FINANCIAL STRATEGY FOR PUBLIC MANAGERS

Fourth Edition

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FOREWORD

There are many fine textbooks on public financial management. Each does certain things well, but in our view, none covers all the concepts, techniques, and analytical tools that today's public policy and administration graduate students need to put their passion into action. This book is our best attempt to weave that material together in a fresh, robust, concise, and immersive way. We also believe the time is right to bring to the market a free, open-source treatment of this critically important subject.

At the University of Washington and the University of Chicago, we use this text for a variety of quarter-length introductory courses on public finance, budgeting, and financial management. We believe it's also suitable for a similarly structured semester-long course. Sections of the text might also be suitable for other courses often found in Master of Public Administration, Master of Public Policy, and other programs. Chapters 2 and 3 would be appropriate for courses on governmental accounting, debt management, or non-profit financial management. Chapters 4 and 5 work well for an applied public or non-profit budgeting course.

The first time we co-taught "Public Financial Management and Budgeting," we quickly realized that we approached the course in similar ways. That shared thinking is partly the result of our shared experiences with some exceptional teachers and scholars. They include, in no particular order: the late William Duncombe (formerly of Syracuse University); Bart Hildreth and Ross Rubinstein (Georgia State); Katherine Willoughby (University of Georgia); Craig Johnson (Indiana University); Jerry Miller (Arizona State University); and the late Dwight Denison (formerly of University of Kentucky).

We want to thank Dean Emeritus Sandra Archibald, Evans School Dean Jodi Sandfort, and Harris School Dean Kate Baicker for their commitment to excellence in the teaching of public finance, budgeting, and financial management. Without the support of Apurva Ashok (Rebus Foundation), Lauren Ray (University of Washington Libraries), and Sophia Keskey (Evans School of Public Policy), this project would not have been possible. Lastly, we are indebted to our students, who, through their thoughtful suggestions and criticisms, helped shape and enrich this project.

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INTRODUCTION

In 2015, Mark Zuckerberg, founder of Facebook, launched a plan to give away most of his $45 billion fortune. Along with his wife, Priscilla Chan, he announced the creation of a philanthropic organization known as the "Chan-Zuckerberg Initiative." This "Initiative" defies conventional labels. At one level, it is similar to traditional non-profit organizations. It can deliver social services, participate in public policy debates, and partner with other non-profits. Like traditional philanthropic foundations, it plans to provide grants in key policy areas, including education reform and social justice.

But the Initiative is also decidedly non-traditional. It is organized as a for-profit limited liability corporation. That means when it wants to, it can do many things non-profits and governments cannot. It can invest money in other for-profit entities. It can fund election campaigns. It can manage and invest money on behalf of other non-profit and for-profit organizations. So, the important question around Chan-Zuckerberg is not what will it do, but rather, what won't it do? With $45 billion at its disposal and few, if any, limits on how to spend it, the possibilities are endless.

Some are calling this "philanthrocapitalism." Chan-Zuckerberg is the largest and most visible recent example. But there are many others. If you have ever bought a sweater at Patagonia, worn a pair of TOMS shoes, or used a shot of insulin from Novo Nordisk, you have participated in philanthrocapitalism. These are all for-profit companies with a social purpose hard-wired into their mission. This also works from the other direction. Strange as it sounds, IKEA – whose founder Ingvar Kamprad was once the wealthiest person in the world – is controlled by a charitable family foundation.

Maybe you didn't think public finance has anything to do with Fair Trade Certified™ fleece vests or the FJÄLKINGE shelving unit. Turns out it does.

Philanthrocapitalism brings the glamour and prestige of big business to the decidedly un-glamorous work of feeding the hungry, housing people experiencing homelessness, and the other essential efforts of governments and non-profits. That's important. But even more important, it's forced us to re-think what managing "public" money means.

Showtime's hit show *Billions* is the story of a hedge fund that operates in the shadowy underworld of finance. That fund – known as Axe Capital, for its founder Bobby Axelrod – will do anything to turn a profit. Its traders buy and sell stocks on inside information, bribe regulators, and spread market-moving rumors, among many other nefarious tactics.

Season 2 features a compelling storyline ripped from the proverbial public finance headlines. Axe learns through a back channel that the Town of Sandicot, a long-struggling upstate New York town on the verge of bankruptcy, is about to be awarded a state license to open a new casino.

Axe sees an opportunity. When a government is on the verge of bankruptcy, investors steer clear of

it. As a result, Sandicot's municipal bonds (a form of long-term loan) are available for pennies on the dollar. Axe believes the new casino will drive an economic recovery, and once that recovery is underway, investors will look to buy up Sandicot's bonds. So, he decides to get there first. He "goes long" and buys several hundred million of Sandicot municipal bonds.

But then the story takes an unexpected turn. Word of the Sandicot play leaks out, and Axe's opponents persuade the State to locate the casino in another town. At that moment, Axe faces a difficult choice: Sell the bonds and lose millions or force Sandicot to pay back the bonds in full. Unfortunately, Sandicot can repay only if Axe forces it to enact savage cuts to its police, firefighters, schools, and other basic services. Axe is leery of the bad press that will surely follow a group of billionaire hedge fund managers profiting at the expense of a struggling town.

When asked for their opinion, a superstar Axe analyst named Taylor Mason – the first gender non-binary character on a major television show – says:

> "In many ways, a town is like a business. And when a business operates beyond its means, and the numbers don't add up, and the people in charge continue on heedless of that fact, sure that some Sugar Daddy – usually in the form of the federal government – will come along and scoop them up and cover the shortfalls, well, that truly offends me. People might say you hurt this Town, but, in my opinion, the Town put the hurt on itself. Corrections are in order. There's a way to make this work, and that way is hard but necessary… Once we do this, the town will face that challenge and come out stronger. Or it will cease being. Either result is absolutely natural."

Governments and non-profits tend to have a "retrospective" view of money. To them, an organization's money is well-managed if it stays within its budget, complies with donors' restrictions, and completes its financial audit on time. To them, bigger questions like "Is this program working?" or "Does this program deliver more benefits than it costs?" are best answered by elected officials and board members. In their view, if we mingle the different sectors' money, taxpayers will never know what they get for their tax dollars, and elected officials and board members won't know if the programs they worked so hard to create and fund are delivering on their promises. To public organizations, financial accountability has often meant looking back to ensure that public money was spent according to plan.

Zuckerberg and many others who now operate in the public sector see public money in "prospective" terms. To them, public money is a means to an end. It's how we'll end racial disparities in public education, cure infectious diseases, close the gender pay gap, and pursue other lofty goals. These folks are not particularly concerned with how government tax dollars differ from charitable donations or business profits. If money can move an organization closer to its goals, regardless of where that money comes from, why not add it to the mix? They don't think of financial contributions as a way to divvy up credit for a program's success. They want to know how their money was spent, but far more importantly, they want to know what it accomplished.

The opposite is also true. Taylor Mason and many others who share their views also see public money in "prospective" terms. But instead of thinking about what the public sector could accomplish, they also believe no public sector organization is "too big to fail." If a local government like Sandicot is no longer accomplishing its mission, they argue, it should cease to exist.

Both these perspectives – "philanthrocapitalism" and "government is like a business" – are significant departures from public financial management's status quo. They're also why public organizations have tended to segregate themselves into "money people" and "everyone else." Money people tend to see the world differently.

And to be clear, both these perspectives illustrate a much broader recent trend: blending the financial lines across the sectors. Many non-profits now operate profitable lines of business that subsidize other services they provide for free. Governments around the world have created for-profit corporations that allow private sector investors to build, operate, and maintain public infrastructure like bridges, subways, and water treatment facilities. Charitable foundations of all sizes now act as "Angel Investors." They buy stock in small start-up companies that develop products to improve the quality of life in the developing world. Many of those investments have turned a handsome profit that, in turn, subsidized other, far-less-profitable endeavors.

Philanthrocapitalism and "government, like business," are also animated by pressure to do more with less. For roughly 50 years, taxpayers around the world have said no to new taxes but yes to a steady expansion of the size and scope of government. They have demanded more spending on health care, education, environmental conservation, and other services but left unclear how to pay for it. They have allowed their governments to borrow record amounts of money but denied them the financial means to repay that debt. Many governments today are simply maxed out. They have little or no new money to commit to innovative programs that philanthrocapitalists like Bill Gates, Mark Zuckerberg, and others would like to see.

These trends – blurring of the sectors, emphasis on outcomes, scarce government resources – are redefining what it means to manage public money.

You got into public service because you want to make a difference. Maybe, like Mr. Zuckerberg, you want to tackle big, complex public problems. Maybe you want to make governments and non-profits work just a bit more efficiently. Maybe you think government should do a lot more in areas like health care, education, and transportation. Maybe, like Taylor Mason, you think government should get out of the way and make room for non-profits and for-profits. Regardless of your goals, you'll need to speak the language of public financial management to make that difference. You'll need to translate your aspirations into cost estimates, budgets, and financial reports. You'll need to show how an investment in your program/product/idea/initiative/movement will produce results. You'll need to understand where public money comes from and where it can and can't go. You probably didn't get into public service to manage money but in today's rapidly changing public sector,

We're all money people now!

And the opposite is also true. In today's public sector, money people must also step outside of their comfort zone. They must be able to communicate with program managers, board members, and many other stakeholders with whom they don't traditionally interact. They must help others translate their ideas into the language of finance. As a public manager, a big part of your job will be learning to inspire your money people to step far outside of their comfort zone in the name of accomplishing your organization's goals.

WHAT IS FINANCIAL STRATEGY?

Money is to public organizations what canvas is to painting. The painter wants to bring their artistic vision to life on the canvas. But to do this, they must work within the confines of that canvas. If the canvas is too small, too rough, or the wrong shape, the painter must adapt their vision. If they stray too far from their vision, they must know when to find a different canvas.

As a public servant, you are like a painter. You know what your organization wants to accomplish, but you must bring those accomplishments to life on its financial canvas. Every organization's financial canvas is a bit different. Some have many revenue streams that produce more than enough money, while others depend on a single revenue source to generate just enough money to keep the organization running. Some have broad legal authority to raise new revenue and borrow money, while others must get permission from their board, taxpayers, or other stakeholders at every step. Some have sophisticated financial experts to produce budgets and manage money, while others have no such expertise.

It's not a problem that each public organization's financial canvas is different from the rest. In fact, those differences are an essential part of what makes public financial management an exciting and dynamic field of study. The problem, however, is that many great policies and programs fail because they're painted on the wrong financial canvas. Public organizations often take on policy challenges without the right financial tools, authority, and capacity. By contrast, some organizations are too modest. They have the tools, authority, and capacity to take on big challenges, but for various reasons, they don't. Financial strategy is how public organizations use their financial resources to accomplish their objectives. It's how they put their organization's vision to its financial canvas.

All public organizations must confront limits on the amount and scope of financial resources they can access. So, in practical terms, a financial strategy is often about tempering our expectations to match what our financial canvas can support. It's about analyzing a program's cost structure to make it more efficient, scaling back its goals and objectives, or finding partner organizations to help launch it. Sometimes, strategy means finding a new canvas. That might mean forming a new organization, re-purposing an existing program, or recruiting a new foundation or venture capitalist to invest. This book tells you how to understand the many different types of canvases available to you and the many different ways to put your organization's vision to one of those canvases.

TECHNIQUE SUPPORTS STRATEGY

We organized this book around a simple idea: technique supports strategy. There are many fine textbooks on public financial management, and almost all of them focus on technical skills. For more than a generation, students of this subject have learned how to forecast revenues, build budgets, record basic transactions in an organization's financial books, and many other useful skills. At the same time, students have rarely been asked a far more important question: Where and how should they apply those skills? We believe technical skill is useful only if it informs actual management decisions. A cost analysis is useful only if it tells us whether and how to launch a new program. Financial statement analysis is a powerful tool because it can inform when to build a new building, start a capital campaign, or invest unused cash. Budget variance analysis is important because it tells program managers where to focus their attention. And so forth. We present these and other

techniques, but more importantly, we try to explain how those techniques can and should inform crucial management, strategy, and policy decisions.

Strategic thinking is, at some level, about "knowing what you don't know." It's about stepping outside of your own experience. It's about looking into your organization's future. It's about putting yourself in your stakeholders' shoes. That's why one of the most valuable tools in financial strategy is asking the right questions. No one can be an expert on all things financial. But if you can ask the right questions and access the right expertise, you can know enough to drive your strategy.

That is why one of the most important techniques in public financial management is asking good questions. This book is littered with questions. Each chapter begins not with learning objectives, but with the kinds of questions managers ask and how the information, conceptual frameworks, and analytical tools from financial management can help answer those questions. It includes exercises to help you refine your financial management technique. But more importantly, it has cases and other opportunities for you to apply that technique to support a genuine financial strategy.

Financial strategy is not sector-specific. What works in the for-profit sector might work in non-profits or governments, and vice versa. And as sector distinctions matter less, financial strategy's origins also matter less. That is why most of the discussion in this book is predicated on the idea that all governments, non-profits, and "for-benefit" organizations (i.e., for-profit organizations with an explicit social purpose) are mostly alike. You will see "public organization" and "public manager" used often. These are generic terms to describe people who interact with the financial strategy in these types of organizations. To be clear, "public manager" includes policy analysts, community organizers, for-profit contractors, and anyone else who has a stake in a public organization's finances. Where necessary and appropriate, you'll see discussions highlighting how each sector's technical information, legal environment, and strategic directions differ. But for the most part, this text assumes that public organizations have a lot in common.

HOW THIS BOOK IS ORGANIZED

First and foremost, this is a book about people and organizations. To many of us, finance and budgeting are abstract subjects. They are numbers in a spreadsheet, but not much more.

In reality, public financial management is how real public servants in real public organizations bring their passions to life. That is why all of the technical information is presented in the context of specific people, organizations, and strategies. Throughout this book, you will find lots of illustrations and examples drawn from real public organizations.

The first chapter is titled "How We Pay for the Public Sector." It covers where public organizations' money comes from and where it goes. It also highlights some of the pressing challenges facing public organizations – namely shrinking public resources and burgeoning mandatory expenditures – and how those challenges present tremendous opportunities for entrepreneurial public managers.

Each of the subsequent chapters covers a bundle of tools that public financial managers use to inform financial strategy. The second chapter covers the basic financial statements. Financial statements are an essential and often overlooked tool to understand an organization's financial story. This chapter

introduces those statements, the information they contain, and the questions they help public sector managers ask and answer.

Chapter 3 is about financial statement analysis. If financial statements tell an organization's financial story, financial statement analysis is the annotated bibliography of that story. It is a tool to understand the specific dimensions of an organization's financial position, to place that position in an appropriately nuanced context, and to identify strategies to improve that financial position in both the near-term and long-term.

To truly understand the numbers in the financial statements – and how those numbers might change as an organization pursues different financial strategies – you must also understand the core concepts of accounting. To that end, the fourth chapter is an applied primer on core accounting concepts like accruals, revenue and expense recognition, depreciation and amortization, and encumbrances. These concepts and their application to actual financial activity are collectively known as "Transaction Analysis."

Chapter 5 is about Cost Analysis. Many public organizations need help to meaningfully answer a simple question: What do your programs and services cost? They struggle not because they are lazy or inept but because it is challenging to measure all the different costs incurred to produce public services and then express those costs in an intuitive way. It is even more challenging to think about how those costs change as the amount of service changes or as the scope of a service expands or contracts. It is challenging, but it is also essential. Every successful public program ever devised was designed with a careful eye toward its cost structure. In this chapter, you will learn the different types of costs, the core concepts of cost behavior, and how to think about ways to improve an organization's financial position given its cost behavior.

Chapter 6 covers Budgeting. A public organization's budget is its most important policy statement. It is where the mission and the money connect. Budgeting is, at one level, a technical process. It demands solid cost analysis, revenue and expense forecasting, and clear technical communication. But more importantly, it's a political process. It is how policymakers bring their political priorities to life and shut down their opponents' priorities. It is how the media and taxpayers hold public organizations accountable. It is where sophisticated public managers can advance their priorities. This chapter focuses on budgeting as a technical process, emphasizing the different types of budgets and the legal processes by which budgets are made. But it also covers some of the common political strategies that play out in the budget process and how public managers do and do not engage those strategies. The discussion of those strategies is loosely organized around concepts borrowed from the burgeoning field of behavioral economics, such as loss aversion and the "endowment effect."

At the outset, it is also worth highlighting what this book does not cover:

- Unlike other textbooks in this space, we do not give special attention to financial management in healthcare organizations. Healthcare financial management has much in common with public financial management. But recent trends in the former – especially the Medicare Modernization Act, the Affordable Care Act ("Obamacare"), and the collapse of the municipal bond insurance market – have made it too distinct to cover in a coherent way within the framework of this book.

- We gloss over government budgeting systems and processes. We cover the steps outlined in law that governments are supposed to follow to arrive at a budget. But for roughly a decade now, the actual budget processes in Washington, D.C., and many state governments have been quite different from what's prescribed in law. Terms that used to describe deviations from that process, like "continuing resolution," "sequestration," "sweeps," and "recissions," now seem like parts of that process. That's why it seems silly to devote much attention to the budget process. Instead, we treat budgeting as where money, politics, and priorities come together in predictable and unpredictable ways.
- Financial managers find themselves in the throes of transformational changes in public organizations. They are asked to push the boundaries of what traditional procurement and contracting processes will allow. They are often asked to implement massive new information technology projects. They find themselves leading new initiatives around "evidence-based decision-making," "lean management," and "performance benchmarking," among others. Woefully, we do not have time or space to devote to these processes. We hope to cover these topics in future iterations of this text.

CHAPTER 1.

HOW WE PAY FOR THE PUBLIC SECTOR

WHERE THE MONEY COMES FROM AND WHERE IT GOES

Managers need to know where public money comes from and where it goes. That information can answer important questions like:

- What revenue options are available to governments? Non-profits?
- What are the advantages and disadvantages of various revenue sources with respect to efficiency, equity, fairness, and other goals?
- How will the US federal government's financial challenges shape the financial future of the public sector?
- How, if at all, will governments address the challenges of income and racial inequality?

In January 2010, the United States Department of Justice (DOJ) received a formal civil rights complaint from a local community organization in Ferguson, Missouri. In their complaint, they accused the Ferguson Police Department of aggressive and biased policing tactics, including large numbers of traffic stops, searches, seizures, and arrests in the city's African American communities. DOJ officials corroborated the report with the Missouri Attorney General's office, which had also received several similar complaints throughout the previous five years. Both offices agreed to monitor the situation.

On August 9, 2014, Michael Brown, an African American teenager, and resident of Ferguson, was shot and killed by a Ferguson police officer who was investigating a nearby robbery. Ferguson police officials drew sharp criticism for the incident and their management of the subsequent investigation into potential police misconduct. Several weeks later, a grand jury declined to indict the police officer. In their view, the evidence suggested the police officer had reason enough to consider Brown as a potentially dangerous suspect.

The shooting sparked violent protests across the United States. Ferguson residents said the shooting was just the most recent example of the racist policing they had pointed out to federal and state officials years earlier. They implored Attorney General Eric Holder to immediately open a DOJ civil rights investigation into the Ferguson Police Department. Holder said his office would gather as much information as possible but cautioned everyone that anecdotes and demographics are insufficient to prove an accusation of biased policing. For several weeks, the country anxiously awaited word on what DOJ would do next.

On September 20, 2014, the DOJ opened a formal civil rights investigation. The report from that

investigation was released in March 2015. It excoriated the Ferguson Police Department and the Ferguson City Council for actively and passively encouraging the sort of aggressive policing that Ferguson residents had decried. But perhaps even more importantly, it explained that the most compelling evidence of biased policing was not arrest records or police reports. *It was Ferguson's budget*. The report said, "Ferguson's law enforcement practices are shaped by the City's focus on revenue rather than public safety needs." It documented a recent trend toward raising new city revenues through aggressive enforcement of fines and fees. Ferguson generated more than $2.5 million in municipal court revenue in fiscal year 2013, an 80 percent increase from only two years prior. In all, fines and forfeitures comprised 20 percent of the city's operating revenue in fiscal year 2013, up from about 13 percent in 2011. By comparison, other St. Louis suburbs relied on fines and fees for no more than six percent of operating revenue. This budget strategy legitimized and even encouraged Ferguson's law enforcement and court officials, most of whom were not racists, to pursue aggressive policing against Ferguson's majority African American community.

The takeaway here is clear: **where a public organization gets its money says a lot about its priorities**. In Ferguson's case, choices about where to get revenue led to a nationwide social movement.

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Identify the revenue sources used by the federal, state, and local governments.
- Show how similar governments pay for similar services in quite different ways.
- Identify some of the "macro-challenges" that will shape public organizations' finances well into the future.

Governments across the United States do the same basic things. Cities and towns primarily maintain roads, plow snow, keep neighborhoods safe, prevent and fight fires, and educate children. County governments run elections, care for the mentally ill, and prevent infectious diseases. State governments provide schools with funding for education, coordinate health care for the poor, incarcerate prisoners, and operate public universities and community colleges. The national – or "federal" – government regulates trade and commerce, defends our borders, and pays for health care for seniors.

At the same time, governments are remarkably dissimilar in how they pay for and deliver these services. Some rely on a single tax source for most or all of their revenue. Others draw on many different revenue sources. Some deliver their services with the help of non-profits, private sector contractors, and other stakeholders. Others engage outside entities infrequently, if at all. Some citizens want their government to deliver many different high-quality services. Others want their government to do as little as possible.

These choices about how governments pay for their services, how much they provide, and how they ultimately deliver those services matter a lot to citizens. For instance, if a city government

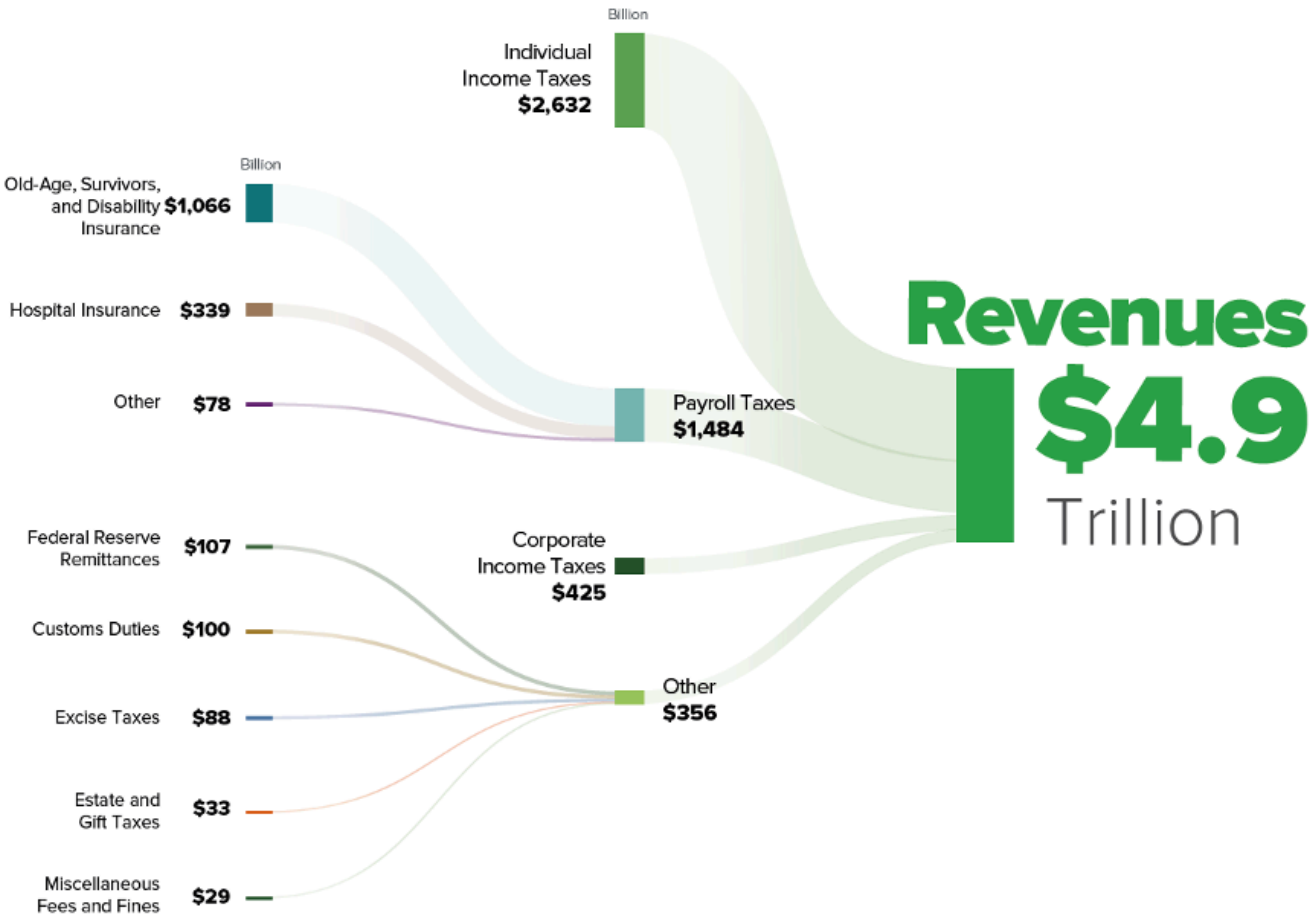
depends mostly on property taxes, its leaders might have the incentive to emphasize services that benefit property owners, such as public safety and sidewalks, and worry less about services more likely to benefit those who do not own property, like public parks or housing people experiencing homelessness. In some regions, governments pay non-profit organizations to deliver most or all essential services in areas like foster care, child immunizations, and assisted living for seniors. For those who use those services, the quality of service they receive can depend a lot on which non-profit delivers the service or manages their case.

So, at a high level, governments look the same. But if we examine them more carefully, we see they vary greatly in where their money comes from and where it goes. That variation, and its implications for citizens, is a key part of the study of public finance. This chapter is a basic overview of where governments get their money, where they spend it, and some of the financial challenges they will likely face.

THE FEDERAL GOVERNMENT

The national government – also known as the "federal government" – is one of the largest and most important employers in the United States. Every soldier in the military, customs agent at an airport, and astronaut at NASA (the National Aeronautics and Space Administration's acronym) works for the federal government. And so do many, many others. In 2022, the federal government spent just under $6.3 trillion and employed an estimated 4.3 million people directly and millions indirectly as government contractors and grant employees. For the past decade or so, federal government spending has accounted for roughly one-quarter of the U.S.'s entire economic output – otherwise known as its gross domestic product (GDP).

Federal government revenues in FY 2022 were $4.9 trillion; 84 percent was from two sources –individual income tax and payroll taxes.



Source: Congressional Budget Office (2023) "Revenues in Fiscal Year 2022"

The federal government collected just over $2.6 trillion in individual income taxes in FY 2022. The tax paid on income is determined by applying a tax rate to taxable income with allowances for tax preferences.

Taxable income is the amount of income (e.g., wages, interest and dividend income, partnership and business income (or loss), farm income, pension income, rents, royalties, and Social Security benefits) subject to tax after deductions and exemptions. The federal government offers a *standard deduction* that all taxpayers can claim. The reduction of taxable income varies by filer type (e.g., $13,850 for single filers, $27,700 for married filers filing jointly, and $20,800 for heads of household in 2023). Beyond that *standard deduction*, eligible taxpayers can claim hundreds of other exemptions, deductions, credits, and other tax benefits related to home ownership, retirement savings, health insurance, investments in equipment and technology, and dozens of other areas. The federal government offers these preferences to encourage taxpayers to save for retirement, buy a home, invest in a business, or participate in other types of economic activity. The *tax rate* is the amount of tax paid per dollar of taxable income. For 2023, the federal tax code has seven different rates that are applied across levels of taxable income (also known as tax brackets). Those *statutory rates* ranged from 10 percent on individual annual income up to $11,000 to 37 percent on annual income over $578,125 ($693,750 for married individuals filing joint returns).

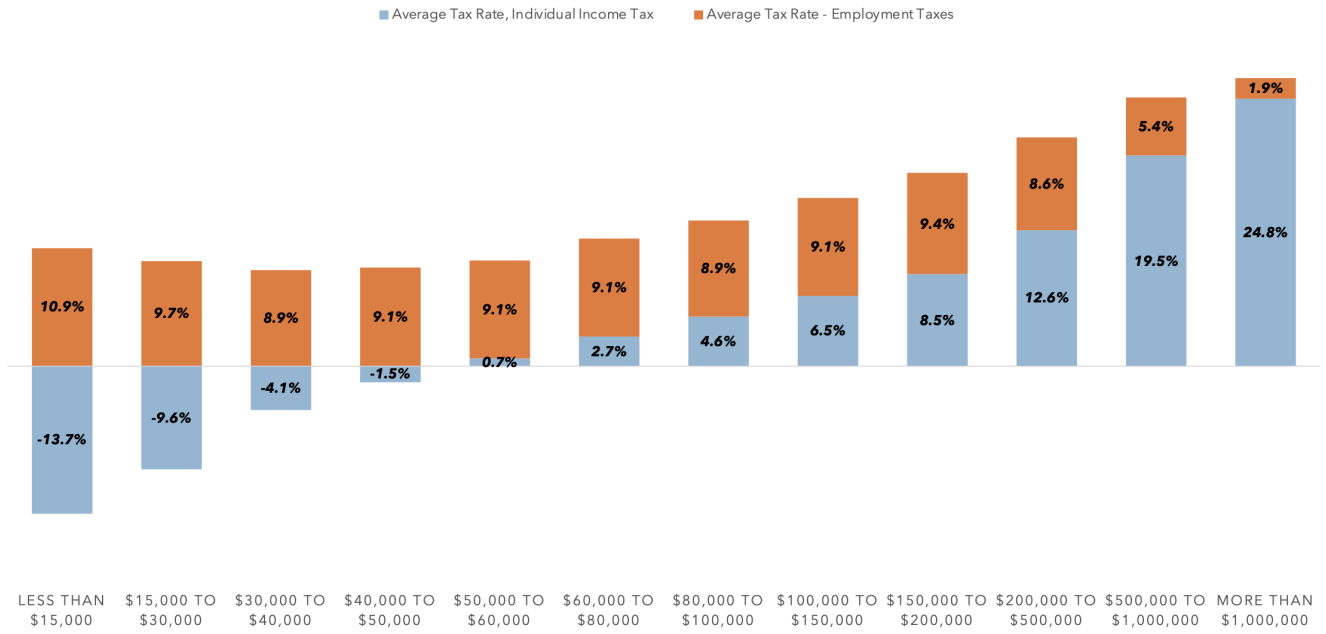
Statutory Tax Rate	For Single Filers			For Married, Joint Returns			For Heads of Households		
10%	$ -	to	$ 11,000	$ -	to	$ 22,000	$ -	to	$ 15,700
12%	$ 11,000	to	$ 44,725	$ 22,000	to	$ 89,450	$ 15,700	to	$ 59,850
22%	$ 44,725	to	$ 95,375	$ 89,450	to	$ 190,750	$ 59,850	to	$ 95,350
24%	$ 95,375	to	$ 182,100	$ 190,750	to	$ 364,200	$ 95,350	to	$ 182,100
32%	$ 182,100	to	$ 231,250	$ 364,200	to	$ 462,500	$ 182,100	to	$ 231,250
35%	$ 231,250	to	$ 578,125	$ 462,500	to	$ 693,750	$ 231,250	to	$ 578,100
37%	$ 578,125	to	or more	$ 693,750	to	or more	$ 578,100	to	or more

When an individual uses exemptions, deductions, and credits, their *effective tax rate* (ETR, i.e., tax liability divided by their taxable income) is frequently lower than the marginal tax rate (i.e., the statutory tax rate imposed on the last dollar of income). For that reason, the debate on tax policy is focused on the effective tax rate, not the marginal tax rate.

Social insurance receipts are taxes levied on individuals' wages. Employers and employees contribute an equal amount in Old-Age, Survivors, and Disability Insurance (OASDI) tax equal to 6.2 percent of gross income up to $160,200 and an additional 1.45 percent in Hospital Insurance (HI), proceeds of which are used to fund the federal Medicare program. That is why they are referred to as *payroll taxes* or *withholding taxes.* In FY 2022, payroll taxes were $1.48 trillion.

While the income tax is progressive, payroll taxes are regressive, with the highest average rate falling on Americans with the lowest income. For example, the estimated payroll tax burden for individuals making less than $50,000 is between 9.1 and 10.9 percent, while the average payroll tax burden for individuals making more than $500,000 was 5.4 percent – 1.9 percent for those making $1 million or more.

Average or Effective Income and Payroll Tax Rates by Income Group



Source: Joint Committee on Taxation "Overview of the Federal Tax System as in Effect for 2023" (Table A-6)

There has been a lot of debate surrounding the 47 percent of taxpayers who do not pay federal income

taxes. That is correct – 47 percent of taxpayers don't pay federal income taxes. But that is by design! The income tax rates are low for low-income households. Coupled with deductions, exemptions, and tax credits (e.g., the child tax credit and earned income tax credit) –47 percent of taxpayers do not pay federal income taxes. They do, however, pay payroll taxes, state income taxes, sales taxes, property taxes, and taxes on gasoline, alcohol, and tobacco. Adjusting for state and local taxes, the U.S. tax system as a whole is, in fact, regressive.

What is frequently overlooked in the debate about the 47 percent is their share of income. The Joint Committee on Taxation estimates the 47 percent that did not pay federal income taxes earned 13 percent of total income. Sixty-six percent of total income is earned by the top 25 percent of tax filers (i.e., those reporting an annual income greater than $100,000).[1] And while the effective (or average) income tax rates are higher for these filers, the economic value of their tax preferences – the value of their deductions, exclusions, exemptions, and preferential tax rates – far exceed direct government spending (e.g., Medicare, Medicaid, and Social Security) for those that do not pay federal income tax. Wealth inequality is even greater. The top 10 percent of households – those with at least $1.2 million in net worth – own in aggregate 77 percent of the wealth in America, whereas the bottom half of families (approximately 63 million families reporting a net worth of $97,000 or less) own in aggregate one percent of the wealth (Source: Ana Kent, Lowell Ricketts, and Ray Boshara "*What Wealth Inequality in America Looks Like: Key Facts & Figures*" Federal Reserve Bank of St. Louis).

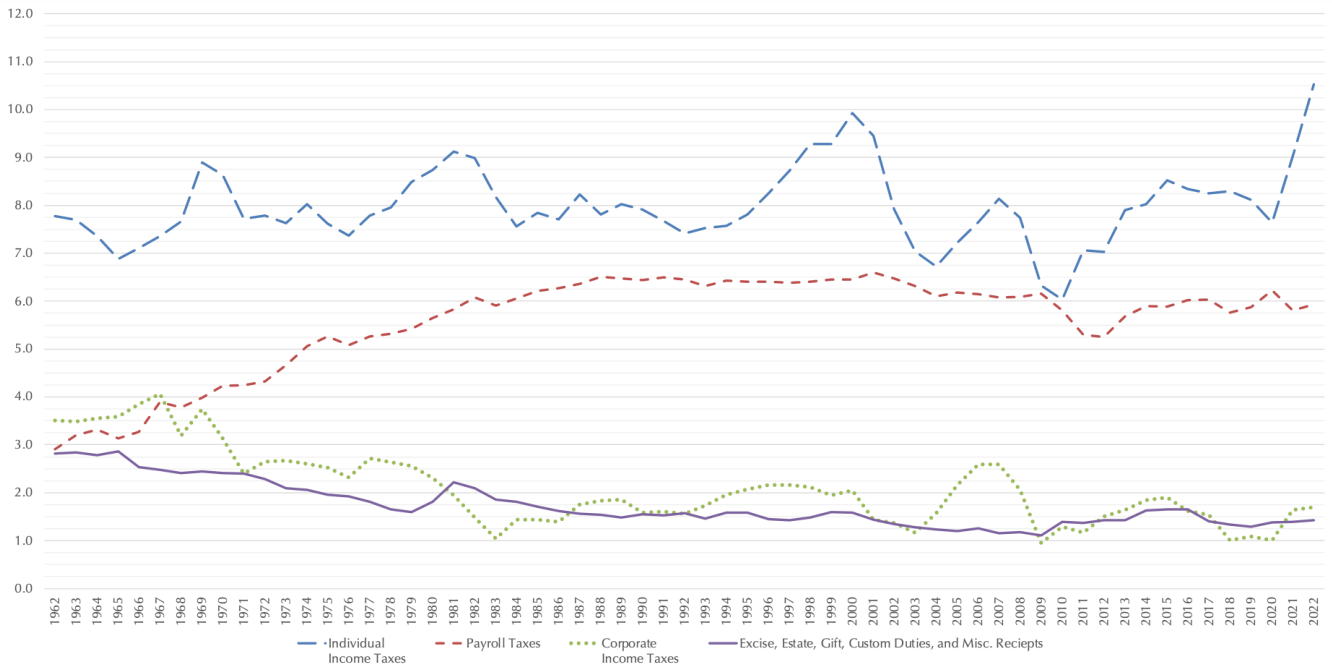
Suzanne Mettler, author of The *Government-Citizen Disconnect*, notes that the assumption that the welfare state serves low-income households is, in fact, false. **We are all beneficiaries**! What differentiates the 47 percent from everyone else is the visibility of government programs, services, and policies. Low-income households rely on government programs that make the government's role most apparent. The high-income households benefit from tax preferences that obscure the government's role and, as such, are not viewed as spending because appropriations are not made, and benefits checks are not sent.

The remaining 16 percent of federal revenue ($781 billion) was from a variety of sources, including the corporate income tax (taxes on business income rather than individual income), excise taxes (taxes on the purchase of specific goods like gasoline, cigarettes, and airline tickets), and estate taxes (a tax imposed when a family's wealth is transferred from one generation to the next).

As shown in the figure below, revenues from corporate income tax, excise taxes, and estate taxes have either remained constant or declined as a share of GDP. In fact, growth in federal government revenues is primarily from the personal income tax, and much of that growth is driven by economic expansion as the top marginal income tax rates have declined from 91 percent on income in excess of $200,000 in 1962 (or $400,000 filing jointly) to 37 percent in 2020.[2] The **federal income tax is less progressive today than it was in 1962** when the government had 20 income tax brackets.

1. Wealth inequality is even greater. The top 10 percent of households – those with at least $1.2 million in net worth – own in aggregate 77 percent of wealth in America, whereas the bottom half of families (approximately 63 million families reporting a net worth of $97,000 or less) own in aggregate one percent of wealth (Source: Ana Kent, Lowell Ricketts, and Ray Boshara "What Wealth Inequality in America Looks Like: Key Facts & Figures" Federal Reserve Bank of St. Louis).
2. Adjusted for inflation, $200,000 in 1962 is equivalent to $1.7 million today.

Federal Government Revenues (% of GDP)

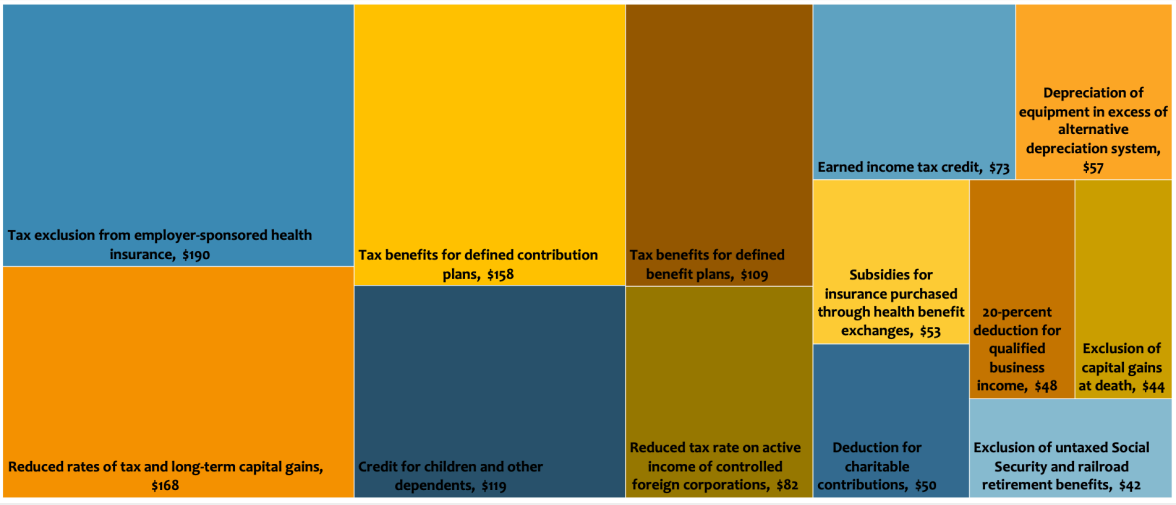


Source: Congressional Budget Office (2023) "An Update to the Budget Outlook 2023 to 2033"

TAX PREFERENCES: SPENDING BY ANOTHER NAME

Tax preferences – sometimes called tax expenditures – are provisions in tax law that allow preferential treatment of certain taxpayers. They include exclusions, exemptions, deductions, preferential tax rates, credits, deferrals, and anything else to reduce an individual's or a corporation's tax liability.

Exclusions, exemptions, and deductions reduce the amount of income subject to tax. Employer contributions to pension plans and employer-sponsored health care plans are excluded from the federal and state income tax. ***Itemized deductions*** are a special category of deductions, valuable only to taxpayers whose itemized deductions exceed the standard deduction. Itemized deductions are most valuable to high-income earners whose annual mortgage interest cost, state and local tax (SALT) deduction, and charitable contributions exceed the standard deduction. High-income earners are also more likely to invest in municipal bonds. Interest income from municipal debt is exempt from federal taxes. ***Credits*** reduce tax liability dollar for dollar by the amount of credit. Examples include the earned income tax credit (EITC) and child tax credit. ***Preferential tax rates*** benefit taxpayers who receive certain income. Income earned from capital gains and dividends, for example, are taxed at preferential rates that are significantly lower than the income tax rates. ***Deferrals*** allow taxpayers to delay payments without penalty. The federal government defers tax payments on income earned in qualified retirement plans. Payments are only required when beneficiaries withdraw assets from their retirement plans.



Source: Joint Committee on Taxation Estimates of Largest Federal Tax Expenditures ($Billions, FY 2021)

Tax expenditures are, in effect, a form of spending. **They are also costly**. For comparison, the cost of all federal income tax expenditures is higher than Social Security and the combined cost of Medicare and Medicaid. They also exceed the combined cost of defense and non-defense discretionary spending.

Additionally, exclusions, exemptions, deductions, preferential tax rates, credits, and deferrals increase as household income rises. Put differently, **these subsidies benefit individuals that do not need them, further exacerbating racial disparities in income and wealth.** The child tax credit ($119 billion) and earned income tax credit ($73 billion) are exceptions.

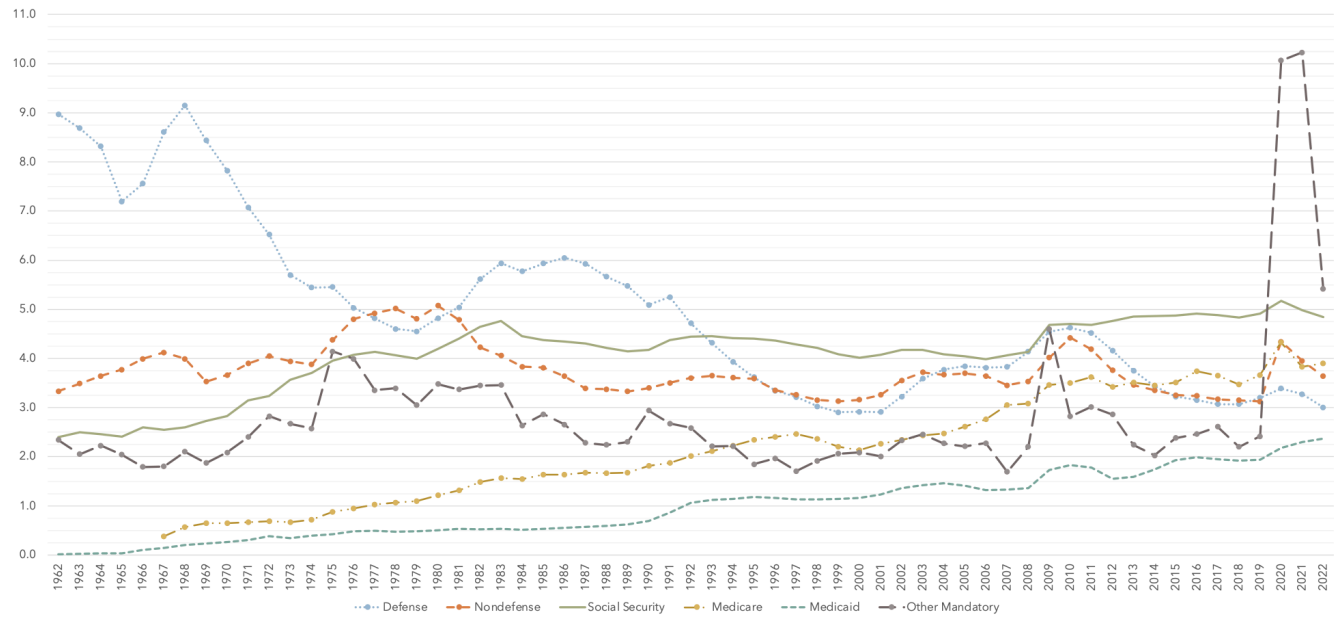
The 2017 Tax Cuts and Jobs Act did not advance racial equity in the federal tax code. In fact, core provisions tilt heavily towards households at the top of the income distribution. Analysis shows the highest-income (predominately white) households receive 23.7 percent of the TCJA tax cuts, far more than the 13.8 percent of tax cuts that go to the bottom 60 percent of households (of all races).

Sources: Center for Budget and Policy Priorities (2019) "Policy Basics: Federal Tax Expenditures" and Chye-Ching Huang and Roderick Taylor (2019) "How the Federal Tax Code Can Better Advance Racial Equity: 2017 Tax Law Took Step Backward" Center for Budget and Policy Priorities.

We often divide federal government spending into two categories: *discretionary* and *non-discretionary* spending, the latter of which is sometimes referred to as *mandatory* spending. Non-discretionary spending is controlled by law. Social Security is a good example. A person becomes eligible for "full" Social Security benefits once they are over the age of 65 and have paid payroll taxes for almost four years. Once they become eligible, their benefit is determined by a formula linked to the total wages earned during their last 35 years of employment. That formula is written into the law that created Social Security. Once a person becomes eligible, they are "entitled" to the benefits determined by that formula. Other programs like Medicare, food stamps, Supplemental Security Income, and many others follow a formula-based structure. If Congress and the President want to change how much is spent on these programs, they must change the relevant laws.

Discretionary spending includes appropriations for national defense and federal government agencies. This is spending that Congress and the President can adjust in the annual budget. In fact, the vast majority of federal spending is driven by laws, rules, and priorities that originate outside the budget. Data shows that non-discretionary spending is more than 65 percent of all federal spending. Add to those monies spent on interest on the national debt (roughly 7-8 percent), and we see that nearly three-quarters of federal spending is "locked in." So, when Congress debates its annual budget, they are, in effect, debating on about 10 to 25 percent of what it will eventually spend.

Federal Government Outlays (% of GDP)

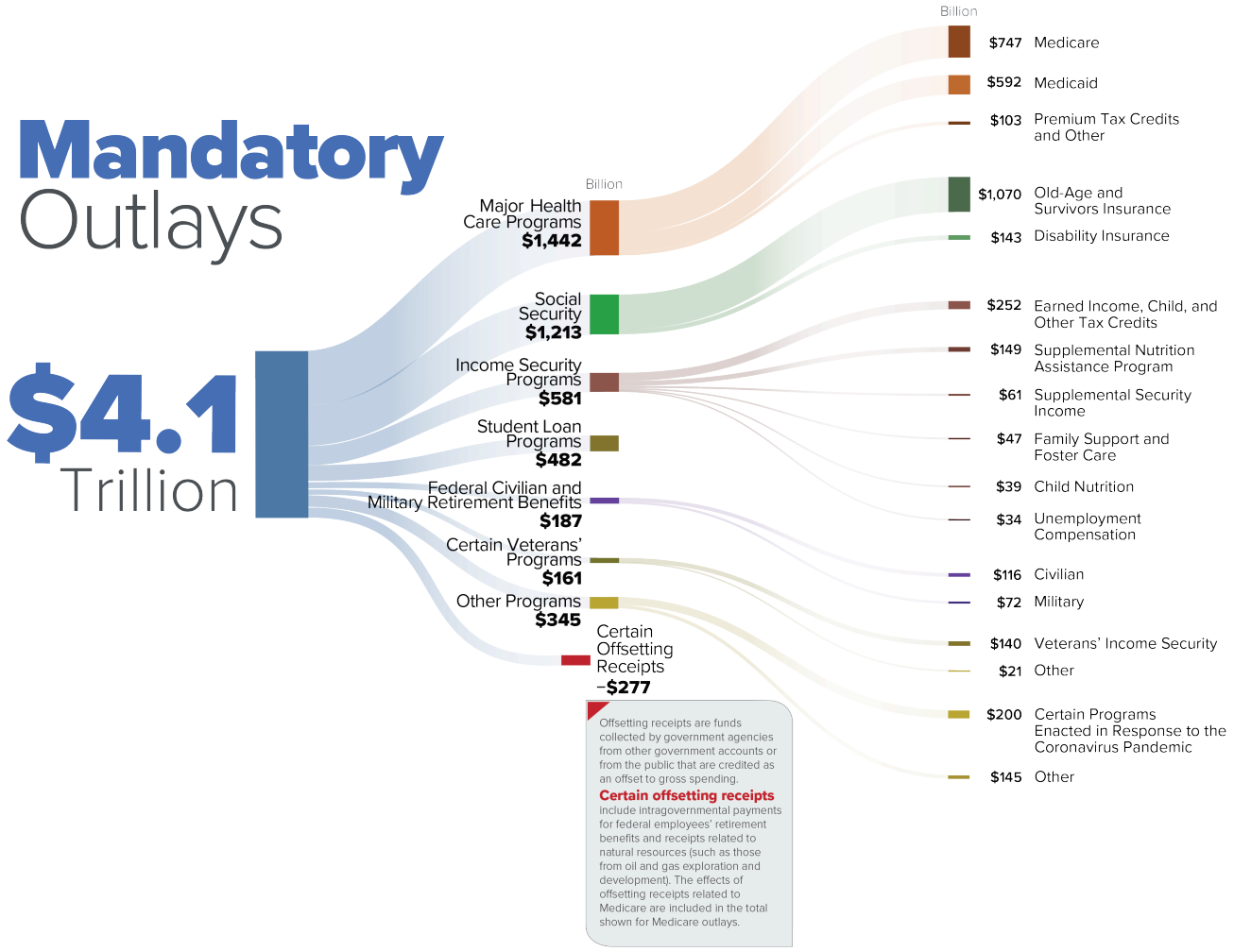


Source: Congressional Budget Office (2023) "An Update to the Budget Outlook 2023 to 2033"

In 2022, federal spending on mandatory programs was $4.1 trillion. That included $1.2 trillion in social security benefits, $1.4 trillion in healthcare spending (primarily Medicare and Medicaid), $581 billion in income security programs (unemployment compensation, earned income tax credits, supplemental nutrition assistance programs, etc.), and $348 billion in federal civilian and military retirement benefits and other veterans' programs.

