



**VALUATION OF THE  
EDUCATION BENEFITS FUND**

**SEPTEMBER 30, 2019**

*DoD Office of the Actuary*

*January 2021*

## **ACTUARIAL CERTIFICATION**

This September 30, 2019, report on the Education Benefits Fund, hereafter referred to as the Fund, has been prepared in accordance with generally accepted actuarial principles and practices. In preparing this report, we have relied upon information maintained by the Department of Defense and the Department of Veterans Affairs regarding program provisions, assets, eligible members, and benefit usage. The purpose of this report is to document the actuarial status of the Fund and the funding amounts to support the Secretary of Defense and the DoD Board of Actuaries (Board) in meeting the requirements of Section 2006, Title 10, United States Code. Use of these results for other purposes may not be appropriate.

We have performed the valuation using methods and assumptions approved by the Board. In general, the decrement rates used in the valuation are based on actual experience of the Fund. The annual economic assumptions, as set by the Board, include an interest rate of 2.75% and an ultimate Consumer Price Index increase of 2.20%.

In our opinion, the actuarial assumptions are reasonable and the valuation results present a fair assessment of the financial condition of the Fund, given the available data and the limitations as described in Section 3 of this report.

Refer to the DoD Office of the Actuary website, <https://actuary.defense.gov/>, for contact information.

*Richard Allen*

Richard Allen \*  
Actuary  
ASA, MAAA  
US Dept of Defense  
Office of the Actuary  
4800 Mark Center Drive, Suite 03E25  
Alexandria, VA 22350  
[Richard.S.Allen40.civ@mail.mil](mailto:Richard.S.Allen40.civ@mail.mil)

*Pete Zouras*

Peter Zouras \*  
Chief Actuary  
ASA, MAAA, EA  
US Dept of Defense  
Office of the Actuary  
4800 Mark Center Drive, Suite 03E25  
Alexandria, VA 22350  
[Peter.M.Zouras.civ@mail.mil](mailto:Peter.M.Zouras.civ@mail.mil)

\* Meets the qualification standards of the American Academy of Actuaries to render the actuarial opinion referenced above.

**EDUCATION BENEFITS FUND REPORT**

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## **SECTION 1 – INTRODUCTION**

The Department of Defense Education Benefits Fund was established by 10 USC 2006 to pay education benefits to members of the armed forces. The Fund, which shall be administered by the Department of Treasury, shall be used for the accumulation of funds in order to finance armed forces education liabilities on an actuarially sound basis. Benefits covered by the Fund have been expanded many times (see Appendix E) and the Fund can now pay for the following benefits:

- Title 38, Chapter 30/33 kicker and transferred kicker benefits<sup>1</sup>
- Title 10, Chapter 1606 basic and transferred basic benefits<sup>2</sup>
- Title 10, Chapter 1606 kicker and transferred kicker benefits<sup>2</sup>
- Title 10, Chapter 1607 basic benefits<sup>3</sup>
- Title 38, Chapter 30 basic benefits for Post-Vietnam Era and Involuntary Separatees (Category III)
- Title 10, Chapter 31, Section 510 National Call to Service<sup>4</sup>
- Title 38, Chapter 30, Section 3020 transferred benefits<sup>4</sup>

The Board<sup>5</sup>, whose members are appointed by the Secretary of Defense, approves methods and assumptions used in the Fund valuation, reports to the Secretary of Defense annually on the actuarial status of the Fund, and recommends changes needed to maintain the Fund on a sound actuarial basis.

<sup>1</sup>Benefit is in conjunction with the Department of Veterans Affairs funded Chapter 30, also referred to as Montgomery GI Bill–Active Duty (MGIB-AD) benefit, and Chapter 33 (Post 9/11 GI Bill) basic benefit.

<sup>2</sup>Also referred to as Montgomery GI Bill–Selected Reserve (MGIB-SR) benefit. Transferred benefits are not currently offered under Chapters 1606 directly, but if transferability is achieved through Chapter 33, Chapter 1606 kicker benefits can be transferred.

<sup>3</sup> The National Defense Authorization Act of 2016, P.L. 114-92 (November 25, 2015), sunset Chapter 1607 (also known as Reserve Educational Assistance Program, or REAP) benefits on November 25, 2015. Some individuals remained eligible for REAP benefits until November 25, 2019.

<sup>4</sup>Due to the relatively small size of benefits for National Call to Service and Chapter 30, Section 3020 Transferability, liability amounts for those programs have not been estimated.

<sup>5</sup>Assumptions and methods for this valuation were reviewed and approved by DoD Board of Actuaries members Marcia Dush (Chair), John Moore, and Michael Clark at a public meeting (virtual) on June 26, 2020.

**SECTION 1 – INTRODUCTION (Cont.)**

**How to Use this Report**

- An executive summary of the Fund can be found in Section 2.
- In various places in the report, numbers may not add exactly due to rounding.
- An explanation of terms used throughout the report can be found in Appendix G.
- Additional information can be obtained by contacting the Office of the Actuary (OACT) as detailed on page 2.
- Only Chapter 1606 kickers and Chapter 30 kickers are currently being used. For the purpose of this report, please refer to the following table when referencing kickers:

<b>OACT Report Name</b>	<b>Description</b>
Chapter 30 kickers	Chapter 30 kickers used with Chapter 30 basic or Chapter 33 basic
Chapter 33 kickers	Chapter 33 kickers used with Chapter 33 basic
Chapter 1606 kickers	Chapter 1606 kickers used with Chapter 1606 basic, Chapter 1607 basic or Chapter 33 basic

**SECTION 2 – EXECUTIVE SUMMARY**

(\$ in millions)

	<u>Chapter 30/33</u>	<u>Chapter 1606</u>	<u>Chapter 1607<sup>2</sup></u>	<u>Other<sup>3</sup></u>	<u>Total</u>
<b>Sept. 30, 2019 Eligibles<sup>1</sup></b>	139,627	444,073	N/A	N/A	583,700
<b>Sept. 30, 2019 Fund Balance</b>					
Sept. 30, 2018 Fund Balance	\$437.6	\$634.0	\$3.3	\$9.1	\$1,083.9
FY19 Asset Transfers	\$0.0	\$1.5	\$(1.5)	\$0.0	\$0.0
FY19 Amortization Payments	17.5	1.7	0.0	0.1	19.2
FY19 Per Capita Contributions	0.0	168.5	0.0	0.0	168.5
FY19 Benefit Payments	(70.5)	(125.9)	(1.2)	(0.1)	(197.8)
FY19 Interest	11.5	18.3	0.0	0.2	30.1
FY19 Total Changes	\$(41.6)	\$64.0	\$(2.7)	\$0.3	\$20.1
Sept. 30, 2019 Fund Balance <sup>4</sup>	\$396.0	\$698.1	\$0.6	\$9.3	\$1,104.0
<b>Sept. 30, 2019 Snapshot</b>					
Actuarial Liability (AL)	\$353.0	\$364.3	\$4.7	\$0.1	\$722.1
Fund Balance <sup>4</sup>	<u>(396.0)</u>	<u>(698.1)</u>	<u>(0.6)</u>	<u>(9.3)</u>	<u>(1,104.0)</u>
Unfunded AL (Surplus)	\$(43.1)	\$(333.8)	\$4.2	\$(9.2)	\$(381.9)

The above table summarizes the FY 2019 Fund experience and actuarial valuation results as of September 30, 2019. The majority of liabilities detailed in this report stem from active duty kickers, reserve kickers, and reserve basic benefits.

These results depend on the underlying data and assumptions. We relied without audit on the data provided by the Defense Manpower Data Center (DMDC) and the Defense Finance and Accounting Service (DFAS). Current results may be under- or over-stated if data are inaccurate and future results will vary to the extent that experience differs from assumptions.

<sup>1</sup>Members eligible for multiple programs are counted separately for each program.

<sup>2</sup>Chapter 1607 eligible counts are not included because program is sunset in November, 2019.

<sup>3</sup>Other is Category III, National Call to Service and Chapter 30 Section 3020 Transferability. Due to the relatively small size of benefits and no benefits paid since FY 2008 for National Call to Service and Chapter 30 Section 3020 Transferability, liability amounts for those programs have not been estimated. Liability amounts in this column represent only the Category III liability. Fund balances for National Call to Service and Chapter 30 Section 3020 Transferability are still reflected in this column.

<sup>4</sup>Officially, there is only one Fund. OACT allocates the Fund into separate accounts for the various programs by component, using reported contributions and benefit payments by program for each component and allocating reported interest earnings by program.

### **SECTION 3 – VALUATION DATA**

The valuation data are taken from files maintained by DMDC along with financial data provided by DFAS. Data used for future projections of the Chapter 30 (active duty), Chapter 33 (active duty and reserve), Chapter 1606 (reserve), and Chapter 1607 (reserve) programs are provided from DMDC, DFAS, Office of the Under Secretary of Defense for Personnel and Readiness (Manpower and Reserve Affairs), and Under Secretary of Defense (Comptroller). An overview of the number of members in each program and their status can be found in Appendix B, Population Data. Data on benefit payments and contributions are from DFAS, in some cases supplemented by Department of Veterans Affairs (VA) reports. In the case of benefit payments, VA makes payments to members and receives reimbursement from the Fund where appropriate; DFAS reports information submitted to them by VA. In the case of Fund contributions, DFAS reports monies and associated information received from the military components.

OACT has unresolved concerns with VA regarding their inability to make accurate and complete member level data available to DoD. The missing and inaccurate data can create large and material limitations to valuation accuracy. In particular, for Chapter 1606 and Chapter 30, there are unresolved discrepancies between DMDC and DFAS total benefit usage. For data for FY 2019, OACT received 87% of the data needed for Chapter 1606 and 86% of the data needed for Chapter 30 kickers. For earlier years, the amount of data received was much less.

The data was reviewed for reasonableness and consistency, including a reasonableness check of eligible counts, modifications for codes that conflict with dates given, adjustments for unreasonable benefit amounts, and adjustments to months used to account for discrepancies between DMDC and DFAS total benefit usage. However, the data has not been audited by OACT and OACT is not responsible for the accuracy of the data. Responsibility for the accuracy of the member data lies with the components who report eligibility and demographic data to DMDC. Responsibility for financial data related to Fund transactions and benefit usage is shared between the components, VA, and DFAS.

**SECTION 4 – ASSETS, UNFUNDED LIABILITIES, AND ANNUAL CHANGES**

(\$ in millions)

Using the input data described in the previous section and Appendix B, OACT computed the actuarial liability for the Chapter 30/33 kicker benefit, the Chapter 1606 basic benefit, the Chapter 1606 kicker benefit, and the Chapter 1607 benefit. The total value of assets on the valuation date (September 30, 2019) was obtained from the Fund's investment manager at DFAS. OACT tracks assets and liabilities separately by program and component and may transfer assets between programs (not components) with the Board's approval. For official accounting, the assets and liabilities are pooled into one Fund. The programs' unfunded liabilities or surpluses are as follows:

**Chapter 30/33 Kicker Benefits as of September 30, 2019**

<b><u>Component</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or Surplus</u></b>
Army	\$255.1	(\$317.9)	(\$62.8)
Navy	\$66.4	(\$40.5)	\$25.9
Marine Corps	\$30.5	(\$36.4)	(\$5.9)
<u>Coast Guard</u>	<u>\$1.0</u>	<u>(\$1.2)</u>	<u>(\$0.2)</u>
Total	\$353.0	(\$396.0)	(\$43.1)

**Chapter 1606 Basic and Kicker Benefits as of September 30, 2019**

<b><u>Component</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or Surplus</u></b>
Army Nat Guard	\$169.1	(\$348.4)	(\$179.3)
Army Reserve	\$70.9	(\$140.5)	(\$69.6)
Navy Reserve	\$9.7	(\$23.6)	(\$13.8)
Marines Reserve	\$19.2	(\$39.8)	(\$20.7)
Air Force Nat Guard	\$71.9	(\$81.9)	(\$10.0)
Air Force Reserve	\$23.1	(\$59.9)	(\$36.8)
<u>Coast Guard Reserve</u>	<u>\$0.3</u>	<u>(\$3.9)</u>	<u>(\$3.6)</u>
Total	\$364.3	(\$698.1)	(\$333.8)



**SECTION 4 – ASSETS, UNFUNDED LIABILITIES, AND ANNUAL CHANGES****(cont.)**

(\$ in millions)

**Chapter 1607 Basic Benefits as of September 30, 2019**

<b><u>Component</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or Surplus</u></b>
Army National Guard	\$2.9	(\$0.1)	\$2.7
Army Reserve	\$1.0	(\$0.3)	\$0.7
Navy Reserve	\$0.1	(\$0.0)	\$0.1
Marines Reserve	\$0.2	(\$0.0)	\$0.2
Air Force National Guard	\$0.3	(\$0.1)	\$0.2
Air Force Reserve	\$0.2	\$0.0	\$0.2
<u>Coast Guard Reserve</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total	\$4.7	(\$0.6)	\$4.2

In addition to the above assets and liabilities, there are 15 items not reflected in this report (some of which are zero), one for each active duty component for Category III, National Call to Service, and Chapter 30 Section 3020 Transferability paid from the Fund. OACT tracks the assets and liabilities that directly impact the accuracy of the allocation by each combination of component and program. In addition to the above assets and liabilities, the Fund allocation is dependent on the accuracy of the reported Fund transactions.

