



the **Vision** Project  
**Dashboard**

**Middlesex Community College**

May 2014

Also includes data from  
Community College Funding Formula



MASSACHUSETTS  
Department of  
Higher Education

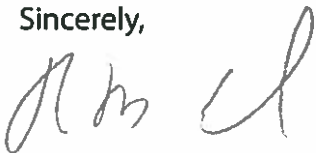
# Dear Presidents and Trustees:

In my meetings and discussions with you during the past year, many of you have requested data on your respective colleges' results in the key outcome areas of the Vision Project, ideally presented in a dashboard format, to assist you in evaluation of your colleges' progress as the campus begins the annual presidential review process. In response, this spring we developed this *Vision Project Dashboard*, which contains all data available to the DHE on your college's results in relation to the community college segment as a whole. It also includes an appendix with a simplified view of the Community College Funding Formula, again with your college's data presented alongside that of the segment.

As you look at this document, I ask you to keep a few essential points in mind. Because there is a lag in the availability of higher education data, this document does not address your college's results in FY14 and thus, if used as part of the presidential review, should be seen as context and trend only. Additionally, this document addresses system-wide goals only, and should be used to supplement information related to your campus' unique goals and mission. For all of these reasons, I encourage you to view this document as a jumping-off point for discussion and more extensive data collection at the campus level around the key outcomes of the Vision Project.






Again, I hope you will find this document to be a constructive and user-friendly addition to your information bank. Please feel free to contact me at 617-994-6901 or [commissioner.freeland@bhe.mass.edu](mailto:commissioner.freeland@bhe.mass.edu) if you have any questions or feedback. Thank you as always for your contributions to Massachusetts public higher education.

Sincerely,



Richard M. Freeland  
Commissioner  
Massachusetts Department of Higher Education

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## See Also

You may download a detailed spreadsheet containing the data used to create this dashboard report at:

[www.mass.edu/vpd/middlesex78.xls](http://www.mass.edu/vpd/middlesex78.xls)

# Middlesex Community College

## Vision Project Dashboard

**Trend Data** = Improving Performance  
 = Flat Performance  
 = Declining Performance

## 1 College Participation

### Enrollment Rates

				Five-Year Trend*	One-Year Change*
Annual Undergraduate Enrollment FY13	Middlesex	13,254 Headcount	6,040 FTE		
	All Comm. Col's	139,483 Headcount	65,352 FTE		

## 2 College Completion

### Progress Rates

		0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%	Five-Year Trend	One-Year Change
Two-Year Developmental Math Success Rate 2013 Enrolled 2011, completed dev'l and credit-bearing course by 2013	Middlesex			
	All Comm. Col's			
Two-Year Developmental English Success Rate 2013 Enrolled 2011, completed dev'l and credit-bearing course by 2013	Middlesex			
	All Comm. Col's			
Fall-to-Fall Retention Rate of First-Time Freshmen 2013 Entered fall 2012, still enrolled fall 2013	Middlesex			
	All Comm. Col's			

### Success Rate

		0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%	Four-Year Trend	One-Year Change
Six-Year "Achieving the Dream" Success Rate 2012 Entered fall 2006, success by 2012	Middlesex			
	All Comm. Col's			

\* Trend in Annual Enrollment is shown for Headcount only. See data appendices for trend on FTE enrollment.



# Student Learning

## ■ Pass Rates on National Licensure Exams

			2009	2010	2011	2012	2013
Pass Rate on Licensed Practical Nurse Licensure Exam	Middlesex	% Passing	n/a	n/a	n/a	n/a	n/a
		# Test Takers	n/a	n/a	n/a	n/a	n/a
	All Comm. Colleges	% Passing	89%	92%	90%	86%	91%
		# Test Takers	261	306	298	262	284

			2009	2010	2011	2012	2013
Pass Rate on Registered Nurse Licensure Exam	Middlesex	% Passing	81%	76%	83%	92%	88%
		# Test Takers	80	80	72	73	73
	All Comm. Colleges	% Passing	86%	88%	90%	89%	83%
		# Test Takers	1,105	1,071	1,069	1,071	1,022

			2008	2009	2010	2011
Pass Rate on Radiography Licensure Exam	Middlesex	% Passing	100%	83%	88%	88%
		# Test Takers	18	18	16	16
	All Comm. Colleges	% Passing	93%	90%	89%	87%
		# Test Takers	231	224	190	174



