Under the William D. Ford Direct Loan Program, the federal government provides education loans to undergraduate and graduate students and to the parents of undergraduate students. In the direct loan program, the federal government serves as the lender for all borrowers but contracts with private entities to service those loans. Before July 1, 2010, the federal government also provided loan guarantees to financial institutions to provide federal student loans through the Federal Family Education Loan Program. The current program offers four types of loans:

- **Subsidized loans** are need-based loans for undergraduate students. No interest accrues while the borrower is enrolled or during other deferment periods, and borrowing is limited by a student's class level and dependency status.
- Unsubsidized loans are non-need-based loans for undergraduate and graduate students. Interest accrues from origination, and borrowing is limited by a student's class level and dependency status.
- **PLUS parent loans** are non–need-based loans for parents of dependent undergraduates. Interest accrues from origination, and borrowing is limited only by the cost of attendance.
- **GradPLUS loans** are non–need-based loans for graduate students. Interest accrues from origination, and borrowing is limited only by the cost of attendance.

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

These six tables detail the costs, loan volumes, and subsidy rates for the student loan programs for CBO's March 2020 baseline.

Table 1 includes the cost projections for each budget account associated with the student loan programs using estimating procedures established in the Federal Credit Reform Act (FCRA).

Table 2 includes the projections of loan volume and subsidy rates for the direct student loans using FCRA.

Table 3 includes expenditures for student aid administration.

Table 4 includes the projection of the borrower interest rates.

Table 5 includes the cost projections for the student loan programs using fair-value estimating procedures.

Table 6 includes the federal subsidy rates for student loans using fair-value estimating procedures.

The differences between FCRA and fair-value estimating procedures are as follows:

FCRA requires that the lifetime costs of student loans be recorded up front on an accrual basis (that is, they are recognized in the year in which the loan is made). The lifetime cost of a federal loan—called its subsidy cost—is measured by discounting all of the expected future cash flows associated with the loan to a present value at the date the loan is disbursed. Present value is a single number that expresses a flow of current and future income, or payments, in terms of an equivalent lump sum received, or paid, at a specific time. The present value depends on the rate of interest—the discount rate—that is used to translate future cash flows into current dollars. The cash flows include the amounts disbursed, principal repaid, interest received, fees charged, and net losses that accrue from defaults.

Under the rules specified in FCRA, the present value of expected future cash flows is calculated by discounting those cash flows using the rates on U.S. Treasury securities with similar terms to maturity. For instance, the yield on a Treasury security maturing in one year is used to discount cash flows one year from disbursement, a two-year rate is used for cash flows two years from disbursement, and so on.

In contrast, under the fair-value estimating procedures, estimates are based on market values—market prices or approximations of market prices when directly comparable figures are unavailable—which more fully account for the cost of the risk the government incurs. The fair-value approach accounts for the cost of market risk; FCRA procedures using Treasury rates do not.

The definitions of budget authority, program obligations, and outlays as they apply to the student loan program subsidy or "program" accounts are as follows:

Subsidy budget authority figures express what total subsidy costs would be if all the loans for which an eligible application was received during a year were made. In reality, not all loans are disbursed because prospective borrowers either do not go to school or decide not to take all or part of the loan for which they applied.

Subsidy obligations are the costs associated with all loans for which there will be at least one cash disbursement (shown on the attached tables as "Net Annual Loan Volume"). Typically, the subsidy obligation estimates are not included in budget tables.

Subsidy outlays reflect the subsidy obligations adjusted for the timing of the cash disbursements. Because of the multiple disbursement requirements and the timing of the academic school years compared with the federal fiscal year, only about two-thirds of the funds are disbursed to borrowers during the first fiscal year; the rest is disbursed in the following year.