**SECTION 4 – ASSETS, UNFUNDED LIABILITIES, AND ANNUAL CHANGES**

**(cont.)**

(\$ in millions)

<b><u>Chapter 30/33 Annual Changes</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>% of Projected Actuarial Liability</u></b>
<b><u>Expected 9/30/2019<sup>1</sup></u></b>		
Projected September 30, 2019 Assets	\$391.7	
<u>Projected September 30, 2019 Liability</u> Projected	<u>\$412.3</u>	
September 30, 2019 Unfunded Liability	\$20.7	
Actual September 30, 2019 Assets	\$396.0	
<u>Actual September 30, 2019 Liability</u>	<u>\$353.0</u>	
Actual September 30, 2019 Unfunded Liability	(\$43.1)	
September 30, 2019 (Gain)/Loss	(\$63.8)	-15.5%
<u>(Gain)/Loss Due to Liability</u>		
Withdrawal Experience & Census Changes	(\$77.2)	-18.7%
Interest Rate Assumption Change	\$9.1	2.2%
Usage Rate and Other Assumption Changes <u>New</u>	\$8.7	2.1%
<u>Entrant Experience</u>	<u>\$0.0</u>	<u>0.0%</u>
Total Liability (Gain)/Loss	(\$59.4)	-14.4%
<u>(Gain)/Loss Due to Assets</u>		
Benefit Usage Experience	(\$6.7)	-1.6%
Contribution Experience	\$0.0	0.0%
<u>Interest Earning Experience<sup>2</sup></u>	<u>\$2.3</u>	<u>0.6%</u>
Total Assets (Gain)/Loss	(\$4.4)	-1.1%

The development above reflects the changes in actuarial liability from the 9/30/2018 valuation (projected) to the 9/30/2019 valuation (actual) for Chapter 30/33 kickers. Assumed rates<sup>3</sup> are updated each year to reflect the most recent experience. Census changes were the largest driver of the Chapter 30/33 gain and this is reflected in "Withdrawal Experience & Census Changes."

<sup>1</sup>Expected 9/30/2019 assets and liabilities are based off 9/30/2018 valuation

<sup>2</sup>The components of (Gain)/Loss Due to Assets represents the difference between expected and actual amounts for each item. The percentage change for Interest Earning Experience is expressed as a percent of "Projected September 30, 2019 Assets."

<sup>3</sup>"Rate" refers to probabilities or averages, for example, the probability of staying in service, probability of using the benefit in a given year, or average months of benefit used in a given year.

**SECTION 4 – ASSETS, UNFUNDED LIABILITIES, AND ANNUAL CHANGES****(cont.)**

(\$ in millions)

<b><u>Chapter 1606 Annual Changes</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>% of Projected Actuarial Liability</u></b>
<b><u>Expected 9/30/2019</u></b>		
Projected September 30, 2019 Assets	\$691.7	
<u>Projected September 30, 2019 Liability</u>	<u>\$373.9</u>	
Projected September 30, 2019 Unfunded Liability	(\$317.8)	
Actual September 30, 2019 Assets	\$698.1	
<u>Actual September 30, 2019 Liability</u>	<u>\$364.3</u>	
Actual September 30, 2019 Unfunded Liability	(\$333.8)	
September 30, 2019 (Gain)/Loss	(\$15.9)	-4.3%
<u>(Gain)/Loss Due to Liability</u>		
Withdrawal Experience & Census Changes	\$6.7	1.8%
Interest Rate Assumption Change	\$12.8	3.4%
Usage Rate and Other Assumption Changes	\$5.0	1.3%
<u>New Entrant Experience</u>	<u>(\$34.1)</u>	<u>-9.1%</u>
Total Liability (Gain)/Loss	(\$9.6)	-2.6%
<u>(Gain)/Loss Due to Assets</u>		
Benefit Usage Experience	\$4.4	1.2%
Contribution Experience	(\$14.2)	-3.8%
<u>Interest Earning Experience<sup>1</sup></u>	<u>\$3.5</u>	<u>0.5%</u>
Total Assets (Gain)/Loss	(\$6.3)	-1.7%

The development above reflects the changes in actuarial liability from the last valuation (projected) to the latest valuation (actual) for Chapter 1606. Assumed rates are updated each year to reflect the most recent experience. The organizations responsible for administering transferability under Chapter 1606 have communicated to OACT that transferability is not currently offered through Chapter 1606. Differences in liability between actual and expected new entrants was the largest driver of the gain and this is reflected in "New Entrant Experience."

<sup>1</sup>The components of (Gain)/Loss Due to Assets represents the difference between expected and actual amounts for each item. The percentage change for Interest Earning Experience is expressed as a percent of "Projected September 30, 2019 Assets."

**SECTION 5 – AMORTIZATION PAYMENTS**

When a program is projected to have an unfunded liability, an amortization payment is scheduled to be paid into the Fund. This payment is the first year’s payment of a five-year amortization schedule at the valuation interest rate. The five-year amortization schedule was chosen by the Board and will be reset each year, i.e., the schedule is given a “fresh start” every year. While this amortization method asymptotically approaches full funding, technically, the fund will not actually reach full funding without a change in the projected liability. For budgetary reasons, annual amortization payments are determined two years in advance and therefore do not reflect all information available as of the date the amortization payments are made.

The amortization payments for FY 2021 (determined in the September 30, 2018, valuation) and FY 2022 (determined in the September 30, 2019, valuation) are shown in the following tables. The amortization payments for the Chapter 1606 basic program and the Chapter 1606 kicker program are calculated together as a single Chapter 1606 amortization payment.

Public Law 114-92, The National Defense Authorization Act of 2016, stated that Chapter 1607 benefits would sunset on November 25, 2019. The Board approved an internal transfer of funds for each reserve component between Chapter 1606 and Chapter 1607 to fund the remaining projected Chapter 1607 benefits. Because of this transfer, there are not amortization payments scheduled for Chapter 1607.

Note that the payment for Category III is determined differently. The October 1, 2020 payment for the Category III program was determined by estimating FY 2020 benefits and bringing forward any surplus or liability from October 1, 2019. Both items were adjusted for interest and then added together to determine the October 1, 2020 payment.

**Chapter 30/33 Annual Amortization Amounts**

<b><u>Component</u></b>	<b><u>FY 2021 10/1/2020</u></b>	<b><u>FY 2022 10/1/2021</u></b>
Army	\$0	\$0
Navy	\$5,204,989	\$1,630,752
Marine Corps	\$139,593	\$0
Coast Guard	\$0	\$0

**Chapter 1606 Annual Amortization Amounts**

<b><u>Component</u></b>	<b><u>FY 2021 10/1/2020</u></b>	<b><u>FY 2022 10/1/2021</u></b>
Army National Guard	\$0	\$0
Army Reserve	\$0	\$0
Navy Reserve	\$0	\$0
Marine Corps Reserve	\$0	\$0
Air National Guard	\$0	\$0
Air Force Reserve	\$0	\$0
Coast Guard Reserve	\$0	\$0

**SECTION 5 – AMORTIZATION PAYMENTS (cont.)**

**Category III Basic Annual Payment<sup>1</sup>**

<b><u>Component</u></b>	<b><u>FY 2021 10/1/2020</u></b>	<b><u>FY 2022 10/1/2021</u></b>
Army	\$3,676	Set Next Year
Navy	\$8,118	Set Next Year
Marine Corps	\$4,505	Set Next Year
Air Force	\$12,796	Set Next Year
Coast Guard	\$0	Set Next Year

<sup>1</sup>Payments for Category III are not pre-funded, but are calculated based on actual and projected benefit payments during the previous year.

**SECTION 6 – PER CAPITA AMOUNTS**

The per capita amounts for the Chapter 30/33 and Chapter 1606 programs are given below. A separate per capita amount is set for each component, program, and benefit amount. Per capita amounts are usually determined once per year, but may be calculated more often if there are significant changes, such as major legislative changes. The per capita amounts below have corresponding normal costs that are shown in Appendix C, Assumptions and Methods. Note that there are not any per capita amounts for Category III because the cost for that benefit is determined in aggregate after benefits are paid.

When a program is expected to have a surplus, a portion of the surplus is used to decrease the per capita amount. This portion or “offset” is the first year’s payment of a five-year amortization schedule at the valuation interest rate. The amortization schedule is reset each year, i.e., the schedule is given a “fresh start” every year. The Chapter 30/33 kicker per capita amounts were not offset because, per the Comptroller’s office, none of the active duty services is expected to offer any kicker benefits to new entrants in either FY 2021 or FY 2022. For budgetary reasons, expected surpluses (and unfunded liabilities) are determined two years in advance and therefore do not reflect all data available as of the date the per capita amounts are paid.

**Chapter 30 Kicker Benefit Per Capita Amounts for FY 2021**

<b><u>Kicker Amount</u></b>	<b><u>Army 2 Year<sup>1</sup></u></b>	<b><u>Army 3 Year</u></b>	<b><u>Army 4 Year</u></b>	<b><u>Army 5 Year</u></b>	<b><u>Army 6 Year</u></b>	<b><u>Navy 4 Year</u></b>	<b><u>M.C. 4 Year</u></b>	<b><u>M.C. 5 Year</u></b>	<b><u>M.C. 6 Year</u></b>	<b><u>C.G. 4 Year</u></b>
<b>\$150</b>	\$1,901	\$1,828	\$1,736	\$1,665	\$1,533	\$1,913	\$1,887	\$1,849	\$1,787	\$1,495
<b>\$250</b>	\$3,204	\$3,081	\$2,923	\$2,801	\$2,579	\$3,222	\$3,173	\$3,109	\$3,006	\$2,508
<b>\$350</b>	\$4,537	\$4,362	\$4,135	\$3,957	\$3,642	\$4,556	\$4,482	\$4,390	\$4,245	\$3,532
<b>\$450</b>	\$5,897	\$5,669	\$5,369	\$5,133	\$4,722	\$5,915	\$5,811	\$5,692	\$5,504	\$4,569
<b>\$550</b>	\$7,284	\$7,001	\$6,625	\$6,326	\$5,820	\$7,297	\$7,162	\$7,014	\$6,783	\$5,616
<b>\$650</b>	\$8,697	\$8,359	\$7,903	\$7,539	\$6,934	\$8,702	\$8,532	\$8,355	\$8,081	\$6,675
<b>\$750</b>	\$10,136	\$9,740	\$9,201	\$8,768	\$8,064	\$10,128	\$9,923	\$9,715	\$9,397	\$7,744
<b>\$850</b>	\$11,600	\$11,145	\$10,520	\$10,015	\$9,209	\$11,576	\$11,332	\$11,093	\$10,730	\$8,824
<b>\$950</b>	\$13,088	\$12,573	\$11,859	\$11,279	\$10,369	\$13,043	\$12,579	\$12,489	\$12,082	\$9,913

**Chapter 30 Kicker Benefit Per Capita Amounts for FY 2022**

<b><u>Kicker Amount</u></b>	<b><u>Army 2 Year</u></b>	<b><u>Army 3 Year</u></b>	<b><u>Army 4 Year</u></b>	<b><u>Army 5 Year</u></b>	<b><u>Army 6 Year</u></b>	<b><u>Navy 4 Year</u></b>	<b><u>M.C. 4 Year</u></b>	<b><u>M.C. 5 Year</u></b>	<b><u>M.C. 6 Year</u></b>	<b><u>C.G. 4 Year</u></b>
<b>\$150</b>	\$2,474	\$2,373	\$2,239	\$2,141	\$2,062	\$2,113	\$1,740	\$1,668	\$1,599	\$1,733
<b>\$250</b>	\$4,161	\$3,992	\$3,764	\$3,597	\$3,462	\$3,554	\$2,930	\$2,809	\$2,687	\$2,903
<b>\$350</b>	\$5,876	\$5,638	\$5,314	\$5,074	\$4,882	\$5,019	\$4,143	\$3,971	\$3,792	\$4,083
<b>\$450</b>	\$7,618	\$7,310	\$6,886	\$6,571	\$6,321	\$6,506	\$5,378	\$5,155	\$4,913	\$5,273
<b>\$550</b>	\$9,385	\$9,008	\$8,481	\$8,088	\$7,779	\$8,015	\$6,635	\$6,359	\$6,049	\$6,474
<b>\$650</b>	\$11,176	\$10,729	\$10,097	\$9,623	\$9,253	\$9,544	\$7,912	\$7,584	\$7,201	\$7,684
<b>\$750</b>	\$12,991	\$12,472	\$11,732	\$11,176	\$10,743	\$11,093	\$9,210	\$8,828	\$8,367	\$8,903
<b>\$850</b>	\$14,828	\$14,237	\$13,386	\$12,746	\$12,250	\$12,661	\$10,528	\$10,091	\$9,548	\$10,131
<b>\$950</b>	\$16,685	\$16,023	\$15,058	\$14,331	\$13,771	\$14,247	\$11,865	\$11,372	\$10,743	\$11,367

<sup>1</sup> Refers to the number of years a member must serve to earn the benefit

**SECTION 6 – PER CAPITA AMOUNTS (cont.)**

**Chapter 1606 Basic and Kicker Benefit Per Capita Amounts for FY 2021**

	<b><u>Army Guard</u></b>	<b><u>Army Reserve</u></b>	<b><u>Navy Reserve</u></b>	<b><u>Marine Reserve</u></b>	<b><u>Air Guard</u></b>	<b><u>Air Reserve</u></b>	<b><u>Coast Guard</u></b>
Basic	\$626	\$576	\$226	\$762	\$1,981	\$0	\$0
\$100 Kicker	\$481	\$540	\$1,038	\$977	\$755	\$750	\$588
\$200 Kicker	\$987	\$1,202	\$1,986	\$1,611	\$1,551	\$1,536	\$1,471
\$350 Kicker	\$3,353	\$2,265	\$4,265	\$3,445	\$2,932	\$2,829	\$3,313

**Chapter 1606 Basic and Kicker Benefit Per Capita Amounts for FY 2022**

	<b><u>Army Guard</u></b>	<b><u>Army Reserve</u></b>	<b><u>Navy Reserve</u></b>	<b><u>Marine Reserve</u></b>	<b><u>Air Guard</u></b>	<b><u>Air Reserve</u></b>	<b><u>Coast Guard</u></b>
Basic	\$647	\$493	\$0	\$583	\$1,757	\$0	\$0
\$100 Kicker	\$486	\$514	\$1,050	\$912	\$764	\$776	\$558
\$200 Kicker	\$991	\$1,141	\$2,010	\$1,536	\$1,561	\$1,584	\$1,457
\$350 Kicker	\$3,344	\$2,172	\$4,163	\$3,175	\$2,901	\$2,887	\$3,271

Note that there are not any per capita amounts for Chapter 1607 because the program closed as of November 26, 2019.

## **SECTION 7 – EDUCATION BENEFITS FUND TRANSACTION PROCESS**

The effects of the Fund transaction process on the deficit, the debt, the DoD budget, and benefit security described in this section are applicable under the current practices of the federal government regarding budget accounting and tax policy. These practices do not provide for changes in taxes to pre-fund the education benefits programs but do result in changes in the national debt.