The federal government spent $1.4 trillion on healthcare, including Medicare and Medicaid. Federal spending in these two programs represents 37 cents of every dollar spent on health care in the

U.S. – more than private insurance (33 percent), out-of-pocket expenses (10 percent), or any other government program (20 percent).



Source: Congressional Budget Office (2023) "Mandatory Spending in Fiscal Year 2022

Medicare is the federal government's health insurance program for the elderly. The program does not employ physicians or other healthcare providers. It is, in effect, a health insurance company funded by the federal government. Established in 1965, Medicare has three main components. "Part A" pays for hospital stays, surgery, and other medical procedures that require admission to a hospital. "Part B" covers supplementary medical services like physician visits and procedures that do not require hospital admission. "Part D" pays for prescription drugs. Part A is funded through payroll taxes and through premiums paid by individual beneficiaries, and Parts B and D are funded mostly through payroll taxes. Since 1966, Medicare enrollment has increased from 19 million to almost 60 million individuals.

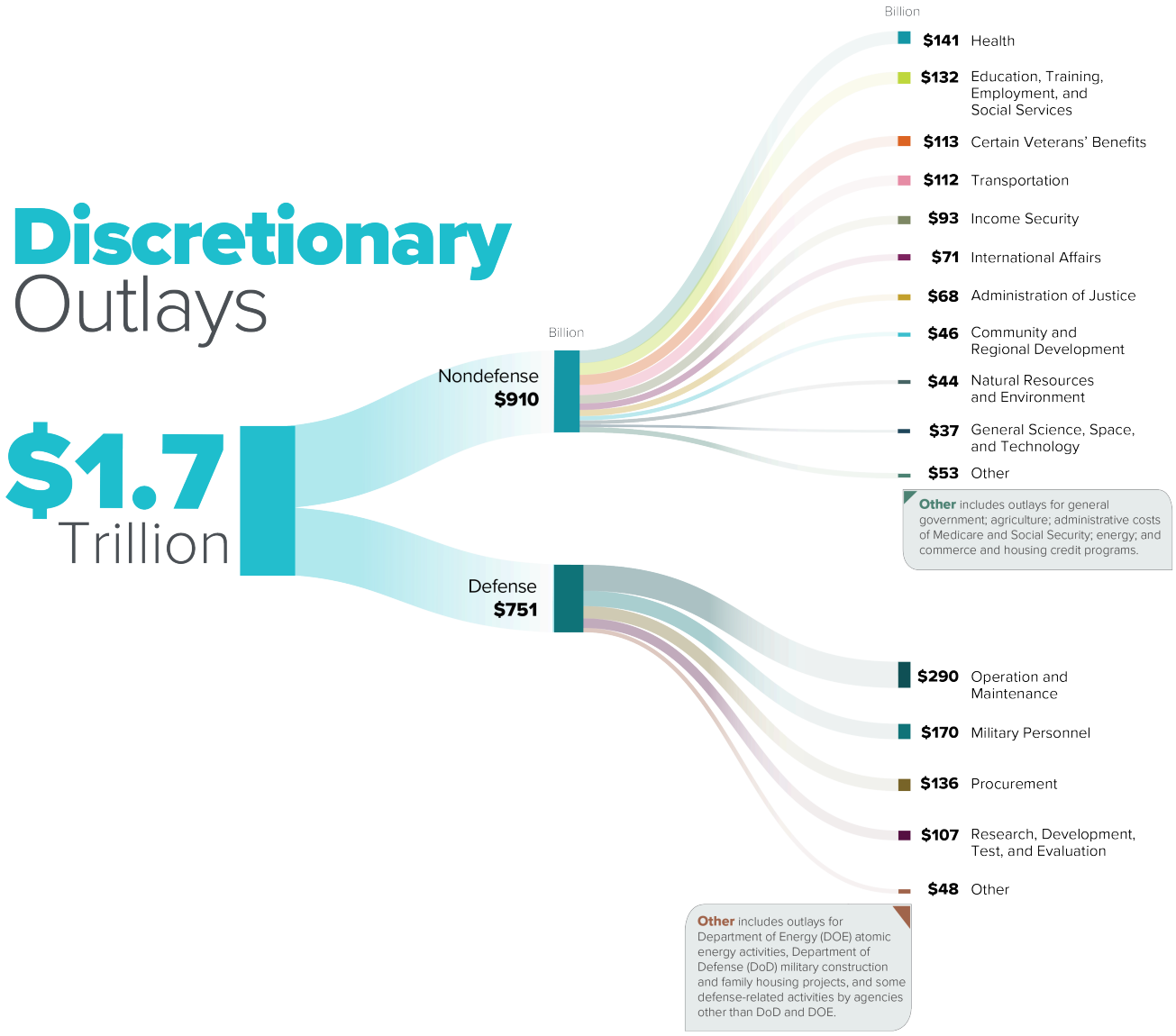
Created in 1935, Social Security is a federal income assistance program for retirees. In 2022, 66 million Americans – including 51 million retired workers, 9 million disabled workers, and 6 million

survivors of deceased workers – received $1.07 trillion in benefits. Average benefits per month were $1,755 for retired workers, $1,486 for disabled workers, and $1,451 for survivors – all of which are nominally above the poverty rate.

Medicare and Social Security are intergenerational transfer systems. Today's workers help pay for current retirees' and beneficiaries' benefits, not their own future benefits. Put differently, there is no account set aside with your name or contributions on it.

Without legislative action, the Social Security trust funds are projected to be exhausted in 2034. At that point, the Social Security Administration (SSA) will no longer be able to pay beneficiaries' benefits in full, as the SSA would be limited to the amounts payable from dedicated funding sources, per current law.

Income security programs are cash and cash-like assistance programs outside of Social Security. Most of these programs help individuals pay for specific, basic necessities. Included in income security programs are the Earned Income Tax Credit, supplemental nutrition assistance program (or SNAP), supplemental security income, COVID-19 federal stimulus checks, and unemployment compensation, to name a few. Expanded benefits during and following the COVID-19 pandemic exceeded 10 percent of GDP in 2020 and 2021.



Source: Congressional Budget Office (2023) "Discretionary Spending in Fiscal Year 2022

Discretionary spending was $1.7 trillion in FY 2022, including $751 billion in defense spending and $910 in non-defense spending.

National defense includes pay and benefits for all members of the U.S. Army, Navy (including Marines), Air Force, and civilian support services. Defense budgets include capital outlays – spending on items with long useful lives – for military bases, planes, tanks, and other military hardware. National defense spending remains a top priority of the federal government. In FY 2022, defense spending was 13 percent of all federal spending (keep in mind that the $751 billion in discretionary defense spending excludes $113 billion in veterans benefit services that are budgeted as non-defense discretionary spending and $348 billion in veterans' health and retirement benefits budgeted as mandatory spending).

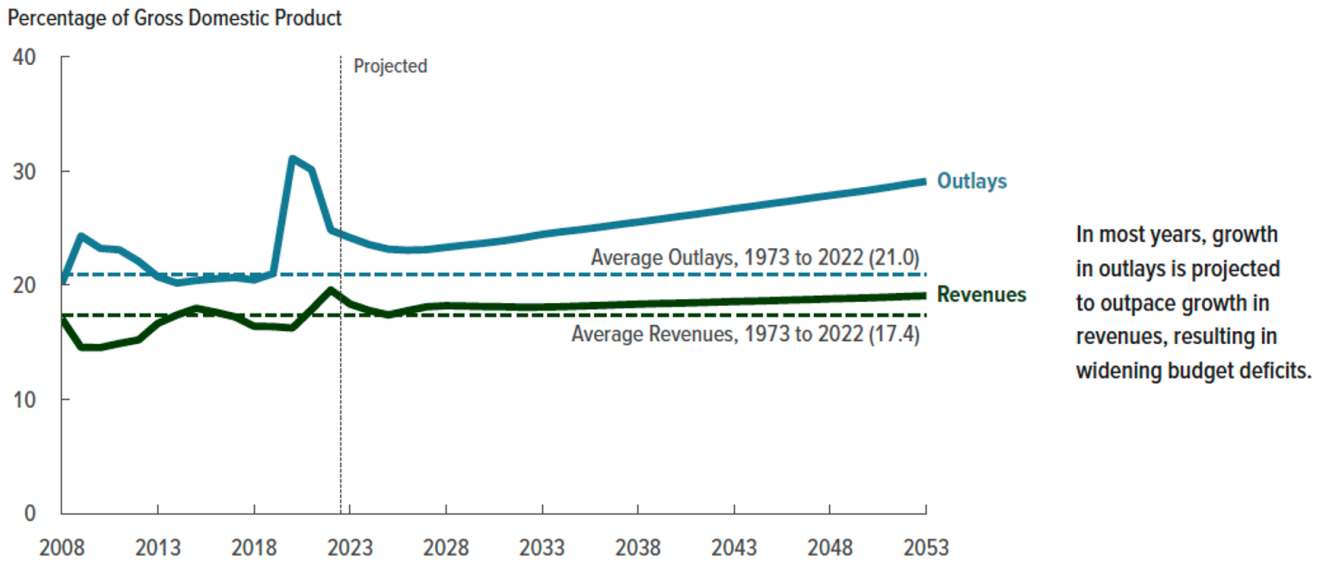
The U.S. defense budget exceeds those of China, Russia, Saudi Arabia, India, France, the U.K., and Japan – combined! There is considerable debate on whether national defense is, in fact, discretionary

spending. That said, the real question is whether, in the absence of any other military superpower, we might be spending more than would be appropriate.

All other spending or *non-defense discretionary* (NDD) includes appropriations for healthcare and research (including funding for public health and population health agencies like the National Institutes of Health (NIH) and the Centers for Disease Control (CDC), and for health-focused regulatory agencies like the Food and Drug Administration (FDA)), transportation and economic development, education, income security (e.g., special supplemental nutrition program for Women, Infants, and Children (WIC), the low-income home energy assistance program, and child care and development block grants), law enforcement, the environment, and international affairs.

NDD spending was 3.6 percent of GDP. Except in periods of crisis (e.g., the Great Recession and the COVID-19 pandemic), NDD spending has been declining as a share of the economy. Congress, for example, has approved more than $5.3 trillion in federal stimulus spending since the start of the COVID-19 pandemic.

This discussion raises another absolutely essential point: **The federal government has a substantial structural deficit.** A *structural deficit* is when a government's long-term spending exceeds its revenues. In 2022, the federal government had a $1.4 trillion budget deficit (or 5.5 percent of GDP). To support economic recovery, the federal government approved several pieces of legislation that resulted in a $3.1 trillion (or 14.9 percent of GDP) deficit in 2021 and a $2.8 trillion (or 12.4 percent of GDP) in 2020. Assuming no significant changes in spending or revenue policies, the annual budget deficit is projected to grow to 10 percent of GDP.



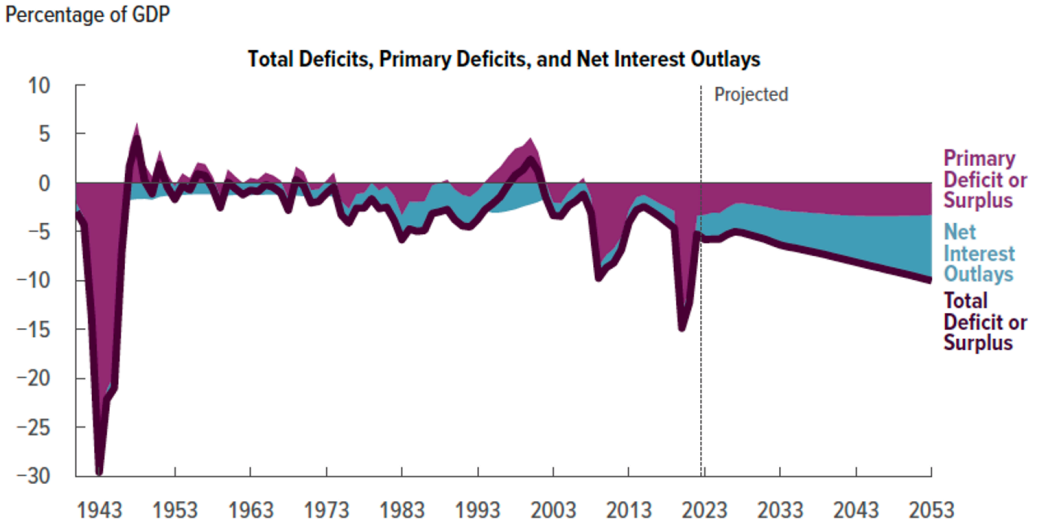
Source: Congressional Budget Office (2023) "The 2023 Long-Term Budget Outlook"

Why is the deficit expected to grow so quickly? In part because mandatory spending is going to continue to grow. More and more of the "Baby Boomer" population will become eligible for Medicare,

Social Security, and other programs. As the eligible population grows, so too will spending. The cost of health care services has increased three to four times faster than all other costs across the economy. That's why health-related non-discretionary spending is the proverbial "double whammy" – the number of people who need those services will increase, and so will the rate of spending per person to deliver those services. At the same time, most economists are projecting slower economic growth for the next several decades. Given the federal government's current revenue policies, that will mean slower revenue growth over time. Those two main factors – growth in non-discretionary spending and slower revenue growth – will lead to much larger deficits over time.

The federal government's structural deficit is the single most important trend in public budgeting and finance today. Without major changes in federal government policy, especially in areas like Medicare and Social Security, the federal government will have no choice but to run enormous deficits and cut non-discretionary spending. Those cuts will mean less money for many of the key programs you probably care about basic scientific research, student loans, highways, transit systems, national parks, and every other discretionary program. In fact, some cynics have said that in the future, "the federal government will be an army with a health care system."

State and local governments will be forced to take on many of the services the federal government used to provide in areas like affordable housing, environmental protection, and international trade promotion. At the same time, some optimists say this is a welcome change. Without the rigidity and uniformity of the federal government, local communities will have the latitude and flexibility to experiment with new approaches to social problems. What's not debatable is that absent major changes in policy, especially for non-discretionary spending, federal government spending will look quite different in the not-too-distant future.

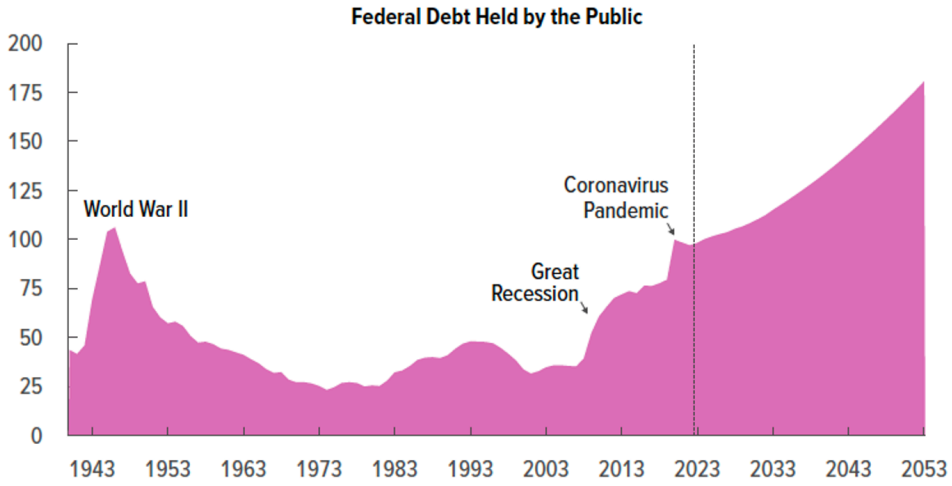


In CBO's projections, primary deficits exceed their historical 50-year average of 1.5 percent of GDP throughout the projection period. In 2053, the primary deficit equals 3.3 percent of GDP. Driven up by large and sustained primary deficits and by rising interest rates, net interest outlays reach 6.7 percent of GDP in 2053.

Source: Congressional Budget Office (2023) "The 2023 Long-Term Budget Outlook"

You're probably wondering how the federal government will finance those deficits. If the government does not collect enough revenue to cover its spending needs, it borrows. The figure below shows

national debt as a percent of GDP from 1943, including projections for the three decades. At the end of FY 2019, federal government debt was around 79 percent of GDP and increased to 97 percent of GDP at the end of 2022. The national debt burden is expected to rise to 115 percent of GDP in 2033 and 181 percent in 2053.



Growing deficits push federal debt held by the public, which is already high, further up throughout the 30-year period. Such debt reaches 181 percent of GDP in 2053—and would continue to rise thereafter.

Source: Congressional Budget Office (2023) "The 2023 Long-Term Budget Outlook"

WHAT MOVES INTEREST RATES?

Interest rates are one of the most important numbers in public budgeting and finance. Interest is what it costs to use someone else's money. Banks and other financial institutions lend consumers and governments money at "market interest rates" like the annual percentage rate (APR). Small changes in interest rates can mean big differences in the cost of delivering public projects. That's why it behooves public managers to know what drives interest rates.

Interest rates fluctuate for a variety of macroeconomic reasons. If inflation is on the rise, then businesses will be less willing to spend money on new buildings, equipment, and other capital investments. If the demand for capital investments is down, then so is the demand for borrowed money to finance those investments. In those market conditions, banks and other financial institutions will lower their interest rates on loans to entice businesses to make those investments. The opposite is also true. Businesses will seek to invest during periods of low inflation, which drives up demand for borrowed money and drives interest rates up. Government borrowing and capital investment can also drive demand for borrowed money. Macroeconomists have complex models that explain and predict these interrelationships between consumer spending, investments, and government spending.

The U.S. Federal Reserve Bank – "The Fed" – is also a crucial and closely-watched player. The Fed is the Central Bank. It lends money to banks and holds deposits from banks throughout the U.S. Its mission is to fight inflation and keep unemployment to a minimum. In finance circles, this is called the Dual Mandate.

The Fed has many tools to achieve that mission, and most of those tools involve interest rates. It can raise or lower the Federal Funds Rate or the interest rates at which banks lend money to each other. It can demand that banks keep more money on deposit at the Fed. Increases in either will reduce the amount of money banks have available to lend, which drives up interest rates. Its most powerful tool is called open market operations (OMO). If the Fed wishes to lower interest rates, it buys short-term Treasury bonds and other financial securities from investors. This increases the money available for lending and reduces interest rates. When it wishes to raise rates, it sells securities to banks. When banks buy those securities, they have less money available to

lend, and that increases interest rates.

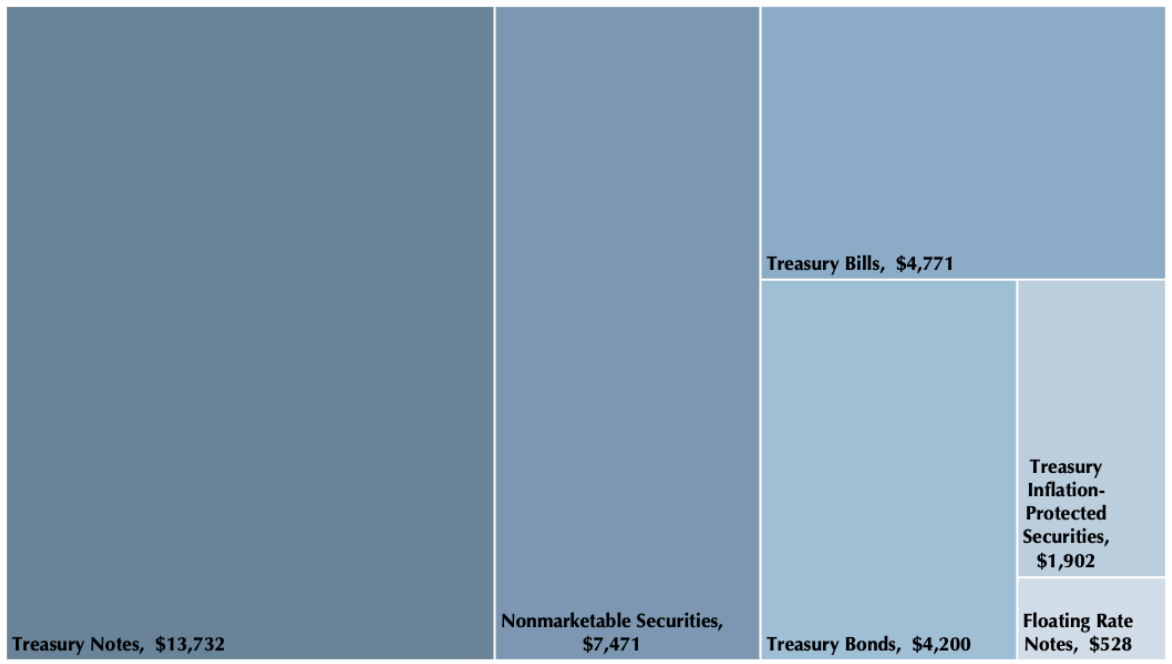
This rapid growth in debt is concerning for many reasons. First, federal government borrowing "crowds out" borrowing by small businesses, homeowners, state and local governments, and others who need to borrow to invest in their own projects. Since there are only so many investors with money to invest, if the federal government takes a larger share of that money, there's less for everyone else. Many economists and finance experts have also warned that if the federal government's debt grows too high, then investors might be less willing to loan it money in the future. If investors are less willing to loan the government money, the government must offer higher interest rates to increase investors' return on investment. As the federal government's interest rates rise, interest rates rise for everyone else. Occasional increases in interest rates are not necessarily bad, but prolonged high-interest rates mean less investment by people and businesses, resulting in lower productivity and slower economic growth.

WHAT IS THE DEBT LIMIT?

Created by Congress in 1917, the debt limit, or debt ceiling, sets the maximum amount of debt the U.S. government can incur.[3] The amount is set by law, and once the limit is reached, the government must either (a) raise the debt limit, (b) suspend the debt limit from taking effect, (c) violate the debt limit or (d) default on its obligations to pay its bills. Congress has raised or suspended the debt limit more than 100 times since 1940. Raising or suspending the debt limit does not authorize new spending. It simply allows for the government to pay for obligations that Congresses and presidents have made in the past.

With political polarization deepening over the last decade, votes to raise the debt ceiling have remained contentious, with congressional budget hawks increasingly demanding spending cuts in return for their support. On January 19, 2023, the U.S. Treasury reported it had reached the $31.4 trillion debt limit and begun using "extraordinary measures" to meet the government obligations without violating the limit. Following negotiations, Congress voted to suspend the nation's debt ceiling through January 2025 in exchange for limits on the growth in non-defense spending. Suspending the debt ceiling gives Treasury the latitude to borrow as much money as it needs to pay the nation's bills. It also kicks the potential fight for raising the debt ceiling past the next presidential elections.

Treasury Securities Outstanding (July 2023, $Billions)[4]



Debate on the debt ceiling is not a costless effort. With every debt ceiling debacle, confidence in the U.S. government, the world's reserve currency, is eroded. The last time the U.S. was pushed to the brink of a default resulted in a rating downgrade by S&P, one of the major rating agencies (from AAA to AA+). On August 1, 2023, Fitch Ratings downgraded the U.S. long-term rating to AA+ from AAA, citing "growing general government debt burden and the steady deterioration in the standards of governance."

3. The first debt limit was established in 1917 to make it easier to finance mobilization efforts in World War I. Before that, Congress had to authorize each bond issue.
4. The federal government borrows money by issuing treasury bills, notes, bonds, nonmarketable securities, and other securities. Treasury bills have a maturity of three months up to 12 months. Treasury notes have maturities of two years to ten years. Treasury bonds mature in 10 years up to 30 years. Nonmarketable securities include securities issued to state and local governments and federal trusts (e.g., Social Security). Floating rate notes are short-term investments (mature in two years or less) that have an interest rate that may change (or float) over time, while Treasury Inflation-Protected Securities (or TIPS) are indexed to inflation to protect investors from a decline in the purchasing power of their investment.

Uncertainty will likely raise interest rates. Higher interest rates make solving the long-term fiscal problem harder, with ramifications for practically every sector of the economy. While the economic consequences of an intentional default, an unprecedented event in American history, are unknown, there is no doubt they would be catastrophic.

STATE GOVERNMENTS

There's an old adage that state governments are in charge of "medication, education, and incarceration." That saying is both pithy and true. State government expenditures in 2021 were $2.3 trillion, and most of it was spent on primary and secondary education, public universities and community colleges, healthcare, public assistance, state highways, corrections, and public safety.

States vary a lot in how much of those services they deliver and how they pay for those services. In some regions, the state is one of the largest employers. This is especially true in rural areas with state universities or prisons. In other regions, state governments have a limited presence.

States rely on a few key revenue sources. State-wide sales taxes are one-fifth of state government revenue and nearly 50 percent of state tax revenues. There are two basic types of sales taxes: a *general sales tax* that applies to all retail sales transactions and *special sales taxes* that apply only to sales of certain goods and services, such as gasoline, tobacco, alcohol, and gambling. Some states tax construction, personal trainers, catering, and other professional services, while many do not. Many special sales taxes are administered as excise taxes.

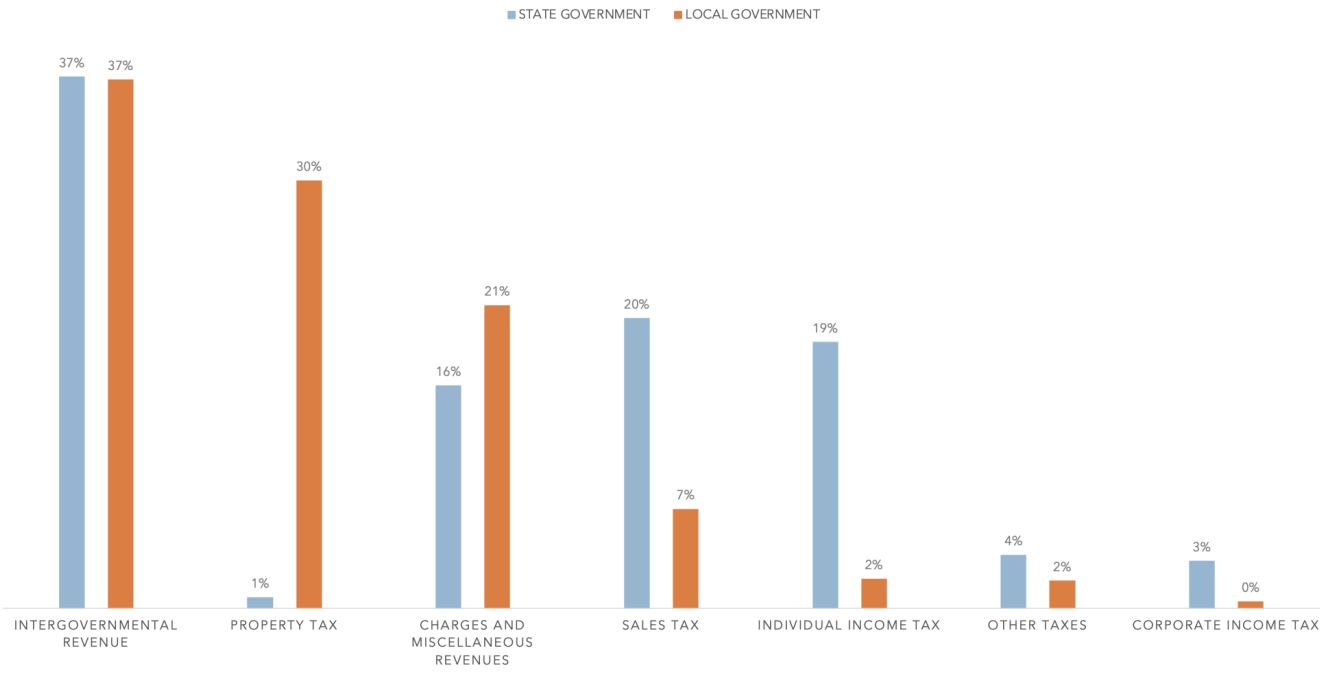
Five states (Alaska, Delaware, Montana, New Hampshire, and Oregon) do not have state-wide sales tax. Although, Alaska does allow its local governments to collect local sales taxes. California has the highest state-level retail sales tax rate, at 7.25 percent, followed by Indiana, Mississippi, Rhode Island, and Tennessee at 7 percent (Tax Foundation, *State and Local Tax Rates 2023*). States that are heavily reliant on sales and excise taxes are more likely to have regressive tax systems.

Like with the income tax, sales tax revenues are derived from a tax rate applied to a taxable base. A state's sales tax base is all the retail sales of personal property that happen within its borders. The challenge is that it's not always clear what is included in that taxable base. For instance, in Illinois, candy that contains flour and does not require refrigeration (e.g., Twix) is exempt from the state's retail sales tax. In New York, an "unaltered bagel" is not subject to the 8.85 percent retail sales tax, whereas a sliced bagel is. When a company does business in multiple states, it must follow complex tax codes to determine the sales tax it owes in each state.

Online retailers like eBay and Amazon have long argued that they should not have to collect and remit sales taxes if they do not have nexus (or physical presence) in the state in which the purchaser resides. In 2018, the U.S. Supreme Court ruled in *South Dakota v. Wayfair* that businesses with more than 200 transactions or $100,000 in-state sales – but without a physical presence in the state – must collect and remit sales taxes. Consumers are now required to remit sales taxes to the vendor or pay an equivalent amount known as a use tax directly to the state. Some states will go so far as to send residents an estimated use tax bill to residents if the vendor fails to collect and remit sales taxes.

In many states, the goods and services purchased by businesses for the purposes of producing a good or delivering a service are exempt from sales taxes. Doing so prevents tax-pyramiding. For these and other reasons, sales tax administration is quite complex.

State and Local Government Revenues by Source (2021)



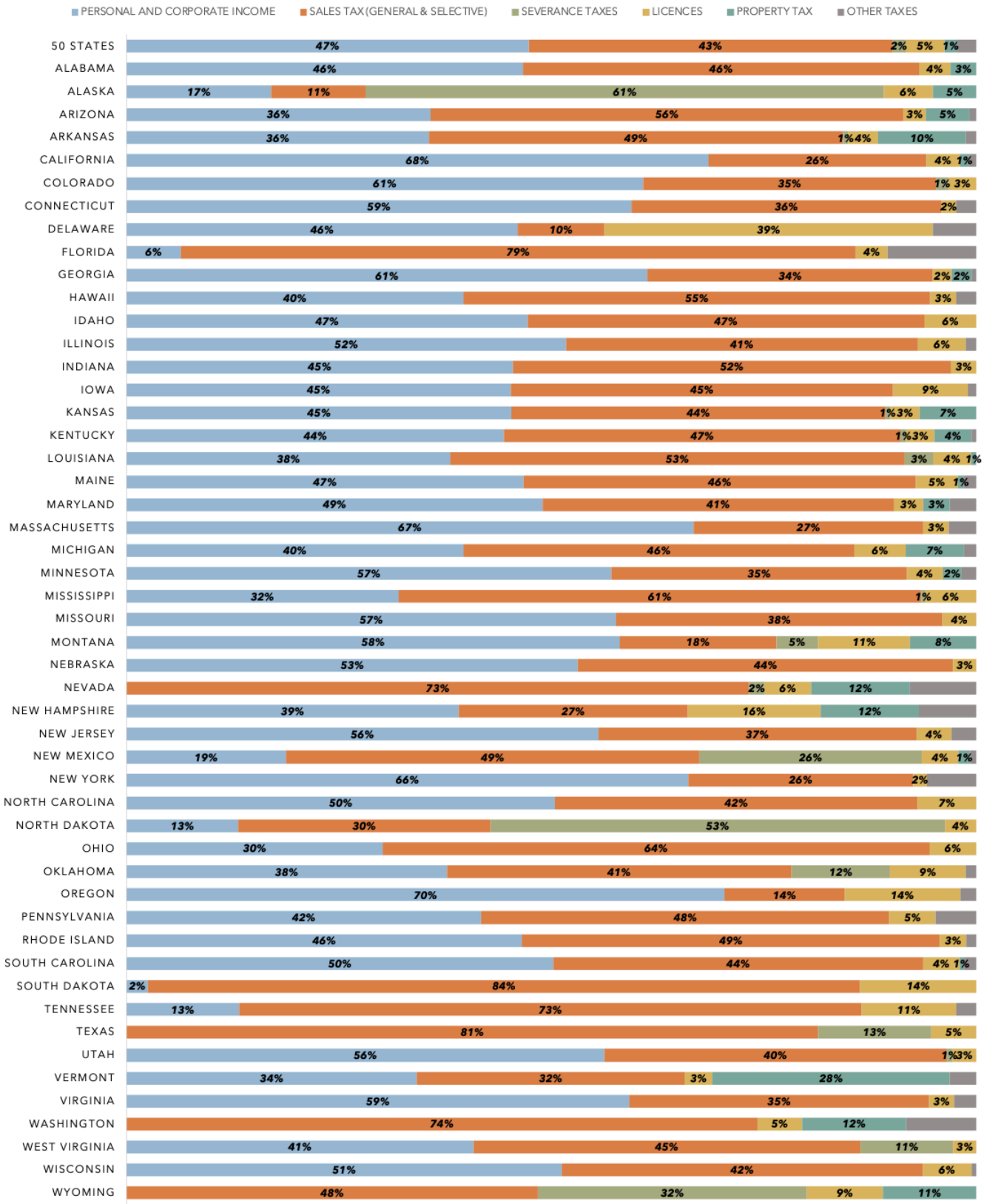
Source: 2021 State & Local Government Finance Census Data and author's estimates.

State-wide individual income taxes are one-fifths of state government revenue and one-third of state tax revenues. Seven states – Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming – do not have a state-wide individual income tax.

State income taxes are administered much like the federal income tax. In fact, most states apply the federal government's definition of taxable income to determine state taxable income. In New Hampshire and Tennessee, the individual income tax is limited to dividend and interest income only (Tax Foundation, State Individual Income Tax Rates, and Brackets 2020).

Thirty-two states have graduated-rate income taxes. A graduated-rate structure does not guarantee progressivity. Higher rates have to apply to high-income taxpayers while holding harmless low- and middle-income taxpayers. Tax credits (e.g., childcare credit, earned income tax credit), exemptions, and deductions specifically targeted toward low- and middle-income taxpayers can enhance the progressivity of an income tax.

State Government Tax Revenues (by Source, 2022)



Source: The Pew Charitable Trusts – How States Raise Their Tax Dollars (FY 2022) using data published by the Census Bureau

WHAT IS A "FAIR" TAX?

Governments tax many different types of activity with many different types of revenue instruments (taxes, fees, charges, etc.). Each instrument is fair in some ways but less fair in others. In public finance, we evaluate taxes across several dimensions:

- ***Efficiency***. Basic economics tells us that if a good or service is taxed, then consumers will purchase or produce less of it. *An efficient tax minimizes these market distortions.* For instance, most tax experts agree that the corporate income tax is one of the least efficient. Most large corporations are willing and able to move to the state or country where they face the lowest possible corporate income tax burden. When they move, they take jobs, capital investments, and tax revenue with them. The property tax, by contrast, is one of the most efficient taxes. The quantity of land available for purchase is fixed, so taxing it cannot distort supply the same way that taxing income might discourage work, or that taxing investment might encourage near-term consumption.

- ***Vertical Equity***. Vertical equity means the amount of tax someone pays increases with their ability to pay. Most income tax systems impose higher tax rates on individuals and businesses with higher incomes. This is meant to ensure that taxpayers who have a greater ability to pay will contribute a higher share of their income through taxes.

  A tax with a high degree of vertical equity, like the income tax, is known as a progressive tax. A regressive tax is a tax where those who have less ability to pay ultimately pay a higher share of their income in taxes. The retail sales tax is a regressive tax. Those who are least able to pay often pay comparatively more of it as a share of income. For instance, a family with high annual income will pay the same amount in sales tax for school supplies as a low-income family. The **effective tax rate** (i.e., sales tax liability as a percent of income) will be higher for the low-income household when compared to the high-income household.

- ***Horizontal Equity.*** Sometimes called "tax neutrality," horizontal equity means that people with similar abilities to pay contribute a similar amount of taxes. The property tax is a good example of a tax that promotes horizontal equity. With a properly administered property tax system, homeowners or business owners with similar properties will pay similar amounts of property taxes. Income taxes are quite different. Because of tax preferences, it's entirely possible for two people with the same income to pay very different amounts of income tax.

- ***Elasticity.*** An elastic tax responds quickly to changes in the broader economy. If the economy is growing and consumers are spending money, collections of elastic taxes increase and overall revenue grows. This is quite attractive to policymakers: with elastic taxes, they can see growth in tax collections without increasing the tax rate. Of course, the opposite is also true. If the economy is in recession, consumer spending decreases, and so do revenue collections. Sales taxes and income taxes are the most elastic revenues.

- **Stability.** A stable tax does not respond quickly to changes in the economy. Property taxes are among the most inelastic taxes. Property values do not fluctuate as much as prices of other goods, so property tax collections don't increase or decrease nearly as fast as sales or income taxes. While the tax is stable, it does not grow as fast. Put differently, the property tax is stable but inelastic, whereas the income tax is elastic but unstable.

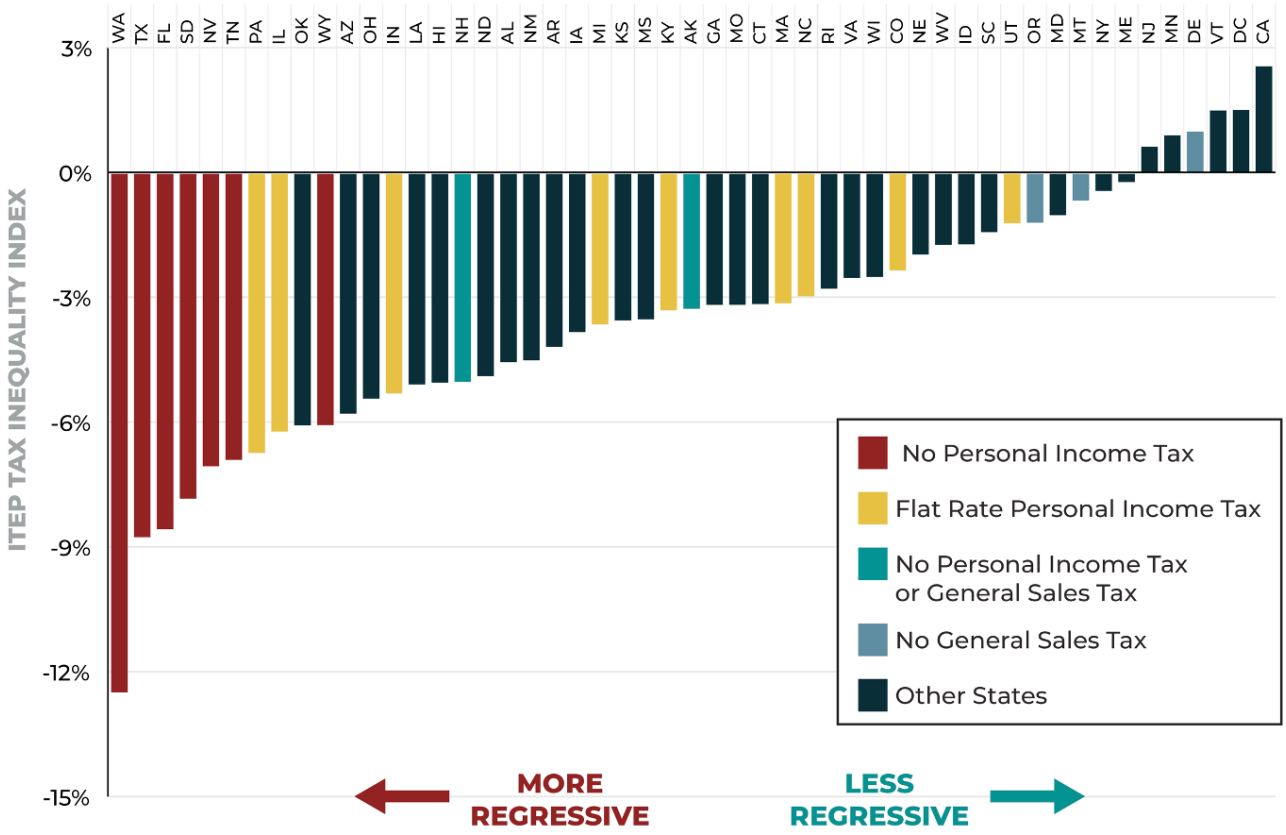
- **Administrative Costs**. Some taxes require a lot of time and resources to administer. Property taxes are a good example. Tax assessors go to great lengths to make certain the appraised value they assign to a home or business is as close as possible to its actual market value. To do this, they perform spatial analysis. That analysis demands time and expertise.

The chart below illustrates a basic fact about taxation: all taxes come with trade-offs. For instance, the property tax is stable and promotes horizontal equity, but it's costly to administer and generally non-responsive to broader trends in the economy. The sales tax is cheap to administer and produces more revenue during good economic times but is regressive. To ensure vertical equity, the income tax has to impose higher taxes on individuals and businesses with higher incomes. Note that for many of these instruments, the evidence is mixed. That is, tax policy experts disagree on whether that characteristic is a strength or weakness for that particular revenue instrument.

	Property Tax	Sales Tax	Income Tax	Charges & Fees
Vertical Equity	+/-	-	+	-
Elasticity	-	+	+	+/-
Stability	+	-	-	+/-
Administrative Costs	-	+	+/-	+/-
Horizontal Equity	+	+	-	+
Efficiency	+	+/-	-	+/-
Strength +	***Weakness***	-	***Mixed***	+/-

In their 2018 "*Who Pays*" report, the Institute of Taxation and Economic Policy (ITEP) once again found that states that rely on sales and excise tax and less on graduated personal income taxes are more likely to tax their lowest-income residents at higher rates than the top one percent of taxpayers.

ITEP's *Tax Inequality Index* measures the effects of each state's tax system on income inequality by assessing its impact on the incomes of taxpayers at different income levels. The chart below shows that states without a personal income tax (Washington, Texas, Florida, South Dakota, Nevada, and Tennessee) and those with a flat personal income tax (e.g., Pennsylvania and Illinois) have regressive tax structures. States with graduated personal income taxes that hold harmless low- and middle-income taxpayers are less regressive or, in more positive terms – progressive. The distributional impact of the tax systems on income has clear implications for wealth inequality among racial groups. **Tax codes that are regressive not only worsen income inequality; they worsen the racial income and wealth divides.**



Source: https://itep.org/whopays/ States with regressive tax structures have negative inequality index scores, meaning incomes are less equal in those states after state and local taxes than before. States with progressive tax structures have positive inequality index scores. In these states (California, Washington D.C., Vermont, Delaware, Minnesota, and New Jersey), incomes are more equal after collecting state and local taxes than before.

All state governments depend to some extent on **intergovernmental revenues** (IGRs). For state governments, IGRs are used to meet the federal government's share of mandatory spending. Medicaid is the largest and most important for most states. The federal government also sends states money for transportation infrastructure, the Child Health Insurance Program (or S-CHIP), federal student loan assistance, and many other programs.

Federal IGR falls into roughly two categories: *categorical grants* that are restricted to specific purposes and *block grants* that are less restricted but must produce measurable outcomes or deliverables. Federal funds for highways and university research are good examples of categorical grants. The Community Development Block Grant program is a good example of a block grant.

Most state revenues are from the sales tax, income tax, and IGR. That said, states do depend on a variety of other tax revenues (e.g., taxes on oil, gas, coal, other minerals, timber, and fish, as well as death and gift taxes). Some states levy a property tax on transactions of certain personal property, like vehicles. States also generate revenue through fees, including tuition from public universities and colleges, highway tolls, charges to patients and private insurance companies at public hospitals, and licenses on everything from hunting to running a tavern to practicing medicine. Some states also tax private electricity and water utility operators.

State spending has grown substantially over the past few decades. In 1977, the average state's per

capita spending was around $2,800. In 2021, it was $7,500. Revenues have grown on a similar trajectory. But note that growth was not uniform. Spending in states like Arizona, California, Colorado, and Washington grew far slower than the average. This is not a coincidence. These states have passed strict laws, broadly known as *tax and expenditure limitations*, that restrict how quickly their revenues and spending can grow. States without those limits, like Connecticut, Delaware, New York, and Massachusetts, have seen much faster growth in both revenues and spending. North Dakota, Wyoming, and New Mexico saw large jumps in revenues and spending in the past decade or so, due mostly to the growth of their respective shale oil industries (more commonly known as fracking).

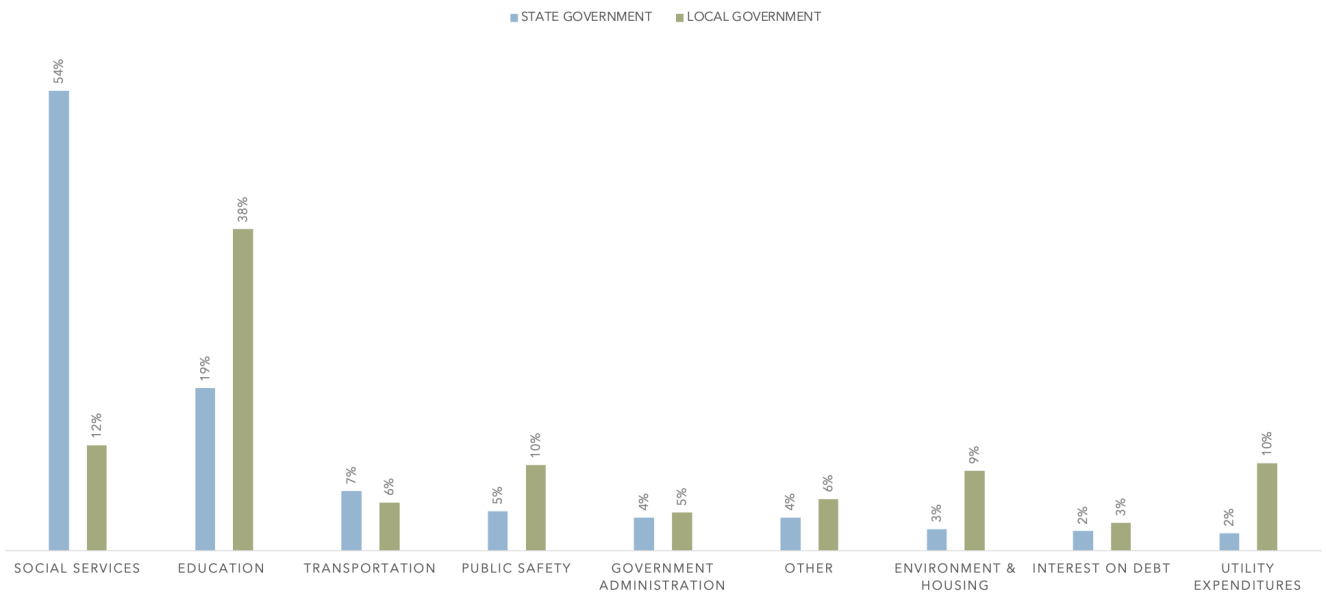
A third important trend is that state revenues roughly equal state spending. Virtually every state's constitution requires that its legislature and governor pass a balanced budget. As you'll see later, a "balanced budget" can mean rather different things in different places. But overall, states do not spend more money than they collect. This is in sharp contrast to the federal government. As you saw above, throughout the past several decades the federal government's spending has routinely exceeded its revenues. Unlike the federal government, states cannot borrow money to finance an operating budget deficit. In a number of states, restrictions on balanced budgets are enshrined in law.

Most of state spending is around health, education, transportation, and corrections. About one-half of state spending was in *social services* – which includes state spending on the Medicaid and mean-tested cash assistance programs ($795 billion); state investment in public hospitals and community clinics; and healthcare programs like vaccinations, diabetes prevention, and outreach programs to prevent sexually transmitted diseases ($177 billion).

Medicaid is the federal government's healthcare program for the poor. It is delivered in partnership with the states. Each state designs its own Medicaid program, and the federal government covers 50-70 percent of the spending related to that program.

Medicaid is *non-discretionary* spending for state governments. Medicaid is to the states what Medicare is to the federal government: a massive health insurance program that is expected to cover more people and become vastly more expensive over time. In most states, an individual qualifies for Medicaid once their income falls below a certain level. Medicaid is also the default health insurer for many vulnerable populations, including foster children, the permanently disabled, and the mentally ill. Older individuals who are poor or disabled often qualify for both Medicare and Medicaid. They are known as *dual-eligibles* – 18 percent of Medicare patients are eligible for Medicaid coverage as well. In fact, growth in Medicaid spending is the result of spending on long-term care and nursing homes for the elderly.

