



**Research, Applied
Analytics & Statistics**

Tax Gap Estimates

2014–2016

(And Projections for 2017–2019)

Tax Gap Estimates for Tax Years 2014–2016

(And Projections for Tax Years 2017–2019)

Overview

TY 2014–2016 Tax Gap Estimates

- Gross Tax Gap: \$496B
- Voluntary Compliance Rate: 85.0%
- Enforced & Other Late Payments: \$68B
- Net Tax Gap: \$428B
- Net Compliance Rate: 87.0%

This overview presents estimates of the tax gap for the Tax Year (TY) 2014–2016 timeframe and tax gap projections for TY 2017–2019. It also provides revised estimates for TY 2011–2013 that incorporate data that were not yet available when the estimates were initially released. The tax gap is a measure of the level of overall noncompliance, in the context of Internal Revenue Code (IRC) provisions in effect at the time. The estimates provide the Internal Revenue Service (IRS) with periodic appraisals of the nature and extent of noncompliance for use in formulating tax administration strategies. The word “tax” in the phrase “tax gap” is used broadly to encompass both tax and refundable and nonrefundable tax credits.

The gross tax gap is the amount of true tax liability that is not paid voluntarily and timely. **The estimated annual gross tax gap for Tax Years (TY) 2014–2016 is \$496 billion** (Table 1). The voluntary compliance rate (VCR) is a ratio measure of relative compliance and is defined as the amount of “tax paid voluntarily and timely” divided by “total true tax”, expressed as a percentage. **The estimated VCR is 85.0 percent.**

The gross tax gap comprises three components:

- Nonfiling (tax not paid on time by those who do not file required returns on time, \$39 billion),
- Underreporting (tax understated on timely filed returns, \$398 billion), and
- Underpayment (tax that was reported on time, but not paid on time, \$59 billion).

The net tax gap is the gross tax gap less tax that subsequently will be paid, either voluntarily but late or collected through IRS administrative and enforcement activities. The net tax gap is the portion of the gross tax gap that will not be paid. **An estimated \$68 billion of the gross tax gap eventually will be paid, resulting in a TY 2014–2016 net tax gap of \$428 billion.** The Net Compliance Rate (NCR) is defined as the sum of

“tax paid voluntarily and timely” and “enforced and other late payments” divided by “total true tax”, expressed as a percentage. **The estimated NCR is 87.0 percent.**

The tax gap estimates are also segmented by type of tax. Table 1 shows that individual income tax makes up the largest components of the tax gap, contributing \$357 billion to the gross tax gap and \$306 to the net tax gap. The second and third largest components involve employment tax, which includes self-employment, FICA and FUTA tax, and corporation income tax.

Comparison with Previous Estimates

The gross tax gap increased even though the estimated TY 2014–2016 Voluntary Compliance Rate of 85.0% is 1.3 percentage points higher than the revised TY 2011–2013 estimate of 83.7%.

Many factors contribute to differences over time in both the gross tax gap and the VCR. These include factors such as the overall level of economic activity, changes in the composition of economic activity, for example shifts toward those activities with higher or lower compliance rates, changes in tax law and tax administration practices, updated data and improved methodologies, and changes in underlying compliance behavior on the part of taxpayers, tax preparers, and other tax advisors.

The estimated VCR for TY 2014–2016 (85.0 percent) is slightly higher than the revised TY 2011–2013 estimate, 83.7 percent (Table 2). However, the TY 2014–2016 gross and net tax gap estimates of \$496 billion and \$428 billion, respectively, are higher than their respective revised TY 2011–2013 estimates by \$58 billion (gross) and by \$48 billion (net). These increases can be attributed to economic growth between the two periods as evidenced by the more than 23 percent increase in true tax liability shown in the table.

The Effect of Information Reporting on Tax Compliance

- The tax gap analysis again confirms that compliance is higher when there is third-party information reporting and withholding.
- Misreporting of wages, which is subject to substantial information and withholding, is 1 percent compared to 55 percent for non-farm proprietor income, which is subject to little or no information reporting.

