



**VALUATION OF THE  
EDUCATION BENEFITS FUND**

**SEPTEMBER 30, 2008**

*DoD Office of the Actuary*

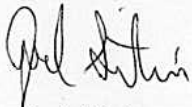
*January 2010*

## ACTUARIAL CERTIFICATION

This report on the Education Benefits Fund (Fund) as of September 30, 2008, has been prepared in accordance with generally accepted actuarial principles and practices. In preparing the report, we have relied upon information maintained by the Office of the Secretary of Defense regarding plan provisions, assets, eligible members, and benefit usage. The purpose of this report is to document the actuarial status of the Fund and develop actuarial liability and 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 include an interest rate of 4.5%, an ultimate Consumer Price Index increase of 2.6%, and a National Center for Education Statistics' Index increase of 6.0%.

In our opinion, the actuarial assumptions are reasonable and the valuation results present a fair picture of the financial condition of the Fund.



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## **SECTION 1 – INTRODUCTION**

The Fund was established on July 1, 1985, to pay education benefits to members of the armed forces. Benefits covered by the Fund have been expanded many times (see Appendix D) 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
- Title 10, Chapter 1606 kicker and transferred kicker benefits
- Title 10, Chapter 1607 basic and transferred basic benefits
- Title 38, Chapter 30 basic benefits for Post-Vietnam Era and Involuntary Separates (Category III)
- Title 10, Chapter 31, Section 510 National Call to Service<sup>2</sup>
- Title 38, Chapter 30, Section 3020 transferability benefits<sup>2</sup>

The Board, 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.

### **How to Use this Report**

In various places in the report, numbers may not add exactly due to rounding.

An executive summary of the Fund can be found in Section 2.

Annual amortization payments for each component can be found in Section 5.

The per capita costs charged for component members newly becoming eligible for benefits can be found in Section 6.

A projection of future years' per capita costs can be found in Appendix C under "decrement assumptions."

A projection of future years' benefit payments can be found in Appendix E.

<sup>1</sup>Current legislation requires that the Department of Veterans Affairs fund Chapter 33 kickers. However, DoD has traditionally funded all kickers as they are a recruitment and retention tool. Per an informal understanding with the VA, DoD plans to fund Chapter 33 kickers through the Education Benefits Fund.

<sup>2</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.

## **SECTION 2 - EXECUTIVE SUMMARY**

	<b><u>Chapter 30/33</u></b>	<b><u>Chapter 1606</u></b>	<b><u>Chapter 1607</u></b>	<b><u>Other</u></b>	<b><u>Total</u></b>
Sept. 30, 2008 Eligibles <sup>1</sup>	224,568	452,683	612,272	2,467	1,291,990
<b><u>Sept. 30, 2008 Fund Balance</u></b>					
Sept. 30, 2007 Fund Balance	\$649,362,853	\$551,180,703	\$225,565,344	\$582,701	\$1,426,691,601
FY08 Amortization Payments	6,224,956	12,468,161	137,514,586	3,783,658	159,991,361
FY08 Per Capita Contributions	97,346,800	254,303,731	197,002,288	2,307,810	550,960,629
FY08 Benefit Payments	(92,359,831)	(127,610,071)	(171,910,122)	(3,076,023)	(394,956,048)
<u>FY08 Interest</u>	<u>33,928,794</u>	<u>32,727,599</u>	<u>19,914,806</u>	<u>214,473</u>	<u>86,785,671</u>
FY08 Total Changes	45,140,718	171,889,420	182,521,558	3,229,917	402,781,613
Sept. 30, 2008 Fund Balance	\$694,503,571	\$723,070,123	\$408,086,902	\$3,812,618	\$1,829,473,214
<b><u>September 30, 2008 Snapshot</u></b>					
Actuarial Liability (AL)	\$958,950,629	\$442,844,634	\$339,567,317	\$22,253,988 <sup>2</sup>	\$1,763,616,568
<u>Fund Balance<sup>3</sup></u>	<u>(694,503,571)</u>	<u>(723,070,123)</u>	<u>(408,086,902)</u>	<u>(3,812,618)</u>	<u>(1,829,473,214)</u>
Unfunded AL (Surplus)	\$264,447,058	\$(280,225,489)	\$(68,519,585)	\$18,441,370	\$(65,856,646)

The above summarizes FY 2008 Fund experience and actuarial valuation results as of Sept. 30, 2008. The majority of liabilities detailed in this report stem from active duty kickers, reserve kickers and reserve basic benefits.

On June 30, 2008, the most comprehensive education legislation since the original GI Bill was passed into law and came to be known as the "Post-9/11 GI Bill". The Post-9/11 GI Bill created a new benefit structure including benefits for tuition, housing, books, and moving expenses as well as an ability for members to transfer some or all of their benefits to their spouse or child. While the VA paid Post 9/11 GI Bill benefits are not covered in this report, the liability amounts presented in this report were greatly affected by this comprehensive legislative change.

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 vary if data are inaccurate and future results will vary to the extent experience varies from assumptions.

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

<sup>2</sup> While the Fund Balances for National Call to Service and Chapter 30 transferability have been included in this column, liabilities for those programs are not included. Due to the relatively small size of benefits for National Call to Service and Chapter 30 transferability, liability amounts for those programs have not been estimated. This amount only represents Cat III liability.

<sup>3</sup> Officially, there is only one Fund. The DoD Office of the Actuary allocates the Fund into separate accounts for the various programs, using reported contributions and benefit payments by program 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 from DFAS. Input data on members of the Chapter 30 (active duty)/Chapter 33 (active duty and reserve), Chapter 1606 (reserve), and Chapter 1607 (reserve) programs are taken from DMDC, DFAS, Reserve Affairs, and Comptroller. Data on benefit payments and contributions are from DFAS. An overview of the number of members in each program and their status can be found in Appendix B.

The data has not been audited by the DoD Office of the Actuary (OACT). OACT is not responsible for the validity of the data. Responsibility for the validity of the member data lies with the components who report eligibility and demographic data to DMDC. In the case of benefit payments, VA makes payments to members and receives reimbursement from the Fund where appropriate; DFAS reflects information submitted to them by VA. In the case of Fund contributions, DFAS reports monies and associated information received from the components.

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

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, 2008) was obtained from the Fund’s investment manager at DFAS. For official accounting, the assets and liabilities are pooled into one Fund. However, OACT tracks assets and liabilities separately by program and component. The assets are given at book value, rather than at market value. The programs' unfunded liabilities or surpluses are as follows:

**Chapter 30/Chapter 33 Kicker Benefits as of September 30, 2008**

<b><u>Program</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or (Surplus)</u></b>
Army	\$653,982,289	(501,795,336)	\$152,186,953
Navy	181,717,255	(80,070,000)	101,647,255
Marine Corps	122,790,604	(112,527,303)	10,263,301
<u>Coast Guard</u>	<u>460,481</u>	<u>(110,931)</u>	<u>349,550</u>
Total	958,950,629	(694,503,571)	264,447,058

**Chapter 1606 Basic Benefits as of September 30, 2008**

<b><u>Program</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or (Surplus)</u></b>
Army National Guard	\$132,311,573	\$(220,761,961)	\$(88,450,388)
Army Reserve	65,051,678	(93,150,503)	(28,098,826)
Navy Reserve	11,623,196	(25,690,904)	(14,067,708)
Marine Corps Reserve	16,663,918	(42,633,331)	(25,969,413)
Air National Guard	44,096,534	(8,198,350)	35,898,184
Air Force Reserve	11,108,785	(12,684,252)	(1,575,467)
<u>Coast Guard Reserve</u>	<u>1,688,601</u>	<u>169,101</u>	<u>1,857,701</u>
Total	282,544,285	(402,950,201)	(120,405,916)

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

**Chapter 1606 Kicker Benefits as of September 30, 2008**

<b><u>Program</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or (Surplus)</u></b>
Army Nat. Guard	\$83,169,223	\$(139,519,861)	\$(56,350,638)
Army Reserve	30,078,230	(129,449,220)	(99,370,990)
Navy Reserve	482,688	(1,209,231)	(726,543)
Marine Corps Reserve	1,085,860	(4,433,680)	(3,347,820)
Air National Guard	35,887,891	(34,058,803)	1,829,089
Air Force Reserve	9,596,457	(11,449,128)	(1,852,671)
<u>Coast Guard Reserve</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	160,300,349	(320,119,922)	\$(159,819,573)

**Chapter 1607 Basic Benefits as of September 30, 2008**

<b><u>Program</u></b>	<b><u>Actuarial Liability</u></b>	<b><u>Assets</u></b>	<b><u>Unfunded Liability or (Surplus)</u></b>
Army Nat. Guard	\$211,049,142	\$(184,520,532)	\$26,528,610
Army Reserve	69,707,406	(83,848,011)	(14,140,605)
Navy Reserve	4,556,919	(32,746,377)	(28,189,458)
Marine Corps Reserve	20,569,350	(14,586,414)	5,982,936
Air National Guard	21,728,122	(34,621,042)	(12,892,920)
Air Force Reserve	11,108,179	(53,227,750)	(42,119,571)
<u>Coast Guard Reserve</u>	<u>848,199</u>	<u>(4,536,775)</u>	<u>(3,688,576)</u>
Total	339,567,317	(408,086,902)	(68,519,585)

In addition to the above, there are 15 items not reflected (some of which are zero), one for each component for Category III, National Call to Service, and Chapter 30 transferred benefits paid from the Fund. However, OACT tracks the assets and liabilities by each of the 40 lines. This Fund allocation is dependent on the accuracy of the reported Fund transactions; errors and missing information directly impact the accuracy of the allocation.



