Michigan Education Trust - Plan D

Actuarial Soundness Valuation Report as of September 30, 2017

December 4, 2017

Ms. Robin Lott
Executive Director
Michigan Education Trust
430 W. Allegan Street
P.O. Box 30198
Lansing, MI 48933

Re: Michigan Education Trust – Plan D Actuarial Valuation as of September 30, 2017

Dear Ms. Lott:

Gabriel, Roeder, Smith & Company ("GRS") has performed an actuarial soundness valuation of the Michigan Education Trust – Plan D ("MET") as of September 30, 2017. Although the term "actuarial soundness" is not specifically defined, the purpose of this actuarial valuation is to evaluate the financial status of the program as of September 30, 2017.

This report presents the principal results of the actuarial soundness valuation of MET including the following:

- A comparison of the actuarial present value of the obligations for prepaid tuition contracts purchased through September 30, 2017, with the value of the assets associated with the program as of that same date;
- An analysis of the factors which caused the deficit/surplus to change since the prior actuarial valuation; and
- A summary of the actuarial assumptions and methods utilized in the actuarial calculations.

This report was prepared at the request of the MET Board and is intended for use by the MET Board and those designated or approved by the MET Board. This report may be provided to parties other than the MET Board only in its entirety and only with the permission of the MET Board. GRS is not responsible for unauthorized use of this report. This report should not be relied on for any purpose other than the purpose described above.

The actuarial soundness valuation results set forth in this report are based upon data and information, furnished by MET, concerning program benefits, financial transactions and beneficiaries of MET. We reviewed this information for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by MET. Further, the data and information provided is through September 30, 2017, and does not reflect subsequent market changes. There were no program changes subsequent to September 30, 2017.

The actuarial soundness valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The actuarial assumptions used in this analysis were based on an experience review for the period from October 1, 2010 to September 30, 2013, and were adopted for use commencing with the September 30, 2014 valuation. Effective with the previous valuation, if the contract beneficiary has matriculated, but the contract beneficiary has not used credits within the past year, the matriculation rates, refund rates and benefit utilization rates that apply to members who have not yet matriculated are assumed.

Given the current asset allocation and liquidity requirements, the net investment rate of return assumption of 6.00 percent appears to be reasonable. However, other assumptions could also be reasonable, and could result in materially different results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. We have performed an analysis of the sensitivity of certain changes in future assumptions.

We believe that the actuarial methods used in this report are reasonable and appropriate for the purpose for which they have been used. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

This report is not a recommendation to anyone to participate in MET. GRS makes no representations or warranties to any person participating in or considering participation in MET. Current and future participants should be aware that the promises of MET will only be met if the assets of MET are sufficient to pay its obligations.

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Michigan Education Trust – Plan D as of September 30, 2017. All calculations have been made in conformity with generally accepted actuarial principles and practices commonly applicable to similar types of arrangements.

Paul T. Wood is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.

The signing individuals are independent of MET.

Respectfully submitted,

Paul T Wood

Paul T. Wood, ASA, MAAA, FCA
Consultant

Kenneth G. Alberts

Kenneth G. Alberts
Consultant

Contents

SECTION A

EXECUTIVE SUMMARY

Summary of Results

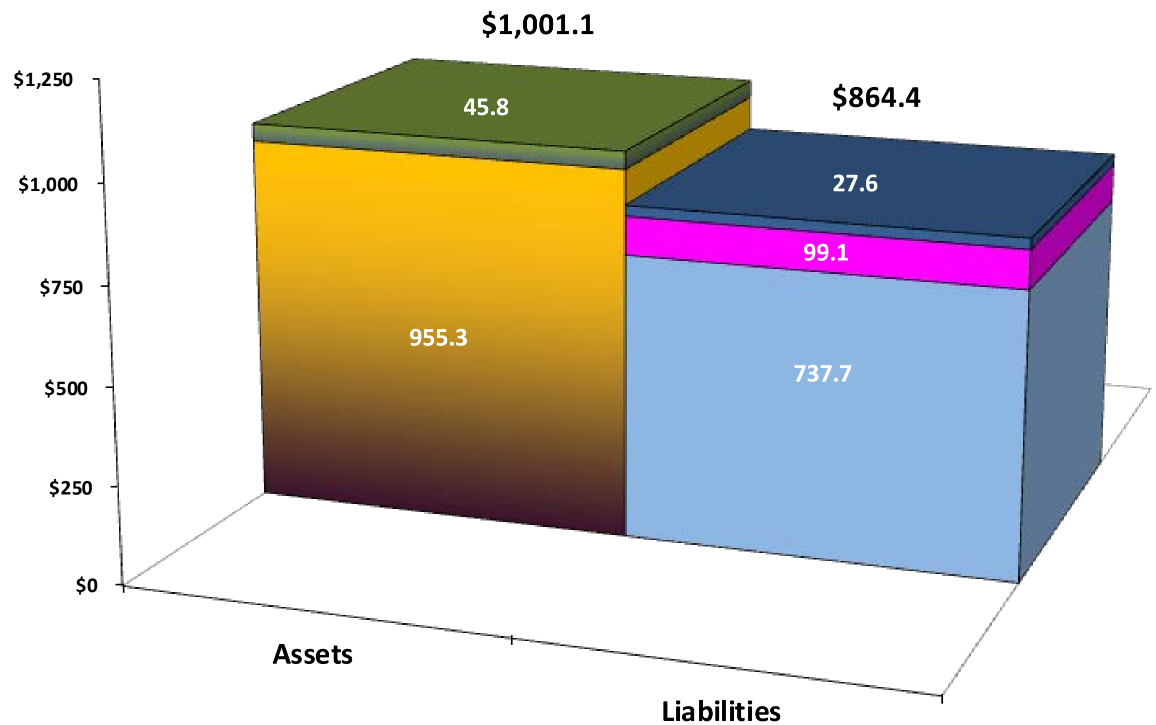
Principal Valuation Results

Valuation Date:	September 30, 2017
Contract Summary:	
Counts	
Not yet in Payment Status	27,586
In Payment Status or Termination in Progress*	9,466
Total	37,052
Average Years until Enrollment if not yet in Payment Status or Not Using Contract	6.4
Assets	
Valuation Assets	$1,001,048,960
Approximate Return on Valuation Assets for Year Ended September 30, 2017	10.84%
Actuarial Liabilities (Present Value of Future Tuition Payments, Fees, and Administrative Expenses)	$864,444,345
Surplus/(Deficit)	$136,604,615
Funded Ratio	115.8%

** Counts include 3,829 contracts that are classified as "In Payment Status" but have not used any credits within the past year.*

Summary of Assets and Liabilities as of September 30, 2017

Michigan Education Trust - Plan D
($ in Millions)



ASSETS	LIABILITIES
PV Future Contributions	PV Administrative Fees
Net Market Value of Assets	PV Benefits (in Payment Status or Termination in Progress)
	PV Benefits (Not in Payment Status or Not Using Contract)

