

PACT
ALABAMA'S PREPAID
AFFORDABLE COLLEGE
TUITION PROGRAM

September, 2019
ACTUARIAL REPORT

October 21, 2019

Board of Trustees
Alabama's Prepaid Affordable College Tuition Trust Fund
State Treasurer's Office
Suite 660
100 North Union Street
Montgomery, Alabama 36130

To the Board:

The Wallace-Folsom College Savings Investment Plan Act provides that the Board of Trustees ("Board") shall obtain appropriate actuarial assistance to establish, maintain, and certify a fund sufficient to defray the obligation of the Alabama Prepaid Affordable College Tuition Trust Fund, and shall annually evaluate, or cause to be evaluated, the actuarial soundness of the PACT Trust Fund. The following pages summarize the actuarial valuation of the PACT Trust Fund performed by Sherman Actuarial Services as of September 30, 2019.

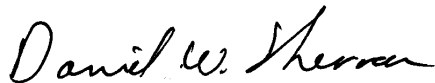
A comparison of the assets and liabilities of the PACT Trust Fund shows that as of September 30, 2019 there is a surplus of approximately \$53.0 million, which represents a funded ratio of 116.6%. This does include last May's one-time increase of 7% in tuition and fee payments to schools. Plans that have funded ratio greater than 100% are considered actuarially sound.

The actuarial valuation was performed based upon generally accepted actuarial principles, and tests were performed as considered necessary to ensure the accuracy of the results. We certify that the amounts presented in the following pages have been appropriately determined according to the actuarial assumptions stated herein.

In our opinion, the methods and assumptions are reasonable for projecting the expected financial results of the PACT Trust Fund.

The methods, assumptions and data used in the actuarial evaluation of the PACT Trust Fund are described in the following pages. Daniel Sherman is an Associate of the Society of Actuaries. He is a Member of the American Academy of Actuaries and meets the Qualification Standards of the Academy to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions concerning it.

Respectfully submitted,



Daniel W. Sherman
Associate of the Society of Actuaries
Member, American Academy of Actuaries



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Executive Summary

EXECUTIVE SUMMARY

Funded Status

As of September 30, 2019 the trust has a surplus of \$53.0 million (the value of assets, including the value of future payments by contract purchasers of approximately \$4.0 million and present value of future Education Trust Fund payments by the State of approximately \$270.0 million, is more than the expected liabilities of the trust). This represents a decrease of \$18.8 million from the surplus of \$71.8 million as of September 30, 2018. The funded ratio, assets divided by liabilities, decreased from 120.2% in 2018 to 116.6% in 2019.

The decrease in trust funded ratio was primarily due to an actuarial asset gain offset by the 7% increase in tuition and fee payments.

The main factor that affects the funding status of PACT is Withdrawals and Matriculations. The affects of these factors are detailed as follows:

Investment Return

The return on invested assets (net of investment management fees) was 3.99% versus the assumed return of 0.50%. However, total asset return, including monies not invested and available to meet daily cash flow needs, was 2.05%. The total asset return of 2.05% compared to the projected investment return of 0.50% resulted in a small actuarial gain.

Gain/Loss Summary

During the last year, the plan experienced a \$1.0 million actuarial gain. The 7% increase in tuition and fee payments decreased the surplus by \$20.3 million. The sources of the gain/(loss) are as follows:

Gain / (Loss)	<u>(millions)</u>
Asset Gain (2.05% return)	\$1.6
Withdrawal and Matriculation	(0.8)
Expense	0.1
Assumption Change	<u>0.1</u>
Total Gain / (Loss)	\$1.0