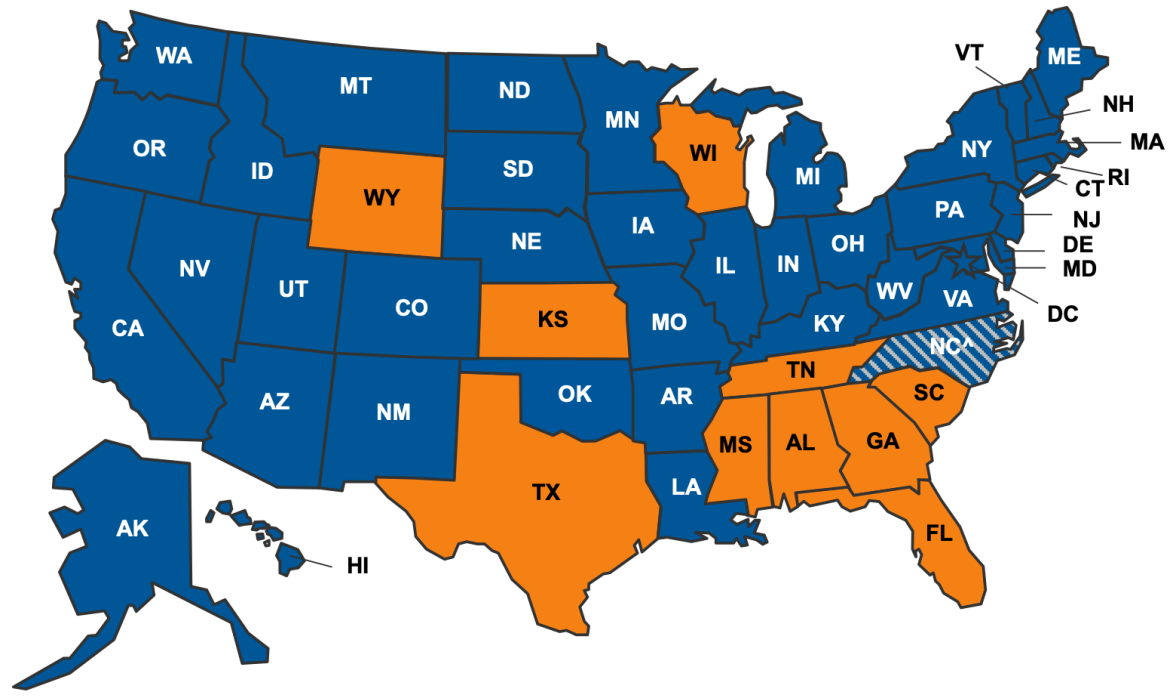
State and Local Government Spending (by Function, 2021)



Source: 2021 State & Local Government Finance Census Data and author's calculations

MEDICAID EXPANSION

As part of the Affordable Care Act (ACA), the federal government offered states a once-in-a-generation opportunity: If states expanded their Medicaid programs to cover more uninsured people, the federal government would cover up to 90 percent of the costs for that expansion. As of August July 2023, 41 states have implemented the ACA. Analysis shows that expansion states experience a substantial increase in Medicaid spending. That spending was subsidized with federal funds. In other words, the ACA did not crowd out state spending in other priority areas like education, transportation, or public assistance. More importantly, the 35 states that expanded healthcare coverage before the COVID-19 pandemic reported lower uninsured rates and were better positioned to respond to the public health emergency by providing coverage to millions of Americans who lost their job-based healthcare coverage.



Around 19 percent of state spending was on public education, including public universities, colleges, and public libraries.

Virtually every state constitution has language that calls out funding primary (Kindergarten through eighth grade) and secondary (ninth through 12th grade) public education as the state's principal responsibility. In most states, public education is delivered by local school districts but paid for in large part with local government property tax revenues and state funds distributed to school districts using formulas that factor in the number of students, student demographics, and local property wealth – all to ensure adequate and equitable funding.

State governments' direct expenditures in elementary and secondary education are nominal ($6 billion). Direct spending is executed by local governments – often by school districts, but sometimes municipal governments or townships ($750 billion, or 38 percent of local government spending).

State governments directly support public universities and colleges ($264 billion); the remainder is invested by local governments in their community colleges and public libraries ($76 billion).

State and local government investment in transportation – including highways, airports, sea and inland ports, and parking facilities – were eight percent of state government spending, with significant variation across states. Large states like Alaska and Texas dedicate up to 20 percent of their annual spending to building and maintaining highways, airports, and seaports. By contrast, New England's state highway systems are far smaller, so state spending on transportation is not nearly as large a share of overall state spending.

State and local governments finance most of their investments in infrastructure by borrowing money – usually through municipal bonds – that they repay over time. Interest on that debt was three percent of state government spending.

Public safety was 5 percent of state government spending. For state governments, corrections (i.e., prisons, detention centers, parole officers, and state crime prevention programs) are a significant proportion of spending. Unlike local governments, state spending on police is a small share of total spending with much of that spending related to state patrols and criminal investigations.

Spending on parks, environment conservation programs, clean water initiatives, housing redevelopment, and economic development was three percent of state government spending.

Government administration – including state spending on courts, legal services, legal counseling of indigent or other needy persons, legislative bodies, and agencies concerned with tax assessment and collection, budgeting, accounting, and financial reporting was four percent of government spending.

Finally, pensions and other post-employment benefits (OPEB) for retired state government workers are one of the most important and fastest-growing components of other expenditures (three percent).

The *discretionary vs. non-discretionary* spending distinction is critically important to the states. **Medicaid and primary/secondary education are effectively non-discretionary programs.** State legislators can change their state Medicaid laws and policies, and many have. But without a policy change, Medicaid spending is formula-driven and locked in. Primary and secondary education spending is also driven by formulas that require the state to send a given amount of money to local school districts each year, barring some substantial policy change. States must also pay the interest on their debts and make good on their pension and other post-employment benefit (OPEB) promises. Taken together, non-discretionary spending for state governments is around 70 percent of total spending. That's why when revenues fall short of expectations and states need to balance their budgets, they have little choice but to scale back on the 30 percent that remains in discretionary areas like higher education, public health programs, transportation, and government administration.

We were reminded of this fact in the Great Recession when state governments cut spending on higher education by an average of 35 percent and public health programs by an average of 50 percent. We expected history to repeat itself at the start of the COVID-19 pandemic; however, the influx of federal stimulus funds coupled and the mild recession – amid the pandemic resulted in a majority of states reporting surpluses, not deficits, FY 2021 and FY 2022.

PUBLIC PENSION PROBLEMS PERSIST!

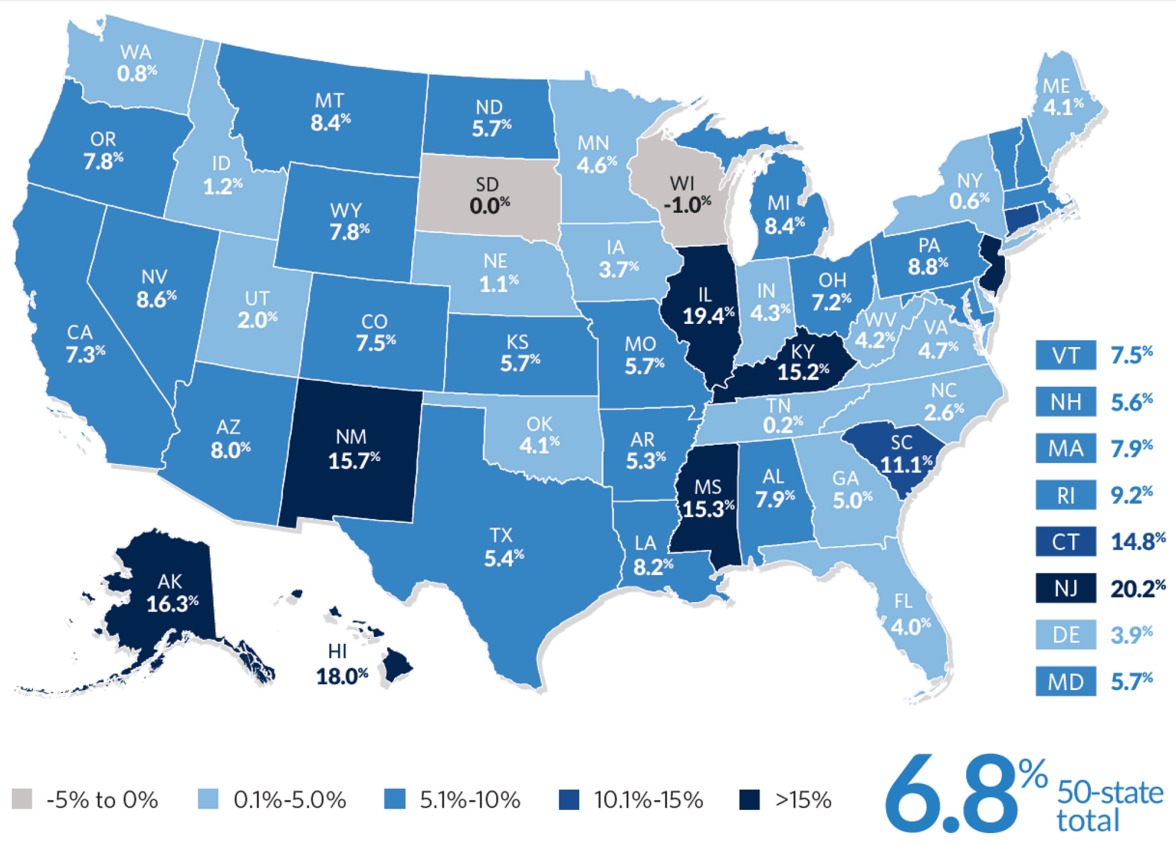
The chronic underfunding of public sector retirement systems is arguably one of the most significant fiscal challenges facing state and local governments to date. The 50-state pension funding gap – the difference between state retirement systems' assets and projected benefit payments to employees – was **$1.25 trillion** at the end of FY 2019 (Pew, 2022).

While the Great Recession exacerbated the public sector retirement crisis, it did not create it. Pension problems were long in the making as states opted to increase employee pension benefits in lieu of annual wage adjustments. At the same time, they failed to make their annually required contributions and instead relied on robust returns on investments and above-average discount rates to value their long-term obligation. These actions resulted in inflated assets and understated liabilities.

While reforms have faced legal setbacks, several states have been able to scale back on their plan benefits, including limiting benefits to current employees, demanding higher contributions, limiting or ending eligibility for new employees, and creating defined contribution plans or hybrid retirement plans. While policy changes represent improvements on the margin, they do not resolve plan insolvency.

Why would pension underfunding present a fiscal challenge to governments? First, pension obligations are akin to general obligation (GO) debt in that general tax dollars will be used to make payments on retiree benefits. However, unlike general government long-term debt obligations, liabilities associated with retirement benefits are less visible to the public, face no constitutional or statutory limitations, and do not require voter approval. What's more, governments can do little to modify benefits to existing employees, retirees, or their beneficiaries once granted. Unfunded retiree benefits represent a substantial reallocation of future cash flows on what is, in essence, an unpaid historical cost.

Unfunded Pension Liabilities as a Share of State Personal Income (2019)

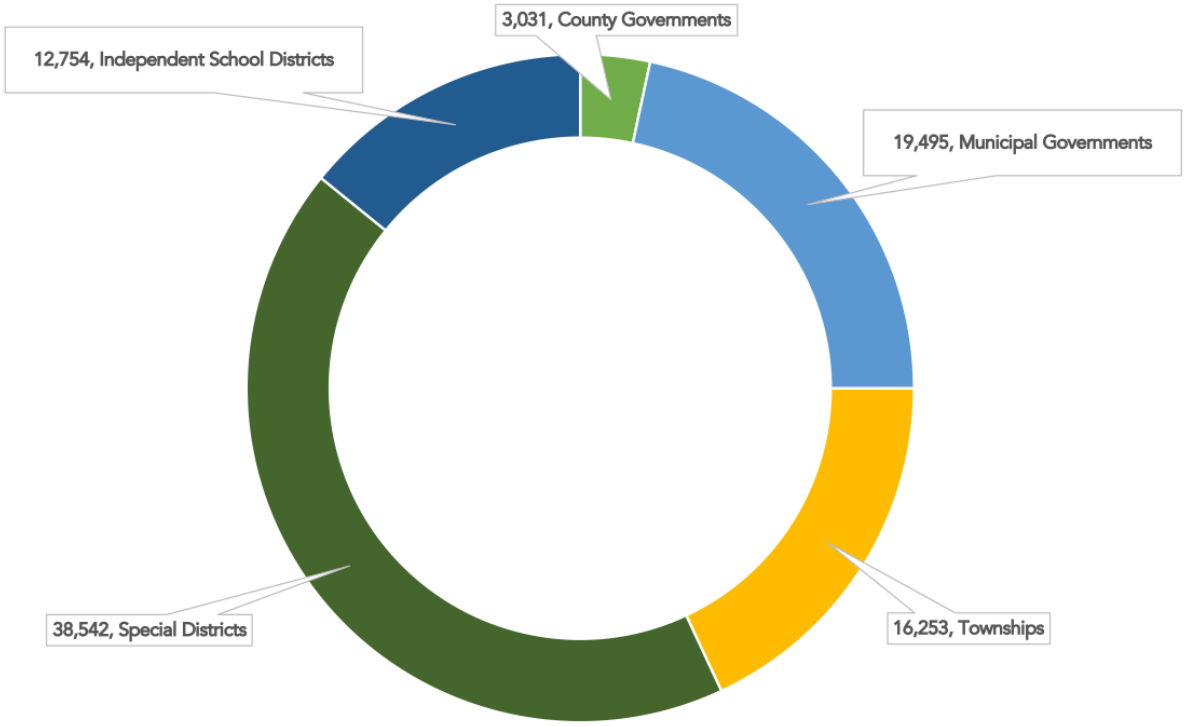


***Source**: Pew (2022) "States' Unfunded Pension Liabilities Persist as Major Long-Term Challenge"*

LOCAL GOVERNMENTS

In addition to the federal government and the 50 state governments, the Census Bureau recognizes five basic types of local governments: counties, municipalities (i.e., cities, boroughs, and villages), townships (i.e., towns or townships), special districts, and school districts. Counties, municipalities, and townships are recognized as general-purpose governments, whereas school districts and special districts are recognized as special-purpose and single-purpose governments, respectively.[5]

Municipalities fund and manage public schools, utilities, large cash-transfer assistance programs, and major infrastructure networks. No two municipal governments are alike. Some operate their own electric utilities and water companies. Some operate golf courses, swimming pools, and other recreational facilities. Cities like Austin, Jacksonville, and Seattle have financial structures dominated by large public utilities. Some have programs to fight homelessness and promote affordable housing, both areas that until recently were managed by the state and federal governments. Others have programs to fight climate change, promote tourism, and acclimate new immigrants to their communities. Of all the levels of government, municipalities offer the most variety in their size and scope of services.



Source: 2017 State & Local Government Finance Census Data

Counties are often called the "bottom of the fiscal food chain." They deliver expensive and human capital-intensive services like public health, elections, tax administration, and regional transit systems. In some sense, counties are the opposite of municipal governments and townships. Counties manage services where a broader geographic reach, relative to municipalities, is more practical and

5. The federal government officially recognizes the sovereignty of 573 Indian tribes in the contiguous 48 states and Alaska. U.S. territories (Puerto Rico, Guam, Northern Mariana Islands, U.S. Virgin Islands, and American Samoa) are self-governing, and each has a non-voting member of the House of Representatives. We've not included a discussion on the revenue structure or spending priorities of these governments in this edition of the text.

economical. Elections, for example, are usually a county function. Instead of dozens of municipalities conducting their own elections, county governments manage county-wide elections that cover all the municipal and county officials elected within the county. Tax administration is another example. Property assessors are usually positioned within a county government but execute property assessments for all the municipalities and other taxing jurisdictions within their county. For this same reason, counties are usually responsible for a majority of human service programs, including public health and mental health services.

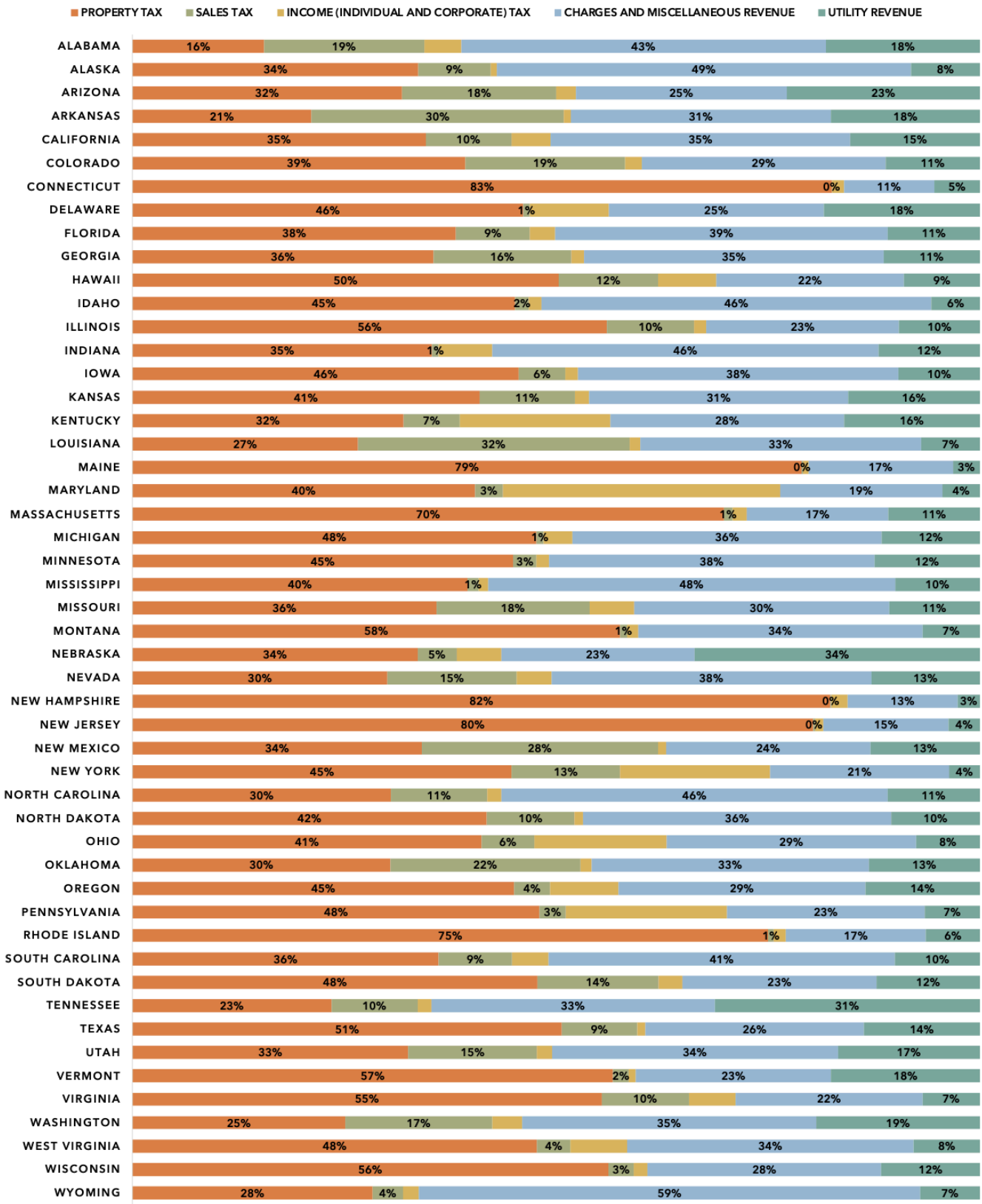
Local governments depend on the same revenue sources but in different configurations.

Property taxes are the local revenue workhorse. They are the oldest local revenue source and the only tax found in all 50 states. For the past two decades, they have accounted for at least 30 percent of all local government revenues – with significant variation across the states. There are good reasons for this. Property taxes are simple and transparent. They follow the same basic taxable base times tax rate concept you've already seen with both the income tax and the sales tax (see below for more details on property tax administration). And yet, property taxes are wildly unpopular. Taxpayers get angry when their tax bill increases, but their income does not. They also struggle to understand how the government determines their property value. That's why the property tax is often called the "necessary evil" of local revenue systems.

In 38 states, the state government has authorized local governments to levy a *local sales tax*. In all, around 6,500 municipal governments rely on local sales tax revenues for seven percent of total revenues. Applicable rates and taxable bases vary. The five states with the highest average local sales tax rates are Alabama (5.25 percent), Louisiana (5.10 percent), Colorado (4.88 percent), New York (4.52 percent), and Oklahoma (4.48 percent). Some city and county governments have a general sales tax to fund local services. Other local sales taxes are much smaller rates but have more specific purposes like public education, public safety, public health, or tourism. For example, in 2000, voters in Brown County, WI, authorized a 0.5 percent sales tax to fund improvements to Lambeau Field, home of the Green Bay Packers of the National Football League (NFL).

Local income taxes are common in areas with lots of commuters. In fact, they are often called *commuter taxes* or *head taxes.* Central cities often lament commuters who work in the central city and use central city services but do not pay for those services because they own property outside the central city. Local income taxes impose a tax on wages, income, and other earnings in the jurisdiction where that income is earned. This is the logic behind local income taxes in several large cities like Birmingham, Denver, Kansas City, New York City, Philadelphia, St. Louis, and Washington, D.C. Several municipalities in greater Portland impose a local income tax to help fund Tri-Met, the regional light rail system. This is an interesting twist on the commuter tax model. Ohio authorizes all its municipal governments to levy a local income tax. The central criticism of local income taxes is that they drive away business. That is, if a local business can avoid paying the local income tax simply by moving to another jurisdiction, it will have a strong incentive to do so.

Local Government Own Source Revenues (by Source 2021)



Source: 2021 State & Local Government Finance Census Data and author's estimates.

JUMPSTART SEATTLE

Two years after passing and then repealing the head tax (planned to be $275 per employee), the Seattle City Council approved a new payroll tax. Christened "JumpStart Seattle," the city's payroll ordinance imposes a tier-rate payroll tax on businesses with annual payrolls of more than $7 million on a sliding scale from 0.7 percent on employee wages between $150,000 and $399,999 up to 2.4 percent, with the highest rates applying to employees reporting income in excess of $400,000 who are employed by businesses with more than $1 billion in annual payroll expenses. However, unlike the OASDI, this payroll tax is a tax on the employer, even though the basis of the tax is employee wages.

Businesses with payroll expenses of less than $7 million, grocery stores, insurance businesses, certain motor vehicle businesses, federal, state, and local government entities, and independent contractors whose compensation is included in the payroll expense of another business that is subject to the tax are exempt from the payroll tax. Additionally, not-for-profit healthcare entities are exempt from the payroll tax on employees with annual compensation of $150,000 up to $400,000 for the period January 1, 2020, through December 31, 2023.

The tax, which was expected to yield $210 million in its first year, brought in more than $230 million. Revenues from the tax were used to mitigate the effects of the COVID-19 public health and economic crisis and finance affordable housing investments and equitable development projects in the future.

Local governments depend on a variety of *intergovernmental revenues.* Many state governments offer municipalities grants to fund a variety of needs, especially infrastructure. States have *revolving loan* programs to help city and county governments pay for roads, bridges, drinking water systems, stormwater management systems, and other basic infrastructure.

Federal intergovernmental revenues also assist municipalities with transportation infrastructure, affordable housing, community development, community policing, and many other initiatives. In a few states, municipalities receive up to 40 percent of their revenues through state revenue-sharing programs. This is most common in states where local governments are not authorized to levy a local sales tax or are subject to strict property tax limits.

Municipalities also employ dozens of "other" revenue sources. Some tax utilities, both publicly owned and privately owned, are within their borders. Municipalities also impose fees on licenses for everything from owning a pet to operating a tavern to practicing massage therapy. Municipal courts also impose a variety of fines on everything from illegal parking to vagrancy.

Like the sales tax, fees and other miscellaneous charges have become a much larger part of municipal revenue portfolios. These revenue streams are regressive, and their proliferation exacerbates income inequality.

PRIMER ON PROPERTY TAX

The property tax is the most important tax used by local governments, accounting for about 70 percent of local government tax revenues and 30 percent of all local government revenues. The property tax is also politically unpopular. The unpopularity of the tax is based on its visibility. Taxpayers get angry when their property tax bill increases when their incomes have not, and they struggle to understand how the government estimates the value of their property. Even though the tax remains an essential source of revenue for local governments, it remains unpopular, and voters have shown their disdain for the tax with their support of property tax limits (see Tax and Expenditure Limits).

Property taxes apply to **real property**, including land and buildings, and **personal property**, including moveable items such as cars, boats, and value stocks and bonds – although most states have moved away from taxing personal property and now impose taxes on real property.

In its simplest form, the property tax is calculated by multiplying land and buildings' value by the property tax rate. Property tax rates are typically expressed in mills (a mill is one-tenth of one percent). An owner of property worth $250,000 subject to a 10 mill (i.e., 1 percent) tax rate would pay $2,500. In reality, property taxes are often more complicated.

First, local governments must determine the property's value for tax purposes. Tax assessors use statistical models to estimate the property's market price using prices of recently sold properties. They then multiply the estimated market value by an assessment ratio ranging from 0 percent (meaning the property is exempt from the property tax) to 100 percent (indicating full-value assessment) to arrive at the property's assessed value.

Market Value x Assessment Ratio = Assessed Value

While many states use market value (an assessment ratio equal to 100 percent), others assess property at a fraction of its actual value. For example, a state may have a 100 percent assessment ratio for commercial property and a 70 percent assessment ratio for residential property, which means a $250,000 commercial property is taxed on its full market value, but a $250,000 residential property is taxed as if it were worth $175,000. States may have exemptions or credits that are available to certain types of properties or property owners. Homestead exemptions, for example, reduce the amount of property subject to taxation. This exemption is limited to owner-occupied homes. For a home worth $250,000 subject to fractional assessment (at an assessment ratio of 70 percent), the home would be taxed as if it were worth $125,000 (($250,000 x 0.70)-$50,000).

Assessed – Exemptions = Taxable Value

The millage rate, usually the sum of tax rates of several jurisdictions (e.g., county tax, city tax, school district tax, special district tax (for hospitals, parks, libraries, etc.)), is then applied to the assessed value (net of exemptions). Assuming a millage rate of 10 mills (or $10 per $1,000 in assessed value), the property tax bill of a $250,000 commercial property is $2,500. In contrast, the property tax bill of residential property, subject to a 70 percent assessment ratio and whose owners are eligible for the homestead exemption, is $1,250 (i.e., ($125,000 x 0.01).

Taxable Value x Millage Rate = Tax Liability

States may provide means-tested tax credits that lower the property tax liability.

Tax Liability – Credits = Property Tax Owed

More importantly, the fractional assessment, homestead exemption, and property tax credits result in a lower effective tax rate for homeowners. The effective tax rate is equal to the actual property tax payment divided by the property's market value. For the owner-occupied residential property, the ETR is 0.5 percent (i.e., $1,250/$250,000). ETR for commercial property not eligible for the exemption and assessed at full value is 1.0 percent (i.e., $2,500/$250,000).

Local government expenditures in 2021 were $2.2 trillion; most of it was spent on primary and secondary education, social services, and public safety.

Public education accounts for around 40 percent of local government spending. In 2021, local

government invested $750 billion in elementary and secondary education, $46 billion in community colleges, and $13 billion in public libraries.

Social services were 12 percent of local government spending. As we noted earlier, Medicaid and means-tested cash assistance programs are all administered by state governments. Local governments are responsible for funding and investing in public hospitals ($130 billion) and healthcare programs ($69 billion), including spending in public health departments that lead disease prevention and health promotion efforts such as vaccination programs, food safety, and disaster preparedness and response.

Local governments spent $216 billion (10 percent) on *public safety*, including police ($116 billion), fire ($61 billion), and corrections ($32 billion). Public safety is one of the fastest-growing spending areas but ranks third behind local government investment in public education and social services. Spending on police today remains at the same level it was in 1959 – at about 4.8 percent – even though crime rates are at their lowest point in decades.

The remainder of local government spending is spent on municipal infrastructure, economic development, government administration, and employee benefit programs. Municipal infrastructure includes investments in streets, sidewalks, bridges, drinking water treatment, wastewater treatment, stormwater management, electricity, cable television, and broadband. Many of our most basic human needs are met by municipal infrastructure. Economic development includes programs to encourage small business growth, promote arts and culture, make neighborhoods safer and more walkable, and provide affordable housing, among others. The remainder is the interest expense on long-term debt issued to finance municipal infrastructure.

As mentioned above, the priorities of local governments around the country have expanded dramatically in the past two decades. Today, local governments have programs and services designed to mitigate climate change, stop the nationwide opioid epidemic, protect the civil rights of the LGBTQ community, prepare recent parolees for careers in emerging industries, promote international trade, and assist newly arriving refugees. In the past, these issues were considered state, national, or even international issues. What difference can a city make, the argument went, around a problem so vast as climate change? But in the midst of chronic political gridlock in state capitals and in Washington, D.C., and in a new environment where "symbolic politics" are more potent than ever, many municipal officials feel compelled to go it alone.

TAX AND EXPENDITURE LIMITATIONS (TELS)

At the local level, TELs are either limits on the property tax rates, growth in the property tax base (or assessed value), property tax revenues, or the aggregate of local government taxing or spending authority.

Limits on assessed valuation are limits on annual growth in the valuation of the property (e.g., two percent), while limits on property tax revenues are dollar limits on the total amount of revenue that can be raised from the property tax. Caps on the aggregate of local government taxing or spending authority are dollar limits on overall spending authority. The limits can apply to all governments with taxing authority or specific municipalities (e.g., school districts).

The first property tax limit that is still in effect today was adopted in Alabama in 1875. Adopting restrictive property tax limits protected white landowners from new or higher property taxes intended to fund education for Blacks, who were largely untouched by property taxes since they owned very little real or personal property. Alabama was not alone. Arkansas, Georgia, Missouri, and Texas adopted restrictive property tax limits – some of which remain in the books now.

At the state level, TELs restrict the growth of government revenues or spending. In estimating limits on spending authority, the state is required to establish base-year appropriations subject to the limit and adjust for a factor of growth that is equal to changes in population, inflation, or personal income. States can only exceed appropriation caps if they exercise the override provision, which often is a legislative majority or super-majority vote.

Funds in excess of the limitation are refunded to taxpayers, deposited in a reserve fund (commonly referred to as a rainy-day fund), or used for purposes as provided by law (e.g., capital improvements, K-12 spending).

In addition to limits on appropriations, state governments mandate a legislative supermajority vote or voter approval before the state can adopt new or higher taxes. Mississippi was the first state to adopt a legislative supermajority requirement – and to date, any tax increase must secure three-fifths of votes in both houses of the legislature. Sixteen states have since adopted legislative supermajority or voter approval requirements, thereby limiting the government's ability to raise additional tax dollars or engage in meaningful tax reform.

While these revenue suppression measures remain popular, they have had unintended and perhaps detrimental effects, especially at the local level. For example, data from 1977 through 2007 – when a number of property tax limits were adopted in the states – shows the precipitous decline in property tax revenues as a share of own-source revenues. In California, Massachusetts, and Oregon, revenues from property taxes fell more than 15 percent. In response, local governments have come to rely more on intergovernmental transfers and user charges and fees. They have also adopted local option sales and/or income taxes to make up for lost property tax revenues. The extensive reliance on user charges and fees without a progressive income tax means state and local government tax structures are regressive.

For local governments, revenues are now more volatile, and they have less control over their budgets than they did prior to the tax revolt movement. TELs have also altered how local governments are willing to borrow, market perceptions of their credit quality (or default risk), and their ability to manage their other long-term obligations and legacy costs.

Recommended Reading: Michael Leachman, Michael Mitchell, Nicholas Johnson, and Erica Williams (2018) "*Advancing Racial Equity with State Tax Policy*" Center for Budget and Policy Priorities

SPECIAL DISTRICTS

Special districts are independent, special-purpose government units created for a limited, specific purpose with substantial administrative and fiscal independence from general-purpose governments. They are called many different things, including *public authorities*, *off-budget entities*, *special-purpose districts*, *autonomous governments*, *special taxing districts,* and *public corporations*. Authorized by their respective state governments, special districts deliver a wide variety of services, including fire protection, parks, parking facilities, libraries, electric power, water supply, sewerage and solid-waste management, cemeteries, airports, community colleges, industrial development, affordable housing, hospitals, and sea and inland port facilities.

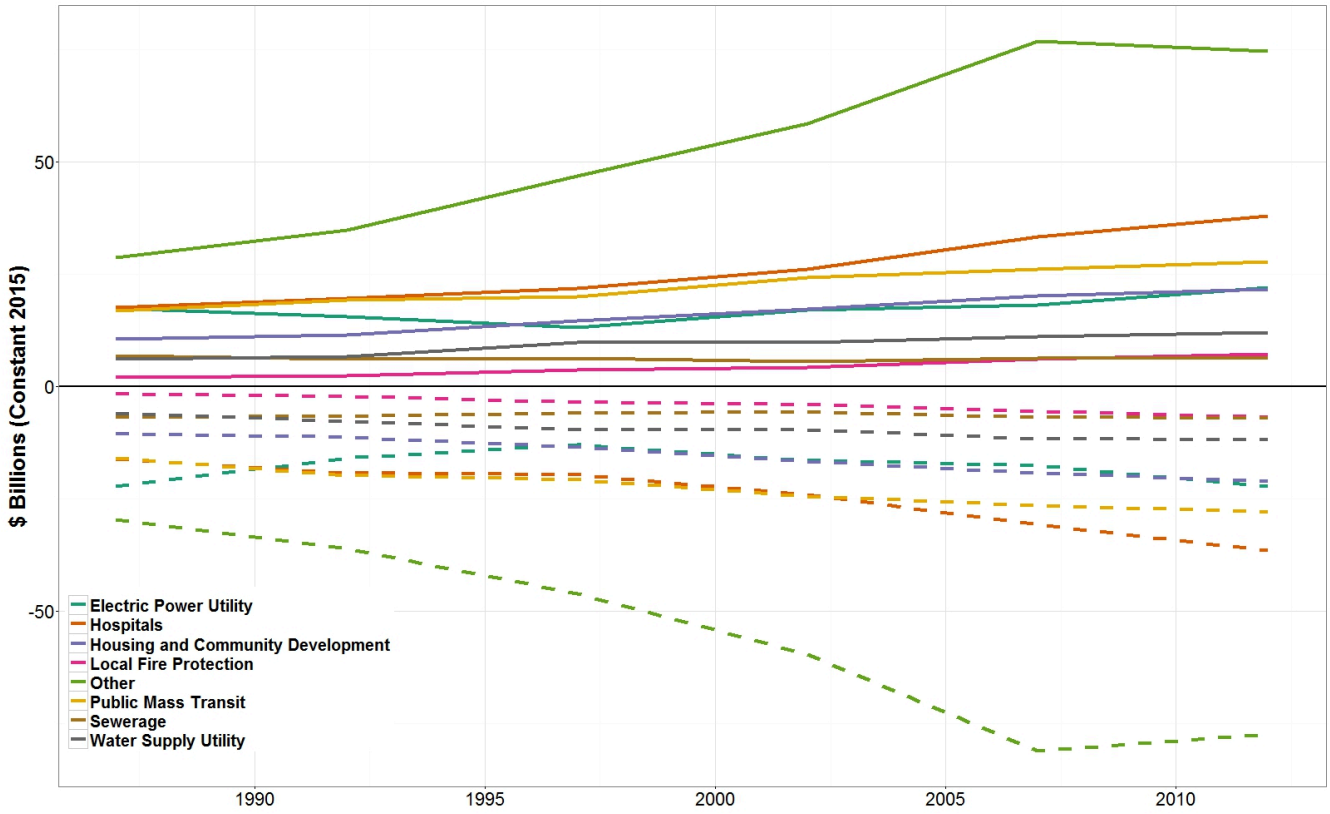
Consider the following examples:

- The *Milwaukee (WI) Metropolitan Sewerage District (MMSD)* is a regional agency that provides wastewater and stormwater management services for about 1.1 million people. Its service area covers 411 square miles and includes six watersheds. It is one of the largest urban sewerage districts in the country. In 1996, it contracted out most of its basic operations to the private firm United Water, making it the largest urban sewer system in the U.S. under private management. It collects revenues from charges to businesses and homes that use its sewer system, a 0.5 percent property tax on all land within the district, state and federal grants, and sales of "Milorganite," an organic compost product it developed and patented, among other revenue sources. In 2015, it spent $252 million and employed 1,200 people.
- The *Port of Seattle (WA)* manages one of the fastest growing airports in the world (Seattle-Tacoma International Airport), the third largest cargo container port on the West Coast, an $8 billion real estate portfolio, and a variety of technical education programs that train young people to work in the maritime and aviation industries. It employs 2,200 people, and in 2022, it spent $573 million. It collects revenues from rental fees paid by airlines and shipping companies, fees on cargo and airline passengers, and real estate rentals and sales. It also has the authority to levy a property tax.
- The *Barberton-Norton (OH) Mosquito Abatement District* manages populations of "biting arthropods" across 60 square miles of northeast Ohio. In its own words, the district is successful if "you can prepare a picnic, play cards by moonlight, even sit on your front porch without the hassle of mosquitoes." It employs three full-time staff. Its sole revenue source is a 0.05 percent property tax.
- The *Holley-Navarre (FL) Fire District* began as a volunteer fire squad with no equipment or funding. It operated from 1965 through 1980 using borrowed equipment and was funded solely by donations. In 1980, the district was created by a special act of the Florida legislature. Today it covers approximately 50 square miles in the Florida "panhandle," with 30 full-time firefighters across four fire stations. In 2021, it spent $2.8 million. Revenue for the fire district comes from property taxes and *impact fees*, an excise tax levied on the assessed value of new construction.
- The *New Jersey Sports and Exposition Authority* (*NJSEA)*is the planning and land use agency for a 30-square-mile area just across the Hudson River from New York City. It was created in 1971 to develop sports and entertainment facilities near the "Meadowlands," a marshy and heavily polluted former industrial area (see the opening credits of *The Sopranos*). Today, it manages Met Life Stadium (home of the New York Giants and New York Jets of the NFL), IZOD Arena (former home of the New Jersey Devils of the National Hockey League), and several other racetracks, convention facilities, aquariums, and amusement parks. In 2015 the New Jersey Meadowlands Commission, the authority originally tasked with land use planning and restoration of the Meadowlands, was folded into the NJSEA. As a result of that merger, the NJSEA now delivers services that include planning, zoning, floodplain management, solar energy, methane recovery, a marina, and pontoon boat cruises. In 2021 it employed 95 full-time staff and spent $102 million. It derives most of its revenue from rental fees and leases and a local tourism tax paid on hotel rooms and rental cars.

- The *Utah Housing Corporation* is a statewide authority created by the Utah legislature in 1975. Its mission is to raise funds to make housing affordable for lower-income Utah households. It does this mostly by offering home loans – or *mortgages* – to first-time home buyers and to developers building or renovating affordable apartment projects. The Authority is self-supporting and raises hundreds of millions of dollars each year through partnerships with banks, real estate developers, realtors, and others. In 2022 it employed 104 people and spent $55 million. It collects interest payments on its mortgages, buys and sells mortgages for a profit, and receives corporate donations.

In 1977 there were just under 26,000 special districts in the U.S. Today, there are just under 40,000. The figure below shows the growth in special district revenues and spending from 1977-2012. Solid lines represent revenues, and dashed lines represent spending for eight different special districts, including electric power, hospitals, housing and community development, fire protection, mass transit, sewerage, and water supply. Most districts increased their total revenues and spending by 30-75 percent during this period. Revenues and expenditures in the "other" category, including soil and water conservation, libraries, cemeteries, parks, and recreation, increased more than 200 percent over the same period.

Special District Revenues and Spending (1987-2012)

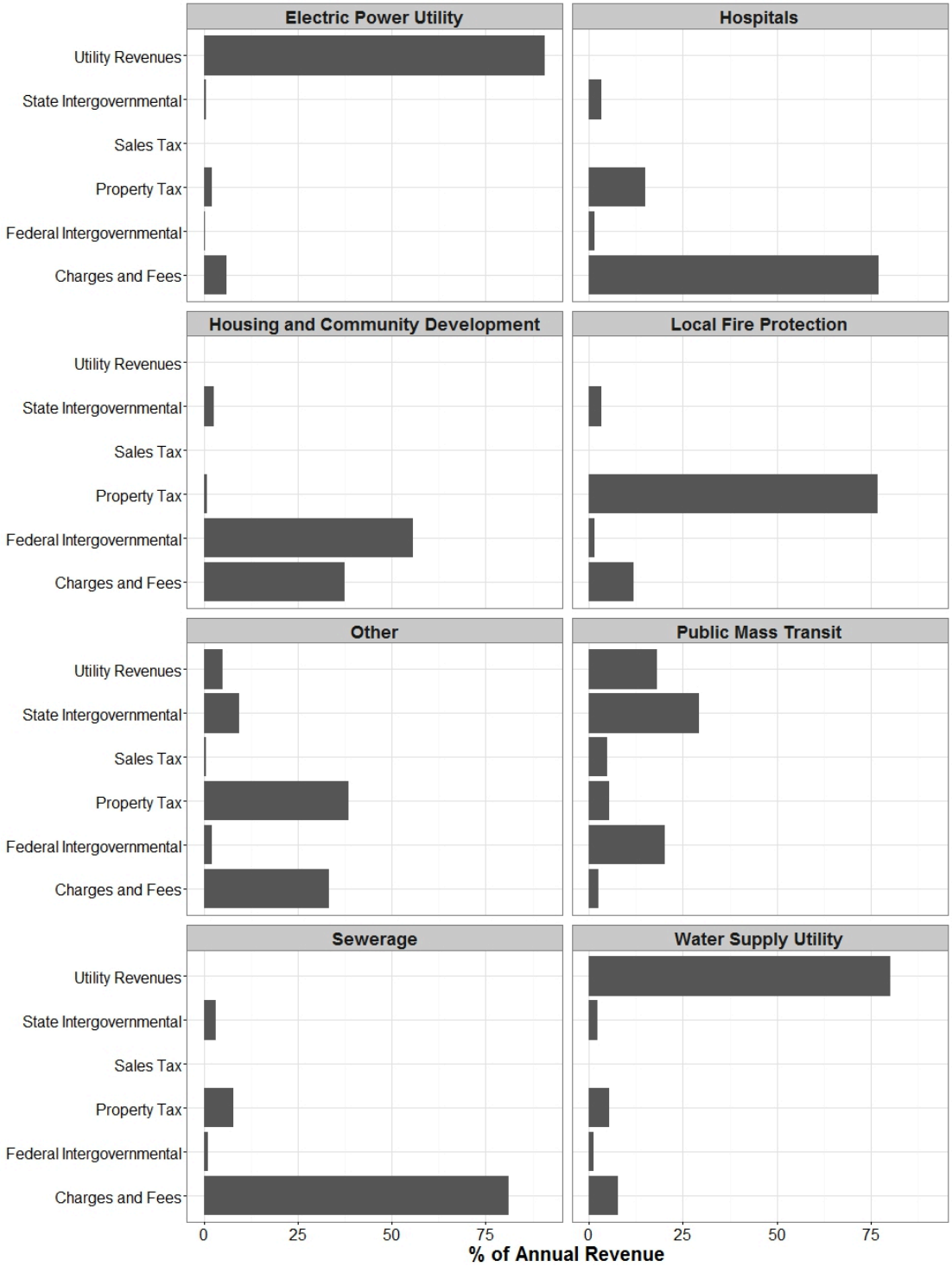


Source: U.S. Census of Governments Data and author's estimates (excludes School Districts). Note: Like state and local governments, special districts balance their budgets; as such, their revenues exceed expenditures.

The next figure shows the composition of special districts' revenues. It shows each revenue source as a percent of total revenues for special districts by type. For example, in 2012, public hospitals derived 77 percent of their revenues from charges and fees. In other words, a typical hospital earns revenue

by collecting fees from patients (and patients' health insurers, including Medicare and Medicaid). Public hospitals levy property taxes (12 percent) and receive federal (4 percent) and state (7 percent) intergovernmental revenues. Utility districts are authorized to deliver electricity to customers and collect fees in exchange.

Revenue Composition of Special Districts (2012)



Source: U.S. Census of Governments Data and author's estimates. Note: Figures may not add up to 100 percent due to rounding and excluding smaller categories.

This chart's key takeaway is that most special districts depend on one or two main revenue sources. This is not a coincidence. State and local legislatures typically grant special districts limited revenue authority, and few can levy a tax or receive funding from the state. In fact, special districts are engaged in business-type activities where they deliver a specific service in exchange for a fee. This is quite different from state and local governments, where taxpayers pay general revenue sources like property and sales taxes and receive general services like public safety and public health.

What accounts for the explosive growth of special districts? Two, sometimes contradictory factors. First, special districts allow for more direct taxpayer control. Suppose citizens receive a service through their municipal or county government, and they wish to change how they pay for that service or how that service is delivered. In that case, they can only affect that change through their city councilmember or other local representatives who must also attend to dozens of other service delivery concerns. With special districts, citizens elect a separate governing body that attends only to that specific service, and they pay taxes or fees dedicated to that service. The relationship between governance, funding, and service delivery is, in concept, much clearer.

Fire protection is a good example. Citizens in unincorporated areas (i.e., areas that fall outside the boundaries of any municipality) often receive fire protection from a county government or nearby municipality. In the event of a fire, they would rather not wait for the county or nearby municipal fire service to arrive. They'd much rather have local firefighters who understand the local terrain and offer services that a municipal or county fire service is less likely to deliver (e.g., wilderness rescue, wildfire prevention, and outreach). So, they create a local fire protection district, pay property taxes specific to that district, and elect a fire protection district board. We see a similar dynamic in service areas like flood control, agricultural irrigation, and parks. It is also quite common in the Western U.S., where local political culture tends to favor populist, local control of government. For example, while Tennessee and Washington have roughly the same population, Tennessee has 347 municipal governments and 475 special districts, whereas Washington has 281 municipal governments and 1,670 special districts.

Special districts have also proliferated because they can help citizens circumvent tax and expenditure limitations. Sometimes those limitations are political. For instance, taxpayers across the country have voted often to move traditional municipal services like libraries and parks from their municipal government to a special district. When these services are delivered through a special district, they have a dedicated revenue source. They need not compete with public safety, roads, water/sewer, and other municipal services for limited tax dollars. And sometimes, those limitations are legal. For example, school districts in many states must get voter approval for new school buildings. Before the district can borrow money to build, voters must approve the additional property taxes needed to pay back that borrowed money. Voters are reticent to support additional property taxes. So, as an alternative, a district can authorize the creation of a school building authority. That authority will borrow money, build the new school building, lease the building to the district, and then repay the borrowed money with the school district's lease payments. At one point in the early 2000s, nearly half the public school buildings in Texas were financed through this "leaseback" model.

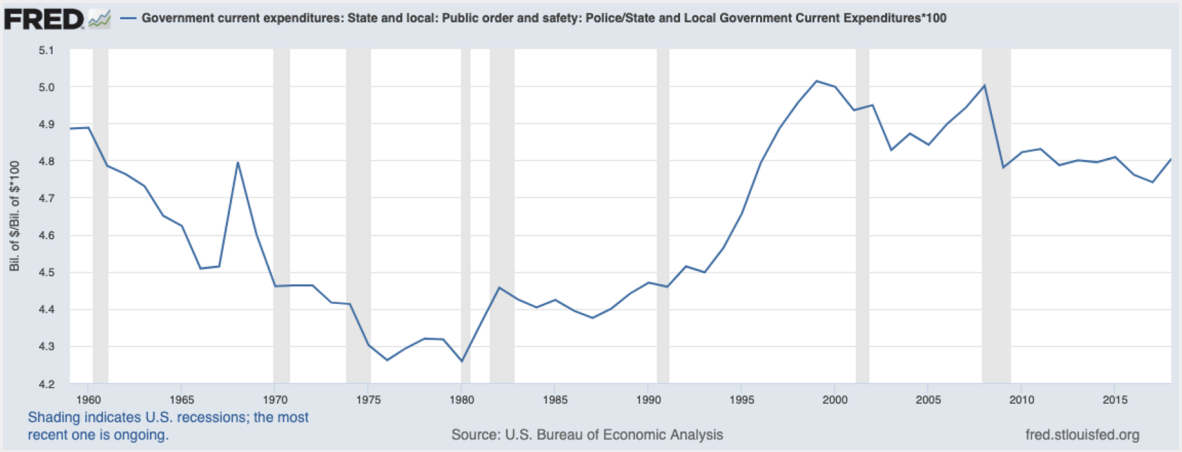
This proliferation presents a variety of trade-offs for governance and accountability. Special districts do offer more local control, but the evidence suggests they often do the opposite. Voter turnout for special district elections is usually among the lowest for all elected offices. Academic research shows

that citizens rarely know that special districts even exist and almost never know who they voted for in the last election. So, there is little evidence that special districts offer better democratic accountability. Another practical concern is that the proliferation of special districts has drastically increased the total amount of local government debt outstanding. This raises a variety of concerns about whether local governments are able to repay those debts.

DEFUND THE POLICE

The opening salvo to this chapter is the story of Michael Brown, a teenager and a resident of Ferguson, who was shot and killed by a police officer who was investigating a nearby robbery. The deaths of George Floyd, Breonna Taylor, and other Black Americans have once again raised questions about police training, tactics, and priorities, especially with respect to their interactions with communities of color. One response to these tragedies is calls to "defund the police." Defunding the police means different things to different communities – but at its core, it is a call for police reform that would divert funds from police budgets to community health, economic development, and other services to address the root causes of crime.