A trust fund was created inside the Unified Budget of the federal government for the monies of the education benefits programs. This fund has three sources of income: (1) monthly per capita payments made by DoD<sup>1</sup>, (2) annual amortization payments made by DoD, and (3) interest earnings on investments in government securities made by Treasury and the payment of the par values of these securities at maturity. All three of these items are intra-governmental transfers consisting of debits from one government account and credits to another.

The fund has two types of payouts--payments for members' and dependents' benefits, and purchases of U.S. Treasury securities. The purchase of a Treasury security is also an intra-governmental transfer, while a payment for a member's or dependent's benefit is not.

### **Effect of the Fund transaction process on the deficit**

Figure 1 on the following page depicts this process. The only transactions in a particular year that directly affect the **deficit** of the Unified Budget are those that pass in or out of the government, such as tax collections (which decrease the deficit) and payments for members' or dependents' benefits (which increase the deficit). The intra-governmental transfers are debits and credits within the federal budget, with no direct effect on the deficit. The following examples illustrate the process:

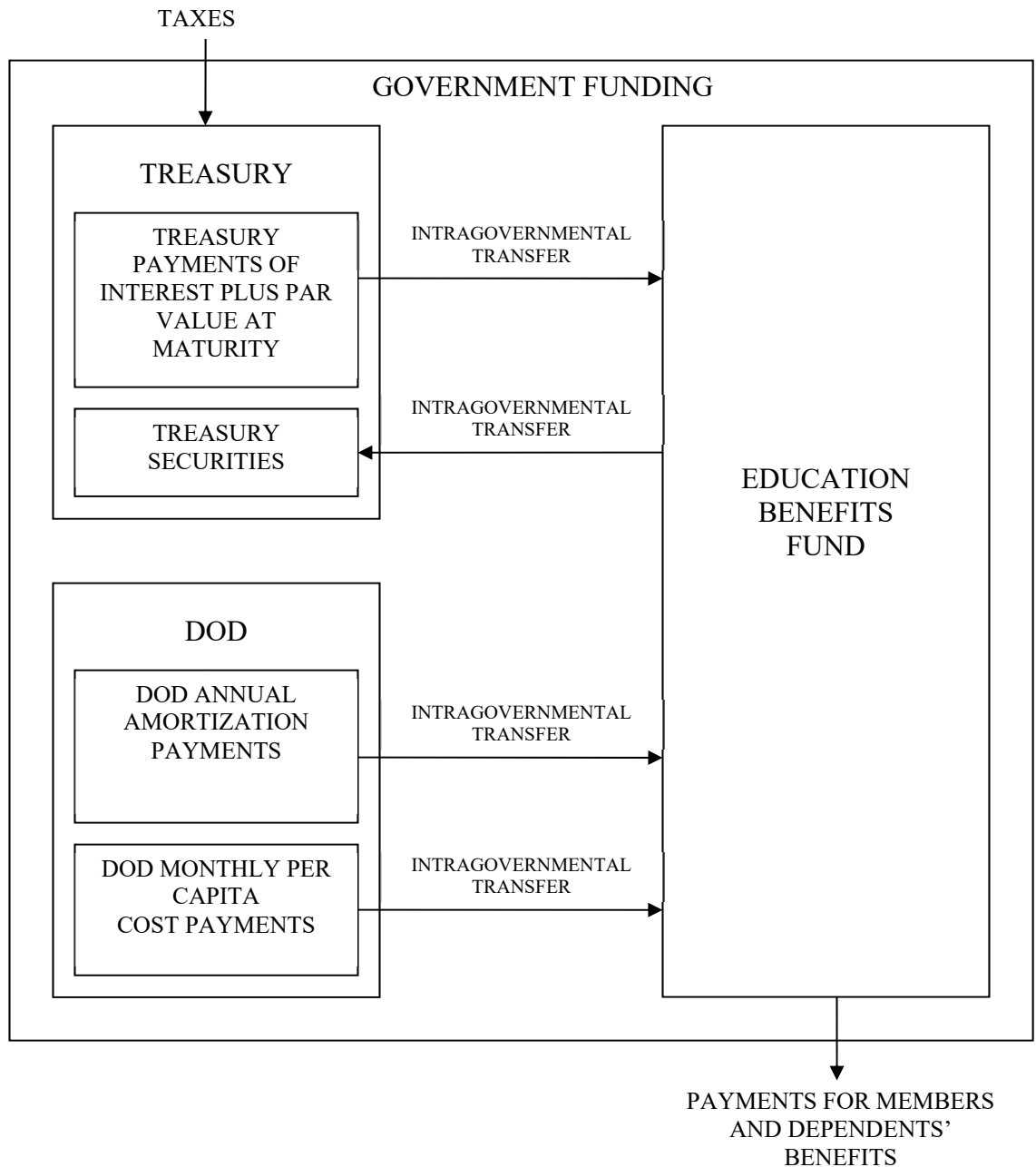
- If DoD debits \$170 million in per capita payments and the Fund credits the \$170 million, the net direct federal budget deficit effect is zero.
- If the Fund purchases \$70 million in securities (debit) and the Treasury sells \$70 million in securities (credit), the net direct federal budget deficit effect is zero.
- If the Treasury pays \$70 million in interest (debit) and the Fund earns \$70 million interest (credit), the net direct federal budget deficit effect is zero.
- Disregarding all other government programs, if the government collects \$150 million in tax revenues (credit) and pays \$170 million for members' and dependents' benefits (debit), the net direct federal budget deficit effect is \$20 million.

<sup>1</sup>References to "DoD" in this section also include Coast Guard.



**SECTION 7 – EDUCATION BENEFITS FUND TRANSACTION PROCESS (cont.)**

**Figure 1: Unified Budget**



All of the intra-governmental transfers inside Figure 1 will generate both a credit and an associated equal debit within the Unified Budget. Consequently, under current federal budget accounting practices, contributions to the Fund beyond what are required to pay benefits to members and dependents that year have no impact on the total federal deficit. Just as with the pay-as-you-go method, the only transactions that directly affect the deficit in the education benefits accounting process are payments for benefits.

## **SECTION 7 – EDUCATION BENEFITS FUND TRANSACTION PROCESS (cont.)**

### **Effect of the Fund transaction process on the debt**

On the other hand, the purchase of securities by the Fund does increase the national **debt**, specifically the portion of the debt held by the government. The portion held by the public will not change. However, the total debt will increase and this might require an increase in the statutory borrowing authority.

Suppose that the amount needed to pay for members' and dependents' benefits was \$400 million and the Fund had grown to \$2 billion. The following transactions would take place:

- Fund cashes in \$400 million in securities (credit).
- Treasury – pays \$400 million to the Fund (debit).
- Net federal surplus zero.

Since no budget surplus can be derived from using Fund money, the government still has a need for \$400 million to pay for benefits—the same need it would have under the pay-as-you-go system. Accordingly, the Fund cannot transfer liabilities from one tax year to another.

### **Effect of the Fund transaction process on the DoD budget**

The Fund transaction process has an effect on the **DoD budget**. With the per capita amount payments in the DoD budget, policymakers are forced to consider how manpower decisions affect future costs. For example, if a decision were made today to double the number of reserve members given kicker benefits, the DoD budget would have an immediate increase in obligations. Under the pay-as-you-go method, the expenses would not necessarily be considered to the same extent in the initial decision since they would not show up for several years (typically, active duty kickers are used after service members complete their contract or when they are transferred to a child much later).

### **Effect of the Fund transaction process on benefit security**

The Fund transaction process also provides benefit security that the pay-as-you-go method does not. In the short term, the Fund transaction process provides benefit security because it is not dependent on obtaining the necessary appropriation from Congress each year in order to pay benefits. In the long term, the Fund transaction process provides benefit security because it helps prevent benefits from being over-extended and later reduced.

## **APPENDIX A – DESCRIPTION OF BENEFITS**

The descriptions in this appendix are intended as an overview. For more detailed information, visit the links suggested.

### **Chapter 30 Kicker Eligibility**

Members may be eligible to receive a Chapter 30 kicker benefit if they are eligible to receive the Chapter 30 basic or the Chapter 33 basic benefit. They may be eligible if they have an honorable discharge, a high school diploma or GED or in some cases 12 hours of college credit, and meet the requirements of one of the program categories. Categories I, II, and IV are described below and Category III is described in a separate section. For more detailed information, visit: [https://www.benefits.va.gov/gibill/mgib\\_ad.asp](https://www.benefits.va.gov/gibill/mgib_ad.asp).

Category I includes those who entered active duty for the first time after June 30, 1985, and had military pay reduced by \$100 a month for the first 12 months. Members must have continuously a) served for 3 years, b) served for 2 years if they first enlisted for 2 years, or c) served for 2 years if they entered the Selected Reserve within a year of leaving active duty and served 4 years in the Selected Reserve.

Category II includes those who entered active duty before January 1, 1977, served at least 1 day between October 19, 1984, and June 30, 1985, and stayed on active duty through June 30, 1988 (or stayed on active duty through June 30, 1987, if they entered the Selected Reserve within 1 year of leaving active duty and served 4 years). Members must have had entitlement left from the Vietnam-Era GI Bill on December 31, 1989.

Category IV includes those who were on active duty on October 9, 1996, had money remaining in a Veteran's Educational Assistance Program (VEAP) account on that date, and elected Montgomery GI-Bill (MGIB-AD) by October 9, 1997. Another way to be included in Category IV would have been to enter full-time National Guard duty under Title 32, United States Code between July 1, 1985, and November 28, 1989, and have elected MGIB-AD during the period October 9, 1996 through July 8, 1997. Under either way, the member would have had military pay reduced by \$100 a month for 12 months or have made a \$1,200 lump-sum contribution.

### **Chapter 30 Kicker Benefit Amount**

The Secretary of Defense may increase the basic benefit up to an additional \$950 per month. Kicker amounts do not receive cost-of-living increases.

### **Chapter 30 Kicker Restrictions**

Generally, members are eligible to use the benefit up to 10 years after the date of their last discharge, but the number of years can vary, depending on the situation.

## **APPENDIX A – DESCRIPTION OF BENEFITS (cont.)**

### **Chapter 33 Kicker Member Eligibility**

Members may receive a Chapter 33 kicker benefit if they are eligible to receive the Chapter 33 basic benefit. Service members may be eligible if after September 10, 2001, they have served at least 90 days of aggregate active duty service and are still on active duty, or if they were honorably discharged or were discharged with a service-connected disability after 30 days. For more detailed information, visit [https://www.benefits.va.gov/gibill/post911\\_gibill.asp](https://www.benefits.va.gov/gibill/post911_gibill.asp).

### **Chapter 33 Kicker Transferred Benefit Eligibility**

Title V of the Supplemental Appropriations Act of 2008, P.L. 110-252 (June 30, 2008), commonly referred to as the Post-9/11 GI Bill, allows service members to transfer all or some unused benefits to their spouse or dependent children. The Harry W. Colmery Veterans Educational Assistance Act, P.L. 115-48 (August 16, 2017), also known as the Forever GI Bill, expands transferability eligibility in certain cases for Purple Heart recipients. The impact of this is expected to be minor and no explicit adjustment has been made to the valuation. The option to transfer is open to any member of the armed forces active duty or Selected Reserve, officer or enlisted who is eligible for the Post-9/11 GI Bill, and meets the following criteria: (1) has at least six years of service in the armed forces (active duty and/or Selected Reserve) on the date of approval and agrees to serve four additional years in the armed forces from the date of election or (2) has at least 10 years of service in the armed forces (active duty and/or Selected Reserve) on the date of approval, is precluded by either standard policy (by component or DoD) or statute from committing to four additional years, and agrees to serve for the maximum amount of time allowed by such policy or statute.

Spouses (1) may start to use the benefit immediately, (2) may use the benefit while the member remains in the armed forces or after separation from active duty, (3) are not eligible for the monthly housing allowance while the member is serving on active duty, and (4) may use the benefit for up to 15 years after the member's last separation from active duty.

Children (1) may start to use the benefit only after the member making the transfer has completed at least 10 years of service in the armed forces, (2) may use the benefit while the member remains in the armed forces or after separation from active duty, (3) may not use the benefit until they have attained a secondary school diploma (or equivalency certificate) or they have reached age 18, (4) are entitled to the monthly housing allowance stipend even though the member is on active duty, and (5) are not subject to the 15-year limit, but may not use the benefit after reaching 26 years of age.

### **Chapter 33 Kicker Benefit Amount**

The Secretary of Defense may increase the basic benefit up to an additional \$950 per month. Kicker amounts do not receive cost-of-living increases. Chapter 33 kicker benefits are values between and including \$150 and \$950, increasing in \$100 increments.

## **APPENDIX A – DESCRIPTION OF BENEFITS (cont.)**

### **Chapter 33 Kicker Restrictions**

For Veterans who left active duty on or after January 1, 2013, the period of eligibility for the Post-9/11 GI Bill does not end. For Veterans who left active duty before January 1, 2013, the period of eligibility ends 15 years from the date of last discharge from active duty.

### **Chapter 1606 Basic and Kicker Eligibility**

Eligible members must have had a six-year obligation to serve in the Selected Reserve signed after June 30, 1985. Officers must have agreed to serve 6 years in addition to their original obligation. For some types of training, it is necessary to have a six-year commitment that begins after September 30, 1990. Members must have completed their initial active duty for training (IADT) and must meet the requirement to receive a high school diploma or equivalency certificate before completing IADT. Lastly, members must remain in good standing while serving in the Selected Reserve. For more detailed information, visit [https://www.benefits.va.gov/gibill/mgib\\_sr.asp](https://www.benefits.va.gov/gibill/mgib_sr.asp).

At the discretion of the Secretary, a member may receive a Chapter 1606 kicker benefit if that member's occupation has been designated as a critical occupational specialty.

### **Chapter 1606 Basic and Kicker Benefit Amount**

The full-time institutional training rate is \$392 per month for fiscal year 2020. This rate became effective October 1, 2019. Fractional amounts may apply for less than full-time education.

The basic benefit may be increased by a kicker benefit of as much as \$350 per month for recruits in critical skills or critical specialties.

Consumer Price Index (CPI) increases are given to the basic benefit, but not to the kicker benefit.

### **Chapter 1606 Basic and Kicker Restrictions**

The maximum number of months of educational assistance that may be provided to any member under this chapter is 36.