Tuition and Qualified Fees Increases

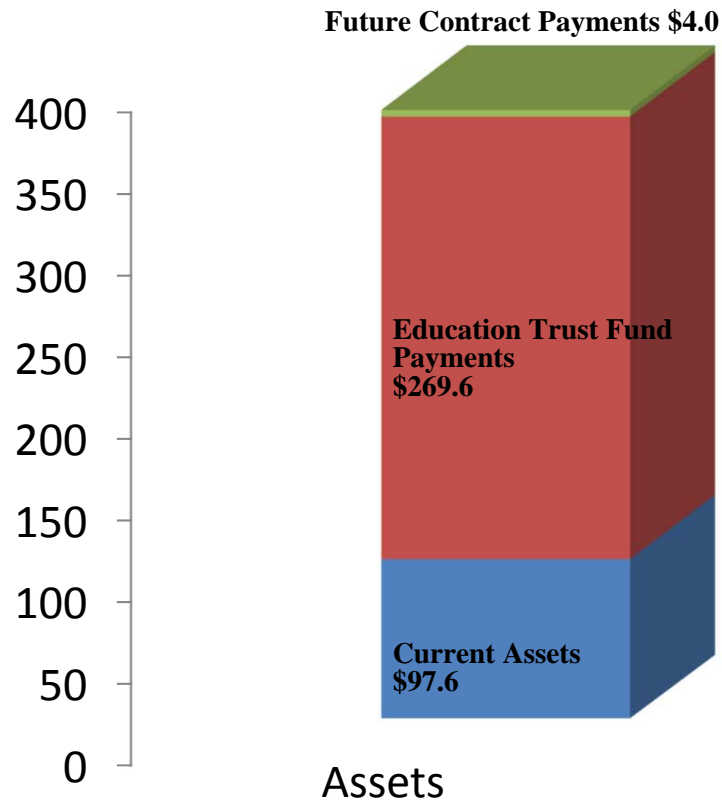
For the 2019 actuarial valuation, the expected tuition and qualified fees to be paid were based on the Fall 2010 tuition and fees, the provisions of the Settlement, increased 3% effective for the Fall of 2015 payments, 6% effective for the Fall of 2016 payments, 8% effective for the Fall of 2017 payments, 7% effective for the Fall of 2018 payments and 7% effective for the Fall of 2019 payments, compounded.

Funded Status

The value of assets of the trust fund as of September 30, 2019 (including the value of future payments by contract purchasers as well as the Education Trust Fund Payments) exceed the liabilities by \$53.0 million. The funded ratio, assets divided by liabilities, is equal to 116.6%.

Total: \$372.2 million

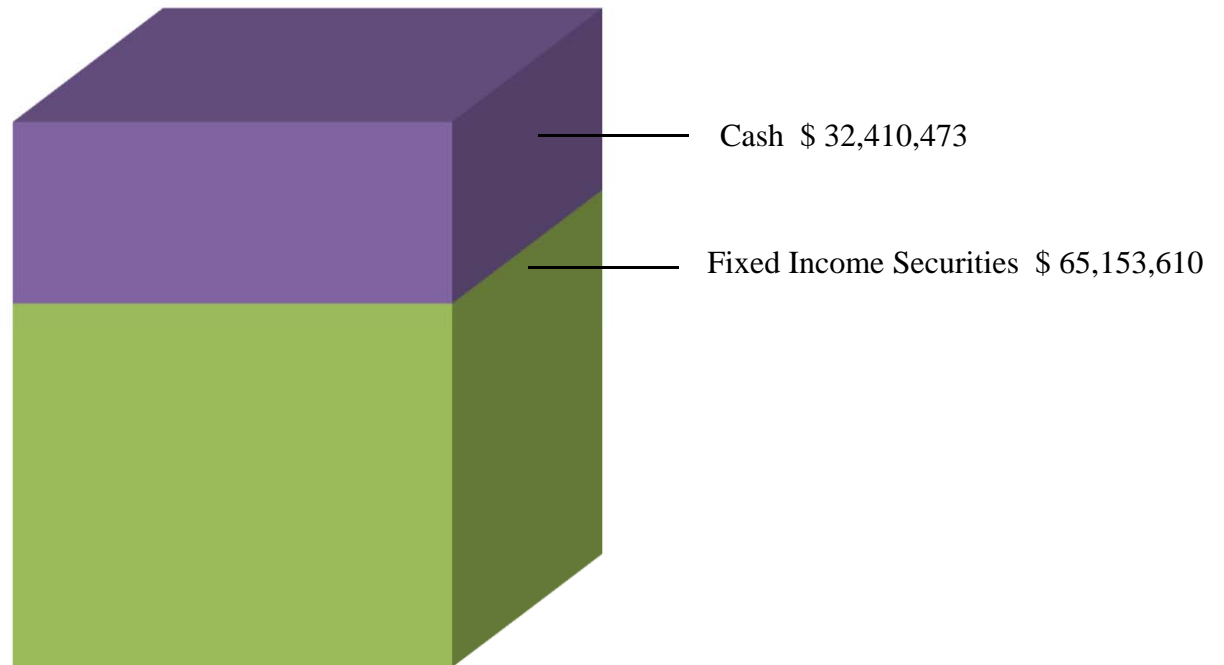
Total: \$318.2 million



Market Value of Trust Assets

The investment return for the fiscal year ended September 30, 2019 of invested assets was 3.99%. However, total asset return, including monies not invested and available to meet daily cash flow needs, was 2.05%. Assets as of September 30, 2019 were allocated as follows:

Total: \$ 97,564,083



Active Contracts

The table below illustrates the total number of contracts sold less cancellations, expirations, graduations, and depletions, for each enrollment period.

Enrollment Year	Active Contracts	Enrollment Year	Active Contracts
1990	11	2000	1286
1991	5	2001	1662
1992	126	2002	1764
1993	315	2003	1068
1994	410	2004	767
1995	621	2005	478
1996	711	2006	513
1997	950	2007	451
1998	1108	2008	353
1999	987	Total	13,586

Contracts

Status	Number of Contracts
Active	13,586
Inactive	62,665
Total Sold	76,251

Valuation Assumptions And Methods

ACTUARIAL ASSUMPTIONS

The assumptions used in the actuarial valuation of the PACT Trust Fund are described below. In our opinion the actuarial assumptions are reasonable for projecting the expected financial results of the PACT Trust Fund.

Tuition and Fee Increases

Due to the Settlement Agreement, the Weighted Average Tuition (WAT) increases are shown in the table below.

9/30/2019 Valuation			
University of Alabama and Auburn University	Other Alabama 4-year Universities	Community Colleges	Private/Out-of-State Universities
0.00%	0.00%	0.00%	0.00%

Investment Return and Discount Rates

The actuarial valuation of the PACT Trust Fund was determined using the table of returns below. Note that these are expected rates of return based on analysis and discussions with Regions from 2019. These rates were unchanged from those used in the 2016 actuarial valuation.

Fiscal Year Ending	Expected Rates of Return on Invested Assets	
	9/30/2019 Valuation	9/30/2018 Valuation
2020	1.00%	0.50%
2021	1.00%	0.30%
2022-23	0.00%	0.00%
2024	0.40%	0.40%
2025	1.10%	1.60%
2026	1.70%	2.20%
2027	2.50%	2.60%
2028	2.50%	3.20%

Enrollment of PACT Beneficiaries

The assumed enrollment of PACT beneficiaries was unchanged for this valuation from that assumed as of September 30, 2018. A comparison of the rates that contract beneficiaries will matriculate is shown in the following table.

College Type	Percent Enrolled
Private/Out-of-State	17.00%
Community College	15.00%
University of Alabama and Auburn University	53.00%
Other Alabama Universities	<u>15.00%</u>
Total	100.00%

In addition, it was assumed that contract beneficiaries who enroll in a community college will transfer to a four-year university after two years.

Contract Cancellations

The assumed cancellation of PACT contracts was unchanged from that assumed as of September 30, 2018. The actuarial valuation recognized cancellations in accordance with the following schedule:

Age 0 through 9th grade	0% per year
10th grade	1%
11th grade	1%
12th grade	1%

Administrative Expenses

For the 2019 actuarial valuation, a load of \$600,000 was included for administrative fees for future fiscal years through 2027. From 2028 to 2031 it is lowered \$100,000 per year.

Education Trust Fund Payments

The Education Trust Fund Payments are assumed to be paid on October 1st, January 1st, April 1st and July 1st for the fiscal year.

Deaths and Disabilities

Mortality and disability decrements were not used. This is the same assumption as previous valuations.