Table 1.
Student Loan Program Budget Account Totals, Federal Credit Reform—CBO's March 2020 Baseline

Millions of Dollars, by Fiscal Year													March 19, 2020
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020-2030
			Ε	Direct Stude	nt Loans								
Program Account <sup>a</sup>	Budget Authority	6,225	-3,563	-3,179	-2,791	-2,813	-3,221	-3,185	-3,768	-4,023	-4,397	-4,259	-28,974
	Outlays	6,182	-3,745	-3,023	-2,696	-2,593	-2,832	-2,940	-3,268	-3,592	-3,895	-3,931	-26,333
Credit Reestimates and Modifications <sup>b</sup>	Budget Authority	63,691	0	0	0	0	0	0	0	0	0	0	63,691
	Outlays	63,691	0	0	0	0	0	0	0	0	0	0	63,691
Subtotal, Direct Loans	Budget Authority	69,916	-3,563	-3,179	-2,791	-2,813	-3,221	-3,185	-3,768	-4,023	-4,397	-4,259	34,717
	Outlays	69,873	-3,745	-3,023	-2,696	-2,593	-2,832	-2,940	-3,268	-3,592	-3,895	-3,931	37,358
			Gua	ranteed Stu	dent Loans								
Program Liquidating Account and	Budget Authority	10	10	9	9	9	9	8	8	8	8	7	95
Federal Student Loan Reserve Fund	Outlays	-172	-137	-107	-80	-60	-46	-38	-30	-28	-26	-25	-749
Credit Reestimates and Modifications <sup>b</sup>	Budget Authority	6,395	0	0	0	0	0	0	0	0	0	0	6,395
	Outlays	6,395	0	0	0	0	0	0	0	0	0	0	6,395
Subtotal, Guaranteed Loans	<b>Budget Authority</b>	6,405	10	9	9	9	9	8	8	8	8	7	6,490
	Outlays	6,223	-137	-107	-80	-60	-46	-38	-30	-28	-26	-25	5,646
			Stu	dent Aid Adr	ministration								
Student Aid Administration (Discretionary) <sup>c</sup>	Budget Authority	1,769	1,812	1,856	1,900	1,945	1,991	2,036	2,083	2,130	2.177	2,226	21,925
, ,,	Outlays	1,723	1,779	1,826	1,872	1,916	1,962	2,007	2,053	2,100	2,147	2,195	21,580
Student Aid Administration (Mandatory) <sup>d</sup>	Budget Authority	1.304	1.326	1.356	1.395	1.441	1.478	1,506	1.534	1.562	1.591	1,621	16.114
` ,	Outlays	1,285	1,320	1,348	1,385	1,430	1,469	1,499	1,527	1,555	1,584	1,613	16,015
Subtotal, Student Aid Administration	Budget Authority	3,073	3,138	3,212	3,295	3,386	3,469	3,542	3,617	3,692	3,768	3,847	38,039
	Outlays	3,008	3,099	3,174	3,257	3,346	3,431	3,506	3,580	3,655	3,731	3,808	37,595
			Total	Spending, S	tudent Loan	s							
Total Student Loans	Budget Authority	79,394	-415	42	513	582	257	365	-143	-323	-621	-405	79,246
	Outlays	79,104	-783	44	481	693	553	528	282	35	-190	-148	80,599

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

Note: Components may not sum to totals because of rounding; OMB = Office of Management and Budget

a. Estimated spending for fiscal year 2020 includes additional adjustments based on current spending patterns projected by the OMB.

b. Costs for credit reestimates and modifications are changes to the estimated costs of outstanding loans originated before 2020. Those totals are based on the amounts that the OMB expects to record in fiscal year 2020.

c. Projections of discretionary spending for administering student aid are calculated by inflating the budget authority provided in the most recent appropriation act rather than on the basis of an estimate of the future costs of administering the program.

d. Projections of mandatory spending for administering student aid are based on estimated future costs of administering federal loan programs.

Table 2.