Generally, the entitlement period for a member of the Selected Reserve expires at the date the member is separated from the Selected Reserve. For persons involuntarily separated from October 1, 1991, to September 30, 2001, or from October 1, 2007, to September 30, 2014, or for persons separated for disability not the result of willful misconduct, the period of entitlement expires at the end of the 14-year period beginning on the date on which the person became entitled to the benefit. The time period does not run if the member is prevented from pursuing a program of education because of a mental or physical disability incurred in or aggravated by service in the Selected Reserve.

## **APPENDIX A – DESCRIPTION OF BENEFITS (cont.)**

### **Chapter 1607 Reserve Education Assistance Program (REAP) Eligibility**

The National Defense Authorization Act of 2016 ended REAP on November 25, 2015. Some individuals remained eligible for REAP benefits until November 25, 2019, while others are no longer eligible for REAP benefits. For more detailed information visit:

<https://www.benefits.va.gov/gibill/reap.asp>.

### **Chapter 1607 Benefit Amount**

Each member is eligible for a portion of the Montgomery GI Bill Active Duty (MGIB-AD) 3-year benefit rate. The following rates become effective October 1, 2019:

- Members who serve 90 days to less than 1 year receive:  
40% of the MGIB-AD 3-year rate or \$820 per month
- Members who serve 1 year but less than 2 years receive:  
60% of the MGIB-AD 3-year rate or \$1,230 per month
- Members who serve 2 or more continuous years (or 3 years cumulative) receive:  
80% of the MGIB-AD 3-year rate or \$1,640 per month

### **Chapter 1607 Restrictions**

For a member of the Selected Reserve who has completed a service obligation, the period of eligibility ends on the earlier of November 25, 2019, or 10 years from the date of the last discharge or release from the Selected Reserve. For members separated while serving in the Individual Ready Reserve or members who have not completed a service obligation, eligibility ends upon separation from either the Individual Ready Reserve or Selected Reserve, as applicable.

### **Category III Eligibility**

To qualify under Category III, a member must have a high school diploma, GED or 12 hours of college credit, not be eligible under Category I or Category II, must have been on active duty on September 30, 1990, elected MGIB-AD before being separated, and before separation must have had military pay reduced by \$1,200. In addition, the member must have an involuntary separation after February 2, 1991, or have been voluntarily separated under either Voluntary Separation Incentive (VSI) program or Special Separation Benefit (SSB) Program. For more detailed information visit:

[https://www.benefits.va.gov/gibill/mgib\\_ad.asp](https://www.benefits.va.gov/gibill/mgib_ad.asp).

## **APPENDIX A – DESCRIPTION OF BENEFITS (cont.)**

### **Category III Benefit Amounts**

The full-time institutional training rate is \$2,050 per month for fiscal year 2020. This rate became effective October 1, 2019. Fractional amounts may apply for less than full-time education.

Annual increases for Category III are determined by the National Center for Education Statistics' index reflecting the average cost of undergraduate tuition.

### **Category III Restrictions**

Generally, members are eligible to use the benefit up to 10 years after the date of their last discharge. However, if the member's eligibility is based on 2 years of active duty and 4 years in the Selected Reserve, the 10 years begins on the date of release from active duty, or the date of completion of the four-year Selected Reserve obligation, whichever is later.

### **Restrictions for all Fund Benefits**

Members entitled to educational assistance under a program established by the MGIB who are also eligible for assistance under another educational assistance program may not receive assistance under both programs simultaneously; they must choose one or the other.

If a member is eligible for more than one program, they must notify VA in writing which program they intend to use before enrolling in training.

No member may receive basic benefits from any one program for more than 36 months or its equivalent in part-time educational assistance. Excluding transferred benefits, a member may only receive a total of 48 months of benefits from all benefit programs combined.

If a member is eligible for the Post-9/11 GI Bill and another benefit program, they must make an irrevocable election in writing before receiving any Post-9/11 GI Bill benefits. This means they cannot change back to the other program after they receive any Post-9/11 GI Bill benefits.

[https://gibill.custhelp.va.gov/app/answers/detail/a\\_id/523](https://gibill.custhelp.va.gov/app/answers/detail/a_id/523) offers more detailed information.

[https://www.benefits.va.gov/GIBILL/comparison\\_chart.asp](https://www.benefits.va.gov/GIBILL/comparison_chart.asp) offers some comparison tools for several types of VA education and training benefits.

**APPENDIX B – POPULATION DATA**

**Chapter 30 and 33 “Kicker” Eligibles**

	<b><u>Sept. 30, 2018</u></b>	<b><u>Sept. 30, 2019</u></b>
Army 2-Year	4,806	3,195
Army 3-Year	28,715	26,306
Army 4-Year	57,992	49,319
Army 5-Year	8,661	8,390
Army 6-Year	6,010	5,940
Navy 2-Year	29	25
Navy 3-Year	664	509
Navy 4-Year	37,383	29,592
Marine 4-Year	11,188	9,494
Marine 5-Year	6,949	6,429
Marine 6-Year	79	78
Coast Guard 4-Year	362	350
Total	162,838	139,627
Army	106,184	93,150
Navy	38,076	30,126
Marine Corps	18,216	16,001
Coast Guard	362	350
Total	162,838	139,627



**APPENDIX B – POPULATION DATA (cont.)****Chapter 1606 Eligibles**

	<b><u>Sept. 30, 2018</u></b>	<b><u>Sept. 30, 2019</u></b>
<b>1606 Eligibles, Excluding 33 Eligibles</b>		
Army National Guard	109,765	109,172
Army Reserve	44,116	41,182
Navy Reserve	8,526	8,089
Marine Corps Reserve	18,376	18,970
Air National Guard	13,570	12,109
Air Force Reserve	2,791	3,063
<u>Coast Guard Reserve</u>	<u>425</u>	<u>346</u>
Total	197,569	192,931
<b>Eligible for a \$100 Kicker Benefit</b>		
Army National Guard	53	53
Army Reserve	7,525	8,866
Navy Reserve	0	0
Marine Corps Reserve	0	0
Air National Guard	0	0
Air Force Reserve	0	0
<u>Coast Guard Reserve</u>	<u>0</u>	<u>0</u>
Total	7,578	8,919
<b>Eligible for a \$200 Kicker Benefit</b>		
Army National Guard	36,093	40,524
Army Reserve	10,986	11,565
Navy Reserve	398	389
Marine Corps Reserve	0	0
Air National Guard	0	0
Air Force Reserve	0	0
<u>Coast Guard Reserve</u>	<u>0</u>	<u>0</u>
Total	47,477	52,478
<b>Eligible for a \$350 Kicker Benefit</b>		
Army National Guard	9,584	16,712
Army Reserve	10,539	11,123
Navy Reserve	0	0
Marine Corps Reserve	358	509
Air National Guard	30,059	27,627
Air Force Reserve	11,275	11,160
<u>Coast Guard Reserve</u>	<u>0</u>	<u>0</u>
Total	61,815	67,131

## **APPENDIX C – ASSUMPTIONS AND METHODS**

### **Board Minutes Link**

Minutes documenting the Board meetings addressing methods and assumptions for the September 30, 2018 valuation and the September 30, 2019 valuation can be found here:

<https://actuary.defense.gov/External-Links/>

### **Actuarial Assumptions**

Actual experience of the programs will very likely not coincide exactly with assumed experience, regardless of the choice of the assumptions and methodologies. Each valuation provides a complete recalculation of assumed future experience and takes into account past differences between assumed and actual experience. The result is a series of adjustments to the computed expense. The assumptions are modified annually to reflect experience trends, legislative, regulatory, and administrative changes, and future expectations.

### **General Methodology Notes: Rate Determination**

The liabilities for programs depend on rates based mainly on the past 10 years of actual experience. Adjustments to the historical experience are sometimes made when results are based on too few cases or data appears to be unreliable in order to better project future outcomes. Recent years' historical experience is weighted more heavily than older years. For active duty rates, each past year's experience is weighted at 80% of the year it precedes. So, when deriving rates from historical experience, FY 2019 is weighted at 100%. FY 2018 is weighted at 80% of FY 2019. FY 2017 is weighted at 80% of FY 2018, which is 64% ( $0.80 * 0.80$ ) and so on. For reserve rates, each past year's experience is weighted at 60% of the year it precedes. Usage may be adjusted if it is expected to deviate from historical averages when different conditions may be forecast than existed during the time period the historical rates were taken. This year, as in previous years, aggregate model expectations have been adjusted to account for data limitations.

### **General Methodology Notes: Pre-Funding, Per Capita Amounts, and Liability Calculations**

All benefits are pre-funded except for Category III benefits. For all pre-funded benefits, monthly contributions known as per capita amounts go into the Fund. For all pre-funded benefits with a projected deficit, a portion of the unfunded liability is scheduled to be paid on the first day of the projected fiscal year in order to reduce the deficit. The annual amortization payment and the monthly Per Capita Amounts are collectively referred to in this report as contributions to the Fund.

Per capita amounts are the amounts needed to pay the benefits for qualifying individuals entering the various programs. Per capita amounts reflect the time value of money, the fact that not everyone uses the entire benefit for which they could become eligible, differences between components, and differences between programs. Per capita amounts may be reduced when a component has a projected surplus. In such cases, the per capita amount represents the normal cost reduced for surplus.

## **APPENDIX C – ASSUMPTIONS AND METHODS (cont.)**

Calculating the actuarial liability is similar to calculating the per capita amounts. For both calculations, we find the expected value of the benefits for those participants eligible to receive benefits in the future, adjusted for the time value of money. However, the per capita amount and the actuarial liability calculations are different in terms of the population involved and the time at which benefits are valued. The per capita amount calculation uses a hypothetical new-entrant group, whereas the liability calculation uses the actual census population as of the valuation date.

Future actuarial measurements may differ significantly from the current measurements due to the following factors: experience differing from that anticipated by the economic and behavior assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in program provisions or applicable law.

### **General Methodology Notes: Amortization of Unfunded Liability**

Unfunded liabilities are amortized over 5 years. Each year, the amortization calculation is given a fresh start based on that year's unfunded liabilities. While this amortization method asymptotically approaches full funding, technically, the fund will not actually reach full funding until many years into the future (well beyond the original amortization period of 5 years).

### **General Methodology Notes: Normal Cost Calculation**

In addition to the approach outlined in the “Methodology” notes above, the normal cost can be derived by multiplying the “Average Benefit Amount” by the “Percent of Benefit Used”, the “Discount Factor”, and 36 months, as detailed in the usage assumptions section. “Average Benefit Amount” is the fixed dollar amount for benefits that are not indexed; for benefits that are indexed, it reflects the effect of future projected increases to the benefit. “Percent of Benefit Used” reflects what portion (of a hypothetical new entrant group) is projected to become eligible and what percentage of the potential 36-month total entitlement is projected to be used. “Discount Factor” reflects the reduction in the normal cost due to discounting for interest and timing due to when the benefit is used. For example, a discount factor of 0.800 indicates the normal cost is 80% of what it otherwise would be if calculated with a zero interest rate.

### **Post-9/11 GI Bill Methodology Transferability Note**

Transferability has been implemented for Chapter 30 kicker benefits taken with Chapter 33. Members elect transferability at the 6 year-of-service point and can transfer any amount of unused benefits up to the full 36-month entitlement. Members must serve 4 additional years with some exceptions for those nearing retirement. The costs for transferability are implicit in the Chapter 30 kicker valuation, as usage rates reflect both member and dependent usage.

### **Chapter 1607 Methodology Notes**

NDAA 2016 sunset REAP on November 25, 2015. Some individuals will remain eligible for REAP benefits until November 25, 2019, while others are no longer eligible for REAP benefits.

**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)**

Liabilities for Chapter 1607 are calculated by projecting benefit payments from the end of fiscal year 2019 until the sunset date. Fund surpluses or deficits in Chapter 1607 will be made whole through an internal transfer between Chapter 1606 and Chapter 1607 for each respective guard or reserve component. There are not any per capita amounts for Chapter 1607 because the program no longer has new entrants.

**Chapter 30 & Chapter 1606 Methodology Notes**

Adjustments for Data Deficiencies: It was appropriate for the Chapters 30 and 1606 models to compensate for known deficiencies in the available data. Increases to the base models were made as follows:

	<b><u>Chapter 30</u></b>	<b><u>Chapter 1606<sup>1</sup></u></b>
Army	14%	17%
Army Guard		13%
Navy	17%	32%
Marine Corps	19%	26%
Air Force	N/A	28%
Air Force Guard		12%
<u>Coast Guard<sup>2</sup></u>	<u>946%</u>	<u>25%</u>
All Components	16%	15%

**Economic Assumptions**

The Board, independently of DoD, approves the methods and assumptions used to determine the costs of these programs. In June 2020, the Board approved the following economic assumptions for use in the valuation as of September 30, 2019.

<sup>1</sup>Refers to Reserve component unless specifically labeled as “Guard.”

<sup>2</sup>Rates for Active Duty Coast Guard use data from other active duty components. Figure shown is amount data would have to be increased if Coast Guard data was used without data from other components.

**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)**

**Interest Rate**

The Board set the Fund interest rate assumption at 2.75% annually. Below are the Fund’s interest earnings over the past ten years:

	<b><u>Interest Earnings</u></b>
FY 2010	2.8%
FY 2011	4.1%
FY 2012	2.9%
FY 2013	3.2%
FY 2014	2.9%
FY 2015	2.4%
FY 2016	2.6%
FY 2017	3.0%
FY 2018	3.4%
FY 2019	2.7%

**Inflation**

Annual inflation for the Chapter 1606 basic benefit is calculated, per Section 16131 (b) (2) of Title 10, United States Code, as the percentage increase, rounded to the nearest dollar, of the rate equal to the percentage by which the CPI (all items, United States city average) for the 12-month period ending on the June 30 preceding the beginning of the fiscal year for which the increase is made, exceed such CPI for the preceding 12-month period. The ultimate rate of inflation (CPI) is assumed to be 2.2% per year and the select (short-term) rates are given in the table below. These rates are projected using Blue Chip Financial Forecasts. Note that the only benefit covered that is directly adjusted by this CPI index is the Chapter 1606 basic benefit.