Funded Status as of September 30, 2017

	September 30, 2017
Actuarial Present Value of Future Tuition Payments, Fees and Expenses	$864,444,345
Market Value of Assets (Including the Present Value of Installment Contract Receivables)	$1,001,048,960
Surplus/(Deficit) as of September 30, 2017	$136,604,615

Gain/Loss Summary

	Surplus/(Deficit)
(1.) Value at September 30, 2016	$ 58,889,615
(2.) Interest on (1.) at Assumed Rate from Previous Valuation	$ 3,533,376
(3.) New Enrollment Group	$ 5,229,170
(4.) Projected Value at September 30, 2017 [(1.) + (2.) + (3.)]	$ 67,652,161
(5.) Change Due to:	
a. Asset Experience	$ 47,927,316
b. Tuition/Fee Inflation	$ 23,195,948
c. Assumption Changes	$ -
d. Other Experience	(2,170,810)
(6.) Total [(5.)a. + (5.)b. + (5.)c. + (5.)d.]	$ 68,952,454
(7.) Actual Value at September 30, 2017 [(4.) + (6.)]	$ 136,604,615

Discussion

Actuarial Valuation

Gabriel, Roeder, Smith & Company ("GRS") has performed an actuarial soundness valuation of the Michigan Education Trust – Plan D ("MET") as of September 30, 2017.

The primary purposes of the actuarial soundness valuation are to:

- Determine the actuarial present value of the obligations for prepaid tuition contracts purchased through September 30, 2017, and compare such liabilities with the value of the assets associated with the program as of that same date; and

- Analyze the factors which caused the deficit/surplus to change since the prior actuarial valuation.

This report summarizes the results under the current assumptions and also presents the impact of variances in the rate of tuition and fee increases as well as the rate of investment return on assets.

In addition, the report provides summaries of the beneficiary data, financial data, plan provisions and actuarial assumptions and methods.

Background

MET is a public body created by Michigan's Legislature (Public Act 316 of 1986) and housed within the Michigan Department of Treasury. MET must operate and finance its activities only through its assets. To protect those assets from other uses by the State, only MET, and not the State, controls its assets.

MET allows beneficiaries to mitigate some future tuition and fee increase risks. The beneficiaries are also eligible for certain federal and state tax advantages.

Three different plan options are available. The **Full Benefits Plan** provides full in-state tuition and mandatory fees at any Michigan public university, or tuition and mandatory fees at Michigan public community colleges (in-district or out-of-district) up to the number of credit hours required for a standard four-year baccalaureate degree (usually 120 semester credit hours). Individuals may purchase the Full Benefits Plan in semester increments up to 10 semesters (five years) of tuition.

The **Limited Benefits Plan** provides in-state tuition and mandatory fees at Michigan public universities, or tuition and mandatory fees at Michigan public community colleges (in-district or out-of-district) up to 105 percent of the weighted average tuition of all Michigan public four-year universities. If a student decides to attend a Michigan public college where tuition costs are higher than average, the number of credits allowed will be prorated based on the number of credit hours MET can purchase with 105 percent of the weighted average cost of Michigan public four-year universities. This plan might not cover the full cost of Michigan's most expensive institutions.

Students who attend a school where tuition is not fully covered under the Limited Benefits Plan will receive the number of credit hours MET can purchase at the time of college enrollment.

For example, in the 2017/2018 school year:

- If a student with a four-year Limited Benefits Plan contract attends the University of Michigan-Ann Arbor, MET will pay for 107 credit hours.
- If a student attends Michigan Technological University, MET will pay for 108 credit hours.
- If a student attends Michigan State University, MET will pay for 110 credit hours.

Individuals may purchase the Limited Benefits Plan in semester increments up to 10 semesters (five years).

The **Community College Plan** provides in-district tuition and mandatory fees at Michigan public community colleges. Some areas of the State are not within a community college district. Students who attend a community college out of their district will be responsible for paying the difference between the out-of-district and in-district tuition cost. Individuals may purchase the Community College Plan in semester increments up to ten semesters (five years) under this contract.

For contracts sold during and after the 2012/2013 enrollment period, the mandatory fees paid cannot exceed the 2012 rate charged by the Public Educational Institutions.

MET Plan D is open to children from newborn through adult. The Beneficiary must be a resident of the State of Michigan and must have a valid Social Security Number.

Actuarial Assumptions

The actuarial soundness valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The actuarial assumptions used in this analysis were based on an experience review for the period from October 1, 2010 to September 30, 2013, and were adopted for use commencing with the September 30, 2014, actuarial soundness valuation. The major actuarial assumptions used in this analysis were provided by and are the responsibility of MET.

In the previous actuarial soundness valuation as of September 30, 2016, a discount rate assumption of 6.00% percent and a tuition increase assumption of 7.1 percent for the first two years, 5.75 percent for the third year, 5.0% percent for the fourth year and 4.5 percent, thereafter, were used. Each year, the discount rate and tuition increase assumption are reviewed for reasonableness. Staff at the Department of Treasury then recommends updated assumptions to the MET Board. The recommended assumptions for the actuarial soundness valuation as of September 30, 2017, are as follows:

- Discount Rate: 6.00% percent.
- Tuition Increase Assumption: 7.1 percent for the first year, 5.75 percent for the second year, 5.0 percent for the third year and 4.5 percent, thereafter.

In summary, the discount rate stayed at 6.00% percent and the tuition increase assumption had no changes from the prior assumptions for respective future calendar years.

The MET Board approved these assumptions for use in the September 30, 2017 actuarial soundness valuation at its August 3, 2017, meeting.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. We have performed an analysis of the sensitivity of certain changes in future assumptions.

Financial Status of Program

As of September 30, 2017, the present value of all future tuition obligations under contracts outstanding (and including estimated future administrative expenses) at that date is $864.4 million. Fund assets as of September 30, 2017, including the market value of program assets and the present value of installment contract receivables, are $1.00 billion.

The difference between the market value of assets of $1.00 billion and program obligations of $864.4 million represents a program surplus of $136.6 million. The comparable program surplus as of the last actuarial soundness valuation as of September 30, 2016 was $58.9 million.

Under the approved assumptions, the program is 115.8 percent funded and is expected to pay all contracted benefits. It should be noted that new contracts are being offered in 2018 and are intended to be offered in future years.

Gain/Loss Analysis

As previously described, the program surplus increased from $58.9 million as of September 30, 2016 to $136.6 million as of September 30, 2017. Favorable investment returns and lower than expected tuition increases contributed to the increase in surplus.

Benefit Provisions

We understand there were no changes in program provisions since the last actuarial valuation as of September 30, 2016.

Assets

MET assets are held in trust. MET provided the asset information used in the September 30, 2017, actuarial soundness valuation.

This report contains several exhibits summarizing the plan's assets, including a summary of the market value of assets broken down by asset category and a reconciliation of the assets from the last valuation date to the current valuation date.