# Workforce Alignment

## ■ Degrees and Certificates Conferred Overall

				Five-Year Trend	One-Year Change
Degrees and Certificates Conferred in All Fields FY13	Middlesex		1,296	↑	↑
	All Comm. Col's		13,701	↑	↑

## ■ Degrees and Certificates Conferred in High-Need Fields

			FY09	FY10	FY11	FY12	FY13	FY09-FY13 % Growth
STEM Degrees Conferred	Middlesex	As % of All Degrees	13%	11%	12%	14%	12%	n/a
		#	136	127	133	177	160	18%
	All Comm. Colleges	As % of All Degrees	10%	10%	11%	11%	12%	n/a
		#	1,145	1,240	1,384	1,432	1,625	42%

			FY09	FY10	FY11	FY12	FY13	FY09-FY13 % Growth
Health Care Degrees Conferred	Middlesex	As % of All Degrees	21%	21%	26%	22%	19%	n/a
		#	210	238	280	263	251	20%
	All Comm. Colleges	As % of All Degrees	28%	28%	28%	26%	25%	n/a
		#	3,141	3,319	3,621	3,482	3,481	11%



# Closing Achievement Gaps

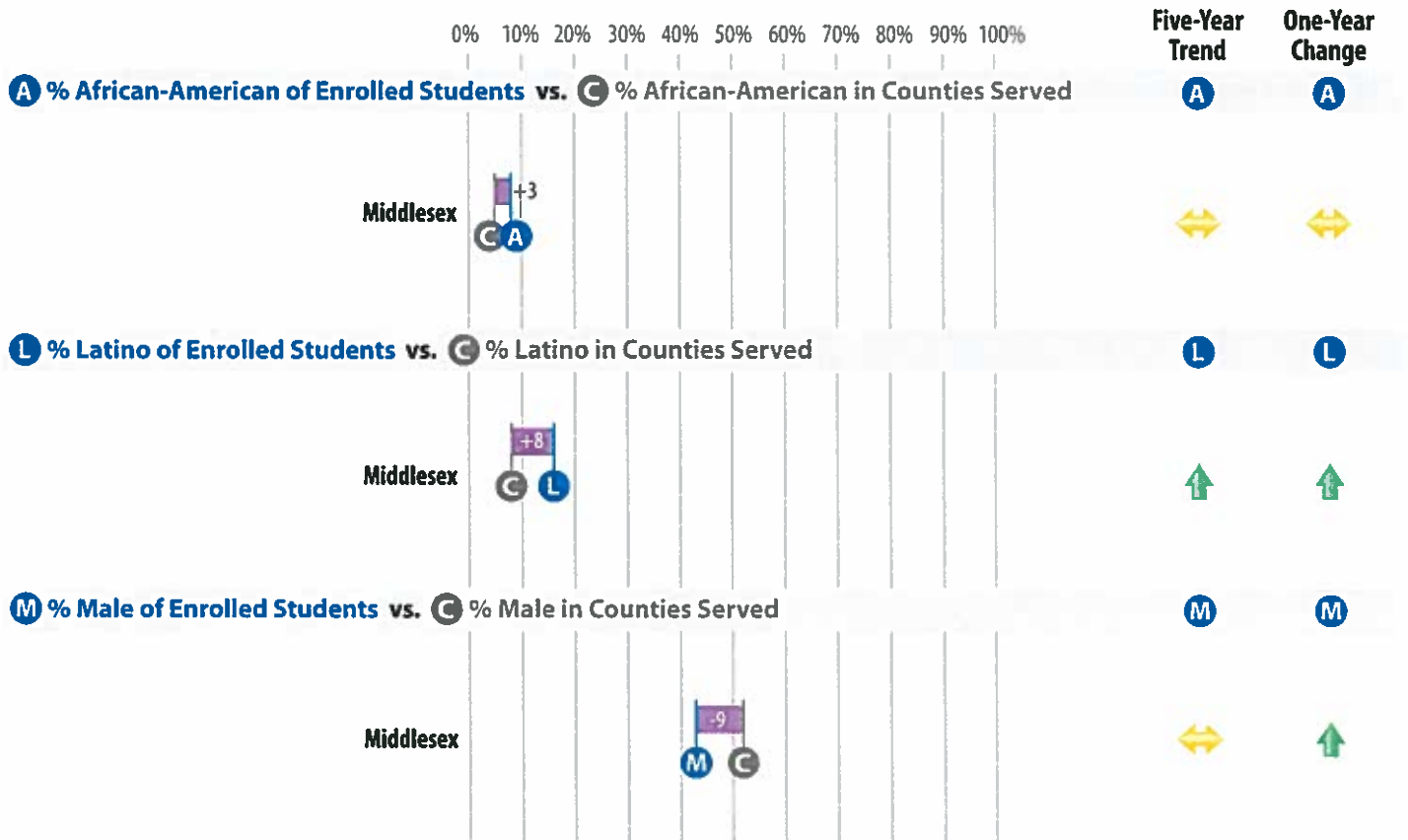
**Trend Data** = Improving Performance  
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**Comparison Group Icons**