			<b><u>Projected CPI Increase</u></b>
FY 2020	to	FY 2021	1.4%
FY 2021	to	FY 2022	0.9%
FY 2022	to	FY 2023	2.1%
FY 2023	to	FY 2024	2.2%
FY 2024	to	FY 2025	2.2%
FY 2025	to	FY 2026	2.2%
FY 2026	to	FY 2027	2.1%
FY 2027	to	FY 2028	2.2%

**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)**

**Chapter 30/33 Usage Assumptions**

<b>Chapter 30/33 Kicker</b>	<b><u>Benefit Amount</u></b>	<b><u>Percent of Benefit Used</u></b>	<b><u>Discount Factor</u></b>	<b><u>FY 2022 Normal Cost</u></b>
Army 2 Year	\$150	56.5%	81.1%	\$2,474
Army 2 Year	\$250	57.0%	81.1%	\$4,161
Army 2 Year	\$350	57.5%	81.1%	\$5,876
Army 2 Year	\$450	57.9%	81.2%	\$7,618
Army 2 Year	\$550	58.4%	81.2%	\$9,385
Army 2 Year	\$650	58.8%	81.2%	\$11,176
Army 2 Year	\$750	59.3%	81.2%	\$12,991
Army 2 Year	\$850	59.7%	81.2%	\$14,828
Army 2 Year	\$950	60.1%	81.2%	\$16,685
<b>Chapter 30/33 Kicker</b>				
Army 3 Year	\$150	55.5%	79.2%	\$2,373
Army 3 Year	\$250	56.0%	79.2%	\$3,992
Army 3 Year	\$350	56.5%	79.2%	\$5,638
Army 3 Year	\$450	57.0%	79.2%	\$7,310
Army 3 Year	\$550	57.4%	79.2%	\$9,008
Army 3 Year	\$650	57.9%	79.2%	\$10,729
Army 3 Year	\$750	58.3%	79.2%	\$12,472
Army 3 Year	\$850	58.7%	79.3%	\$14,237
Army 3 Year	\$950	59.1%	79.3%	\$16,023
<b>Chapter 30/33 Kicker</b>				
Army 4 Year	\$150	53.5%	77.5%	\$2,239
Army 4 Year	\$250	53.9%	77.6%	\$3,764
Army 4 Year	\$350	54.4%	77.6%	\$5,314
Army 4 Year	\$450	54.8%	77.6%	\$6,886
Army 4 Year	\$550	55.2%	77.6%	\$8,481
Army 4 Year	\$650	55.6%	77.6%	\$10,097
Army 4 Year	\$750	56.0%	77.6%	\$11,732
Army 4 Year	\$850	56.4%	77.6%	\$13,386
Army 4 Year	\$950	56.7%	77.6%	\$15,058
<b>Chapter 30/33 Kicker</b>				
Army 5 Year	\$150	51.1%	77.5%	\$2,141
Army 5 Year	\$250	51.5%	77.5%	\$3,597
Army 5 Year	\$350	51.9%	77.5%	\$5,074
Army 5 Year	\$450	52.3%	77.6%	\$6,571
Army 5 Year	\$550	52.7%	77.6%	\$8,088
Army 5 Year	\$650	53.0%	77.6%	\$9,623
Army 5 Year	\$750	53.4%	77.6%	\$11,176
Army 5 Year	\$850	53.7%	77.6%	\$12,746
Army 5 Year	\$950	54.0%	77.6%	\$14,331

**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)****Chapter 30/33 Usage Assumptions (cont.)**

	<b><u>Benefit Amount</u></b>	<b><u>Percent of Benefit Used</u></b>	<b><u>Discount Factor</u></b>	<b><u>FY 2022 Normal Cost</u></b>
<b>Chapter 30/33 Kicker</b>				
Army 6 Year	\$150	49.7%	76.8%	\$2,062
Army 6 Year	\$250	50.1%	76.8%	\$3,462
Army 6 Year	\$350	50.5%	76.8%	\$4,882
Army 6 Year	\$450	50.8%	76.8%	\$6,321
Army 6 Year	\$550	51.1%	76.8%	\$7,779
Army 6 Year	\$650	51.5%	76.8%	\$9,253
Army 6 Year	\$750	51.8%	76.8%	\$10,743
Army 6 Year	\$850	52.1%	76.8%	\$12,250
Army 6 Year	\$950	52.4%	76.8%	\$13,771
<b>Chapter 30/33 Kicker</b>				
Navy 4 Year	\$150	55.3%	70.8%	\$2,113
Navy 4 Year	\$250	55.7%	70.9%	\$3,554
Navy 4 Year	\$350	56.1%	71.0%	\$5,019
Navy 4 Year	\$450	56.5%	71.0%	\$6,506
Navy 4 Year	\$550	57.0%	71.1%	\$8,015
Navy 4 Year	\$650	57.3%	71.1%	\$9,544
Navy 4 Year	\$750	57.7%	71.2%	\$11,093
Navy 4 Year	\$850	58.1%	71.2%	\$12,661
Navy 4 Year	\$950	58.4%	71.3%	\$14,247
<b>Chapter 30/33 Kicker</b>				
Marine Corps 4 Year	\$150	41.8%	77.1%	\$1,740
Marine Corps 4 Year	\$250	42.2%	77.2%	\$2,930
Marine Corps 4 Year	\$350	42.6%	77.2%	\$4,143
Marine Corps 4 Year	\$450	42.9%	77.3%	\$5,378
Marine Corps 4 Year	\$550	43.3%	77.4%	\$6,635
Marine Corps 4 Year	\$650	43.7%	77.4%	\$7,912
Marine Corps 4 Year	\$750	44.0%	77.5%	\$9,210
Marine Corps 4 Year	\$850	44.4%	77.5%	\$10,528
Marine Corps 4 Year	\$950	44.7%	77.6%	\$11,865
<b>Chapter 30/33 Kicker</b>				
Marine Corps 5 Year	\$150	41.0%	75.4%	\$1,668
Marine Corps 5 Year	\$250	41.4%	75.5%	\$2,809
Marine Corps 5 Year	\$350	41.7%	75.5%	\$3,971
Marine Corps 5 Year	\$450	42.1%	75.6%	\$5,155
Marine Corps 5 Year	\$550	42.5%	75.6%	\$6,359
Marine Corps 5 Year	\$650	42.8%	75.7%	\$7,584
Marine Corps 5 Year	\$750	43.2%	75.7%	\$8,828
Marine Corps 5 Year	\$850	43.5%	75.8%	\$10,091
Marine Corps 5 Year	\$950	43.9%	75.8%	\$11,372

**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)**

**Chapter 30/33 Usage Assumptions (cont.)**

	<b><u>Benefit Amount</u></b>	<b><u>Percent of Benefit Used</u></b>	<b><u>Discount Factor</u></b>	<b><u>FY 2022 Normal Cost</u></b>
<b>Chapter 30/33 Kicker</b>				
Marine Corps 6 Year	\$150	39.9%	74.3%	\$1,599
Marine Corps 6 Year	\$250	40.2%	74.3%	\$2,687
Marine Corps 6 Year	\$350	40.5%	74.4%	\$3,792
Marine Corps 6 Year	\$450	40.8%	74.4%	\$4,913
Marine Corps 6 Year	\$550	41.0%	74.4%	\$6,049
Marine Corps 6 Year	\$650	41.3%	74.5%	\$7,201
Marine Corps 6 Year	\$750	41.6%	74.5%	\$8,367
Marine Corps 6 Year	\$850	41.9%	74.6%	\$9,548
Marine Corps 6 Year	\$950	42.1%	74.6%	\$10,743
<b>Chapter 30/33 Kicker</b>				
Coast Guard 4 Year	\$150	47.7%	67.3%	\$1,733
Coast Guard 4 Year	\$250	47.9%	67.3%	\$2,903
Coast Guard 4 Year	\$350	48.1%	67.4%	\$4,083
Coast Guard 4 Year	\$450	48.3%	67.4%	\$5,273
Coast Guard 4 Year	\$550	48.5%	67.4%	\$6,474
Coast Guard 4 Year	\$650	48.7%	67.5%	\$7,684
Coast Guard 4 Year	\$750	48.9%	67.5%	\$8,903
Coast Guard 4 Year	\$850	49.0%	67.5%	\$10,131
Coast Guard 4 Year	\$950	49.2%	67.6%	\$11,367



**APPENDIX C – ASSUMPTIONS AND METHODS (cont.)****Chapter 1606 Usage Assumptions**

	<b><u>Average</u></b>	<b><u>Percent of</u></b>	<b><u>Discount</u></b>	<b><u>FY 2022</u></b>
<b>Chapter 1606 Basic</b>	<b><u>Benefit Amt</u></b>	<b><u>Benefit Used</u></b>	<b><u>Factor</u></b>	<b><u>Normal Cost</u></b>
Army National Guard	\$422	15.2%	93.8%	\$2,165
Army Reserve	\$422	8.6%	93.6%	\$1,230
Navy Reserve	\$426	4.9%	92.6%	\$698
Marine Corps Reserve	\$423	9.5%	93.2%	\$1,347
Air National Guard	\$419	17.7%	94.5%	\$2,527
Air Force Reserve	\$423	3.6%	93.5%	\$518
Coast Guard Reserve	\$421	15.8%	93.9%	\$2,249
<b>Chapter 1606 Kicker - \$100</b>				
Army National Guard	\$100	16.4%	82.1%	\$486
Army Reserve	\$100	17.0%	84.1%	\$514
Navy Reserve	\$100	31.7%	92.0%	\$1,050
Marine Corps Reserve	\$100	27.4%	92.5%	\$912
Air National Guard	\$100	25.7%	82.4%	\$764
Air Force Reserve	\$100	26.0%	83.0%	\$776
Coast Guard Reserve	\$100	18.2%	85.0%	\$558
<b>Chapter 1606 Kicker - \$200</b>				
Army National Guard	\$200	16.7%	82.3%	\$991
Army Reserve	\$200	18.9%	84.0%	\$1,141
Navy Reserve	\$200	30.5%	91.6%	\$2,010
Marine Corps Reserve	\$200	23.2%	91.9%	\$1,536
Air National Guard	\$200	26.2%	82.7%	\$1,561
Air Force Reserve	\$200	26.4%	83.2%	\$1,584
Coast Guard Reserve	\$200	23.0%	87.9%	\$1,457
<b>Chapter 1606 Kicker - \$350</b>				
Army National Guard	\$350	30.0%	88.4%	\$3,344
Army Reserve	\$350	20.6%	83.7%	\$2,172
Navy Reserve	\$350	35.9%	91.9%	\$4,163
Marine Corps Reserve	\$350	27.3%	92.3%	\$3,175
Air National Guard	\$350	27.6%	83.3%	\$2,901
Air Force Reserve	\$350	27.4%	83.7%	\$2,887
Coast Guard Reserve	\$350	29.5%	88.0%	\$3,271

**APPENDIX D – FUND HISTORY<sup>1</sup>**

(\$ in millions)

**Chapter 30 & 33 Kicker**

**Contributions**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Coast Guard</u>	<u>Total</u>
2010	\$171.8	\$28.2	\$4.6	\$0.0	\$204.5
2011	\$35.9	\$19.9	\$11.6	\$0.1	\$67.5
2012	\$13.6	\$19.7	\$4.9	\$0.1	\$38.3
2013	\$0.0	\$22.9	\$3.2	\$0.4	\$26.5
2014	\$0.0	\$18.2	\$2.4	\$0.4	\$20.9
2015	\$0.0	\$20.2	\$7.0	\$0.3	\$27.5
2016	\$4.4	\$19.2	\$9.6	\$0.3	\$33.5
2017	\$0.3	\$16.3	\$7.1	\$0.3	\$23.9
2018	\$15.9	\$16.6	\$8.6	\$0.2	\$41.3
2019	\$0.8	\$12.0	\$4.7	\$0.0	\$17.5

**Benefit Payments**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Coast Guard</u>	<u>Total</u>
2010	\$45.3	\$37.4	\$17.3	\$0.1	\$100.1
2011	\$39.7	\$28.0	\$13.3	\$0.1	\$81.2
2012	\$56.4	\$30.1	\$16.9	\$0.1	\$103.6
2013	\$71.8	\$27.8	\$19.7	\$0.2	\$119.5
2014	\$84.9	\$24.8	\$20.5	\$0.1	\$130.4
2015	\$86.1	\$21.9	\$19.6	\$0.1	\$127.7
2016	\$82.2	\$18.7	\$17.2	\$0.1	\$118.1
2017	\$72.2	\$14.7	\$14.0	\$0.1	\$101.0
2018	\$61.9	\$12.9	\$10.9	\$0.1	\$85.8
2019	\$50.5	\$11.3	\$8.6	\$0.1	\$70.5

<sup>1</sup>The breakouts (by component and program) show OACT’s internal allocation of the Fund. There is only one Education Benefits Fund.

