April 17, 2018

The Honorable Mike Lee  
Vice Chairman  
Joint Economic Committee  
United States Senate

The Honorable Bill Cassidy  
United States Senate

The Honorable Tom Cotton  
United States Senate

**Higher Education: Characteristics of Graduate PLUS Borrowers**

To help students and their families pay for higher education, the Department of Education (Education) provides billions of dollars in federal student loans each year through programs authorized under Title IV of the Higher Education Act of 1965, as amended.¹ As of September 2017, over 42 million borrowers held nearly $1.4 trillion in federal student loans. Graduate students have been eligible for Graduate PLUS (Grad PLUS) loans to help finance their education since July 1, 2006.² Grad PLUS loans are not need-based and students can borrow up to the cost of attendance, such as tuition, fees, and room and board, minus any other estimated financial assistance.³ Grad PLUS loans are also different than many other federal student loans because they do not have fixed annual or aggregate—referred to in this report as “lifetime”—limits.

Education currently offers a variety of repayment plans for federal student loan borrowers, including, among others, the Standard plan and several Income-Driven Repayment plans. Income-Driven Repayment is an umbrella term that describes a number of repayment plans available to eligible borrowers that primarily base payment amounts on a borrower’s income, and extend repayment periods from the typical 10 years under the Standard plan to 20 or 25 years, with any remaining balance forgiven at the end of the loan repayment period. Since 2009, several Income-Driven Repayment plans have been made available to borrowers, and these

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³Cost of attendance is an estimate of a student’s educational expenses for one period of enrollment (such as an academic year). Cost of attendance includes, among other things, tuition and fees, books and supplies, room and board, transportation, and other miscellaneous personal expenses (e.g., the cost of purchasing a personal computer). See 20 U.S.C. § 1087ll.
plans may help reduce some of the challenges borrowers face in repaying their loans.\textsuperscript{4} Grad PLUS borrowers may choose to participate in Income-Driven Repayment plans if the borrower and the loans meet the applicable criteria.

Education also offers the Public Service Loan Forgiveness program, which allows borrowers, including those with eligible Grad PLUS loans, to have their loans forgiven after 10 years of qualifying payments if they meet certain requirements. To receive loan forgiveness, borrowers must participate in a qualifying repayment plan and make 120 on-time monthly payments while employed full-time in a public service job.\textsuperscript{5} Borrowers were first eligible to start making qualifying payments under the Public Service Loan Forgiveness program in 2007. The first potentially eligible borrowers began applying for forgiveness in 2017.

You asked us to review issues related to Grad PLUS loans and borrowers. This report examines (1) what is known about Grad PLUS borrowers and the loan repayment plans they use to manage their debt, and (2) how the addition of loan limits might affect the number and type of borrowers, and the amount of money awarded for Grad PLUS loans.

To address both objectives, we analyzed data from Education’s National Student Loan Data System, a database with information on federal student loan borrowers. We used National Student Loan Data System data on Grad PLUS borrowers from award years 2007 (July 1, 2006-June 30, 2007) through 2017 (July 1, 2016-June 30, 2017).\textsuperscript{6} We also analyzed data from Education’s 2012 Baccalaureate and Beyond survey, a nationally representative longitudinal survey of students’ education and work experiences following completion of a bachelor’s degree. The 2012 data set includes students who completed bachelor’s degree requirements in the 2007-2008 academic year. We selected this data set because it was the most recent Baccalaureate and Beyond data available and the only Baccalaureate and Beyond data that captured students with Grad PLUS loans. The survey sample includes 1,239 Grad PLUS borrowers, and results are weighted estimates.\textsuperscript{7} To assess the reliability of the National Student Loan Data System and the Baccalaureate and Beyond data sets we reviewed data documentation, and, for the National Student Loan Data System data set, interviewed agency officials knowledgeable about these data. Because the Baccalaureate and Beyond data are of a sample (rather than the entire population) of Grad PLUS borrowers, we express precision of the results produced from the analysis of these data at the 95 percent confidence level. We found that both of the data sets were sufficiently reliable for our purposes in describing the characteristics of Grad PLUS borrowers, the repayment plans they use to manage their debt, and how the addition of loan limits might affect Grad PLUS borrowers.