The Defund the Police movement has raised many important questions about how local governments spend money and what that spending says about their priorities. Perhaps most importantly, it's shown that those priorities can be radically different from one neighborhood to the next. Local government spending on public safety (i.e., policing, fire, and corrections) ranks third behind spending on education and social services. The chart below shows that spending on policing today remains at the level it was in 1959 – even though today's crime rates are at their lowest point in decades.



Source: U.S. Bureau of Economic Analysis and https://fredblog.stlouisfed.org/2020/06/government-spending-on-police/

Revenues from the criminal justice system have become an essential part of local government budgets. The DOJ's formal investigation of the fatal shooting of Michael Brown found that the city's law enforcement practices were shaped by its focus on revenue rather than on public safety. Ferguson's practices may have been more aggressive than some other police departments. Still, many local governments have come to rely on fines, fees, and penalties for revenues even though the incidence falls disproportionately on the poor and communities of color. In other words, defunding the police also means, to a degree, defunding other parts of local government.

While much of the public debate has focused on defunding the police in the face of police brutality, few have focused on how ineffective many police departments are at doing what they are supposed to do – solving crime. Data shows that approximately 38 percent of murders, 48 percent of aggravated assaults, 66 percent of sexual assaults, and 70 percent of robberies go unsolved. Even though budgets define responsibilities and can be used to hold agencies accountable, more often than not, police are also asked to respond to everything from loose dogs to disciplining children in our public schools. Police advocates and critics alike agree that "policing" resources are not allocated to their best use.

Now that you have a better grasp of where the money comes from and where it goes, you'll recognize the complexities in the call for defunding police. One immediate complication is differences in the scale of spending. Many experts have argued that underserved communities need massive investments in public schools and in social services like community health and affordable housing. Recall that local governments collectively spend orders of magnitude more money on schools and social services than they spend on public safety. Because of that, even a massive reallocation of public safety resources would do little to qualitatively increase spending in areas where it's most needed. For some defund policing advocates, that redirection would symbolize an important shift in priorities, even if the actual impact was minimal. But any serious attempt to address the needs of underserved communities will acknowledge that defunding the police is, at most, a partial solution. Another challenge is to define what services the police will provide with lower budgets and whether some of their existing responsibilities will be shifted to other organizations in the local government. What changes will lead to police using their budgeted resources more efficiently and effectively?

When we put the movement's goal and tactics in the context of local revenues and spending generally, it is clear that achieving its broader goals requires more than just reallocating police budgets. That will require careful attention to local governments' overall revenues and spending, what a fiscally sound local government looks like, what it costs to deliver public services, what it means to deliver those services cost-effectively, and how local budget politics and processes reinforce or upend existing policy priorities. Those are precisely the questions you'll grapple with throughout this textbook.

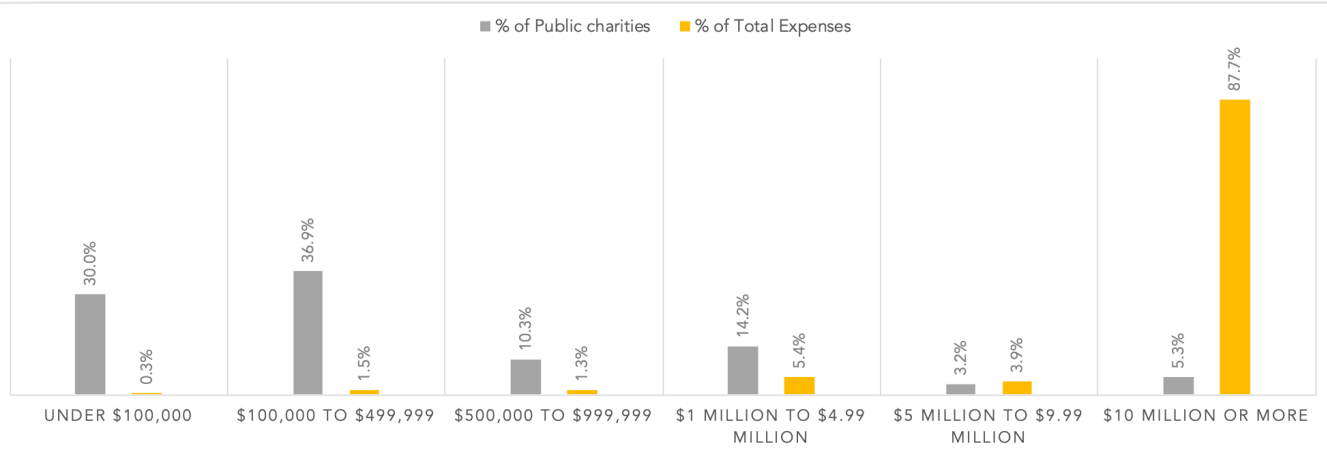
THE NON-PROFIT SECTOR

Non-profits are big business! According to the National Center for Charitable Statistics, approximately 1.54 million non-profit organizations were registered with the Internal Revenue Service at the end of 2016. Note that not all non-profits are registered with the IRS; therefore, the total number of non-profit organizations in the U.S. is unknown. The sector collectively reported $5.99 trillion in assets and $2.62 trillion in revenues and contributed an estimated $1.05 trillion to the U.S. economy (5.6 percent of the nation's GDP).

Public charities are the largest category of more than 30 types of tax-exempt organizations (totaling1.08 million in 2016) – a majority of which are small, therefore, not required to file tax forms with the IRS (i.e., Form 990, Form 990-EZ, or Form 990-PF).

The figure below presents an analysis of public charities by size. Just over three-quarters of reporting public charities – i.e., those reporting expenses of less than $1 million – altogether account for 2.1 percent of total expenses. In contrast, charitable organizations reporting $10 million or more in revenues reported the largest share of expenses (88 percent) even though they were a smaller share of the sector (5.3 percent).

Number and Expenses of Public Charities (as a Percentage of All Reporting Public Charities and Expenses)



Excludes organizations reporting $50,000 or less in revenues. Source: Urban Institute, National Center for Charitable Statistics, Core Files (Public Charities, 2016).

To understand where non-profits get their money and where their money goes, you must first understand the many different types of organizations that comprise the "non-profit sector." The table and charts below illustrate some of these differences. A few key trends stand out. Healthcare organizations have an outsized role in the sector. Even though they represent 12 percent of organizations, they account for 59 percent of the sector's revenues and 43 percent of assets. The Kaiser Foundation Health Plan, together with Kaiser Foundation Hospitals, for example, reported $68 billion in expenses at the end of FY 2016. That has since grown to $97 billion at the end of FY 2022.

Education non-profits (including private schools, universities, and parent-teacher associations) were 17 percent of non-profits but were an oversized share of the sector's assets – 33 percent. That includes not only the physical assets (e.g., academic buildings and student housing) but also financial investments. The President and Fellows of Harvard College is a permanent endowment that supports professorships, financial aid, and student activities at Harvard University. At the end of FY 2021, the university reported $60 billion in investments ($72 billion in total assets) – the largest of any private university. The Bill and Melinda Gates Foundation, the largest U.S. foundation, reported $67 billion in long-term investments and $68 billion in assets.

These non-profits defy the conventional wisdom that "non-profit" means "not profitable." How can an organization be that large and profitable yet remain "non-profit"? That's because the term "**non-profit" refers to the organization's tax status, not its business model.** By law, non-profits do not pay federal, state, or local taxes on their net income – except UBIT – that is, unrelated business income tax paid on income earned on activities that are not substantially related to furthering the exempt purpose or the organization. They also receive tax-free charitable donations from individuals and corporations. We grant them these benefits because they deliver goods and services that would benefit the public. Most non-profit hospitals accomplish this by offering free or low-cost healthcare to people who can't afford it. As long as they provide that service, there's little restriction on how much profit they can earn. For public sector organizations, profits are not central to resource allocation. However, as you'll see in Chapters 2 and 3, profits are essential to their long-term financial health.

Ten Largest Public Charities by Subsector, 2016

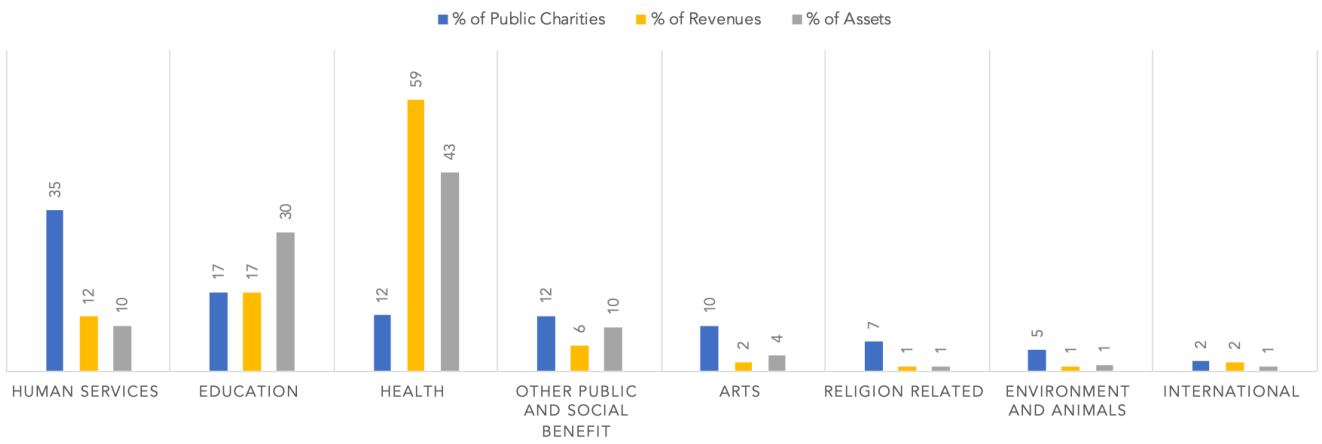
All		Human Services		Higher Education		Environment		International	
Kaiser Foundation Health Plan Inc	48,252,710,912	American National Red Cross Shared Services Center	2,886,003,368	New York University	5,420,536,806	National Geographic Society	422,501,093	Gavi Alliance	1,813,161,781
Kaiser Foundation Hospitals	20,177,137,580	Feeding America	2,041,987,389	Johns Hopkins University	5,413,130,000	Wildlife Conservation Society	246,807,085	Food for The Poor Inc	1,158,339,554
Partners Healthcare System Inc Affiliates Group Return	10,735,291,530	Park Nicollet Group Return	1,368,839,756	Trustees of The University of Pennsylvania	5,365,056,000	Zoological Society of San Diego	244,952,106	World Vision	993,127,196
UPMC Group Return	10,397,939,016	Partnership for Supply Chain Management Inc	1,142,152,752	The Board of Trustees of The Leland Stanford Junior University	5,050,927,315	World Wildlife Fund Inc	225,035,121	Americares Foundation Inc	982,086,854
Dignity Health	9,598,768,323	National Collegiate Athletic Association	908,806,647	President and Fellows ff Harvard College	4,775,458,754	New Venture Fund	214,351,188	Institute of International Education Inc	830,196,153
Cleveland Clinic Foundation Group Return	7,031,439,782	Navigate Affordable Housing Partners Inc	553,684,120	University of Southern California	4,257,472,819	National Fish & Wildlife Foundation	208,519,799	Nature Conservancy	796,011,941
Ochsner Clinic Foundation	6,546,010,317	Southeastern Conference	510,200,575	Vanderbilt University	4,189,634,110	American Society for the Prevention of Cruelty To Animals	190,082,947	Compassion International Incorporated	787,035,423
New York State Catholic Health Plan Inc	6,241,795,918	Big Ten Conference Inc	436,043,240	Trustees of Columbia University in The City Of New York	4,139,274,346	Ducks Unlimited Inc	186,270,439	Direct Relief	716,768,367
CareSource	6,013,922,970	PAC 12 Conference	435,057,356	Cornell University	3,951,934,873	The Conservation Fund A Nonprofit Corporation	179,485,477	Plan International Inc	689,494,953
Banner Health	5,428,669,563	Community Care Inc	413,060,083	Yale University	3,513,798,862	Center for Sustainable Energy	172,041,689	International Rescue Committee Inc	673,939,914

Source: Urban Institute, National Center for Charitable Statistics, Core Files (Public Charities, 2016).

Human service organizations (including food banks, homeless shelters, and youth and family service social service organizations) were the most common type of non-profit (35 percent of public charities). However, they reported a significantly lower share of the sector's revenues and assets (12 percent and 10 percent, respectively). They are also more likely to rely on individual contributions, foundation grants, and government contracts. As you'll see in Chapter 3, human service organizations do not report sizeable investments or endowments, and given the demand for services, they are more likely to report operating deficits.

The largest human service organizations – American Red Cross, Feeding America, Park Nicollet Group, Partnership for Supply Chain Management Inc., Navigate Affordable Housing Partners Inc., and Community Care – provide access to food, affordable housing, and medical care. However, intercollegiate sports associations (i.e., the NCAA, SEC, and PAC 12) are registered as non-profits and among the ten largest human service organizations!

Public Charities Revenues and Assets by Subsector, 2016

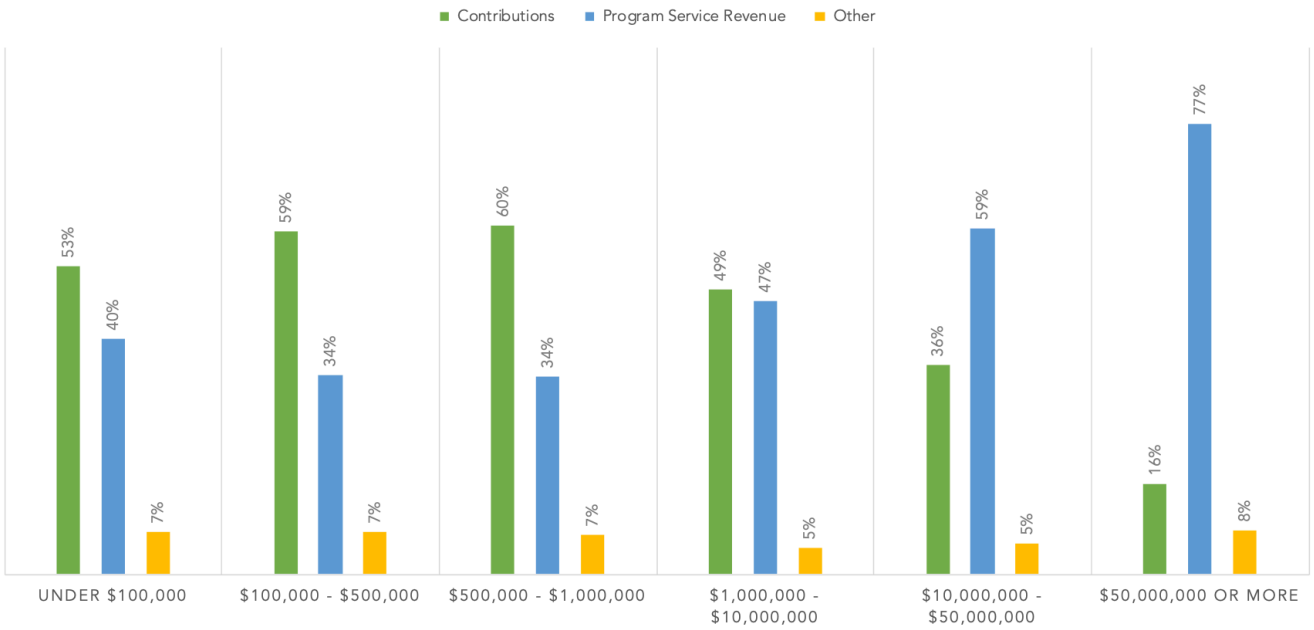


Source: Urban Institute, National Center for Charitable Statistics, Core Files (Public Charities, 2016).

Non-profits provide a staggering variety of services. Many of those services are not unlike governments – they conserve land for future generations, manage affordable housing programs, and provide pro bono legal services for people experiencing poverty. Like governments, a sizeable portion of their budget is spent on employee wages and benefits. And like governments, the sector is comprised of thousands of small organizations but dominated by a handful of larger organizations.

However, unlike governments, contributions are the primary source of revenues for most non-profits. Recall from our earlier discussion: public charities reporting expenses of less than $1 million were three-quarters of the sector. The chart below shows that contributions were a significant revenue source, particularly for non-profits reporting $1 million or less in expenses. Those reporting revenues of more than $10 million were less reliant on contributions and more reliant on program service revenues, including tuition payments to revenues from sales of specialty goods, memberships, and patient revenues (including Medicare/Medicaid). Many remain skeptical that these large non-profits need or deserve tax exemption.

Public Charities Revenues by Source and Size, 2016



Source: Internal Revenue Service Statistical Tables (2017)

Federal, state, and local governments are an essential source of revenue for the sector. More than one-third of non-profit revenue is directly connected with the government – either as a grant, contract for services, or reimbursement for services provided (e.g., Medicaid/Medicare).

Government revenues are not distributed evenly, with significant variation based on sector and the size of the organization. This suggests that many non-profits are not necessarily independent entities with their own mission and organizational capacity but rather low-priced government contracts. In later chapters, we explore the advantages, disadvantages, and criticisms of this part of the non-profit-government nexus.

Governments also support the non-profit sector through a powerful tax preference. The federal government and most state governments offer a tax deduction for charitable giving. Donors give to non-profits for many reasons. Perhaps they like a non-profit's mission or strategy. Maybe they or someone they know received that organization's services. Or perhaps the decision to give had a lot to do with tax planning. When a donor gives to a non-profit, that donor's taxable income is reduced by the amount of that gift, so, for many individuals and corporations, in addition to supporting their favorite non-profit, charitable giving can also reduce their income tax liability, sometimes by up to 50 percent. The U.S. Congress' Joint Committee on Taxation estimates that the federal government's charitable deduction costs about $50 billion annually in foregone revenue.

There is considerable controversy around the charitable deduction. Some believe it only benefits the wealthy and does little to encourage giving. Critics argue that big philanthropy, more than ordinary small donations, is wealth-derived power with minimal democratic controls and civic obligations (Rob Reich (2019) "*Just Giving*"). Philanthropy perpetuates vast differences in privilege and then tasks the privileged with improving the system (Darren Walker (2015) "*Toward a New Gospel of Wealth*"). Perhaps we should stop being grateful for philanthropy and instead direct our skepticism at their activities.

NON-PROFIT PILOTS – PAYMENTS IN LIEU OF TAXES

In every state, charitable non-profit organizations, including private universities, hospitals, museums, and churches, are exempt from property taxes. The impact of the property tax exemption largely depends on the degree of reliance on property taxes as a revenue source and real estate holdings of charitable organizations in the jurisdiction.

Yale University, for example, is New Haven's largest employer. The university's real estate holdings, including academic buildings, student housing, research facilities, and a sprawling hospital complex – are all property tax-exempt. In fact, 56 percent of New Haven's taxable property tax base is exempt. Yale owns a significant proportion of the exempt property.

Cities like Boston, Philadelphia, Pittsburgh, and Los Angeles face the same challenge. Their largest employers include private universities, non-profit hospitals, and cultural organizations, all of whom own valuable real estate – all of which is tax-exempt. While these organizations are economic engines for these cities, the growth in commercial activities by non-profit organizations has raised questions about their property tax exemption. More importantly, the substantial reduction in the taxable base has led to higher property tax rates for residents.

PILOTs (or payments in lieu of taxes) are payments made by tax-exempt non-profit organizations in place of property taxes. PILOT payments are structured as either one-time or long-term contracts with annual payments at a fraction of the locality's foregone property tax revenue.

PILOTs are often the result of tense negotiations. Consider the case of the City of Pittsburgh and the University of Pittsburgh Medical Center. In 2013, the city sued the UPMC. The goal of the lawsuit was to strip UPMC of its tax-exempt status. According to the City's complaint, UPMC did not deliver adequate charity care to justify its tax-exempt status, made no payments in lieu of taxes, and paid its executives lavish compensation packages. Had the City won in court, it planned to impose a 0.55 percent income tax on wages earned by UPMC employees. UPMC counter-sued, claiming it had been unfairly singled out among Pittsburgh's dozens of large tax-exempt organizations. The city dropped its suit in July 2014.

Source: J. Brian Charles (2018) "*Towns Gowns and Real Estate" Governing Magazine* and Daphne Kenyon and Adam Langley (2010) "*Payments in Lieu of taxes: Balancing Municipal and Non-profit Interests*" Lincoln Institute of Land Policy.

CHAPTER 2.

THE BASIC FINANCIAL STATEMENTS

FINANCIAL STATEMENTS: THE "FINANCIAL STORY"

Financial statements help managers answer a variety of questions:

- What and how much does the organization own? What and how much does it owe? Does this organization have enough financial resources to cover its obligations as they come due?
- What are the major sources of revenue for this organization? What are its spending priorities? Do the organization's sources of revenue and spending priorities reflect the organization's core mission?
- How much of this organization's spending does it control? How much of its spending is directed by outside stakeholders like donors, clients, residents, or investors?
- How much, if any, does this organization report in "reserves" or its "rainy day fund"? Given its operations, what would be the optimal level of reserves?

In November 2013, the Contra Costa County (California) Board of Supervisors voted to end nearly $2 million in contracts with the non-profit Mental Health Consumer Concerns (MHCC). The reason: MHCC's savings account had grown too large.

Since the late 1970s, MHCC has offered patient rights advocacy, life skills coaching, anger management classes, and several other mental health-related services to its poorest residents of the Bay Area. Much of its work was funded through contracts with local governments.

In 2007, its Board of Trustees began to divert 10-15 percent of all money received on every government contract to a reserve account (or rainy-day fund). MHCC's management concluded that this policy was necessary after several governments were consistently late on their payments. MHCC's plan was designed to guarantee that the organization would not be exposed to unpredictable cash inflows. The board and management considered this a prudent use of public dollars and a necessary step to protect the organization's financial future. Beginning in 2007 through 2011, nearly $400,000 flowed into the new rainy-day fund.

Contra Costa County disagreed. They interpreted the contracts to mean reimbursements were only for actual service delivery expenses. They also pointed out that those contracts prohibited carrying over funds from year to year. A reserve fund containing County funds was, therefore, a violation of those contracts. MHCC pointed out that they disclosed the reserve fund strategy in their annual financial reports. The reserve allowed them to deliver services uninterrupted, even during the worst moments of the Great Recession. Contra Costa County Supervisor Karen Mitchoff responded by

saying MHCC's financial statements were not the appropriate channel to communicate such a contentious policy choice. She added, "I am not sympathetic to the establishment of the reserve, and the non-profit board knows they had a fiduciary responsibility to be on top of this."

The contracts were canceled, and MHCC dissolved in early 2011.

This episode illustrates two of the key takeaways from this chapter. First, an organization's financial statements are a vital communication tool. They tell us about its mission, priorities, and service delivery strategy. In this case, MHCC made a policy decision to deliver less service in the near term in exchange for the ability to deliver more consistent and predictable services in the future. That choice is reflected in MHCC's financial statements (e.g., assets exceed liabilities, and unrestricted net assets were a significant proportion of net assets). MHCC disclosed the rainy-day fund policy in the notes to its financial statements. Second, and more importantly, financial statements are only useful if the audience knows how to read them. In this case, Contra Costa County failed to understand how the rainy-day fund policy was communicated in the financial statements and how it affected MHCC's finances and its ability to accomplish its mission. Without the ability or desire to interpret the financial statements, the County considered MHCC's actions a breach of contract. Whether a rainy-day fund is, a direct service expense is an important policy question. So is the question of if and how a government should use financial statements for oversight of its non-profit contractors. But to engage these and many other questions, one must first understand how a public organization's financial statements tell its "financial story."

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Identify the fundamental equation of accounting.
- Identify the basic financial statements: balance sheet, income statement, and cash flow statements.
- Recognize key elements in every financial statement, including assets, liabilities, revenues, expenses, change in net assets, change in net position, and change in fund balance.
- Understand what information each statement is designed to convey about an organization.

BUDGETING VS. ACCOUNTING

If you want to know how an organization connects its money to its mission, read its budget. If the budget calls for more spending in one program and less in another, that tells us a lot about that organization's priorities. If one of its programs operates at a loss – but another program's profits subsidize that loss – that is also a clear statement about how that organization carries out its mission. We can think of many other ways an organization's money does or does not connect to its mission. A public organization's budget lays out the many unique ways it makes those connections.

But sometimes, we want an "apples-to-apples" comparison. Sometimes we want to know to what extent an organization's mission-money nexus is the same or different from similar organizations. Sometimes we want to know how efficiently an organization accomplishes its mission compared to

its peers. Sometimes we want to know if an organization is in comparatively good or bad financial health. To answer these types of questions, you need information found only in financial statements. In this chapter, we walk through the basic financial statements and the essential concepts from accounting you need to understand in order to interpret the information presented in those statements.

We may need to compare an organization's finances to the finances of other organizations. If our organization's expenses exceeded revenues, we might consider that to be a failure – unless, of course, we see organizations like it face similar challenges. If it failed to invest in its capital equipment, we might think it was neglecting its service delivery capacity – unless we saw other organizations make that same trade-off. These comparisons demand financial information based on standardized financial information from a broadly shared set of assumptions. As you'll see in Chapters 5 and 6, budgets rarely present information in a standard format.

Fortunately, we can get that information from an organization's financial statements. Financial statements are the main "output" or "deliverable" from the organization's accounting function. **Accounting is the process of recording, classifying, and summarizing economic events in a process that leads to the preparation of financial statements.** Unlike budgets, the numbers reported in financial statements are based on *generally accepted accounting principles (GAAP)* that prescribe when and how an organization should acknowledge economic activity.

GAAP tells us when an organization can say it *owns* an asset or *earned* revenue for delivering a service. These are known as principles of accounting recognition. The key point is that GAAP is a shared set of "rules of the game" for summarizing and reporting an organization's financial activities. If an organization offers GAAP-compliant financial information, we can compare its finances to itself over time and to other organizations.

Standardized rules are not the only difference between budgeting and accounting. Broadly speaking, if budgeting is the story, then accounting is the scorecard. An organization's budget tells us the activities it wants to do, how it plans to pay for those activities, and what it hopes to achieve. Politicians and non-profit board members love to talk about budgets because budgets are full of aspirations. Budgets are how leaders translate their dreams for the organization into a compelling story about what might happen.

Financial statements tell us what happened. Did the organization's revenues exceed its expenses? Did it pay for goods and services it received with cash or *on credit*? Did its investments gain value or lose value? How much revenue would it need to pay for capital improvements and equipment? Accountants often see themselves as the enforcers of accountability. That is why budget-makers and accountants often don't see eye-to-eye.

These two worldviews are different in many other important ways. As mentioned, budgeting is prospective (i.e., about the future), whereas accounting is retrospective (i.e., focused on the past). Budgets are designed primarily for an internal audience – elected officials, board members, department heads, program managers, etc. In contrast, accounting procedures produce financial reports mostly for an external audience, including taxpayers, investors, regulators, and funders. Budgeting focuses on resources that flow in and out of an organization, also known as the *financial*

resources focus. Accounting focuses on the long-term resources the organization controls and its long-term spending commitments, also known as the *economic resources focus*. In preparing a budget, the focus is on revenues and spending. In accounting, the focus is on assets and any claims against those assets. We present a summary of these perspectives in the table below.

How's Budgeting Different from Accounting?

Characteristic	Budgeting	Accounting
Metaphor	*"The Story"*	*"The Scorecard"*
Viewpoint	*Prospective*	*Retrospective*
Format	*Idiosyncratic/Customized*	*Standardized*
Audience	*Internal*	*External*
Focus of Analysis	*Inputs/Outcomes*	*Solvency/Financial Health*
Organizing Equation	*Planned Revenues = Planned Spending*	*Assets = Liabilities + Net Assets*
Measurement Focus	*Financial Resources*	*Economic Resources*
Cost Measurement	*Market Price*	*Historical Cost*

WHO MAKES ACCOUNTING STANDARDS?

The Financial Accounting Standards Board (FASB) produces GAAP for publicly traded companies and non-profits. The Governmental Accounting Standards Board (GASB) produces GAAP for state and local governments. Both the FASB and the GASB are governed by the Financial Accounting Federation (FAF), a non-profit organization headquartered in Norwalk, CT, just outside of New York City. Both Boards are comprised of experts from their respective groups of stakeholders: accounting, auditing, "preparers" (entities that prepare financial statements, like companies and governments), and academia. The Securities and Exchange Commission (SEC), the federal government agency that regulates public companies, designates the FASB as the official source of GAAP for public companies. The GASB has not been designated as such. Still, it is the de facto source of GAAP for governments because key stakeholders like municipal bondholders and credit ratings agencies have endorsed its standards. GAAP for federal government entities is produced by the Federal Accounting Standards Advisory Board (FASAB). The FASAB is comprised of accountants and auditors from federal government agencies. Federal government GAAP is still an emerging set of concepts and practices.

THE FUNDAMENTAL EQUATION OF ACCOUNTING

Everything we do in accounting is organized around the *fundamental accounting equation*. That equation is

Assets = Liabilities + Net Assets

An **asset** is anything of value that the organization owns. There are two types of assets: 1) short-term assets, known more generally as *current assets*, and 2) *long-term* or *non-current assets*. A current asset is any asset that the organization will likely sell, use, or convert to cash within a year.

When someone outside the organization owes money, and the organization expects to collect that

money within the year, that obligation is known as a receivable. If it's due within the year, it is classified as a current asset. An organization recognizes an *account receivable* or *A/R* when it delivers a service to a client and that client or customer agrees to pay within the current fiscal year. Non-profits frequently report *donations receivable* or *pledges receivable*. Pledges receivable represent a donor's commitment to give at a future date. The same logic applies to *grants receivable* when foundations or governments commit to giving the organization a grant. Governments recognize an overdue tax payment as *taxes receivable*. *Due from other governmental units* represents payments due to a government from other governmental units.

Organizations will report *inventory* or *supplies* if they expect to use these resources as they carry out routine operations. These are also current assets.

Most public organizations own buildings, vehicles, equipment, and other assets they use to deliver their services. These are *long-term assets*, as the organization expects to use them over multiple years (frequently referred to as *useful life*). Organizations are not likely to sell these assets, as doing so would diminish their capacity to deliver services. State and local governments build and maintain roads, bridges, sewer systems, and other *infrastructure assets*. These are among the most expensive and essential long-term assets in the public sector.

By contrast, a *liability* is anything the organization owes to others. To put it in more favorable terms, liabilities are how an organization acquires its assets. Here the short-term (or current) vs. long-term distinction also applies. *Current liabilities* are liabilities that the organization expects to pay within the next fiscal year. The most common are *accounts payable* for goods or services the organization has received but not yet paid for and *wages payable* for services delivered by employees but not yet paid for.

Long-term liabilities are money the organization will pay at some point beyond the current fiscal year. When an organization borrows money and agrees to pay it back over several years, it recognizes a *loan payable* or *bonds payable*. Many public sector employees earn a *pension* while they work for the government, and they expect to collect that pension once they retire. If the government has not set aside enough money to cover those future pension payments, it must report a *pension liability* (sometimes referenced as net pension liability).

What's left is called *net assets*. Technically speaking, net assets represent the difference between assets and liabilities. For private sector entities, this difference is known as the *owner's equity*. Public organizations do not have "owners." Instead, they have *stakeholders,* or anyone interested, financial or otherwise, in how well the organization achieves its mission. For governments, taxpayers are a rough analog to owners. But unlike shareholders, taxpayers do not have a legal claim to the government's assets. Their priorities also differ. Taxpayers want to see their governments deliver the services.

Similarly, donors expect contributions to be used to provide services. They do not expect to get their money back if the organization fails. However, they care about the organization's financial position and frequently focus on whether its operations are sustainable and will continue serving the public for generations to come. For these reasons, net assets are an important part of government and non-profit finances, but they do not have quite the same meaning as owners' equity for a for-profit entity.

That said, irrespective of sector, we should think of net assets as an indicator of the organization's financial strength. If its net assets are growing, that suggests its assets are growing faster than its liabilities, and in turn, so is its capacity to deliver services. If its net assets are shrinking, its service-delivery capacity is also shrinking.

We also have to think about the restrictions on net assets. The new accounting rules require non-profits to report net assets "*without donor restrictions*" and net assets "*with donor restrictions*." Prior to FASB Accounting Standards Update 2016-14, net assets reported as *unrestricted* are now reported as net assets without donor restrictions. Net assets reported as *temporarily restricted* (i.e., net assets with time or use restrictions) or *permanently restricted* (i.e., net assets with restrictions that do not expire) are now reported as net assets with donor restrictions. While ASU 2016-14 is a significant change in how non-profits present financial information in their audited financial statements, how they account for these resources in day-to-day operations remains unchanged. Put differently, changes in GAAP do not alter or amend donor intent. Non-profits will need to continue to track gifts – but report in the financial statements in aggregated categories.

Governments use separate classification schemes, but these are a bit more detailed. We describe that scheme later in this chapter.

OWNERS = EQUITY HOLDERS

In for-profit organizations, the fundamental equation is ***Assets = Liabilities + Owners' Equity***. Conceptually, every shareholder has a claim to assets that do not have an offsetting liability. Put differently, shareholders have a claim to all assets not otherwise promised to creditors or suppliers. When you buy a for-profit company's stock (or "shares"), you are, in effect, purchasing a portion of that company's owner's equity. That's why stocks are also known as equities. If a company's assets grow faster than its liabilities, its equity will become more valuable, and the price of its stock will increase, meaning investors who hold that stock make money. If, for example, you had invested in Apple stocks before the first iPod came to market in 2001, as of June 30, 2023, your portfolio's value would have increased by 58,679 percent (from $0.33 per share to $193.97 per share). The price of Apple shares reflects growth in revenues and, correspondingly, growth in assets.

THE BASIC FINANCIAL STATEMENTS

Organizations that follow GAAP produce three *basic financial statements*:

1. A **Balance Sheet** summarizes the organization's assets, liabilities, and net assets at the end of the fiscal period (e.g., as of December 31, 20XX).
2. An **Income Statement** presents a summary of the organization's revenues, expenses, and changes in net assets for the fiscal year (e.g., for the year ending December 31, 20XX).
3. A **Cash Flow Statement** shows how the organization receives and uses cash to carry out its mission (e.g., for the year ending December 31, 20XX).

In the discussion that follows, you will see more detail about each statement and how the information it contains can inform key management and policy decisions.

When considering an organization's financial statements, keep one central point in mind: **Net assets are the focal point.** Regardless of the organization's structure or mission or changes in assets, liabilities, revenues, expenses, and cash flows will affect net assets. While the content of each financial statement differs, the focus is on net assets.

Additionally, each statement's presentation style and terminology vary depending on the sector. The table below summarizes these differences.

Statement	What For-Profits Call It	What Non-Profits Call it	What Governments Call It		
			Government-Wide Statements	**Governmental Fund Financial Statements**	**Proprietary Fund Financial Statements**
Balance Sheet	Balance Sheet or Statement of Financial Position	Statement of Financial Position	Statement of Net Position	Balance Sheet	Statement of Net Position
Income Statement	Income Statement, Profit & Loss (P&L) Statement, or Operating Statement	Statement of Activities	Statement of Activities	Statement of Revenues, Expenditures, and Changes in Fund Balances	Statement of Revenues, Expenses, and Changes in Net Position
Cash Flow Statement	Cash Flow Statement or Statement of Cash Flows	Statement of Cash Flows	N/A	N/A	Statement of Cash Flows

Many of the labeling differences are intended to contrast the mission orientation of non-profits and governments with the profit orientation of for-profits. We see this most clearly in the income statement. For-profit organizations often refer to the income statement as the "profit/loss statement," given that its purpose is to distinguish its profitable products and services from its non-profitable products and services. For governments and non-profits, the focus is on "activities." The question here is not whether the organization's activities are profitable but how those activities advance its mission. **To be sustainable, every organization must generate more income than it incurs in expenses.** That said, profitability is not a primary objective for public sector organizations, as it is in the private sector.

You will also note several differences in what governments call these statements. We have already discussed how financial statements illuminate operational accountability or how efficiently and effectively an organization uses financial resources to advance its mission. Taxpayers want to know that their government delivers services efficiently and effectively. To that end, state and local governments prepare "government-wide" financial statements. These statements present the government's overall financial position. These statements offer some insights into the government's ability to continue to deliver services in the future. With a few modifications, these government-wide statements are conceptually like the basic financial statements for a non-profit or for-profit.

The government-wide balance sheet is called the *Statement of Net Position*, and the government-wide income statement is called the *Statement of Activities*. By referring to the income statement as the Statement of Activities, standard setters have sent a clear message: governments exist not to generate income but to produce activities. This also explains why there is no government-wide cash flow statement. Information about how a government generates and uses cash does not necessarily help us understand if it is achieving its mission.

But with governments, operational accountability is only part of the story. Taxpayers also want to know if their government did what they told it to do. They want to know if services were delivered with revenues collected. That's *fiscal accountability*.

When we think of fiscal accountability in government, we usually think of the budget. **A government's budget is not just a plan – it is the law.** Most governments' constitutions or charters require them to lay out their planned revenues and spending in a special law called an *appropriations ordinance*. They must pass legislation that makes their budget intentions clear. If they spend more than their budget allows or if monies are spent in ways not specified in their budget ordinance, they are breaking the law.

Budgets are enshrined in law because they are one of our most effective tools to ensure inter-period equity. *Inter-period equity* is the idea that if a government presents and approves a balanced budget, it is living within its means and not passing costs onto future generations.

Fiscal accountability and inter-period equity are so important that they are built not just into a government's budget but also its financial statements. For instance, imagine a school district levies a property tax to pay for school buildings. Taxpayers want to see how much revenue that tax generated, how much money the school district borrowed for capital improvements, how much of that revenue is being used to repay those borrowed funds, and so on. They want fiscal accountability on that special tax. To assess this, taxpayers need to see those revenues, expenditures, assets, and liabilities presented separately from all other operations. To do that, the school district must present those finances in a stand-alone *special revenue fund*.

A *fund* is a stand-alone, self-balancing set of accounts with a specific purpose. The *General Fund* has every government account for services paid for through general revenue sources. It is where local governments account for police, fire, public health, and other essential services paid for using locally adopted property and sales taxes. It is where state governments account for funding for education (K-12, public universities, and community colleges), public health, public safety, and other essential services paid for using state-wide income and sales tax revenues. For most governments, the General Fund is the largest and most carefully watched. According to GAAP, a government's General Fund, special revenue funds, *debt service funds*, *capital projects funds,* and *permanent funds* are collectively called *governmental funds.* The governmental funds account for the government's core operations and services.

Like budgets, governmental funds focus on near-term revenues and spending (also known as current financial measurement focus). For that reason, the information you see in governmental funds statements is prepared using a different set of accounting principles. Those principles are known as *modified accrual accounting* (or "fund accounting"). Modified accrual basis of accounting measures the current financial resources available. To that end, revenues are recognized when they are both *measurable* (i.e., revenues can reasonably be estimated) and *available* (i.e., revenues are available within 60 days). Expenditures are recognized when the costs have been incurred to acquire goods or services in the current period.

Funds are so important to governments that governments are required to present a separate set of fund financial statements prepared using the modified accrual basis of accounting. The balance sheet

in the governmental funds is called the *Balance Sheet*, and the income statement is called the *Statement of Revenues, Expenditures, and Changes in Fund Balance*.

Governments also deliver goods and services whose operations are similar to what we would find in the private sector. Examples include water and electric utilities, golf courses, swimming pools, and waste disposal facilities, to name a few. These are known as *business-type* or *proprietary activities.* In concept, business-type activities should cover their expenses with the revenue they generate through charges for services. Many governments operate business-type activities because they are profitable and can subsidize other services that cannot pay for themselves. Since business-type activities pay for themselves, we account for them on an *accrual basis* and prepare a separate set of fund statements referred to as *proprietary fund statements.* Accrual basis of accounting reports on a transaction when it has an economic impact, regardless of whether it spends or receives cash. Governments reporting business-type activities will prepare a *Statement of Net Position*, *Statement of Revenues, Expenses, and Changes in Net Position*, and a *Statement of Cash Flows* in the proprietary fund statements.

WHAT IS AN AUDIT REPORT?

You will find an audit report at the beginning of every set of financial statements. The report, formatted as a letter prepared by an external financial auditor, is presented to the organization's board and management and incorporated in the audited financial statements. The auditor performs a series of tests to assess the strength of internal controls (i.e., rules and procedures adopted by an organization to prevent fraud and abuse) and reviews a representative sample of transactions. Their work is designed to answer a simple question: Are the organization's financial statements a fair presentation of its actual financial position? Usually, the audit report expresses an unqualified opinion, meaning the auditor believes the financial statements are a fair presentation of the organization's financial position, operations, and cash flows. An unqualified audit report will contain language to the effect of "…these financial statements present, fairly, and in all material respects, this organization's financial position." If the auditor has reason to believe the financial statements do not present that position fairly, they will issue a qualified opinion or, in rare cases, an adverse opinion or disclaimer of opinion.

BASIC FINANCIAL STATEMENTS – NON-PROFIT ORGANIZATIONS

The basic financial statements of non-profit organizations include the *Statement of Financial Position*, *Statement of Activities, Statement of Cash Flows*, and *Statement of Functional Expenses*. Below is a quick review of each statement.

THE STATEMENT OF FINANCIAL POSITION

The *Statement of Financial Position*, the non-profit's balance sheet, is designed to answer a simple question: What is this organization's *financial position*? Financial position has both short-term and long-term components. If current assets exceed current liabilities, then the organization's short-term financial position is favorable. If long-term (i.e., non-current) assets exceed long-term liabilities, the organization is in a favorable long-term financial position. As you will see in the discussion that follows, an organization could be in a favorable long-term financial position but have a weak short-term financial position, and vice versa.

For that reason, a point of emphasis for the balance sheet is the relationship between the

organization's assets and liabilities. An organization's net position improves if its assets grow faster than its liabilities. If an organization's assets decrease or liabilities increase, its net position will deteriorate. We are always mindful of why an organization's net position has declined over time. Is that because the organization drew down on its reserves during a recession, or do changes reflect a loss in value in the non-profit's investments? The balance sheet offers a lot of this sort of detail. It also helps organizations formulate strategies to address the issues at hand. If the organization had to draw down on its reserves because of a deficit, it would need to budget for a surplus to replenish reserves. If the organization reported investment losses because of changes in the financial markets, it might opt to do nothing. Doing nothing is a strategy. We've seen the markets recover following a recession, including the Great Recession and the COVID-19 recession.

We provide a review of financial health measures, also known as *financial statement ratios*, that can help you answer some of these questions. Below are some questions you should ask when looking at an organization's balance sheet:

1. Do its total assets exceed its total liabilities? If they do, that is an indicator that the organization's long-term financial position is favorable.
2. Do its current assets exceed its current liabilities? If they do, that is an indicator that the organization's strong short-term financial position, sometimes referred to as *working capital*, is favorable.
3. Of total assets, what proportion are current assets? What proportion are fixed assets (i.e., buildings and equipment)? What proportion are restricted investments? Buildings and equipment add to operating costs (i.e., maintenance and operating costs). Investments, including restricted (or endowment) investments, are a real source of income, and unrestricted investments may be used to support the organization's operations.
4. Of current assets, what proportion are receivables? What proportion of receivables is due in 12 months or less? What proportion of receivables due is from a single donor or grantor? The concentration of receivables with an individual donor is a source of financial uncertainty.
5. What proportion of assets is in the form of cash and cash equivalents? What proportion of current assets is in the form of cash and cash equivalents? How much cash does the organization have relative to its current liabilities? We often hear the phrase **cash is king**. Cash is a liquid asset that allows the organization to meet its obligations as they come due and provides it with the opportunity to invest in new opportunities or immediately respond to a crisis. At the same time, an organization can have too much cash. If it has more cash than it needs to cover its day-to-day operations, it could invest some of that idle cash in marketable securities or other safe investments and earn a nominal return.
6. What proportion of net assets is without donor restrictions? What proportion of net assets is with donor restrictions? Net assets without donor restrictions can be used to cover short-term spending needs, while net assets with donor restrictions cannot, as doing so would violate donor intent.
7. Does the organization have non-current liabilities? How might these affect the organization's current assets in the future? Long-term liabilities like loans, bonds, legal settlements, and pension liabilities increase demand for cash.

It is essential to keep in mind that the **balance sheet is a *snapshot* in time**. When an organization's accounting staff prepares the balance sheet, they present balances in every account on a particular day, usually the last day of the fiscal year. If an organization has a dynamic balance sheet, its financial position could look quite different from one week to the next or one month to the next based on activities in key balance sheet accounts (e.g., cash, accounts receivable, and investments).

Let's look at an example. The *Statement of Financial Position* for Treehouse for the year ending June 30, 2022, is below. The financial statements include consolidated accounts of Treehouse and 2100 LLC (i.e., Treehouse's interest in the 2100 Building) in FY 2022. Treehouse did not include FY 2021 information in its financial statements at the end of FY 2022. That information is presented here for comparison purposes only.

Treehouse

Consolidated Statement of Financial Position

ASSETS	FY 2022	FY 2021
CURRENT ASSETS		
Cash and cash equivalents	$ 4,430,208	$ 5,552,763
Investments	3,162,683	4,144,242
Current pledges receivable, net	970,433	35,000
Contributions receivable (rent), net	195,182	582,099
Contracts receivable	3,528,538	1,141,268
Inventories	315,985	393,462
Unemployment trust deposits	128,572	302,309
Prepaid expenses	364,127	46,213
Total Current Assets	**13,095,728**	**12,197,356**
LONG-TERM ASSETS		
Long-term portion of pledges receivable, net	355,448	1,308,470
Property and equipment, net	1,228,420	1,227,762
Interest in 2100 Building	7,097,000	
Endowment investments	5,189,663	6,373,414
Total Long-Term Assets	**13,870,531**	**8,909,646**
Total Assets	**26,966,259**	**21,107,002**
CURRENT LIABILITIES		
Accounts payable	$ 143,584	$ 286,030
Other Liabilities	266,444	-
Accrued salaries and related costs	829,883	716,656
Total Current Liabilities	**1,239,911**	**1,002,686**
NET ASSETS		
Without donor restrictions	$ 19,743,171	$ 12,564,684
With donor restrictions	5,983,177	7,539,632
Total Net Assets	**25,726,348**	**20,104,316**
Total Liabilities and Net Assets	**26,966,259**	**21,107,002**

Download Treehouse Financials: https://bit.ly/3OTmpO7

Every balance sheet will begin with a summary of assets first. Assets are listed in *reducing order of liquidity*. What that means is that the most liquid asset appears first, and the least liquid assets appear near the bottom. We can convert an asset to cash by selling it or, in the case of receivables, collecting it. Cash is, of course, the most liquid asset. That is why it is listed first. Cash equivalents (including *commercial paper* and *marketable securities* like *money market mutual funds* and *overnight*

repurchase agreements or "Repos") are safe short-term investments that can be converted to cash immediately at low or no cost. Receivables will convert into cash as clients and donors make payments. Current assets that we do not expect to convert to cash quickly are listed below cash and receivables. Restricted assets are not considered liquid and are reported below the least liquid current asset (e.g., inventory or pre-paid expenses) or are not reported as current assets (e.g., endowment investments).

Treehouse reports the most typical current assets:

- *Investments* include holdings of stocks, bonds, and other conventional financial instruments, including investments in mutual funds. Note that investments are reported separately from Endowment Investments (non-current), as the latter is subject to internal (board-designated) and external (donor-imposed) restrictions. Note that investments are reported separately from cash equivalents, as they are bought and sold less frequently. This, however, should not be confused with liquidity. A vast majority of financial investments are liquid. However, unlike cash equivalents, investments do not mature every 30 days or every three months; as a result, they need not be actively traded.
- *Receivables* refer to money owed to the organization. When customers pay money owed to the organization, that asset converts to cash. Treehouse reports net receivables. This means it has subtracted from that receivables figure the portion of those receivables it has determined it cannot collect. Those removals are known as *an allowance for uncollectible* or *bad debt expenses.* The nonprofit reports pledges, rent, and contracts receivable separately. Pledges receivable represent a donor's commitment to give at a future date. Rent receivable represents rent due from tenants in their building. Rent receivable is reported separately from contracts receivable to capture differences in the types of services provided.
- *Inventory* includes goods that the organization intends to sell or give away as part of delivering its services. Much of Treehouse's inventory is in "The Treehouse Store," a thrift store where children can pick up clothing and personal items for free. Many organizations (Treehouse not included) report a separate category for *supplies*. These are goods and materials, usually *commodities*, that the organization intends to use while delivering its services. Unlike marketable securities and investments, there may not be a robust market for supplies and inventory, so they are among the least liquid current assets.
- *Pre-paid expenses* are incurred when an organization opts to pay in advance for services (e.g., insurance, memberships, subscriptions) it will use later. If the organization cancels or renegotiates a pre-paid expense, a refund will be processed for the unused pre-paid amount. This is rare and is subject to contract restrictions.

Treehouse also reports the most common long-term assets. These are listed in decreasing order of liquidity:

- *Long-term receivables* are monies owed to the organization to be received over multiple financial periods. This is especially true for grants, contracts, and pledges that are not in the current period. These long-term receivables are also reported as net of allowance for uncollectable or bad debt expenses. Long-term receivables must also be discounted to present value using the prevailing market interest rate. Recall that present value is the amount of

money a future investment is worth today. Reporting long-term receivables in present value terms recognizes the foregone interest.

- Fixed assets are the least liquid, as the organization's ability to convert these assets into cash will incur costs and take time. *Property and equipment* are reported *book value* – that is, *historical cost* or purchase price, net of *depreciation*. Depreciation is the loss in value of an asset due to wear and tear. Effective December 2021, Treehouse became co-owner of its building when a portion of the property was donated to the organization. The Statement of Financial Position reports the fair market value of Treehouse's share of the building at the time of the donation. Going forward, the value of the organization's interest will be reported net of depreciation.