Payment of Tuition and Qualified Fees

The expected tuition and qualified fees to be paid were based on the Published Fall 2010 tuition and fees increased 3% effective for the Fall of 2015 payments, 6% effective for the Fall of 2016, 8% effective for the Fall of 2017, 7% effective for the Fall of 2018 payments and 7% effective for the Fall of 2019 payments, compounded. The expected weighted average annual tuition and fee payments are expected to be as follows:

University of Alabama and Auburn University Systems	\$10,211
Other Alabama 4-Year Universities and Colleges	\$ 7,908
Out-of-State and Private 4-Year Universities and Colleges	\$ 8,419
Technical and Community Colleges	\$ 4,575

The tuition and fee payment assumption was unchanged for this valuation at 128 credit hours. The actuarial valuation assumes that beneficiaries who matriculate will utilize 128 hours out of the maximum of either 128 or 135 hours of contract benefits. It is assumed that each beneficiary will use 13 hours of contract benefits per semester for the first eight semesters and 11 hours of contract benefits in the ninth semester starting after completion of the 12th grade.

Payment of tuition and qualified fees from the PACT Trust Fund is assumed to occur three times annually: 45% on November 15th, 45% on March 15th, and 10% on August 15th.

ACTUARIAL METHODS

The actuarial valuation of the PACT Trust Fund is based on projections of the tuition and qualified fee amounts expected to be paid from the PACT Trust Fund to colleges and universities, and the expected amounts to be paid into the PACT Trust Fund by contract purchasers and the Education Trust Fund. The actuarial valuation is based on the data summarized below which was obtained by the PACT office through the following sources:

- | | |
|---|---|
| ▪ Tuition/Fee Amounts at Four-Year Universities | University registrar and admission offices |
| ▪ Headcount at Four-Year Universities | Alabama Commission on Higher Education |
| ▪ PACT Purchasers | PACT Records Administrator |
| ▪ Tuition/Fee Amounts at Community Colleges | Community College registrar and admission offices |
| ▪ Headcount at Community Colleges | Alabama Commission on Higher Education |

Active Contracts (Appendix D)

The future payments expected to be made to and from the PACT Trust Fund have been determined based on the number of contracts shown in Appendix D. This information reflects cancellations, expirations, graduations, and deletions that had occurred as of the valuation date.

Weighted Average Tuition: Four-Year Universities

The Weighted Average Tuition (WAT) for public four-year universities in Alabama is the average of the Fall 2010 tuition and qualified fees at each of the four-year universities, weighted by PACT semester hours paid to each university, college and technical school, increased 3% effective for the Fall of 2015 payments, 6% effective for the Fall of 2016 payments, 8% effective for the Fall of 2017 payments, and 7% effective for the Fall of 2019, compounded.

Weighted Average Tuition: Community Colleges

The Weighted Average Tuition (WAT) for community colleges was determined using the same methodology used in the determination of WAT for four-year universities, increased 3% effective for the Fall of 2015 payments, 6% effective for the Fall of 2016 payments, 8% effective for the Fall of 2017 payments, 7% for the Fall of 2018 and 7% for the Fall of 2019, compounded.

Weighted Average Tuition: For Payment to Private and Out-of-State Four-Year Universities

The Weighted Average Tuition (WAT) for public four-year universities in Alabama is the average of the Fall 2010 tuition and qualified fees at each of the four-year universities, weighted by total enrollment at each in-state four-year university and college, increased 3% effective for the Fall of 2015 payments, 6% effective for the Fall of 2016 payments, 8% effective for the Fall of 2017 payments, 7% for the Fall of 2018 and 7% for the Fall of 2019, compounded.

Contract Provisions

SUMMARY OF PRINCIPAL PROVISIONS OF THE PACT CONTRACT

PACT Enrollment Periods

Select periods from 1990 through 2008. The plan has been closed to new contracts since 2008.

Purchaser

The purchaser of a PACT contract must be a person age 19 years or older, a corporation, trust, charitable organization, or any other entity if that entity is approved, in writing, by the State Treasurer.

Beneficiary

A PACT contract was purchased for any individual who:

- had not attained age 18 as of the beginning of the enrollment period, and
- had not completed the 9th grade as of the beginning of the enrollment period.

Beneficiary Substitutions

Contract benefits can be transferred to an eligible substitute beneficiary as long as there are 32 semester hours of tuition remaining. The substitute beneficiary must be a member of the immediate family of the original beneficiary. Substitutions are allowed just once per contract.

Payment Plans

Purchase of a PACT contract was made according to one of the following payment plans:

- Single Payment Plan: A single lump sum payment.
- 5-Year Installment Plan: Monthly payments for 60 months.
- Monthly Payment Plan: Continuous monthly payments until the June 1st preceding the beneficiary's projected college enrollment date.