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

**Chapter 30/33 Annual Changes**

	<b><u>Actuarial Liability</u></b>	<b><u>% of Projected Actuarial Liability</u></b>
Projected September 30, 2008	\$977,303,182	
Withdrawal Experience & Census Changes	\$18,099,786	1.9%
Interest Rate Assumption Change	\$0	0.0%
Usage Rate and Other Assumption Changes	\$(13,126,190)	-1.3%
<u>2008 Population Changes</u>	<u>\$(23,326,149)</u>	<u>-2.4%</u>
Total	\$(18,352,553)	-1.9%
Actual September 30, 2008	\$958,950,629	

The development above reflects the changes in actuarial liability from the last valuation (projected) to the latest valuation (actual) for Chapter 30/33. Rates are updated each year to reflect the most recent experience.

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

**Chapter 1606 Annual Changes**

	<b><u>Actuarial Liability</u></b>	<b><u>% of Projected Actuarial Liability</u></b>
September 30, 2008 Projected	\$612,687,682	
2008 Population Changes	\$(81,543,381)	-13.3%
Updated Census	\$(44,598,511)	-7.3%
Interest Rate Assumption Change	\$0	-0.0%
Other Economic Assumption Changes	\$29,287,459	-4.8%
<u>Non-Economic Assumption Changes</u>	<u>\$(72,988,614)</u>	<u>-11.9%</u>
Total	\$(169,843,048)	-27.7%
September 30, 2008 Actual	\$442,844,634	

The development above reflects the changes in actuarial liability from the last valuation to the latest valuation for Chapter 1606. Rates are updated each year to reflect the most recent experience.

The two largest decreases in liability are due to fewer new entrants and lower usage rates than expected. This experience is reflected in the new assumptions for September 30, 2008, which lowers the liability.

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

**Chapter 1607 Annual Changes**

	<b><u>Actuarial Liability</u></b>	<b><u>% of Projected Actuarial Liability</u></b>
September 30, 2008 Projected	\$351,234,248	
2008 Population Changes	\$3,104,666	0.9%
Updated Census	\$376,124,062	107.1%
Interest Rate Assumption Change	\$0	-0.0%
Other Economic Assumption Changes	\$(40,974,033)	-11.7%
<u>Non-Economic Assumption Changes</u>	<u>\$(349,921,627)</u>	<u>-99.6%</u>
Total	\$(11,666,932)	-3.3%
September 30, 2008 Actual	\$339,567,317	

The development above reflects the changes in actuarial liability from the last valuation to the latest valuation for Chapter 1607. Rates are updated each year to reflect the most recent experience.

The liability increase for “Updated Census” is due to having actual data on new eligibles, as per the National Defense Authorization Act of 2008 (NDAA 08) (last year’s valuation factored them into the valuation using a load). These new eligibles are expected to use the benefit far less than those currently eligible because they have had a chance to use the benefit before. The relatively lower usage of these new eligibles as compared to current eligibles is reflected in “Non-Economic Assumption Changes” as a liability decrease.

## **SECTION 5 - AMORTIZATION PAYMENTS**

When a program is expected to have an unfunded liability, a portion of the unfunded liability is paid into the Fund. This portion is the first year's payment of a 5 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. Expected unfunded liabilities (and surpluses) are determined two years in advance for budgetary reasons. For this reason, when amortization payments are made, they do not reflect all data available as of the date the amortization payments are made.

The amortization payments for FY 2010 (determined in the September 30, 2007, valuation) and FY 2011 (determined in the September 30, 2008, valuation) are shown in the following tables. The amortization payment for the Chapter 1606 basic program and the Chapter 1606 kicker program is calculated as a single Chapter 1606 amortization payment.

Note that the payment for Category III is determined differently than the above. The payment for October 1, 2009, for Involuntary Separates and Voluntary Separation Incentive/Special Separation Bonus recipients (i.e., Category III) was determined by estimating FY 2009 benefits, and by bringing forward any surplus or liability from October 1, 2008. Both items were adjusted by interest and then added together to determine the October 1, 2009, payment.

### **Chapter 30/33 Annual Amortization Amounts**

<b><u>Fiscal Year</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>
<b><u>Due Date</u></b>	<b><u>10/1/2009</u></b>	<b><u>10/1/2010</u></b>
Army	\$44,431,267	\$29,937,620
Navy	22,900,991	19,781,165
Marine Corps	3,697,942	4,137,318
Coast Guard	25,582	To be determined

### **Chapter 1606 Annual Amortization Amounts**

<b><u>Fiscal Year</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>
<b><u>Due Date</u></b>	<b><u>10/1/2009</u></b>	<b><u>10/1/2010</u></b>
Army National Guard	\$0	\$0
Army Reserve	0	0
Navy Reserve	0	0
Marine Corps Reserve	0	0
Air National Guard	10,103,003	3,673,929
Air Force Reserve	3,026,556	0
Coast Guard Reserve	448,744	236,053

## **SECTION 5 - AMORTIZATION PAYMENTS (cont.)**

### **Chapter 1607 Basic Benefits Annual Amortization Amounts**

<b><u>Fiscal Year</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>
<b><u>Due Date</u></b>	<b><u>10/1/2009</u></b>	<b><u>10/1/2010</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

### **Category III Basic Annual Amortization Amounts<sup>1</sup>**

<b><u>Fiscal Year</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>
<b><u>Due Date</u></b>	<b><u>10/1/2009</u></b>	<b><u>10/1/2010</u></b>
Army	\$941,092	Set next year
Navy	1,733,654	Set next year
Marine Corps	85,701	Set next year
Air Force	476,988	Set next year
Coast Guard	8,354	Set next year

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

## **SECTION 6 - PER CAPITA COSTS**

The per capita costs for the Chapter 30/33, Chapter 1606, and Chapter 1607 programs are given below. A separate per capita cost is set for each component, program, and benefit amount. Per capita costs are usually determined once per year, but may be calculated more often if there are extenuating circumstances, such as major legislative changes. The per capita costs below have corresponding normal costs that are shown in Appendix C. Note that there are no per capita costs 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 cost. This portion is the first year's payment of a 10 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. Expected surpluses (and unfunded liabilities) are determined two years in advance for budgetary reasons. For this reason, when per capita costs are paid, they do not reflect all data available as of the date the per capita costs are paid.

### **Chapter 30/33 Kicker Benefit Per Capita Costs During FY 2010**

	<u>Army</u> <u>2 Year</u>	<u>Army</u> <u>3 Year</u>	<u>Army</u> <u>4 Year</u>	<u>Army</u> <u>5 Year</u>	<u>Army</u> <u>6 Year</u>	<u>Navy</u> <u>4 Year</u>	<u>M.C.</u> <u>4 Year</u>	<u>M.C.</u> <u>5 Year</u>	<u>M.C.</u> <u>6 Year</u>	<u>C.G. 4</u> <u>Year</u>
\$150	\$2,201	\$2,182	\$1,843	\$1,693	\$1,669	\$1,410	\$2,056	\$1,390	\$1,793	\$1,826
\$250	3,713	3,668	3,100	2,845	2,804	2,369	3,462	2,347	3,021	3,073
\$350	5,258	5,176	4,376	4,014	3,955	3,343	4,894	3,326	4,273	4,343
\$450	6,832	6,706	5,671	5,199	5,121	4,331	6,351	4,328	5,548	5,634
\$550	8,434	8,256	6,985	6,399	6,301	5,331	7,831	5,351	6,844	6,945
\$650	10,060	9,824	8,315	7,612	7,494	6,343	9,332	6,395	8,161	8,275
\$750	11,709	11,409	9,662	8,839	8,700	7,366	10,855	7,459	9,497	9,622
\$850	13,378	13,010	11,023	10,078	9,918	8,400	12,396	8,542	10,852	10,987
\$950	15,066	14,626	12,399	11,329	11,147	9,443	13,956	9,643	12,223	12,369