BOOK VALUE VS. MARKET VALUE

Accountants usually report assets at *historical cost* or the cost the organization paid to acquire them. For instance, if an organization purchased a building for $500,000 10 years ago, it would report a book value equal to the historical cost net of depreciation. Meanwhile, an *appraiser* might estimate that a buyer would be willing to pay $1,000,000 for that building today. This is the building's estimated *market value*. Accountants prefer historical costs. In fact, that preference is so strong that it is called the *historical cost rule* of accounting. Until that building is sold for $1,000,000, that figure is just a guess that is too unreliable as a basis for financial reporting.

- *Endowment Investments* represent donor-restricted funds. For that reason, endowment investments are frequently listed as non-current assets. Note that investments remain liquid – the classification as a non-current asset reflects restrictions on use. Investment earnings could be invested in the programs or services if donor restrictions do not apply. Treehouse reports endowment investments separately from its other investments and cash holdings. Not all non-profits will report investments this way. That said, they must disclose the different types of endowment funds (or donor-restricted net assets) in the notes to the financial statements.
- *Other Investments*. Many investments are not liquid because their owner is not allowed to sell them. For example, venture capital funds, hedge funds, and private equity funds mandate lock-in periods. Investors trade off liquidity in these funds but expect higher investment returns. Some investments are less liquid because there are fewer potential buyers. Commercial real estate, for instance, can take some time to sell because there are fewer potential investors interested in those types of properties than in residential real estate. All these investments are reported as "other" long-term assets.

FAIR VALUE VS. HISTORICAL COST

Investments are a notable exception to the historical cost rule. Most investments trade on an exchange like the New York Stock Exchange. The prices quoted in those exchanges are a reasonable estimate of the value of a stock or bond. Since we can readily observe that the fair market value or the value of the investment can be objectively obtained, we replace the historical cost with a fair value estimate. Assuming a non-profit purchased 1,000 shares of Apple stock in 2001 for $0.33 per share, the value of that portfolio, as of June 30, 2023, would have been $193,970. We adjust our books on an annual basis to recognize the gains or losses in the value of our investments. In this case, we would report the change in the investment value as the price of Apple stock increased by $55.86 from $138.11 on July 1, 2022, to $193.97 on June 30, 2023. Despite the considerable gain in the value, accountants are comfortable relaxing the historical cost rule because we objectively measured the value of the Apple stock.

In every balance sheet, liabilities are listed in *increasing order of maturity*. Maturity refers to the moment in time when payment is due. Said differently, liabilities are listed based on how quickly the organization will need to pay them. Treehouse's balance sheet includes the two most common current liabilities: accounts payable and accrued salaries and related costs (i.e., wages payable). These are liabilities that will come due within the fiscal year. Like many non-profits, Treehouse does not report any long-term liabilities like a mortgage or a loan. If it had, it would list the proportion due in the next twelve months under current liabilities and the proportion due after that under non-current liabilities.

At a glance, three key features of Treehouse's balance sheet stand out. First, its current assets far exceed the non-profit's current liabilities. Its near-term financial position is robust, and the non-profit has more than enough cash to cover its obligations as they come due.

Every balance sheet will present a summary of the organization's net position (equity, net assets, net position, or fund balance). In the case of Treehouse, a non-profit, its net position is reported in one of two categories: net assets "*without donor restrictions*" or net assets "*with donor restrictions*." Net assets with restrictions include donor-restricted endowment funds (previously listed as permanently restricted) and contributions receivable that are restricted over time and/or use (previously listed as temporarily restricted). Board-designated quasi-endowment funds and accumulated profits are reported under net assets "without donor restrictions."

The balance sheet shows Treehouse is in a strong financial position, has the right balance across its current and long-term assets, and does not have any long-term liabilities. It also has greater autonomy over its financial resources, as 76 percent of its net assets are not subject to donor restrictions.

NOTES TO THE FINANCIAL STATEMENTS

GAAP imposes uniformity on how public organizations recognize and report their financial activity. But at the same time, all public organizations are a bit different. They have different missions, financial policies, tolerances for financial risk, and so forth. Moreover, large parts of GAAP afford organizations a lot of discretion on how and when to recognize certain types of transactions. For these reasons, numbers in the basic financial statements do not always tell the complete financial story about the organization in question. **That is why it is essential to read the "Notes to the Financial Statements."** The notes are narrative explanations at the end of the financial statements. They outline the organization's key accounting assumptions, share its key financial policies, and explain any unique transactions or other financial activity.

STATEMENT OF ACTIVITIES

The *Statement of Activities*, the non-profit's income statement, is designed to tell us if an organization's programs and services cover its costs. In other words, is this organization *profitable*?

Every income statement will begin with a summary of *revenues* and a report of *expenses*, either by program or line time. In GAAP, revenue is what the organization earns for delivering services or selling goods. Expenses are the cost of doing business. Whenever possible, think of expenses in terms of the revenues they help to generate. For non-profit organizations, this relationship is sometimes clear and sometimes not. For example, imagine that a non-profit conservation organization operates guided backpacking trips. Participants pay a small fee to participate in those trips. To run those trips, the organization will incur expenses like wages paid to the trip guides, supplies, costs related to state permits, and so forth. These are expenses incurred while producing backpacking tour revenue. Here the relationship between revenues and expenses is clear.

This same organization might sell coffee mugs, water bottles, and other merchandise and then use those revenues to support its conservation mission. The expenses to produce those mugs are known as the *cost of goods sold*. Here again, the revenue-expense relationship is clear. When that link is clear, we can determine if a program/service/product is *profitable*. That is, does the revenue it generates exceed the expenses it uses up?

In for-profit organizations, profitability and accountability are virtually synonymous. But for public organizations, profitability has little to do with accountability. For instance, our conservation non-profit might accept donations from individuals in support of its conservation work. Which expenses were necessary to "produce" those revenues? The development director's salary? The administrator's travel expenses to visit a key donor? The expenses from a recent marketing campaign? Here, the revenue-expense link is less clear. Same for in-kind contributions (i.e., donated goods and services) the organization receives in support of its mission. This link is even murkier for governments, where taxpayers pay income, property, and sales taxes. Those taxes have no direct link to the expenses the government incurs to deliver police, fire, parks, public health, and other services.

To put this in the language of accounting, public organizations have a mix of *exchange-like activities*, such as backpacking trips and coffee mugs, and *non-exchange-like* activities, like conservation programs and public safety functions that are just as, if not more, central to their mission as their

exchange-like activities. That is why profitability is one of the many criteria we need to apply when thinking about a public organization's finances.

That said, the main point of emphasis on the income statement is the relationship between revenues and expenses. As mentioned, net assets are a good indication of that relationship. If revenues increase faster than expenses, then net assets increase. If expenses increased faster than revenues, net assets would decrease. The income statement can help illuminate several follow-up questions to understand an organization's revenues-expenses relationship in some detail:

1. How much did net assets increase since last year? How much of that increase was in net assets without donor restrictions? How much was in net assets with donor restrictions? Growth in net assets without donor restrictions indicates that the organization's core programs and services are profitable. An increase in net assets with donor restrictions can mean many other things. It could mean the non-profit received additional donations that had a time or purpose restriction. The non-profit would need to meet those restrictions over multiple years. It could also mean the non-profit's endowment reported a positive return. That return may be reinvested in the endowment or diverted to cover core operational expenses.
2. What portion of revenue is from *earned income* versus *contributed income*? Earned revenue, or revenue generated when the organization sells goods or services, is attractive because managers have direct control of expenses needed to generate that income. Contributions are less predictable and less directly manageable but do not have an immediate offsetting expense – except for fundraising and development costs. That said, the disconnect between donor and beneficiary provides the non-profit with the ability to manage expenses given changes in contributions.
3. What percentage of earned revenue is from the organization's core programs and services? What proportion is from other activities and other lines of business (sometimes known as unrelated business income)? It is common for non-core programs and services to subsidize core programs and services, but is that the right policy for this organization to pursue? Non-profits that generate unrelated business income must pay UBIT – *unrelated business income tax* on profits earned from activities not substantially related to the charitable organization.
4. To what extent does this organization rely on in-kind contributions? Investment income? In-kind contributions will vary by type of organization. Food banks are more likely to report in-kind contributions as a major source of revenue. Treehouse received an in-kind donation of an interest in their building. Professionals in legal, marketing, and accounting service industries frequently provide local non-profits with services for free or at steep discounts. These are reported as in-kind donations.

How much the non-profit reports as investment income largely depends on the size of the investment portfolio. Foundations, for example, will report investment income as the single largest source of revenue. In contrast, for most non-profits, investment income makes up a smaller portion of overall revenues. Still, it often allows the organization to report a surplus at the end of the fiscal year.

To illustrate, let us examine Treehouse's Statement of Activities for the year ending June 30, 2022. The income statement reports revenues by source and by restriction and expenses by function (program,

management, or fundraising). While Treehouse does not report expenses for each program, a detailed list of expenses can be found in the *Statement of Functional Expenses*.

Treehouse
Consolidated Statement of Activities

	FY 2022			FY 2021		
	Without donor restrictions	With donor restrictions	Total	Without donor restrictions	With donor restrictions	Total
OPERATING REVENUE						
Contributions and grants	9,400,113	640,000	**10,040,113**	8,257,401	350,000	**8,607,401**
In-kind contributions	662,156	-	**662,156**	580,307	271,968	**852,275**
Contract revenue	12,659,996	-	**12,659,996**	3,867,313	-	**3,867,313**
SBA PPP Proceeds	-	-	**-**	-	-	**-**
Other Revenue	23,358	-	**23,358**	137,164	-	**137,164**
Net assets released from restrictions	1,270,202	(1,270,202)	**-**	878,350	(878,350)	**-**
Total Revenue	**24,015,825**	**(630,202)**	**23,385,623**	**13,720,535**	**(256,382)**	**13,464,153**
OPERATING EXPENSES						
Program services	19,577,929		**19,577,929**	8,129,972		**8,129,972**
Management and general	1,659,555		**1,659,555**	945,581		**945,581**
Fundraising	2,262,043		**2,262,043**	1,588,136		**1,588,136**
Total Expenses	**23,499,527**	**-**	**23,499,527**	**10,663,689**	**-**	**10,663,689**
CHANGES IN OPERATING NET ASSETS	**516,298**	**(630,202)**	**(113,904)**	**3,056,846**	**(256,382)**	**2,800,464**
NON-OPERATING ACTIVITY						
Investment Income (Loss)	(505,340)	(856,252)	**(1,361,592)**	127,859	1,246,119	**1,373,978**
Donation of interest in building	7,097,000	-	**7,097,000**			
Property Related Revenues	123,011	-	**123,011**			
Property Related Expenses	(122,486)	-	**(122,486)**			
Total Non-Operating Activity	**6,592,185**	**(856,252)**	**5,735,933**	**127,859**	**1,246,119**	**1,373,978**
TOTAL CHANGE IN NET ASSETS	**7,108,483**	**(1,486,454)**	**5,622,029**	**3,184,705**	**989,737**	**4,174,442**
NET ASSETS, beginning of year	**12,634,688**	**7,469,631**	**20,104,316**	**9,379,979**	**6,549,895**	**15,929,874**
NET ASSETS, end of year	**19,743,171**	**5,983,177**	**25,726,345**	**12,564,684**	**7,539,632**	**20,104,316**

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For FY 2022, Treehouse reported $23.4 million in revenues. Of that, $10.04 million was from contributions and grants, $0.7 million was from in-kind contributions, and $12.7 million from contract revenue. Most of Treehouse's income is not subject to donor restrictions (i.e., without donor restrictions). Investment income, classified as non-operating revenues, is reported separately from operating revenues (i.e., grants, contributions, and contract revenue). Investment income would be classified as operating revenue in instances where the non-profit has invested a substantial proportion of its resources to generate income to support core programs or cover overhead costs. That is not the case for Treehouse.

Net assets released from restrictions represent a reclassification of net assets. That reclassification will appear as a reduction in net assets "with donor restrictions" and a corresponding increase in net assets "without donor restrictions." In doing so, the non-profit is reporting it has satisfied the intent of the donation or grant received in the current or prior period. Remember, restrictions only apply to revenues; they do not apply to expenses, hence the need to release assets from restrictions.

In the expense part of the Statement, we see that expenses for program services were $19.6 million – approximately 83 percent of total expenses. Treehouse reports non-operating income separately from operating income, which indicates that income generated from investments and other sources was not derived from core activities. Not surprisingly, Treehouse reported investment losses at the end of FY 2022 ($1.4 million). It also reported the in-kind donation of an interest in the building ($7.1 million) as non-operating activity. In doing so, the organization conveys to stakeholders that it does not view this donation or related activities as part of its core operations.

Change in net assets is a focal point when reviewing the Statement of Activities. In FY 2022, Treehouse reported a positive change in net assets of $5.6 million. Much of this can be attributed to the in-kind donation of interest in a building ($7.1 million). Adjusting for the gift, Treehouse reported a deficit at the end of FY 2022. However, that deficit was primarily driven by investment losses – not the nonprofit's core operations. Judging an organization's performance using data from a single year is often difficult. Five years of data could provide a more compelling narrative of the organization's financial position and operating results. More on this in Chapter 3.

WHAT IS THE OPTIMAL LEVEL OF RESERVES?

Well, as one of us likes to say, *it depends* on a wide variety of factors, including revenue mix and volatility, timing of cash flows, changes in demand for services – particularly in an economic downturn – existing capital investments, and the need for capital improvements, to name a few. **In creating reserves, a clear statement of purpose, size, and strategy to accumulate, expend, and replenish reserves should be discussed and adopted.**

The Non-profit Finance Fund (NFF, see https://nff.org/fundamental/kinds-capital) recommends that non-profits create and accumulate reserves with specific goals in mind. Categories include (a) *working capital reserves* to ensure timely payment of obligations as they come due, (b) *operating reserves* used to absorb unforeseen revenue losses or unexpected extraordinary expenses, (c) *risk and opportunity capital* to support program development and innovation, (d) *change capital* that helps the organization address strategic issues including social justice, changes in government policies, or existential threats to operations (e.g., disruptive technology), (e) *recovery capital* to help recover from damaging financial shortfalls, reduce debt, or fund much-needed repairs to facilities and equipment, (f) *facilities and equipment capital* that finances the purchase of capital equipment or upgrades to existing infrastructure, and (g) *endowments* that generate investment income that can be used to support core programs or replenish reserves. Organizations need not establish each reserve, and one could argue that the categories are fluid. For example, some could consider operating reserves the same as recovery capital. Others are not. For example, working capital reserves allow the organization to cover program costs while payments from funders are pending. Working capital reserves are essential to every organization and are not the same as operating reserves. Every organization needs a working capital reserve, but not all organizations need recovery capital; therefore, the context of operations and environmental factors matter in creating and drawing on reserves.

How do you build and replenish reserves? **Non-profits should budget for reserves.** To ensure they meet that goal, they should include budget reserves as a line item in their operating budget or intentionally budget for a surplus. Capital campaigns would raise funds to fund capital improvements or create endowments. However, doing so could divert donations from operating activities. For that reason, the use of capital campaigns to create reserves should be strategic. Governments adopt similar approaches to build and replenish their "rainy-day" or "budget-stabilization funds." More on this in Chapter 6.

STATEMENT OF CASH FLOWS

The *Statement of Cash Flows* is just as the title suggests. It tells us how an organization receives and uses cash.

It might seem strange to devote an entire financial statement to a specific asset. But cash is not just any asset. **Cash is king!** For small organizations, especially small non-profits, it is possible to run out of cash. If that happens, nothing about that organization's mission, clients, or impact on society will matter. Its employees, vendors, and creditors will not take a compelling mission statement as a form of payment. If the organization is out of cash, it is out of business.

To that end, the Statement of Cash Flows is quite useful if we want to answer a few key questions about how a public organization receives and uses cash:

a. Did the organization's core operations generate more cash than they used? If not, why?
b. Did the organization depend on cash flow from investing or financing activities to support cash flows necessary for basic operations? How predictable are cash flows from investing and financing activities?
c. How much of the organization's cash is the result of transactions it cannot directly control (e.g., receivables)?
d. How much of the organization's cash flow is related to sales of goods and inventory? How predictable are those sales?

From the cash flow statement, we can learn a lot about the specific ways an organization generates and uses cash. The statement breaks cash flows into three categories: operations, investing activities, and financing activities. Euphemistically, we call this "OIF" (pronounced "oy-f"):

1. *Cash Flow from Operations* presents a summary of how the organization receives cash and uses cash for its core activities. Negative cash flow from operations indicates that the organization's basic operations use more cash than they produce. It could mean the organization reported profits because of growth in revenues – but those revenues remain uncollected and are reported as receivables. It could also be the case that the non-profit did not report a profit but reports positive cash flows from operations as a result of collecting outstanding receivables. While our discussion is focused on profitability, keep in mind that without positive cash flows from operations, the organization's finances are not sustainable.
2. *Cash Flow from Investing Activities.* In this case, investing includes investments in financial instruments or fixed assets like property and equipment. For most non-profits, this section is focused on cash earned from investments. If those investments produced more cash than what was spent to acquire them, they provide *positive cash flow*. Purchases of buildings and equipment are a *cash outflow*, and if the organization sells any buildings or equipment, the receipts from those sales also appear here as a cash inflow (though this is rare). In general, we expect positive cash flow from investing activities. It's essential, however, to know the origins of that positive cash flow. If the organization sold a building, that might produce positive cash flow, but at the expense of its ability to deliver services in the future. It might see negative cash flow from investing activities if, for instance, it moves idle cash into short-term investments.
3. *Cash Flow from Financing Activities*. Financing activities capture any cash the organization borrows to finance its operations. Most of the activity in this section has to do with borrowed money. For-profit entities use this section of the cash flow statement to show how issuing stock produces a cash inflow. For non-profits and governments, the cash inflow from issuing

bonds or taking out a loan will appear here. For non-profits with an *endowment* or other *permanently restricted net assets* that produce unrestricted investment income, that cash flow will also appear here.

Like with the balance sheet and income statement, net assets are a key part of most public organizations' cash flow statements, especially cash flows from operating activities. It might seem strange that net assets are the point of departure for a statement about cash, but it makes sense if we are willing to make a few assumptions.

Recall that the most common way for net assets to increase is for revenues to exceed expenses. To understand the cash flow statement, take this idea a step further. Assume that a public organization's total cash will increase during a fiscal period if the cash inflows from its main operating revenues exceed the cash it pays out to cover its main operating expenses. The "cash flow from operations" part of the cash flow statement is based on precisely this idea. It starts with the assumption that an organization's change in net assets is a good indicator of its cash flows from operations.

Treehouse
Consolidated Statement of Cash Flows
Year Ended June 30, 2022

CASH FLOWS FROM OPERATING ACTIVITIES		
Change in net assets	$	5,622,029
Adjustments to reconcile change in net assets to net cash flows from operating activities		
Depreciation		286,275
Donated investments		(336,936)
Net realized and unrealized losses (gains) on investments		1,568,107
Changes in allowance and discounts on receivables		(24,422)
Donation of interest in building		(7,097,000)
Changes in operating assets and liabilities		
Pledges receivable		42,101
Contribution receivable for rent		386,917
Contracts & Other receivable		(2,387,270)
Inventories		77,477
Deposits held in trust		173,737
Prepaid expenses		(317,914)
Accounts payable		123,999
Accrued salaries and related costs		113,229
Net cash used in operating activities		(1,769,671)
CASH FLOWS USED IN INVESTING ACTIVITIES		
Purchase of investments		(195,512)
Proceeds from sale of investments		1,129,561
Purchase of furniture and equipment		(286,933)
Net cash from investing activities		647,116
NET CHANGE IN CASH AND CASH EQUIVALENTS		(1,122,555)
CASH AND CASH EQUIVALENTS, beginning of year		5,552,763
CASH AND CASH EQUIVALENTS, end of year	$	4,430,208

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Most sizable public organizations follow this concept and report their cash flows from operations using the *indirect method*. This method starts with the Change in Net Assets, assuming that change is the result of cash flows from operations. But of course, not all changes in net assets are the result of positive or negative cash flow. Different transactions and accounting procedures can affect revenues or expenses without affecting cash flow. A typical example is depreciation. Depreciation is when an organization "uses up" some portion of an asset to deliver services. The portion of that asset's value that is used up is recorded as a depreciation expense. Like all expenses, depreciation reduces net assets. But at the same time, there is no cash flow associated with depreciation. You will not find checks written to an entity called "Depreciation." The same is true for changes in the value of an

organization's investments. Its stocks, bonds, and other investments can increase in value, but unless it sells those investments, that increase in value will not produce any positive cash flow. Depreciation and changes in the value of investments are both examples of *reconciliations*. These are transactions that affect net assets but do not involve a cash flow.

In FY 2022, Treehouse produced its Statement of Cash Flows using the indirect method. Treehouse reported a positive change in net assets or surplus at the end of FY 2022 ($5.6 million). Using the Statement of Cash Flows, we want to understand how core operations contributed to the nonprofit's operating position ($5.6 million) and whether that operating position resulted in higher cash balances. Skip down to the row "*Net cash flows from operating activities,*" and you will see that in FY 2022, Treehouse's operating activities resulted in a net cash outflow of $1.8 million. In other words, while the nonprofit reported a large surplus, that surplus did not result in an increase in cash. In fact, core operations resulted in a $1.77 million decrease in cash balances.

To appreciate these differences, review the reconciliations reported under "*Adjustments to reconcile change in net assets to net cash flows from operating activities.*" Recall that the figures in this part of the statement are reconciliations, so we interpret them inversely. Any activity that decreases net assets is shown here as a positive value because we are "*adding back*" those activities to arrive at Net Cash Flows from Operations. Any activity that would increase net assets is shown as a negative value (or in parentheses) because we are "*backing out*" those activities to arrive at Net Cash Flows from Operations.

Treehouse reported several reconciliations in FY 2022. Treehouse reported $286,275 in depreciation expense. Depreciation expenses decrease net assets. We add back deprecation to the Change in Net Assets to arrive at Net Cash Flows from Operations – i.e., the estimate of the change in cash flows from operating activities.

Treehouse reported an increase in discounts and allowances for uncollectables of $24,422. That increase in discounts and allowances decreases Change in Net Assets. We reconcile this item by backing out the change in allowances.

Treehouse received $336,936 in donated investments and $7.097 million in donated interest in the 2100 building. These transactions increase net assets (or profitability) but do not produce a positive cash flow. We deduct (or back out) contributed property and investments from Change in Net Assets. The same logic applies to realized and unrealized losses (gains) on investments. Treehouse reported $1,568,107 in investment losses at the end of FY 2022. Since these cash flows are restricted, and all cash flows are reported under investments – not cash – we add (or deduct) back that loss (gain) from Change in Net Assets.

Below the reconciliations, you will see "*Change in Operating Assets and Liabilities*." The figures listed here are also reconciliations, this time to reconcile changes in assets and liabilities that do involve cash to Changes in Net Assets. The key here is that we are focused on changes in assets and liabilities as a result of cash flows. So, to make sense of the Change in Operating Assets and Liabilities section, first, think about how typical assets and liabilities interact with cash.

Cash balances are lower if assets other than cash are higher. If, for example, receivables are higher this year compared to the previous year, cash balances will be lower – in other words, the payment

we should have received for a donated pledge or services provided has yet to be received. Consider contracts and other receivables. In FY 2022, contracts receivable was $3,528,538. In FY 2021, contracts receivable was $1,141,268. The increase in receivables implies that payments were pending, so our cash balances are $2,387,270 lower. The same logic applies to prepaid expenses, which increased from $46,213 at the end of FY 2021 to $364,127 at the end of FY 2022. The same logic applies when assets other than cash and investments increase. For example, balances in contributions receivable in FY 2022 were $195,182 – $386,917 lower than they were in FY 2021 ($582,099). That reduction resulted in an increase in cash. The same logic applies to inventories and unemployment trust deposits.

Change in Asset or Liability	Net Change in Cash & Cash Equivalents
Increase in an asset account	*Decrease* in Cash & Cash Equivalents
Decrease in an asset account	*Increase* in Cash & Cash Equivalents
Increase in a liability account	*Increase* in Cash & Cash Equivalents
Decrease in a liability account	*Decrease* in Cash & Cash Equivalents

Cash balances are higher if balances in liability accounts are higher. Given the focus on Net Cash Flows from Operations, we focus here on accounts payable, other liabilities, and accrued salaries and related costs. As we noted earlier, any change in balances of any notes payable or loan payable would be reported in Net Cash Flows from Financing Activities. More on this below.

Consider Accounts payable. In FY 2022, accounts payable were $143,584, nearly half the balance reported at the end of FY 2021 ($286,030). This decrease in payables implies payments were made, as such, cash balances are $142,446 lower. Conversely, balances in other liabilities and accrued salaries and related costs were higher in FY 2022. Delayed payments mean the non-profit holds more cash now, so cash balances are higher ($266,444 and $113,227, respectively).

The *Cash Flows from Investing Activities* and *Cash Flows from Financing Activities* sections are more intuitive. Like before, an increase in an asset account reported under Investing Activities (e.g., Investments or Property and Equipment) results in a decrease in cash and cash equivalents and vice versa. An increase in a liability account reported under Financing Activities (e.g., Loan Payable) results in an increase in cash.

Returning to Treehouse, we see that in FY 2022, it purchased $286,933 in furniture and equipment and $195,512 in investments. The nonprofit reported the sale of investments ($1,129,561). The net effect of investing activities was $647,116 – in other words, investing activities (including the sale of investments) increased the cash position of the nonprofit.

Treehouse did not report any Cash Flows from Financing Activities. It did not report any long-term obligations, did not draw on any line of credit, and did not rely on borrowed funds. This reflects the nonprofit's strong financial position but also the choice of the board to use internal resources to manage its cash position.

We can draw two immediate and important conclusions from Treehouse's Statement of Cash Flows.

First, the non-profit reported a large surplus ($5,622,029). While there were changes in account balances related to the non-profit operating activities, those activities did not generate cash. As a result, net cash flows from operating activities are negative ($1,739,671). The nonprofit relied on proceeds from the sale of investments to improve the organization's cash position. At the end of FY 2022, the nonprofit's cash position had declined from $5,552,763 at the start of the year to $4,430,208 at the end of the year. While the cash position has declined, it's important to contextualize those findings. The nonprofit reported a large surplus because of a significant increase in revenues and the value of donations (investments and interest in building). While the nonprofit does not expect to liquidate the donated space, the contracts and other receivables should be collected in the next 12 months, improving the nonprofit's cash position.

STATEMENT OF FUNCTIONAL EXPENSES

One of the central questions in non-profit financial management is: How well does this organization accomplish its mission? From a financial standpoint, one way to answer this question is to determine how much of the organization's expenses are related to its core, mission-related services. In the language of accounting, this distinction is *program services* vs. *support services* (i.e., *administrative services*). According to paragraph 28 of FASB Statement 117, program services are "activities that result in goods and services being distributed to beneficiaries, customers, or members that fulfill the purposes or mission for which the organization exists." Support services are everything else: fund-raising, communications, management, administrative support, and other activities necessary to deliver program services.

Donors want to support a non-profit's primary goals. They want to know if their contribution improved a child's education, fed the hungry, funded scientific research, or advanced objectives outlined in the organization's mission. They are less interested in funding rent, insurance, professional memberships, administrators' salaries (gasp!), or other support services. To be clear, support services are essential. They're just not sexy. That is why one of the most closely watched numbers in non-profit financial management is the program expense ratio, computed as total program service expenses/total expenses. Many donors look for organizations with comparatively high program expense ratios, and many non-profit leaders work hard to minimize their support service expenses for that same reason.

The program services vs. support services distinction is so important that GAAP calls for a fourth basic statement to illustrate it. This statement is called the *Statement of Functional Expenses*. It shows three basic categories of expenses:

1. **Program**. Many non-profits report their program expenses separately for each of their major mission or programmatic areas.
2. **Management and General** are principally salaries and benefits for administrators, technical support services like accounting and information technology, and reconciliation expenses in areas like depreciation.
3. **Fundraising** includes expenses related to fundraising and special events, identifying and contacting donors, and other expenses associated with soliciting and generating contributions.

Treehouse
Consolidated Statement of Functional Expenses
Year Ended June 30, 2022

	Program Services				Support Services			
	Education Programs	Enrichment Programs: Free Store	Enrichment Programs: Other	Total Program Services	Management and General	Fundraising	Total Support Services	Total
Payroll	$ 4,395,285	$ 314,944	$ 3,256,070	$ 7,966,299	$ 534,943	$ 1,489,412	$ 2,024,355	$ 9,990,654
Payroll taxes and benefits	1,095,975	73,316	689,588	1,858,879	153,356	158,137	311,493	2,170,372
Free Store & Holiday Magic	-	805,346	-	805,346	-	-	-	805,346
Assistance to specific individuals	-	-	5,740,043	5,740,043	-	-	-	5,740,043
Occupancy	-	240,000	167,947	407,947	52,778	5,090	57,868	465,815
Professional services	301	22,191	1,161,957	1,184,449	584,639	276,936	861,575	2,046,024
Transportation	59,528	3,277	41,356	104,161	6,351	1,360	7,711	111,872
Licenses and fees	-	16,886	820,303	837,189	202,811	12,623	215,434	1,052,623
Special events	-	-	-	-	-	109,479	109,479	109,479
Depreciation	-	4,745	230,364	235,109	49,030	2,135	51,165	286,274
Supplies	22,130	8,903	28,496	59,529	2,435	5,639	8,074	67,603
Printing and publications	797	620	19,818	21,235	24,781	37,681	62,462	83,697
Postage and shipping	521	12,335	77,715	90,571	12,080	479	12,559	103,130
Staff training	2,607	2,158	114,428	119,193	14,208	11,186	25,394	144,587
Credit card fees	-	5	8,716	8,721	30	108,775	108,805	117,526
Insurance	-	1,582	76,785	78,367	8,857	8,198	17,055	95,422
All other operating expenses	7,621	6,182	47,088	60,891	13,256	34,913	48,169	109,060
Total operating expenses - 2022	$ 5,584,765	$ 1,512,490	$ 12,480,674	$ 19,577,929	$ 1,659,555	$ 2,262,043	$ 3,921,598	$ 23,499,527

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Let's return to Treehouse and examine its Statement of Functional Expenses. Treehouse reports expenses for each of its main programs in the first three columns from the left.

Education programs are by far the largest spending area. In FY 2022, Education programs were $5.6 million, or 23.7 percent of the organization's total expenses. The previously mentioned Treehouse Free Store program expenses were $1.5 million (6.4 percent of total spending), and all "other" programs were $12.5 million (53.1 percent of total expense).

Total expenses in all program services in 2022 were $19.6 million, or 83.3 percent of total spending. In other words, the *program service ratio* is 83.3 percent. To put it one more way, 83 cents of every dollar Treehouse spends goes directly to fund the organization's core programs.

One appealing feature of the Statement of Functional Expenses is that the expense categories are intuitive. Items like payroll, payroll taxes and benefits, occupancy (i.e., expenses related to maintaining buildings), licenses and fees, and transportation are self-explanatory.

Like many other human services-focused non-profits, most of Treehouse's spending on support services is for fund-raising, and most of its spending on support services overall is for payroll. The same applies to spending on education programs. All these functions are labor-intensive.

BASIC FINANCIAL STATEMENTS – STATE AND LOCAL GOVERNMENTS

The basic financial statements of state and local governments include four sets of financial statements.

- ***Government-wide statements –*** *Statement of Net Position* and *Statement of Activities* that report on the government as a whole and with a long-term focus.
- ***Fund Statements***, including the:
    - ***Governmental fund statements –*** the *Balance Sheet* and *Statement of Revenues, Expenditures, and Changes in Fund Balance* report on activities financed with revenues from taxes, intergovernmental transfers, and other non-exchange or non-market transaction-based revenue sources with a short-term focus.
    - ***Proprietary fund statements –*** the *Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position,* and *Statement of Cash Flows* report on business-type activities of the government that are financed primarily with user charges and fees with a long-term focus.
    - ***Fiduciary fund statements –*** the *Statement of Net Position* and *Statement of Changes in Net Position* that account for funds held by the government in a trustee or agency capacity.

GOVERNMENT-WIDE STATEMENTS

Governments prepare government-wide financial statements that are like the basic financial statements for a non-profit or for-profit entity. **Government-wide statements help users assess the finances of the government in its entirety.** These government-wide statements answer key questions taxpayers ask about their government:

- Has the government's overall financial position improved or deteriorated?
- Were its current-year revenues sufficient to cover the full costs of services?
- How much did the government invest in infrastructure and other capital improvements?
- How much does it depend on user fees and other exchange-like revenues compared to general tax revenues?
- How does its financial position compare to other, similar governments?

To illustrate, let's look at the financial statements for the City of Bothell, WA. The City of Bothell, part of the Seattle metropolitan area, is in King and Snohomish counties. In 2021, its population was just under 48,920.

STATEMENT OF NET POSITION

Let's start with Bothell's government-wide balance sheet, formally known as the *Statement of Net Position*. It shows Bothell's balances for its assets, liabilities, and net position on the final day of its fiscal year (December 31, 2021). This statement includes separate presentations for *governmental activities* and *business-type activities*. Taxes and other non-exchange revenues support governmental activities. Business-type or proprietary activities are supported by *exchange-like revenues* or fees the government charges for goods and services it delivers. For local governments, government-owned

utilities (water, gas, electric, sewer, solid waste), recreational facilities (e.g., convention centers, golf courses, hotels, swimming pools, ice arenas, etc.), and other enterprises are almost always considered business-type activities. For state governments, business-type activities often include state lotteries, unemployment benefit funds, workers' compensation funds, university tuition assistance programs, public hospitals, universities, community colleges, and public authorities supporting housing and economic development, to name a few.

On the asset side, we see many of the same assets reported in the Statement of Financial Position for Treehouse. The city of Bothell reports cash and cash equivalents, investments, receivables, restricted assets, and capital assets (non-depreciable and depreciable). Recall assets will be listed in *reducing order of liquidity* – the most liquid assets, cash and cash equivalents, are reported first, and the least liquid assets – capital assets (or infrastructure investments) and net pension assets – are listed last.

Governments will report amounts owed to the city for goods or services (e.g., outstanding payments for licenses, permits, fines, rents, royalties, or charges for services) separately from amounts due from taxes. *Taxes receivables* consist of property taxes and related interests and penalties the city of Bothell was owed at the end of 2021. Keep in mind that governments will report receivables for *special assessments* (a surtax in addition to the regular property tax) separately from taxes receivable as funds are used to fund specific activities (e.g., sidewalks, street lighting, economic development activities, etc.). Governments will also report receivables *due from other governments*. These capture inter-local agreements or cross-jurisdictional sharing arrangements common in areas like transit, emergency management, police and fire response, and public health.

It is important to note that this is the only financial statement that will report the value of the government's investment in infrastructure or capital assets. Capital assets may be reported by type (e.g., land, buildings, leased assets, infrastructure, etc.) or classification (e.g., depreciable versus non-depreciable). Capital assets are reported at historical costs. Depreciable capital assets are reported net of depreciation.

Liabilities are listed in *increasing order of maturity*. Maturity refers to the moment in time when payment is due. The proportion due in the next twelve months is reported under "due within one year." The accounts payable, unearned revenue, long-term liabilities, and other post-employment benefits due within one year are considered current liabilities. The remainder is non-current.

The city reported *unearned revenue*, sometimes referred to as *deferred revenue*. Unearned revenues represent revenues the government has received for services it has yet to provide. If the city fails to provide services, it will need to issue refunds. If the city owed another government based on an inter-local agreement, that obligation would appear here as *due to other governments*.

The city reports long-term liabilities, *other post-employment benefits* (OPEB), and *net pension liability*. Long-term liabilities include a variety of bonds (*general obligation* and *revenue*), as well as loans and leases associated with capital improvements. State and local governments finance most of their infrastructure improvements with long-term loans, bonds, notes, and leases that are paid off over 20 to 30 years. Cities, counties, and school districts rarely cease operations, even when they go bankrupt, so investors are willing to invest in them for long periods. It is quite different for non-profits or for-profits, where the *going concern* question is not always so clear.

Net pension liability represents the net obligation of retirement benefits the government owes its current employees, retirees, and beneficiaries. It represents the difference between the present value of projected retirement benefits and the plan assets, mainly financial investments. A net pension liability is reported if the current value of investments is less than the present value of projected benefits. If the current value of investments is greater than the present value of projected benefits, a *net pension asset* is reported. A majority of governments report pension and OPEB liabilities. OPEB (also known as other-post employment benefits) liabilities represent the net obligation of benefits other than pension benefits (principally healthcare benefits – including medical, dental, vision, hearing, death benefits, life insurance, disability, and long-term care) a government owes its employees and retirees. While governments have consistently funded their pension plans, few have set aside funds to meet their OPEB obligations. This is true for the city of Bothell – which reported $1.5 million in net pension liabilities and more than $6.5 million in OPEB obligations at the end of FY 2021.

Basic Financial Statements — City of Bothell

Statement of Net Position
December 31, 2021

	Primary Government		
	Governmental Activities	Business-Type Activities	Total
ASSETS			
Cash and cash equivalents	$ 43,625,978	$ 3,098,118	$ 46,724,096
Investments	52,673,731	18,962,038	71,635,769
Receivables (net)	14,129,337	2,944,749	17,074,086
Taxes receivable	577,654	-	577,654
Restricted assets:			
Deposit held in trust	277,395		277,395
Investment	-	1,316,369	1,316,369
Capital assets:			
Non-depreciable	190,905,806	5,381,078	196,286,884
Depreciable, net	410,067,171	57,208,806	467,275,977
Net pension asset	40,016,250	2,575,986	42,592,236
Total assets	752,273,321	91,487,144	843,760,466
DEFERRED OUTFLOWS OF RESOURCES			
Deferred outflows - pension	4,183,827	297,567	4,481,394
Deferred outflows - other postemployment benefits (OPEB)	66,836	-	66,836
Total deferred outflows of resources	4,250,663	297,567	4,548,230
LIABILITIES			
Accounts payable	8,598,730	797,056	9,395,786
Unearned revenue	6,687,001	-	6,687,001
Long-term liabilities (see Note 13):			
Due within one year	8,391,210	1,209,592	9,600,803
Due in more than one year	109,404,132	14,040,304	123,444,436
Total other postemployment benefits (OPEB):			
Due within one year	197,584	-	197,584
Due in more than one year	6,391,449	-	6,391,449
Net pension liability - due in more than one year	1,489,772	-	1,489,772
Total liabilities	141,159,878	16,046,952	157,206,831
DEFERRED INFLOWS OF RESOURCES			
Deferred inflows - pension	28,361,837	2,417,444	30,779,281
Deferred inflows - advanced grant	-	12,909	12,909
Total deferred inflows of resources	28,361,837	2,430,353	30,792,190
NET POSITION			
Net investment in capital assets	510,712,545	47,625,783	558,338,328
Restricted for:			
Pension	17,541,429	443,200	17,984,630
Transportation	4,778,189	-	4,778,189
Parks & Recreation	5,872,879	-	5,872,879
Capital projects	20,131,126	-	20,131,126
Street maintenance	4,902,348	-	4,902,348
Drug forfeitures	205,570	-	205,570
Fire impact fees	450,164	-	450,164
Public safety levy	6,113,168	-	6,113,168
Debt service	3,974	1,316,369	1,320,343
Firefighter's Pension	369,116	-	369,116
Cemetery (permanently restricted)	16,321	-	16,321
Other purpose	628,105	-	628,105
Unrestricted	15,277,335	23,922,054	39,199,389
Total net position	**$ 587,002,269**	**$ 73,307,406**	**$ 660,309,675**

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Below total assets and total liabilities are two new categories of *deferrals* – *deferred inflows of resources* and *deferred outflows of resources*. A government records a deferred inflow of resources when it receives resources as part of a non-exchange transaction in advance. Pre-paid property taxes are a good example. Imagine a property owner in Bothell who paid property taxes for 2022 in October of

2021. The City of Bothell might be tempted to call this *deferred revenue* because it received payment in advance for services it will deliver next year. However, that would be incorrect because property taxes are a *non-exchange revenue*. Taxpayers in Bothell do not pay property taxes for specific services at specific times; they pay for a variety of services delivered at various times throughout the year. There is no real exchange. In this case, the city would recognize the taxpayer's payment as an asset but simultaneously recognize a *deferred inflow of resources*. Next year, when the city delivers services funded by property taxes, it will reduce cash and reduce that deferred inflow.

The inverse is true for deferred outflows. Say, for example, that most of the city's employees belong to the public employee retirement system (there are several, including PERS 1, PERS 2/3, PSERS 2, LEOFF 1, LEOFF 2). The pension systems, collectively administered by the State of Washington, send the city a bill for $2.7 million to cover pensions and other costs related to the city's employees. That bill is due on January 20, 2022. If, before the city closes its books on December 31, 2021, the city council signs papers acknowledging its commitment to making that $2.7 million payment shortly after the start of the coming fiscal year, those resources are effectively unavailable for the following year. The City of Bothell might be tempted to classify this under accounts payable because it owes money. But that is not entirely true. A state retirement system is not a service, and even if it were, it would not deliver that service until the next fiscal year. Instead, the city will book this as a deferred outflow of resources and book a corresponding increase in liabilities. By not booking a liability and not spending the cash, the city's balance sheet looks much stronger. At the same time, it has committed resources to the future, which will impact its operations in the coming year. By recognizing a deferred outflow of resources, the city has offered us a clearer picture of how well the resources it collects each year cover its annual spending needs.

With the addition of deferrals, we re-write the fundamental equation for the government-wide financial statements as

Assets + Deferred Outflows = Liabilities + Deferred Inflows + Net Position

In the traditional fundamental equation, we use "net assets" to identify assets minus liabilities. When we add deferrals, the "net assets" label no longer captures everything on the right side of the equation, but "net position" does. Net position and its components are also a uniquely governmental reporting feature. Here, Bothell's net position is similar to other states and local governments.

- *Net Investment in Capital Assets* is the historical cost of capital improvements or infrastructure investments – net of depreciation – and debt associated with the acquisition, construction, or improvement of capital assets. All capital assets are reported in this component of net assets, even if there are legal or other restrictions on how the government uses them for service delivery.
- Governments restrict portions of their net position for many purposes. *Restricted net position* is virtually the same as restricted net assets for a non-profit. According to governmental GAAP, a portion of net position is restricted if: 1) an external body, like bondholders or the state legislature, can enforce that restriction, or 2) the governing body passes a law or other action that imposes that restriction. If there are assets that are restricted, that restriction will be reported in the net position. The city reports a restricted net position for a wide variety of activities, including transportation, parks, and street maintenance. These restrictions are

based on laws adopted by the governing board or contracts with an external third party (e.g., bondholders).

- The government's *unrestricted net position* is akin to a non-profit's unrestricted net assets. These are net assets available for spending in the coming fiscal year. A negative unrestricted net position occurs if liabilities exceed assets. This does not mean the government is on the brink of fiscal disaster. It simply means the government's non-current liabilities, particularly retiree benefit obligations, far exceed its unrestricted non-capital assets. Governments reporting a sizeable unfunded liability are more likely to report a negative unrestricted net position.

WHAT'S A STREET "WORTH"?

When we look at Net Investment in Capital Assets, we are forced to evaluate the "book value" of a capital asset. Recall that most organizations – public and private – record their tangible capital assets at historical cost. That means they record a new asset at whatever it cost to construct or purchase it and then depreciate it over its useful life. Most of the fixed assets non-profits carry on their books – buildings, vehicles, office furniture, etc. – have useful lives of 10-30 years. But how does a government determine the book value of a street? Or a school building? Or a sewer system? Many were built long before governments started preparing modern financial statements, and many of them have useful lives of more than 100 years.

States and localities dealt with precisely this issue when they implemented Governmental Accounting Standards Board (GASB) Statement 34. This statement, euphemistically known as "GASB 34," required governments to report the book value of their capital assets. Prior to GASB 34, governments reported what they spent each year on capital assets as an expense, but they did not include their full book value. In other words, they did not capitalize on their infrastructure assets.

Fortunately, many governments were able to reconstruct historical cost figures by reviewing old invoices, purchase orders, construction plans, and other documents. Public works staff at state and local governments around the country spent thousands of hours researching old records to determine what they spent to build their original streets, bridges, sewer systems, university buildings, and other key pieces of infrastructure. Those assets were then grouped into fixed asset networks, assigned a useful life and a depreciation schedule, and depreciated to the present day. That depreciated figure became the original capitalized infrastructure asset value.

So, for most governments, the figure Net Investment in Capital Assets is the original capitalized value depreciated to a present-day value, plus any investments since implementing GASB 34. A few governments take a different approach allowed under GASB 34, known as the modified method. Here, a government capitalizes its infrastructure assets, but instead of depreciation, it estimates how much it will need to spend each year to maintain those assets in good working condition. If it can demonstrate that it's making those investments, it need not depreciate, and the book value does not change.

Why take the time and effort to do this? Because investors and taxpayers want to know if the government is taking care of its vital infrastructure. If the Net Investment in Capital Assets is stable or increasing, it suggests a government is precisely making those investments.

STATEMENT OF ACTIVITIES

A government's *Statement of Activities* presents much of the same information we see on the income statement for a for-profit or non-profit. It lists a government's revenues and expenses or expenditures and the difference between them. It reports the change in net assets or net position and explains why that change happened. Like an income statement, it tells us where the government's money came from, where it went, and whether its core activities pay for themselves.

That said, the Statement of Activities is also quite different from a traditional income statement. *Expenses* in the upper left are presented first. These are listed by function or program, with the *governmental activities* presented separately from the *business-type activities*. Recall that governmental activities are those supported by taxes and other *non-exchange revenues*. In contrast, business-type activities are supported with *exchange-like revenues*, primarily user charges and fees. Governmental activities and business-type activities together comprise the *primary government*. Next to expenses, you may occasionally see (although not with Bothell) indirect expenses the government has allocated to each activity (more on this in Chapter 5).

Statement of Activities
For the Year Ended December 31, 2021

Functions/program	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions	Net (Expense) Revenues and Changes in Net Position: Governmental Activities	Net (Expense) Revenues and Changes in Net Position: Primary Government Business-Type Activities	Net (Expense) Revenues and Changes in Net Position: Total
Primary government:							
Government activities:							
General government	$ 18,943,497	$ 6,079,031	$ 795,460	$ -	$ (12,069,005)	$ -	$ (12,069,005)
Security of persons and property	26,724,920	6,829,797	2,067,268	-	(17,827,855)	-	(17,827,855)
Physical environment	2,154,053	1,625,408	111,151	-	(417,495)	-	(417,495)
Transportation	50,610,973	752,450	996,532	12,354,275	(36,507,716)	-	(36,507,716)
Economic environment	4,897,604	11,191,305	109,281	-	6,402,981	-	6,402,981
Culture and recreation	2,098,286	287,202	6,080	308,993	(1,496,011)	-	(1,496,011)
Interest	3,933,715	-	-	-	(3,933,715)	-	(3,933,715)
Total governmental activities	**109,363,047**	**26,765,193**	**4,085,772**	**12,663,267**	**(65,848,816)**	**-**	**(65,848,816)**
Business-type activities:							
Water	5,623,205	6,342,408	241	382,712	-	1,102,156	1,102,156
Sewer	7,747,885	8,851,058	198	289,043	-	1,392,414	1,392,414
Storm & surface water	5,733,509	6,908,221	7,324	1,094,538	-	2,276,575	2,276,575
Total business-type activities	**19,104,599**	**22,101,687**	**7,763**	**1,766,293**	**-**	**4,771,144**	**4,771,144**
Total primary government	**128,467,646**	**48,866,880**	**4,093,535**	**14,429,560**	**(65,848,816)**	**4,771,144**	**(61,077,671)**
General Revenues:							
Property taxes					27,025,250	-	27,025,250
Sales taxes					19,298,152	-	19,298,152
Excise taxes					8,623,599	-	8,623,599
Business taxes					7,261,144	-	7,261,144
Interest and investment earnings					108,963	6,428	115,391
Miscellaneous					1,027,883	270,009	1,297,893
Transfers					408,265	(408,265)	-
Total general revenues and transfers					63,753,256	(131,828)	63,621,428
Change in net position					(2,095,559)	4,639,317	2,543,757
Net position - beginning					589,097,828	68,668,090	657,765,918
Net position - ending					**$ 587,002,269**	**$ 73,307,406**	**$ 660,309,675**

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Program revenues include *(a)* charges for services, *(b)* operating grants and contributions, and *(c)* capital grants and contributions. Charges for services include revenues based on exchange or exchange-like transactions that can be directly linked to programs. For example, the city of Bothell reported $6.1 million in charges under General Government. Revenues were from the sale of licenses and permits. The $6.8 million in charges reported under the Security of persons and property include anything from fees for fire protection and emergency medical services to civil penalties, including parking fees and traffic violations. Charges for services will vary by type of government and scope of activities. The city reported $4.1 million in operating grants and contributions and $12.7 million in capital grants and contributions. A significant proportion of the capital grants and contributions were in Transportation. Business-type activities similarly reported operating ($7,763) and capital ($1.8 million) grants and contributions.

Shifting to the right, we see columns with the heading "Net (Expense) Revenue and Changes in Net Position." **The *net cost format* nets program revenues from expenses.** The city reports a net expense of $12,069,005 for the General government. This figure represents the sum charges for services, operating grants and contributions, and capital grants and contributions minus expenses (($6,079,031 + $795,460 + $0) – $18,943,497). This deficit (or net expense) tells us that general government activities do not pay for themselves. Similarly, public safety programs (police, fire, emergency medical services) do not pay for themselves (-$17,827,855). **Governmental activities are not self-sustaining**. Except for the "economic environment," every program reported a net expense (or deficit) – for a total of $65.9 million.