Contract Benefits

The PACT contract provides for payment of the amounts shown below. In general, PACT contract benefits must be used within ten years following the beneficiary's projected college enrollment date.

- payment of instate tuition until the earlier of (i) the award of a baccalaureate degree or (ii) payments by the PACT Trust Fund have been made for 135 (128 for contracts sold after 2006) semester hours (or the academic equivalent units), and
- payment of qualified fees (those fees required as a condition of enrollment for all students) for not more than eight registrations on a semester system, twelve registrations on a quarter system, or the equivalent number of registrations on other academic bases.

Attendance at an Out-of-State or Private Institution

If the beneficiary attends an out-of-state or private institution, an amount will be forwarded each academic term to the institution in which the beneficiary is enrolled. The amount paid is the weighted average by resident headcount of basic instate tuition and fee at the Alabama Four-Year Universities as certified for the fall 2010 semester, adjusted per the Settlement Agreement.

Contract Cancellations

An amount will be paid to the purchaser equal to the total of all contract payments made to the PACT Trust Fund, not including administrative fees, minus a cancellation fee and any contract benefit amounts that have been paid to a college or university.

Appendices

Funded Status

Appendix A

a. Market Value of Assets	\$97,564,083
b. Actuarial present value of future payments expected to be made to the fund by contract purchasers	4,011,668
c. Actuarial present value of future expenses	(5,321,480)
d. Actuarial present value of future Education Trust Fund payments expected to be made to the fund by the State	<u>269,644,592</u>
e. Subtotal (a + b + c + d)	\$365,898,863
f. Actuarial present value of future payments expected to be made from the trust fund to universities for tuition and mandatory fees, and to purchasers upon contract cancellation	<u>312,940,496</u>
g. Reserve as of September 30, 2019 (e - f)	<u><u>\$52,958,367</u></u>

Trust Assets

Appendix B

<u>Invested Assets</u>	<u>Market Value</u>
Cash & Equivalents	\$32,410,473
Fixed Income Securities:	
Domestic	65,153,610
International	0
Equity Securities:	
Domestic	0
International	0
Total Assets	<u>\$97,564,083</u>

The above information was provided by the PACT office and Regions.

Cash Flow, Asset and Liability Projection

Appendix C

(amounts are shown in \$1,000s)

Fiscal Year End	Contract Payments	Education Trust Fund	Payments Out of Trust Fund	Administrative Expenses	Assets	Liabilities End of Year
9/30/2019					\$ 97,600	\$ 312,940
9/30/2020	\$ 2,000	\$ 60,700	\$ -75,800	\$ - 600	84,600	237,392
9/30/2021	1,100	31,900	-66,600	- 600	51,000	179,345
9/30/2022	600	32,200	-57,300	- 600	25,900	128,370
9/30/2023	300	33,500	-46,100	- 600	12,900	86,727
9/30/2024	100	33,700	-34,500	- 600	11,700	55,352
9/30/2025	0	38,400	-21,400	- 600	28,300	35,940
9/30/2026	0	39,200	-15,100	- 600	52,500	22,230
9/30/2027	0	32,500	- 9,900	- 600	76,000	13,175
9/30/2028	0	0	- 6,700	- 500	70,600	7,025
9/30/2029	0	0	- 4,300	- 400	67,600	3,053
9/30/2030	0	0	- 2,200	- 300	66,700	954
9/30/2031	0	0	- 900	- 200	67,300	113
9/30/2032	0	0	- 100	- 100	68,800	0

Active Contracts

Appendix D

All Enrollment Periods

Projected Enrollment Year	Number of Contracts	Percentage of Total
1994 - 1995	2	0.0%
1995 - 1996	1	0.0%
1996 - 1997	1	0.0%
1997 - 1998	1	0.0%
1998 - 1999	2	0.0%
1999 - 2000	0	0.0%
2000 - 2001	1	0.0%
2001 - 2002	1	0.0%
2002 - 2003	2	0.0%
2003 - 2004	5	0.0%
2004 - 2005	2	0.0%
2005 - 2006	3	0.0%
2006 - 2007	1	0.0%
2007 - 2008	1	0.0%
2008 - 2009	4	0.0%
2009 - 2010	1	0.0%
2010 - 2011	578	4.3%