\textsuperscript{5}20 U.S.C. § 1087e(m); 34 C.F.R. § 685.219. Qualifying repayment plans include the Income-Driven Repayment plans and the Standard plan. Public service jobs include, among others, full-time jobs in government or at a tax-exempt nonprofit organization.

\textsuperscript{6}For borrowers who consolidated their Grad PLUS loans with one or more other federal loans into a single, new “consolidation” loan, we did not analyze actions—such as defaults or changes to repayment plans—that occurred after the consolidation took place. Fewer than 25 percent of Grad PLUS borrowers consolidated their Grad PLUS loans, which represented less than 25 percent of overall Grad PLUS disbursements. The figures we present from the National Student Loan Data System data set have been rounded.

\textsuperscript{7}All percentage estimates presented are plus or minus 5 percentage points unless otherwise noted.
We also modeled three scenarios with varying graduate borrowing and income amounts. The three scenarios were based on the 2012 data set of Education’s Baccalaureate and Beyond survey data to portray a range of hypothetical borrowers. These simulations are intended for illustrative purposes. Additionally, we analyzed National Student Loan Data System data to describe the effect of hypothetical Grad PLUS loan limits. These loan limits were selected to illustrate a range of alternatives for our analysis. To identify the effect of loan limits, we tested annual loan limits—or limits on the amount that individuals can borrow in 1 year—of $10,000, $20,000, and $25,000, and lifetime loan limits—or limits on the amount that individuals can borrow in a lifetime—of $50,000, $100,000, and $125,000. For both types of limits, we calculated the number of borrowers who would be affected and summed the amount of Grad PLUS funding they collectively would not have been able to borrow given those respective limits. For this analysis, we assumed that borrowers over a hypothetical limit would have instead borrowed up to the limit, and we counted any amount above that limit as funds that would not have been awarded.

We conducted this performance audit from January 2017 to April 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

On March 20, 2018, we briefed your staff on the preliminary results of this study. This report formally conveys the information provided during this briefing, as summarized below (see enclosure I for the briefing slides).

- **Grad PLUS borrowers:** As of June 30, 2017, the median Grad PLUS borrower had taken out over $140,000 in federal student loans (including Grad PLUS, undergraduate, and other graduate loans). Nearly $27,000 of that amount was Grad PLUS loans. From award years 2007 through 2017, Education disbursed $71 billion in Grad PLUS

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8 We calculated total repayment for each scenario under the Standard plan and three Income-Driven Repayment plans—Income-Based Repayment, New Income-Based Repayment, and Pay As You Earn—to focus on plans with income-eligibility requirements. For the applicable requirements for these three Income-Driven Repayment plans, see 34 C.F.R. § 685.209(a) (Pay As You Earn) and 34 C.F.R. §§ 682.215, 685.221 (Income-Based Repayment and New Income-Based Repayment). Due to similar requirements, New Income-Based Repayment and Pay As You Earn produced identical results in our models, so we grouped those plans together. For these models, we utilized interest rates from award year 2018, assumed that borrowers were unmarried and had no dependents, and matched other assumptions to those used by Education’s online student loan repayment calculator. These assumptions include that federal poverty guidelines would follow the Congressional Budget Office’s inflation projections, and that borrowers would experience 5 percent annual income growth. We also assumed that all of the borrowers’ student loan debt was eligible for the relevant repayment program and that borrowers were eligible for the Public Service Loan Forgiveness program. Finally, the available survey data we used to inform our assumptions about borrower income after attaining a degree only included data on earned income rather than adjusted gross income (which is used to calculate payment amounts for our three selected Income-Driven Repayment plans). This may cause our income assumptions to be slightly higher than the income information Education uses in determining income-based repayment amounts for certain borrowers.

9 For annual loan limits, we calculated the number of borrowers who had borrowed more than each of the respective limits in any given award year.