Should the city council be concerned that its core services are hemorrhaging money? Not really. We do not want local government services like public safety, planning, and zoning to pay for themselves because there is no clear link between the users and the beneficiaries of these services. The city exacts fines on people who break the law when they park illegally or speed on city streets, but those fees are designed to deter those behaviors. Perpetrators who pay these fines do not receive a service, and as we saw in Ferguson, MO, and elsewhere, bad things happen when local governments turn fines into a viable revenue source.

But that leaves open an important question. Citizens want to see these essential services provided. How, then, do we help fund public transit or public safety?

To answer that question, skip down to the lower right corner of the statement. Here we see a list of *General Revenues* like property taxes, sales taxes, excise taxes, business taxes, and other revenues. General revenues are not directly connected to a specific activity. The city of Bothell reported $63.8 million in general revenues for FY 2021. Compare that figure to the $65.9 million in net expense for governmental activities – we are left with a decrease in the government's net position for governmental activities of $2.1 million. The city's total revenues (taxes, charges and fees, and grants) were not sufficient to cover its expenses.

Should the city council be concerned with this figure? Well, it depends. We need to understand whether the negative change in net position resulted from a decline in revenues, an increase in expenses, or both. We also need to understand whether the changes resulted from changes in the economic environment, tax policy, or accounting standards. The answer, sometimes, is not as straightforward. As you will see in Chapter 3, more questions than answers will arise from any review of financial statements. That said, **the relationship between expenses, program revenues, and general revenues is one of the most important things to observe in a government's Statement of Activities.**

The expense versus program revenues link is much more straightforward for business-type activities. Recall that business-type activities are designed to pay for themselves through charges and services. For the city of Bothell, Water, Sewer, and Storm Water reported net revenue of $4.8 million at the end of FY 2021. Their operations were not subsidized with tax revenues.

Not all business-type activities are self-supporting, and not all business-type activities consistently report a surplus. For example, public universities and hospitals listed under business type are frequently subsidized with tax revenues. States will report transfers to business-type activities to

finance the operations of its universities and hospitals. The unemployment benefits program is another example of a program that reports sizeable surpluses when unemployment rates are low but reports sizeable deficits when unemployment rates are high, as benefit distributions in a recession will exceed program revenues. So again, it depends!

That said business-type activities present challenging strategic and policy questions. How profitable is too profitable? Moreover, should business-type activities subsidize governmental activities? If a business-type activity like a golf course is not profitable, does it offer enough indirect benefits in areas like economic development and tourism to justify that lack of profitability? With a careful look at the Statement of Activities, you can begin to put numbers to these and other questions.

ARE WE COMPONENTS?

A component unit is a legally separate entity for which the government is financially accountable. The primary government is financially responsible if it can appoint a voting majority to the unit's governing body, if the component unit can impose financial burdens on the primary government, or if the unit is fiscally dependent on the primary government. Special districts like local development authorities, transportation improvement districts, and library districts are typical local government component units. Component units reported by larger governments, including states, include housing authorities, tollway authorities, public insurance corporations, state lotteries, and state universities.

Most component units are small relative to the primary government. But some are pretty large. The Cherokee Nation of Oklahoma (www.cherokee.org), for example, counts among its component units three casinos, a housing development company, a home health services company, a public health insurance company, a waste management company, a large community foundation, a historic preservation society, and an economic development corporation, among others. At the end of FY 2022, total revenues from the primary government were $2.17 billion. Revenues of the various components of the Cherokee Nation were $2.14 billion.

THE FUND STATEMENTS

A fund is a stand-alone, self-balancing set of accounts with a specific purpose. Funds are one of our main tools to assess a government's *fiscal accountability*. Fiscal accountability is the responsibility of governments to justify that their actions in the current period have complied with public decisions concerning the raising and spending of public money (GASB Statement 34). That responsibility is fundamental to financial reporting and why governments prepare separate fund-based financial statements. They include:

a. ***Governmental Fund Statements*** that report on activities financed primarily with revenues from taxes, intergovernmental transfers, and other non-exchange or non-market transaction-based revenue sources. Governments will prepare a *Balance Sheet* and a *Statement of Revenues, Expenditures, and Changes in Fund Balances* for the governmental funds.

b. ***Proprietary Fund Statements***, which report on business-type activities of the government that are financed primarily with user charges and fees. Financial statements include a *Statement of Net Position*, a *Statement of Revenues, Expenses, and Changes in Net Position*, and a *Statement of Cash Flows*.

c. ***Fiduciary Fund Statements*** account for funds held by the government in a trustee or agency

capacity. Governments will prepare a *Statement of Net Position* and a *Statement of Changes in Net Position*.

GOVERNMENTAL FUND STATEMENTS

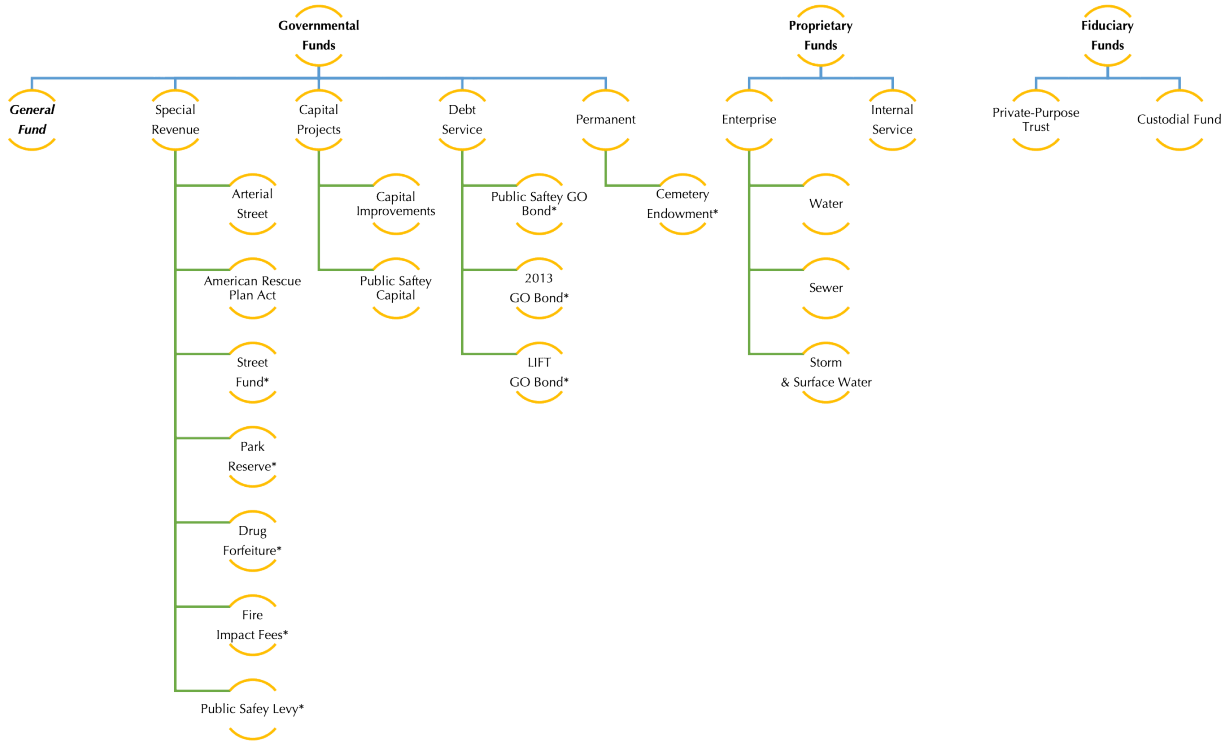
The governmental fund statements are prepared on a different basis of accounting, known as *modified accrual* accounting. Modified accrual accounting is designed to reflect this unique focus on short-term fiscal accountability. To that end, we rewrite the fundamental equation of accounting for the modified accrual context as follows

Assets + Deferred Outflows = Liabilities + Deferred Inflows + Fund Balance

In the governmental fund statements, we care most about fund balance – the difference between assets and liabilities in each fund. **Fund balance is the most closely watched number in all governmental accounting.** Taxpayers seem to understand that if a government is living within its means, then its assets should be greater than its liabilities, and it will report a positive fund balance. Policymakers seem to understand that ending the fiscal year with a positive fund balance means there is a bit of money to spend in the next fiscal year. That's why many fiscal policy and financial strategy discussions often come back to a simple "Goldilocks" question: ***Is our general fund balance too large, too small, or just right?***

It is important to note that the change to reporting on a modified accrual basis does not apply to proprietary or fiduciary fund statements. In fact, proprietary and fiduciary fund statements are prepared using the same accounting basis used to prepare government-wide statements. So why prepare an additional set of financial statements if the same basis of accounting applies? Again, the idea goes back to the responsibility of governments to fulfill their fiscal accountability responsibility. More on this below.

Fund Structure – City of Bothell



**The "Combining Financial Statements" are included in the Required Supplementary Section of the Annual Comprehensive Financial Reports (ACFRs) and provide details on each non-major fund. For the city of Bothell, there were no non-major funds in the Proprietary Fund.*

The governmental fund statements report on a fund basis on activities in the general fund, special revenue funds, capital projects funds, debt service funds, and permanent funds. The city of Bothell reports fourteen separate funds in the governmental fund statements, four in its proprietary fund statements, and two in fiduciary funds. The larger the government or, the more complex its operations are, the more likely it will report a multitude of funds.

Critics of government financial reporting often say that governments have too many funds. That is true. But **government finances are complex**. They are spread across many reporting units and serve a wide variety of mandates. So, while fund statements are cumbersome, they are the best available means to ensure fiscal accountability. Below is a quick tour of the fund statements. We begin with a review of the governmental fund statements.

BALANCE SHEET

GAAP requires governments to prepare a balance sheet that shows the assets, liabilities, and fund balance in every major governmental fund and the combined assets, liabilities, and fund balance in non-major funds.

Bothell's governmental fund Balance Sheet is presented here. It shows three discretely presented funds – the General Fund, two special revenue funds (Arterial Street and American Rescue Plan Act), and two capital projects funds (Capital Improvements and Public Safety Capital). All other funds are reported in aggregate in the "Other Governmental Funds." They include five special revenue funds (Street Fund, Park Reserve, Drug Forfeiture, Fire Impact Fee, and Public Safety Levy), three

debt service funds (Public Safety GO Bond, 2013 GO Bond, and LIFT Bond), and a permanent fund (Cemetery Endowment).

THAT'S HOW WE ROLL

Most governments have dozens, if not hundreds, of individual funds. It's not feasible to report on all of them in the financial statements. To simplify financial reporting, governments draw a distinction between major funds and non-major funds. A fund is classified as a major fund if government officials believe that the fund is particularly important to financial statement users (e.g., the General Fund) or whose total assets plus deferred outflows of resources, liabilities plus deferred inflows of resources, and revenues or expenditures/expenses are at least 10 percent of the relevant fund category (governmental or proprietary) *and* 5 percent of the corresponding total for all governmental and proprietary funds combined. GAAP requires a set of financial statements for each fund. The major funds are reported in the Basic Financial Statements. Non-major funds are reported in an aggregate format in the Basic Financial Statements and on a disaggregated basis in the Combining Statements, included in the Required Supplementary Section of the Annual Comprehensive Financial Reports (ACFRs).

Balance Sheet
Governmental Funds
December 31, 2021

	General	Special Revenue Funds: Arterial Street	Special Revenue Funds: American Rescue Plan Act	Capital Projects Funds: Capital Improvements	Capital Projects Funds: Public Safety Capital	Other Governmental Funds	Total Governmental Funds
ASSETS							
Current cash & cash equivalents	$ 12,863,100	$ 1,797,722	$ 6,410,842	$ 13,245,389	$ -	$ 6,917,951	$ 41,235,005
Investments	5,974,970	3,000,000	-	1,900,000	28,674,581	10,824,179	50,373,731
Receivables (net of allowances)							
Taxes	408,610	-	-	-	-	169,044	577,654
Accounts receivable, net	2,450,344	-	-	102,905	-	-	2,553,250
Due from other governmental units	6,586,014	-	-	4,755,964	-	175,191	11,517,170
Total assets	**28,283,039**	**4,797,722**	**6,410,842**	**20,004,259**	**28,674,581**	**18,086,366**	**106,256,809**
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES							
Liabilities:							
Accounts payable	796,760	-	1,105	1,303,051	3,255,770	100,599	5,457,284
Deposits payable	329,477	-	-	-	-	-	329,477
Due to other governmental units	110,567	-	-	194,732	-	221	305,520
Payroll payable	1,991,265	-	131	-	-	228,198	2,219,595
Unearned revenue	-	-	6,409,606	-	-	-	6,409,606
Total liabilities	3,228,070	-	6,410,842	1,497,782	3,255,770	329,018	14,721,482
Deferred Inflows of Resources							
Unavailable revenue-property tax, service fees & impact fees	797,821	19,533	-	-	-	136,267	953,621
Unavailable revenue-advanced grant							-
Total deferred inflows of resources	797,821	19,533	-	-	-	136,267	953,621
Fund balances:							
Restricted	1,008,256	4,778,189	-	18,506,476	25,418,811	17,553,388	67,265,121
Committed	3,516,750	-	-	-	-	67,692	3,584,442
Assigned	1,711,130	-	-	-	-	-	1,711,130
Unassigned	18,021,012	-	-	-	-	-	18,021,012
Total fund balances	24,257,148	4,778,189	-	18,506,476	25,418,811	17,621,081	90,581,705
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES	**$ 28,283,039**	**$ 4,797,722**	**$ 6,410,842**	**$ 20,004,259**	**$ 28,674,581**	**$ 18,086,366**	**$ 106,256,809**

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Bothell's General Fund has $28.3 million in assets. General fund assets far exceed General Fund liabilities ($3.2 million). The city reports deferred inflows related to pre-paid property taxes, special assessments, and grants. While the focus is the General Fund, a significant proportion of resources are restricted and reported outside the General Fund. For the city of Bothell, the General Fund only accounts for 27 percent of the $106.3 million in assets.

The difference between assets and liabilities (net of deferred inflows and outflows) is Fund Balance. According to GAAP, there are five types of fund balance, each corresponding to the strength of restrictions on how fund balance resources can be spent:

- *Non-spendable* fund balance is, as the name suggests, not available for spending in the next fiscal period. Governments usually record non-spendable fund balances for items like inventory, legal settlements, small trust funds or endowment funds, or other long-term investments where the corpus of the investment must remain intact. Bothell did not report a non-spendable fund balance in any of its funds.
- The *restricted* fund balance, like restricted net assets, can only be spent on purposes prescribed in the government's constitution, enabling legislation, or some action from an external funder. Bothell, like many other local governments, reports restricted fund balance in the General fund ($1.01 million), special revenue fund ($4.8 million), capital projects funds ($43.9 million), and other non-major funds (including cemetery endowment fund $17.6 million) – for a total restricted fund balance of $67.3 million.
- *Committed* fund balance includes amounts that can be used for purposes determined by a governing body's formal action. State and local legislators will occasionally commit fund balances for capital projects or other one-time spending needs or for *rainy-day* funds or other *budget stabilization* funds designed to prevent spending cuts during an economic downturn. The city of Bothell committed $3.5 million in the General Fund and $67,692 in other non-major funds (specifically the Cemetery Endowment Fund). Like most local governments, the City of Bothell does not report a formal *rainy day* In these instances, the unassigned fund balance becomes an important measure of liquidity (or short-term solvency).
- *Assigned* fund balance is restricted by some action other than a governing body commitment or other enforceable restrictions. Usually, this means restrictions that management places on fund balances without the approval of the governing body. The city of Bothell reported $1.7 million in the General Fund as an assigned fund balance. Note 20 in the Notes to the Financial Statements provides additional detail on fund balances. In this instance, the $1.7 million reported in the General Fund is currently assigned to capital projects. Unlike funds reported as committed or restricted, there is greater flexibility in reassigning funds to other uses. Therefore, we consider the assigned fund balance as an "*informal*" rainy day fund that management, not the governing body, maintains.
- The *unassigned* fund balance reports fund balances not subject to any restrictions. At the end of FY 2021, the city of Bothell reported $18 million in unassigned fund balance. Again, the General Fund's unassigned fund balance is one of the most closely watched indicators of a government's overall financial position.

Some readers review the governmental fund balance and ask an intuitive question. *Do the fund balances*

in the governmental funds equal the net assets in the governmental activities we see on the government-wide Statement of Net Position? Fund balance and net assets are the residual left when we subtract liabilities from assets. If that is true, the fund balance should be equal to the net position. Except when we look at the two statements, it is quite evident they are not the same. Why? Again, this goes back to the bases of accounting used to prepare financial statements. The government-wide statements are prepared using the accrual basis of accounting with an economic resource measurement focus. In contrast, governmental fund statements are prepared using the modified accrual basis of accounting with a financial resource measurement focus. Given the *current* financial resources measurement focus, **there are no long-term assets or long-term obligations listed in the Balance Sheet.** For this, and a variety of other reasons, the fund balance reported in the governmental fund statements differs substantively from the net position reported in the Statement of Net Position.

As noted earlier, the city of Bothell reports nine non-major funds, including (a) Street, (b) Park Cumulative Reserve, (c) Drug Forfeiture, (d) Fire Impact Fee, and (e) Public Safety Levy, (f) the 2013 General Obligation Bond, (g) the 2014 Local Infrastructure Financing Tool (LIFT) Bond, (j) Public Safety GO Bond and (k) the Cemetery Endowment Fund. Detailed information on every fund can be found in "*Combining Financial Statements*." The combining financial statements supplement the basic financial statements. The basic financial statements for governmental and proprietary funds have columns for each of the major funds and a single column in which all the nonmajor funds are aggregated. The combining statements provide the details of the nonmajor funds with one column for each.

Combining Balance Sheet
Other Governmental Funds
December 31, 2021

	Special Revenue Funds						Permanent Fund					
	Street	Park Cumulative Reserve	Drug Forfeitures	Fire Impact Fees	Public Safety Levy	Total Special Revenue Funds	Cemetery Endowment	2013 GO Bond	Lift GO Bond	Public Safety GO Bond	Total Debt Service Funds	Total Other Governmental Funds
ASSETS												
Current cash & cash equivalents	$ 1,809,117	$ 1,913,245	$ 163,490	$ 459,390	$ 2,488,696	$ 6,833,938	$ 84,013	$ -	$ -	$ -	$ -	$ 6,917,951
Investments	3,050,000	4,000,000	-	-	3,774,179	10,824,179	-	-	-	-	-	10,824,179
Receivables (net of allowances):												
Taxes receivable	72,831	-	-	-	74,845	147,676	-	-	-	21,368	21,368	169,044
Accounts receivable	-	-	-	-	-	-	-	-	-	-	-	-
Due from other governmental units	144,147	-	31,044	-	-	175,191	-	-	-	-	-	175,191
TOTAL ASSETS	**$ 5,076,095**	**$ 5,913,245**	**$ 194,535**	**$ 459,390**	**$ 6,337,720**	**$ 17,980,985**	**$ 84,013**	**$ -**	**$ -**	**$ 21,368**	**$ 21,368**	**18,086,366**
LIABILITIES												
Accounts payable	49,015	40,366	-	9,226	1,992	100,599	-	-	-	-	-	100,599
Due to other governmental units	221	-	-	-	-	221	-	-	-	-	-	221
Payroll payable	65,927	-	-	-	162,271	228,198	-	-	-	-	-	228,198
Unearned revenue	-	-	-	-	-	-	-	-	-	-	-	-
Total liabilities	115,163	40,366	-	9,226	164,263	329,018	-	-	-	-	-	329,018
DEFERRED INFLOWS OF RESOURCES												
Unavailable revenue	58,584	-	-	-	60,290	118,873	-	-	-	17,394	17,394	136,267
Total deferred inflows of resources	58,584	-	-	-	60,290	118,873	-	-	-	17,394	17,394	136,267
FUND BALANCES												
Restricted	4,902,348	5,872,879	194,535	450,164	6,113,168	17,533,093	16,321	-	-	3,974	3,974	17,553,388
Committed	-	-	-	-	-	-	67,692	-	-	-	-	67,692
Total fund balances	4,902,348	5,872,879	194,535	450,164	6,113,168	17,533,093	84,013	-	-	3,974	3,974	17,621,081
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES	**$ 5,076,095**	**$ 5,913,245**	**$ 194,535**	**$ 459,390**	**$ 6,337,720**	**$ 17,980,985**	**$ 84,013**	**$ -**	**$ -**	**$ 21,368**	**$ 21,368**	**$ 18,086,366**

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The "Combining Balance Sheet" reports assets, liabilities, and fund balances in each of these funds. Total assets reported here ($18.1 million) are also reported, in a single column, in the Balance Sheet included in the Basic Financial Statements (see second-to-last column titled "Other Governmental Funds"). Again, the main difference here is that we now know how these assets are reported in each non-major fund. For example, we now know that the Public Safety Levy fund is the largest non-major fund ($6.3 million in assets). We also know that of the $5.1 million reported in the Street Fund, $1.8 million was in cash and cash equivalents, $3.1 million was in investments, and the remainder was in receivables. So why is reporting information in the combining statements important? If you are a resident of Bothell, you want to know if dedicated taxes for streets, parks, or public safety are reported in the appropriate special revenue fund – or that dedicated tax revenues are appropriately transferred from the General Fund to the special revenue fund. The Combining Financial Statements provide you with that additional information.

That said, there is not a lot of activity reported in the non-major funds. For that reason, the combining financial statements are relegated to the *Required Supplementary Section* of the ACFRs. The city reports fund balances in every special revenue fund and the sole permanent fund (i.e., the Cemetery Endowment fund). Two of the three debt service funds do not report fund balances. That is not unusual.

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE

The *Statement of Revenues, Expenditures, and Changes in Fund Balance* is an income statement prepared on a modified accrual basis in the governmental fund statements. It lists the revenues, expenditures, and the change in fund balances. In this case, changes in fund balance are akin to changes in net assets or changes in net position.

Bothell's Statement of Revenues, Expenditures, and Changes in Fund Balances shows that its two largest overall revenue sources are taxes ($40.5 million in the General Fund, $62 million total). Other sources of revenue include licenses and permits ($4 million in the General Fund, $4.6 million total), intergovernmental revenue ($2.8 million in the General Fund, $14.9 million total), and charges for services ($12.7 million in the General Fund, $17.8 million total).

An expenditure is roughly equivalent to an expense, albeit on the modified accrual basis of accounting (again, more on this in Chapter 4). Nearly two-thirds of the city's total governmental funds expenditures are in the General Fund ($55.4 million). More than half of Bothell's General Fund expenditures are for public safety ($29.4 million). This is typical of mid- and large-sized suburban cities. The remainder of governmental fund expenditures go to administrative functions of the city ($14.2 million), transportation ($12.2 million), economic environment ($5.9 million), capital outlays ($18 million), and debt service ($4.3 million). In general, non-capital expenditures in the General Fund are a good proxy for a government's "operating costs." Most of its salaries, benefits, and operational spending will appear as General Fund expenditures. By contrast, most of the revenues and expenditures in the special revenue and debt service funds will be related to capital spending and debt repayments, neither of which are considered day-to-day operations costs.

At the bottom of this statement, we also see "*other financing sources*." These are inflows and outflows of resources that affect fund balance, which are neither revenues nor expenditures. They frequently include loan or bond proceeds, proceeds from the sale of assets, and insurance recoveries, to name a few.

Statement of Revenues, Expenditures, and Changes in Fund Balances Governmental Funds
For the Year Ended December 31, 2021

	General	Special Revenue Funds		Capital Projects Funds		Other Governmental Funds	Total Governmental Funds
		Arterial Street	American Rescue Plan Act	Capital Improvements	Public Safety Capital		
REVENUES							
Taxes	$ 40,450,611	$ -	$ -	$ 8,623,599	$ -	$ 12,920,156	$ 61,994,366
Licenses and permits	3,969,487	-	-	541,158	-	116,047	4,626,692
Intergovernmental revenues	2,842,205	-	214,759	10,863,104	-	1,026,162	14,946,230
Charges for services	12,663,650	3,501,226	-	-	-	1,626,978	17,791,854
Fines and forfeitures	197,922	-	-	-	-	88,034	285,956
Interest earnings	86,555	-	-	-	22,407	-	108,963
Contributions	11,363	-	-	66,542	-	-	77,906
Other revenue	787,452	-	-	83,046	-	1,247	871,744
Total revenue	61,009,245	3,501,226	214,759	20,177,450	22,407	15,778,624	100,703,711
EXPENDITURES							
Current							
General government	13,037,933	-	207,887	-	-	925,885	14,171,705
Security of persons and property	29,379,058	-	-	-	-	1,556,708	30,935,766
Transportation	5,271,282	-	-	4,370,189	-	2,522,019	12,163,491
Physical environment	22,322	-	6,871	-	-	-	29,193
Economic environment	5,218,407	-	-	681,344	-	-	5,899,751
Culture and recreation	2,074,024	-	-	-	-	-	2,074,024
Other expenditures	-	-	-	300	300	300	900
Debt service:							
Debt service - principal	-	-	-	1,976,759	-	2,000,000	3,976,759
Debt service - interest	11,012	-	-	1,820,835	-	2,307,700	4,139,547
Issuance costs	-	-	-	-	105,653	-	105,653
Capital outlay	365,048	-	-	9,890,413	7,464,886	291,819	18,012,166
Total expenditures	55,379,086	-	214,759	18,739,840	7,570,839	9,604,432	91,508,955
Excess (deficiency) of revenue over expenditures	5,630,160	3,501,226	-	1,437,610	(7,548,431)	6,174,192	9,194,756
OTHER FINANCING SOURCES (USES)							
Sales of capital assets	4,737	-	-	13,465,000	-	-	13,469,737
Proceeds from public safety bonds	-	-	-	-	8,135,000	-	8,135,000
Proceeds from public safety bond premium	-	-	-	-	1,859,659	-	1,859,659
Transfer in	6,750,194	-	-	5,363,973	-	1,691,963	13,806,130
Transfer out	(2,119,173)	(1,959,609)	-	(8,442,157)	-	(1,996,100)	(14,517,039)
Total other financing sources (uses)	4,635,758	(1,959,609)	-	10,386,816	9,994,659	(304,137)	22,753,487
Net change in fund balances	10,265,917	1,541,617	-	11,824,426	2,446,227	5,870,055	31,948,243
FUND BALANCE - BEGINNING	13,991,231	3,236,572	-	6,682,050	22,972,584	11,751,025	58,633,462
FUND BALANCE - ENDING	**$ 24,257,148**	**$ 4,778,189**	**$ -**	**$ 18,506,476**	**$ 25,418,811**	**$ 17,621,081**	**$ 90,581,705**

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The last two lines of other financing sources are an important and sometimes controversial part of governmental accounting: *inter-fund transfers*. *Transfers in* are movements of resources into a fund from some other fund. *Transfers out* are movements of resources out of a fund into some other fund. For example, in 2021, the city transferred to the General Fund $6.8 million. Transfers from the General Fund ($2.1 million) were distributed to the Capital Improvement Fund and Internal Service Funds. How are we able to know this? Governments frequently chart the transfers to and from funds in the notes to the financial statements. Look for a note on "interfund transfers."

Critics say governments use inter-fund transfers to perpetuate a financial "shell game." By opportunistically transferring money in and out of funds (frequently known as fund sweeps) at just the right moment, the government can obscure its actual financial position. **How and when transfers can and should happen are important parts of financial strategy and policy**.

WHEN TRANSFERS ARE FRAUD?

In September 2016, the former mayor and finance director of the City of Miami, FL, was convicted in federal court of defrauding investors. Their crime, according to prosecutors from the Securities and Exchange Commission (SEC), was that they improperly transferred money that had been committed to debt service in other funds into the City's General Fund. City officials argued those transfers were common and were necessary to bolster the City's financial position just before the credit rating agencies updated the city's rating.

SEC officials and the jury disagreed. In their view, those transfers misled investors into thinking the City was financially stronger than it really was. Shortly after the verdict, City officials began negotiating a financial settlement with the SEC.

See SEC compliant: https://www.sec.gov/litigation/complaints/2013/comp-pr2013-130.pdf

As we noted earlier, detailed information on every non-major fund can be found in the *Combining Statements of Revenues, Expenses, and Changes in Fund Balance*. Total Revenues reported in the "Other Governmental Funds" ($15.8 million) previously are now reported in the combining statement for every non-major fund. We see that much of the revenue is reported in the Street fund ($6.1 million), the Park Cumulative Reserve fund ($1.6 million), and the Public Safety GO ($1.6 million). There were no revenues reported in the permanent fund and transfers to the 2013 GO Bond and LIFT GO Bond fund were used to meet principal and interest payments on outstanding bonds. This is not unusual. General obligation bonds would be repaid with tax revenues. If there are no dedicated taxes, revenues would be to a bond fund to meet debt service obligations. This is a policy decision.

Combining Statement of Revenues, Expenditures, and Changes in Fund Balances
Other Governmental Funds
December 31, 2021

	Special Revenue Funds						Permanent Fund					
	Street	Park Cumulative Reserve	Drug Forfeitures	Fire Impact Fees	Public Safety Levy	Total Special Revenue Funds	Cemetery Endowment	2013 GO Bond	Lift GO Bond	Public Safety GO Bond	Total Debt Service Funds	Total Other Governmental Funds
REVENUES												
Taxes	$ 5,002,944	$ 163,463	$ -	$ -	$ 5,137,364	$ 10,303,771	$ -	$ -	$ 1,000,000	$ 1,616,386	$ 2,616,386	$ 12,920,156
Licenses and permits	116,047	-	-	-	-	116,047	-	-	-	-	-	116,047
Intergovernmental revenue	999,283	-	-	-	26,879	1,026,162	-	-	-	-	-	1,026,162
Charges for services	24,152	1,471,323	-	131,503	-	1,626,978	-	-	-	-	-	1,626,978
Fine and forfeitures	-	-	88,034	-	-	88,034	-	-	-	-	-	88,034
Other revenue	1,247	-	-	-	-	1,247	-	-	-	-	-	1,247
Total revenues	6,143,673	1,634,786	88,034	131,503	5,164,243	13,162,239	-	-	1,000,000	1,616,386	2,616,386	15,778,624
EXPENDITURES												
Current												
General government	-	-	-	-	925,885	925,885	-	-	-	-	-	925,885
Security	-	-	3,383	-	1,553,325	1,556,708	-	-	-	-	-	1,556,708
Transportation	2,522,019	-	-	-	-	2,522,019	-	-	-	-	-	2,522,019
Physical environment	-	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay	-	-	-	-	291,819	291,819	-	-	-	-	-	291,819
Other expenditures	-	-	-	-	-	-	-	300	-	-	300	300
Debt service	-	-	-	-	-	-	-	-	-	-	-	-
Principal retirement	-	-	-	-	-	-	-	425,000	795,000	780,000	2,000,000	2,000,000
Interest	-	-	-	-	-	-	-	271,013	1,200,650	836,038	2,307,700	2,307,700
Total expenditures	2,522,019	-	3,383	-	2,771,029	5,296,432	-	696,313	1,995,650	1,616,038	4,308,000	9,604,432
Excess of revenues over (under) expenditures	3,621,654	1,634,786	84,651	131,503	2,393,214	7,865,807	-	(696,313)	(995,650)	348	(1,691,615)	6,174,192
OTHER FINANCING SOURCES (USES)												
Transfers in	-	-	-	-	-	-	-	696,313	995,650	-	1,691,963	1,691,963
Transfers out	(1,942,944)	(25,000)	-	-	(28,156)	(1,996,100)	-	-	-	-	-	(1,996,100)
Total other financing sources (uses)	(1,942,944)	(25,000)	-	-	(28,156)	(1,996,100)	-	696,313	995,650	-	1,691,963	(304,137)
Net change in fund balances	1,678,710	1,609,786	84,651	131,503	2,365,058	5,869,708	-	-	-	348	348	5,870,055
Fund balance - beginning	3,223,639	4,263,094	109,884	318,661	3,748,109	11,663,386	84,013	-	-	3,626	3,626	11,751,025
Fund balance - ending	**$ 4,902,348**	**$ 5,872,879**	**$ 194,535**	**$ 450,164**	**$ 6,113,168**	**$ 17,533,093**	**$ 84,013**	**$ -**	**$ -**	**$ 3,974**	**$ 3,974**	**$ 17,621,081**

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PROPRIETARY FUND STATEMENTS

Governments account for their *business-type activities* using the accrual basis of accounting. This is the same basis of accounting used to prepare government-wide statements. The proprietary fund statements disaggregate information reported under business-type activities by fund type. We rewrite the fundamental equation of accounting as follows

Assets + Deferred Outflows = Liabilities + Deferred Inflows + Net Position

STATEMENT OF NET POSITION

Governments report proprietary fund assets, liabilities, and net position in a *Statement of Net Position*. Proprietary fund statements draw a distinction between major and non-major proprietary funds. Bothell is unique in that it did not have any non-major proprietary funds. There are only three funds – Water, Sewer, and Storm and Surface Water.

Total assets in Water ($25.9 million), Sewer ($23.5 million), and Storm and Surface Water ($42.2 million) add up to the total assets reported under *business-type activities* ($91.5 million). Again, the difference between the government-wide statement of Net Position and the proprietary fund

Statement of Net Position is the detailed reporting of assets, liabilities, revenues, and expenses by fund type – Water, Sewer, and Storm and Surface Water.

The proprietary fund Statement of Net Position reports current assets ($26.3 million) separately from non-current assets ($65.2 million). Governments are not required to report current assets separately from their non-current assets in the government-wide statements, but that breakdown is required in the proprietary fund statements.

Like most local governments, revenue bonds make up a large proportion of liabilities ($13.5 million). A large proportion of the city's proprietary fund liabilities are in the Storm and Street Water fund ($10.9 million).

Like the government-wide Statement of Net Position, the proprietary fund Statement of Net Position classifies the position as either Net Investment in Capital Assets, Restricted Net Position, or Unrestricted Net Position.

- *Net Investment in Capital Assets* in the historical cost of capital improvements – net of depreciation – and debt associated with the acquisition, construction, or improvement of capital In the Water Fund, net investment in capital assets is equal to $16,634,885 – i.e., Capital Assets not being depreciated plus capital assets being depreciated minus depreciation ($19,670,033) minus the current portion of revenue bonds payable, net ($183,345) minus non-current revenue bonds payable ($2,851,803).
- The *restricted net position* represents assets restricted by a third party or law. Governments are frequently required to establish restricted reserve funds following a revenue bond issue to ensure payments occur on time and in full. Revenue bond reserve funds are often the lesser of (a) maximum annual debt service, (b) 125 percent of average annual debt service, or (c) 10 percent of original bond proceeds.
- The remainder is reported as the *unrestricted net position*. Each business-type activity reports a positive unrestricted net position.

Statement of Net Position
Proprietary Funds
December 31, 2021

	Business-Type Activities Enterprise Funds				Governmental Activities
	Water	Sewer	Storm & Surface Water	Total	Internal Service Funds
ASSETS					
Current assets					
Cash and cash equivalents	$ 303,342	$ 744,901	$ 2,049,875	$ 3,098,118	$ 2,390,973
Investments	4,190,215	6,307,503	8,464,320	18,962,038	2,300,000
Accounts receivable	859,474	1,817,087	-	2,676,561	53,396
Due from other governments	357	56,256	211,575	268,188	5,522
Reserved assets:					
Deposit held in trust	-	-	-	-	277,395
Investment-revenue bond reserve	109,785	292,497	914,086	1,316,369	-
Total current assets	5,463,173	9,218,244	11,639,857	26,321,274	5,027,286
Non-current assets					
Net pension assets	724,367	547,655	1,303,964	2,575,986	538,766
Capital assets not being depreciated:					
Land	122,175	163,126	-	285,302	-
Right of way	-	-	1,935,868	1,935,868	-
Construction in progress	405,339	997,494	1,757,076	3,159,909	-
Capital assets being depreciated:					
Intangible assets	141,538	122,978	146,663	411,179	-
Buildings	2,729,301	3,513,086	2,304,125	8,546,512	35,285
Improvements other than buildings	29,514,840	17,760,228	36,850,875	84,125,944	1,042,450
Equipment	59,048	1,806,274	275,951	2,141,273	1,829,336
Vehicles	30,457	30,457	250,920	311,834	9,562,936
Less accumulated depreciation	(13,332,666)	(10,711,077)	(14,284,192)	(38,327,935)	(8,960,868)
Total non-current assets	20,394,400	14,230,221	30,541,250	65,165,871	4,047,905
Total assets	25,857,573	23,448,464	42,181,107	91,487,144	9,075,191
DEFERRED OUTFLOWS OF RESOURCES					
Deferred outflows - pension	80,511	64,930	152,126	297,567	55,324
Total deferred outflows of resources	80,511	64,930	152,126	297,567	55,324
LIABILITIES					
Current liabilities					
Accounts payable	355,435	28,875	174,040	558,349	59,031
Payroll payable	66,558	51,260	119,130	236,948	43,504
Compensated absences	87,001	86,807	111,987	285,795	42,112
Due to other governments	1,166	-	593	1,759	39,488
Interest payable	-	-	-	-	144,831
Current portion of loans payable	-	-	45,516	45,516	-
Current portion of revenue bonds payable, net	183,345	86,047	608,890	878,281	-
Total current liabilities	693,504	252,988	1,060,157	2,006,648	328,966
Non-current liabilities					
Loans payable	-	56,250	455,497	511,747	-
Revenue Bonds Payable, net	2,851,803	1,276,047	9,400,707	13,528,557	-
Unearned revenue	-	-	-	-	277,395
Total non-current liabilities	2,851,803	1,332,297	9,856,204	14,040,304	277,395
Total liabilities	3,545,307	1,585,285	10,916,361	16,046,952	606,361
DEFERRED INFLOWS OF RESOURCES					
Deferred inflows - advance grant	-	-	12,909	12,909	-
Deferred inflows - pension	678,978	515,295	1,223,171	2,417,444	502,186
Total deferred inflows of resources	678,978	515,295	1,236,080	2,430,353	502,186
NET POSITION					
Net investment in capital assets	16,634,885	12,264,222	18,726,676	47,625,783	3,509,139
Restricted for pension assets	125,900	97,290	220,010	443,200	91,904
Restricted for debt service	109,785	292,497	914,086	1,316,369	-
Unrestricted	4,843,229	8,758,806	10,320,020	23,922,054	4,420,925
Total net position	**$ 21,713,799**	**$ 21,412,814**	**$ 30,180,793**	**$ 73,307,406**	**$ 8,021,968**

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Internal service funds are reported in the proprietary fund statements. They account for programs in government that serve other parts of the government. The city of Bothell has three internal service funds – Equipment Rental (Fleet), Self-Insurance, and Asset Replacement. Internal service funds are designed to be self-supporting. They bill the receiving department at rates intended to cover the costs of goods or services provided. Keep in mind that these funds are not reported in the government-wide statements, as internal service accounts cancel out once we aggregate governmental activities with proprietary activities.

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

The proprietary fund *Statement of Revenues, Expenses, and Changes in Fund Net Position* presents a summary of revenues, expenses, and changes in net position in the proprietary fund statements by fund type. A couple of features here merit additional discussion.

First, you will notice that Proprietary Fund Statements draw a distinction between operating revenues and non-operating revenues (expenses). Charges for services ($21.9 million) are reported under operating revenues. Note that the amount reported in the Statement of Revenues, Expenses,

and Changes in Net Position is the same as that reported under business-type activities as Charges for Services.

Business-type activities report a modest amount in operating grants and contributions ($7,763) and capital grants and contributions ($1.8 million). Operating grants and contributions are not reported as operating revenues; rather, they are reported as non-operating revenues. The capital grants and contributions are also reported as non-operating revenues, just below transfers out. Reporting operating and capital grants and contributions as non-operating revenues reflects the non-recurring nature of revenues. The capital grants are reported separately from operating grants to reflect the fact that these revenues are not part of general operations.

Basic Financial Statements — City of Bothell

Statement of Revenues, Expenses, and Changes in Fund Net Position
Proprietary Funds
For the Year Ended December 31, 2021

	Business-Type Activities Enterprise Funds				Governmental Activities
	Water	Sewer	Storm & Surface Water	Total	Internal Service Funds
OPERATING REVENUES					
Charges for services	$ 6,339,397	$ 8,788,494	$ 6,863,366	$ 21,991,257	$ 4,022,162
Other operating revenue	3,011	62,564	44,855	110,430	-
Total operating revenue	6,342,408	8,851,058	6,908,221	22,101,687	4,022,162
OPERATING EXPENSES					
Administrative and general	897,152	1,067,502	2,003,189	3,967,843	2,788,021
Purchased water	1,734,839	-	-	1,734,839	-
Metro service	-	4,480,487	-	4,480,487	-
Maintenance and operations	984,712	689,838	1,593,614	3,268,165	381,957
Customer accounts	200,068	199,591	-	399,659	-
Taxes	825,860	633,502	476,404	1,935,766	-
Depreciation	881,887	632,655	1,333,495	2,848,037	962,396
Total operating expenses	5,524,519	7,703,575	5,406,702	18,634,796	4,132,374
OPERATING INCOME (LOSS)	817,889	1,147,483	1,501,519	3,466,891	(110,213)
NON-OPERATING REVENUES (EXPENSES)					
Investment income	-	-	6,428	6,428	1,677,027
Intergovernmental revenue	241	198	7,324	7,763	3,906
Miscellaneous revenue	18,762	-	251,247	270,009	-
Proceeds from sale of capital assets including insurance recoveries	-	-	-	-	157,386
Gain (loss) on disposition of capital assets	-	-	-	-	(264,102)
Revenue bonds interest	(98,686)	(44,310)	(326,807)	(469,803)	(1,670,280)
Total non-operating revenue (expense)	(79,683)	(44,112)	(61,808)	(185,603)	(96,064)
INCOME (LOSS) BEFORE CONTRIBUTIONS AND TRANSFERS	738,206	1,103,371	1,439,712	3,281,288	(206,276)
Transfers in	-	-	-	-	2,349,660
Transfers out	(78,134)	(73,909)	(256,222)	(408,265)	(1,230,487)
Capital contributions	382,712	289,043	1,094,538	1,766,293	-
CHANGE IN NET POSITION	1,042,784	1,318,505	2,278,028	4,639,317	912,897
Net position - beginning	20,671,015	20,094,310	27,902,765	68,668,090	7,109,071
Net position - ending	**$ 21,713,799**	**$ 21,412,814**	**$ 30,180,793**	**$ 73,307,406**	**$ 8,021,968**

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FIDUCIARY FUNDS STATEMENTS

We've covered governmental, proprietary, and internal service funds. The final type of fund you'll see on a government's financial statements is fiduciary funds. *Fiduciary funds* account for resources held for the benefit of parties outside of the reporting government. Fiduciary funds are not reported in the government-wide financial statements because the resources of those funds are not available to support the government's own programs.

Most fiduciary funds relate to retiree benefits (i.e., pension and OPEB). Different plans are managed

in quite different ways. Some are managed at the state level, and beneficiaries are not only state employees but also employees of local governments that participate in state-sponsored or state-administered plans. Some governments are "self-funded," meaning they manage a plan whose members come only from their government. In Washington, most public employee pension and OPEB plans are managed by the state. For that reason, the fiduciary fund statements for the State of Washington are extensive, as they account for all retirement plans administered and managed by the state.

The City of Bothell does not report any assets held on behalf of its employees. In other words, retirement benefits for current and former employees of the city of Bothell are administered by the state. The city does not report any employee retirement benefit funds in its fiduciary funds. Rather the city reports two trust funds a Private-Purpose Trust Fund and a Custodial Fund. The Private Purpose Trust funds include proceeds held on behalf of beneficiaries in the Court Bail Bond Trust and Court Restitution Trust. The Custodial Fund reports court collection fees on behalf of King County and the state of Washington.

Basic Financial Statements — City of Bothell

Statement of Net Position
Fiduciary Funds
For the Year Ended December 31, 2021

	Private-Purpose Trust Funds	Custodial Fund	Total
ASSETS			
Cash and cash equivalents	$ 38,758	$ 32,255	$ 71,013
Total assets	38,758	32,255	71,013
DEFERRED OUTFLOWS OF RESOURCES			
Total deferred outflows of resources	-	-	-
LIABILITIES			
Accounts payable	-	32,143	32,143
Total liabilities	-	32,143	32,143
DEFERRED INFLOWS OF RESOURCES			
Total deferred inflows of resources	-	-	-
NET POSITION			
Restricted for:			
Individuals, organizations and other governments	38,758	112	38,870
Total net position	$ 38,758	$ 112	$ 38,870

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Governments also produce a *Statement of Changes in Fiduciary Net Position*. This statement is similar to an income statement. Instead of revenues and expenditures, it identifies *additions* and *deductions* to the fiduciary funds. Additions reflect the increase in assets – deductions account for the decrease in assets. For the city of Bothell, additions in the fiduciary fund statements included payments to the Court Bail Bond Trust, the Court Restitution Trust, and fees collected on behalf of King County and the state of Washington. Deductions reported payments in each of these accounts.

Statement of Changes in Net Position
Fiduciary Funds
For the Year Ended December 31, 2021

	Private-Purpose Trust Funds	Custodial Fund	Total
ADDITIONS			
Court bail bond/restitution trust	$ 82,005	$ -	$ 82,005
Fees collections for other governments	-	186,271	186,271
Total additions	82,005	186,271	268,276
DEDUCTIONS			
Payments of Court bail bond/restitutions	84,262	-	84,262
Payments of fee to other governments	-	186,918	186,918
Total deductions	84,262	186,918	271,180
Net increase (decrease) in fiduciary net position	(2,258)	(647)	(2,905)
Net position - beginning	41,015	759	41,774
Net position - ending	$ 38,758	$ 112	$ 38,870

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FEDERAL GOVERNMENT FINANCIAL REPORTING

The federal government does, in fact, prepare a set of audited financial statements known as the Financial Report of the United States Government. A division of the U.S. Treasury known as the Bureau of the Fiscal Service prepares this report according to a set of accounting principles developed by the Federal Accounting Standards Advisory Board (FASAB). Those principles are similar to modified accrual accounting, focusing on financial resources and fiscal accountability. They also incorporate some recognition concepts that speak to the unique nature of federal appropriations and budget authority. The Government Accountability Office (GAO) then audits those statements according to those standards.

The federal government has never received an audit opinion on these financial statements. GAO has yet to issue an opinion due to several material weaknesses in internal controls, especially at the Department of Defense (DOD). That said, the federal government has substantially improved its financial reporting processes. Today almost all of the 24 major cabinet agencies have received an unqualified audit opinion, and the DOD has convened a high-level task force to address its internal control shortcomings.

CHAPTER 3.

FINANCIAL STATEMENT ANALYSIS

FINANCIAL STATEMENT ANALYSIS: "HOW ARE WE DOING?"

Financial statement analysis informs a wide variety of strategic management questions, including:

- What is this organization's overall financial position? Is it liquid? Profitable? Solvent?
- How does this organization's financial position compare to its peer organizations?
- How much debt or other long-term liabilities can this organization afford?
- How can this organization adjust its operations and policies to strengthen its financial position?

On March 22, 2014, the side of a hill near the town of Oso, Washington, gave out after three days of relentless rainfall. A massive landslide followed, with mud and debris covering more than a square mile. Forty-three people were killed when the slide engulfed their homes.

In the days that followed, more than 600 personnel participated in search and recovery operations. They rescued eight people from the mud and evacuated more than 100 others to safety. Most of the rescue personnel came from the four rural Snohomish County fire districts surrounding Oso.

Minutes after hearing of the slide, staff at the Washington State Office of Financial Management (OFM) – the governor's budget office – made two critical phone calls. Earlier that week, they had reviewed some data on the financial health of local special districts across the state. They observed that rural fire districts in the counties north of greater Seattle showed signs of acute fiscal stress. Those districts had seen huge growth in property tax collections during the real estate boom of the 2000s. But since the real estate crisis of 2007-2009, those revenues had fallen precipitously. Many of these districts had laid off staff, cut back on specialized training, and back-filled shifts with volunteer firefighters.

So, moments after hearing of the slide, OFM staff called the fire chiefs at two of the most financially stressed Snohomish County fire districts. Their message to those chiefs was simple: send your people. OFM agreed to reimburse the districts from state or federal emergency management funds if needed. In turn, personnel from two of those districts were among the first on the scene and were responsible for three of the eight life-saving rescues.

A few weeks later, the chiefs of both those districts acknowledged that had OFM not called, they would not have sent their personnel. Both districts were so financially stressed that they could not have afforded the overtime wages and other expenses they'd have incurred to participate in the rescue operations.

Financial condition matters. It shapes how a public organization thinks about its mission and capacity. In the case of the Oso mudslide, it was the focal point for some life-saving decisions. That is why all aspiring public servants need to know how to evaluate financial statements and measure, manage, and improve their organization's financial position.

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Compute and interpret ratios that describe liquidity, profitability, and solvency. Contrast how those ratios mean slightly different things across the government, non-profit, and for-profit sectors.
- Understand the typical strategies organizations employ to improve their liquidity, profitability, and solvency.
- Contrast short-term solvency with long-term solvency, particularly for governments.

WHAT IS FINANCIAL POSITION?

Financial position is a public organization's ability to accomplish its mission now and in the future. When stakeholders ask, "*How are we doing financially*?" the answer should reflect that organization's financial position.

An organization's financial position has three main components:

1. **Liquidity.** Does the organization have liquid resources to cover its near-term liabilities?
2. **Profitability.** Do the organization's revenues cover its operating expenses?
3. **Solvency.** Can the organization generate enough resources to cover its near-term and long-term liabilities?

In the previous chapter, you learned how to extract information about an organization's financial position from its balance sheet. For example, are most assets liquid (e.g., cash and marketable securities), or does the organization have assets that are more difficult to convert to cash (e.g., receivables, inventory, or prepaid expenses)?

