

GovRank.org's Methodology

Introduction: What Is This Project?

In recent years, a great deal of energy has been directed toward assessing governments' financial positions in the United States and abroad. In the U.S., cases of cities, counties, and states in severe fiscal distress have consumed our collective national attention. Often, these cases drew substantial attention only after the implications of their fiscal distress became clear via prominent bankruptcy filings, budget crises, defaults, credit downgrades, repeated tax hikes, and serious service cuts.

Ideally, citizens, journalists, researchers, and public officials would be able to quickly and clearly assess a government's financial health, both individually and relative to its peers. In reality, the limited availability of standardized, electronic financial data and comparative methods of assessment generally prevents this. In 2015, [United States Common Sense](#) tried to address these challenges directly by measuring the financial health of most local and state governments nationwide. In 2016, we are making the results and source data freely available on a simple electronic platform: [GovRank.org](#).

Why Has It Been So Difficult to Assess Financial Health?

Financial data can be extremely difficult to access and compile, limiting its comparability over time and across geography. Some of the challenges include accessing documents and the data they contain for a large number of governments, ensuring the data is comparable, and creating a consistent analytical framework.

Accessibility - While many governments are making financial reports available online, some are not, especially those in small towns with few resources or in states that do not mandate such disclosure. Second, when governments do upload records online, they are almost exclusively available as PDFs, making the financial data they contain difficult for most people to access. When records are available only through public record requests or a trip to city hall, obtaining them in hard copy can require a public employee to scan and mail them, and the requester to pay printing, postage costs, or travel costs. All these factors have contributed to the woefully limited amount of comparable information we have had about government finances in the U.S.

Comparability - Although governments publish a variety of financial documents, only a limited number of those documents comprehensively depict how governments actually operated while allowing for clear, comparable assessments across governments. Government budgets, for example, are forward-looking documents that illustrate a government's anticipated prospects for the coming year, but they are aspirational rather than descriptive. Budgets also vary substantially across governments, and even within the same government, over time. Changes such as departmental restructuring, renaming, and reclassification, as well as the election or hiring of new leaders and administrators, can alter how the government presents budget information over time. For similar reasons, comparison of detailed budget line items across governments is difficult.

Analytical Framework - Finally, the general public currently lacks a consistent, high-level, broadly applicable framework of analysis to assess and compare governments' fiscal performance, particularly at the local level. There exist bond rating agencies, but their ratings are often limited to larger governments, rely on opaque methods, and are derived inconsistently across governments. Moreover, rating agencies generally assess government's fiscal positions from an investor's standpoint, not a resident's. This is significant because a

bondholder's tolerance for risk is generally higher than a resident's. While a bondholder typically is concerned about the risk of default—which is indeed a serious outcome—a resident usually faces quality-of-life reductions first, via service cuts and tax increases, as the government tries to avoid default. Furthermore, in the event of a government bankruptcy, bondholders are more likely to recoup some of their investment in the course of the proceedings, while residents will not necessarily have their services restored, taxes lowered, or retirement benefits secured. GovRank.org provides a framework and the data to enable residents and leaders to understand local fiscal health and put it in comparative perspective.

How Does GovRank Improve Public Access to Government Financial Information?

Citizens should be able to understand their governments' financial performance, particularly as it relates to their tax dollars. Recognizing the challenges of data availability, comparability, and transparency, US Common Sense has collected and compiled more than 97,000 government financial reports and 69,000 budgets. We have also extracted "top-line" financial figures from the financial reports programmatically and manually; ranked local and state governments' performance; conducted research into fiscal sustainability; and made all of the information freely available on GovRank.org. By extracting data from financial report PDFs and allowing for direct downloads of both the data and the source documents, we directly improved the limited availability of electronic financial data. The financial reports substantially increase the level of data comparability, both because they are now aggregated in one place, and also because the reports we obtained largely adhere to generally accepted accounting principles (GAAP). These principles establish reporting standards to ensure comparability across governments. Finally, the ranking system we developed, while limited like all measures, offers a way to quickly assess the fiscal health of thousands of governments. This system uses a simple but meaningful set of measures: budget balance, asset flexibility, and pension funding for public employees.