SECTION B

ACTUARIAL SOUNDNESS VALUATION RESULTS

Exhibit I
Principal Valuation Results as of September 30,

		2017	2016
1	Number of Contracts		
	a. Not yet in Payment Status:	27,586	27,992
	b. In Payment Status or Termination in Progress*	9,466	9,266
	c. Total	37,052	37,258
	Average Years until Enrollment if Not Yet In Payment Status	6.4	6.5
2	Assets		
	a. Market Value of Assets (in Trust)	$ 955,275,082	$ 882,341,575
	b. PV Future Contract Contributions	$ 45,773,878	$ 52,069,111
	c. Total Market Value of Assets (MVA)	$ 1,001,048,960	$ 934,410,686
3	Actuarial Results		
	Liabilities - Tuition and Fees		
	a. Not yet in Payment Status or Not Using Contract	$ 737,737,640	$ 751,956,383
	b. In Payment Status or Termination in Progress	$ 99,152,999	$ 100,002,867
	c. Total	$ 836,890,639	$ 851,959,250
	Liabilities - Present Value of Future Administrative Expenses	$ 27,553,706	$ 23,561,821
	Liabilities Total	$ 864,444,345	$ 875,521,071
	Surplus/(Deficit)	$ 136,604,615	$ 58,889,615
	Funded Ratio	115.8%	106.7%

**Counts for 2017 include 3,829 contracts that are classified as "In Payment Status" but have not used any credits within the past year.*

Exhibit I
Principal Valuation Results as of September 30, (Concluded)

	2017	2016
1. Assets		
a. Market Value of Assets (in Trust)	$ 955,275,082	$ 882,341,575
b. PV Future Contract Contributions (Short Term)[a]	$ 10,253,967	$ 11,634,991
c. PV Future Contract Contributions (Long Term)[b]	$ 35,519,911	$ 40,434,120
d. Total Market Value of Assets (MVA)	$ 1,001,048,960	$ 934,410,686
2. Actuarial Present Value of Tuition, Fees and Admin Expenses		
a. Short Term[a]	$ 72,920,174	$ 70,828,451
b. Long Term[b]	$ 791,524,171	$ 804,692,620
c. Total	$ 864,444,345	$ 875,521,071
Surplus/(Deficit)	$ 136,604,615	$ 58,889,615
Funded Ratio	115.8%	106.7%

[a] *Present value of amounts in following year.*

[b] *Present value of amounts after first year.*

Exhibit II
Gain/Loss Summary

		Present Value of Benefits		PV Future Member Contributions		Market Value of Assets		Surplus/(Deficit)
(1.) Values at September 30, 2016	$	875,521,071	$	52,069,111	$	882,341,575	$	58,889,615
(2.) Contributions/Miscellaneous Income (Not including New Enrollment Group)	$	-	$	(8,129,322)	$	8,129,322	$	-
(3.) Benefit Payments and Administrative Expenses	$	(75,149,921)	$	-	$	(75,149,921)	$	-
(4.) Interest on (1.), (2.), and (3.) at Assumed Rate from Previous Valuation	$	50,309,606	$	2,883,819	$	50,959,163	$	3,533,376
(5.) New Enrollment Group	$	34,788,727	$	5,908,823	$	34,109,074	$	5,229,170
(6.) Projected Values at September 30, 2017 [(1.) + (2.) + (3.) + (4.) + (5.)]	$	885,469,483	$	52,732,431	$	900,389,213	$	67,652,161
(7.) Change Due to:								
a. Asset Experience	$	-	$	(6,958,553)	$	54,885,869	$	47,927,316
b. Tuition/Fee Inflation		(23,195,948)		-		-		23,195,948
c. Assumption Changes		-		-		-		-
d. Other Experience		2,170,810		-		-		(2,170,810)
(8.) Total [(7.)a. + (7.)b. + (7.)c. + (7.)d.]	$	(21,025,138)	$	(6,958,553)	$	54,885,869	$	68,952,454
(9.) Actual Values at September 30, 2017 [(6.) + (8.)]	$	864,444,345	$	45,773,878	$	955,275,082	$	136,604,615

Exhibit III
Sensitivity Testing Results

The actuarial assumptions regarding future increases in tuition costs and fees and the future rate of investment return were prescribed to us by MET. In our opinion, the actuarial assumptions prescribed to us are reasonable for the purpose of the measurement. However, no one knows with certainty what the future holds with respect to economic and other contingencies. For example, while it is assumed that the assets of the fund will earn 6.00 percent each year throughout the life of the contracts, actual returns are expected to vary from year to year. Therefore, we have projected MET results under alternative assumptions for future investment income and tuition increases, as follows:

1. Current actuarial soundness valuation assumptions approved by the MET Board (6.00 percent investment return, 7.1/5.75/5.0/4.5 percent tuition increases).
2. Tuition increases are 100 basis points higher/lower in each future year than assumed in this year's actuarial soundness valuation.
3. The investment return is 100 basis points higher/lower in each future year than assumed in this year's actuarial soundness valuation.
4. Tuition increases are 100 basis points higher and the investment return is 100 basis points lower in each future year than assumed in this year's actuarial soundness valuation.
5. Tuition increases are 100 basis points lower and the investment return is 100 basis points higher in each future year than assumed in this year's actuarial soundness valuation.

The impact of each of these scenarios on the principal actuarial soundness valuation results is presented on the following page.

Exhibit III
Sensitivity Testing Results (Concluded)
$ in Millions

	Current Valuation Assumptions	Assumed Tuition Increases +100 Basis Points	Assumed Tuition Increases -100 Basis Points	Assumed Investment Return +100 Basis Points	Assumed Investment Return -100 Basis Points	Assumed Tuition Increases +100 Basis Points and Investment Return -100 Basis Points	Assumed Tuition Increases -100 Basis Points and Investment Return +100 Basis Points
Assumed Investment Return	6.00%	6.00%	6.00%	7.00%	5.00%	5.00%	7.00%
Assumed Tuition Increases*	7.1%/4.5%	8.1%/5.5%	6.1%/3.5%	7.1%/4.5%	7.1%/4.5%	8.1%/5.5%	6.1%/3.5%
1 Assets							
a. Market Value of Assets (in Trust)	$955.3	$955.3	$955.3	$955.3	$ 955.3	$ 955.3	$955.3
b. PV Future Contract Contributions	$ 45.8	$ 45.8	$ 45.8	$ 44.4	$ 47.2	$ 47.2	$ 44.4
c. Total Market Value of Assets (MVA)	$1,001.1	$1,001.1	$1,001.1	$999.7	$1,002.5	$1,002.5	$999.7
2 Actuarial Results							
Liabilities - Tuition and Fees							
a. Not yet in Payment Status or Not Using Contract	$737.7	$790.9	$689.2	$685.2	$ 796.6	$ 856.1	$641.6
b. In Payment Status or Termination in Progress	$99.1	$99.8	$ 98.5	$ 97.8	$ 100.5	$ 101.2	$ 97.2
c. Total	$836.8	$890.7	$787.7	$783.0	$ 897.1	$ 957.3	$738.8
Liabilities - PV of Future Admin. Expenses	$ 27.6	$ 27.6	$ 27.6	$ 26.2	$ 29.1	$ 29.1	$ 26.2
Liabilities Total	$864.4	$918.3	$815.3	$809.2	$ 926.2	$ 986.4	$765.0
Surplus/(Deficit)	$136.7	$ 82.8	$185.8	$190.5	$ 76.3	$ 16.1	$234.7
Funded Ratio	115.8%	109.0%	122.8%	123.5%	108.2%	101.6%	130.7%
Difference From Results Based on Current Assumptions							
Deficit	$ 0.0	$(53.9)	$ 49.1	$ 53.8	$ (60.4)	$(120.6)	$ 98.0
Funded Ratio	0.0%	(6.8%)	7.0%	7.7%	(7.6%)	(14.2%)	14.9%