Total Direct Loan Program (New Loans Only), Federal Credit Reform—CBO's March 2020 Baseline

y Fiscal Year										Mai	rch 19, 2020
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total All New Loans <sup>a</sup>											
Net Annual Loan Volume (Millions of dollars)	92,310	93,366	95,470	98,445	102,115	105,958	110,039	113,537	116,595	119,720	122,763
Net Number of Loans (Thousands)	15,183	15,161	15,241	15,556	16,033	16,518	17,049	17,399	17,611	17,826	18,036
Average Loan Amount (Dollars)	6,080	6,158	6,264	6,328	6,369	6,415	6,454	6,526	6,620	6,716	6,807
Subsidy Rate (Percent) <sup>b</sup>	-5.14	-3.49	-3.06	-2.62	-2.54	-2.79	-2.66	-3.04	-3.15	-3.35	-3.16
Subsidized Student Loans											
Net Annual Loan Volume (Millions of dollars)	19,306	19,307	19,472	19,863	20,682	21,540	22,542	23,136	23,511	23,893	24,281
Net Number of Loans (Thousands)	5,741	5,685	5,676	5,733	5,910	6,095	6,315	6,417	6,457	6,497	6,537
Average Loan Amount (Dollars)	3,363	3,396	3,430	3,465	3,499	3,534	3,570	3,605	3,641	3,678	3,715
Subsidy Rate (Percent) <sup>b</sup>	7.51	9.15	10.23	10.77	10.64	10.61	10.58	10.40	10.43	10.41	10.45
Unsubsidized Student Loans: Undergraduate											
Net Annual Loan Volume (Millions of dollars)	21,464	21,715	22,087	23,081	24,218	25,370	26,576	27,571	28,297	29,042	29,807
Net Number of Loans (Thousands)	6,102	6,112	6,156	6,369	6,617	6,862	7,118	7,311	7,429	7,549	7,671
Average Loan Amount (Dollars)	3,517	3,553	3,588	3,624	3,660	3,697	3,734	3,771	3,809	3,847	3,885
Subsidy Rate (Percent) <sup>b</sup>	-2.77	-1.05	-0.77	-0.79	-1.01	-1.23	-1.37	-1.61	-1.46	-1.61	-1.56
Unsubsidized Student Loans: Graduate											
Net Annual Loan Volume (Millions of dollars)	27,434	27,204	27,664	28,143	28,879	29,635	30,410	31,206	32,023	32,861	33,720
Net Number of Loans (Thousands)	1,810	1,801	1,812	1,823	1,851	1,878	1,907	1,935	1,964	1,994	2,024
Average Loan Amount (Dollars)	15,157	15,101	15,267	15,435	15,605	15,776	15,950	16,125	16,303	16,482	16,663
Subsidy Rate (Percent) <sup>b</sup>	-4.63	-2.82	-2.63	-2.31	-2.52	-3.11	-3.20	-3.71	-4.09	-4.45	-4.54
GradPLUS Student Loans											
Net Annual Loan Volume (Millions of dollars)	11,232	11,896	12,608	13,294	13,900	14,599	15,305	16,018	16,747	17,486	18,102
Net Number of Loans (Thousands)	598	617	638	657	670	686	702	717	731	745	752
Average Loan Amount (Dollars)	18,796	19,266	19,747	20,241	20,747	21,266	21,797	22,342	22,901	23,473	24,060
Subsidy Rate (Percent) <sup>b</sup>	0.22	1.97	2.02	3.79	4.98	4.19	4.92	3.73	3.31	2.87	3.98
Parent Loans											
Net Annual Loan Volume (Millions of dollars)	12,874	13,244	13,640	14,064	14,435	14,815	15,205	15,606	16,017	16,439	16,852
Net Number of Loans (Thousands)	932	945	959	974	985	996	1,007	1,018	1,030	1,041	1,052
Average Loan Amount (Dollars)	13,806	14,013	14,224	14,437	14,653	14,873	15,096	15,323	15,553	15,786	16,023
Subsidy Rate (Percent) <sup>b</sup>	-33.78	-31.83	-31.33	-31.20	-31.29	-31.21	-31.09	-31.07	-30.98	-30.84	-30.54

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

Components may not sum to totals because of rounding.

a. Totals exclude consolidation loans stemming from loans issued before 2020.

b. The subsidy rate is the net present value of future federal cash flows divided by the amount in loans disbursed to borrowers each year. For example, the 2021 federal cost associated with the \$93,366 million in new loan volume would be -\$3,258 million or -3.49 percent of the new loan volume [\$93,366 \* -0.0349 = -\$3,258]. The federal government will save, on average, about 3 cents for each new dollar lent in 2021. Subsidy rates exclude federal administrative costs associated with disbursing and servicing loans. Those costs are included in the budget on a cash basis (see Table 3). Subsidy rates were calculated using CBO's January 2020 interest rate forecast.