How Did You Choose Which Governments to Include?

For the sake of completeness, we naturally included all 50 states on our platform, as well as Puerto Rico. However, the process of deciding which local governments to include was less straightforward. To generate a list of possible cities and counties (and their equivalents), we first identified all incorporated and Census-designated places, along with counties (and county equivalents), as determined by the [U.S. Census Bureau](http://www.census.gov). We excluded places that are unincorporated under their states' laws, thus omitting Census-Designated Places, "comunidades," and "zonas urbanas" from the platform. We included cities, towns, villages, boroughs, unified governments, and counties, which we collectively describe as "local governments." As of the 2010 Census, which was our benchmark, there were 22,638 local governments.

We then sought to identify those local governments from which we were most likely to successfully obtain financial records, either because they already provided the documents online or because we could request the records without an undue cost burden. We hypothesized that the smaller the population, the less likely we were to be able to obtain the records online or by request. We considered a random sample of 1,000 local governments and determined whether each had a publicly accessible website, phone number, and/or email address. Overall, 76% of the surveyed governments had at least a website, phone number, or email address. Only 63% had at least two of these, and only 50% had all three.

The survey confirmed our hypothesis that government accessibility is highly correlated with population size. We scored each government's level of accessibility on a binary basis: If we located at least two of the three

forms of contact or access, it scored a “1,” otherwise a “0.” Our model showed that if a government had 709 residents or more, it was most likely to score a “1”. There were 14,919 local governments that met this population threshold, and they constituted our target local governments from which we sought financial records.

In GovRank, we group local governments into two groups. Counties are the first group, and all remaining local governments (such as villages, towns, boroughs, unified governments, metro governments, and others) are labeled as “cities”. Louisiana parishes and Alaska boroughs are treated as counties. Governments that are both cities and counties are treated as cities. Puerto Rico classified among the 50 states but its data is not compared to that of the states.

What Is the Data Source?

United States Common Sense successfully collected annual financial reports (mostly audited, though some self-reported) for more than 13,000 local governments with a population of 709 or more, as well as all 50 states and Puerto Rico. Our focal period was fiscal years 2008-09 to 2013-14. Our initial review of local government websites, and subsequent communications with governments, revealed that fiscal year 2008-09 was commonly the earliest date for which records were available online or by request. Many governments began keeping electronic records from fiscal year 2008-09, often opting not to digitize earlier records at that time. In addition, many states require or recommend that [governments retain records](#) on file for only five to seven years before destroying them. Such standards do not eliminate the possibility of finding earlier records elsewhere, but they substantially increase acquisition costs. Fiscal year 2013-14 was our ending year because the release of annual financial reports typically lags due to the audit process. As a result, 2014-15 reports were not available during the early months of 2015 when we were requesting documents.

In some cases, we obtained more than the six fiscal years’ worth of documents we targeted; in others, we obtained fewer. To locate documents, we first searched for existing electronic financial reports and budgets by reviewing the 14,919 individual governments’ websites and/or participation in public record repositories. We then downloaded any records we found in our target period, as well as any earlier documents we found. If we did not find all documents for the target period online, we emailed a public record request to the government for the missing years, eventually sending over 10,000 electronic requests. We noted that most governments with a website had already posted some of the documents we sought online, though they were often missing older or more recent records. When we do not have all the documents, it may be because the government could not locate them, the government did not respond to our record request, or the fees for fulfilling our request were beyond our budget, meaning they exceeded approximately \$10-20 per document.

Whenever possible, we obtained comprehensive annual financial reports (CAFRs). [These](#) are audited annual financial reports that follow a detailed, semi-structured format and comply with generally accepted accounting principles, as defined by the [Governmental Accounting Standards Board](#) (GASB). A minority of governments report their finances in other formats, and in those cases we sought their “non-CAFR” annual reports. These annual financials vary greatly: At one end of the spectrum, they are simplified and/or unaudited reports; at the other, they are audited reports that use the same structure as CAFRs but present the financials on a nonaccrual basis. The entire spectrum deviates enough from a CAFR’s structure that we cannot compare governments that produce them to those that produce non-CAFR financials. We did extract more limited data from non-CAFRs and provide a basic ranking, as described further below.