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in millions)

**Chapter 30 & 33 Kicker****Interest**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navy</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
2010	\$18.1	\$1.9	\$2.9	\$0.0	\$23.0
2011	\$29.2	\$2.4	\$4.1	\$0.0	\$35.8
2012	\$21.0	\$1.6	\$2.9	\$0.0	\$25.5
2013	\$21.9	\$1.6	\$2.8	\$0.0	\$26.3
2014	\$17.9	\$1.2	\$2.1	\$0.0	\$21.2
2015	\$13.0	\$0.9	\$1.4	\$0.0	\$15.4
2016	\$12.5	\$1.0	\$1.4	\$0.0	\$15.0
2017	\$12.4	\$1.2	\$1.4	\$0.0	\$15.0
2018	\$12.7	\$1.5	\$1.5	\$0.0	\$15.7
2019	\$9.2	\$1.2	\$1.1	\$0.0	\$11.5

**End of Year Fund Balance**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navy</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
2010	\$703.9	\$53.1	\$99.4	-\$0.1	\$856.4
2011	\$729.4	\$47.4	\$101.8	-\$0.1	\$878.5
2012	\$707.6	\$38.6	\$92.7	-\$0.1	\$838.7
2013	\$657.1	\$35.2	\$79.0	\$0.1	\$771.5
2014	\$589.6	\$29.9	\$62.9	\$0.4	\$682.8
2015	\$516.6	\$29.1	\$51.8	\$0.6	\$598.1
2016	\$451.3	\$30.7	\$45.6	\$0.8	\$528.4
2017	\$391.8	\$33.5	\$40.1	\$1.0	\$466.4
2018	\$358.5	\$38.6	\$39.2	\$1.2	\$437.6
2019	\$317.9	\$40.5	\$36.4	\$1.2	\$396.0

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in millions)

**Chapter 1606 Basic & Kicker****Contributions**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$114.8	\$54.1	\$3.8	\$18.1	\$38.2	\$13.6	\$0.8	\$243.4
2011	\$62.6	\$29.3	\$2.3	\$8.2	\$31.3	\$11.4	\$1.6	\$146.8
2012	\$28.8	\$22.8	\$1.5	\$6.6	\$28.4	\$14.6	\$0.4	\$103.1
2013	\$49.3	\$19.1	\$0.7	\$4.7	\$29.9	\$12.2	\$0.0	\$115.9
2014	\$14.2	\$6.7	\$0.4	\$1.2	\$16.0	\$3.4	\$0.4	\$42.2
2015	\$13.0	\$9.9	\$0.0	\$0.6	\$21.3	\$3.7	\$0.0	\$48.7
2016	\$13.4	\$8.9	\$0.0	\$0.4	\$11.0	\$2.4	\$0.0	\$36.1
2017	\$1.3	\$5.4	\$0.2	\$0.8	\$10.3	\$1.5	\$0.0	\$19.6
2018	\$66.3	\$32.4	\$0.1	\$3.9	\$20.8	\$2.9	\$0.0	\$126.3
2019	\$113.9	\$25.4	\$0.0	\$6.5	\$22.9	\$1.6	\$0.0	\$170.2

**Benefit Payments**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$87.4	\$42.7	\$5.1	\$6.7	\$28.9	\$8.8	\$0.6	\$180.2
2011	\$89.7	\$49.1	\$4.5	\$6.7	\$28.7	\$8.1	\$0.4	\$187.3
2012	\$84.5	\$50.0	\$4.3	\$6.2	\$27.5	\$8.7	\$0.3	\$181.5
2013	\$79.8	\$49.5	\$4.5	\$7.4	\$25.9	\$9.1	\$0.3	\$176.6
2014	\$77.2	\$45.5	\$4.9	\$8.3	\$24.7	\$9.8	\$0.4	\$170.9
2015	\$75.4	\$40.6	\$5.2	\$9.3	\$24.5	\$9.6	\$0.5	\$165.1
2016	\$72.8	\$34.9	\$5.1	\$9.6	\$25.6	\$8.5	\$0.4	\$156.8
2017	\$67.8	\$32.1	\$4.9	\$9.6	\$25.4	\$7.0	\$0.3	\$147.1
2018	\$59.8	\$27.5	\$4.5	\$9.2	\$24.2	\$6.0	\$0.2	\$131.4
2019	\$57.6	\$26.2	\$4.1	\$8.4	\$24.1	\$5.3	\$0.2	\$125.9

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in millions)

**Chapter 1606 Basic & Kicker****Interest**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$12.1	\$7.4	\$0.7	\$1.4	\$2.0	\$0.7	\$0.1	\$24.3
2011	\$17.4	\$10.4	\$1.0	\$2.3	\$3.1	\$1.2	\$0.1	\$35.6
2012	\$11.8	\$7.1	\$0.8	\$1.8	\$3.1	\$1.5	\$0.1	\$26.2
2013	\$12.0	\$7.2	\$0.9	\$2.0	\$3.4	\$1.9	\$0.1	\$27.6
2014	\$9.7	\$5.2	\$0.8	\$1.7	\$2.6	\$1.7	\$0.1	\$21.7
2015	\$8.1	\$3.5	\$0.5	\$1.2	\$2.0	\$1.2	\$0.1	\$16.8
2016	\$8.1	\$3.9	\$0.9	\$1.4	\$2.4	\$1.7	\$0.1	\$18.6
2017	\$8.6	\$4.1	\$0.9	\$1.4	\$2.6	\$1.9	\$0.1	\$19.7
2018	\$9.2	\$4.5	\$1.0	\$1.4	\$2.7	\$2.1	\$0.1	\$21.0
2019	\$8.7	\$3.8	\$0.7	\$1.1	\$2.3	\$1.6	\$0.1	\$18.3

**End of Year Fund Balance**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$452.3	\$273.6	\$26.1	\$55.9	\$70.5	\$26.4	\$1.9	\$906.6
2011	\$424.4	\$254.0	\$25.0	\$59.8	\$76.1	\$30.8	\$3.2	\$873.4
2012	\$380.5	\$234.0	\$27.7	\$62.0	\$106.0	\$55.0	\$4.1	\$869.2
2013	\$362.0	\$210.8	\$28.0	\$61.3	\$107.8	\$59.9	\$4.4	\$834.2
2014	\$308.7	\$163.3	\$24.2	\$55.9	\$85.9	\$55.1	\$4.5	\$697.6
2015	\$317.5	\$136.2	\$19.6	\$48.4	\$84.7	\$50.5	\$4.0	\$660.9
2016	\$285.1	\$138.0	\$33.3	\$51.2	\$87.8	\$65.1	\$4.2	\$664.8
2017	\$262.4	\$126.5	\$30.4	\$44.5	\$80.6	\$62.9	\$4.1	\$611.3
2018	\$282.6	\$137.4	\$26.9	\$40.6	\$80.7	\$61.8	\$4.0	\$634.0
2019	\$348.4	\$140.5	\$23.6	\$39.8	\$81.9	\$59.9	\$3.9	\$698.1

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in millions)

**Chapter 1607****Contributions**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$45.6	\$3.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$48.7
2011	\$34.2	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.0
2012	\$27.9	\$5.4	\$0.0	\$5.4	\$0.7	\$0.4	\$0.0	\$39.8
2013	\$23.0	\$5.7	\$0.0	\$0.4	\$2.0	\$0.7	\$0.0	\$31.8
2014	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.1
2015	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2016	\$1.5	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.0
2017	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2018	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2019	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

**Benefit Payments**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$73.7	\$29.3	\$2.0	\$7.1	\$8.6	\$5.3	\$0.3	\$126.3
2011	\$72.0	\$22.9	\$1.4	\$4.4	\$7.2	\$3.5	\$0.2	\$111.6
2012	\$54.0	\$15.8	\$1.0	\$2.8	\$4.4	\$1.9	\$0.1	\$80.0
2013	\$48.7	\$13.3	\$0.8	\$1.9	\$4.0	\$1.5	\$0.1	\$70.2
2014	\$39.5	\$11.0	\$0.7	\$1.3	\$3.5	\$1.1	\$0.1	\$57.2
2015	\$27.0	\$8.5	\$0.6	\$0.8	\$3.0	\$0.8	\$0.1	\$40.8
2016	\$13.2	\$4.4	\$0.4	\$0.3	\$1.9	\$0.5	\$0.0	\$20.8
2017	\$4.8	\$1.6	\$0.1	\$0.1	\$0.7	\$0.2	\$0.0	\$7.5
2018	\$2.1	\$0.6	\$0.1	\$0.1	\$0.4	\$0.1	\$0.0	\$3.3
2019	\$0.8	\$0.2	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$1.2

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in millions)

**Chapter 1607****Interest**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$7.2	\$2.3	\$0.8	\$0.5	\$1.3	\$1.2	\$0.1	\$13.4
2011	\$10.2	\$2.8	\$1.1	\$0.5	\$1.7	\$1.6	\$0.1	\$18.1
2012	\$6.7	\$1.6	\$0.7	\$0.4	\$0.3	\$0.7	\$0.0	\$10.4
2013	\$6.8	\$1.6	\$0.6	\$0.4	\$0.5	\$0.7	\$0.0	\$10.6
2014	\$5.3	\$1.6	\$0.6	\$0.4	\$0.8	\$0.6	\$0.0	\$9.2
2015	\$2.1	\$1.1	\$0.5	\$0.3	\$0.6	\$0.5	\$0.0	\$5.1
2016	\$1.4	\$0.4	\$0.0	\$0.0	\$0.2	\$0.1	\$0.0	\$2.1
2017	\$0.3	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.5
2018	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2
2019	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

**End of Year Fund Balance**

<u>FY</u>	<u>ARNG</u>	<u>USAR</u>	<u>USNR</u>	<u>USMCR</u>	<u>ANG</u>	<u>USAFR</u>	<u>USCGR</u>	<u>Total</u>
2010	\$247.0	\$69.7	\$28.3	\$15.1	\$44.2	\$41.6	\$2.1	\$448.0
2011	\$237.6	\$60.6	\$28.0	\$11.2	\$38.7	\$39.7	\$1.9	\$417.7
2012	\$218.2	\$51.8	\$23.0	\$14.2	\$9.5	\$22.1	\$1.2	\$339.9
2013	\$199.3	\$45.8	\$19.6	\$13.1	\$13.5	\$22.0	\$0.7	\$314.0
2014	\$165.0	\$50.2	\$19.5	\$12.2	\$26.7	\$21.6	\$0.6	\$295.9
2015	\$77.2	\$42.8	\$19.3	\$11.8	\$24.2	\$21.3	\$0.6	\$197.3
2016	\$47.9	\$15.5	\$1.1	\$0.9	\$7.3	\$1.9	\$0.1	\$74.6
2017	\$8.2	\$2.9	\$0.2	\$0.2	\$1.4	\$0.3	\$0.0	\$13.2
2018	\$1.7	\$0.8	\$0.1	\$0.1	\$0.4	\$0.1	\$0.0	\$3.3
2019	\$0.1	\$0.3	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.6

**APPENDIX D – FUND HISTORY (cont.)**

(\$ in thousands)

**Category III****Contributions**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>	<u>Coast Guard</u>	<u>Total</u>
2010	\$941.1	\$1,733.7	\$85.7	\$477.0	\$8.4	\$3,245.8
2011	\$854.2	\$1,216.4	\$93.4	\$403.3	\$0.2	\$2,567.4
2012	\$696.9	\$937.0	\$87.9	\$339.9	\$0.8	\$2,062.5
2013	\$525.9	\$606.7	\$23.9	\$209.5	\$17.0	\$1,383.0
2014	\$448.2	\$299.0	\$23.8	\$230.8	\$13.8	\$1,015.6
2015	\$267.8	\$166.3	\$33.1	\$184.8	\$20.5	\$672.4
2016	\$435.8	\$222.4	\$33.1	\$79.0	\$20.7	\$791.0
2017	\$272.8	\$192.6	\$0.0	\$100.0	\$8.0	\$573.4
2018	\$170.7	\$42.4	\$7.0	\$79.4	\$0.0	\$299.5
2019	\$58.4	\$4.5	\$1.4	\$27.6	\$0.0	\$91.9

**Benefit Payments**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>	<u>Coast Guard</u>	<u>Total</u>
2010	\$863.5	\$1,194.3	\$86.0	\$396.6	\$0.5	\$2,540.4
2011	\$686.6	\$926.7	\$84.5	\$337.4	\$4.0	\$2,035.2
2012	\$528.0	\$600.3	\$17.4	\$208.6	\$14.0	\$1,354.4
2013	\$416.1	\$293.7	\$43.5	\$240.2	\$14.2	\$993.6
2014	\$304.2	\$192.7	\$16.6	\$153.7	\$20.1	\$667.2
2015	\$409.7	\$203.7	\$24.3	\$103.2	\$20.5	\$740.9
2016	\$256.2	\$171.2	\$7.2	\$86.7	\$5.2	\$521.3
2017	\$161.7	\$55.4	\$8.0	\$76.2	\$0.0	\$301.2
2018	\$69.1	\$12.1	\$6.9	\$28.7	\$0.0	\$116.7
2019	\$51.8	\$4.9	\$0.3	\$13.1	\$0.0	\$70.1



**APPENDIX D – FUND HISTORY (cont.)**

(\$ in thousands)

**Category III****Interest**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>	<u>Coast Guard</u>	<u>Total</u>
2010	-\$10.4	-\$14.8	-\$1.3	-\$4.9	\$0.0	-\$31.5
2011	-\$12.7	-\$16.4	-\$1.7	-\$6.0	-\$0.1	-\$36.8
2012	-\$7.1	-\$7.6	-\$0.3	-\$2.7	-\$0.3	-\$17.8
2013	-\$6.5	-\$4.0	-\$0.5	-\$3.6	-\$0.2	-\$14.5
2014	-\$3.6	-\$2.2	-\$0.7	-\$2.4	-\$0.3	-\$8.8
2015	-\$5.0	-\$2.6	-\$0.2	-\$0.8	-\$0.3	-\$8.6
2016	-\$3.1	-\$2.0	\$0.2	-\$1.3	-\$0.1	-\$6.3
2017	-\$1.9	-\$0.2	\$0.0	-\$1.0	\$0.0	-\$3.1
2018	-\$0.5	\$0.0	-\$0.1	-\$0.3	\$0.0	-\$0.8
2019	-\$0.5	-\$0.1	-\$0.1	-\$0.1	\$0.0	-\$0.8

**End of Year Fund Balance**

<u>FY</u>	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>	<u>Coast Guard</u>	<u>Total</u>
2010	-\$853.2	-\$1,197.1	-\$96.5	-\$398.4	-\$0.3	-\$2,545.2
2011	-\$698.3	-\$923.8	-\$89.2	-\$338.6	-\$4.3	-\$2,049.9
2012	-\$536.5	-\$594.8	-\$19.0	-\$210.1	-\$17.7	-\$1,360.5
2013	-\$433.2	-\$285.9	-\$39.0	-\$244.4	-\$15.1	-\$1,002.5
2014	-\$292.8	-\$181.8	-\$32.4	-\$169.7	-\$21.7	-\$676.8
2015	-\$439.8	-\$221.8	-\$23.9	-\$88.9	-\$22.0	-\$774.4
2016	-\$263.4	-\$172.7	\$2.1	-\$97.8	-\$6.6	-\$531.7
2017	-\$154.2	-\$35.6	-\$5.9	-\$74.9	\$1.4	-\$270.6
2018	-\$53.1	-\$5.2	-\$5.8	-\$24.5	\$1.4	-\$88.6
2019	-\$47.0	-\$5.6	-\$4.8	-\$10.0	\$1.5	-\$67.5

## **APPENDIX E – LEGISLATIVE HISTORY**

### **Background**

Chapter 34 of Title 38 covers service back to 1955. The immediate predecessor of the Montgomery GI Bill (MGIB) was the VEAP. It is covered by Chapter 32 of Title 38 and provides education benefits for those who first entered active duty between January 1, 1977, and June 30, 1985.