10 On average, Grad PLUS borrowers had taken out $178,418 in federal student loans (including Grad PLUS, undergraduate, and other graduate loans) as of June 30, 2017. In comparison, during the same time period (award years 2007-2017), borrowers who took out one or more federal loans for undergraduate studies but did not take out loans for graduate studies had borrowed an average of approximately $16,300 in federal student loans, according to Education.
loans to 1.7 million unique borrowers, with borrowing amounts per borrower of $5,000 (10th percentile of borrowers) to $98,554 (90th percentile of borrowers). To manage their debt, the majority of Grad PLUS borrowers in repayment status as of June 2017 used the Standard 10-year repayment plan. As of June 2017, 36 percent of Grad PLUS borrowers in repayment status had ever participated in an Income-Driven Repayment plan. As of June 2017, 11 percent of Grad PLUS borrowers in repayment status had been certified as eligible for Public Service Loan Forgiveness. As of March 2017, 2 percent of borrowers had defaulted on at least one Grad PLUS loan.11 The most common degree types pursued by Grad PLUS borrowers are master’s degrees and doctoral professional practice degrees.12 In each of the three hypothetical scenarios we reviewed, Grad PLUS borrowers who were in Income-Driven Repayment plans would pay back less with Public Service Loan Forgiveness than otherwise. If borrowers were not enrolled in Public Service Loan Forgiveness, in some cases they would pay back more under Income-Driven Repayment plans than under the Standard plan.

- **Loan limits:** The lowest annual Grad PLUS loan limit we modeled—$10,000—would have reduced awards to over 1.2 million borrowers and decreased overall disbursements by $41.6 billion. The highest annual limit we modeled—$25,000—would have reduced awards to more than 600,000 borrowers and decreased disbursements by $16.5 billion. Based on available survey data, the largest groups of borrowers who would be affected by our hypothetical lifetime limits would be those in doctoral professional practice programs and those in law and health-related fields of study.

**Agency Comments**

We provided a draft of this report to the Department of Education (Education) for its review and comment. In an e-mail dated March 28, 2018, an Education official indicated that Education had no comments.

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If you or your staff have any questions about this report, please contact me at (617) 788-0534 or emreyarrasm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in enclosure II.

Melissa Emrey-Arras, Director
Education, Workforce, and Income Security Issues

Enclosures

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11In comparison, the default rate was 22 percent among borrowers who had taken out one or more federal undergraduate loans but no graduate loans during the same time period (July 2006-March 2017), according to Education data.

12Doctoral professional practice degrees include, for example, chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, and veterinary medicine.
Higher Education: Characteristics of Graduate PLUS Borrowers

A Briefing to Congressional Requesters
March 20, 2018
Agenda

• Objectives
• Background
• Scope and Methodology
• Findings
Objectives

• What is known about Graduate PLUS borrowers and the loan repayment plans they use to manage their debt?

• How might the addition of loan limits affect the number and type of borrowers, and the amount of money awarded for Graduate PLUS loans?
Background

- Graduate PLUS (Grad PLUS) loans have been available to borrowers since July 1, 2006. These loans are not need-based and students can borrow up to the cost of attendance (such as tuition and room and board) minus any other estimated financial assistance.

- Grad PLUS loans have higher interest rates and loan origination fees than other federal student loans.¹

- In addition to Grad PLUS loans, a borrower may receive up to $20,500 annually in unsubsidized Stafford loans, or up to $138,500 total in subsidized and unsubsidized Stafford loans, including loans received for undergraduate study. Subsidized loans are loans for which borrowers are generally not responsible for paying interest while in school or during certain grace and deferment periods; on unsubsidized loans, borrowers must ultimately pay all interest.

- The Department of Education (Education) offers a variety of repayment plans for Grad PLUS borrowers, including the Standard plan and several Income-Driven Repayment plans. The Standard plan generally has a repayment period of 10 years. Unlike the Standard plan, Income-Driven Repayment plans set repayment amounts based on borrower income and offer loan forgiveness after 20 or 25 years, depending on the plan.