### **Chapter 30/33 Kicker Benefit Per Capita Costs During FY 2011**

	<u>Army</u> <u>2 Year</u>	<u>Army</u> <u>3 Year</u>	<u>Army</u> <u>4 Year</u>	<u>Army</u> <u>5 Year</u>	<u>Army</u> <u>6 Year</u>	<u>Navy</u> <u>4 Year</u>	<u>M.C.</u> <u>4 Year</u>	<u>M.C.</u> <u>5 Year</u>	<u>M.C.</u> <u>6 Year</u>	<u>C.G. 4</u> <u>Year</u>
\$150	\$2,351	\$2,178	\$1,850	\$1,633	\$1,613	\$1,555	\$2,087	\$1,589	\$1,796	TBD
\$250	3,953	3,652	3,103	2,736	2,703	2,607	3,505	2,674	3,106	TBD
\$350	5,578	5,144	4,373	3,850	3,803	3,671	4,943	3,777	4,253	TBD
\$450	7,226	6,652	5,657	4,974	4,913	4,747	6,400	4,898	5,507	TBD
\$550	8,895	8,174	6,955	6,109	6,032	5,833	7,875	6,036	6,777	TBD
\$650	10,582	9,711	8,266	7,252	7,159	6,930	9,366	7,192	8,061	TBD
\$750	12,287	11,261	9,590	8,404	8,295	8,036	10,874	8,363	9,360	TBD
\$850	14,008	12,823	10,925	9,564	9,439	9,151	12,397	9,550	10,671	TBD
\$950	15,743	14,397	12,273	10,732	10,590	10,275	13,934	10,751	11,995	TBD

**SECTION 6 - PER CAPITA COSTS (cont.)**

**Chapter 1606 Basic Benefit Per Capita Costs During FY 2010**

	<u>Army</u> <u>Guard</u>	<u>Army</u> <u>Reserve</u>	<u>Navy</u> <u>Reserve</u>	<u>Marine</u> <u>Reserve</u>	<u>Air</u> <u>Guard</u>	<u>Air</u> <u>Reserve</u>	<u>Coast</u> <u>Guard</u>
Basic	\$2,278	\$1,557	\$1,037	\$2,953	\$4,151	\$2,563	\$2,067
\$100 Kicker	1,200	830	444	853	1,402	957	759
\$200 Kicker	2,163	1,678	1,163	1,944	2,809	2,030	1,597
\$350 Kicker	3,408	2,470	1,365	3,109	4,681	3,212	3,091

**Chapter 1606 Basic Benefit Per Capita Costs During FY 2011**

	<u>Army</u> <u>Guard</u>	<u>Army</u> <u>Reserve</u>	<u>Navy</u> <u>Reserve</u>	<u>Marine</u> <u>Reserve</u>	<u>Air</u> <u>Guard</u>	<u>Air</u> <u>Reserve</u>	<u>Coast</u> <u>Guard</u>
Basic	\$1,330	\$998	\$560	\$1,489	\$3,892	\$2,137	\$1,402
\$100 Kicker	1,310	997	712	974	1,763	1,371	1,156
\$200 Kicker	2,608	1,933	1,783	2,085	2,842	2,307	2,244
\$350 Kicker	4,755	3,050	4,129	4,287	5,268	4,128	3,957

**Chapter 1607 Basic Benefit Per Capita Costs During FY 2010**

	<u>Army</u> <u>Guard</u>	<u>Army</u> <u>Reserve</u>	<u>Navy</u> <u>Reserve</u>	<u>Marine</u> <u>Reserve</u>	<u>Air</u> <u>Guard</u>	<u>Air</u> <u>Reserve</u>	<u>Coast</u> <u>Guard</u>
40% of MGIB-AD	\$621	\$167	\$0	\$0	\$0	\$0	\$0
60% of MGIB-AD	977	256	0	0	0	0	0
80% of MGIB-AD	1,217	313	0	0	0	0	0

**Chapter 1607 Basic Benefit Per Capita Costs During FY 2011**

	<u>Army</u> <u>Guard</u>	<u>Army</u> <u>Reserve</u>	<u>Navy</u> <u>Reserve</u>	<u>Marine</u> <u>Reserve</u>	<u>Air</u> <u>Guard</u>	<u>Air</u> <u>Reserve</u>	<u>Coast</u> <u>Guard</u>
40% of MGIB-AD	\$591	\$75	\$0	\$0	\$0	\$0	\$0
60% of MGIB-AD	935	124	0	0	0	0	0
80% of MGIB-AD	1,201	152	0	0	0	0	0

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

The description of deficit, debt, and funding impact contained 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 increases in taxes to pre-fund the education benefits programs but do result in increases 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 intragovernmental 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 intragovernmental transfer, while a payment for a member's or dependent's benefit is not.

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 and payments for members' or dependents' benefits. The intragovernmental 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 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.)**

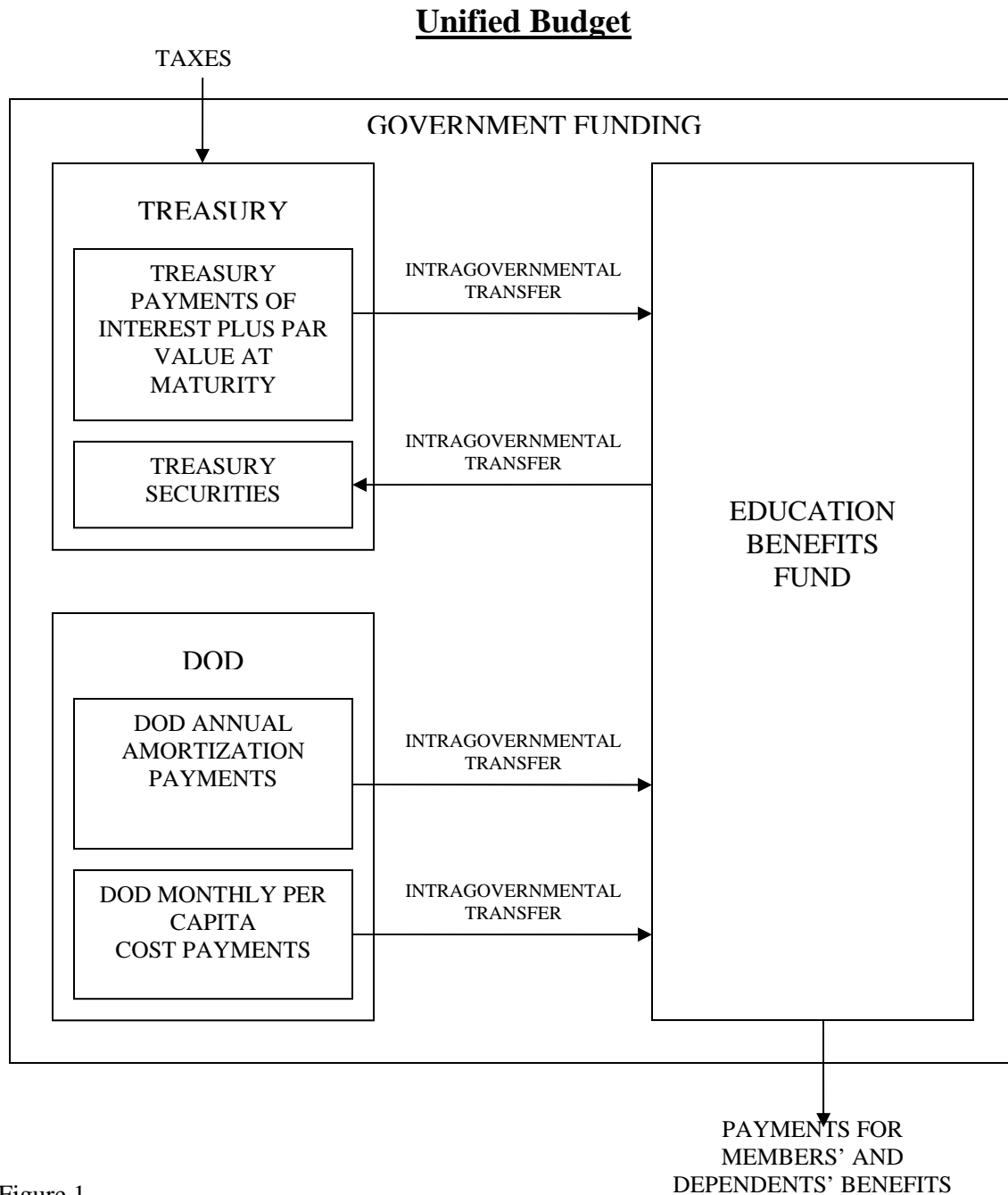


Figure 1

All of the intragovernmental 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.)**

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.

However, funding does have an effect on the DoD budget. With the per capita cost payments in the DoD budget, policymakers now automatically consider the impact on future benefit costs when they make manpower decisions related to offering education benefits, and this could have an impact on future federal budgets. For example, if a decision were made today to double the number of active duty members given kicker benefits under a 6-year contract, the DoD budget would automatically 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.

The fact that costs are fully recognized in advance probably provides greater benefit security over the long term. Also, when there is a fund, the system is not as dependent on obtaining the necessary appropriation from Congress each year in order to pay benefits for that year. This can provide additional benefit security in the short run.

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

Note: The descriptions in this appendix are intended as an overview. For a more comprehensive description of all provisions covering every situation and circumstance, consult other sources.

### **Chapter 30 Kicker Eligibility**

A member can not receive a Chapter 30 kicker benefit without being eligible to receive the Chapter 30 or Chapter 33 basic benefit. Eligibility for the basic benefit requires an honorable discharge, a high school diploma or GED, and meeting the requirements of one of the four main categories. Categories I, II, and IV are described here and Category III is described in its own section.