The balance sheet also tells us a lot about solvency, namely if the organization has a lot of long-term liabilities (e.g., long-term debt or pension liabilities). Long-term liabilities mean the organization will have to divert some of its resources to meet those obligations, which can mean fewer resources to invest in its mission. To be clear, there are times when an organization can and should take on long-term liabilities in pursuit of its mission. Sometimes it makes sense to borrow and invest in a new facility that allows the organization to serve its clients effectively. Pensions and retiree health care benefits are an important employee recruitment and retention tool, even though offering current and future employees these benefits could result in a long-term obligation.

To learn about profitability, we typically look to the income statement. Recall that if an organization's

revenues exceed its expenses, its net assets will grow. The income statement clarifies the organization's key sources of revenues, which revenues are growing, and whether those revenues cover program and administrative expenses. The income statement also shows depreciation, bad debt expenses, and other expenses that reduce net assets but do not impact cash. These are all solvency considerations.

While financial ratios can provide useful metrics, always start with a quick review of the financial statements. Ideally, the financial statements you are working with should report on the organization's operating and financial position for at least two financial periods – though that is not always the case. Keep in mind that funding agencies and financial analysts need access to at least four, if not five years, of financial data. A review of the trends should inform your interpretation of the ratios.

A review of the *Statement of Financial Position* (or Statement of Net Position) can be guided by the following questions:

- *Assets*: How have the assets changed? What proportion of assets are current? How much is reported under cash and cash equivalents? How much is reported under property plant and equipment, net of depreciation? Were there any new investments in property, plant, and equipment (review note on fixed assets)? How much is reported in investments? What proportion of investments are restricted? Have investments changed significantly, and was this the result of market gains and investment income, a capital campaign, or transfers from cash? How much more or less is the organization reporting in receivables, prepaid expenses, or inventory? Have changes in current assets had a negative or positive impact on cash flows?
- *Liabilities*: How have the liabilities changed? What proportion of liabilities is the result of operations? What proportion of liabilities is current? What proportion of liabilities is the result of financing activities? Of that, how much is in the form of a short-term loan or a line of credit? Is the organization subject to loan covenants or restrictions, and are these disclosed in the notes to the financial statements? Are there any contingent liabilities because of recent lawsuits, and what is the probable liability?
- *Net Assets*: What proportion is reported as net assets without donor restrictions? What proportion is reported as net assets with donor restrictions? Of net assets with donor restrictions, what proportion is reported as permanently restricted (review notes on Endowment funds)?

Similar questions can guide your review of the *Statement of Activities*:

- *Revenues*: What are the major sources of revenues? Were there significant changes in operating revenues? Of total revenues, what percent is "with donor restrictions"? What proportion is contributed versus earned (e.g., fee for services, government contracts)? How much does the organization report as foundation grants? Corporate gifts? Is the organization susceptible to changes in governmental agency or foundation funding priorities?
- *Expenses*: How much did the organization spend on programs? How much did the organization spend on administration? Fundraising? Were there significant changes in the level of spending? What proportion of our expenses are personnel costs? Have personnel costs changed? How much did the organization report in depreciation and amortization? Are there

other fixed costs that limit budget flexibility?

FINANCIAL STATEMENT RATIOS

The purpose of accounting is to help organizations make better financial decisions. *Financial statement analysis* is the process of analyzing an organization's financial statements to produce new information to inform those decisions. Public organizations make dozens of crucial decisions every day: Should we expand a program? Should we lease or buy a new building? Should we move cash into longer-term investments? Should we accept terms in a contract with a government agency? Should we accept a grant with restrictions from a foundation? Should we, as a funding agency, fund a particular organization?

These decisions can be informed by financial statement analysis. An organization should only expand if its existing programs are profitable. It should invest in new property or equipment once it understands how existing fixed asset costs contribute to or detract from its net position. It should move cash into less liquid investments once it knows the organization has sufficient liquid resources to cover its operating expenses.

To answer these questions, we need metrics that demonstrate an organization's liquidity, profitability, and solvency. We turn to financial ratios (sometimes called financial statement ratios) for those metrics. Financial ratios are calculations derived from information included in the financial statements. Each ratio illustrates one dimension of an organization's overall financial health. Analysts who evaluate public organizations' financial statements employ dozens of different financial ratios. However, the way they use ratios will be unique to their needs. For example, the criteria used by financial institutions (or credit rating agencies) will differ from those used by funding agencies. In other words, context and goals matter.

Therefore, a word of caution is necessary when it comes to financial ratios. For many, financial statement ratios objectively assess the organization's financial position and overall performance. However, when applied incorrectly, they can lead to improper allocation of resources within an organization. For example, focusing on profit maximization, particularly on programs that do not align with the organization's core values or mission, could lead to mission creep.

Relatedly, criteria used to assess the organization's financial health should not be the sole criteria used to determine a non-profit's eligibility for a grant or contract. As you'll see below, financial ratios are objective measures of financial position and performance that do not incorporate an organization's proven track record in service delivery. Financial ratios emphasize the organization's financial strengths and do not address the organization's effectiveness. Financial ratios do not relay the organization's unique challenges, or the efforts management and staff have undertaken to address those challenges. In fact, the widespread use of ratios has resulted in widespread inequity in philanthropic giving. Research shows that Black-led organizations receive less funding and are more likely to receive funding with restrictions when compared to peer white-led organizations. As a result, these organizations report low cash reserves, frequently report operating deficits, and often report fewer net assets without donor restrictions. Continued use of financial ratios as criteria for funding organizations perpetuates the cycle – well-funded organizations continue to receive funding without

restrictions. In contrast, smaller organizations in poor financial health receive less or restricted funding.

We apply a similar word of caution when using ratios to assess the financial health of governments. A careful review of budget documents or related socio-economic or legal environments would give users a better understanding of why the government reported a deficit or high debt burden. And as we discuss later in this chapter, governments need not be profitable to continue operations.

So, while we endorse the use of financial ratios, we recognize there are limits to their usability and encourage users to contextualize their analysis to the organization, industry, and region of operations.

ADDRESSING RACIAL BIAS IN PHILANTHROPY AND GRANTMAKING

Philanthropy has proven itself as a powerful mechanism for working toward a more equitable society by challenging oppression and seeking to ensure social, economic, and political change (Powell, 2015). But biases based on race, gender, and other factors are still a real problem in the sector, often in the form of implicit bias. Implicit bias refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner. These biases, which encompass favorable and unfavorable assessments, are activated involuntarily and without an individual's awareness or intentional control.

Implicit bias in philanthropy affects not just which groups get funded but also who sits on the boards of philanthropic organizations, how grantmaking foundations set priorities, how decisions are made, who makes those decisions, and even who gets hired (Powell, 2015). A D5Coalition 2016 report found that 92 percent of foundation CEOs were white, 83 percent of full-time executive staff were white, and 68 percent of program staff were white. Studies have shown that three-quarters of white people have entirely white social networks, a factor that further excludes organizations led by people of color from philanthropic networks (Dorsey et al., 2020). The D5Coalition report also found that only eight percent of grants were directed to organizations that served diverse communities.

A 2020 study (completed by Echoing Green and Bridgspan) found that Black-led organizations were more likely to receive less funding, receive restricted grants, and were required to meet rigorous reporting requirements. Undoubtedly, the lack of unrestricted support reflects a lack of trust in organizations led by people of color (Dorsey et al., 2020). Over time, disparities in revenue and restrictions result in few net resources that do not have donor restrictions. Data shows that Black-led organizations reported a net asset position without donor restrictions that was 76 percent less than white-led organizations. Additionally, data shows organizations led by Black women consistently receive less support than either Black men or white women. Disparities persist even considering factors like issue area, education level, and gender.

Financial metrics (e.g., revenue growth, demonstrated operating performance, and accumulated reserves) are frequently used to determine organizations with the "capacity" to manage grants, discounting the value of the organization's work. **Using financial health criteria to determine who receives funding perpetuates a vicious cycle**, further depriving chronically underfunded organizations that have the potential to do good work!

So, what should funders do? Below are some recommendations based on our review of the existing research. Our list is not comprehensive – we have included an extensive list of readings at the end of this section.

- **Focus on organizational strengths.** Assess the organization's proposals based on its ability to do the work, not trends in revenues or whether the non-profit has reserves or an endowment. Allow for a narrative contextualizing the non-profit's operating environment and financial history. Understand all the financial and non-financial resources the organization mobilizes to achieve its mission and endeavor to value the work being performed. Funders should provide unrestricted capacity-building grants to strengthen organizational leadership and management and eliminate matching grant requirements, as these requirements marginalize organizations that lack the fundraising capacity and unconsciously steer funding to well-resourced organizations with accumulated resources or access to fundraising networks (Nonprofit Finance Fund, 2019).
- **Cover full costs.** Recognizing overhead costs is essential for the proper function of any organization. Smaller organizations do not benefit from economies of scale and, as a result, report higher-than-average overhead costs

(median ratio of 20 percent). Larger organizations, especially those with a regional presence or brand recognition, have the capacity to raise public support from individual donors. In contrast, smaller organizations do not have a large or wealthy donor base or the capacity to create one. Understand operational context and challenges. For example, non-profits that rely on government contracts are more likely to be chronically underfunded, as governments rarely cover overhead costs. To that end, funders should consider providing capacity-building grants, as these investments position the organization to deliver higher-quality services beyond the life of the grant.

- **Shift focus from reporting to engagement.** Evaluate whether reporting requirements are grounded in organizations demonstrating results or distrust of leaders. Funders should streamline grant application processes and eliminate redundancies in reporting. Where possible, shift the funding model away from restricted annual grant awards to unrestricted multi-year grants, demonstrating the funder's trust and investment in the organization. Engage with grantees in tangible ways other than grant reports and develop relationships that are not contingent on funding. Build grantee capacity by providing additional funding to smaller organizations to meet reporting requirements and create reporting mechanisms that result in program metrics relevant to both the grantor and grantee.

- **Give more – much more!** Foundations consistently use the five percent payout rule as a maximum level of giving, even though the tax law established the five percent payout rule as the minimum. Data shows that even though foundation wealth has nearly doubled since the Great Recession, the level of giving did not change significantly over the period. A philosophical shift that puts "spending decisions within the context of mission" rather than "mission in the context of available resources" shifts the focus away from wealth accumulation and perpetuity of foundations to investing in mission-aligned priority areas at levels that would lead to sustained changes. Additionally, foundations should diversify their grantee portfolio. They should invest in smaller organizations led by Black, Indigenous, or people of color that work in communities that face funding disparities.

- **Make diversity, equity, and inclusion a top priority.** The world of philanthropy relies on relationships. Whom you know and who knows you matter! Philanthropic organizations committed to social, economic, and political change lack the lived experience of people of color in low-income communities. Funding organizations should prioritize diversifying their organization, from the non-profit board to the program staff. They should expand their grantee sourcing mechanisms and intentionally reach out to smaller grassroots organizations whose programming and values align with foundation priorities. Finally, they need to be accountable to themselves and the community they serve. To that end, they should report on their diversity, equity, and inclusion goals, benchmarks, and progress.

Our knowledge of implicit bias in philanthropy benefited from the work of many, including Cheryl Dorsey, Jeff Bradach and Peter Kim. (2020). Racial Equity and Philanthropy: Disparities in Funding for Leaders of Color Leave Impact on the Table (Echoing Green and The Bridgspan Group), D5Coalition (2016) "State of the Work: Stories from the Movement to Advance Diversity, Equity, and Inclusion," John A Powell (2015) "Implicit Bias and its Role in Philanthropy and Grantmaking" and Non-profit Finance Fund (2019) "Addressing Racial Biased Financial Analysis."

The first table lists a set of *liquidity ratios*. Recall that **liquidity is the ease with which an asset can be converted to cash with minimal loss in value**. Liquidity ratios assess liquid assets that can cover the organization's obligations or day-to-day expenses. The numerator in these ratios measures liquid resources – either current assets or a specific type of current asset (e.g., cash and cash equivalents, receivables, etc.). The denominator is a measure of existing obligations – either current liabilities or average daily cash expenses. To estimate average daily expenses, we take total expenses and deduct expenses like depreciation, amortization, and bad debt expense that do not require an outflow of liquid resources. Our estimate of cash expenses is then divided by 365 days to produce a rough measure of average daily cash spending.

For governments, the focus is on the General Fund. Recall that the General Fund accounts for unrestricted resources or resources that are not required to be accounted for in other funds. **The**

unassigned fund balance is the most closely watched number in governmental accounting. It reports on the government's unrestricted resources.

LIQUIDITY RATIOS

Ratio	What it Tells Us	Non-Profit	Government	For-Profit/Hybrid
Current Ratio	Will near-term assets cover near-term obligations? Rule of Thumb: >2	$\frac{\text{Current Assets}}{\text{Current Liabilties}}$	$\frac{\text{General Fund Assets}}{\text{General Fund Liabilties}}$	$\frac{\text{Current Assets}}{\text{Current Liabilties}}$
Quick Ratio	Will the most liquid assets cover near-term obligations? Rule of Thumb: >1	$\frac{\text{Cash + Investments + Recievables}}{\text{Current Liabilties}}$		$\frac{\left(\begin{matrix}\text{Cash + Investments}\\ \text{+Recievables}\end{matrix}\right)}{\text{Current Liabilties}}$
Cash Ratio	Will cash and investments cover near-term obligations? Rule of Thumb: >1	$\frac{\text{Cash + Investments}}{\text{Current Liabilties}}$	$\frac{\text{General Fund Cash + General Fund Investments}}{\text{General Fund Liabilities}}$	$\frac{\text{(Cash + Investments)}}{\text{Current Liabilties}}$
Days of Cash on Hand	How many days of cash do we have? Rule of Thumb: >90 days	$\frac{\text{Cash + Investments}}{\left(\begin{matrix}\text{Total Expenses − Depreciation}\\ \text{−Bad Debt Expense}\end{matrix}/365\text{ Days}\right)}$		$\frac{\text{Cash + Investments}}{\left(\begin{matrix}\text{Total Expenses − Depreciation}\\ \text{−Bad Debt Expense}\end{matrix}/365\text{ Days}\right)}$
Days of Liquid Net Assets	How many days of liquid net resources do we have? Rule of Thumb: >180 days	$\frac{\left(\begin{matrix}\text{Net Assets Without Restrictions −}\\ \text{Fixed Assets, Net of Depreciation}\end{matrix}\right)}{\left(\begin{matrix}\text{Total Expenses − Depreciation}\\ \text{−Bad Debt Expense}\end{matrix}/365\text{ Days}\right)}$		$\frac{\left(\begin{matrix}\text{Net Assets Without Restrictions −}\\ \text{Fixed Assets, Net of Depreciation}\end{matrix}\right)}{\left(\begin{matrix}\text{Total Expenses − Depreciation}\\ \text{−Bad Debt Expense}\end{matrix}/365\text{ Days}\right)}$
Receivables Turnover	How long does it take us collect receivables? Rule of Thumb: <60 days	$\frac{Receivables}{(Revenues/365\ days)}$		$\frac{Receivables}{(Revenues/365\ days)}$
Short-Run Financial Position	How much in unrestricted resources do we have as a percent of our revenues? Rule of Thumb: >5%		$\frac{\text{Unassigned General Fund Balance}}{\text{General Fund Revenues}}$	

LIQUIDITY AND AVAILABILITY OF FINANCIAL ASSETS DISCLOSURE

FASB Accounting Standards Update No. 2016-14 requires non-profits to disclose qualitative (narrative) and quantitative (numeric) information about their liquidity and availability. According to the standard, the most basic measure of liquidity is the "availability of resources to meet cash needs for expenses within one year of the date of the statement of financial position." The availability of a financial asset may be affected by (1) its nature, (2) external limits imposed by donors, grantors, laws, and contracts with others, and (3) internal limits imposed by the governing board. Qualitative information communicates how the non-profit entity manages its liquid resources to meet cash needs for expenses. In contrast, quantitative information communicates the availability of the non-profit's financial assets to meet cash needs for expenses – all within a year of the balance sheet date.

Although common sense tells us that having more assets available for use without limitations allows for greater flexibility to meet unforeseen financial circumstances, it does not immediately follow that a not-for-profit organization that shows a relatively small portion of its assets as "available for general expenditure" is experiencing financial difficulty.

Non-profits routinely use assets received with donor restrictions in ongoing programmatic and operational activities. In those

cases, assets that appear to have limitations are, in fact, being put to immediate use paying for day-to-day operations. The narrative disclosure should give financial statement users insight into the full range of assets available for use.

Non-profits may also describe established operating reserve policies, how they manage cash based on major receivables cycles, and the availability and use of lines of credit. When contemplating liquidity disclosures, NFPs should:

- Consider the message they want to convey to stakeholders: Does your organization have ample resources to fund activities over the next 12 months? If yes – you want to make that clear in the disclosure. You may also want to discuss your policy for dealing with excess revenues (e.g., the board designates a certain percentage of excess budgeted funds to be added to the organization's operating reserves). If your organization struggles to maintain sufficient resources to cover expenses, you may want to disclose your action plan for covering those expenses. Perhaps you have lines of credit that could be drawn upon if needed, or maybe you are expecting a large grant that will fund a significant portion of your expenses.
- Review its current procedures around board designation of net assets: What are the board's current procedures for identifying and designating net assets – are they formally documented, or are amounts designated by the board on an ad-hoc basis? Considering the board's awareness of management's designations is important, given the new standard's emphasis on board designation of net assets. In addition to reviewing current procedures, this may be a good time for the board to revisit existing board designations to determine if they still make sense and determine if any new policies will be required.
- Adopt an operating reserve policy if your organization doesn't already have one. This policy would document (a) what the organization considers an appropriate level of reserves, (b) how the reserves will be built, and (c) the steps to follow if the reserves fall below the set level.
- Decide on the best presentation approach for your organization. The format of the new liquidity disclosures will depend on the type of non-profit, the relative liquidity of the organization's resources, donor-imposed restrictions on those resources, internal board designations on resources, and so on.

The following reflects Treehouse's availability of financial assets as of the consolidated statement of financial position date. Financial assets are reduced by the amounts not available for general use within one year of the consolidated statement of financial position date because of contractual or donor-imposed restrictions or internal designations. Internal designations can be changed based on board approval.

Financial assets, at year-end	
Cash and cash equivalents	$ 4,430,208
Investments	8,352,346
Contracts and other receivables	3,528,538
Pledges receivable	1,325,881
	17,636,973
Less those unavailable for general expenditures within one year	
Due to donor purpose restrictions	-
Due to donor time restrictions	380,000
Due to endowment purpose restriction	4,403,995
	4,783,995
Financial assets available to meet cash needs for general expenditures within one year	$ 12,852,978

The non-profit may also consider adding or augmenting other disclosures. For example, suppose in your liquidity disclosures, you choose to break out the availability of promises to give into those that are donor-restricted and those that are not. In that case, consider whether providing the same breakout in your pledges receivable disclosure would be useful to the users of your financial statements.

We drew heavily from two articles prepared by the American Institute of CPAs (AICPA), including "The New Liquidity and Availability Disclosure and Going Concern Issues" and "Steps You Can Take Now to Create Exceptional Liquidity Disclosures."

Profitability is an intuitive measure derived from changes in net assets (or change in net position). Recall that net assets increase when revenues exceed expenses – and vice versa.

The *operating margin* speaks to profitability in the organization's core operations (i.e., change in net assets without donor restrictions). Gross margin (sometimes called margin) is the difference between net sales and cost of goods sold. Industries like retail clothing have extraordinarily tight margins, meaning the price often exceeds unit costs by a percent or two. Low-margin businesses must be "high volume," meaning they must sell a lot of products to be profitable. Professional services like accounting, tax consulting, and equipment leasing are "high margin," meaning the price charged far exceeds the unit cost, sometimes by orders of magnitude. High-margin industries tend to have barriers to entry. They require highly trained professionals, expensive equipment, or other significant up-front investments.

The *total margin* is a broader measure of profitability across the entire organization. For non-profits, the total margin accounts for all activities reported in the year, regardless of the restriction. For governments, the total margin incorporates the change in the net position of business-type activities. For for-profit or hybrid organizations, total margin accounts for all expenses before interest, taxes, depreciation, and amortization, frequently referred to as "EBITDA" (*e-bit-dah*).

There are caveats to the total margin ratio – particularly for governments and non-profit organizations. Organizations that receive funding with donor restrictions are more likely to report a total margin ratio greater than their operating margin. As noted in Chapter 2, change in net assets has two components – net assets without donor restrictions and net assets with donor restrictions. The total margin includes the latter, even though the organization will need to expend those resources at a future date or are restricted in perpetuity. Using the organization's total margin ratio would incorrectly signal the non-profit's profitability.

PROFITABILITY RATIOS

Ratio	What it Tells Us	Non-Profit	Government	For-Profit/Hybrid
Operating Margin	Do operating revenues cover operating expenses? Rule of Thumb: Positive	$\frac{\text{Change in Net Assets Without Donor Restrictions}}{\text{Revenues Without Donor Restrictions}}$	$\left(\frac{\text{Net Revenue (Expense)}_{\text{Governmental Activities}}}{\text{Total Revenues}_{\text{Governmental Activities}}}\right) x - 1$	$\frac{(\text{Sales} - \text{Cost of Goods Sold})}{\text{Sales}}$
Total Margin	Do total revenues exceed total expenses? Rule of Thumb: Positive	$\frac{\text{Change in Net Assets}}{\text{Total Revenue}}$	$\frac{(\text{Change in Net Position})_{\text{Primary Government}}}{(\text{Total Revenue})_{\text{Primary Government}}}$	$\frac{\text{Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA)}}{\text{Total Revenue}}$
Return on Assets	How well does management leverage its assets to generate profits? Rule of Thumb: Positive	$\frac{\text{Change in Net Assets}}{\text{Total Assets}}$		$\frac{\text{Earnings Before Interest and Taxes}}{\text{Total Assets}}$
Return on Investments	How well does management leverage its investments to generate income? Rule of Thumb: Positive	$\frac{\text{Investment Gain (Loss)}}{\text{Total Investments}}$		
Return on Equity or Net Asset Growth	What is the return on shareholders investments? Rule of Thumb: Positive	$\frac{\text{Change in Net Assets Without Donor Restricitons}}{\text{Net Assets Without Donor Restrictions}_{t-1}}$	$\frac{\text{Change in Governmental Activities Net Position}}{\text{Net Position, Governmental Activities}_{t-1}}$	$\frac{\text{Net Income}}{\text{Equity}}$
Own Source Revenue	How much does this organization depend on support from other governments? Rule of Thumb: < 10%		$\frac{\text{Primary Govt. Contributions}}{\text{Primary Govt. Revenues}}$	
Inventory Turnover	How long does it take us sell inventory? Rule of Thumb: <60 days			$\frac{\text{Inventory}}{(\text{Cost of Goods Sold} / 365 \text{ days})}$

For governments, the total margin ratio would include the change in the net position of their business-type activities. While business-type activities are self-sustaining, the profits cannot be used to subsidize the government's core operations without legislative approval or a voter referendum. Consider the case of the City of Detroit when it filed for bankruptcy protection in 2013. City officials sought to transfer funds from its business-type activities (mainly funds in water and sewer) to the General Fund. Bondholders, secured with revenues from water and sewer services (i.e., business-type activities) sued and successfully prevented the transfer of funds to the General Fund, arguing resources are not fungible. Changes in law, contract, and administrative procedures would be required before resources are transferred from one fund to another.

Profitability measures are less salient for governments because governments need not be profitable to continue operating. Governments have the legal authority and monopolistic advantages that non-profits and for-profits do not. Governments can bolster their financial position by raising taxes or imposing fees. That's why profitability measures for government are focused on not just the change in net position but the share of revenues derived from general revenues versus grants or contributions.

Solvency measures speak to where the organization gets its resources. Revenues – earned or contributed – pay for regular programming and operating expenses. Capital – loans and mortgages – are how an organization acquires its assets. If a non-profit depends too much on unpredictable or volatile donor revenues, that's a potential solvency concern. The same is true of revenues from governments. Intergovernmental grants and contracts can disappear quickly if the government changes its fiscal policies and priorities.

Non-profits will report a wide variety of obligations, including accounts payable, accrued salaries and benefits, deferred revenue, long-term debt, and pension obligations. Since these are the result of doing business, they are expected and acceptable.

Although necessary, long-term debt is a drain on future resources. Research has shown that non-profits with long-term debt are less liquid and less profitable. An organization with long-term debt will make principal and interest payments every month (e.g., loans or mortgages) or semi-annually (e.g., bonds) – and, therefore, strain liquid resources and operating costs. Fixed assets frequently add to maintenance costs and depreciation expenses, resulting in lower profitability margins. These factors could inhibit an organization's ability to continue to serve its mission.

The liability-to-asset ratio is an alternative measure of solvency. This ratio allows analysts to assess the scope of non-current liabilities that are not in the form of loans, mortgages, or bonded debt. For example, a significant proportion of liabilities reported by the Bill and Melinda Gates Foundation and the Susan G. Komen Breast Cancer Foundation were non-current grants payable. This reflects the organization's use of multi-year grants to support the operating activities of other non-profits. The Boy Scouts of America, USA Gymnastics, and various Catholic dioceses have sizeable *contingent liabilities* following several recent sexual abuse lawsuits. These obligations are contingent on a court ruling or legal settlement. Accounting rules require organizations to report a contingent liability in the basic financial statements or notes to these financial statements. These disclosures depend upon the degree of certainty and materiality of the court ruling or legal settlement. These organizations will likely need to liquidate their existing assets to meet these obligations (as a side note, these organizations have filed for bankruptcy protection to allow for a negotiated settlement of outstanding obligations). The March of Dimes, Girls Scouts of America, American Civil Liberties Union, and the Metropolitan Opera Association all report an accrued pension liability. If the obligation is unfunded, it represents a drain on the organization's resources.

We, therefore, encourage users to estimate a liability-to-asset ratio, keeping in mind that *all debt is a liability, but not all liabilities are debt*.

SOLVENCY RATIOS

Ratio	What it Tells Us	Non-Profit	Government	For-Profit/Hybrid
Debt to Assets	What percentage of this organization's assets were financed with debt? Rule of Thumb: <0.5	$\frac{Total\ Debt}{Total\ Assets}$		$\frac{Total\ Debt}{Total\ Assets}$
Liability to Assets	What percentage of this organization's assets are owed to third parties? (an alternative to debt-to-asset ratio) Rule of Thumb: <0.5	$\frac{Total\ Liabilities}{Total\ Assets}$		$\frac{Total\ Liabilities}{Total\ Assets}$
Contributions Ratio	How much does this organization depend on donors? Rule of Thumb: >10% but <75%	$\frac{Total\ Contributions}{Total\ Revenue}$		
Government Revenue Ratio	How much does this organization depend on government funding? Rule of Thumb: <25%	$\frac{Government\ Revenue}{Total\ Revenue}$		
Near-Term Solvency	How well can this government meet its near-term obligations with annual revenues? Rule of Thumb: < 150%		$\frac{\left(Total\ Liabilties - Deferred\ Inflows\right)_{Primary\ Govt.}}{(Total\ Revenues)_{Primary\ Govt.}}$	
Debt Burden	How much money has this government borrowed so far? Rule of Thumb: Depends		$\frac{(Total\ Long\ Term\ Debt)_{Primary\ Govt.}}{Population}$	
Coverage 1	How easily can this government repay its debts as they come due? Rule of Thumb: < .15		$\frac{(Debt\ Service)_{Governmental\ Funds}}{(Expenditures)_{General\ Fund}}$	
Coverage 2	How easily can this government's business-type activities repay their long-term debt obligations as they come due? Rule of Thumb: > 5		$\frac{(Operating\ Revenue)_{Proprietary\ Funds}}{(Interest\ Expense)_{Proprietary\ Funds}}$	
Capital Asset Condition	Is this government investing in its capital assets? Rule of Thumb: Positive		$\frac{Net\ Investment\ in\ Capital\ Assets_t - Net\ Investment\ in\ Capital\ Assets_{t-1}}{Net\ Investment\ in\ Capital\ Assets_{t-1}}$	

The Internal Revenue Service (IRS) monitors the *contributions ratio* as part of its *public support test* for charitable organizations. According to this test, a non-profit must receive at least 10 percent of its support from contributions from the public or gross receipts from activities related to its tax-exempt purposes. Less than that suggests the public is not invested in that organization's mission. By contrast, non-profit analysts also emphasize the *tipping point* where a non-profit depends too much on individual donors. Different analysts define the tipping point threshold differently, but most agree that 80 percent of total revenues from individual contributions is dangerously high. At that point, a non-profit's ability to serve its mission is far too dependent on unpredictable individual donors and not dependent enough on either earned income (e.g., government contracts or fees-for-services) or gifts from corporations or foundations.

For governments, the solvency ratios are focused entirely on debt and other long-term obligations. Governments can borrow money that won't be paid back for decades. If careless, a government can take on too much *leverage.* That is why solvency ratios for governments focus on how much money a government has borrowed or owes in its governmental and enterprise funds and its ability to meet those obligations as they come due. The latter is known as *coverage*. Bond investors, particularly for public utilities, often stipulate how much coverage a government must always maintain. Coverage ratios are usually expressed as operating revenues as a percentage of interest expenses.

In addition to financial health, financial statements can illuminate how efficiently a non-profit raises money and how much of its resources it devotes to its core mission. These effectiveness measures are related to but separate from the financial position. Fundraising efficiency shows the financial return a non-profit realizes for its investments in its fundraising capacity.

NON-PROFIT EFFECTIVENESS RATIOS

Ratio	What it Tells Us	Formula
Fundraising Efficiency	What is the return on $1.00 in fundraising expenses? Rule of Thumb: > 1	$\frac{Total\ Contributions}{Fundraising\ Expense}$
Program Expense Ratio	What proportion of total expenses are invested in programs and services versus administration and fundraising? Rule of Thumb: > .8	$\frac{Program\ Expenses}{Total\ Expenses}$

The program expense ratio is one of the most closely watched and controversial ratios in non-profit financial management. It tells us how much of a non-profit's total expenses are invested in its programs and services rather than administration, fundraising, and other overhead spending. Many analysts and non-profit monitors recommend a program service ratio of at least 80 percent – though we caution against the use of the program-expense ratio as allocation of expenses into program, administrative, and fundraising is far from clear cut.

RATIOS AND RULES OF THUMB

These rules of thumb are derived from the rich academic literature and industry analysis. To be clear, there is no legal or GAAP-based definition of "financially healthy" or "strong financial position." Every financial institution, foundation, donor, or grantor defines these metrics differently. Measures of financial health will vary by sector and the size of the organization. The rules listed in the ratio tables above represent figures cited by analysts in the public and private sectors. Before going further, let's consider a few key points about financial statement ratios:

- *Ratios are only part of the story.* Ratios are useful because they help us quickly and efficiently focus our attention on the most critical parts of an organization's financial position. In that sense, they are a bit like watching ESPN's 30-second highlight recap of a football game (or whatever sporting event, if any, you find interesting). If we want to know which team won and who made some big plays, we'll watch the highlight reel. If we want to know the full story – the coaches' overall game plan, which players played well throughout the game, when a key mistake changed the course of the game, etc. – we need to watch a lot more than just the highlights. Ratios are the same way. They are fast, interesting, and important. If we want a quick overview and not much more, they are useful. If we don't have the time to dig deeper

into an organization's operations, or if it's not appropriate for us to dig deeper, then they're the best tool we have. But they are never the whole story. Always keep this limitation in mind.

- *Always interpret ratios in context.* Ratios are useful because they help identify trends in an organization's financial behavior. Is its profitability improving? How has its overall liquidity changed over time? Are its revenues growing? And so on. But on their own, ratios don't tell us anything about trends. To reveal a trend, we must put a ratio in context. We need to compare it to that same ratio for that same organization over time. For that reason, we often need multiple years of financial data. It is also essential to put ratios in an industry context. Sometimes, a broader financial trend will affect many organizations in similar ways. A decline in corporate giving will mean lower donor revenues for many non-profits. Increases in overall healthcare costs will impact all organizations' income statements. Reductions in certain federal and state grants will affect particular types of non-profits in similar ways. To understand these trends, we need to compare an organization's financial ratios to the ratios of organizations in similar industries. It is useful, for instance, to compare human services-focused non-profits with less than $2 million in assets to other small, human service-focused non-profits in the same region with less than $2 million in assets. We should compare fee-for-service, revenue-based non-profits to other fee-for-service, revenue-based non-profits. Large non-profits with national or international missions should be compared to each other.
- *Financial statement analysis raises questions.* A good financial statement analysis will almost always reveal some contradictory trends. Why does this organization's profitability look strong, but the current ratio is well below the rule of thumb? Why is this organization less liquid than its peers? Why does this organization not have debt and is far more liquid than similar organizations? A good financial statement analysis raises questions about the organization's financial assumptions, program operations, and overall effectiveness. Sometimes these follow-up questions can be answered from other publicly available information, such as the notes to the financial statements or the annual report. Sometimes they can't. If your analysis concludes with many unanswered questions, that does not mean your analysis is bad. It simply means there are limits to what we can learn from financial statements alone.
- *Ratios are retrospective.* Most organizations release their financial statements three to six months after the close of their fiscal year. As a result, analysis based on those statements relies on information that is at least 12 to 18 months old. A lot can happen in 18 months! Always keep this in mind when doing financial statement analysis.

NON-PROFIT BUSINESS MODEL AND CAPITAL STRUCTURE

A non-profit's financial self-assessment is based on a coherent analysis of the organization's business model and capital structure. What do we mean by business model? It is the nature and distribution of an organization's revenues and expenses. The business model reflects the non-profit's strategic choices to fund operations (e.g., individual donors vs. corporate gifts, contributions vs. earned income, private support vs. government contracts) and resources allocated to programs and administrative services. **A sustainable non-profit business model provides reliable revenues to cover the full cost of doing business.** Sustainable non-profits understand how programs subsidize or are subsidized by others and maintain a specific, actionable plan to respond to unexpected events. Capital structure refers to the nature and distribution of an organization's assets, liabilities, and net assets. **A well-capitalized organization can access the cash necessary to cover its obligations, has the reserves to weather downturns in the external operating environment, and can take advantage of new opportunities to innovate.**

We have modified the Non-profit Financial Assessment Toolkit developed by the Non-profit Finance Fund (NFF) to help non-profits assess their financial health. To contextualize questions included in the survey, let's review the connection between an organization's business model (i.e., Statement of Activities or Income Statement) and capital structure (i.e., Statement of Financial Position or Balance Sheet).

Thus far, we have focused on the idea that the non-profit's revenues must meet or exceed program and overhead costs. However, a broader definition is necessary – one that accounts for the full costs of operations (a term we've also borrowed from NFF). Non-profits that generate enough resources to cover full costs of operations have sufficient reserves to meet unexpected costs or revenue shortfalls; can invest in technology, property, or equipment; and take advantage of new opportunities and are innovative in program or service delivery.

A non-profit's ability to do so will be a function of the type of revenue it earns. Unrestricted contributions provide an organization with the greatest flexibility. Studies show that non-profits that rely on government contracts are more likely to report deficits and are more likely to be insolvent for two reasons. First, governments do not cover overhead costs. Failure to cover overhead costs means the organization has a structural deficit baked in the service agreement with the government agency. On the revenue side, the non-profit will need to raise additional donor support or rely on profitable ventures. On the expense side, the non-profit will likely scale back on administrative functions, including finance, technology, and other back-office staff. Eventually, it will need to draw down on reserves or cut back on critical program staff. Second, governments are more likely to delay payments. As a result, the non-profit will need to draw down on existing reserves, rely on lines of credit, or delay payments to vendors. It will forego investment income, incur an interest expense if it uses a line of credit, incur late payment penalties with vendors or suppliers, or forego pre-payment discounts.

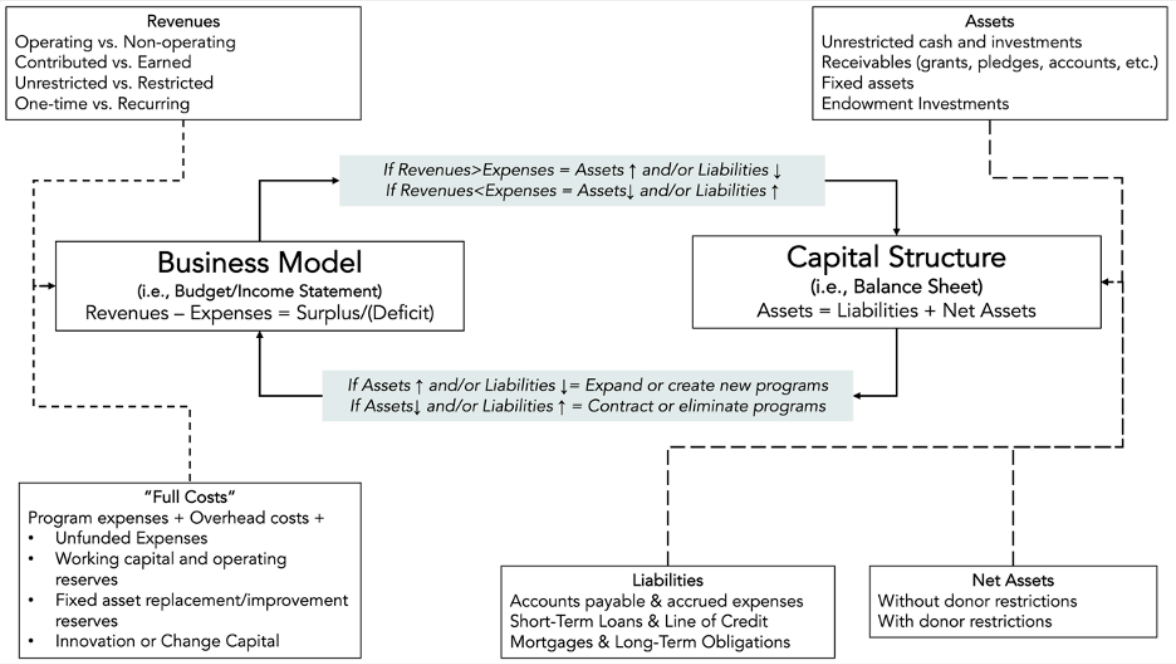
A non-profit that consistently reports a surplus will see continued and sustained growth in assets. We'll likely find that a significant proportion of its long-term obligations are used to acquire fixed assets (i.e., a mortgage or long-term debt). Those reporting a greater share of unrestricted public support are more likely to report a larger share of net assets without donor restrictions. That organization has a greater ability to expand programs. It can invest in new equipment, and excess funds can be transferred to a long-term investment portfolio that would generate investment income.

Non-profits reporting deficits are more likely to report fewer assets, and their liabilities are likely to grow over time. How does this happen? In the short term, it will draw on reserves, but persistent deficits will likely result in increased reliance on lines of credit and delayed payments to suppliers and vendors. Deficits will demand cuts to critical program and administrative staff. The deficits may incentivize the organization to pursue profitable but non-essential programs to subsidize essential programs, resulting in mission drift. Over the long term, the organization could become vulnerable to after-the-fact audits and claw-backs for disallowed expenses as a result of significant cuts in grant administration and finance staff. These create unexpected and sizeable contingent liabilities. The non-profit could also report a growing pension liability if it fails to fund employee benefit programs adequately. Growth in liabilities reflects the organization's inability to generate revenues sufficient to cover full costs.

The figure below shows the connections between the non-profit's business model (i.e., revenues, program expenses, and overhead costs) and capital structure (i.e., assets, liabilities, and net assets). As we noted in Chapter 2, non-profits need to budget for reserves. We, therefore, reflect not just program expenses and overhead costs in "Full Costs" but also reserve needs for the organization. Practically speaking, a non-profit would need to report a surplus equal to five percent of operating revenues for 10 consecutive years to accumulate reserves equal to six months of operating expenses. Given the evidence that most non-profits report deficits, a mix of budget surplus and capital campaigns would be necessary to create meaningful levels of reserves.

The more revenues (and, correspondingly, surpluses) a non-profit generates, the more assets it will report. Those will appear first in receivables and then in cash. Over time, these are invested in property and equipment or used to create informal or formal reserves.

Non-profits that are profitable can invest in or expand programs. Those that are not profitable will need to tap into reserves (i.e., cash and investments) in the short term or cut spending or sell assets over the long term to balance budgets and make payments on obligations as they come due. Selling assets and eliminating programs may be the only way the non-profit can maneuver out of a financial crisis.



Recommended readings include Morris, G., et al. (2018). The Financial Health of the United States Non-profit Sector: Facts and Observations, MacIntosh, J., et al. (2016). Understanding Overhead: A Governance Challenge for Non-profit Trustees and Nonprofit Finance Fund (2011) "Case for Change Capital in the Arts"

NON-PROFIT FINANCIAL SELF-ASSESSMENT WORKSHEET

This worksheet reveals some of your non-profit's financial strengths and weaknesses. If you answer ***YES*** to many questions, you have a good grasp of your financial dynamics and will likely weather an economic crisis. If you answer ***NO,*** you may want to review what actions you could be making to mitigate risk.

CRITERIA	YES	NO
– Our revenue portfolio is diverse and predictable. To assess diversity, identify unique sources of revenue. To assess predictability, compare actual revenues to budgeted revenues.		
– Our donors are reliable. To assess donor support, consider donor recruitment, retention, attrition, and changes in average gift size.		
– We can count on funding agencies for continued support at current levels. To assess continued support, a careful review of the organization's history of corporate gifts, government contracts, and foundation grants is required. For example, what proportion of gifts, grants, or contracts are multi-year? How long has the donor, foundation, or government supported the organization?		
– Our earned income services are competitively priced. Our organization maintains competitive advantage in the community or region. To assess competitive advantage, a market analysis of the organization's services should be completed as part of the strategic planning process (at least once every three to five years).		
– Government contracts and foundation grants sufficiently fund overhead costs. Covering indirect and non-program costs associated with general operations, capacity-building, and innovation is crucial to the long-term success of the non-profit. Otherwise, government contracts and foundation grants create a structural deficit for the organization that would require donor support or a draw on reserves.		
– Foundation support is unrestricted and remitted in advance. Government contracts and all other accounts receivable are collected 60 days from invoice date. Unrestricted funding gives management the flexibility to direct resources to highest need. Foundations should remit funds upfront to limit non-profit draws on reserve funds or use of lines of credit. Government contracts should be paid in a timely fashion to limit non-profit draws on reserve funds or use of lines of credit.		
– We have a demonstrated history of consistently reporting operating surpluses. To objectively assess operating surpluses, review audited financial statements for the last five years. The three-year moving average of operating margin should be positive, and the non-profit should have reported an operating surplus (i.e., operating revenues without donor restrictions>expenses) in three of the last five years.		
– Our operating surpluses are sufficiently large. Sustainable non-profits should have a target surplus based on current and future needs, including creating and maintaining rainy-day reserves, fixed-asset replacement reserves, and/or board-designated innovation reserves.		
– We have policies in place to respond to a rapidly changing operating environment. The board and management should identify which costs they would need to cut without delay or harming core programs.		

Adopted with modifications from "*Financial Self-Assessment Worksheet – Know Your Strengths and Weaknesses*" published by the Non-profit Finance Fund

NON-PROFIT FINANCIAL SELF-ASSESSMENT WORKSHEET

This worksheet reveals some of your non-profit's financial strengths and weaknesses. If you answer ***YES*** to many questions, you have a good grasp of your financial dynamics and will likely weather an economic crisis. If you answer ***NO,*** you may want to review what actions you could be making to mitigate risk.

	CRITERIA	YES	NO
–	The Board receives and reviews monthly financials. This includes monthly budget versus actuals comparison schedules, monthly cash flow projections, notification use of reserve funds or lines of credit, and pro-forma balance sheet.		
–	We adopt balanced budgets. Budget assumptions should reflect current operating environment. Scenario analysis (i.e., best, probable, and worst budget options) is part of the budget preparation process.		
–	We have enough cash on hand to manage the cyclicality of our daily operations. Non-profits should have in place working capital policy with recommendation for days of cash on hand.		
–	We have reserves that we can draw on to manage revenue shortfalls or meet unexpected expenses. There are procedures for when the non-profit can draw down on reserves. An unexpected draw on reserves is included in the report to the Board or requires Board approval.		
–	We have access to line(s) of credit. Non-profits, particularly those with less than six months of reserves, should negotiate for access to secured and unsecured line(s) of credit (the latter being more expensive).		
–	We have procedures to replenish reserves. This may include diverting a proportion of donations without restrictions or profits from earned income activities to a reserve fund.		
–	Our investments are safe and stable. Non-profits should adopt an investment policy for short-term investments that outlines allowable liquid and safe investments. A separate investment policy should be in place to guide asset allocation for all long-term investments (i.e., board-designated and donor-restricted investments). Use of investment advisory services should be at competitive rates.		
–	We pay our vendors on time and take advantage of pre-payment discounts. Management should have a purchasing review process that allows the Director of Finance to pre-pay for goods or services where there are potential costs savings (e.g., bulk purchases with pre-payment discounts).		
–	We are making payments on outstanding long-term debt. Non-profits should make timely payments on long-term debt. The Director of Finance should report on a monthly or semi-annual basis that all loan covenants (e.g., debt service coverage ratio and debt service reserve funds) are met. They should also provide all lenders with timely, accurate reporting and analysis of financial results, and submit to lenders audited financial statements at the end of each fiscal year.		
–	We maintain a capital improvement plan. To adequately maintain, replace, or expand existing property and equipment, a capital improvement plan is in place and is reviewed and amended on an annual basis. Fixed asset replacement reserves are planned based on current and future needs of the organization.		

Adopted with modifications from "*Financial Self-Assessment Worksheet – Know Your Strengths and Weaknesses*" published by the Non-profit Finance Fund

Download Non-Profit Financial Self-Assessment Worksheet: https://bit.ly/3rbVKUR

NON-PROFIT FINANCIAL RATIOS – AN ILLUSTRATION

To see these ratios in action, let us return to Treehouse. We use FY 2022 data to illustrate how each ratio is estimated and include FY 2021 ratios for comparative purposes. We highlight the key findings below. Note that our discussion below does not focus on how one should interpret each ratio. Instead, we tell a story about the organization's financial position and operating performance. That story – not the ratios – helps formulate questions and additional lines of inquiry. Notwithstanding, we've included comments in the tables to help you understand how to interpret each ratio.

FINANCIAL RATIOS – TREEHOUSE

RATIO	WHAT IT TELLS US	FORMULA	2022 RATIOS	2021
Current Ratio	Will near-term assets cover near-term obligations? Rule of Thumb: >2	$\frac{Current\ Assets}{Current\ Liabilties}$	$\frac{13{,}095{,}728}{1{,}239{,}911} = 10.56$ For every $1 in current liabilities, Treehouse reported $10.56 in current assets.	12.16
Quick Ratio	Will the most liquid assets cover near-term obligations? Rule of Thumb: >1	$\frac{Cash + Investments\ + Receivables}{Current\ Liabilties}$	$\frac{4{,}430{,}208 + 3{,}162{,}683 + 970{,}433 + 195{,}182 + 3{,}528{,}538}{1{,}239{,}911} = 9.91$ For every $1 in current liabilities, Treehouse reported $9.91 in cash and receivables.	11.42
Cash Ratio	Will cash and investments cover near-term obligations? Rule of Thumb: >1	$Cash + Investments/Current\ Liabilities$	$\frac{4{,}430{,}208 + 3{,}162{,}683}{1{,}239{,}911} = 6.12$ For every $1 in current liabilities, Treehouse reported $6.12 in cash and investments.	9.67
Days of Cash on Hand	How many days of cash do we have? Rule of Thumb: >90 days	$\frac{Cash + Investments}{\left(\frac{Total\ Expenses - Depreciation}{-Bad\ Debt\ Expense}/365\ Days\right)}$	$\frac{4{,}430{,}208 + 3{,}162{,}683}{(23{,}499{,}527 - 286{,}274 - 33{,}567/365\ \text{Days})} =$ 119.56 days Treehouse reported $7.6 million in cash and unrestricted investments sufficient to meet 119 days of operating expenses.	255.24 days
Days of Liquid Net Assets	How many days of liquid net resources do we have? Rule of Thumb: >180 days	$\frac{\left(\frac{Net\ Assets\ Without\ Restrictions -}{Fixed\ Assets, Net\ of\ Depreciation}\right)}{\left(\frac{Total\ Expenses - Depreciation}{-Bad\ Debt\ Expense}/365\ Days\right)}$	$\frac{(19{,}743{,}171 - 7{,}097{,}000 - 1{,}228{,}420)}{(23{,}499{,}527 - 286{,}274 - 33{,}567/365\ \text{Days})} =$ 179.79 days Treehouse reported unrestricted liquid assets of 179 days. This is a very strong unrestricted liquid net asset position even though it reported $8.3 million in fixed assets.	298.41 days
Receivables Turnover	How long does it take us collect receivables? Rule of Thumb: <60 days	$\frac{Receivables}{(Revenues/365\ days)}$	$\frac{970{,}433 + 195{,}182 + 3{,}528{,}538}{\left(\frac{23{,}385{,}623}{365\ days}\right)} = 73.2$ days In FY 2022, Treehouse reported a significant increase in receivables. As a result, the receivables turnover period is higher than in previous years.	35.65 days

What do the financial statements and estimated ratios tell us about Treehouse's financial position and performance? Treehouse reported a strong financial position. At the end of FY 2022, the non-profit reported $27 million in assets, including $7.6 million in cash and investments, $5 million in receivables ($4.7 million are due in the next 12 months), $8.3 million in fixed assets (net of depreciation), and $5.2 million in endowment investments. That said, the non-profit reported a

$2.1 million drop in cash and investments. While the drop in cash and investments has a negative impact on the non-profit's liquidity position, the liquidity ratios remain at or above recommended benchmarks.