- A** = African-American    **C** = Counties Served
- L** = Latino                    **W** = White
- M** = Male                      **F** = Female
- P** = Pell Recipient        **NP** = Non-Pell Recipient

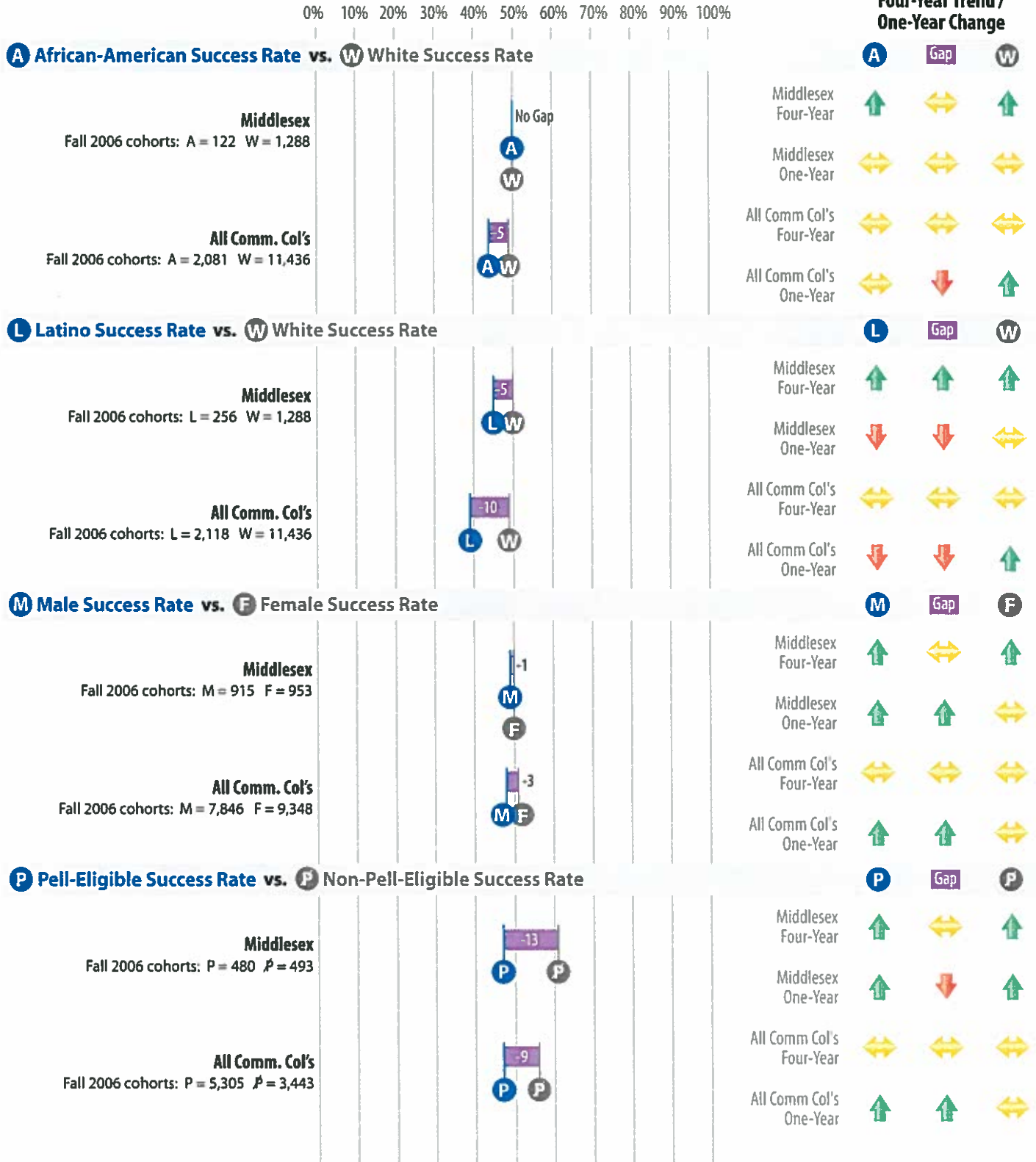
## College Participation Gaps

### ■ College Participation and Population Rates FY13



# College Completion Gaps

## ■ Six-Year "Achieving the Dream" Success Rates 2012



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## Workforce Alignment Gaps

### ■ Degrees and Certificates Conferred in High-Need Fields FY09–FY13

			FY09	FY10	FY11	FY12	FY13	FY09–FY13
			#	#	#	#	#	% Growth
<b>STEM Degrees Conferred</b>	<b>Middlesex</b>	To African-American Students <b>A</b>	7	5	11	14	8	—
		To Latino Students <b>L</b>	17	18	17	14	13	—
		To White Students <b>W</b>	88	72	73	106	93	6%
	<b>All Comm. Col's</b>	To African-American Students <b>A</b>	99	103	136	114	143	44%
		To Latino Students <b>L</b>	81	95	113	156	153	89%
		To White Students <b>W</b>	810	864	940	952	1,102	36%
	<b>Middlesex</b>	To Female Students <b>F</b>	41	23	45	53	41	0%
		To Male Students <b>M</b>	95	104	88	124	119	25%
	<b>All Comm. Col's</b>	To Female Students <b>F</b>	277	310	365	327	416	50%
To Male Students <b>M</b>		868	930	1,019	1,105	1,209	39%	

<b>Health Care Degrees Conferred</b> <i>Note: The vast majority of Health Care degrees conferred by community colleges are in nursing, a sector that has long been dominated by females. The gender disparity is not considered a matter of concern.</i>	<b>Middlesex</b>	To African-American Students <b>A</b>	17	22	22	27	19	12%
		To Latino Students <b>L</b>	10	15	27	22	33	230%
		To White Students <b>W</b>	165	183	201	177	173	5%
	<b>All Comm. Col's</b>	To African-American Students <b>A</b>	370	375	449	395	388	5%
		To Latino Students <b>L</b>	190	235	278	345	383	102%
		To White Students <b>W</b>	2,337	2,439	2,608	2,478	2,450	5%
	<b>Middlesex</b>	To Female Students <b>F</b>	191	202	251	221	213	12%
		To Male Students <b>M</b>	19	36	29	42	38	100%
	<b>All Comm. Col's</b>	To Female Students <b>F</b>	2,600	2,796	3,022	2,885	2,932	13%