**Graded schedule 7.1% for one year, 5.75% for the second year, 5.0% for the third year and 4.5% thereafter.*

SECTION C

FUND ASSETS

Statement of Plan Assets
(Assets at Market Value)

Michigan Education Trust - Plan D
Statement of Plan Net Assets
Year ended September 30, 2017

1. Cash and cash equivalents	$	20,546,997
2. Investments		
a. Short-term Investments	$	66,609,947
b. Unamortized discount on short-term investments	$	(647,163)
c. Bonds	$	183,307,019
d. Equity mutual funds	$	680,461,447
Total investments	$	929,731,250
3. Deferred Outflows of Resources	$	67,878
4. Receivables		
a. Advances to state general fund	$	2,956,593
b. Interest and dividends receivable	$	1,292,723
c. Tuition contracts receivable	$	45,773,878
d. Due from others	$	2,362,203
Total receivables	$	52,385,397
5. Liabilities		
a. Undisbursed charitable tuition	$	-
b. Compensated absences	$	1,685,545
c. Due to vendors and contract purchasers	$	-
d. Due to Plans B&C	$	-
Total liabilities	$	1,685,545
6. Deferred Inflows of Resources	$	(2,983)
7. Net assets = (1) + (2) + (3) + (4) - (5) - (6)	$	1,001,048,960

Numbers may not add due to rounding.

Reconciliation of Plan Assets

Michigan Education Trust - Plan D
Statement of Changes in Plan Net Assets
Twelve Month Period ended September 30, 2017

1. Value of assets at beginning of year	$	934,410,686
2. Changes during year		
a. Additions		
(1) Investment income	$	30,942,502
(2) Miscellaneous income	$	690,873
(3) Net gain on sale of security	$	104,555,400
(4) Prepaid tuition of 2017 enrollments	$	14,049,210
(5) Other contracts receipts	$	27,498,313
Total Additions = (1) + (2) + (3) + (4) + (5)	$	177,736,298
b. Deductions		
(1) Administrative and other expenses	$	3,313,993
(2) Amounts paid under contracts		
(a) Tuition benefits	$	56,259,909
(b) Termination benefits		
[1] Paid to colleges	$	10,026,064
[2] Loan defaults/Death refunds	$	216,917
[3] Paid to refund designee	$	5,333,038
Total termination benefits	$	15,576,019
Total paid under contracts = (a) + (b)	$	71,835,928
Total Deductions = (1) + (2)	$	75,149,921
c. Unrealized appreciation (depreciation)	$	(35,948,103)
Net increases (decreases) during year = a - b + c	$	66,638,274
Net value of assets at end of year = 1 + 2	$	1,001,048,960

SECTION D

PARTICIPANT DATA

Historical Summary as of September 30, 2017

	2017	2016	2015	2014	2013
Number of Contracts					
Lump Sum					
Full benefits	18,263	18,732	19,081	19,261	19,335
Limited benefits	5,095	5,197	5,219	5,226	5,155
Community college	2,120	2,166	2,169	2,184	1,781
Monthly Purchase					
Full benefits	6,371	6,630	6,882	7,070	7,208
Limited benefits	2,176	2,274	2,327	2,356	2,369
Community college	1,697	1,711	1,737	1,697	1,684
Pay As You Go					
Full benefits	815	323	0	0	0
Limited benefits	414	187	0	0	0
Community college	101	38	0	0	0
Total	**37,052**	**37,258**	**37,415**	**37,794**	**37,532**
Assets					
Market value	**$1,001,048,960**	**$934,410,686**	**$883,583,213**	**$912,671,063**	**$852,104,885**

Contract Data Summary

	Lump Sum			Monthly Purchase			Pay As You Go			
	Full Benefits	Limited Benefits	Community College	Full Benefits	Limited Benefits	Community College	Full Benefits	Limited Benefits	Community College	Total
Total as of 9/30/2016	18,732	5,197	2,166	6,630	2,274	1,711	323	187	38	37,258
Adjustment for prior years*	108	45	9	47	14	(1)	35	29	5	291
New contracts issued	617	230	68	119	31	59	464	202	58	1,848
Contracts paid in full	(1,194)	(377)	(123)	(425)	(143)	(72)	(7)	(4)	0	(2,345)
Total as of 9/30/2017	**18,263**	**5,095**	**2,120**	**6,371**	**2,176**	**1,697**	**815**	**414**	**101**	**37,052**

** Adjustments include the following:*

- *162 contracts depleted and not included in paid in full, expired in FY2016, or cancelled in FY2016*
- *6 contracts depleted in FY2016 included in paid in full*
- *46 contracts depleted in FY2016 and reinstated in FY2017*
- *113 FY2016 contracts loaded in FY2017*
- *288 contracts created by transfer*

Contracts in Payment Status as of September 30, 2017

	Full Benefits Contracts	Limited Benefits Contracts	Community College Contracts	Total
1. Michigan Public 4-Year College				
Central Michigan University	248	122	0	370
Eastern Michigan University	142	45	0	187
Ferris State University	94	39	0	133
Kendall Art & Design of Ferris	0	0	0	0
Grand Valley State University	376	149	0	525
Lake Superior State University	25	6	0	31
Michigan State University	1,608	346	0	1,954
Michigan Technological University	89	28	0	117
Northern Michigan University	54	16	0	70
Oakland University	266	116	0	382
Saginaw Valley State University	43	22	0	65
University of Michigan-Dearborn	120	29	0	149
University of Michigan-Flint	36	14	0	50
University of Michigan-Ann Arbor	1,637	159	0	1,796
Wayne State University	220	66	0	286
Western Michigan University	240	99	1	340
Total Michigan Public 4-Year College	**5,198**	**1,256**	**1**	**6,455**

Contracts in Payment Status as of September 30, 2017(Continued)