The MGIB provides education benefits for those entering the armed forces beginning July 1, 1985. It is called the Montgomery GI Bill after Congressman Sonny Montgomery, who was instrumental in passing the legislation. MGIB was codified in Chapter 1606 and Chapter 1607 of Title 10, and in Chapter 30 and Chapter 33 of Title 38. Chapter 1606 and Chapter 1607 cover reservists. Chapter 30 and Chapter 33 cover active duty (or former active duty) members and reservists called to active service.

Title 38 covers veteran benefits and the MGIB benefits for active duty members are generally used after members become veterans. Title 10, on the other hand, covers the armed forces, and reservists generally use their MGIB benefits while they are still members of the Selected Reserve, where they attend monthly drills, etc.

Beginning in 1991, subsequent legislation required that basic Chapter 30 benefits be paid from the Fund for veterans who entered service in the VEAP era and were permitted to enroll in the MGIB as a consequence of involuntary separation or acceptance of a VSI or SSB benefit. In this case, the basic Chapter 30 benefits are paid by the Fund. These benefits are not pre-funded and are paid by a series of annual contributions. These benefit amounts are referred to in this report as Category III.

Transferability test programs were offered under Section 3020 of Title 38 to approximately 100 Air Force and 400 Army active duty members, where members who have been in the service for six years and agree to stay for four more years can transfer part of their Chapter 30 eligibility for benefits to a dependent. This program is partly paid by the VA and partly by the Fund. The part paid by the Fund is pre-funded by a normal cost mechanism.

Transferability is currently offered to all Chapter 33 participants where members who have been in the service for six years and agree to stay for four more years can transfer part of their Chapter 30 eligibility for benefits to a dependent.

### **Major Amendment History**

Public Law 101-510 (November 5, 1990) allows active members involuntarily separated after February 2, 1991 with honorable discharges to enroll in the MGIB. Those who entered the service during the post-Vietnam era (January 1, 1977, through June 30, 1985) have their basic benefits paid from the Fund. Those who entered after June 30, 1985 have their basic benefits paid from other funds by VA. Those who entered prior to January 1, 1977, and who because of discontinuous service are not already enrolled in the MGIB also have their basic benefits paid by VA. The eligible involuntary separatees would receive the basic MGIB benefit, but not the "kicker" benefit.

## **APPENDIX E – LEGISLATIVE HISTORY (cont.)**

### **Major Amendment History (cont.)**

Public Law 102-25 (April 6, 1991) temporarily increased the Chapter 30 (active) basic benefit to \$275 per month for 2-year enlistments (formerly \$250) and \$350 per month for 3- and 4-year enlistments (formerly \$300), effective October 1, 1991. The Chapter 1606 (reserve) benefit was increased to \$170 per month (formerly \$140), effective October 1, 1991.

Public Law 102-568 (October 29, 1992) permanently increased the basic Chapter 30 benefit to \$400 per month for 3- and 4-year programs and \$325 per month for 2-year programs, beginning April 1, 1993. In addition, the benefit was automatically increased by the CPI each October, beginning October 1, 1993. Public Law 102-568 also increased the Chapter 1606 benefit to \$190 per month, beginning on April 1, 1993, and provided automatic CPI indexing for the Chapter 1606 benefit. The CPI indexing is to be based on a year ending with the June CPI that precedes the October increase, compared to the previous June. Informally, VA, the Office of Management and Budget, and DoD have decided (1) to use the CPI-W for this purpose, (2) to construct the multiplier by adding twelve months of CPI-W ending in the June prior to the increase and dividing by the sum of twelve months of CPI-W ending with the preceding June, (3) to round the multiplier to the nearest 1/10th of one percent for full cost-of-living adjustments (COLAs) and the nearest 1/100th of one percent for reduced COLAs, and (4) to compute the Chapter 1606 and Chapter 30 basic benefit to the nearest penny. Public Law 102-568 (October 29, 1992) increased the basic Chapter 30 benefits of those who enlisted in 2-year programs, but served three or more years. Their benefits are now identical to those whose initial enlistment was for three or more years. This has no effect on the “kicker” amounts.

Neither Public Law 102-25 nor Public Law 102-568 directly affects the kicker benefit. However, the Army, with DoD approval, modified their kicker amounts, effective April 1, 1993, so that the total of basic and kicker benefits for 36 months would equal \$20,000, \$25,000, and \$30,000, respectively, for the 2-, 3-, and 4-year programs. The effect of this was to increase the 2- and 4-year kicker benefits, effective April 1, 1993, while decreasing the 3-year kicker benefit. Effective August 1, 1993, the Marine Corps, which began a 4-year kicker program January 1, 1993, raised the amount to that of the Army 4-year program. Effective May 1, 1994, the Navy also switched to this procedure for their 4-year program and added a 3-year program that also follows this procedure. For the near future, the kicker benefits would fall whenever the basic benefits increased, since the \$20,000, \$25,000, and \$30,000 totals of basic and kicker would remain constant. The maximum benefit would actually be larger than the \$20,000, \$25,000, and \$30,000, respectively, however. This occurred because the time of enrollment in a kicker program is what determined the benefit, but the time of benefit use (i.e. going to school) is what determined the basic benefit level.

Public Law 102-484 (October 23, 1992) treats separatees in the SSB and VSI programs in the same way that involuntary separatees were treated under Public Law 101-510. They can enroll in the MGIB. If they entered the service in the post-Vietnam era, their basic benefits are paid from the Fund. Persons separating under VSI or SSB prior to enactment are also eligible to enroll.

Public Law 102-484 also waived the continued service requirement for Chapter 1606 eligibility for persons involuntarily separated from the Selected Reserve during the period October 1, 1991 through September 30, 1995.

## **APPENDIX E – LEGISLATIVE HISTORY (cont.)**

### **Major Amendment History (cont.)**

Public Law 103-66 (August 10, 1993) eliminated the October 1, 1993, COLA and reduced the October 1, 1994, COLA to one-half the value it would have been.

Public Law 103-160 (November 30, 1993) provided graduate school education under Chapter 1606. The benefit is still limited to 36 full-time months or their equivalent.

Public Law 104-106 (February 10, 1996) permits a supplement beyond the reserve basic MGIB benefit for persons in critical skills or units. It provides up to an additional \$350 per month under Chapter 1606 for persons in critical skills or critical units, at the discretion of the Secretary of Defense.

Public Law 105-178 (June 9, 1998) increased basic benefits in both the Chapter 30 and Chapter 1606 programs by 20% beginning in FY 1999. This is in lieu of the cost-of-living increase, rather than in addition to it. Normal CPI increases resumed in FY 2000. The 20% increase does not apply to the kicker amounts. However, for Chapter 30, the practice of solving for the kicker amount [using  $\text{kicker} = (\text{advertised amount} - 36 * \text{basic monthly amount})/36$ ] means that groups entering in FY 1999 will have lower kickers for a given advertised amount, such as \$40,000. Public Law 105-178 also caused the basic monthly amount to be rounded to the nearest dollar.

Public Law 105-261 (October 17, 1998) increased the kicker limit to \$950 per month, effective October 1, 1998.

Public Law 106-65 (October 5, 1999) made it possible for the Coast Guard to fund their Chapter 30 kicker benefits from the Fund.

Public Law 106-419 (November 1, 2000) increased the Chapter 30 basic MGIB benefits to \$528 per month for 2-year programs and to \$650 per month for programs of 3 or more years of active service. Section 102 of the bill also made eligible those in both the Chapter 30 and Chapter 1606 programs who completed the educational prerequisites (such as being a high-school graduate), but not before completing their obligated service (in the case of Chapter 30) or not before completing initial active duty training (in the case of Chapter 1606). Section 103 reduced from three years to two years the obligated service needed for full benefits for some types of separations.

Public Law 107-103 (December 27, 2001) increased the Chapter 30 basic MGIB benefits to \$650 per month for 2-year programs and \$800 per month for programs of 3 or more years of active service. These increases were effective January 1, 2002. The law also increased the monthly full-time benefits on October 1, 2002 to \$732 (for 2-year programs) and to \$900 (for programs of 3 or more years of active service). The law further increased the monthly full-time benefits on October 1, 2003 to \$800 (for 2-year programs) and to \$985 (for programs of 3 or more years of active service).

## **APPENDIX E – LEGISLATIVE HISTORY (cont.)**

### **Major Amendment History (cont.)**

Public Law 107-107 (December 28, 2001) permits transferring entitlement of MGIB benefits to dependents in certain conditions. Under the Secretary of Defense's discretion, those with critical military skills may transfer up to 18 months of benefits to one or more dependents. The military members transferring benefits must have served six years and agree to serve another four. A spouse can use the benefit immediately, but a child has to wait until the member has completed ten years of service. The law requires that the present value of the benefit for increased usage be transferred to the Fund on a monthly basis as new takers agree to serve an additional four years for the benefit.

Public Law 107-314 (December 2, 2002) extended the eligibility period for using Chapter 1606 benefits from 10 to 14 years (given that the member is still in the Selected Reserve).

Public Law 108-183 (December 16, 2003) removed the rounding on Chapter 30 benefits so that Chapter 30 benefits are now rounded to the nearest cent.

Public Law 108-375 (October 28, 2004) created Chapter 1607, which provides educational assistance to members of the reserve components called or ordered to active service in response to a war or national emergency. Eligible members receive benefits based on their longest continuous length of service. Benefits range from 40% to 80% of MGIB-AD.

Public Law 108-454 (December 10, 2004) provided education benefits for the payment of national admissions exams and national exams for credit at institutions of higher learning under Chapter 30.

Public Law 109-163 (January 6, 2006) provides that licensing and certification tests are now payable under Chapters 1606 and 1607 of Title 10, United States Code. Entitlement for licensing and certification tests taken under Chapters 1606 and 1607 will be charged by dividing the amount paid for the test by the member's full-time rate, less any kicker the member would receive. Section 540 provides that a member can have a break in Selected Reserve service of up to 90 days and still receive Chapter 1607 benefits as long as the member remains in the Ready Reserve during and after the break. DoD and the Department of Homeland Security (for Coast Guard cases) determine eligibility under Chapter 1607 and will administer the provision. Section 545 amends Title 10 to clearly state that VA is to administer the two education incentive benefits provided by the National Call to Service program. (These two incentive programs are an education allowance equal to the chapter 30 3-year rate payable of up to 12 months or equal to one-half the chapter 30 2-year rates payable up to 36 months.)

Public Law 109-461 (December 22, 2006) requires VA and DoD to submit separate biennial reports to Congress on education benefits beginning 180 days after December 22, 2006 (date of enactment of this Act) and ending January 1, 2011.

## **APPENDIX E – LEGISLATIVE HISTORY (cont.)**

### **Major Amendment History (cont.)**

Public Law 110-181 (January 28, 2008), commonly referred to as “NDAA 08”, made the following changes: (1) allowed reservists who were otherwise eligible for the MGIB-SR or REAP to receive accelerated payments for a non-degree program lasting 2 years or less, (2) made the REAP 80% rate available to anyone who was mobilized for at least 2 continuous years of active duty OR who served multiple mobilizations totaling 3 years or more, (3) created a \$600 buy-up program for REAP participants, (4) modified ending dates for REAP participants separated from the Selected Reserve and for MGIB-SR participants separated involuntarily, and (5) expanded REAP eligibility to anyone having a break in service (regardless of length) as long as they continued to serve in another component of the Ready Reserve (such as IRR or ING) during the break in service.

Public Law 110-252 (June 30, 2008), commonly referred to as the “Post-9/11 GI Bill”, is the most comprehensive education legislation since the original GI Bill. The Post-9/11 GI Bill created a new benefit structure including benefits for tuition, housing, books, and moving expenses. Any member who served 90 consecutive days on active duty in the Armed Forces (including reserve and guard components) since September 11, 2001 is eligible. Benefit levels are determined by cumulative service with 3 years of cumulative service receiving 100% of benefits. Members with at least 6 years of active duty can transfer benefits to their spouse and/or children if they complete an additional service period of at least 4 years. The legislation also removed the 14-year eligibility period for Chapter 1606 eligibles (except in the case of disability or involuntary separation, in which case the VA interpretation is that the 14-year eligibility period still applies).

Public Law 111-377 (January 4, 2011), commonly referred to as the Post 9/11 Veterans Educational Assistance Improvements Act of 2010 allowed National Guard members to use Title 32 service for Post-9/11 GI Bill benefits, placed a \$17,500 cap on annual tuition and fees for non-public institutions, and created a funding priority structure that makes the Post-9/11 GI bill paid after any federal, state, institutional, or employer-based aid.

Public Law 114-92 (November 25, 2015), commonly referred to as the National Defense Authorization Act of 2016 ended REAP on November 25, 2015. Some individuals will remain eligible for REAP benefits until November 25, 2019, while others are no longer eligible for REAP benefits.

Public Law 115-48 (August 16, 2017), known as the Harry W. Colmery Veterans Educational Assistance Act (H.R. 3218) or also as the "Forever GI Bill" made the following changes; (1) reservists who had eligibility under the REAP and lost it due to the program sunset provision will receive credit toward establishing eligibility under the Post-9/11 GI Bill, (2) the 15-year time limitation for using the Post-9/11 GI Bill for Veterans who left active duty on or after January 1, 2013 has been eliminated, and (3) Servicemembers and honorably discharged Veterans who were awarded a Purple Heart on or after September 11, 2001 will be entitled to Post-9/11 GI Bill benefits at the 100-percent benefit level for up to 36 months.