- Borrowers in Income-Driven Repayment plans who work in public service may be eligible to participate in the Public Service Loan Forgiveness program. These borrowers may have their outstanding loan balances forgiven after 120 monthly payments in eligible plans.

¹Interest rates for loans first disbursed from July 1, 2017 to June 30, 2018 are 4.45 percent (undergraduate Stafford), 6 percent (graduate Stafford), and 7 percent (Grad PLUS). Origination fees for loans first disbursed from Oct. 1, 2017 to Sept. 30, 2018 are 1.066 percent (Stafford) and 4.264 percent (Grad PLUS).
Enclosure I

Scope and Methodology

To address our objectives, we analyzed:

**National Student Loan Data System data**

- The National Student Loan Data System is an Education database with information about federal student loan borrowers.
- We used the portion of the National Student Loan Data System that encompasses all Grad PLUS borrowers, and includes Grad PLUS borrowing data from award years 2007 (July 1, 2006-June 30, 2007) through 2017 (July 1, 2016-June 30, 2017). The figures we present from this data set have been rounded.
- For borrowers who consolidated their Grad PLUS loans with one or more other federal loans into a single new “consolidation” loan, we did not analyze actions, such as defaults or changes to repayment plans, that occurred after the consolidation took place. As of March 2017, fewer than 25 percent of Grad PLUS borrowers consolidated their Grad PLUS loans, and those who did represented less than 25 percent of overall Grad PLUS disbursements.

**Baccalaureate and Beyond survey data**

- Baccalaureate and Beyond is a nationally representative longitudinal survey of students’ education and work experiences post-bachelor’s degree undertaken by Education; the 2012 data set includes students who completed bachelor’s degree requirements in the 2007-2008 academic year.  
  2
- A 2012 survey sample includes 1,239 Grad PLUS borrowers. Results are estimates. All percentage estimates presented are +/- 5 percentage points, unless otherwise indicated.  
  3

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1We selected this data set because it was the most recent Baccalaureate and Beyond data available and the only Baccalaureate and Beyond data that captured students with Grad PLUS loans.

2We express precision of the results at the 95 percent confidence level.
Scope and Methodology

Hypothetical borrower scenarios

- To estimate repayment outcomes under certain student loan repayment plans, we modeled three scenarios with differing graduate borrowing and income amounts based on Education’s survey data to portray a range of hypothetical borrowers from the beginning of repayment until the loans are paid off or forgiven.\(^4\)

- We calculated total repayment amounts for each scenario under the Standard plan and three Income-Driven Repayment plans—Income-Based Repayment, New Income-Based Repayment, and Pay As You Earn—to focus on Income-Driven Repayment plans with income-eligibility requirements.\(^5\)

- For these models, we utilized interest rates from award year 2018, assumed that borrowers were unmarried and had no dependents, and matched other assumptions to those used by Education’s online student loan repayment calculator. These assumptions, which we built into our models, include that federal poverty guidelines would follow the Congressional Budget Office’s inflation projections and that borrowers would experience 5 percent annual income growth. We also assumed borrowers were eligible for the Public Service Loan Forgiveness program.

We conducted this performance audit from January 2017 to April 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

\(^4\)These data came from the 2012 data set of Education’s Baccalaureate and Beyond survey.

\(^5\) Due to similar requirements, New Income-Based Repayment and Pay As You Earn produced identical results in our models, so we grouped those plans together.
Summary of Findings

- As of June 2017, the median Grad PLUS borrower had taken out over $140,000 in federal student loans overall—including nearly $27,000 in Grad PLUS loans.\textsuperscript{6}
  
  - Of Grad PLUS borrowers in repayment status, less than 40 percent had ever participated in Income-Driven Repayment plans, and a smaller proportion have been certified as eligible for Public Service Loan Forgiveness.

- Over award years 2007-2017, the lowest Grad PLUS annual loan limits we modeled—$10,000—would have reduced awards to 1.2 million unique borrowers and decreased overall federal student loan disbursements by $41.6 billion.