Consistent with findings from earlier tax gap analyses, compliance is higher when amounts are subject to information reporting and even higher when also subject to withholding. The extent of coverage by information reporting and/or withholding is called “visibility” because incomes that are reported to the IRS are more “visible” to both the IRS and taxpayers. Misreporting of income amounts subject to substantial information reporting and withholding is 1 percent of income. For amounts subject to substantial information reporting but not withholding, it is 6 percent; and for income amounts subject to little or no information reporting, such as nonfarm sole proprietor income, it is 55 percent. (Figure 1)

Tax Gap Projections, TY 2017–2019

TY 2017–2019 Tax Gap Projections

- The annual gross tax gap for the TY 2017–2019 timeframe is projected to be more than half a trillion dollars per year.

This release of the tax gap estimates includes tax gap projections for the TY 2017–2019 timeframe. **The projected annual gross tax gap for the TY 2017–2019 timeframe is \$540 billion. The VCR is projected to be 85.1 percent. An estimated annual \$70 billion of the gross tax gap is expected to be paid eventually resulting in an annual net tax gap of \$470 billion. The NCR projection is 87.0 percent.** The underreporting tax gap accounts for \$35 billion of the \$44 billion increase between the TY 2014–2016 gross tax gap estimate and the TY 2017–2019 projection. The rest of the difference is due to increases in the underpayment tax gap of \$7 billion and the nonfiling tax gap of \$2 billion. (Table 3.) Figures 2 and 3 provide a visual summary of tax gap estimates and projections in the form of a Tax Gap Map.

Methodology

- Estimation approaches generally changed very little, except for the individual nonfiling tax gap.
- Projections to the next set of three years are now included.

In keeping with earlier tax gap releases, the new estimates and projections in this report reflect an estimated average compliance rate and associated annual tax gap covering a timeframe of three tax years. The approaches used to estimate the various tax gap components for TY 2014–2016 generally follow the methods used for the previous TY 2011–2013 estimates, with some improvements.

For the largest components, these TY 2014–2016 estimates, like the prior TY 2011–2013 estimates, are based on actual compliance data from completed examinations.¹ Improvements for TY 2014–2016 are reflected in the individual income tax and self-employment tax nonfiling tax gap methodologies that incorporate an expanded set of data which includes information that was not available for previous estimates. The individual income tax underreporting tax gap estimation methodology is modified slightly to address changes in the underlying statistical sample data that are the foundation of that component estimate. The estate tax nonfiling and underreporting tax gap estimates reflect an updated methodology that takes into account recent increases in the filing threshold that greatly reduced the number of estates subject to this tax.

A particular challenge for tax gap estimation is the time it takes to collect certain compliance data, especially data on underreporting that come from completed examinations. Waiting for the data to become available allows the estimates to reflect the compliance behavior for the years of the estimates, but by then the timeframe of the estimates can be several years prior to the year of the tax gap release. To address this issue, the current release includes tax gap projections for TY 2017–2019 as a bridge between the competing priorities of the need for more contemporaneous tax gap estimates and having tax gap estimates based on compliance data for the timeframe of the estimates. Differences between the estimation methods used to produce the tax gap estimates and the projections vary by component, reflecting the timing in which compliance data become available for use in estimation. For example, the projections of the underreporting tax gap generally reflect the level of the tax gap that takes into account the growth in the reported tax or the reported amount of line items on tax returns while assuming compliance behavior has not changed from prior years. The projections will be updated annually as additional compliance data become available.

¹ For detailed discussion of methods used to estimate each component, see “Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016,” Publication 1415 (Rev. 08-2022) Catalog Number 10263H, Department of the Treasury Internal Revenue Service www.irs.gov.

Data Limitations

- As before, estimates of non-detection of unreported income included only for individual income tax.
- Confidence intervals are not estimated, but may be large.
- Data limitations preclude estimation of the gap for some categories.