Category I include 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. The member must have a) continuously served for 3 years, b) served for 2 years if he first enlisted for 2 years, or c) served for 2 years if he 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). The member 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) 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, USC, between July 1, 1985, and November 28, 1989, and have elected MGIB during the period October 9, 1996, through July 8, 1997. Under either way, the member would have had to have 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. However, if the member's eligibility is based on two years of active duty and four 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.

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

### **Chapter 33 Kicker Eligibility**

A member can not receive a Chapter 33 kicker benefit without being eligible to receive the Chapter 33 basic benefit. Veterans who have served at least 90 days of active duty service after September 10, 2001 and received an honorable discharge will qualify for the Chapter 33 basic benefit. To qualify for the full benefit a veteran must have served at least 3 years of active duty after September 10, 2001. The Post-9/11 GI Bill will allow officers who graduated from service academies or who received ROTC scholarships to qualify. Time spent satisfying ROTC or Service Academy active duty obligation does not count toward the active duty service necessary to qualify for the benefits.

For active duty veterans serving active duty service after 9/10, the following chart applies:

<b><u>Member Serves</u></b>	<b><u>Percentage of Maximum Benefit Payable</u></b>
At least 36 months	100%
At least 30 continuous days on active duty and service-connected disability discharge	100%
At least 30 months, but less than 36 months	90%
At least 24 months, but less than 30 months	80%
At least 18 months, but less than 24 months	70%
At least 12 months, but less than 18 months	60%
At least 6 months, but less than 12 months	50%
At least 90 days, but less than 6 months	40%

### **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 Restrictions**

The period of eligibility for the Post-9/11 GI Bill ends 15 years from the date of the last discharge or release from active duty.

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

### **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). Members 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.

At the discretion of the Secretary concerned, 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 \$329 per month for fiscal year 2009. This rate became effective October 1, 2008. 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.

The entitlement time period for a member of the Selected Reserve expires at the date the member is separated from the Selected Reserve. Separation does not terminate the benefit 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 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 Eligibility**

A member of the Ready Reserve is entitled to educational assistance under this chapter if the member served on active duty in support of a contingency operation for 90 consecutive days or more; in the case of a member of the Army National Guard of the United States or Air National Guard of the United States, if the member performed full-time National Guard duty under section 502(f) of title 32 for 90 consecutive days or more when authorized by the President or Secretary of Defense for the purpose of responding to a national emergency declared by the President and supported by Federal funds so long as such service is after September 11, 2001. Members who become disabled before serving 90 consecutive days are entitled to educational assistance under this chapter at the benefit rate of 40% as described below.

### **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 August 1, 2008:

- Members who serve 90 days to less than 1 year receive:  
40% of the MGIB-AD 3-year rate or \$528 per month
- Members who serve 1 year but less than 2 years receive:  
60% of the MGIB-AD 3-year rate or \$793 per month
- Members who serve 2 or more continuous years (or 3 years cumulative) receive:  
80% of the MGIB-AD 3-year rate or \$1,057 per month

Because of the linkage to the MGIB-AD rates, annual increases for Chapter 1607 are determined by the National Center for Education Statistics' index reflecting the average cost of undergraduate tuition.

### **Chapter 1607 Restrictions**

The maximum number of months of educational assistance that may be provided to any member under this chapter is 36. For a member of the Selected Reserve who has completed a service obligation, the period of eligibility ends 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.

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

### **Category III Eligibility**

To qualify under Category III, a member must not be eligible under Category I or Category II<sup>1</sup>, must have been on active duty on September 30, 1990, elected MGIB before being separated, and before separation must have had military pay reduced by \$1200. In addition, the member must have an involuntary separation after February 2, 1991, or have been voluntarily separated under either VSI or SSB.

### **Category III Benefit Amounts**

The full-time institutional training rate is \$1,321 per month for fiscal year 2009. This rate became effective August 1, 2008. 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.

<sup>1</sup> Note that only a portion of Category III benefits are paid by the Fund.

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

### **Restrictions for all EBF 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.

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.



## **APPENDIX B – POPULATION DATA**

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

	<b><u>Sept. 30, 2007</u></b>	<b><u>Sept. 30, 2008</u></b>
<b><u>On Active Duty</u></b>		
Army 2-year	1,975	1,559
Army 3-year	10,410	13,455
Army 4-year	27,024	28,185
Army 5-year	5,518	6,583
Army 6-year	2,978	3,711
Navy 2-year	20	13
Navy 3-year	480	440
Navy 4-year	21,801	20,908
Marine Corps 4-year	6,232	7,398
Marine Corps 5-year	3,468	4,604
<u>Coast Guard 4-year</u>	<u>44</u>	<u>66</u>
Total	79,950	86,922
 <b><u>Not On Active Duty, Who Have Not Used the Benefit</u></b>		
Army 2-year	3,636	2,713
Army 3-year	6,452	6,010
Army 4-year	15,049	15,861
Army 5-year	770	1,178
Army 6-year	601	947
Navy 2-year	26	25
Navy 3-year	771	454
Navy 4-year	20,265	17,897
Marine Corps 4-year	3,470	3,401
Marine Corps 5-year	989	1,134
<u>Coast Guard 4-year</u>	<u>12</u>	<u>22</u>
Total	52,041	53,112
 <b><u>Not On Active Duty, Who Have Used the Benefit</u></b>		
Army 2-year	7,674	6,261
Army 3-year	12,572	10,548
Army 4-year	24,215	24,020
Army 5-year	23	66
Army 6-year	86	132
Navy 2-year	17	13
Navy 3-year	1,571	753
Navy 4-year	26,946	34,694
Marine Corps 4-year	6,230	6,438
Marine Corps 5-year	1,373	1,576
<u>Coast Guard 4-year</u>	<u>27</u>	<u>33</u>
Total	80,734	84,534
 <u>Total Eligible</u>	 212,725	 224,568

## **APPENDIX B – POPULATION DATA (cont.)**

### **Chapter 1606 Eligibles**

	<b><u>Sept. 30, 2007</u></b>	<b><u>Sept. 30, 2008</u></b>
<b><u>Eligible for Basic Benefit</u></b>		
Army National Guard	108,985	94,410
Army Reserve	47,891	49,446
Navy Reserve	14,821	14,970
Marine Corps Reserve	14,489	11,558
Air National Guard	31,742	29,581
Air Force Reserve	14,527	12,591
<u>Coast Guard Reserve</u>	<u>2,100</u>	<u>1,845</u>
Total	234,553	214,401
<b><u>Eligible for Kicker - \$100 per month<sup>1</sup></u></b>		
Army National Guard	1,751	2,831
Army Reserve	13,213	24,157
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	14,964	26,988
<b><u>Eligible for Kicker - \$200 per month<sup>1</sup></u></b>		
Army National Guard	35,911	61,072
Army Reserve	4,159	7,666
Navy Reserve	351	608
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	40,421	69,346
<b><u>Eligible for Kicker - \$350 per month<sup>1</sup></u></b>		
Army National Guard	4,816	10,704
Army Reserve	7,227	13,118
Navy Reserve	0	0
Marine Corps Reserve	697	596
Air National Guard	18,137	25,393
Air Force Reserve	6,787	9,882
<u>Coast Guard Reserve</u>	<u>2</u>	<u>2</u>
Total	37,666	59,695

<sup>1</sup> These 2007 counts were understated. This understatement has the effect of reducing scheduled contributions to accounts for benefit programs already fully funded as a result of the benefit reduction included in the Post 9/11 GI Bill. The handling of the understatement was approved by the Board of Actuaries.

## **APPENDIX B – POPULATION DATA (cont.)**

### **Chapter 1607 Eligibles**

	<b><u>Sept. 30, 2007</u></b>	<b><u>Sept. 30, 2008</u></b>
<b><u>Eligible for 40% of MGIB</u></b>		
Army National Guard	35,064	84,834
Army Reserve	24,243	54,222
Navy Reserve	13,435	25,971
Marine Corps Reserve	13,923	35,379
Air National Guard	23,099	38,475
Air Force Reserve	14,917	25,812
<u>Coast Guard Reserve</u>	<u>1,097</u>	<u>4,361</u>
Total	125,778	269,054
<b><u>Eligible for 60% of MGIB</u></b>		
Army National Guard	99,802	155,510
Army Reserve	45,425	84,934
Navy Reserve	4,245	8,884
Marine Corps Reserve	3,677	8,578
Air National Guard	7,243	12,578
Air Force Reserve	6,373	10,738
<u>Coast Guard Reserve</u>	<u>693</u>	<u>1,212</u>
Total	167,458	282,434
<b><u>Eligible for 80% of MGIB</u></b>		
Army National Guard	9,420	22,773
Army Reserve	5,532	21,271
Navy Reserve	550	2,007
Marine Corps Reserve	1,496	4,439
Air National Guard	1,896	4,656
Air Force Reserve	1,888	4,350
<u>Coast Guard Reserve</u>	<u>1,317</u>	<u>1,288</u>
Total	22,099	60,784