- Based on available survey data, the largest groups of borrowers who would be affected by certain lifetime limits would be those in doctoral professional practice programs and those in law and health-related fields of study.\textsuperscript{7}

Sources: GAO analysis of data from the National Student Loan Data System and Baccalaureate and Beyond survey.
\textsuperscript{6}The $140,000 figure is for all federal student loans, including those from both undergraduate and graduate studies.
\textsuperscript{7}Doctoral professional practice degrees include, for example, chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, and pharmacy.
Finding 1: Grad PLUS Borrowers and Loan Repayment

Overview of Grad PLUS Borrowing

- According to our data analysis, $71 billion was disbursed to 1.7 million unique borrowers from award years 2007 through 2017.

- Table 1: Grad PLUS Loan Amounts Per Borrower (as of June 2017)

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>10th percentile</th>
<th>Median</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursed</td>
<td>$41,530</td>
<td>$5,000</td>
<td>$26,863</td>
<td>$98,554</td>
</tr>
<tr>
<td>Outstanding</td>
<td>$32,670</td>
<td>$0</td>
<td>$10,857</td>
<td>$97,229</td>
</tr>
</tbody>
</table>

- Income-Driven Repayment: As of June 2017, 36 percent of Grad PLUS borrowers in repayment status had ever been in an Income-Driven Repayment plan.

- Public Service Loan Forgiveness: As of June 2017, 11 percent of Grad PLUS borrowers in repayment status had been certified as eligible for Public Service Loan Forgiveness.

- Default: As of March 2017, 2 percent of borrowers had defaulted on at least one Grad PLUS loan. In comparison, the default rate was 22 percent among borrowers who had taken out one or more federal undergraduate loans but no graduate loans during the same time period (July 2006-March 2017), according to Education data.

Source: GAO analysis of data from the National Student Loan Data System. Notes: “Disbursed” amounts include only the funds that students received. In contrast, “outstanding” amounts include principal (disbursed funds) and interest minus loan payments borrowers had made as of June 30, 2017. This is why outstanding amounts may be less than disbursed amounts. Default rates exclude defaults that occurred after loans were consolidated.
Finding 1: Grad PLUS Borrowers and Loan Repayment

Total Federal Borrowing by Grad PLUS Borrowers

- Virtually all Grad PLUS borrowers (99.9 percent) have other federal student loans.
- From award years 2007-2017, disbursements from all federal student loans totaled $306 billion, with an outstanding balance of $229 billion as of June 2017 (see figure).
- Disbursements per borrower:
  - Average: $178,418
  - 10th percentile: $56,865
  - Median: $140,950
  - 90th percentile: $347,887
- Outstanding balance per borrower:
  - 10th percentile: $0 (loans repaid)
  - Median: $110,830
  - 90th percentile: $281,944
- In comparison, during the same time period (award years 2007-2017), borrowers who took out one or more federal loans for undergraduate studies but did not take out loans for graduate studies had borrowed an average of approximately $16,300 in federal student loans, according to Education.

Source: GAO analysis of U.S. Department of Education’s National Student Loan Data System. Notes: Total federal borrowing includes borrowing for both undergraduate and graduate studies. “Disbursed” amounts include only the funds that students received, whereas “outstanding” amounts include principal (disbursed funds) and interest minus loan payments borrowers had made as of June 30, 2017.
Finding 1: Grad PLUS Borrowers and Loan Repayment

Academic Characteristics of Grad PLUS Borrowers

Table 2: Selected Degree Programs in which Grad PLUS Borrowers Enrolled

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Percent Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's Degree</td>
<td>49%</td>
</tr>
<tr>
<td>Doctoral Degree – Professional Practice (e.g., Medicine, Law, Dentistry)</td>
<td>43%</td>
</tr>
<tr>
<td>Doctoral Degree – Research/Scholarship</td>
<td>4%</td>
</tr>
</tbody>
</table>

