7.1%	5.7%	4.3%	
SAT-Takers from Low-Income Schools (75% or more)	<i>N too small to report.</i>				
SAT-Takers from High-Income Schools (25% or less)	7.5%	7.3%	7.1%	6.9%	
Interest in Health	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All SAT-Takers	15.6%	15.7%	15.9%	16.0%	Reduce Gaps
Female SAT-Takers	22.2%	23.3%	24.5%	25.6%	
Male SAT-Takers	6.9%	6.8%	6.7%	6.6%	
Asian SAT-Takers	21.7%	15.0%	8.3%	1.6%	
Black SAT-Takers	26.8%	18.1%	9.4%	0.7%	
Hispanic SAT-Takers	18.2%	18.2%	18.2%	18.2%	
White SAT-Takers	12.8%	11.4%	10.0%	8.6%	
SAT-Takers from Low-Income Schools (75% or more)	<i>N too small to report.</i>				
SAT-Takers from High-Income Schools (25% or less)	13.4%	12.3%	11.3%	10.3%	

Goal 2: Increase Student STEM Achievement – Metro North Data

5th Grade Math MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	54.9%	59.2%	63.4%	67.7%	72.2% by 2016
Female	54.5%	60.9%	67.2%	73.6%	
Male	55.4%	57.6%	59.7%	61.8%	
Asian	71.2%	80.3%	89.4%	98.4%	
Black	29.1%	30.7%	32.4%	34.0%	
Latino	33.0%	38.7%	44.4%	50.1%	
White	62.0%	68.0%	74.1%	80.2%	
Students from Low-Income Schools (75% or more)	37.2%	39.1%	41.0%	43.0%	
Students from High-Income Schools (25% or less)	67.6%	74.6%	81.5%	88.5%	
5th Grade Science MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	51.0%	52.7%	54.4%	56.2%	69.7% by 2016
Female	49.3%	54.3%	59.2%	64.2%	
Male	52.6%	51.5%	50.4%	49.3%	
Asian	60.6%	63.8%	67.1%	70.3%	
Black	18.2%	22.5%	26.8%	31.1%	
Latino	21.5%	28.6%	35.7%	42.8%	
White	61.5%	63.6%	65.7%	67.8%	
Students from Low-Income Schools (75% or more)	24.1%	28.8%	33.5%	38.3%	
Students from High-Income Schools (25% or less)	67.0%	67.0%	66.9%	66.8%	
8th Grade Math MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	49.7%	55.5%	61.3%	67.1%	69.1% by 2016
Female	48.8%	55.3%	61.7%	68.1%	
Male	50.8%	56.4%	61.9%	67.5%	
Asian	71.0%	82.4%	93.9%	100%	
Black	21.8%	32.2%	42.6%	53.0%	
Latino	29.2%	35.4%	41.6%	47.8%	
White	56.3%	62.9%	69.4%	76.0%	
Students from Low-Income Schools (75% or more)	29.2%	37.1%	44.9%	52.8%	
Students from High-Income Schools (25% or less)	68.5%	73.1%	77.8%	82.4%	
8th Grade Science MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	38.1%	45.1%	52.0%	59.0%	59.0% by 2016
Female	36.7%	42.8%	48.9%	55.0%	
Male	39.8%	48.0%	56.1%	64.3%	
Asian	50.9%	68.2%	85.5%	100%	
Black	11.2%	20.0%	28.8%	37.6%	
Latino	16.5%	25.2%	33.9%	42.5%	
White	46.2%	52.9%	59.6%	66.4%	
Students from Low-Income Schools (75% or more)	17.2%	22.9%	28.7%	34.4%	
Students from High-Income Schools (25% or less)	59.6%	63.8%	67.9%	72.0%	

Goal 2: Increase Student STEM Achievement – Metro North Data

10th Grade Math MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	73.2%	79.7%	86.1%	92.6%	91.7% by 2016
Female	73.2%	81.8%	90.4%	99.0%	
Male	73.2%	77.5%	81.9%	86.2%	
Asian	88.4%	90.5%	92.7%	94.8%	
Black	57.0%	67.2%	77.4%	87.6%	
Latino	52.8%	63.7%	74.6%	85.4%	
White	79.4%	84.9%	90.3%	95.8%	
Students from Low-Income Schools (75% or more)	22.2%	67.3%	100%	100%	
Students from High-Income Schools (25% or less)	87.2%	91.4%	95.7%	99.9%	
10th Grade Science MCAS: % P+	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All	58.5%	67.1%	75.7%	84.3%	76.9% by 2016
Female	58.7%	67.9%	77.1%	86.3%	
Male	58.4%	66.3%	74.3%	82.3%	
Asian	73.7%	80.6%	87.4%	94.3%	
Black	34.3%	49.6%	64.8%	80.0%	
Latino	36.2%	47.5%	58.7%	70.0%	
White	65.9%	74.1%	82.3%	90.5%	
Students from Low-Income Schools (75% or more)	16.7%	39.4%	62.1%	84.8%	
Students from High-Income Schools (25% or less)	80.5%	84.2%	87.9%	91.6%	
Reported Taking 4 Yrs Mth & 3 Yrs Sci	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
All SAT-Takers	79.5%	77.6%	75.7%	73.9%	100.0% by 2016
Female SAT-Takers	77.8%	77.3%	76.8%	76.4%	
Male SAT-Takers	81.6%	78.0%	74.3%	70.7%	
Asian SAT-Takers	83.5%	87.1%	90.6%	94.2%	
Black SAT-Takers	76.3%	77.8%	79.3%	80.8%	
Latino SAT-Takers	75.1%	69.9%	64.7%	59.4%	
White SAT-Takers	81.7%	81.9%	82.0%	82.2%	
Students from Low-Income Schools (75% or more)	<i>N too small to report.</i>				
Students from High-Income Schools (25% or less)	83.5%	85.0%	86.5%	88.0%	

Goal 3: Increase Skilled STEM Educators – Metro North Data

Measure	2008 Act.	2012 Act.	2016 Est.	2020 Est.	Goal
Groupings TBD	*	*	*	*	TBD

* Exact data, measures, groupings, Goals, etc. will be determined in Spring 2014 when analysis of new MA Department of Elementary and Secondary Education information is analyzed.