## APPENDIX B – POPULATION DATA (cont.)

### Category III Eligibles<sup>1</sup>

	<u>Number of Persons at Fiscal Year End</u>					
	<u>Involuntary</u>		<u>VSI/SSB</u>		<u>Total</u>	
	<u>2007</u>	<u>2008</u>	<u>2007</u>	<u>2008</u>	<u>2007</u>	<u>2008</u>
<b><u>Enrolled but No Benefit Use</u></b>						
Army	134	76	43	9	177	85
Navy	306	322	32	27	338	349
Marine Corps	26	12	0	1	26	13
Air Force	19	11	12	10	31	21
<u>Coast Guard</u>	<u>16</u>	<u>7</u>	<u>1</u>	<u>0</u>	<u>17</u>	<u>7</u>
Total	501	428	88	47	589	475
<b><u>Enrolled and Has Used the Benefit</u></b>						
Army	177	100	31	3	208	103
Navy	497	462	180	234	677	696
Marine Corps	35	23	3	2	38	25
Air Force	26	18	17	14	43	32
<u>Coast Guard</u>	<u>17</u>	<u>14</u>	<u>0</u>	<u>0</u>	<u>17</u>	<u>14</u>
Total	752	617	231	253	983	870
<b><u>Total</u></b>						
Army	311	176	74	12	385	188
Navy	803	784	212	261	1,015	1,045
Marine Corps	61	35	3	3	64	38
Air Force	45	29	29	24	74	53
<u>Coast Guard</u>	<u>33</u>	<u>21</u>	<u>1</u>	<u>0</u>	<u>34</u>	<u>21</u>
Total	1,253	1,045	319	300	1,572	1,345

<sup>1</sup> This includes only those involuntary and voluntary separatees whose basic benefit is paid from the Department of Defense Education Benefit Fund. This includes separatees who entered the service after December 31, 1976 and before July 1, 1985.

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

### **Post-9/11 GI Bill**

The passage of this landmark legislation creates significant uncertainty with respect to future usage of education benefits. We expect higher benefit amounts and the ability to transfer benefits to dependents to influence usage levels and other behaviors, such as decisions about how long to stay in the service. However, projecting behaviors at this time is very difficult; as actual usage levels become known, our assumptions (and hence our actuarial results) may change significantly in future years.

In addition, regulations governing how the program will be administered are not final at the time of this report. We have assumed that: transferability will be implemented for Chapter 33 kicker benefits, Chapter 1606 basic and kicker benefits, and for Chapter 1607 basic benefits. The ability to transfer benefits to eligible dependents will be effective in FY 2010. 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. Member must serve 4 additional years with some exceptions for those members nearing retirement. Loading factors for transferability have been applied as follows:

Chapter 30/33 Kicker Normal Cost:	7.5%
Chapter 30/33 Kicker Actuarial Liability:	10.0%
Chapter 1606 Basic Normal Cost:	15.0%
Chapter 1607 Basic Normal Cost:	17.5%
Chapter 1606 Kicker Normal Cost:	5.0%
Chapter 1606 Basic Actuarial Liability:	20.0%
Chapter 1607 Basic Actuarial Liability:	25.0%
Chapter 1606 Kicker Actuarial Liability:	10.0%

Significant reductions are expected to be experienced for Chapter 1607 as members choose to participate in the larger benefits offered by Chapter 33. In addition to the load factors mentioned above, the following reductions have been applied to Chapter 1607 normal cost and actuarial liabilities:

Army National Guard	60%
Army Reserve	85%
Navy Reserve	85%
Marine Corps Reserve	85%
Air National Guard	80%
Air Force Reserve	85%
Coast Guard Reserve	85%

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

### **Valuation Date**

The valuation date for this report is September 30, 2008.

### **Actuarial Assumptions**

Actual experience of the system will not coincide exactly with assumed experience, regardless of the choice of the assumptions, the skill of the actuary, and the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all 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 and future expectations.

### **Economic Assumptions**

The Board of Actuaries, independently of DoD, approves the methods and assumptions used to determine the costs of these programs. In August, 2009, the DoD Board of Actuaries adopted the following economic assumptions for use in the valuation as of September 30, 2008.

### **Inflation**

Annual inflation for the Chapter 1606 basic benefit is calculated, per Section 16131 (b) (2) of Title 10, USC, as the percentage increase, rounded to the nearest dollar, in the rates 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 2.6% per year and the select rates are given in the table below. These rates are projected using Blue Chip financial forecasts. Note that the only benefit covered by the EBF that is directly adjusted by this CPI index is the Chapter 1606 basic benefit.

2010	1.6%
2011	1.9%
2012	2.1%
2013	2.3%
2014	2.5%
2015	2.6%
2016	2.6%
2017	2.6%

Annual inflation for Chapter 30 and Chapter 1607 is based on the National Center for Education Statistics' average cost of undergraduate tuition. The rate of inflation for these chapters is assumed to be 6.0% per year.

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

### **Interest Rate**

The interest rate assumption was set by the Board to be 4.5% annually.

### **Methodology**

All benefits are pre-funded except for Category III benefits. For all pre-funded benefits, monthly contributions known as per capita costs 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 fiscal year. The annual payment and the monthly per capita costs are collectively referred to in this report as contributions to the Fund.

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

Calculating the actuarial liability is similar to calculating the per capita costs. For both calculations if participants are expected to receive a benefit in the future, we find the expected value of that benefit, adjusted for the time value of money. However, the per capita cost and the actuarial liability calculations are distinctly different in terms of the population involved and the time at which benefits are valued. The per capita cost calculation uses a hypothetical new-entrant group, whereas the liability calculation uses the actual census population.

### **Normal Cost Calculation**

In addition to the approach outlined in the “Methodology” section above, the normal cost can be derived by multiplying the “Average Benefit Amount” times the “Percent of Benefit Used” times the “Discount Factor” times 36 months. “Average Benefit Amount” is the dollar amount for kicker 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 for and use the benefit, and how much of the potential 36-month total entitlement is projected to be used during the eligibility period. “Discount Factor” reflects the reduction in the normal cost due to discounting for interest and changes in timing due to other assumptions. For example, a discount factor of 0.800 indicates the normal cost is 20% less than it otherwise would be if calculated with a zero interest rate. Programs for which data is available depend on rates determined by actual experience in the most recent 10-year period with adjustments where results are not credible as well as adjustments for future expectations. Usage is adjusted if it is expected to deviate from historical averages since different conditions may be forecast than existed during the time period the historical rates were taken. The normal costs can be found on the pages immediately following.

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

**Chapter 33 Decrement Assumptions FY 2011**

	<u>Average</u> <u>Benefit Amount</u>	<u>Percent of</u> <u>Benefit Used</u>	<u>Discount</u> <u>Factor</u>	<u>Normal</u> <u>Cost</u>
<b><u>Chapter 33 Kicker</u></b>				
Army 2 Year	\$150	58.1%	0.750	\$2,351
Army 2 Year	\$250	58.4%	0.751	\$3,953
Army 2 Year	\$350	58.8%	0.753	\$5,578
Army 2 Year	\$450	59.1%	0.754	\$7,226
Army 2 Year	\$550	59.5%	0.755	\$8,895
Army 2 Year	\$650	59.8%	0.757	\$10,582
Army 2 Year	\$750	60.0%	0.758	\$12,287
Army 2 Year	\$850	60.3%	0.759	\$14,008
Army 2 Year	\$950	60.6%	0.760	\$15,743
<b><u>Chapter 33 Kicker</u></b>				
Army 3 Year	\$150	57.3%	0.704	\$2,178
Army 3 Year	\$250	57.5%	0.705	\$3,652
Army 3 Year	\$350	57.8%	0.706	\$5,144
Army 3 Year	\$450	58.0%	0.708	\$6,652
Army 3 Year	\$550	58.2%	0.709	\$8,174
Army 3 Year	\$650	58.5%	0.710	\$9,711
Army 3 Year	\$750	58.7%	0.711	\$11,261
Army 3 Year	\$850	58.9%	0.712	\$12,823
Army 3 Year	\$950	59.0%	0.713	\$14,397
<b><u>Chapter 33 Kicker</u></b>				
Army 4 Year	\$150	52.2%	0.656	\$1,850
Army 4 Year	\$250	52.5%	0.657	\$3,103
Army 4 Year	\$350	52.8%	0.658	\$4,373
Army 4 Year	\$450	53.0%	0.659	\$5,657
Army 4 Year	\$550	53.2%	0.660	\$6,955
Army 4 Year	\$650	53.4%	0.661	\$8,266
Army 4 Year	\$750	53.7%	0.662	\$9,590
Army 4 Year	\$850	53.9%	0.663	\$10,925
Army 4 Year	\$950	54.0%	0.664	\$12,273