United States Common Sense also collected budget documents for target governments. These documents are available at GovRank.org alongside the financial reports as public resources for researchers, journalists, and citizens. We did not extract or analyze any data from the budgets.

What Data Do You Provide?

We systematically extracted top-line data points from the CAFRs' government-wide statements, the Statement of Net Position and Statement of Activities, through a combination of automated and manual processes. Data we extracted or calculated from the CAFRs are listed in Table 1, along with an explanation of the way we calculated the data point if we did so.

Table 1. Extracted and Calculated Data Points on GovRank.org

Data Point	Extracted, or Calculation Method	Location in CAFR
1. Total Assets	Extracted	Statement of Net Position
2. Total Liabilities	Extracted	Statement of Net Position
3. Total Revenues	Total Expenses + Change in Net Position	Derived from, but also reported in, Statement of Activities
4. Total Expenses	Extracted	Statement of Activities
5. Change in Net Position	Extracted	Statement of Activities
6. Total Net Position	Extracted	Statement of Net Position
7. Unrestricted Net Assets	Extracted	Statement of Net Position
8. Investment in Capital, Net of Related Debt	Extracted	Statement of Net Position
9. Restricted Net Assets	Total Net Assets – Net Investment in Capital – Unrestricted Net Assets	Derived from Statement of Net Position
10. Unfunded Pension Liability	Sum of Unfunded Accrued Actuarial Liabilities (UAAL) for Up to 5 Pension Funds*	Required Supplementary Section
11. Unfunded OPEB Liability	Sum of UAAL for Up to 3 Nonpension Post-Employment Benefit Funds, or "OPEBs" (Other Post-Employment Benefits)	Required Supplementary Section

* Subsequent to GASB Statement No. 68, which was issued in 2012 and aims to improve accounting and financial reporting about public pensions, some governments have begun to report net pension liability in lieu of UAAL.

If the government files non-CAFR financials, we report the following data points, when they are available:

1. General fund total revenues
2. General fund total expenses
3. General fund balance
4. Unfunded pension liability (See above.)
5. Unfunded liability for OPEBs (See above.)

How Do You Measure Fiscal Sustainability?

A government is considered **fiscally sustainable** if it can meet the service needs of its current population without jeopardizing its ability to meet the service needs of its future population. Fiscal sustainability is a

complex concept, which we proxy using three financial indicators or ratios of key data points. The three indicators are a **budget balance** ratio; an **asset flexibility** ratio; and a **pension funding** ratio. A fiscally sustainable government overall would maintain a generally balanced budget balance ratio, a positive and relatively high net asset ratio, and a low per capita unfunded liability associated with retired public employees' pension benefits. We then used these ratios to rank governments' performance in comparison to each other. Table 2 summarizes the meaning and the calculation of each data point.

Table 2. Overview of Indicator Ratios

Ratio	Explanation
Budget Balance	Budget balance reflects the balance of a government's incoming and outgoing funds in a given year and thus, to a large extent, its ability to meet its obligations (i.e., pay its bills) in the current fiscal year. It is calculated as total revenues/total expenses.
Asset Flexibility	Asset flexibility reflects the amount of flexible assets a government has at its disposal in the current fiscal year, relative to the amount of debt it holds. It captures the government's current financial position compared to the current and future obligations it has amassed. It is calculated as unrestricted net assets/total liabilities.
Pension Funding	Pension funding reflects the funding shortfall of the government's public employee pension fund(s), relative to the size of the municipality's population. It illustrates the magnitude of the government's unfunded obligatory pension costs for current and future retirees. It is calculated as the unfunded pension liability/population.

To create rankings, we calculated the budget balance and asset flexibility ratios for each of the six fiscal years from 2008-09 to 2013-14 for which we had data. When we had three or more fiscal years' worth of data, we calculated an average budget balance ratio, an average asset flexibility ratio. We derived the pension ratio by dividing the most recent pension liability figure we were able to locate from 2010 to 2014 by the U.S. Census Bureau's 2014 population estimate. For each of the variables, we normalized the ratio values (0 to 1), then calculated a percentile rank for each government. We only compared same-type governments: Cities received a percentile rank in comparison to other cities, counties to counties, and states to states.