Given the complexity of the tax system and available data, no single approach can be used for estimating each component of the tax gap. Each approach is subject to measurement or nonsampling error; the component estimates that are based on samples are also subject to sampling error. For the individual income tax underreporting tax gap, Detection Controlled Estimation is used to adjust for measurement error that results when some existing noncompliance is not detected during an audit. Other statistical techniques are used to control for bias in estimates based on operational audit data.² Due to the heterogeneous nature of the estimation methodology no standard errors are reported; however, the user should be mindful of these limitations when using these estimates.

Given available data, these are the best possible estimates of the tax gap components presented. However, the estimates cannot fully represent noncompliance in some components of the tax system, particularly as they relate to corporation income tax, income from flow-through entities, foreign or illegal activities, and digital assets, because data are lacking. For example, the IRS does not have a reliable method for estimating the corporation income tax nonfiling tax gap. The tax gap associated with illegal activities has been outside the scope of tax gap estimation because the objective of government is to eliminate those activities, which would eliminate any associated tax. With respect to noncompliance associated with digital assets and other emerging issues, it takes time to develop the expertise to uncover related noncompliance and to complete examinations that can be used to measure the extent of that noncompliance. Notwithstanding, the IRS is actively working on new methods for estimating and projecting the tax gap to better reflect changes in taxpayer behavior as they emerge.

Table 1. Tax Year 2014–2016[1] Tax Gap Estimates

[Money amounts are in billions of dollars]

Tax Gap Component	TY2014–2016 [1]	Share of Gross Tax Gap
Estimated Total True Tax	\$3,307	
Gross Tax Gap	\$496	100%
<i>Voluntary Compliance Rate</i>	85.0%	
Enforced and Other Late Payments	\$68	
Net Tax Gap	\$428	
<i>Net Compliance Rate</i>	87.0%	
Nonfiling Tax Gap	\$39	8%
Individual Income Tax	\$32	7%
Self-Employment Tax	\$7	1%
Estate Tax	[3]	[2]
Underreporting Tax Gap	\$398	80%
Individual Income Tax	\$278	56%
Non-Business Income	\$60	12%
Business Income	\$130	26%
Adjustments, Deductions, Exemptions	\$25	5%
Filing Status	\$5	1%
Other Taxes [4]	\$4	1%
Unallocated Marginal Effects [5]	\$11	2%
Credits	\$42	9%
Corporation Income Tax	\$37	7%
Small Corporations (assets < \$10M)	\$14	3%
Large Corporations (assets ≥ \$10M)	\$23	5%
Employment Tax	\$82	17%
Self-Employment Tax	\$53	11%
Uncollected Social Security and Medicare Tax	[3]	[2]
FICA and FUTA Tax	\$29	6%
Estate Tax	\$1	[2]
Underpayment Tax Gap	\$59	12%
Individual Income Tax	\$47	9%
Corporation Income Tax	\$4	1%
Employment Tax	\$5	1%
Estate Tax	\$3	1%
Excise Tax	[3]	[2]

[1] The estimates are the annual averages for the Tax Year 2014–2016 timeframe.

[2] Less than 0.5 percent.

[3] Less than 0.5 billion.

[4] The *Other Taxes* component included the Alternative Minimum Tax, Excess APTC Repayment, and taxes reported in the "Other Taxes" section of the Form 1040 except for self-employment tax and unreported social security and Medicare tax (which are included in the employment tax gap estimates).

[5] The *Unallocated Marginal Effects* component reflects the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be a difference whenever more than one line item has been misreported on the same return and the combined misreporting results in a higher marginal tax rate when the tax on the misreported amounts is calculated separately.

Detail may not add to total due to rounding.