Projected Enrollment Year	Number of Contracts	Percentage of Total
2011 - 2012	672	4.9%
2012 - 2013	717	5.3%
2013 - 2014	766	5.6%
2014 - 2015	983	7.2%
2015 - 2016	1,419	10.4%
2016 - 2017	1,590	11.7%
2017 - 2018	1,470	10.8%
2018 - 2019	1,392	10.2%
2019 - 2020	1,219	9.0%
2020 - 2021	901	6.6%
2021 - 2022	699	5.1%
2022 - 2023	393	2.9%
2023 - 2024	274	2.0%
2024 - 2025	230	1.7%
2025 - 2026	152	1.1%
2026 - 2027	89	0.7%
2027 - 2028	14	0.1%
Totals:	13,586	100.0%

PACT Beneficiaries

Appendix E

Matriculation Information: Four-Year Universities

Paid Dates 10/1/2018 - 9/30/2019

	Number of Enrollments	Semester Hours	Percentage of Total Hours	Fees Paid	Tuition Paid	Total Tuition and Fees Paid	Average Paid Per Semester Hour
Alabama A&M	25	362	0.24%	14,009	\$ 93,794.81	\$ 107,803.38	\$ 297.80
Alabama State	43	556	0.37%	19,263	\$ 153,766.94	\$ 173,030.16	\$ 311.21
Athens State	137	1,463	0.98%	28,140	\$ 259,032.90	\$ 287,172.50	\$ 196.29
Auburn University	3,607	46,477	31.06%		\$16,517,727.05	\$16,517,727.05	\$ 355.40
Auburn University - Montgomery	303	3,229	2.16%	10,375	\$ 870,632.59	\$ 881,007.30	\$ 272.84
Jacksonville State	457	5,219	3.49%		\$ 1,481,330.58	\$ 1,481,330.58	\$ 283.83
Troy University	853	8,754	5.85%	223,933	\$ 2,383,835.81	\$ 2,607,768.58	\$ 297.89
University of Alabama	3,549	45,835	30.63%		\$16,740,443.91	\$16,740,443.91	\$ 365.24
University of Al-Birmingham	1,166	12,417	8.30%		\$ 3,860,705.22	\$ 3,860,705.22	\$ 310.93
University of AL - Huntsville	650	7,478	5.00%		\$ 2,464,543.37	\$ 2,464,543.37	\$ 329.57
University of Montevallo	196	2,417	1.62%	18,916	\$ 732,124.40	\$ 751,040.45	\$ 310.73
University of North Alabama	455	5,458	3.65%	121,395	\$ 1,273,569.69	\$ 1,394,964.37	\$ 255.58
University of South Alabama	756	8,950	5.98%	148,809	\$ 1,945,612.89	\$ 2,094,422.21	\$ 234.01
University of West Alabama	86	1,035	0.69%	38,477	\$ 256,976.83	\$ 295,453.71	\$ 285.46
GRAND TOTAL	12,283	149,648	100.00%	\$ 623,315.80	\$49,034,096.99	\$49,657,412.79	\$ 331.83