To Male Students <b>M</b>		540	521	598	596	545	1%	



# Vision Project Dashboard Notes

**Throughout—All Sources** are Massachusetts Department of Higher Education (DHE) unless otherwise noted.

**Throughout—All Trend Assessments** follow these rules unless otherwise noted:

- **Five-Year Trend:** Minimum 4 percentage point (on rates) or 4 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.
- **One-Year Change:** Minimum 1 percentage point (on rates) or 1 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.
- The trend assessments are provided to generally summarize the direction on the metric. “Improving Performance,” “Flat Performance,” and “Worsening Performance” simply report whether a metric was higher, lower, or equal to its prior level. To fully understand the significance of these patterns, it is important to take into account specific institutional circumstances not evident in the numbers themselves.

**Throughout—Tables** are substituted for charts when small populations are being analyzed. Typically, rates based on large numbers provide stable estimates of the true, underlying rate. Conversely, rates based on small numbers may fluctuate dramatically from year to year, even when there is no meaningful difference. Charts can obscure such situations.

## Page 4—Six-Year “Achieving the Dream” Success Rate

- **Cohort/Definition:** This metric recognizes the complex mission of community colleges by including both full- and part-time students (first-time, degree-seeking) and capturing students who, within six years of initial enrollment, earn an associate’s degree or certificate, transfer to a four-year institution, or are still enrolled with at least 30 credits earned.
- **Source:** DHE, NSC, Jobs for the Future
- **Trend Assessment Rule:**
  - **Four-Year Trend:** Minimum 3 percentage point (on rates) or 3 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.
  - **One-Year Change:** Minimum 1 percentage point (on rates) or 1 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.