By their nature, percentile ranks are a relative measure of performance. For example, a city government that ranks in the 98th percentile for budget balance performed better than 98% of the city governments in our sample. Thus, a **higher percentile rank indicates better performance** relative to the entire sample.

For governments that had a budget balance rank, an asset flexibility rank, and a pension funding rank, we also calculated an **overall rank** for fiscal sustainability. To calculate the overall rank, we weighted all factors equally. We did so because there is no consensus on which factors define fiscal health: whether short-, mid-, or long-term view; budget balance, debt burden, or retirement fund status; fairness to future generations, service provision, or tax burden for current tax payers.

Thus, the raw overall score was calculated as follows:

- (0.33) (average budget balance percentile rank) +
- (0.33) (average asset flexibility percentile rank) +
- (0.33) (most recent unfunded pension liability percentile rank)

We used the summed value as the basis for the overall percentile rank.

Most non-CAFR annual financial reports do not provide any of the data points we sought from CAFRs. Given both this limitation and our desire to measure those governments' fiscal health in some way, we opted to provide a modified budget balance rank for them. We calculated their budget balance ratio as general fund total revenues/general fund total expenses (rather than total revenues/total expenses, neither of which was available), which allowed for the most comparable measure of operating position across those governments. However, using the general fund figures does not guarantee we captured the cost of operating the entire government, as the general fund is often one of multiple funds, albeit typically the largest. Thus, a budget balance rank for a government that issues a "non-CAFR" financial report is not comparable to the rank of one that does. We also found that governments that do not use the GAAP standards for their non-CAFR financial reports often do not account for their debts or retirement benefit liabilities consistently.

In the sections below, we provide additional details about the meaning and calculation method for each of the three subcomponent ranks, as well as the overall rank.

Budget Balance Ranking

Budget balance is the ratio of a government's total revenues to its total expenses in any given year.

For example, if a municipality had \$1,000,000 in total revenues and \$900,000 in total expenses in a given year, then its budget balance was 1.11 ($\$1,000,000/\$900,000$). We know that a place with equivalent total revenue and total expense amounts would have a ratio equal to 1.00. So if the ratio is 1.11, then total revenue is 1.11 times the total expenses, meaning the municipality had an 11% budget surplus.

Because we collected up to six fiscal years' worth of data, we calculated an average budget balance ratio. Thus, if a municipality had budget ratios of 1.11, 1.20, 1.02, and 0.99 (and two years of missing data), then we can say it ran budget surpluses in three years, had a deficit in one year, and had an average budget balance of 1.08, or an 8% average annual surplus.

Budget Balance = Total Revenues/Total Expenses

- **Total revenues** include all the income a government generated in a fiscal year, as reported in its comprehensive annual financial report (CAFR). The total amount includes tax collections, fees and charges for services, transfers from other governments, and other revenue sources.
- **Total expenses** include all costs a government incurred in a year, as reported in the CAFR. These typically include costs for general operations, personnel, infrastructure spending, and services that may include corrections, education, healthcare, and others.

What the Ratio Tells Us: Budget balance sheds light on a government's fiscal sustainability by showing whether it operated in surplus, balance, or deficit in a given fiscal year.

Interpretation:

- When the budget balance is greater than 1 (total revenues > total expenses), the government operated in surplus, with a larger value indicating a greater surplus.
- When the budget balance is equal to 1, the government broke even (total revenues = total expenses).
- When the budget balance is less than 1, the government operated in deficit (total revenues < total expenses), with a smaller value indicating a greater deficit.

Budget Balance Ranking: To rank budget balance performance, we calculated the average of a government's annual budget balance ratios, so long as we had at least three fiscal years of data. We then normalized the average ratio (0 to 1) and calculated the percentile rank for each government.