	Full Benefits Contracts	Limited Benefits Contracts	Community College Contracts	Total
2. Michigan Community College				
Alpena Community College	0	0	3	3
Bay De Noc Community College	0	1	5	6
Delta College	9	2	15	26
Glen Oaks Community College	1	1	1	3
Gogebic Community College	1	0	0	1
Grand Rapids Community College	22	7	39	68
Henry Ford Community College	15	5	16	36
Jackson Community College	9	0	17	26
Kalamazoo Valley Community College	6	3	20	29
Kellogg Community College	2	3	8	13
Kirtland Community College	2	0	2	4
Lake Michigan Community College	5	3	7	15
Lansing Community College	37	16	57	110
Macomb County Community College	40	15	83	138
Mid-Michigan Community College	4	6	4	14
Monroe Community College	3	1	4	8
Montcalm Community College	0	2	1	3
Mott Community College	15	3	33	51
Muskegon Community College	3	2	9	14
North Central Michigan College	6	0	3	9
Northwestern Michigan College	11	6	13	30
Oakland Community College	64	11	57	132
Schoolcraft College	48	19	59	126
Southwestern Michigan College	0	1	3	4
St. Clair County Community College	8	2	22	32
Washtenaw Community College	33	9	25	67
Wayne County Community College	3	1	12	16
West Shore Community College	2	0	3	5
Total Michigan Community College	**349**	**119**	**521**	**989**
Total Active Contracts (1.) + (2.)	**5,547**	**1,375**	**522**	**7,444**

Contracts in Payment Status as of September 30, 2017 (Concluded)

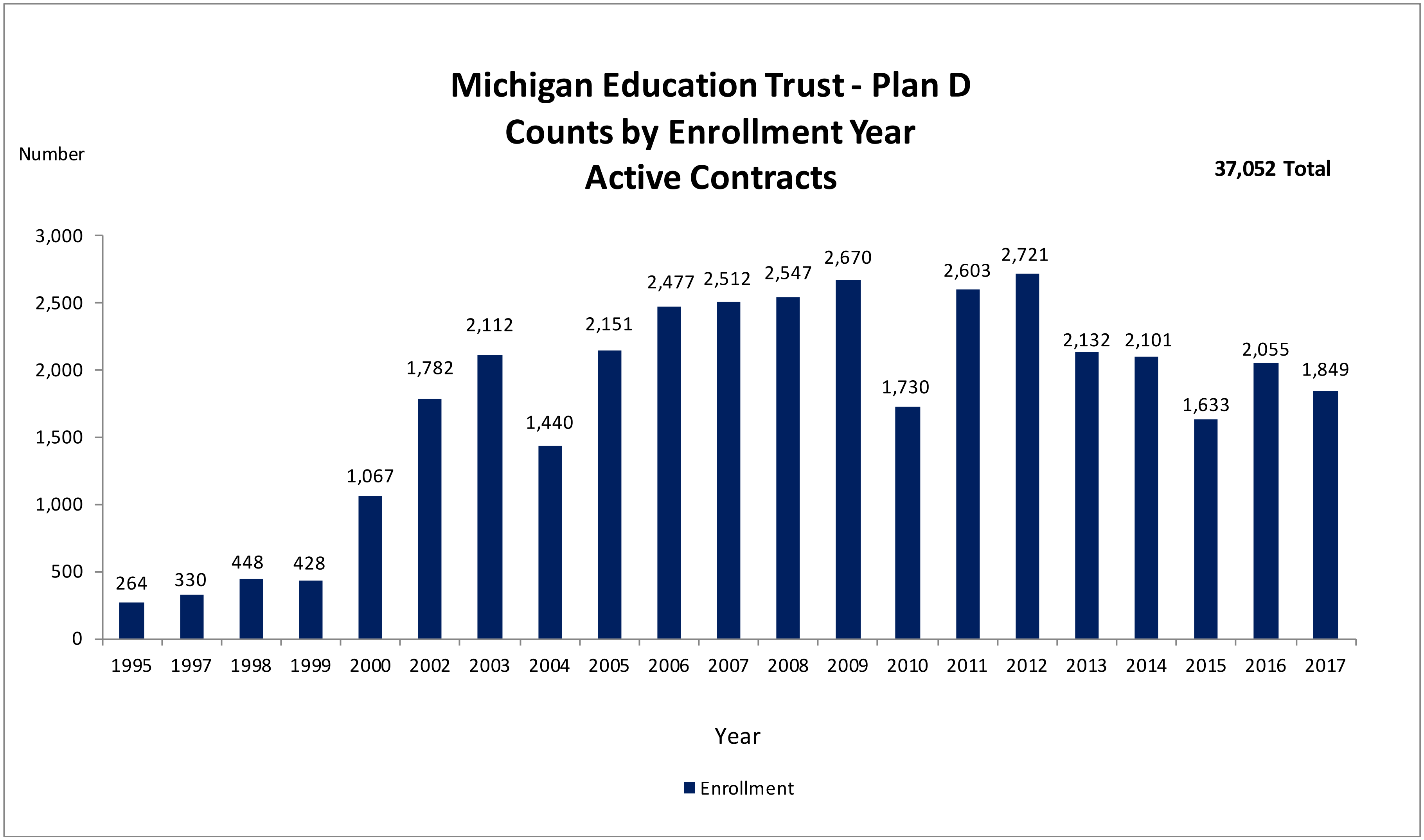
	Full Benefits Contracts	Limited Benefits Contracts	Community College Contracts	Total
3. Terminations in Progress				
Reason:				
Michigan Independent College	317	81	28	426
Out-of-State/Pay College	786	144	33	963
Out-of-State/Pay Refund Designee	29	16	1	46
Full Scholarship	49	15	3	67
Not Attending College	134	52	6	192
Attending Community College with Full/Limited Benefits Contract	56	39	0	95
Attending 4-year College with Community College Contract	0	0	158	158
Other (Military)	7	1	1	9
Total Terminations in Progress	**1,378**	**348**	**230**	**1,956**
4. Inactive Students	**54**	**6**	**6**	**66**
Grand Total, Contracts in Payment Status (1.) + (2.) + (3.) + (4.)	**6,979**	**1,729**	**758**	**9,466**
5. Not Yet in Payment Status	**18,470**	**5,956**	**3,160**	**27,586**
Grand Total, Active Contracts (1.) + (2.) + (3.) + (4.) + (5.)	**25,449**	**7,685**	**3,918**	**37,052**