Table 3. Student Aid Administration—CBO's March 2020 Baseline

Millions of Dollars, by Fiscal Year												M	arch 19, 2020
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020-2030
						Mandato	ry Administi	rative Costs					
Outstanding Guaranteed Loans													
Administrative Account	<b>Budget Authority</b>	405	398	391	382	372	361	350	338	326	312	297	3,932
	Outlays	409	400	393	384	374	363	353	341	329	315	301	3,962
Default Prevention Fee Paid	Budget Authority	10	10	9	9	9	9	8	8	8	8	7	95
to Guaranty Agencies <sup>a</sup>	Outlays	10	10	9	9	9	9	8	8	8	8	7	95
Loan Collection Costs	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
on Pre-1992 loans <sup>a</sup>	Outlays	<u>7</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>24</u>
Subtotal, Mandatory	Budget Authority	415	408	400	391	381	370	358	346	334	320	304	4,027
	Outlays	426	414	405	395	385	373	362	350	338	324	309	4,081
Direct Loans													
Administrative Account	<b>Budget Authority</b>	899	927	965	1,013	1,070	1,118	1,156	1,195	1,236	1,279	1,323	12,181
	Outlays	876	920	956	1,001	1,056	1,106	1,146	1,185	1,226	1,269	1,312	12,053
Subtotal, Mandatory	<b>Budget Authority</b>	899	927	965	1,013	1,070	1,118	1,156	1,195	1,236	1,279	1,323	12,181
	Outlays	<u>876</u>	<u>920</u>	<u>956</u>	<u>1,001</u>	<u>1,056</u>	<u>1,106</u>	<u>1,146</u>	<u>1,185</u>	<u>1,226</u>	<u>1,269</u>	<u>1,312</u>	<u>12,053</u>
Total Mandatory	Budget Authority	1,314	1,335	1,365	1,404	1,451	1,488	1,514	1,541	1,570	1,599	1,627	16,208
·	Outlays	1,302	1,334	1,361	1,396	1,441	1,479	1,508	1,535	1,564	1,593	1,621	16,134
						Discretiona	ary Adminis	trative Cost	s <sup>b</sup>				
	Budget Authority	1,769	1,812	1,856	1,900	1,945	1,991	2,036	2,083	2,130	2,177	2,226	21,925
	Outlays	1,723	1,779	1,826	1,872	1,916	1,962	2,007	2,053	2,100	2,147	2,195	21,580
						Total A	Administrati	ve Costs <sup>a</sup>					
	Budget Authority	3,083	3,147	3,221	3,304	3,396	3,479	3,550	3,624	3,700	3,776	3,853	38,133
	Outlays	3,025	3,113	3,187	3,268	3,357	3,441	3,515	3,588	3,664	3,740	3,816	37,714

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

Components may not sum to totals because of rounding.

a. In the budget, funds for default prevention are included in the Student Loan Reserve Fund Account and funds for administering pre-1992 loans are included in the Liquidating Account. Both are included in this table's total for administration.

b. Some of the funds for discretionary administrative costs are used for other student aid programs, such as the Pell grant program.

Table 4.