Budget Balance Data Notes and Limitations:

- We did not calculate a budget balance ranking if we were unable to obtain at least three fiscal years of a government's CAFRs for 2009-14.
- We only compared same-type governments: Cities to other cities, counties to counties, and states to states.
- If the government produced a non-CAFR annual financial report, we reported the budget balance of its **general fund** only.

Asset Flexibility Ranking

Asset flexibility is the ratio of a government's unrestricted net assets to its total liabilities.

For example, if a municipality had \$100,000 in unrestricted net assets and \$1,000,000 in total liabilities at the end of a fiscal year, then the asset flexibility ratio was 0.10 (\$100,000/\$1,000,000). This tells us the government could, if it wished, pay 10% of its (largely long-term) debt obligations using the unrestricted net assets it had at that time.

Because we collected up to six fiscal years' worth of data, we calculate an average asset flexibility ratio.

Asset Flexibility = Unrestricted Net Assets/Total Liabilities

To understand unrestricted net assets, first consider the following equation:

Total Net Assets = Restricted Net Assets + Unrestricted Net Assets + Investment in Capital, Net of Related Debt,

where "net" means that debt on the asset is subtracted from the value of the asset.

- **Capital assets** include property such as roads, buildings, and other infrastructure. They are not easily liquidated or converted to cash.
- **Restricted assets** must be used for particular purposes—as stipulated by law, regulation, or a higher level of government—which may include capital projects, debt service, or community development.

- **Unrestricted assets** are all other assets, which have no restrictions on how the government uses them. They are the most flexible accumulated resources.
- **Total liabilities** are the total amount of resources a government is required to turn over to other entities (i.e. the amount it owes). Despite their name, total liabilities do not include public employee retirement benefit liabilities. These are reported elsewhere in a CAFR.

What the Ratio Tells Us: The asset flexibility ratio sheds light on a government's fiscal sustainability by showing its (hypothetical) ability to pay off the debt it currently holds with the most flexible resources (assets) it has. The ratio is, thus, a measure of how manageable the government's long-term, non-retirement benefit debt burden is.

Interpretation:

- We say that the measure is somewhat hypothetical because it would be extremely rare for a government to ever have to pay all of its outstanding liabilities at once. Thus, it never needs liquid assets available to cover 100% of its obligation. However, a government that has a relatively small debt burden and/or relatively large pool of liquid unrestricted assets would be less squeezed by its debt obligations over time. A government with a growing debt burden and/or diminishing liquid assets would find itself becoming increasingly burdened by the narrowing gap over time. Thus, the higher the ratio, the greater its ability to meet its debts with resources it has available.
- A government with a negative asset flexibility ratio has negative unrestricted net assets, which means its debt obligations are typically quite high. The larger the negative ratio, the higher the debt and the lower the asset flexibility, with the result that the government risks becoming less and less likely to meet its debts over time.

Asset Flexibility Ranking: To rank asset flexibility performance, we calculated the average of a government's asset flexibility ratios, so long as we had at least three fiscal years of data. We then normalized the average ratio (0 to 1) and calculated the percentile rank for each government.

Asset Flexibility Data Notes and Limitations:

- We did not calculate an asset flexibility ranking if we were unable to obtain at least three fiscal years of a government's CAFRs for 2009-14.
- We only compared same-type governments: Cities to other cities, counties to counties, and states to states.
- Despite its name, total liabilities does not include public employee retirement benefit liabilities. These are reported elsewhere in a CAFR.

Pension Funding Ranking

The pension funding ratio is the government's public employee pension funding shortfall per resident.

For example, consider a municipality with 8,000 residents and pension obligations due to current and future retired public employees totaling \$10,000,000 as of 2014. Suppose the government had \$6,500,000 in assets set aside to meet that obligation. The municipality's unfunded pension liability is \$3,500,000 and its pension

funding ratio is \$437.50 (or \$3,500,000/8,000). This tells us the government had a pension funding shortfall of \$437.5 per resident.

Pension Funding = Unfunded Pension Liability/Population

- **Pension liability** is the total amount a government has contractually promised to pay retired public employees in monthly pension payments throughout their retirement.
- **Unfunded pension liability** is the shortfall between the total **pension liability**, or the amount the government owes, and the estimated value of the assets in the pension fund.