Table 3: Selected Fields of Study in which Grad PLUS Borrowers Enrolled

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Percent Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal professions and studies</td>
<td>29%</td>
</tr>
<tr>
<td>Health professions and related sciences</td>
<td>26%</td>
</tr>
<tr>
<td>Business, management, and marketing</td>
<td>9%</td>
</tr>
<tr>
<td>Education</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of data from Baccalaureate and Beyond survey. Note: The data in these tables represent the highest degree program that borrowers had enrolled in, as of 2012, after completing their bachelor’s degrees.
Finding 1: Grad PLUS Borrowers and Loan Repayment

Impact of Income-Driven Repayment Plans on Hypothetical Borrowers

Key Takeaways

- In each of the hypothetical scenarios we modeled, borrowers who were in Income-Driven Repayment plans would pay back less if they participated in Public Service Loan Forgiveness.\(^8\)
- If borrowers were not enrolled in Public Service Loan Forgiveness, in some cases, they would pay back more under the Income-Driven Repayment plans than under the Standard plan.

\(^8\)We estimated what borrowers would pay with and without Public Service Loan Forgiveness.
### Finding 1: Grad PLUS Borrowers and Loan Repayment

#### Impact of Income-Driven Repayment Plans on Hypothetical Borrowers

<table>
<thead>
<tr>
<th>Repayment Plan</th>
<th>Estimated Repayment</th>
<th>Estimated Repayment with PSLF</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Year Standard</td>
<td>$33,329</td>
<td>$33,329</td>
</tr>
<tr>
<td>Income-Based Repayment</td>
<td>$51,849</td>
<td>$9,405</td>
</tr>
<tr>
<td>New Income-Based Repayment/Pay As You Earn</td>
<td>$23,771</td>
<td>$6,270</td>
</tr>
</tbody>
</table>

#### Table 4: Impact of Income-Driven Repayment Plans and Public Service Loan Forgiveness (PSLF) on Hypothetical Borrowers

**Borrower 1:** Total Graduate Borrowing - $24,800 (Grad PLUS - $4,800), Initial Adjusted Gross Income - $21,000

<table>
<thead>
<tr>
<th>Repayment Plan</th>
<th>Estimated Repayment</th>
<th>Estimated Repayment with PSLF</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Year Standard</td>
<td>$110,751</td>
<td>$110,751</td>
</tr>
<tr>
<td>Income-Based Repayment</td>
<td>$168,669</td>
<td>$54,685</td>
</tr>
<tr>
<td>New Income-Based Repayment/Pay As You Earn</td>
<td>$103,129</td>
<td>$36,457</td>
</tr>
</tbody>
</table>

**Borrower 2:** Total Graduate Borrowing - $82,000 (Grad PLUS - $25,000), Initial Adjusted Gross Income - $45,000

<table>
<thead>
<tr>
<th>Repayment Plan</th>
<th>Estimated Repayment</th>
<th>Estimated Repayment with PSLF</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Year Standard</td>
<td>$265,168</td>
<td>$265,168</td>
</tr>
<tr>
<td>Income-Based Repayment</td>
<td>$377,953</td>
<td>$149,019</td>
</tr>
<tr>
<td>New Income-Based Repayment/Pay As You Earn</td>
<td>$268,459</td>
<td>$99,346</td>
</tr>
</tbody>
</table>

**Borrower 3:** Total Graduate Borrowing - $195,000 (Grad PLUS - $89,000), Initial Adjusted Gross Income - $95,000

**Source:** GAO analysis of data from Baccalaureate and Beyond survey. Note: Income-Based Repayment resulted in higher payments for the scenarios because borrowers pay 15 percent of discretionary income for up to 25 years, while under New Income-Based Repayment and Pay As You Earn borrowers pay 10 percent of discretionary income for up to 20 years.
### Finding 2: Effect of Loan Limits

#### Effect of Hypothetical Grad PLUS Loan Limits

- The lowest hypothetical annual loan limit on Grad PLUS that we modeled ($10,000) would have reduced the amount 1.2 million borrowers received and decreased overall federal disbursements by $41.6 billion. To determine the amount not awarded, we assumed that borrowers over a hypothetical limit would instead have borrowed up to the limit; we counted any amount over that limit as funds that would not have been awarded.