² *Ibid.*

Table 2. Comparisons of Tax Gap Estimates for Tax Years 2011–2013 and 2014–2016

[Money amounts are in billions of dollars]

Tax Gap Component	TY 2011–2013 Prior Published [1]	TY 2011–2013 Revised [1]	TY 2014–2016 [1]
Estimated Total True Tax	\$2,683	\$2,688	\$3,307
Gross Tax Gap	\$441	\$438	\$496
Nonfiling Tax Gap	\$39	\$37	\$39
Underreporting Gap	\$352	\$349	\$398
Underpayment Gap	\$50	\$52	\$59
Voluntary Compliance Rate	83.6%	83.7%	85.0%
Enforced and Other Late Payments	\$60	\$58	\$68
Net Tax Gap [2]	\$381	\$380	\$428
Net Compliance Rate	85.8%	85.9%	87.0%

[1] The estimates are the annual averages for the covered timeframe.

[2] The net tax gap is the gross tax gap reduced by the amount of enforced and other late payments that will eventually be paid.

Detail may not add to total due to rounding.

Table 3. Tax Gap Estimates and Projections

[Money amounts are in billions of dollars]

Tax Gap Component	Tax Gap Estimates		Tax Gap Projections
	TY 2011–2013 Revised [1]	TY 2014–2016 [1]	TY 2017–2019 [1]
Estimated Total True Tax	\$2,688	\$3,307	\$3,621
Gross Tax Gap	\$438	\$496	\$540
<i>Voluntary Compliance Rate</i>	83.7%	85.0%	85.1%
Enforced and Other Late Payments	\$58	\$68	\$70
Net Tax Gap	\$380	\$428	\$470
<i>Net Compliance Rate</i>	85.9%	87.0%	87.0%
Nonfiling Tax Gap	\$37	\$39	\$41
Individual Income Tax	\$31	\$32	\$33
Self-Employment Tax	\$6	\$7	\$7
Estate Tax	[3]	[3]	[3]
Underreporting Tax Gap	\$349	\$398	\$433
Individual Income Tax	\$248	\$278	\$304
Corporation Income Tax	\$31	\$37	\$37
Small Corporations (assets < \$10M)	\$13	\$14	\$15
Large Corporations (assets ≥ \$10M)	\$19	\$23	\$22
Employment Tax	\$70	\$82	\$91
Self-Employment Tax	\$46	\$53	\$58
Uncollected Social Security and Medicare Tax	[3]	[3]	[3]
FICA and FUTA Tax	\$24	\$29	\$32
Estate Tax	\$1	\$1	\$1
Underpayment Tax Gap	\$52	\$59	\$66
Individual Income Tax	\$38	\$47	\$53
Corporation Income Tax	\$5	\$4	\$6
Employment Tax	\$6	\$5	\$4
Estate Tax	\$2	\$3	\$3
Excise Tax	[3]	[3]	[3]