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

### Chapter 33 Decrement Assumptions FY 2011 (cont.)

	<u>Average</u> <u>Benefit Amount</u>	<u>Percent of</u> <u>Benefit Used</u>	<u>Discount</u> <u>Factor</u>	<u>Normal</u> <u>Cost</u>
<b><u>Chapter 33 Kicker</u></b>				
Army 5 Year	\$150	47.2%	0.641	\$1,633
Army 5 Year	\$250	47.4%	0.641	\$2,736
Army 5 Year	\$350	47.6%	0.642	\$3,850
Army 5 Year	\$450	47.8%	0.643	\$4,974
Army 5 Year	\$550	47.9%	0.644	\$6,109
Army 5 Year	\$650	48.1%	0.645	\$7,252
Army 5 Year	\$750	48.2%	0.645	\$8,404
Army 5 Year	\$850	48.4%	0.646	\$9,564
Army 5 Year	\$950	48.5%	0.647	\$10,732
<b><u>Chapter 33 Kicker</u></b>				
Army 6 Year	\$150	47.6%	0.627	\$1,613
Army 6 Year	\$250	47.8%	0.628	\$2,703
Army 6 Year	\$350	48.0%	0.628	\$3,803
Army 6 Year	\$450	48.2%	0.629	\$4,913
Army 6 Year	\$550	48.4%	0.629	\$6,032
Army 6 Year	\$650	48.6%	0.630	\$7,159
Army 6 Year	\$750	48.7%	0.630	\$8,295
Army 6 Year	\$850	48.9%	0.631	\$9,439
Army 6 Year	\$950	49.1%	0.631	\$10,590
<b><u>Chapter 33 Kicker</u></b>				
Navy 4 Year	\$150	42.1%	0.683	\$1,555
Navy 4 Year	\$250	42.3%	0.684	\$2,607
Navy 4 Year	\$350	42.5%	0.685	\$3,671
Navy 4 Year	\$450	42.7%	0.686	\$4,747
Navy 4 Year	\$550	42.9%	0.687	\$5,833
Navy 4 Year	\$650	43.0%	0.688	\$6,930
Navy 4 Year	\$750	43.2%	0.689	\$8,036
Navy 4 Year	\$850	43.3%	0.690	\$9,151
Navy 4 Year	\$950	43.5%	0.691	\$10,275
<b><u>Chapter 33 Kicker</u></b>				
Marines Corp 4 Year	\$150	55.5%	0.696	\$2,087
Marines Corp 4 Year	\$250	55.8%	0.697	\$3,505
Marines Corp 4 Year	\$350	56.2%	0.698	\$4,943
Marines Corp 4 Year	\$450	56.5%	0.699	\$6,400
Marines Corp 4 Year	\$550	56.8%	0.700	\$7,875
Marines Corp 4 Year	\$650	57.1%	0.701	\$9,366
Marines Corp 4 Year	\$750	57.4%	0.702	\$10,874
Marines Corp 4 Year	\$850	57.6%	0.703	\$12,397
Marines Corp 4 Year	\$950	57.9%	0.704	\$13,934

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

**Chapter 33 Decrement Assumptions FY 2011 (cont.)**

	<u>Average</u> <u>Benefit Amount</u>	<u>Percent of</u> <u>Benefit Used</u>	<u>Discount</u> <u>Factor</u>	<u>Normal</u> <u>Cost</u>
<b><u>Chapter 33 Kicker</u></b>				
Marines Corps 5 Year	\$150	45.4%	0.648	\$1,589
Marines Corps 5 Year	\$250	45.8%	0.648	\$2,674
Marines Corps 5 Year	\$350	46.2%	0.649	\$3,777
Marines Corps 5 Year	\$450	46.5%	0.650	\$4,898
Marines Corps 5 Year	\$550	46.9%	0.651	\$6,036
Marines Corps 5 Year	\$650	47.2%	0.651	\$7,192
Marines Corps 5 Year	\$750	47.5%	0.652	\$8,363
Marines Corps 5 Year	\$850	47.8%	0.653	\$9,550
Marines Corps 5 Year	\$950	48.1%	0.653	\$10,751
<b><u>Chapter 33 Kicker</u></b>				
Marines Corps 6 Year	\$150	52.3%	0.636	\$1,796
Marines Corps 6 Year	\$250	52.7%	0.636	\$3,016
Marines Corps 6 Year	\$350	53.0%	0.637	\$4,253
Marines Corps 6 Year	\$450	53.3%	0.637	\$5,507
Marines Corps 6 Year	\$550	53.7%	0.638	\$6,777
Marines Corps 6 Year	\$650	54.0%	0.638	\$8,061
Marines Corps 6 Year	\$750	54.3%	0.639	\$9,360
Marines Corps 6 Year	\$850	54.6%	0.639	\$10,671
Marines Corps 6 Year	\$950	54.9%	0.639	\$11,995
<b><u>Chapter 33 Kicker</u></b>				
Coast Guard 4 Year	\$150	70.1%	0.673	\$2,547
Coast Guard 4 Year	\$250	70.3%	0.674	\$4,267
Coast Guard 4 Year	\$350	70.6%	0.675	\$6,004
Coast Guard 4 Year	\$450	70.8%	0.676	\$7,757
Coast Guard 4 Year	\$550	71.0%	0.677	\$9,525
Coast Guard 4 Year	\$650	71.3%	0.678	\$11,308
Coast Guard 4 Year	\$750	71.5%	0.679	\$13,104
Coast Guard 4 Year	\$850	71.7%	0.680	\$14,912
Coast Guard 4 Year	\$950	71.9%	0.681	\$16,733

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

### Chapter 1606 Decrement Assumptions FY 2011

	<u>Average</u> <u>Benefit Amount</u>	<u>Percent of</u> <u>Benefit Used</u>	<u>Discount</u> <u>Factor</u>	<u>Normal</u> <u>Cost</u>
<b><u>Chapter 1606 Basic</u></b>				
Army National Guard	\$355	17.2%	0.905	\$1,994
Army Reserve	\$355	16.1%	0.905	\$1,858
Navy Reserve	\$361	7.9%	0.881	\$902
Marine Corps Reserve	\$353	19.1%	0.914	\$2,225
Air National Guard	\$355	33.5%	0.908	\$3,892
Air Force Reserve	\$355	18.9%	0.907	\$2,193
Coast Guard Reserve	\$361	12.3%	0.879	\$1,402
<b><u>Chapter 1606 Kicker - \$100</u></b>				
Army National Guard	\$100	38.9%	0.936	\$1,310
Army Reserve	\$100	30.1%	0.919	\$997
Navy Reserve	\$100	21.8%	0.907	\$712
Marine Corps Reserve	\$100	28.9%	0.935	\$974
Air National Guard	\$100	54.0%	0.907	\$1,763
Air Force Reserve	\$100	41.9%	0.909	\$1,371
Coast Guard Reserve	\$100	34.8%	0.922	\$1,156
<b><u>Chapter 1606 Kicker - \$200</u></b>				
Army National Guard	\$200	38.7%	0.935	\$2,608
Army Reserve	\$200	29.3%	0.916	\$1,933
Navy Reserve	\$200	26.8%	0.923	\$1,783
Marine Corps Reserve	\$200	30.8%	0.941	\$2,085
Air National Guard	\$200	43.2%	0.914	\$2,842
Air Force Reserve	\$200	34.7%	0.924	\$2,307
Coast Guard Reserve	\$200	33.5%	0.932	\$2,244
<b><u>Chapter 1606 Kicker - \$350</u></b>				
Army National Guard	\$350	41.1%	0.917	\$4,755
Army Reserve	\$350	26.4%	0.917	\$3,050
Navy Reserve	\$350	35.5%	0.923	\$4,129
Marine Corps Reserve	\$350	37.0%	0.921	\$4,287
Air National Guard	\$350	45.9%	0.910	\$5,268
Air Force Reserve	\$350	35.8%	0.916	\$4,128
Coast Guard Reserve	\$350	34.4%	0.913	\$3,957

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

### Chapter 1607 Decrement Assumptions FY 2011

	<u>Average</u> <u>Benefit Amount</u>	<u>Percent of</u> <u>Benefit Used</u>	<u>Discount</u> <u>Factor</u>	<u>Normal</u> <u>Cost</u>
<b><u>Chapter 1607 40% of MGIB-AD</u></b>				
Army National Guard	\$767	3.9%	0.817	\$875
Army Reserve	\$775	1.2%	0.810	\$278
Navy Reserve	\$749	0.5%	0.831	\$111
Marine Corps Reserve	\$752	1.3%	0.830	\$284
Air National Guard	\$795	1.8%	0.794	\$419
Air Force Reserve	\$762	1.0%	0.821	\$223
Coast Guard Reserve	\$815	0.6%	0.779	\$135
<b><u>Chapter 1607 60% of MGIB-AD</u></b>				
Army National Guard	\$1,166	4.1%	0.809	\$1,385
Army Reserve	\$1,173	1.3%	0.805	\$459
Navy Reserve	\$1,102	0.7%	0.844	\$221
Marine Corps Reserve	\$1,154	1.2%	0.816	\$422
Air National Guard	\$1,217	1.9%	0.783	\$663
Air Force Reserve	\$1,164	1.0%	0.810	\$344
Coast Guard Reserve	\$1,231	0.7%	0.775	\$225
<b><u>Chapter 1607 80% of MGIB-AD</u></b>				
Army National Guard	\$1,608	3.9%	0.789	\$1,778
Army Reserve	\$1,640	1.2%	0.777	\$562
Navy Reserve	\$1,581	0.5%	0.798	\$209
Marine Corps Reserve	\$1,567	1.2%	0.805	\$564
Air National Guard	\$1,698	1.8%	0.756	\$848
Air Force Reserve	\$1,618	0.9%	0.785	\$422
Coast Guard Reserve	\$1,790	0.5%	0.726	\$250