Projection of Borrower Interest Rates—CBO's March 2020 Baseline

March 19, 2020

	Actual											on 10, 2020
Award Year	2019-2020	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Subsidized and Unsubsidized Loans to Undergraduate Students 10-year Treasury + 2.05% Capped 8.25%	4.53%	3.93%	4.21%	4.59%	4.76%	4.81%	4.87%	4.92%	4.97%	5.02%	5.07%	5.13%
Unsubsidized Loans to Graduate Students 10-year Treasury + 3.60% Capped 9.50%	6.08%	5.48%	5.76%	6.14%	6.31%	6.36%	6.42%	6.47%	6.52%	6.57%	6.62%	6.68%
PLUS Loans to Graduate Students and Parents 10-year Treasury + 4.60% Capped 10.50%	7.08%	6.48%	6.76%	7.14%	7.31%	7.36%	7.42%	7.47%	7.52%	7.57%	7.62%	7.68%

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

Borrower interest rates are fixed for the life of the loan. The borrower interest rate is adjusted based on the last auction in May for 10-year Treasury notes. That rate is in effect for all newly issued loans from July 1 through the following June 30.

The borrower interest rates used for estimating are projected using a Monte Carlo method to capture the effect of a cap on interest rates under current law.

Table 5.
Student Loan Program Budget Account Totals, Fair Value Estimating Procedures—CBO's March 2020 Baseline

Millions of Dollars, by Fiscal Year												N	March 19, 2020
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2019-2029
			Di	rect Student	Loans								
Program Costs	Budget Authority	28,502	18,470	19,185	20,062	20,884	21,409	22,310	22,664	23,120	23,458	24,226	244,290
	Outlays	24,809	15,799	16,651	17,376	18,122	18,679	19,357	19,833	20,202	20,531	21,084	212,443
Credit Reestimates and Modifications <sup>a</sup>	Budget Authority	63,691	0	0	0	0	0	0	0	0	0	0	63,691
	Outlays	63,691	0	0	0	0	0	0	0	0	0	0	63,691
Subtotal, Direct Loans	<b>Budget Authority</b>	92,193	18,470	19,185	20,062	20,884	21,409	22,310	22,664	23,120	23,458	24,226	307,981
	Outlays	88,500	15,799	16,651	17,376	18,122	18,679	19,357	19,833	20,202	20,531	21,084	276,134
			Guara	anteed Stud	ent Loans								
Program Costs	Budget Authority	10	10	9	9	9	9	8	8	8	8	7	95
	Outlays	-172	-137	-107	-80	-60	-46	-38	-30	-28	-26	-25	-749
Credit Reestimates and Modifications <sup>a</sup>	Budget Authority	6,395	0	0	0	0	0	0	0	0	0	0	6,395
	Outlays	6,395	0	0	0	0	0	0	0	0	0	0	6,395
Subtotal, Guaranteed Loans	<b>Budget Authority</b>	6,405	10	9	9	9	9	8	8	8	8	7	6,490
	Outlays	6,223	-137	-107	-80	-60	-46	-38	-30	-28	-26	-25	5,646
			Stude	ent Aid Admi	inistration								
Student Aid Administration	Budget Authority	3,073	3,138	3,212	3,295	3,386	3,469	3,542	3,617	3,692	3,768	3,847	38,039
	Outlays	3,008	3,099	3,174	3,257	3,346	3,431	3,506	3,580	3,655	3,731	3,808	37,595
			Total S	pending, Stu	ıdent Loans								
Total Student Loans	<b>Budget Authority</b>	101,671	21,618	22,406	23,366	24,279	24,887	25,860	26,289	26,820	27,234	28,080	352,510
	Outlays	97,731	18,761	19,718	20,553	21,408	22,064	22,825	23,383	23,829	24,236	24,867	319,375

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

Components may not sum to totals because of rounding.

a. Costs for credit reestimates and modifications are changes to the estimated costs of outstanding loans originated in years before 2020. Those totals are based on the amounts that the Office of Management and Budget expects to record in fiscal year 2020.