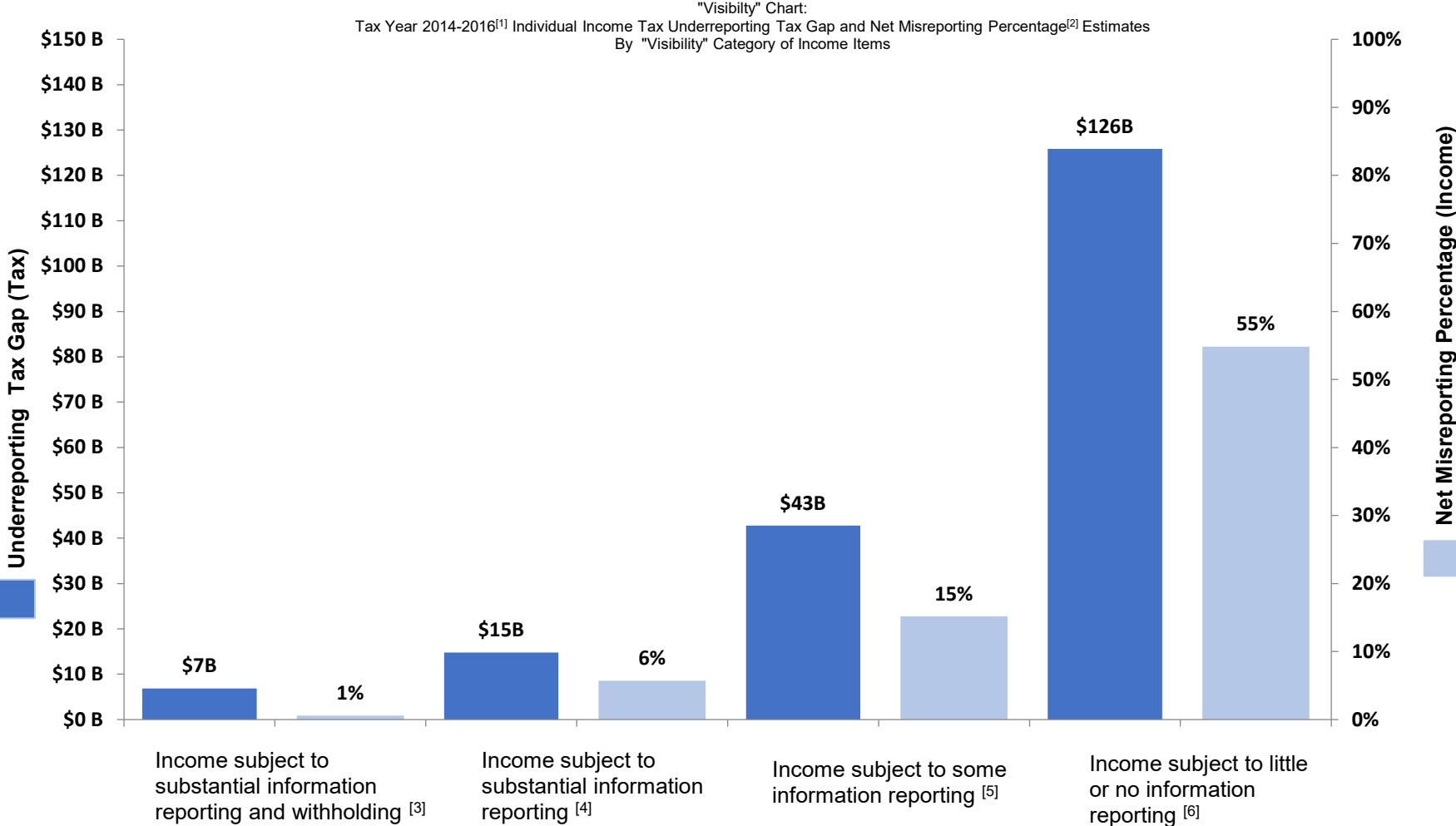
[1] The estimates are annual averages for the tax year timeframes.

[2] The projections are annual averages for the tax year 2017–2019 timeframe. These figures will be updated as more complete compliance data become available.

[3] Less than \$0.5 billion.

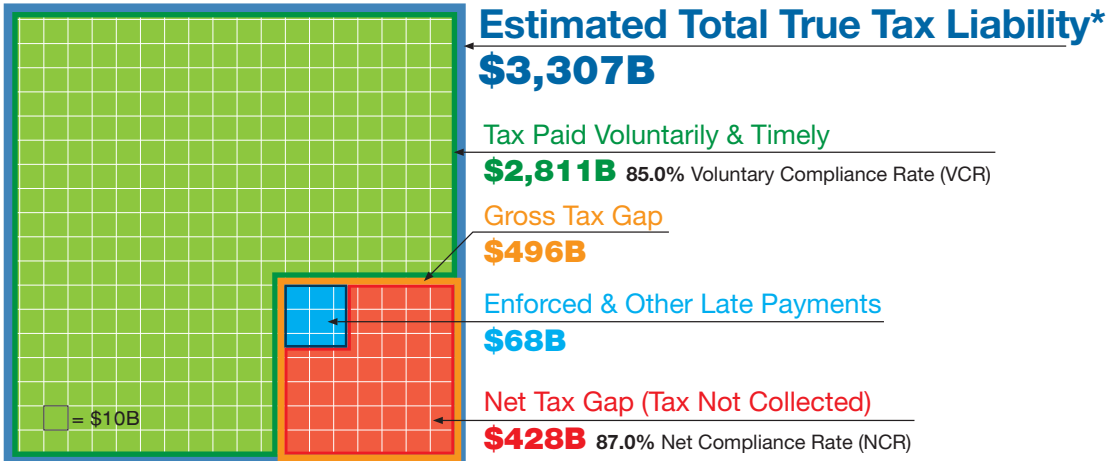
Detail may not add to total due to rounding.