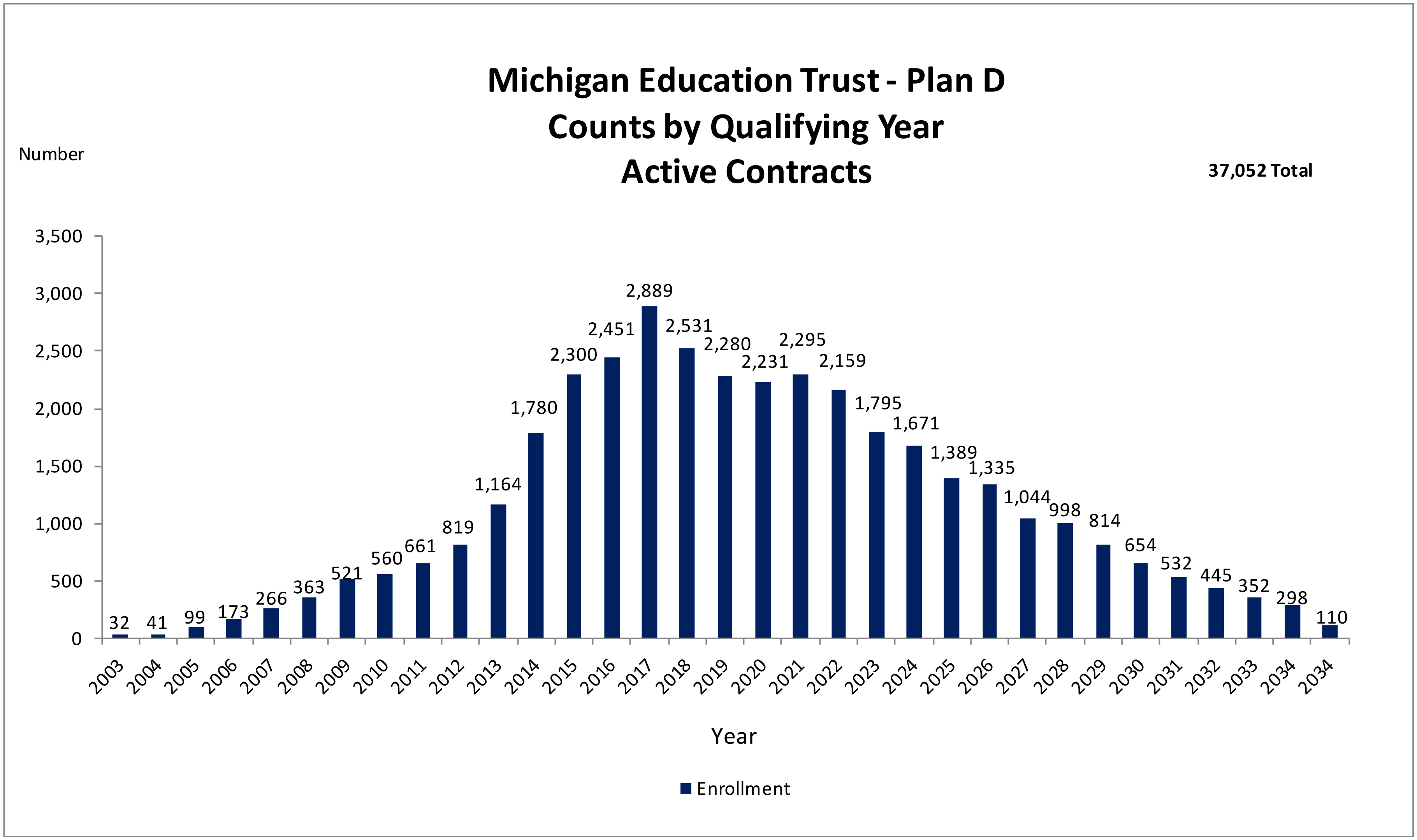
Contracts Paid in Full in the Year Ending September 30, 2017

	Lump Sum			Monthly Purchase			Pay As You Go			
	Full Benefits	Limited Benefits	Community College	Full Benefits	Limited Benefits	Community College	Full Benefits	Limited Benefits	Community College	Total
1. Attended Public Colleges	855	286	43	284	105	23	7	4	0	1,607
2. Terminations										
Michigan Independent College	78	28	11	20	12	5	0	0	0	154
Out-of-State/Pay College	135	26	7	60	7	4	0	0	0	239
Out-of-State/Pay Refund Designee	16	0	1	4	4	3	0	0	0	28
Full Scholarship	28	3	4	10	5	3	0	0	0	53
Not Attending College	61	29	13	38	5	7	0	0	0	153
Disability/Death	4	1	2	2	1	1	0	0	0	11
Attending Community College with Full/Limited Benefits Contract	15	3	0	6	4	0	0	0	0	28
Attending 4-year College with Community College Contract	0	0	42	0	0	26	0	0	0	68
Other (Military)	2	1	0	1	0	0	0	0	0	4
Total Terminations	339	91	80	141	38	49	0	0	0	738
Total Contracts Paid in Full	**1,194**	**377**	**123**	**425**	**143**	**72**	**7**	**4**	**0**	**2,345**