What the Ratio Tells Us: Because pension plan assets are invested to help the plan maintain its require projected funding level over time and meet its legal obligations to retirees, funding shortfalls mean the pension plan lacks sufficient assets to achieve the required funding level given investment return assumptions. The ratio conveys the projected amount of money it owes retired and current employees in pension benefits that it has not set aside in an interest-bearing financial account while controlling for population of the jurisdiction. It is therefore a measure of how manageable the pension debt burden is currently and over time.

Interpretation: The higher the unfunded pension liability per capita, the larger the financial burden a government faces, and the less fiscally sustainable it is.

Pension Funding Ranking: To rank pension funding performance, we used the reported unfunded pension liability for 2014 (which was the most recent available at the time of document collection) or the most recent previous year available. We summed the unfunded liability for up to five pension funds to which the government contributes, then divided by the 2014 population, as estimated by the U.S. Census Bureau. We then normalized the ratio from 0 to 1 and took the reciprocal of this value to account for the fact that *lower* values are better for this ratio (unlike the budget balance and asset flexibility ratios). Then we calculated the percentile rank for each government.

Pension Liability Data Notes and Limitations:

Pension information is more difficult to obtain than the data points we employ in the other ratios for a variety of reasons. In some cases, the governments do not provide employees with public pensions. In many others, the governments *do* provide pension benefits, but have yet to report them in their CAFRs. Under GASB's accounting standards, governments have not been required to report pension liabilities in those financials.

When data is reported, we used only the most recent unfunded liability. Unfunded liabilities change over time, but the change can be the result of a government's funding behaviors, investment performance, changes in investment assumptions, or a combination of the three. Thus, the most recent unfunded liability represents the best estimate of its size as of the date of the valuation. Sometimes the most recent pension liability estimate is not from 2014 because many governments report their unfunded pension fund valuation every second or third year.

We summed the unfunded liability for up to five pension funds to which the government contributes.

GASB Statement No. 68, issued in 2012, required greater disclosure of pension-related liabilities starting in fiscal year 2014-15. To prepare for this requirement, pooled pension systems began—generally in 2013-14—to report individual municipalities' share of total pension system liability, as a percentage. In some cases, the pooled pension system reported the value, in dollars, of the

municipalities' unfunded pension liability. When either of these system-level reports existed *and* the government did not report pension liability in its own annual financial report, we calculated or reported the system's estimation of the municipality's unfunded pension liability for up to five pension systems.

Under GASB Statement No. 68, the method of calculating pension liability also changed. The new standard is to report the net pension liability rather than the UAAL. We report whichever estimate the government or system reports and do not distinguish between the two.

The unfunded pension liability is reported in the "required supplementary section" of a financial report, which is not audited. Governments are also free to assume the investment growth rate of the pension assets they have set aside. Their assumption may be higher or lower than actual annual asset growth.

We only compared same-type governments: cities to other cities, counties to counties, and states to states.

Finally, in addition to pensions, most governments have promised non-pension benefits to retired employees. These include healthcare benefits and others, which are collectively known as Other Post Employment Benefits (OPEBs). OPEB liabilities are less systematically reported than pension liabilities, so we provide data about them on GovRank.org when available, but do not include them in our ranking framework. The existence of unfunded OPEB liabilities means the actual amount of a government's unfunded retirement liabilities is larger than the pension funding ratio we provide indicates.

Overall Ranking

The overall ranking combines the three subcomponent rankings into one.

Overall Ranking = (0.33) (average budget balance percentile rank) +
(0.33)(average asset flexibility percentile rank) +
(0.33)(most recent unfunded pension liability percentile rank)

Interpretation: The higher the overall ranking, the higher the government's fiscal sustainability in our estimation.

Why These Weights?: Other fiscal performance ranking systems are split about how to create an overall ranking. Some weight all elements equally; others weight by their own evaluation of importance. There is no consensus on the best practice. Lacking any theoretical reason to give greater weight to one subcomponent ranking over another, we weight all three equally.

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