Table 6. Federal Subsidy Rates, Fair Value Estimating Procedures—CBO's March 2020 Baseline

									Mar	ch 19, 2020
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
16.19	17.38	17.65	17.91	17.98	17.76	17.83	17.55	17.44	17.23	17.36
26.23	27.40	28.22	28.62	28.54	28.45	28.38	28.25	28.28	28.20	28.24
18.92	20.30	20.49	20.49	20.33	20.16	19.97	19.80	19.93	19.71	19.82
17.69	18.97	18.97	19.03	18.85	18.35	18.23	17.81	17.43	17.07	16.91
22.52	23.84	23.80	24.92	25.85	25.15	25.67	24.82	24.45	24.13	24.86
-12.13	-10.66	-10.38	-10.32	-10.40	-10.35	-10.27	-10.26	-10.20	-10.11	-9.83
	16.19 26.23 18.92 17.69 22.52	16.19 17.38 26.23 27.40 18.92 20.30 17.69 18.97 22.52 23.84	16.19 17.38 17.65 26.23 27.40 28.22 18.92 20.30 20.49 17.69 18.97 18.97 22.52 23.84 23.80	16.19 17.38 17.65 17.91 26.23 27.40 28.22 28.62 18.92 20.30 20.49 20.49 17.69 18.97 18.97 19.03 22.52 23.84 23.80 24.92	16.19 17.38 17.65 17.91 17.98 26.23 27.40 28.22 28.62 28.54 18.92 20.30 20.49 20.49 20.33 17.69 18.97 18.97 19.03 18.85 22.52 23.84 23.80 24.92 25.85	16.19     17.38     17.65     17.91     17.98     17.76       26.23     27.40     28.22     28.62     28.54     28.45       18.92     20.30     20.49     20.49     20.33     20.16       17.69     18.97     18.97     19.03     18.85     18.35       22.52     23.84     23.80     24.92     25.85     25.15	16.19 17.38 17.65 17.91 17.98 17.76 17.83 26.23 27.40 28.22 28.62 28.54 28.45 28.38 18.92 20.30 20.49 20.49 20.33 20.16 19.97 17.69 18.97 18.97 19.03 18.85 18.35 18.23 22.52 23.84 23.80 24.92 25.85 25.15 25.67	16.19 17.38 17.65 17.91 17.98 17.76 17.83 17.55 26.23 27.40 28.22 28.62 28.54 28.45 28.38 28.25 18.92 20.30 20.49 20.49 20.33 20.16 19.97 19.80 17.69 18.97 18.97 19.03 18.85 18.35 18.23 17.81 22.52 23.84 23.80 24.92 25.85 25.15 25.67 24.82	16.19 17.38 17.65 17.91 17.98 17.76 17.83 17.55 17.44 26.23 27.40 28.22 28.62 28.54 28.45 28.38 28.25 28.28 18.92 20.30 20.49 20.49 20.33 20.16 19.97 19.80 19.93 17.69 18.97 18.97 19.03 18.85 18.35 18.23 17.81 17.43 22.52 23.84 23.80 24.92 25.85 25.15 25.67 24.82 24.45	2020         2021         2022         2023         2024         2025         2026         2027         2028         2029           16.19         17.38         17.65         17.91         17.98         17.76         17.83         17.55         17.44         17.23           26.23         27.40         28.22         28.62         28.54         28.45         28.38         28.25         28.28         28.20           18.92         20.30         20.49         20.49         20.33         20.16         19.97         19.80         19.93         19.71           17.69         18.97         18.97         19.03         18.85         18.35         18.23         17.81         17.43         17.07           22.52         23.84         23.80         24.92         25.85         25.15         25.67         24.82         24.45         24.13

These budget projections reflect legislation, administrative actions, and regulatory changes through March 6, 2020. They are based on the economic forecast that CBO completed on January 7, 2020, and do not account for changes to the nation's economic outlook and fiscal situation arising from the recent and rapidly evolving public health emergency related to the novel coronavirus.

The subsidy rate is the net present value of the future federal cash flows divided by the amounts in loans disbursed to borrowers each year. For example, the 2021 federal cost associated with the \$93,366 million in new loan volume would be \$16,227 million or 17.38 percent of the new loan volume [\$93,366 \*0.1738 = \$16,227]. The federal government will spend, on average, about 17 cents for each new dollar lent in 2021.

Subsidy rates do not include federal administrative costs associated with disbursing and servicing loans. Those administrative costs are included in the budget on a cash basis (see Table 5).