## **APPENDIX D: FUND HISTORY<sup>1</sup>**

(Dollar Amounts in Millions)

### **Chapter 30 Kicker Benefit Contributions**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navv</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$67.612	\$35.439	\$18.135	-	\$121.186
2000	90.880	28.257	17.567	-	136.704
2001	93.412	38.089	20.356	-	151.857
2002	75.671	30.314	15.100	-	121.085
2003	36.222	10.578	9.034	\$0.270	56.104
2004	11.131	5.671	8.077	0.005	24.883
2005	46.450	6.826	6.358	-	59.634
2006	35.012	2.146	8.592	-	45.750
2007	43.969	7.288	18.418	-	69.675
2008	80.679	12.355	10.510	0.027	103.572

### **Chapter 30 Kicker Benefit Interest**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navv</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$15.634	\$6.325	\$1.693	-	\$23.652
2000	18.431	8.214	2.869	-	29.513
2001	21.226	9.303	3.920	-	34.449
2002	20.778	9.100	4.233	-	34.111
2003	18.949	8.066	4.051	\$0.012	31.077
2004	14.561	5.908	3.404	0.010	23.883
2005	14.347	5.292	3.446	0.009	23.095
2006	19.019	5.878	4.505	0.009	29.411
2007	19.903	5.013	4.886	0.007	29.810
2008	23.697	4.621	5.604	0.007	33.929

### **Chapter 30 Kicker Benefit Benefit Payments**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navv</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$60.204	\$13.851	\$1.515	-	\$75.300
2000	54.037	15.020	2.381	-	71.437
2001	49.713	16.665	3.393	-	69.771
2002	47.939	20.280	4.832	-	73.052
2003	47.642	25.211	6.760	-	79.613
2004	48.660	29.119	8.277	\$0.015	86.071
2005	50.966	32.419	9.724	0.059	93.168
2006	51.195	34.025	12.328	0.055	97.602
2007	49.194	34.025	13.577	0.057	96.853
2008	44.586	33.165	14.551	0.058	92.360

### **Chapter 30 Kicker Benefit End of Year Fund Balance**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navv</u></b>	<b><u>Marine Corps</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$261.387	\$117.079	\$37.423	-	\$415.888
2000	316.661	138.530	55.477	-	510.668
2001	381.586	169.257	76.360	-	627.203
2002	430.097	188.390	90.860	-	709.347
2003	437.626	181.823	97.185	\$0.282	716.915
2004	414.658	164.283	100.388	0.281	679.611
2005	424.490	143.983	100.469	0.230	669.173
2006	427.327	117.982	101.238	0.184	646.731
2007	442.005	96.259	110.964	0.134	649.363
2008	501.795	80.070	112.527	0.111	694.504

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

## **APPENDIX D: FUND HISTORY (cont.)**

(Dollar Amounts in Millions)

### **Chapter 1606 Basic and Kicker Benefit 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>
1999	\$39.677	\$31.852	\$2.484	\$12.612	\$9.673	-	-	\$96.299
2000	43.274	32.706	3.005	17.024	13.198	\$2.109	-	111.226
2001	41.901	40.955	4.098	16.120	13.399	3.571	-	120.044
2002	50.431	53.566	1.209	13.789	17.951	9.920	-	146.865
2003	84.560	48.656	0.403	13.478	27.004	5.512	-	179.613
2004	83.768	32.127	0.281	13.389	35.090	5.396	-	170.051
2005	93.876	43.302	0.964	16.539	36.490	4.993	-	196.165
2006	138.005	49.457	9.678	20.931	43.751	8.111	-	269.933
2007	129.721	39.262	3.994	12.759	45.597	7.758	\$0.878	239.969
2008	123.794	72.914	5.804	9.255	46.612	7.490	0.904	266.772

### **Chapter 1606 Basic and Kicker Benefit 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>
1999	\$5.897	\$3.838	\$2.155	\$0.780	\$1.055	\$2.783	-	\$16.508
2000	6.393	4.659	2.200	0.950	1.095	2.799	-	18.096
2001	5.985	5.147	2.124	1.090	0.915	2.660	-	17.921
2002	4.442	5.218	1.776	0.987	0.569	2.328	-	15.319
2003	3.853	5.297	1.411	0.989	0.557	2.068	-	14.175
2004	3.751	4.545	0.973	0.870	0.328	1.535	-	12.003
2005	4.445	4.714	0.816	0.982	0.235	1.326	-	12.518
2006	9.002	7.047	1.113	1.758	0.823	1.487	-	21.229
2007	10.427	6.907	1.075	1.756	0.913	1.207	\$(0.007)	22.276
2008	16.101	9.783	1.283	2.260	2.054	1.251	(0.004)	32.728

### **Chapter 1606 Basic and Kicker 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>
1999	\$41.863	\$24.579	\$4.716	\$12.098	\$10.436	\$4.365	-	\$98.057
2000	44.458	26.962	5.426	13.136	14.268	4.816	-	109.067
2001	56.693	31.393	5.151	15.396	19.837	6.557	-	135.027
2002	64.734	36.022	4.499	14.056	23.148	7.450	-	149.908
2003	76.248	38.480	5.440	10.874	29.843	9.231	-	170.116
2004	73.486	34.101	6.311	13.552	37.773	11.682	-	176.906
2005	72.175	41.175	6.114	11.685	39.795	14.281	-	185.225
2006	57.346	29.485	4.945	6.924	33.821	14.063	-	146.584
2007	38.891	18.705	3.912	5.295	24.073	10.961	\$0.719	102.556
2008	53.319	23.683	4.117	7.020	29.247	9.404	0.821	127.610

### **Chapter 1606 Basic and Kicker Benefit 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>
1999	\$98.997	\$69.687	\$35.298	\$12.054	\$17.990	\$44.690	-	\$278.717
2000	104.206	80.090	35.078	16.892	18.015	44.692	-	298.972
2001	95.398	94.799	36.149	18.707	12.493	44.366	-	301.911
2002	85.536	117.561	34.635	20.573	9.734	49.163	-	317.203
2003	97.701	133.034	31.009	24.166	7.451	47.512	-	340.875
2004	111.734	135.605	25.953	24.873	5.096	42.761	-	346.023
2005	137.880	142.446	21.619	30.709	2.026	34.800	-	369.480
2006	227.541	169.465	27.465	46.474	12.779	30.334	-	514.059
2007	273.706	163.586	23.930	42.572	22.838	24.797	\$(0.248)	551.181
2008	360.282	222.600	26.900	47.067	42.257	24.133	(0.169)	723.070

## **APPENDIX D: FUND HISTORY (cont.)**

(Dollar Amounts in Millions)

### **Chapter 1607 Basic Benefit Contributions**

<b><u>FY</u></b>	<b><u>ARNG</u></b>	<b><u>USAR</u></b>	<b><u>USNR</u></b>	<b><u>USMCR</u></b>	<b><u>ANG</u></b>	<b><u>USAFR</u></b>	<b><u>USCGR</u></b>	<b><u>Total</u></b>
1999	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	\$57.467	\$35.969	\$7.854	-	-	\$21.944	-	\$123.233
2007	37.875	23.126	10.471	\$7.968	\$0.215	16.033	\$0.384	96.072
2008	127.965	29.674	-	9.629	20.740	8.151	0.843	197.002

### **Chapter 1607 Basic Benefit Interest**

<b><u>FY</u></b>	<b><u>ARNG</u></b>	<b><u>USAR</u></b>	<b><u>USNR</u></b>	<b><u>USMCR</u></b>	<b><u>ANG</u></b>	<b><u>USAFR</u></b>	<b><u>USCGR</u></b>	<b><u>Total</u></b>
1999	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	\$1.271	\$1.064	\$0.534	\$(0.021)	\$0.376	\$.862	\$0.075	\$4.161
2007	4.989	3.521	1.328	0.466	0.874	2.052	0.149	13.380
2008	8.461	4.620	1.653	0.837	1.531	2.598	0.215	19.915

### **Chapter 1607 Basic Benefit Payments**

<b><u>FY</u></b>	<b><u>ARNG</u></b>	<b><u>USAR</u></b>	<b><u>USNR</u></b>	<b><u>USMCR</u></b>	<b><u>ANG</u></b>	<b><u>USAFR</u></b>	<b><u>USCGR</u></b>	<b><u>Total</u></b>
1999	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	\$65.198	\$33.985	\$1.172	\$13.548	\$8.561	\$3.465	\$0.379	\$126.308
2007	116.781	58.345	2.219	18.064	16.650	7.849	0.751	220.659
2008	90.124	46.119	2.470	13.082	11.989	7.584	0.542	171.910