PACT Beneficiaries

Appendix E

Matriculation Information: Community and Technical Colleges

Paid Dates 10/1/2018 - 9/30/2019

	Number of Enrollments	Semester Hours	Percentage of Total Hours	Fees Paid	Tuition Paid	Total Tuition and Fees Paid	Average Paid Per Semester Hour
<i>Community Colleges</i>							
Coastal Alabama	209	2,003	8.27%	50,170	225,051	275,221	137.40
Bevil	132	1,259	5.20%	26,572	142,959	169,532	134.66
Bishop	41	405	1.67%	7,473	46,932	54,406	134.33
Calhoun	392	3,174	13.11%	79,357	359,145	438,502	138.15
Central Alabama	44	437	1.80%	9,444	49,621	59,066	135.16
Chattahoochee	7	65	0.27%	1,738	7,381	9,118	140.28
Enterprise	18	157	0.65%	4,209	17,783	21,992	140.08
Gadsden	151	1,505	6.21%	32,595	170,759	203,354	135.12
Jefferson State	408	3,172	13.10%	106,864	360,187	467,051	147.24
Lawson			0.00%				0.00
L.B. Wallace	46	414	1.71%	9,468	47,010	56,478	136.42
Marion Military Institute	7	109	0.45%	2,640	26,760	29,400	269.73
Northeast	35	293	1.21%	8,630	33,689	42,319	144.43
NW Shoals	78	775	3.20%	19,555	86,853	106,408	137.30
Shelton	251	2,352	9.71%	52,070	271,906	323,976	137.74
Snead	93	720	2.97%	16,689	81,475	98,164	136.34
Southern Union	274	2,929	12.09%	65,858	332,595	398,454	136.04
Wallace-Dothan / Sparks	101	906	3.74%	19,386	102,503	121,889	134.53
Wallace-Hanceville	267	2,633	10.87%	83,645	296,045	379,690	144.20
Wallace-Selma	68	407	1.68%	9,029	44,818	53,847	132.30
Total Community Colleges	2,622	23,715	97.92%	605,394	2,703,472	3,308,866	139.53
<i>Technical Colleges</i>							
Ayers			0.00%				0.00
Drake	7	48	0.20%	575	5,450	6,026	125.54
J. F. Ingram State			0.00%				0.00
Reid	8	91	0.38%	1,527	10,333	11,860	84.00
Trenholm State Technical College	38	364	1.50%	6,199	41,243	47,442	130.33
Total Technical Colleges	53	503	2.08%	8,301	57,026	65,327	129.88
GRAND TOTAL	2,675	24,218	100.00%	613,695	2,760,499	3,374,194	139.33

PACT Beneficiaries

Appendix E

Matriculation Information: Executive Summary

Paid Dates 10/1/2018 - 9/30/2019

	Number of Enrollments	Semester Hours	Percentage of Total Hours	Fees Paid	Tuition Paid	Total Tuition and Fees Paid	Portion	Average Paid Per Semester Hour
<i>Alabama Universities</i>								
Total Four-Year Alabama Universities	12,283	149,648	71.10%	\$ 623,315.80	\$49,034,096.99	\$49,657,412.79	77.70%	\$331.83
<i>Alabama Community Colleges</i>								
Total Community Colleges	2,622	23,715	11.27%	\$ 605,393.78	\$ 2,703,472.48	\$ 3,308,866.26	5.18%	\$139.53
Total Technical Colleges	53	503	0.24%	\$ 8,300.89	\$ 57,026.49	\$ 65,327.38	0.10%	\$129.88
Total Alabama Community Colleges	2,675	24,218	11.51%	\$ 613,694.67	\$ 2,760,498.97	\$ 3,374,193.64	5.28%	\$139.33
<i>Out-Of-State Institutions</i>								
Out-Of-State Community Colleges	135	1,316	0.63%	\$ 7,864.31	\$ 231,359.34	\$ 239,223.65	0.37%	\$181.78
Out-Of-State Technical Colleges	63	715	0.34%	\$ 6,188.05	\$ 208,865.35	\$ 215,053.40	0.34%	\$300.91
Out-Of-State Universities	1,491	19,567	9.30%	\$ 206,528.96	\$ 5,643,779.71	\$ 5,850,308.67	9.15%	\$299.00
Out-Of-State Private Universities	231	3,149	1.50%	\$ 34,304.99	\$ 915,862.90	\$ 950,167.89	1.49%	\$301.70
Total Out-Of-State Institutions	1,920	24,747	11.76%	\$ 254,886.31	\$ 6,999,867.30	\$ 7,254,753.61	11.35%	\$293.16
<i>Private Institutions</i>								
Private Community Colleges			0.00%	\$.00	\$.00	\$.00	0.00%	\$.00
Private Technical Colleges	5	59	0.03%	\$ 243.12	\$ 4,644.64	\$ 4,887.76	0.01%	\$83.32
Private Senior Colleges	857	11,715	5.57%	\$ 132,994.24	\$ 3,467,911.94	\$ 3,600,906.18	5.63%	\$307.37
Private Universities	10	78	0.04%	\$ 572.27	\$ 20,151.40	\$ 20,723.67	0.03%	\$265.69
Total Private Institutions	872	11,852	5.63%	\$ 133,809.63	\$ 3,492,707.98	\$ 3,626,517.61	5.67%	\$305.99
GRAND TOTAL	17,750	210,465	100.00%	\$1,625,706.41	\$62,287,171.24	\$63,912,877.65	100.00%	\$303.67