## Page 5—Pass Rate on Licensed Practical Nurse Licensure Exam

- **Source:** Massachusetts Board of Registration in Nursing, National Council of State Boards of Nursing

## Page 5—Pass Rate on Registered Licensure Exam

- **Source:** Massachusetts Board of Registration in Nursing, National Council of State Boards of Nursing

## Page 5—Pass Rate on Radiography Licensure Exam

- **Source:** American Registry of Radiologic Technologists

## Page 5—STEM Degrees and Certificates Conferred

- **Definition:** Life Sciences, Physical Sciences, Technology, Computer Science, Mathematics and Engineering

## Page 5—Health Care Degrees and Certificates Conferred

- **Definition:** Includes all health professions and related programs

## Page 6—% of Enrolled Students vs. % in Counties Served

- **“Counties Served” Definition:** Counties with adults ages 20–39, with a high school diploma, enrolled in the college are included in the comparison on a weighted basis.
- **“Counties Served” Source:** U.S. Census Bureau, 2010 Census. Trend not assessed because Census data points are 10 years apart.
- **Trend Assessment Rule:**
  - **Five-Year Trend:** Minimum 2 percentage point (on rates) or 2 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.
  - **One-Year Change:** Minimum 0.5 percentage point (on rates) or 0.5 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.



























## Page 7—Gaps in Six-Year “Achieving the Dream” Success Rate

- **Trend Assessment Rule:**
  - **Four-Year Trend:** Minimum 3 percentage point (on rates) or 3 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.
  - **One-Year Change:** Minimum 1 percentage point (on rates) or 1 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.

# Community College Funding Formula Metrics

Trend Data  = Improving Performance  
 = Flat Performance  
 = Declining Performance

## ■ Enrollment Metrics (driving 50% of funding allocations; all data is FY13 unless otherwise noted)

	Middlesex					All Comm. Col's
	Unweighted Enrollment	Weight Multiplier*	Weighted Enrollment	Enrollment as % of All Comm. Col's Enrollment	FY11-FY13 Trend	FY11-FY13 Trend
Liberal Arts	33,048	x 1.0 =	33,048	8.43%		
Physical, Bio, Social Science	50,483	x 1.5 =	75,725	11.62%		
Math and Computer Science	21,038	x 2.0 =	42,076	11.89%		
Visual & Performing Arts	6,975	x 1.5 =	10,463	11.92%		
Pre-Education	1,998	x 1.5 =	2,997	8.80%		
Engineering / Architecture	0	x 2.0 =	0	0.00%	n/a	
Trades	0	x 2.5 =	0	0.00%	n/a	
Technologies	1,557	x 2.0 =	3,114	5.83%		
Health/Allied Health	8,895	x 2.0 =	17,790	6.67%		
Business	11,836	x 1.0 =	11,836	10.27%		
Services	6,798	x 1.5 =	10,197	6.22%		
Developmental Education	15,807	x 1.5 =	23,711	8.85%		
Non-Credit Workforce Development FY11-FY13 avg.	21,649	x 1.0 =	21,649	28.81%		
<b>Total Enrollment</b>	<b>180,084</b>	<b>—</b>	<b>252,605</b>	<b>Unw'ted: 10.36% Weighted: 10.12%</b>		

\* Weight multipliers account for the cost of instruction, *i.e.*, programs that are costlier to operate receive higher multipliers. Multipliers determined by National Center for Higher Education Management Systems (NCHEMS) in consultation with the Massachusetts Community College Funding Formula Task Force.

■ **Performance Metrics** (driving 50% of funding allocations; all data is FY13 unless otherwise noted)

Performance Area	Weight in Perf. Metrics**	Middlesex			All Comm. Col's
		Rate	Ranking Tier Compared with All Comm. Col's	FY11-FY13 Trend	FY11-FY13 Trend
"Achieving the Dream" Success Rate FY11-FY13 avg.	45%	48.7%	Top Third	↔	↔
Certificates & Degrees Conferred as % of All FTEs	5%	21.5%	Middle Third	↑	↑
<b>Performance on Rate-Based Metrics</b>	<b>50%</b>	—	—	—	—