**Table 5: Effect of Hypothetical Grad PLUS Loan Limits on Borrowers, Award Years 2007-2017**

<table>
<thead>
<tr>
<th>Hypothetical Loan Limits</th>
<th>Number of Borrowers with Grad PLUS Loans Above Limit</th>
<th>Amount Not Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$125,000 Lifetime</td>
<td>90,449 (5% of all Grad PLUS borrowers)</td>
<td>$4,028,534,070</td>
</tr>
<tr>
<td>$100,000 Lifetime</td>
<td>164,592 (10%)</td>
<td>$7,129,139,076</td>
</tr>
<tr>
<td>$50,000 Lifetime</td>
<td>502,597 (29%)</td>
<td>$22,387,424,998</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothetical Loan Limits</th>
<th>Number of Borrowers with Grad PLUS Loans Above Limit in at Least One Academic Year</th>
<th>Amount Not Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,000 Annual</td>
<td>635,733 (37%)</td>
<td>$16,539,786,840</td>
</tr>
<tr>
<td>$20,000 Annual</td>
<td>801,298 (47%)</td>
<td>$22,894,630,371</td>
</tr>
<tr>
<td>$10,000 Annual</td>
<td>1,223,354 (71%)</td>
<td>$41,647,546,107</td>
</tr>
</tbody>
</table>

Source: GAO analysis of data from the National Student Loan Data System. Notes: Lifetime loan limits would restrict the cumulative amount of student borrowing (referred to by Education as “aggregate limits”). Annual loan limits would restrict the academic year amount of student borrowing.
Finding 2: Effect of Loan Limits

Key Characteristics of Borrowers Above Hypothetical Grad PLUS Loan Limits

Below we provide data on the *degree types* and *fields of study* for Grad PLUS borrowers above certain borrowing amounts. Because some borrowers had not completed their programs at the time of the 2012 survey, we examined borrowers who had attained a degree, as well as borrowers who were still enrolled in graduate school.

**Borrowers with more than $100,000 in Grad PLUS loans:**

- Of those who had **attained** a degree
  - 96 percent received a doctoral professional practice degree [CI: 87% to 100%]
  - 77 percent studied Legal Professions and Studies [CI: 49% to 94%]
- Among those still **enrolled** at the time of survey follow-up, at least one-third studied Health Professions and Related Sciences [CI: 34% to 85%]

**Borrowers with more than $50,000 in Grad PLUS loans** (including borrowers with over $100,000 in Grad PLUS loans):

- Of those who had **attained** a degree
  - 71 percent received a doctoral professional practice degree [CI: 59% to 81%]
  - 59 percent studied Legal Professions and Studies [CI: 46% to 71%]
- Among those still **enrolled** at the time of survey follow-up, 47 percent studied Legal Professions and Studies [CI: 32% to 62%] and 37 percent studied Health Professions and Related Sciences [CI: 25% to 51%]

Source: GAO analysis of data from Baccalaureate and Beyond survey. Notes: All percentages are estimates. Figures in brackets are 95 percent confidence intervals. Some confidence intervals are particularly wide due to the small sample of respondents who had borrowed above these limits.
Enclosure II

GAO Contact and Staff Acknowledgments

GAO Contact:

Melissa Emrey-Arras, (617) 788-0534 or emreyarrasm@gao.gov

Staff Acknowledgments:

In addition to the contact named above, Scott Spicer, Assistant Director; Eve Weisberg, Analyst-in-Charge; Jennifer McDonald, Analyst-in-Charge; Colenn Berracasa; Deborah Bland; Ben Bolitzer; Sarah Cornetto; Holly Dye; Justin Fisher; Kirsten Lauber; John Mingus; and Liam O’Laughlin made significant contributions to this report. Also contributing to this report were Swati Deo, Kate O’Dea Lamas, Jeff Miller, Mimi Nguyen, and Ellen Phelps Ranen.
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Orice Williams Brown, Managing Director, WilliamsO@gao.gov, (202) 512-4400,
U.S. Government Accountability Office, 441 G Street NW, Room 7125,
Washington, DC 20548

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

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