**APPENDIX F – BENEFIT PAYMENT PROJECTIONS**

(\$ in Millions)

<u>FY</u>	<u>Per</u> <u>Capitas</u>	<u>Amorts</u>	<u>Interest</u>	<u>Benefits</u>	<u>Transfers</u>	<u>BOY</u> <u>Fund</u>	<u>BOY</u> <u>UFL</u>	<u>BOY</u> <u>Liab</u>	<u>Net Cash</u> <u>Flow</u>
<b><u>All Programs</u></b>									
2020	\$109.0	\$18.3	\$26.6	\$169.6	\$8.9	\$1,094.5	(\$372.4)	\$722.1	(\$6.8)
2021	\$92.4	\$5.4	\$29.2	\$174.4	\$0.0	\$1,087.7	(\$412.1)	\$675.7	(\$47.4)
2022	\$68.1	\$1.7	\$27.5	\$174.1	\$0.0	\$1,040.3	(\$366.5)	\$673.8	(\$76.8)
2023	\$108.3	\$1.3	\$26.0	\$167.6	\$0.0	\$963.5	(\$261.5)	\$702.0	(\$31.9)
2024	\$131.9	\$1.1	\$25.5	\$168.8	\$0.0	\$931.6	(\$197.6)	\$734.0	(\$10.4)
2025	\$151.0	\$0.9	\$25.4	\$172.7	\$0.0	\$921.2	(\$159.6)	\$761.7	\$4.6
2026	\$159.3	\$0.7	\$25.6	\$178.1	\$0.0	\$925.9	(\$136.9)	\$788.9	\$7.6
2027	\$166.0	\$0.6	\$25.8	\$183.6	\$0.0	\$933.5	(\$123.7)	\$809.7	\$8.9
2028	\$172.4	\$0.5	\$26.1	\$189.8	\$0.0	\$942.3	(\$116.3)	\$826.0	\$9.2
2029	\$178.1	\$0.4	\$26.4	\$195.3	\$0.0	\$951.5	(\$113.2)	\$838.3	\$9.6
2030	\$183.3	\$0.3	\$26.7	\$199.9	\$0.0	\$961.1	(\$112.7)	\$848.4	\$10.4
<b><u>Chapter 30 &amp; 33 Kickers</u></b>									
2020	\$0.0	\$18.2	\$9.6	\$55.9	\$8.9	\$396.0	(\$43.1)	\$353.0	(\$19.2)
2021	\$0.0	\$5.3	\$9.9	\$48.2	\$0.0	\$376.8	(\$71.9)	\$304.9	(\$32.9)
2022	\$0.0	\$1.6	\$9.0	\$42.2	\$0.0	\$343.9	(\$79.4)	\$264.5	(\$31.6)
2023	\$0.0	\$1.3	\$8.2	\$36.3	\$0.0	\$312.3	(\$83.3)	\$229.0	(\$26.8)
2024	\$0.0	\$1.1	\$7.5	\$30.2	\$0.0	\$285.4	(\$86.9)	\$198.5	(\$21.6)
2025	\$0.0	\$0.9	\$7.0	\$25.6	\$0.0	\$263.8	(\$90.4)	\$173.4	(\$17.8)
2026	\$0.0	\$0.7	\$6.5	\$21.7	\$0.0	\$246.0	(\$93.8)	\$152.2	(\$14.5)
2027	\$0.0	\$0.6	\$6.1	\$19.3	\$0.0	\$231.5	(\$97.1)	\$134.4	(\$12.6)
2028	\$0.0	\$0.5	\$5.8	\$17.9	\$0.0	\$218.9	(\$100.3)	\$118.5	(\$11.7)
2029	\$0.0	\$0.4	\$5.5	\$16.6	\$0.0	\$207.2	(\$103.6)	\$103.6	(\$10.7)
2030	\$0.0	\$0.3	\$5.2	\$15.5	\$0.0	\$196.5	(\$106.8)	\$89.7	(\$9.9)
<b><u>Chapter 1606 Basic &amp; Kickers</u></b>									
2020	\$109.0	\$0.0	\$17.1	\$108.9	\$0.0	\$698.0	(\$333.7)	\$364.3	\$17.1
2021	\$92.4	\$0.0	\$19.3	\$126.2	(\$4.2)	\$715.1	(\$344.4)	\$370.7	(\$18.7)
2022	\$68.1	\$0.0	\$18.5	\$131.9	\$0.0	\$696.5	(\$287.2)	\$409.3	(\$45.2)
2023	\$108.3	\$0.0	\$17.9	\$131.2	\$0.0	\$651.3	(\$178.3)	\$473.0	(\$5.1)
2024	\$131.9	\$0.0	\$18.0	\$138.6	\$0.0	\$646.2	(\$110.8)	\$535.4	\$11.3
2025	\$151.0	\$0.0	\$18.5	\$147.1	\$0.0	\$657.5	(\$69.2)	\$588.3	\$22.4
2026	\$159.3	\$0.0	\$19.1	\$156.4	\$0.0	\$679.9	(\$43.2)	\$636.7	\$22.1
2027	\$166.0	\$0.0	\$19.7	\$164.2	\$0.0	\$702.0	(\$26.6)	\$675.3	\$21.5
2028	\$172.4	\$0.0	\$20.3	\$171.9	\$0.0	\$723.5	(\$16.0)	\$707.5	\$20.8
2029	\$178.1	\$0.0	\$20.9	\$178.7	\$0.0	\$744.3	(\$9.6)	\$734.7	\$20.3
2030	\$183.3	\$0.0	\$21.4	\$184.4	\$0.0	\$764.6	(\$5.8)	\$758.8	\$20.3
<b><u>Chapter 1607</u></b>									
2020	\$0.0	\$0.0	(\$0.0)	\$4.8	\$0.0	\$0.6	\$4.2	\$4.7	(\$4.8)
2021	\$0.0	\$0.0	\$0.0	\$0.0	\$4.2	(\$4.2)	\$4.2	\$0.0	\$4.2

Note that Chapter 1607 sunsets November 25, 2019. After all Chapter 1607 benefits have been paid, any surplus and deficit funds will be internally transferred between Chapter 1606 and Chapter 1607.

**APPENDIX F – BENEFIT PAYMENT PROJECTIONS (Cont.)**

(\$ in Thousands)

<u>FY</u>	<u>Per</u> <u>Capitas</u>	<u>Amorts</u>	<u>Interest</u>	<u>Benefits</u>	<u>Transfers</u>	<u>BOY</u> <u>Fund</u>	<u>BOY</u> <u>UFL</u>	<u>BOY</u> <u>Liab</u>	<u>Net Cash</u> <u>Flow</u>
<b><u>Category III</u></b>									
2020	N/A	\$74.3	(\$0.2)	\$32.1	\$0.0	(\$66.0)	\$183.5	\$117.5	\$42.0
2021	N/A	\$29.1	(\$0.4)	\$38.4	\$0.0	(\$24.0)	\$112.0	\$88.0	(\$9.7)
2022	N/A	\$38.5	(\$0.2)	\$22.6	\$0.0	(\$33.7)	\$85.3	\$51.6	\$15.7
2023	N/A	\$22.0	(\$0.1)	\$13.3	\$0.0	(\$18.0)	\$48.2	\$30.2	\$8.7
2024	N/A	\$13.0	(\$0.0)	\$7.8	\$0.0	(\$9.3)	\$26.9	\$17.6	\$5.1
2025	N/A	\$7.6	\$0.0	\$4.6	\$0.0	(\$4.1)	\$14.3	\$10.2	\$3.1
2026	N/A	\$4.5	\$0.1	\$2.7	\$0.0	(\$1.1)	\$6.9	\$5.8	\$1.8
2027	N/A	\$2.6	\$0.1	\$1.6	\$0.0	\$0.8	\$2.5	\$3.3	\$1.1
2028	N/A	\$1.5	\$0.1	\$0.9	\$0.0	\$1.9	(\$0.1)	\$1.7	\$0.7
2029	N/A	\$0.9	\$0.1	\$0.5	\$0.0	\$2.6	(\$1.7)	\$0.8	\$0.4
2030	N/A	\$0.5	\$0.1	\$0.3	\$0.0	\$3.0	(\$2.7)	\$0.3	\$0.3

Note that Category III payments are for benefits paid during the previous fiscal year and any amount carried over and interest on such amounts.



**APPENDIX G – ACCOUNTING STATEMENT****CFO Statement for 9/30/2020**

(Amounts in thousands of \$)

	<b><u>Total</u></b>
<b>Beginning Actuarial Liability 9/30/2019</b>	\$786,690
<b>Plus Expenses</b>	
Normal Cost	\$187,860
Interest Cost	\$25,403
Program Amendments	\$0
Experience Losses (Gains)	(\$128,065)
Other factors	\$0
Subtotal: Expenses before Losses (Gains) from Actuarial Assumption Changes	\$85,198
Actuarial Losses (Gains) due to:	
Actuarial (gains)/losses due to changes in trend assumptions	\$0
Changes in assumptions other than trend	\$37,127
Subtotal: Losses (Gains) from Actuarial Assumption Changes	\$37,127
<b>Total Expenses</b>	\$122,325
<b>Less Benefit Outlays</b>	(\$233,351)
<b>Total Change in Actuarial Liability</b>	(\$111,026)
<b>Ending Actuarial Liability 9/30/2020</b>	\$675,664

For Fund liabilities, OACT performs an annual valuation that is governed by Section 2006 of Title 10, United States Code, and uses methods and assumptions approved by the Board.

A separate financial statement valuation (i.e., with different assumptions) may be necessary to satisfy a financial statement regulation called the Statement of Federal Financial Accounting Standards 33 (SFFAS 33) because SFFAS 33 requires the use of a yield curve whereas the Board valuation uses a single average discount rate. (The terms “interest rate” and “discount rate” are often used interchangeably in this context.)

**APPENDIX G – SFFAS ACCOUNTING STATEMENT (Cont.)**

SFFAS 33 requires a minimum of five years of historical rates for the yield curve input and a consistency in the number of historical rates used from period to period. To calculate the accrued liabilities as of September 30, 2020, OACT uses the U.S. Department of the Treasury Office of Economic Policy's 10-Year Average Yield Curve for Treasury Nominal Coupon Issues (TNC yield curve) representing average quarterly rates from April 1, 2010, through March 31, 2020. These rates are equivalent (in terms of producing the same Fund Accrued Liability) to the SFFAS single equivalent rate of 2.07%. As a comparison, the Board valuation single discount rate is 2.75%.

For the September 30, 2020, financial statement purposes, there are no changes needed from the Board valuation to comply with the SFFAS 33 requirement besides the discount rate. Therefore, for September 30, 2020, financial statement purposes, all economic assumptions will be consistent with the Board valuation.

## **APPENDIX H – GLOSSARY**

### **Actuarial Liability (AL)**

The present value of benefits expected to be paid from the Fund to current program participants (i.e., does not include new entrants after the valuation date)

### **Amortization Payment**

An annual payment of principal and interest on unfunded liability

### **Basic Benefit**

The amount of basic educational assistance available in each program for approved education purposes; this amount may be reduced for education pursued on a less than full-time basis

### **Benefit Usage Rates**

The likelihood that a member will use an offered benefit

### **Board**

The Department of Defense Board of Actuaries

### **Book Value**

Treasury bonds, notes, and bills that are valued with amortized premiums/discounts and yields that are set at purchase

### **Closed Group**

The actuarial liability is based only on people already in the system. New entrants after the valuation date are not included. For this reason, the population is called a "closed" group.

### **Component**

In the case of active duty benefits, the term “component” refers to the branch of service: Army, Navy, Air Force, Marine Corps, or Coast Guard. In the case of reserve benefits, the term component refers to the separate guard and reserve services: Army National Guard, Army Reserve, Navy Reserve, Marine Corps Reserve, Air National Guard, Air Force Reserve, and the Coast Guard Reserve.

### **Decrement**

An event that causes the status of the member to change; decrements for this report include disability, withdrawal from and re-entry to service, and death

### **DoD**

Department of Defense

### **DMDC**

Defense Manpower Data Center

### **DFAS**

Defense Finance and Accounting Service

## **APPENDIX H – GLOSSARY (cont.)**

### **Fund (EBF)**

The Education Benefits Fund

### **Fund Balance**

The amount of monies, tracked separately for each program and each component, available to pay future benefits

### **IADT**

Initial Active Duty for Training is a military term referring to the first period, generally 6 months in length, of active duty training, a factor for eligibility under MGIB-SR. IADT is required for people entering the Selected Reserve

### **Inflation Rate**

The rate of increase in the average price level of goods and services during a specified period

### **Interest Rate**

The rate of investment return used to calculate the present value of a series of future payments

### **Interest (or Investment Earnings)**

The amount of money the Fund earns from securities

### **Kicker Benefit**

An additional benefit offered to members who have a critical skill or critical specialty; the Secretary of Defense may increase the amount of basic educational assistance by as much as \$950 per month for Chapter 30 and 33, and by as much as \$350 per month for Chapter 1606

### **Member**

A person eligible to participate in a Fund program

### **MGIB-AD**

Montgomery GI Bill benefits for Active Duty under Chapter 30 of Title 38, United States Code

### **MGIB-SR**

Montgomery GI Bill benefits for Selected Reserve under Chapter 1606 of Title 10, United States Code

### **Normal Cost**

The present value of benefits for a new entrant

### **OACT**

The Department of Defense Office of the Actuary

### **Offset**

A reduction applied to the normal cost in order to decrease a surplus

## **APPENDIX H – GLOSSARY (cont.)**

### **Pay-as-you-go**

A method of recognizing the costs of a benefits system only as benefits are paid

### **Per Capita Amount**

The normal cost minus any offset for expected surplus—this is the amount needed to be paid into a fund for future benefits for each new entrant. For the DoD Education Benefits Fund, the Per Capita Amount is paid once for each new entrant.

### **Present Value of Benefits**

The accrued liability as of the valuation date

### **REAP**

Reserve Education Assistance Program benefits under Chapter 1607 of Title 10, United States Code

### **Sunset Provision**

Measure within a statute, regulation or other law that provides that the law shall cease to be in effect after a specific date

### **Surplus**

The amount of assets in the Fund greater than the actuarial liability

### **Time Value of Money**

The principle that an amount of money available at an earlier point in time has less value than the same amount of money at a later point in time

### **Transferability**

The ability to transfer a benefit to a spouse or dependent child

### **Unfunded Liability**

The portion of the actuarial liability not covered by the Fund assets; if assets exceed the actuarial liability, there is a surplus

### **VEAP**

Veteran's Educational Assistance Program

### **Withdrawal Rate**

The probability that an active military member at the beginning of the year will separate from the service by the end of the year