Performance Area	Weight in Perf. Metrics**	Middlesex			All Comm. Col's
		Count	Ranking Tier Compared with All Comm. Col's	FY11-FY13 Trend	FY11-FY13 Trend
<b>Certificates Conferred</b> (weight multiplier, if applicable)					
Total Certificates Conferred	10%	167	Middle Third	↓	↓
Cert's in Priority Fields (x 1.3)		133	Top Third	↓	↔
Cert's to Pell Grant Recipients (x 2.0)		77	Middle Third	↔	↑
<b>Associate's Degrees Conferred</b> (weight multiplier, if applicable)					
Total Degrees Conferred	15%	1,129	Top Third	↑	↑
Deg's in Priority Fields (x 1.3)		278	Middle Third	↑	↑
Deg's to Pell Grant Recipients (x 2.0)		458	Middle Third	↑	↑
# of Students Transferring After Earning ≥ 24 Credits	5%	481	Top Third	↔	↑
# of Students Reaching 30 Credits	5%	1,880	Top Third	↔	↔
# of Students Completing ≥ One College-Level Math Course	8%	3,192	Top Third	↓	↔
# of Students Completing ≥ One College-Level English Course	7%	4,415	Top Third	↑	↑
<b>Performance on Count-Based Metrics</b>	<b>50%</b>	—	—	—	—

\*\* This is a simplified view of the funding formula, presenting performance data alongside indications of the weight these data carry in the formula.

# Funding Formula Notes

**Formula Data Summary:** This dashboard provides a summary of the metrics that support the funding formula. It is not a comprehensive description of how the formula works. The DHE will provide additional documentation on the workings of the formula upon request.

**Throughout—All Sources** are Massachusetts Department of Higher Education (DHE) unless otherwise noted.

**Throughout—All Trend Assessments** follow these rules unless otherwise noted:

- **FY13 to FY11 Comparison:** Minimum 3 percentage point (on rates) or 3 percent (on counts) increase or decrease is Improving or Worsening; otherwise trend is Flat.

## Page 10—Enrollment Metrics

- **Enrollment in Disciplines (Liberal Arts; Physical, Bio, Social Science; etc.):** This is a count of all non-developmental credits completed in the most recent fiscal year by field of study as identified by the Classification of Instructional Program (CIP) code. (<http://nces.ed.gov/ipeds/cipcode/>)
- **Enrollment in Developmental Education:** This is a count of all developmental (remedial) credits completed in the most recent fiscal year.
- **Enrollment in Non-Credit Workforce Development:** This is a count of enrollments in non-credit workforce development courses.
- **Weighted Enrollment:** This is completed credits/enrollments in the field, multiplied by the weight multipliers. For example, 200 credits completed in math and computer science is equal to 400 weighted credits. The weights are based on the relative cost of instruction in the specified field.
- **Total Enrollment:** This is the sum of credits/enrollments in all fields and is provided for both non-weighted and weighted credits. The bottom row of column 4 shows the college's weighted and non-weighted total enrollment as a share of the segment's weighted and non-weighted total enrollment. The share of the segment's weighted credits is the heart of the enrollment side of the funding formula.

## Page 11—Performance Metrics

- **Ranking Tier:** This is a simple description of where a college falls on the distribution of a metric across the segment. For example, a small community college will typically fall in the bottom third of the metrics based on counts, for example associate degrees conferred or number of students completing a college-level math class. The tiers provide only a general indication of how a college fares against the other colleges on a particular metric.
- **"Achieving the Dream" Success Rate (three-year average):** See notes on page 9.
- **Certificates & Degrees as % of All FTEs:** This is a ratio of degrees and certificates awarded in the most recent fiscal year to full-time equivalent enrollment in the most recent fiscal year.
- **Total Certificates and Total Associate Degrees:** This is a count of associate degrees and certificates awarded in the most recent fiscal year. The Pell Grant Recipient sub-metric indicates the award was earned by a student who received a Pell Grant. The Priority Field sub-metric indicates whether the award was in a STEM or health care field. Awards to Pell Grant Recipients and Awards in Priority Fields receive additional weight in the funding formula.
- **# of Students Transferring After Earning  $\geq 24$  Credits:** This is a count of new, degree-seeking undergraduate transfer students enrolled in a Massachusetts public four-year institution in the most recent fall term who previously attended a Massachusetts community college and who earned 24 credits at the community college prior to enrollment at the four-year institution.
- **# of Students Reaching 30 Credits:** A count of students enrolled in the most recent fiscal year who had earned fewer than 30 credits prior to the start of the fiscal year, who met or passed the 30-credit threshold in the fiscal year.
- **# of Students Completing  $\geq$  One College-Level Math/English Course:** A count of students completing a college-level math course in the most recent fiscal year, and a count of students completing a college-level English course in the most recent fiscal year.