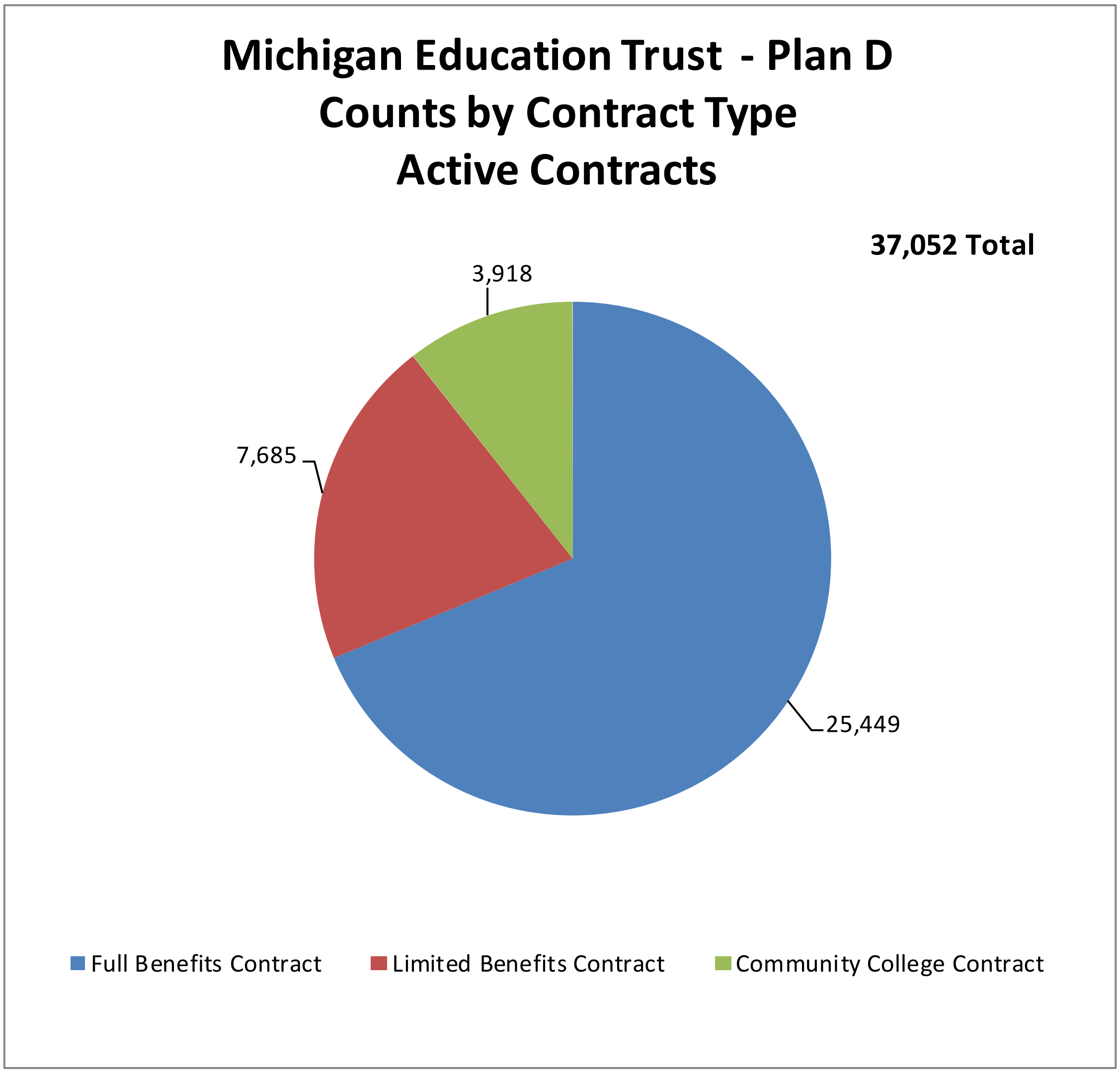
Active Monthly Purchase Contracts

	Full Benefits	Limited Benefits	Community College	Total
Active Purchasers as of 9/30/2016	1,821	793	726	3,340
Adjustment for prior years	(25)	(6)	(8)	(39)
Contracts issued in 2017	119	31	59	209
Purchases completed	(267)	(104)	(73)	(444)
Discontinued	(21)	(10)	(12)	(43)
Active Purchasers as of 9/30/2017	**1,627**	**704**	**692**	**3,023**


Michigan Education Trust - Plan D
Counts by Enrollment Year
Active Contracts
Number
37,052 Total
3,000
2,500
2,000
1,500
1,000
500
0
264
330
448
428
1,067
1,782
2,112
1,440
2,151
2,477
2,512
2,547
2,670
1,730
2,603
2,721
2,132
2,101
1,633
2,055
1,849
1995
1997
1998
1999
2000
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Year
Enrollment



Michigan Education Trust - Plan D
Counts by Qualifying Year
Active Contracts
Number
37,052 Total
3,500
3,000
2,500
2,000
1,500
1,000
500
0
32
41
99
173
266
363
521
560
661
819
1,164
1,780
2,300
2,451
2,889
2,531
2,280
2,231
2,295
2,159
1,795
1,671
1,389
1,335
1,044
998
814
654
532
445
352
298
110
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2034
Year
Enrollment


Michigan Education Trust - Plan D
Counts by Contract Type
Active Contracts
37,052 Total
3,918
7,685
25,449
Full Benefits Contract
Limited Benefits Contract
Community College Contract

SECTION E

ACTUARIAL SOUNDNESS VALUATION
METHODS & ASSUMPTIONS

Valuation Methods & Assumptions

The ***actuarial assumptions*** used in the valuation are shown in this Section.

Measurement Date: September 30, 2017

The ***net investment return rate:*** 6.00 percent per annum, compounded annually

Weighted Average Tuition and Increases by Contract Type

	Four-Year Public College	Community College
Weighted Average Tuition and Fees	$13,980	$3,807
Average Tuition and Fees	$13,372	$4,142
Lowest Tuition and Fees	$10,517	$2,990
Tuition and Fees Increase Assumption - Year One	7.10%	7.10%
Tuition and Fees Increase Assumption - Year Two	5.75%	5.75%
Tuition and Fees Increase Assumption - Year Three	5.00%	5.00%
Tuition and Fees Increase Assumption - Year Four and Beyond	4.50%	4.50%

The Weighted Average Tuition and Fees used in the actuarial soundness valuation are based on preliminary tuition and fees for 2017/2018.

For contracts sold during and after the 2012/2013 enrollment period, the mandatory fees paid cannot exceed the 2012 rate charged by the Public Educational Institutions.

The Tuition and Fee increase assumptions were chosen by the Board and consider historical public tuition and fee inflation over a 5- to 10-year horizon, as well as current economic and political conditions.

Administrative Expenses

Administrative expenses of the Program are assumed to be paid through a combination of investment earnings and fees assessed on purchasers. Total administrative expenses budgeted for MET Plans B and C and MET Plan D net of advertising expenses is equal to $4,138,034. This amount was prorated by the number of active contracts in MET Plans B and C vs. MET Plan D. Therefore, the amount budgeted for MET Plan D in 2017-2018 is $3,682,714. This amount is assumed to increase by 2.5 percent per year. Furthermore, it is assumed that future contract purchases would cover advertising expenses. Advertising expenses for 2017-2018 were budgeted to be $800,000. This amount is also assumed to increase by 2.5 percent per year.

Bias Load

A load of 10.0 percent was added for four-year public universities and zero percent for two-year community colleges is added to the WAT for all contract types to recognize the bias toward enrollment at more expensive schools.

Experience Load

Two features of the program may cause greater payments than expected. These two features are a) the ability of a beneficiary to attend a college for which block pricing is in effect, resulting in the possibility of having the program pay for more years than purchased and b) the ability of a beneficiary who purchased a contract prior to 2012 to have more than 120 hours covered (even though, for example, four years of coverage was purchased) due to being in a specific program requiring more than 120 hours for an undergraduate degree (e.g., Engineering). A load of 2.0 percent was added to all liabilities to account for this.

Future Contract Sales

MET Plan D is open to new entrants. This assumption does not impact the closed-group actuarial soundness valuation, but rather is used in analyzing pricing.

Rates of Matriculation and Refund at and Beyond Qualifying Year

Beneficiaries are assumed to either matriculate or receive a refund according to the following schedule:

Years After Qualifying Year	Matriculation and Refund Rate
0	40%
1	55%
2	40%
3	40%
4	25%
5	15%
6	15%
7	15%
8	15%
9	20%
10	20%
11	20%
12	20%
13	20%
14	20%
15	100%

Probability of Matriculation or Refund upon Transition to Payment Status

Years After Qualifying Year	Matriculation Rate	Refund Rate
0	75%	25%
1	90%	10%
2	90%	10%
3	90%	10%
4	75%	25%
5	75%	25%
6	60%	40%
7	75%	25%
8	75%	25%
9	75%	25%
10	75%	25%
11	75%	25%
12	75%	25%
13	75%	25%
14	75%	25%
15	0%	100%

Utilization of Benefits (applies only to members who have not begun utilizing benefits)

Beneficiaries are assumed to use the benefits as defined in the contract beginning in their qualifying year and subsequently according to the following schedule:

Distribution of Benefit Utilization				
Number of Years Since Benefit Utilization Begins	Number of Years Purchased			
	0 - 1	1 - 2	2 - 3	More Than 3
1	75%	38%	25%	19%
2	17%	34%	25%	19%
3	8%	17%	21%	19%
4		6%	14%	19%
5		6%	8%	13%
6			4%	5%
7			2%	4%
8				2%
9				2%

Utilization of Benefits (applies only to members who have begun utilizing benefits)

Once a beneficiary has begun using benefits, it is assumed that beneficiaries will utilize 22.5 credits per year until benefits are fully depleted.