Figure 1
Visibility Chart: Tax Years 2014–2016 [1] Individual Income Tax Underreporting Tax Gap and Net Misreporting Percentage [2] Estimates by Visibility Category of Income Items



[1] The TY 2014–2016 estimate is the annual average for the TY 2014, 2015, and 2016 timeframe. This chart displays the tax gap attributable to the underreported income category and the rate at which that income is misreported as measured by the Net Misreporting Percentage.
 [2] The Net Misreporting Percentage is the ratio of the net misreported amount to the sum of the absolute values of the amounts that should have been reported, expressed as a percentage. The net misreported amount for the items in this chart is understatements of income less overstatements of income. On net, income is understated.
 [3] Includes wages & salaries.
 [4] Includes pensions & annuities, unemployment compensation, dividend income, interest income, State income tax refunds, and taxable Social Security benefits.
 [5] Includes partnership/S corp. income, capital gains, and alimony income.
 [6] Includes nonfarm proprietor income, other income, rents and royalties, farm income, and Form 4797 income.

Figure 2
Tax Gap Estimates for Tax Years 2014–2016



Calculating the Net Tax Gap

Nonfiling
Underreporting
+ Underpayment

Gross Tax Gap
– Enforced & Other Late Payments

Net Tax Gap

Total True Tax Liability	Tax Paid Voluntarily & Timely	Gross Tax Gap					Enforced & Other Late Payments	Net Tax Gap (Tax Not Collected)	
\$3,307	\$2,811	Nonfiling	Underreporting	Underpayment	Gross Tax Gap				
		\$39	+\$398	+\$59	= \$496	– \$68	= \$428		
By Type of Tax									
Individual Income Tax	Individual Income Tax	Individual Income Tax	Individual Income Tax						Individual Income Tax
\$1,740	\$1,383	\$32	+\$278						+\$306
			Business Income	Non-Business Income	Credits	Income Offsets [1]	Filing Status	Other Taxes [2]	Unallocated Marginal Effects [3]
			\$130	\$60	\$42	\$25	\$5	\$4	\$11
Corporation Income Tax	Corporation Income Tax	Corporation Income Tax	Corporation Income Tax						Corporation Income Tax
\$354	\$313	#	+\$37						+\$34
			Large Corporations	Small Corporations					
			\$23	\$14					
Employment Tax	Employment Tax	Employment Tax [4]	Employment Tax						Employment Tax
\$1,131	\$1,038	\$7	+\$82						+\$87
			Self-Employment Tax	FICA & Uncollected FICA TAX	FUTA				
			\$53	\$28	\$1				
Estate Tax	Estate Tax	Estate Tax	Estate Tax						Estate Tax
\$22	\$17	\$<0.5	+\$1						+\$2