### **Chapter 1607 Basic Benefit End of Year Fund Balance**

<b><u>FY</u></b>	<b><u>ARNG</u></b>	<b><u>USAR</u></b>	<b><u>USNR</u></b>	<b><u>USMCR</u></b>	<b><u>ANG</u></b>	<b><u>USAFR</u></b>	<b><u>USCGR</u></b>	<b><u>Total</u></b>
1999	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	\$20.339	\$22.648	\$15.316	\$(7.869)	\$4.015	\$28.141	\$1.532	\$84.123
2007	66.235	58.220	33.564	4.336	10.715	49.372	3.124	225.565
2008	184.521	83.848	32.746	14.586	34.621	53.228	4.537	408.087

## **APPENDIX D: FUND HISTORY (cont.)**

(Dollar Amounts in Millions)

### **Category III Basic Benefit Contributions**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navy</u></b>	<b><u>Marine Corps</u></b>	<b><u>Air Force</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$3.909	\$1.352	\$0.779	\$4.040	-	\$10.079
2000	3.834	1.254	0.816	3.793	-	9.698
2001	3.540	1.204	0.607	3.414	-	8.764
2002	3.567	1.348	0.621	3.585	-	9.121
2003	4.068	1.745	0.778	4.091	-	10.681
2004	3.618	1.499	0.722	3.211	-	9.049
2005	2.904	1.463	0.475	3.266	-	8.108
2006	2.204	1.770	0.371	1.882	-	6.228
2007	1.247	1.728	0.259	0.130	\$0.125	3.364
2008	1.193	1.955	0.135	0.486	0.015	3.784

### **Category III Basic Benefit Interest**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navy</u></b>	<b><u>Marine Corps</u></b>	<b><u>Air Force</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$(0.121)	\$(0.039)	\$(0.025)	\$(0.116)	-	\$(0.301)
2000	(0.114)	(0.038)	(0.018)	(0.109)	-	(0.280)
2001	(0.108)	(0.042)	(0.019)	(0.108)	-	(0.277)
2002	(0.101)	(0.044)	(0.019)	(0.100)	-	(0.265)
2003	(0.076)	(0.032)	(0.015)	(0.067)	-	(0.190)
2004	(0.049)	(0.026)	(0.008)	(0.057)	-	(0.140)
2005	(0.035)	(0.032)	(0.006)	(0.029)	\$(0.001)	(0.103)
2006	(0.023)	(0.036)	(0.005)	0.003	(0.003)	(0.065)
2007	(0.024)	(0.040)	(0.002)	(0.010)	(0.006)	(0.083)
2008	(0.018)	(0.038)	(0.001)	(0.008)	(0.007)	(0.072)

### **Category III Basic Benefit Payments**

<b><u>FY</u></b>	<b><u>Army</u></b>	<b><u>Navy</u></b>	<b><u>Marine Corps</u></b>	<b><u>Air Force</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$3.771	\$1.224	\$0.761	\$3.748	-	\$9.503
2000	3.346	1.158	0.608	3.279	-	8.391
2001	3.480	1.340	0.618	3.478	-	8.917
2002	3.856	1.624	0.725	3.865	-	10.070
2003	3.602	1.506	0.721	3.274	-	9.103
2004	2.805	1.489	0.467	3.233	\$0.012	8.006
2005	2.123	1.697	0.363	1.545	0.035	5.763
2006	1.338	1.726	0.258	0.412	0.063	3.798
2007	1.081	1.784	0.118	0.422	0.023	3.428
2008	0.909	1.718	0.077	0.363	0.010	3.076

### **Category III Basic Benefit 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>Air Force</u></b>	<b><u>Coast Guard</u></b>	<b><u>Total</u></b>
1999	\$(3.945)	\$(1.274)	\$(0.797)	\$(0.056)	-	\$(6.073)
2000	(3.571)	(1.217)	(0.607)	(3.444)	-	(8.839)
2001	(3.620)	(1.394)	(0.637)	(3.617)	-	(9.268)
2002	(4.010)	(1.715)	(0.761)	(3.996)	-	(10.482)
2003	(3.621)	(1.507)	(0.719)	(3.247)	-	(9.094)
2004	(2.857)	(1.523)	(0.472)	(3.326)	\$(0.012)	(8.190)
2005	(2.111)	(1.789)	(0.366)	(1.634)	(0.048)	(5.948)
2006	(1.268)	(1.781)	(0.258)	(0.161)	(0.115)	(3.583)
2007	(1.126)	(1.878)	(0.119)	(0.463)	(0.144)	(3.730)
2008	(0.861)	(1.679)	(0.062)	(0.347)	(0.145)	(3.094)



## **APPENDIX E – LEGISLATIVE HISTORY**

### **Background**

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

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

Title 38 covers veterans and the MGIB benefits for active duty members are generally used after members become veterans. Title 10, on the other hand, covers DoD, 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 benefit is 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 to approximately 100 Air Force and 400 Army active duty members, where a member who has been in the service for six years and agrees to stay for four more years can transfer part of his Chapter 30 eligibility for benefits to a dependent. This program is partly paid by the Veterans Administration (VA) and partly by the Fund. The part paid by the Fund is pre-funded by a normal cost mechanism.

### **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, also have their basic benefits paid by VA, unless because of discontinuous service they are not already enrolled in the MGIB. 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 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 + kicker 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-year 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 + kicker would remain constant. The benefit maximum 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.

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

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

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.

Public Law 103-66 (August 10, 1993) eliminated the COLA for October 1, 1993, 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 kicker = (advertised amount - 36 \* 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.

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

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

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).

Public Law 107-107 (December 28, 2001) permits transferring entitlement of MGIB benefits to dependents in certain conditions. Under the Service Secretary'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) Section 527 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) Section 106 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) Section 539, provides that licensing and certification tests are now payable under Chapters 1606 and 1607 of title 10, U.S. 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 rate payable up to 36 months.

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

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

Public Law 109-461 (December 22, 2006), Section 305, 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.

Public Law 110-181 (January 28, 2008). Commonly referred to as “NDAA 08”, this law allowed reservists otherwise eligible for MGIB-SR or REAP the potential to receive accelerated payments for a non-degree program lasting 2 years or less. It made the REAP 80% rate available to anyone who was mobilized for at least 2 continuous years of active duty **OR** served multiple mobilizations totaling 3 years or more. It created a \$600 buy-up program for REAP participants. It modified ending dates for REAP participants separated from the Selected Reserve and for MGIB-SR participants separated involuntarily. It expanded REAP eligibility to anyone having a break in service (regardless of length) as long as they continue 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”, this 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 if they complete an additional service period. Members with at least 10 years of active duty can transfer benefits to their child if they complete an additional service period.

## **APPENDIX F – BENEFIT PAYMENT PROJECTIONS<sup>1</sup>**

<b><u>Fiscal Year</u></b>	<b><u>Chapter 30/33</u></b>	<b><u>Chapter 1606</u></b>	<b><u>Chapter 1607</u></b>	<b><u>Category III</u></b>	<b><u>Total</u></b>
2010	\$106,064,753	\$247,349,209	\$60,516,971	\$3,816,196	\$417,747,128
2011	119,674,502	275,941,904	56,452,560	3,869,831	455,938,797
2012	132,294,520	299,042,940	54,135,700	3,697,369	489,170,530
2013	147,967,083	310,317,071	50,678,346	3,083,736	512,046,235
2014	160,939,072	317,225,673	46,988,273	2,758,057	527,911,075
2015	166,743,931	321,790,839	45,379,786	2,469,999	536,384,555
2016	167,951,357	326,408,916	45,298,544	\$0	539,658,817
2017	168,986,740	330,998,635	45,477,113	\$0	545,462,488
2018	169,444,286	335,765,308	44,252,097	\$0	549,461,690
2019	169,997,141	340,957,500	43,295,560	\$0	554,250,201
2020	170,118,050	346,620,722	42,812,969	\$0	559,551,741

<sup>1</sup> These projections rely on input, such as new entrant estimates, provided to OACT by Comptroller and Reserve Affairs. If new entrant estimates change, so will these projections.

## **APPENDIX G – GLOSSARY**

### **Actuarial liability**

The present value of benefits expected to be paid from the Fund to current plan participants. 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 nature of liability 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 G – GLOSSARY (cont.)**

### **Fund**

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.

### **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.

### **Member**

A person eligible to participate in a Fund program.

### **MGIB-AD**

Montgomery GI Bill active duty benefits for Active Duty under Chapter 30.

### **MGIB-SR**

Montgomery GI Bill benefits for Selected Reserve under Chapter 1606.

### **Normal cost**

The expected present value of liabilities 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 G – GLOSSARY (cont.)**

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

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

### **Per capita cost**

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 cost is paid once for each new entrant.

### **Present value of benefits**

The amount, discounted to the valuation date, of benefits expected to be paid from the plan to current plan participants. Does not include new entrants after the valuation date.

### **REAP**

Reserve Education Assistance Program benefits under Chapter 1607.

### **Time value of money**

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

### **Transferability**

The right to transfer a benefit to a spouse or child dependent.

### **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 can be expected to separate from the service by the end of the year.