If the contract beneficiary has matriculated, but the contract beneficiary has not used credits within the past year, the matriculation rates, refund rates and benefit utilization rates that apply to members who have not yet matriculated are assumed.

Contract Terminations

Refund Type	Refund	Amount of Refund - Full or Limited Benefits	Amount of Refund - Community College Benefits	Termination Code and Code Description	Distribution of Contract Termination: Full Benefits	Distribution of Contract Termination: Limited Benefits	Distribution of Contract Termination: Community College Benefits
1	Weighted Average Tuition	$ 13,980	$ 3,807	1 - Attend Mich. Independent college direct refund to college	28.0%	34.0%	17.0%
2	Average Tuition*	$ 13,372	$ 4,142	2 - Attend out of state college - direct refund to college 4 - Full scholarship	58.0%	35.0%	13.0%
3	Lowest Tuition	$ 10,517	$ 2,990	3 - Attend Mich. Independent or out of state college - direct refund to refund designee 5 - Will not attend college 10 - Other (military)	11.0%	22.0%	5.0%
4	Lowest Tuition	$ 10,517	N/A	7 - Purchase full or limited benefit, but attend community college	3.0%	9.0%	0.0%
5	Community College WAT	N/A	$ 3,807	8 - Purchase community college, but attend 4-year public college	0.0%	0.0%	65.0%
6	Lowest Tuition	$ 10,517	$ 2,990	6 - Death or disability	0.0%	0.0%	0.0%
				Average Refund	**$ 13,143**	**$ 12,694**	**$ 3,810**

**Not applicable to Limited Benefits Contracts.*

The Weighted Average Tuition and Fees used in the actuarial soundness valuation are based on preliminary tuition and fees for 2017/2018.

Refunds are paid out in accordance with the contract provisions over a period of four years for full and limited benefit contracts and two years for community college contracts.

Mortality and Disability

No assumption is made for death or disability. Valuing the rate of incidence is expected to be immaterial.

SECTION F

PLAN PROVISIONS

Plan Provisions

A. Issue Years: 1995, 1997, 1998, 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017.

B. Benefit Provisions

1. Full Benefits Plan

a. Michigan Public 4-Year College	Full benefits plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to five years.
b. Community College	If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on the options selected by the beneficiary.
c. Michigan Independent College	If the beneficiary elects to attend a Michigan independent college, the contract may be terminated and MET will pay tuition to the independent college based on the weighted average tuition cost. If the payment is not made to the college, the amount will be based on the lowest tuition.
d. Out-of-State College	If the beneficiary elects to attend an out-of-state college, the contract may be terminated and MET will pay to the college four annual installments based on the average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition.
e. Full Scholarship	If the beneficiary receives a full scholarship, the contract may be terminated and MET will pay four annual installments based on the average tuition cost.
f. Death or Disability	If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated and MET will pay one installment based on the lowest tuition cost.
g. No College	If the beneficiary does not attend college, the contract may be terminated and MET will pay four annual installments based on the lowest tuition cost.

Plan Provisions (Continued)

2. Limited Benefits Plan

a. Michigan Public 4-Year College	Limited benefits plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to four years not to exceed 105% of the WAT. However, if tuition and mandatory fees exceed 105% of the WAT, the beneficiary is provided a reduced number of credit hours.
b. Community College	If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on options selected by the beneficiary.
c. Michigan Independent College	If the beneficiary elects to attend a Michigan independent college, the contract may be terminated and MET will provide funds to the independent college based on the weighted average tuition at the colleges with tuition less than 105% of the weighted average tuition. If payment is not made to the college, the amount will be based on the lowest tuition.
d. Out-of-State College	If the beneficiary elects to attend an out-of-state college, the contract may be terminated and MET will pay four annual installments based on the lowest tuition cost.
e. Full Scholarship	If the beneficiary receives a full scholarship, the contract may be terminated and MET will pay four annual installments based on the lowest tuition cost.
f. Death or Disability	If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated and MET will pay one installment based on the lowest tuition cost.
g. No College	If the beneficiary does not attend college, the contract may be terminated and MET will pay four annual installments based on the lowest tuition cost.

Plan Provisions (Continued)

3. Community College Plan

a. Community College	Community college plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to two years.
b. Other Michigan College	If the beneficiary elects to attend a Michigan four-year public college or a Michigan independent college, the contract may be terminated and MET will pay tuition to the college in two annual installments as needed based on the community college weighted average tuition cost in the year prior to the contract termination.
c. Out-of-State College	If the beneficiary elects to attend an out-of-state college, the contract may be terminated and MET will pay to the college two annual installments based on the community college average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition.
d. Full Scholarship	If the beneficiary receives a full scholarship, the contract may be terminated and MET will pay two annual installments based on the community college average tuition cost.
e. Death or Disability	If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated and MET will pay one installment based on the community college lowest tuition cost.
f. No College	If the beneficiary does not attend college, the contract may be terminated and MET will pay two annual installments based on the community college lowest tuition cost.

C. Transferability	If the contract is transferred to an older beneficiary, MET may charge additional costs, which include a transfer fee, the cost differential between beneficiary ages/grades and MET's loss of investment income. If the older beneficiary accepts the academic year of the original beneficiary, the additional cost can be waived.

Plan Provisions (Concluded)

D. Monthly Purchase	The purchaser of a monthly purchase contract purchases a percent of educational benefits with every monthly purchase amount which is received by MET. A purchaser may choose to make monthly payments over 4, 7, 10 or 15 years.
E. Mandatory Fees for Contracts Sold During and After the 2012/2013 Enrollment Period	For contracts sold during and after the 2012/2013 enrollment period, the mandatory fees paid cannot exceed the 2012 rate charged by the Public Educational Institutions.
F. Pay-As-You-Go	The Pay-As-You-Go purchase option allows contracts to be purchased by the credit hour rather than in semester increments. Contracts can be opened by purchasing a minimum of one credit hour. Once a contract is opened additional contributions can be made at any time, in any amount $25 or greater. Every time a contribution is made credits, or fraction of credits, are purchased based upon the prices in effect at that time.