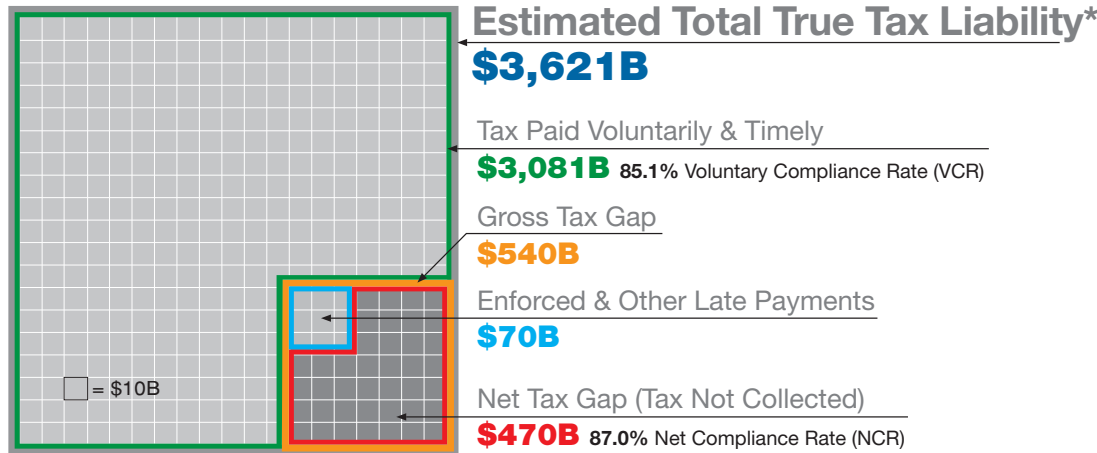
NOTES:

* Totals include Excise Tax.
#—No estimate.
Detail may not add to totals due to rounding.

[1] Includes adjustments, deductions, and exemptions.
[2] Includes the Alternative Minimum Tax and taxes reported in the “Other Taxes” section of the Form 1040 except for self-employment tax and unreported social security and Medicare tax (which are included in the employment tax gap estimates).
[3] Is the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be differences if the marginal tax rates are different in these two situations.
[4] Self-employment tax only.

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Figure 3
Tax Gap Projections for Tax Years 2017–2019



Calculating the Net Tax Gap

Nonfiling
Underreporting
+ Underpayment

Gross Tax Gap

– Enforced & Other Late Payments

Net Tax Gap

Total True Tax Liability	Tax Paid Voluntarily & Timely	Gross Tax Gap						Enforced & Other Late Payments	Net Tax Gap (Tax Not Collected)	
		Nonfiling	Underreporting				Underpayment			Gross Tax Gap
\$3,621	\$3,081	\$41	+\$433				+\$66	= \$540	– \$70 = \$470	
By Type of Tax										
Individual Income Tax	Individual Income Tax	Individual Income Tax	Individual Income Tax						Individual Income Tax	Individual Income Tax
\$1,919	\$1,528	\$33	+\$304						+\$53	= \$390 – \$51 = \$339
			Business Income	Non-Business Income	Credits	Income Offsets [1]	Filing Status	Other Taxes [2]	Unallocated Marginal Effects [3]	
			\$143	\$67	\$47	\$26	\$6	\$4	\$12	
Corporation Income Tax	Corporation Income Tax	Corporation Income Tax	Corporation Income Tax						Corporation Income Tax	Corporation Income Tax
\$340	\$298	#	+\$37						+\$6	= \$43 – \$9 = \$34
			Large Corporations	Small Corporations						
			\$22	\$15						
Employment Tax	Employment Tax	Employment Tax [4]	Employment Tax						Employment Tax	Employment Tax
\$1,279	\$1,177	\$7	+\$91						+\$4	= \$102 – \$7 = \$95
			Self-Employment Tax	FICA & FUTA TAX						
			\$58	\$32						
Estate Tax	Estate Tax	Estate Tax	Estate Tax						Estate Tax	Estate Tax
\$19	\$15	\$<0.5	+\$1						+\$3	= \$4 – \$3 = \$1

NOTES:
* Totals include Excise Tax.
– No estimate.
Detail may not add to totals due to rounding.
[1] Includes adjustments, deductions, and exemptions.
[2] Includes the Alternative Minimum Tax and taxes reported in the "Other Taxes" section of the Form 1040 except for self-employment tax and unreported social security and Medicare tax (which are included in the employment tax gap estimates).
[3] Is the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be differences if the marginal tax rates are different in these two situations.
[4] Self-employment tax only.

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