RATIO	WHAT IT TELLS US	FORMULA	2022 RATIOS	2021
Operating Margin	Do operating revenues cover operating expenses? Rule of Thumb: Positive	$\frac{\textit{Change in Net Assets Without Donor Restrictions}}{\textit{Revenues Without Donor Restrictions}}$	$\frac{516{,}298}{24{,}015{,}825} = 2\%$ Treehouse reported $516,662 in operating surplus (or 2 percent of operating revenues).	22%
Total Margin	Do total revenues exceed total expenses? Rule of Thumb: Positive	$(\textit{Change in Net Assets})/(\textit{Total Revenue})$	$\frac{5{,}622{,}029}{23{,}385{,}623} = 24\%$ Including non-operating and restricted income, Treehouse reported a $5.6 million total surplus equal to 24 percent of total revenues.	31%
Return on Assets	How well does management leverage its assets to generate profits? Rule of Thumb: Positive	$\frac{\textit{Change in Net Assets}}{\textit{Total Assets}}$	$\frac{5{,}622{,}029}{26{,}966{,}259} = 21\%$ Including non-operating and restricted income, Treehouse reported a $5.6 million surplus equal to 21 percent of assets.	20%
Return on Investments	How well does management leverage its investments to generate income? Rule of Thumb: Positive	$\frac{\textit{Investment Gain (Loss)}}{\textit{Total Investments}}$	$\frac{-1{,}361{,}592}{3{,}162{,}683 + 5{,}189{,}663} = -16\%$ Treehouse reported $1.4 million in losses from investments equal to 16 percent of the value of the investments, including endowment investments.	13%
Return on Equity	What is the return on shareholders' investments? Rule of Thumb: Positive	$\frac{\textit{Change in Net Assets Without Donor Restricitons}}{\textit{Net Assets Without Donor Restrictions}_{t-1}}$	$\frac{7{,}108{,}483}{12{,}634{,}688} = 56\%$ There was an increase in equity because of the in-kind donation of an interest in the building resulting in a 56 percent increase in net assets without restrictions (or $7.1 million).	34%

Treehouse reported $516,298 in income at the end of FY 2022 – approximately 2 percent of operating revenues. Operating revenues in FY 2022 ($24 million) were up 75 percent. Much of the growth in revenues was driven by contracts, most of which were with the State of Washington. Contributions, grants, and in-kind donations increased 14 percent. The nonprofit's expenses ($23.5 million) were also higher, particularly in program services. Changes notwithstanding, the non-profit had a program-expense ratio of 83 percent. Total Change in Net Assets for FY 2022 was $5.7 million, including $1.4 million in losses from investments – which mirrors outcomes in the broader financial markets and in-kind donation of an interest in the building ($7.1 million).

Unlike most health and human services organizations, Treehouse has no long-term debt, and its liabilities are modest ($1.2 million).

RATIO	WHAT IT TELLS US	FORMULA	2022 RATIOS	2021
Liability to Assets	What percentage of this organization's assets are owed to third parties? (an alternative to debt-to-asset ratio) Rule of Thumb: <0.5	$\frac{Total\ Liabilities}{Total\ Assets}$	$\frac{1,239,911}{26,966,259} = \$0.05$ Treehouse reported a negligible amount in payables and other obligations (five cents for every dollar in assets held). Keep in mind Treehouse does not report any long-term debt. We, therefore, estimate a liability-to-asset ratio instead of a debt-to-asset ratio.	$0.05
Contributions Ratio	How much does this organization depend on donors? Rule of Thumb: >10% but <75%	$\frac{Total\ Contributions}{Total\ Revenue}$	$\frac{9,400,113 + 662,156}{23,385,623} = 46\%$ Forty-six percent of revenues are from grants and contributions (including in-kind contributions).	70%
Government Revenue Ratio	How much does this organization depend on government funding? Rule of Thumb: <25%	$\frac{Government\ Revenue}{Total\ Revenue}$	$\frac{12,659,996}{23,385,623} = 54\%$ The remainder of the revenues are from government contracts (54 percent).	29%
Fundraising Efficiency	What is the return on $1.00 in fundraising expenses? Rule of Thumb: > 1	$\frac{Total\ Contributions}{Fundraising\ Expenses}$	$\frac{10,040,113 + 662,156}{2,262,043} = \$4.73$ For every $1 in fundraising expenses, the non-profit raised $4.73 in grants and contributions.	$5.96
Program Expense Ratio	What proportion of total expenses are invested in programs and services versus administration and fundraising? Rule of Thumb: > .8	$\frac{Program\ Expenses}{Total\ Expenses}$	$\frac{19,577,929}{23,499,527} = 83\%$ For every $1 in expenses, 83 cents are invested in providing services to the non-profit's clients.	76%

Download Treehouse Financial Statement Analysis: https://bit.ly/44SwTTL

Treehouse's investments in fundraising are productive. For every $1 in fundraising expenses, the non-profit raised at least $5.00 in contributions and grants over the last five years. What's more, our analysis shows it collected those receivables in 60 days or less. This ratio is critical to non-profits that rely on government contracts. If payments are late, the non-profit will need to draw down on its cash reserves and investments to meet operating expenses until the next payment is received. Non-profits that rely on monthly contributions, particularly from small donors, report a collection period that is less than 30 days. The financial statements show a significant increase in contracts in FY 2022 (up from $3.9 million in FY 2021 to $12.7 million in FY 2022) that led to a 204 percent increase in contract receivables ($3.5 million). This increase in receivables could negatively impact cash flows.

THE FINANCIAL HEALTH OF THE NON-PROFIT SECTOR

Unless specified, non-profit financial statements are prepared in accordance with GAAP. They are not, however, the only source of financial data. The IRS Form 990 provides the public with financial information comparable to that reported in the financial statements.

Form 990 is a unique blend of GAAP and tax-basis of accounting. For various reasons, the assets, liabilities, revenues, and expenses reported in the tax form 990 will differ from those reported in the financial statements. Limitations notwithstanding, the IRS maintains an electronic database that can be used to assess the financial health of the non-profit sector. Using 990 data reported by more than 200,000 non-profits reporting $2.45 trillion in expenses, Morris, Roberts, MacIntosh, and Bordone (2018) found the non-profit sector in the U.S. to be **financially fragile, with non-profits in every sector frequently reporting deficits.**

MEDIAN RATIOS USING 2014 IRS 990 DATA

	Count	Expenses (Size of Sector)	Current Ratio	Months of Cash + Investments	Debt-to-Asset Ratio	3yr. Net Income Margin	Operating Reserve	Contribution Ratio*	Administration Ratio*	Fundraising Ratio*	Fundraising Efficiency*
Arts, Culture, & Humanities	9%	2%	3.6	5.3	0.04	2.5%	0.1	43%	13.7%	6.5%	$5.56
Community Capacity	9%	2%	2.5	5.5	0.08	2.2%	1.6	24%	14.9%	5.3%	$7.14
Educational Institutions	16%	25%	2.2	5.4	0.07	3.1%	0.1	17%	13.4%	2.7%	$5.26
Environment and Animal-Related	4%	1%	7.2	6.9	0.02	5.0%	1.0	60%	10.8%	6.7%	$7.14
Health & Human Services	27%	9%	1.3	2.9	0.16	1.0%	1.2	9%	12.1%	3.1%	$5.56
Hospitals & Care Organizations	9%	46%	1.7	3.7	0.18	2.4%	1.1	3%	13.0%	3.1%	$5.56
Other	5%	3%	4.3	5.0	0.03	2.3%	0.8	69%	10.6%	6.1%	$10.00
Philanthropy	5%	3%	6.3	12.4	0.01	4.4%	0.0	61%	8.1%	7.4%	$6.25
Religious Institutions	5%	1%	2.7	3.6	0.02	3.1%	0.0	85%	12.3%	5.3%	$16.67
Science & Technology	2%	4%	4.5	8.6	0.05	2.8%	1.0	38%	12.4%	7.3%	$7.69
Youth Development	8%	1%	4.0	4.0	0.02	2.3%	0.4	30%	9.9%	5.8%	$4.76
Very Small (<$1MM)	66%	2%	3.4	5.2	0.02	2.7%	0.3	41%	14.0%	5.8%	$6.67
Small ($1MM - $5MM)	21%	4%	2.1	3.3	0.16	1.7%	1.1	15%	12.3%	5.5%	$5.88
Mid-Sized ($5MM-$10MM)	5%	3%	1.5	3.1	0.25	1.6%	1.2	6%	11.6%	3.2%	$5.26
Large ($10MM - $50MM)	6%	11%	1.2	3.0	0.33	1.7%	1.2	3%	11.5%	2.3%	$4.76
Very Large ($50MM - $5BN)	2%	58%	1.0	4.1	0.38	2.9%	0.3	1%	10.6%	1.5%	$5.26
Supersized (>$5BN)	0%	21%	1.1	8.1	0.38	2.7%	2.8	2%			

That research found:

- **Operating margins were largest for small non-profits (<$1 million), but there is significant variation in the data**. For example, small non-profits were more likely to report large deficits or surpluses (the operating margin range was -21 percent to 32 percent). Large non-profits (>$10 million) were more likely to report a surplus. The distribution of operating margins was tighter (between -5.9 percent and 12.9 percent) and the largest non-profits (>$5 billion in expenses) did not report deficits.

- **Smaller organizations (<$5 million) are more likely to be liquid**. While larger organizations (>$50 million) reported low current ratios, they maintain sizeable long-term investment portfolios, making them more resilient to an economic downturn. There was significant variation in liquidity by sector, with hospitals and human service organizations reporting low current ratios and reserve balances (and the lowest operating margins). Remember that these two sectors accounted for 55 percent of expenses and 36 percent of organizations. They represent organizations that underserved communities rely on.

- **Large non-profits (>$10 million in expenses) were more likely to report long-term debt**. Not surprisingly, hospitals and health and human service organizations were more likely to report debt, as their business model mandates investment in property and equipment to meet the needs of the communities they serve. Philanthropic and environmental organizations reported the lowest debt burdens. These sectors were also the most profitable – 4.4 percent and 5.0 percent, respectively.

- **There are economies of scale with overhead costs**, with larger non-profits reporting a lower share of overhead costs (i.e., administration and fundraising ratio). There were notable differences in fundraising ratios, with non-profits

relying less on contributions reporting the lowest fundraising efficiency ratios and vice versa.

For detailed distributions of financial ratios, see Morris, G., et al. (2018). The Financial Health of the United States Non-profit Sector: Facts and Observations, Oliver Wyman, SeaChange Capital Partners, GuideStar and MacIntosh, J., et al. (2016). Understanding Overhead: A Governance Challenge for Non-profit Trustees, Oliver Wyman, SeaChange Capital Partners.

**Sample was limited to 10,754 non-profits in New York City. We believe the sample is sufficiently large and the results are representative of all non-profits. We transpose the author's original estimate of fundraising efficiency ratio to estimate fundraising efficiency.*

ASSESSING THE FINANCIAL HEALTH OF GOVERNMENTS USING THE TEN-POINT TEST

Throughout the past few decades, analysts have developed a popular framework to evaluate a local government's financial condition. It is known as the "*Ten Point Test*." It's comprised of 10 key ratios that, when taken together, summarize a government's liquidity, profitability, and solvency. In the Ten Point Test framework, a government earns "points" based on how its ratios compare to its peer governments. If its ratios are consistently better than its peers, it earns a higher score. If its ratios are consistently worse than its peers, its scores are lower and, in some instances, negative.

To see the *Ten Point Test* at work, let's return to the City of Bothell. The table below shows the city's ratios and their computations based on information in its 2021 Annual Comprehensive Financial Reports (ACFRs). Bothell's 10-point ratios are a mixed bag. The government's General Fund liquidity position is relatively strong. The city's General Fund unassigned balance at the end of FY 2021 was $18 million (a historical high), approximately equal to 30 percent of the revenues reported in the General Fund. The government also reported $18.8 million in cash and investments (approximately 584 percent of its General Fund liabilities).

FINANCIAL RATIOS – CITY OF BOTHELL

RATIO	WHAT IT TELLS US	FORMULA	FY 2021
Short-Run Financial Position	How much in unrestricted resources do we have as a percent of our revenues? Rule of Thumb: >5%	$\frac{\text{Unassigned General Fund Balance}}{\text{General Fund Revenues}}$	$\frac{18{,}021{,}012}{61{,}009{,}245} = 30\%$ The City's reported $18 million in unassigned General Fund balance at the end of FY 2021, approximately 30 percent of revenues reported in the General Fund – a historical high.
Liquidity	Will cash and investments cover near-term obligations? Rule of Thumb: >100%	$\frac{\text{General Fund Cash + General Fund Investments}}{\text{General Fund Liabilties (excluding Deferred Inflows)}}$	$\frac{12{,}863{,}100 + 5{,}974{,}970}{3{,}228{,}070} = 584\%$ The City reported $18.8 million in cash and investments, nearly six times the recommended liquidity position (584%) and the strongest liquidity position in more than five years.

That said, the ACFRs show that the City's net position declined $2.1 million or 0.4 percent of the net position. The $2.1 million deficit was a fraction of what the city reported prior to the COVID-19

pandemic. A quick review of the financial statements shows that depreciation expense has increased over the years – reflecting the city's investment in infrastructure. This is also evident in the ratio measuring capital asset improvement, which continues to be negative (-7 percent).

The city relies on general revenues – specifically property and excise taxes – to cover operating expenses. The city reported $4.1 million in operating grants and contributions, approximately 3.12 percent of primary government revenues. Intergovernmental transfers were higher in FY 2020 and FY 2021, reflecting the infusion of federal stimulus funds in the city's operations. The city's operating margin for governmental activities was 61 percent. This ratio is larger because the city reported a deficit. The ratio would be lower if expenses were lower or if the government had reported more in either program revenues or general revenues. Notwithstanding, strong revenue growth and effective management of the city's expenses have allowed the city to improve its net position.

RATIO	WHAT IT TELLS US	FORMULA	FY 2021
Net Asset Growth	What is the return on shareholders' investments? Rule of Thumb: Positive	$\frac{\text{Change in Governmental Activities Net Position}}{\text{Net Position, Governmental Activities}_{t-1}}$	$\frac{-2,095,559}{589,097,828} = -0.4\%$ The city's net position for core operations (or governmental activities) decreased by $2.1 million or 0.4 percent, the lowest deficit in five years. The biggest driver for the city's negative change in Net Position has been depreciation expense.
Operating Margin	Do operating revenues cover operating expenses? Rule of Thumb: Positive	$\left(\frac{\text{Net Revenue (Expense)}_{\text{Governmental Activities}}}{\text{Total Revenues}_{\text{Governmental Activities}}}\right) \text{x} - 1$	$\left(\frac{-65,848,816}{107,267,488}\right) \text{x} - 1 = 61\%$ 61 percent of the City's operating expenses are supported by general revenues - primary property and excise taxes. As noted earlier, the city reported a deficit. That also means the city did not raise sufficient taxes to cover the full costs of operations.
Own Source Revenues	How much does this organization depend on government? Rule of Thumb: < 10%	$\frac{\text{Primary Govt. Operating Contributions}}{\text{Primary Govt. Revenues}}$	$\frac{4,093,535}{131,011,403} = 3\%$ Primary government operating grants and contributions were 3 percent of total revenues, significantly higher relative to prior to the COVID pandemic reflecting the infusion of federal support to the core functions of the city.

The city of Bothell reports a high debt burden ($2,637 per capita). The rapid growth in population and the city's planned expansion in capital improvements have resulted in the growth in the debt per capita. The government's capital improvements make the city more attractive, which would lead to a growth in residents, resulting in a growth in revenues. Notwithstanding, its near-term solvency ratio (120 percent) is below the benchmark – reflecting growth in economic activity and, as a result, revenues. More importantly, the city's pension and OPEB obligations are a modest share of the city's non-current liabilities ($8.1 million, or 6 percent of non-current liabilities).

Moody's upgraded the city from Aa2 to Aa1 on October 11, 2019. The rating agency noted that the city "benefited from its inclusion in the Puget Sound area." Factors that could lead to a rating downgrade include "deterioration in the city's financial position" because of "material contractions of the city's taxable base." The COVID-19 pandemic did not have a material negative effect on the government's revenues. The city's revenue portfolio is inelastic. Property values have not changed significantly since the start of the COVID-19 recession, and the housing market remains competitive.

RATIO	WHAT IT TELLS US	FORMULA	FY 2022
Near-Term Solvency	How well can this government meet its near-term obligations with annual revenues? Rule of Thumb: < 150%	$\frac{\left(\text{Total Liabilties}\atop\text{(Excluding Deferred Inflows)}\right)_{\text{Primary Govt.}}}{(\text{Total Revenues})_{\text{Primary Govt.}}}$	$\frac{157{,}206{,}831}{131{,}011{,}403} = 120\%$ Primary government long-term obligations are 120 percent of primary government revenues. The ratio declined as a result of an increase in tax revenues and federal support. Liabilities of the city ($157 million) were at a historical high.
Debt Burden	How much more money has this government borrowed so far? Rule of Thumb: It depends!	$\frac{(\text{Total Long Term Debt})_{\text{Primary Govt.}}}{\text{Population}}$	$\frac{129{,}018{,}696}{48{,}920} = \$2{,}637$ Outstanding long-term debt obligations of the city (i.e., general obligation and revenue debt, excluding pension and OPEB obligations) were $2,637 per capita. Growth in long-term debt obligations reflects the City's investments in infrastructure.
Coverage 1	How easily can this government repay its debts as they come due? Rule of Thumb: <25%	$\frac{(\text{Debt Service})_{\text{Governmental Funds}}}{(\text{Expenditures})_{\text{General Fund}}}$	$\frac{8{,}221{,}959}{55{,}379{,}086} = 15\%$ Debt service (i.e., principal and interest payments on long-term debt) were 15 percent of General Fund expenditures. Note, we estimate the ratio using debt service from governmental funds as the city reports debt service in a separate debt service fund.
Coverage 2	How easily can this government's business-type activities repay their long-term debt obligations as they come due? Rule of Thumb: >1	$\frac{(\text{Operating Revenue})_{\text{Proprietary Funds}}}{(\text{Interest Expense})_{\text{Proprietary Funds}}}$	$\frac{21{,}101{,}687}{469{,}803} = 47\text{x}$ Revenues from business-type activities (water, sewer, and stormwater) can cover interest costs 47 times over.
Capital Asset Condition	Is this government investing in its capital assets? Rule of Thumb: Positive	$\frac{\text{Net Investment in Capital Assets}_t - \text{Net Investment in Capital Assets}_{t-1}}{\text{Net Investment in Capital Assets}_{t-1}}$	$\frac{558{,}338{,}328 - 602{,}305{,}433}{602{,}305{,}433} = -7\%$ The City's Net Investment in Capital declined 7 percent. Said differently, the City's investment in capital improvements was less than the rate of depreciation of existing assets.

Download Bothell Ten-Point Test: https://bit.ly/4684Kcj

Fortunately, the Ten-Point Test framework allows us to go a step further. Instead of asking how Bothell compares to generic benchmarks (or rules of thumb), we have the tools to compare Bothell to peer local governments. This allows us to make much more precise statements about the City's financial position and operating performance.

Analysts typically make these peer comparisons by computing the Ten Point Test ratios for various local governments and assigning point values based on relative rankings. For example, to calculate Bothell's Ten Point test score for FY 2017 – 2021, refer to the Ten-Point Test Scores table. This table shows national trends for these same ratios. These trends are based on data from the financial statements of 3,721 city governments and 1,282 county governments from FY 2005 to FY 2015.

The ratios are presented in quartiles. Recall that a quartile is a group of percentiles, and a percentile identifies a point in the distribution of that ratio. The table is organized by population groups. So, for instance, for cities with populations between 25,000 and 50,000 (Bothell's peer group), the 25th percentile for the short-run financial position was eight percent. That means one-quarter of Bothell's peer cities had short-run financial positions of less than nine percent, and three-quarters had short-run financial positions equal to or greater than nine percent. For all the ratios shown here, the first quartile starts at the lowest ratio and ends at the 25th percentile, the second quartile covers the 25th

percentile through the 50th percentile, and the third quartile covers the 50th percentile through the 75th percentile. The fourth quartile includes all observations above the 75th percentile.

INSOLVENCY AND MUNICIPAL BANKRUPTCY

Extreme instances of fiscal distress could lead a municipal government to file for Chapter 9 bankruptcy protection. Having satisfied state-specific eligibility requirements, a municipality's petition in federal bankruptcy court must demonstrate the municipality (a) is insolvent, (b) desires to implement a plan to adjust, satisfy, or discharge debts, (c) has either negotiated in good faith, attempted but failed to negotiate with creditors, or negotiations are impracticable prior to bankruptcy protection application, and (d) has filed for bankruptcy protection in good faith.

The burden of demonstrating insolvency is extremely difficult. It requires the municipality to demonstrate that it is unable to pay its obligations as they come due or provide an adequate level of services. In recent years, the courts have sought an expansive definition of insolvency. Municipalities must demonstrate

- an inability to generate and maintain cash balances to pay all its obligations as they come due (i.e., cash insolvency),
- an inability to create a balanced budget that provides enough revenues to cover expenditures that occur in the budget period (i.e., budget insolvency),
- an inability to pay for its long-term obligations given its current taxing or revenue authority (i.e., long-run insolvency), and
- an inability to provide services at the level and quality that are required for the health, safety, and welfare of the community (i.e., service-level insolvency).

There are no financial ratios to assess service-level insolvency. Rather, service-level insolvency is a qualitative assessment of a government's ability to deliver essential services. Service-level insolvency is characterized by longer fire and emergency services response rates, high rates of violent crimes and low rates of clearance, abandoned and blighted structures and lots, and poor service delivery (e.g., polluted water systems, broken streetlights, closed parks, etc.). In other words, governments that are service-level insolvent are struggling to deliver essential services.

In ruling on a government's eligibility, federal courts have said the government's insolvency position cannot be temporary. Rather, insolvency is the result of a fundamental change in the socioeconomic environment that has, over time, resulted in persistent operating deficits and growth in long-term obligations. For that reason, courts have dismissed bankruptcy applications resulting from lawsuits (see, for example, the County of Boise, ID – 2011) or onerous labor contracts (see, for example, the City of Bridgeport, CT – 1991).

Municipalities like Stockton (CA), Jefferson County (AL), and Detroit (MI) successfully petitioned federal courts for Chapter 9 bankruptcy protections. They demonstrated insolvency would not be resolved with higher taxes, as levying additional taxes or collecting more in fees would be at the detriment of the entire community and would not necessarily generate sufficient funds to balance budgets, pay obligations as they come due, or resolve constraints on cash flows. The bankruptcy processes allowed these governments to get back on track, having won concessions from a wide variety of constituents (e.g., taxpayers, employees, retirees, and creditors) in an organized and fair manner.

Recommended readings include Moldogaziev, Tima T., Sharon N. Kioko, and W. Bart Hildreth. 2017. "Bankruptcy Risk Premium in the Municipal Securities Market" 37(4):47-73. Public Budgeting & Finance and Moody's (2012) "Key Considerations for Municipal Governments in Bankruptcy"

These quartiles are the basis for assigning scores for all ratios. If a local government is in the second quartile for a ratio, its score for that ratio is zero. It is not qualitatively better or worse than its peers, so that ratio does not help or hurt its relative score. If a ratio is in the third quartile, it earns one point. The logic here is that a ratio above the median (i.e., the 50th percentile) is a financial positive for that government. If a ratio is in the fourth quartile, it earns two points. To land in the fourth quartile, a government is better than most of its peers on that ratio, and that indicates a source of financial

strength. By contrast, a ratio in the first quartile means that government is comparatively weak in that dimension of financial health. To reflect that weakness, we subtract one point.

A local government's overall Ten Point Test score is easy to interpret. Analysts generally use the following categories:

- *A score of 10 or greater* suggests a government's financial position is "among the best." It can easily meet its immediate spending needs; it has more-than-adequate reserves to mitigate the effects of recessions, natural disasters, or other unexpected events; and it can generate adequate resources to cover its long-term spending needs. Most of its ratios must be as good as or better than its peers to earn that score.
- *A score between 5 and 9* means the government is "better than most." Most of its ratios are better than its peer governments.
- *A score between 1 to 4* means the government is "average." Most of its ratios are equal to, or weaker than, its peer governments.
- *A score between 0 and -4* means the government is "worse than most." Most of its ratios are weaker
  than its peer governments.
- *Scores less than -5* mean the government is "among the worst." It has major financial problems and may be insolvent. Scores this low are quite rare.

Let's return to Bothell's Ten Point Test Score. Recall that the city's population in FY 2021 was 48,920, so we will use the "Population 25,000 to 50,000" quartiles to assign points to the city.

Bothell's liquidity is strong and improved significantly over the last five years. The city scores in the second (0 points) or third quartile (1 point) for its short-run financial position and third (1 point) or fourth (2 points) quartile on its liquidity position. The city's profitability ratios are below average. The city was in the lowest quartile for net asset growth (-1 point) and operating margin (-1 point). Its dependency on operating grants was limited before the COVID-19 pandemic. The infusion of federal funds resulted in a higher ratio (and correspondingly a lower score); this should revert to historical trends now that federal funds have been disbursed.

As we noted earlier, Bothell's solvency profile is mixed. It has virtually no current liabilities in the General Fund but reports $157 million in liabilities, including $129 million in long-term debt and $8.1 million in pension and OPEB obligations. However, given the City's revenue profile, its near-term solvency ratio puts it in the third quartile (1 point). Its high debt burden and substantial debt service, particularly on core operations (i.e., Coverage Ratio), put it in the lowest quartile for both metrics. Finally, the rate of depreciation of capital assets far exceeds the rate of investment in capital improvements, far below its peers (-1 point each).

TEN-POINT TEST SCORES

CITY & COUNTY GOVERNMENTS

	Cities				Counties			
	First Quartile -1 Point	Second Quartile 0 Points	Third Quartile +1 Point	Fourth Quartile +2 Points	First Quartile -1 Point	Second Quartile 0 Points	Third Quartile +1 Point	Fourth Quartile +2 Points
Population less than 25,000								
Short-Run Financial Position	< 15%	15% to 31.9%	32% to 53.9%	> 53.9%	< 21%	21% to 36.9%	37% to 54.9%	> 54.9%
Liquidity	< 77%	77% to 194.9%	195% to 523.9%	> 523.9%	< 62%	62% to 185.9%	186% to 682.9%	> 682.9%
Net Asset Growth	< -0.39%	-0.39% to 3.11%	3.12% to 7.95%	> 7.95%	< 0.26%	0.26% to 4.26%	4.27% to 10.07%	> 10.07%
Operating Margin	> 66%	50.9% to 66%	36.9% to 51%	< 36.9%	> 144%	86.9% to 144%	43.9% to 87%	< 43.9%
Own-Source Revenues	>12%	5.9% to 12%	2.9% to 6%	< 2.9%	> 32%	20.9% to 32%	7.9% to 21%	< 7.9%
Near-Term Solvency	> 328%	197.9% to 328%	105.9% to 198%	< 105.9%	> 72%	42.9% to 72%	20.9% to 43%	< 20.9%
Debt Burden Per Capita	> $2,497	$1,354 to $2,497	$614 to $1,353	< $614	> $534	$201 to $534	$59 to $200	< $59
Coverage 1	> 13.82%	6.95% to 13.82%	3.09% to 6.94%	< 3.09%	> 2.74%	1.06% to 2.74%	0.30% to 1.05%	< 0.30%
Coverage 2	< 4.11	4.11 to 6.99	6.70 to 11.48	> 11.48	< 3.56	3.56 to 5.56	5.57 to 9.46	>9.46
Capital Asset Condition	< -1.87%	-1.87% to 1.27%	1.28% to 7.00%	> 7.00%	< -1.45%	-1.45% to 2.54%	2.55% to 9.43%	>9.43%
Population 25,000 to 49,999								
Short-Run Financial Position	< 9%	9% to 23.9%	24% to 38.9%	> 38.9%	< 16%	16% to 33.9%	34% to 49.9%	> 49.9%
Liquidity	< 67%	67% to 131.9%	132% to 286.9%	> 286.9%	< 66%	66% to 149.9%	150% to 498.9%	> 498.9%
Net Asset Growth	< -0.12%	-0.12% to 2.65%	2.66% to 5.95%	> 5.95%	< -0.44%	-0.44% to 3.29%	3.30% to 6.97%	> 6.97%
Operating Margin	> 55%	45% to 55%	33.9% to 45%	< 33.9%	> 154%	91.9% to 154%	47.9% to 92%	< 47.9%
Own-Source Revenues	>10%	6.9% to 10%	2.9% to 7%	< 2.9%	> 32%	18.9% to 32%	5.9% to 19%	< 5.9%
Near-Term Solvency	> 254%	173.9% to 254%	108.9% to 174%	< 108.9%	> 79%	47.9% to 79%	26.9% to 48%	< 26.9%
Debt Burden Per Capita	> $2,001	$1,276 to $2,001	$715 to $1,275	< $715	> $381	$204 to $381	$83 to $203	< $83
Coverage 1	> 11.05%	6.76% to 11.05%	3.09% to 6.77%	< 3.09%	> 1.45%	0.73% to 1.45%	0.15% to 0.72%	< 0.15%
Coverage 2	< 3.41	3.41 to 5.54	5.55 to 8.54	> 8.54	< 4.67	4.67 to 6.93	6.94 to 10.45	> 10.45
Capital Asset Condition	< -0.31%	-0.31% to 2.03%	2.04% to 6.50%	> 6.50%	< -1.94%	-1.94% to 1.59%	1.60% to 6.05%	> 6.05%
Population 50,000 to 99,999								
Short-Run Financial Position	< 8%	8% to 19.9%	20% to 32.9%	> 32.9%	< 15%	15% to 28.9%	29% to 43.9%	> 43.9%
Liquidity	< 49%	49% to 108.9%	109% to 280.9%	> 280.9%	< 58%	58% to 123.9%	124% to 395.9%	> 395.9%
Net Asset Growth	< -0.29%	-0.29% to 2.81%	2.82% to 5.81%	> 5.81%	< -1.06%	-1.06% to 2.82%	2.83% to 7.65%	> 7.65%
Operating Margin	> 55%	47.9% to 55%	36.9% to 48%	< 36.9%	> 105%	72.9% to 105%	54.9% to 73%	< 54.9%
Own-Source Revenues	>14%	8.9% to 14%	3.9% to 9%	< 3.9%	> 33%	22.9% to 33%	7.9% to 23%	< 7.9%
Near-Term Solvency	> 263%	176.9% to 263%	116.9% to 177%	< 116.9%	> 88%	56.9% to 88%	32.9% to 57%	< 32.9%
Debt Burden Per Capita	> $2,115	$1,490 to $2,115	$844 to $1,489	< $844	> $386	$180 to $386	$82 to $179	< $82
Coverage 1	> 11.88%	7.09% to 11.88%	3.89% to 7.08%	< 3.89%	> 1.43%	0.51% to 1.43%	0.13% to 0.52%	< 0.13%
Coverage 2	< 4.28	4.28 to 7.19	7.20 to 11.69	> 11.69	< 6.43	6.43 to 8.22	8.23 to 12.15	> 12.15
Capital Asset Condition	< -0.38%	-0.38% to 2.54%	2.55% to 5.95%	> 5.95%	< -1.28%	-1.28% to 1.82%	1.83% to 7.48%	> 7.48%
Population 100,000 to 249,999								
Short-Run Financial Position	< 8%	8% to 15.9%	16% to 24.9%	> 24.9%	< 16%	16% to 27.9%	28% to 41.9%	> 41.9%
Liquidity	< 43%	43% to 116.9%	117% to 280.9%	> 280.9%	< 40%	40% to 95.9%	96% to 263.9%	> 263.9%
Net Asset Growth	< 0.27%	0.27% to 2.38%	2.39% to 5.39%	> 5.39%	< -1.40%	-1.40% to 2.95%	2.96% to 7.75%	> 7.75%
Operating Margin	> 54%	44.9% to 54%	36.9% to 45%	< 36.9%	> 159%	95.9% to 159%	58.9% to 96%	< 58.9%
Own-Source Revenues	>11%	7.9% to 11%	3.9% to 8%	< 3.9%	> 33%	15.9% to 33%	6.9% to 16%	< 6.9%
Near-Term Solvency	> 274%	199.9% to 274%	139.9% to 200%	< 139.9%	> 100%	68.9% to 100%	42.9% to 69%	< 42.9%
Debt Burden Per Capita	> $2,641	$1,613 to $2,641	$1,064 to $1,612	< $1,064	> $428	$240 to $428	$102 to $239	< $102
Coverage 1	> 10.11%	6.13% to 10.11%	3.62% to 6.12%	< 3.62%	> 2.00%	0.72% to 2.00%	0.08% to 0.71%	< 0.08%
Coverage 2	< 4.10	4.10 to 6.73	6.74 to 11.61	> 11.61	< 5.33	5.33 to 7.90	7.91 to 12.04	> 12.04
Capital Asset Condition	<-0.32%	-0.32% to 2.24%	2.25% to 4.86%	> 4.86%	<-1.44%	-1.44% to 1.56%	1.57% to 7.63%	> 7.63%
Population 250,000 or more								
Short-Run Financial Position	< -1%	-1% to 6.9%	7% to 9.9%	> 9.9%	< 10%	10% to 19.9%	20% to 32.9%	> 32.9%
Liquidity	< 28%	28% to 62.9%	63% to 192.9%	> 192.9%	< 72%	72% to 155.9%	156% to 313.9%	> 313.9%
Net Asset Growth	< -3.80%	-3.80% to 2.28%	2.29% to 5.91%	> 5.91%	< -2.33%	-2.33% to 2.11%	2.12% to 6.17%	> 6.17%
Operating Margin	> 60%	47.9% to 60%	35.9% to 48%	< 35.9%	> 210%	129.9% to 210%	74.9% to 130%	< 74.9%
Own-Source Revenues	>16%	12.9% to 16%	7.9% to 13%	< 7.9%	> 46%	31.9% to 46%	12.9% to 32%	< 12.9%
Near-Term Solvency	> 445%	330.9% to 445%	229.9% to 331%	< 229.9%	> 105%	87.9% to 105%	62.9% to 88%	< 62.9%
Debt Burden Per Capita	> $5,684	$3,368 to $5,684	$2,273 to $3,367	< $2,273	> $563	$315 to $563	$158 to $314	< $158
Coverage 1	> 13.30%	9.52% to 13.30%	5.84% to 9.51%	< 5.84%	> 8.02%	1.33% to 8.02%	0.33% to 1.32%	< 0.33%
Coverage 2	< 4.40	4.40 to 6.43	6.44 to 10.31	> 10.31	< 3.35	3.35 to 5.98	5.99 to 8.32	> 8.32
Capital Asset Condition	< 1.85%	1.85% to 3.78%	3.79% to 5.65%	> 5.65%	< -0.60%	-0.60% to 2.53%	2.54% to 7.15%	> 7.15%

Trends are based on data from the financial statements of 3,721 city governments and 1,282 county governments from FY 2005 to FY 2015. Source: Merritt Financial Services and authors' estimates.

Download the Ten-Point Test: https://bit.ly/3r4ydFo

Bothell's ratios add up to an overall Ten-Point Test score of 2. Its main financial strengths are its liquidity and its near-term solvency. At the same time, its higher-than-average debt load and operating deficits lower the city's score. Recall that a score of 2 suggests Bothell is "average" relative to similarly sized local governments. With this framework, you can compute and interpret a Ten Point Test score for virtually city or county government.

TEN-POINT TEST, CITY OF BOTHELL (2017 -2021)

	Financial Ratios	2021 Ratio	2021 10-Point Test Score	2020 Ratio	2020 10-Point Test Score	2019 Ratio	2019 10-Point Test Score	2018 Ratio	2018 10-Point Test Score	2017 Ratio	2017 10-Point Test Score
Liquidity	Short-Run Financial Position	30%	1	20%	0	13%	0	14%	0	13%	0
	Liquidity	584%	2	388%	2	249%	1	280%	1	149%	1
Profitability	Net Asset Growth	-0.4%	-1	-1.8%	-1	-3.1%	-1	-3.8%	-1	-3.3%	-1
	Operating Margin	61%	-1	68%	-1	83%	-1	88%	-1	87%	-1
	Own Sources Revenues	3%	1	5%	1	1%	2	1%	2	1%	2
Solvency	Near-Term Solvency	120%	1	124%	1	137%	1	129%	1	138%	1
	Debt Burden	$2,637	-1	$2,565	-1	$2,761	-1	$2,368	-1	$2,503	-1
	Coverage Ratio 1	15%	-1	15%	-1	12%	-1	10%	0	12%	-1
	Coverage Ratio 2	47x	2	40x	2	41x	2	43x	2	34x	2
	Capital Asset Condition	-7%	-1	-2%	-1	-4%	-1	-4%	-1	-3%	-1
	Total Score		**2**		**1**		**1**		**2**		**1**

There are several versions of the Ten Point Test. The version presented here is based on the version recommended by Dean Mead, Research Manager at the Governmental Accounting Standards Board. A few of the ratios have been changed slightly to reflect the data available to compute national trends. For the original version, see Dean Mead's "A Manageable System of Economic Condition Analysis for Governments" in Public Financial Management, ed. Howard Frank (Boca Raton, FL: Taylor and Francis, 2006); pp.383-419.

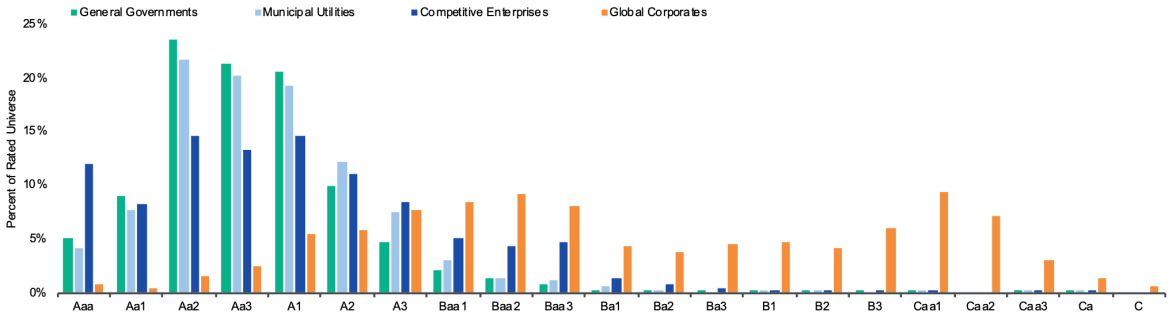
Download Bothell Ten-Point Test: https://bit.ly/4684Kcj

CREDIT RATINGS

A credit rating is an independent assessment by a nationally recognized statistical rating organization (NRSRO) of the issuer's ability to make payments on time and in full. Currently, there are four NRSROs in the municipal bond market. They include Moody's Investor Service (or Moody's), Standard and Poor's (or S&P), Fitch Ratings (or Fitch), and Kroll Bond Rating Agency (or Kroll).

Ratings range from Aaa (highest possible rating) to D (lowest rating, typically in default). The municipal sector is highly rated. The median rating in the U.S. municipal securities market was Aa3 – with more than 98 percent of municipalities rated Baa3 or above. This is in sharp contrast to global corporates – the median rating is Baa3, and more than 49 percent of global corporate credits have a rating below investment grade. Defaults in the municipal securities market are exceedingly rare. The 10-year average of default rates is 0.18 percent. The 10-year average default rate for global corporates is 1.78 percent.

Rating Distributions by Sector: Municipals by Sector vs. Global Corporates, Year End 2016



Source: Moody's (2018) "US Municipal Bond Defaults and Recoveries 1970 – 2018."

For a fee paid by the issuer, NRSROs gather and process information about the issuer – or in the case of revenue bonds, individually issue and provide investors with an assessment of the risk of default associated with an issuer or a specific bond issue. In assigning ratings for general obligation bonds, NRSROs focus on the following key criteria:

- The economic base, including per capita income or median household income (relative to the U.S. average), the total taxable value of property and full value per capita, and diversity of economic activity (e.g., regional economic centers with a diversified taxpayer base and the presence of large institutional actors like universities or military bases).
- The government's operating budget, including revenue or taxing authority, whether the operating budget is structurally balanced, expenditure reduction flexibility, and five-year trends in changes in cash or fund balances. Fund balances are a proxy measure of budget outcomes – any growth (reduction) in fund balances means revenues in prior budget periods were greater (lower) than expenses. Cash balances are equally important. They are a proxy measure of the government's ability to pay obligations as they come due.
- Management and governance structures, including legal and constitutional restrictions (e.g., tax limits and legislative supermajority requirements) or the adoption of prudent financial management practices into law (e.g., balanced budget requirements, mandatory contributions to pension programs, mandatory contributions to rainy-day or similar reserve funds, executive authority to make mid-year budget adjustments)
- Outstanding debt and pension obligations, including total outstanding debt (as a percentage of full value or revenue) and the three-year average net pension liability (as a percentage of full value or revenue)

In assigning a rating for a revenue bond, NRSROs focus on the net operating revenues of the issuer (e.g., utility revenues, tuition fees, or patient revenues – net of operating expenses) or pledged revenues (e.g., gasoline taxes, toll revenues). The issuer's economic base, management and governance structures, and outstanding long-term obligations remain equally relevant.

For a detailed history of defaults in the U.S., see Moody's (2018) "US Municipal Bond Defaults and Recoveries 1970 – 2018."

FINANCIAL STRATEGY

Financial statement analysis can tell us a lot about an organization's financial position. The question, then, is what to do about it. As mentioned, sometimes financial statement analysis offers clear follow-up questions about an organization's financial operations and overall performance. Ideally, it also suggests some steps management can take to improve that financial position and performance.

The table below identifies some of those potential steps. It is organized around liquidity, profitability, and solvency. "+" signs identify that part of the organization's financial position that is strong. "-" signs suggest a potential weakness. There is no "textbook" definition of financial strength or weakness. However, most public sector analysts define ratios above the benchmark rule of thumb or the median within a peer group as strong and ratios below the rule of thumb or the median within a peer group as weak. **This is not a comprehensive list**. That said, it illustrates some strategies management can initiate to address the organization's financial challenges.

For example, non-profits reporting positive trends in liquidity, solvency, and profitability should prioritize reviewing and amending finance policies, invest in process improvements and innovation, and engage in a strategic planning process (including financial self-assessment). This is especially important to recognize the organization's resiliency to future threats in operations. Those threats could be the result of an economic crisis or changes in policy or technology that fundamentally alter the organization's business model.

LIQUIDITY	PROFITABILITY	SOLVENCY	STRATEGY
+	+	+	- Review financial management policies (e.g., working capital, reserves, and investments) to ensure they are up-to-date and adhered to. - Engage in strategic planning processes, including financial self-assessment, to evaluate programming and engage stakeholders. - Complete donor landscape analysis. Identify strategies to bolster donor retention and average gift. Explore new funding opportunities or earned income ventures. - Tap reserve funds and invest in process improvements, innovation, and capital improvements. - Shift excess cash from short-term liquid investments to long-term investments. Where appropriate, refinance long-term debt to lower borrowing costs.
+	+	–	- Refinance long-term debt to lower borrowing costs. (Re)Negotiate lines-of-credit to ensure easy access to cash at affordable rates. - Dispose of excess property and equipment. Use proceeds to pay outstanding obligations or transfer proceeds to long-term investments.
+	–	+	- "Scrub" operating expense items. Explore partnerships to manage overhead costs (e.g., technology and accounting services). - Reassess operations. Expand profitable mission-relevant and eliminate unprofitable non-essential programs. Grow programs to achieve economies of scale. - Shift excess cash from short-term liquid investments to long-term investments to generate investment income. Refinance long-term debt to lower borrowing costs. - (Re)Negotiate contracts to ensure appropriate indirect or overhead cost recovery. - Complete donor landscape analysis. Identify strategies to bolster donor retention and average donation.

Non-profits that are liquid and profitable but not solvent need only consider strategies that alter the makeup of their long-term obligations. That said, changes in long-term obligations will impact liquidity and profitability. Refinancing existing long-term debt obligations has the benefit of lowering interest expenses, thereby increasing profitability and improving liquidity. However, refinancing long-term debt should not extend the loan's maturity beyond the asset's useful life. Refinancing strategies should prioritize savings due to lower interest rates over savings due to a longer maturity period, especially if the organization does not have a capital improvement planning process.

Non-profits that are profitable and solvent but not liquid would likely prioritize moving investments from their diversified equity mutual fund accounts to a money-market mutual fund. While this has the benefit of providing access to cash, the returns from the money-market mutual fund are significantly lower. So, while improving the organization's liquidity position is necessary, that strategy would likely result in a lower profit margin due to changes in investment income. The organization will therefore need to weigh the cost associated with using a line of credit with foregone revenues from long-term investments.

We must also recognize that there are strategies that the non-profit has little or no control over. The sale of surplus property and equipment could take a long time – a reason why we do not suggest this strategy to address liquidity and do not prioritize this strategy if the organization is not liquid or

solvent. Funders may not be willing to renegotiate indirect cost recovery rates on existing contracts. We also know governments are more likely to delay payments in an economic downturn, as they delay payments to suppliers and vendors as a strategy to manage their cash flows.

Of course, organizations with concerns about all three aspects of financial position might consider more drastic measures like a merger with another non-profit.

LIQUIDITY	PROFITABILITY	SOLVENCY	STRATEGY
+	–	–	- "Scrub" operating expense items. Explore partnerships to manage overhead costs (e.g., technology and accounting services). - Shift excess cash from short-term liquid investments to long-term investments to generate investment income. Refinance long-term debt to lower borrowing costs. - Dispose of excess property and equipment. Use proceeds to pay outstanding obligations or transfer proceeds to long-term investments. - Reassess operations. Expand profitable mission-relevant and eliminate unprofitable non-essential programs. Grow programs to achieve economies of scale. (Re)Negotiate contracts to ensure appropriate indirect or overhead cost recovery. - Complete donor landscape analysis. Identify strategies to bolster donor retention and average donation.
–	+	+	- Shift long-term investments to cash (this could lead to lower-than-expected investment income). - (Re)Negotiate lines-of-credit to ensure easy access to cash at affordable rates. - Negotiate with governments for timely payments on contracts. Negotiate with foundations for advanced payment on grants.
–	+	–	- Shift long-term investments to cash (this could lead to lower-than-expected investment income). - Refinance long-term debt to lower borrowing costs and improve short-term solvency. (Re)Negotiate lines-of-credit to ensure easy access to cash at affordable rates. - Dispose of excess property and equipment. Use proceeds to pay outstanding obligations or transfer proceeds to long-term investments. - Negotiate with governments for timely payments on contracts. Negotiate with foundations for advanced payment on grants.
–	–	+	- "Scrub" operating expense items. Explore partnerships to manage overhead costs (e.g., technology and accounting services). - Reassess operations. Expand profitable mission-relevant and eliminate unprofitable non-essential programs. Grow programs to achieve economies of scale. - Negotiate with governments for timely payments on contracts. Negotiate with foundations for advanced payment on grants. - (Re)Negotiate contracts to ensure appropriate indirect or overhead cost recovery. - Complete donor landscape analysis. Identify strategies to bolster donor and retention average donation. Target donors for an endowment or reserve fund. - Dispose excess property and equipment. Use proceeds to pay outstanding obligations or transfer proceeds to long-term investments.
–	–	–	- Non-profits that are insolvent have probably attempted all the above. The only feasible solution would likely be dissolution. - The organization should explore opportunities to merge with other organizations while mitigating risk of limited or no available services to stakeholders.

"SCRUBBING" YOUR EXPENSES

To "scrub" expenses is to carefully review all current major spending items for potential cost savings. Some contemporary examples include:

- Transition bills to online payments, saving on transaction costs and timing delays associated with processing paper bills.
- Move employee reimbursements from checks to direct payroll deposits.
- Renegotiate premiums with your health insurance provider. Bundle different insurance policies with one carrier to improve economies of scale.
- Hire a human resources consultant to identify appropriate salary ranges for future salary negotiations and collective bargaining.
- Shift from traditional phone service to a "voice over internet" (VOI) system. VOI generally offers more lines and better reliability at a lower cost.
- Move to a "multi-platform" plan with your wireless/cellular communications provider. Save money by running phones, iPads, and other wireless devices on one plan.
- Negotiate with credit card providers for lower annual percentage rates and transaction fees.
- Consider opening a line of credit with your existing financial institution. Some institutions offer discounts for bundling banking with credit services.
- Negotiate better terms with your credit card payment processing company. Consider investing in an online processing system that does not require you to lease or purchase credit card terminals.
- Move from local servers to a cloud-based, server-less computing environment.
- Explore "software as a service" for typical business applications.

In short, these strategies are some of the most typical for organizations with different financial position profiles.

CHAPTER 4.

ACCRUAL ACCOUNTING

ACCRUAL ACCOUNTING: GETTING TO THE NUMBERS

Information from financial statements helps managers answer many crucial strategic questions:

- How have this organization's past decisions about fundraising, investing in new property and equipment, and launching new programs shaped its current financial position?
- How might the timing of a key management decision – such as selling a building or hiring a new staff member – affect this organization's financial position?
- How do accounting policy choices regarding depreciation methods, allowances for uncollectable, expense recognition, and other areas affect this organization's financial position?
- How should this organization recognize in-kind contributions of goods and services and volunteer time?
- Why is a government's government-wide financial position different from the position in its governmental funds? Or its enterprise funds?
- Why are this organization's long-term liabilities portrayed differently in its financial statements compared to its fund statements?

The City of Rochester, NY, is like most "Rust Belt" cities. It was once a global center of manufacturing, but since the mid-1980s, it has shed thousands of manufacturing jobs. Tax revenues have lagged, and the City's overall financial position has slowly eroded. The mayor and other local leaders have invested substantial public resources in local programs for the past two decades to promote economic and community development.

Communities like Rochester face a financial dilemma. Some local leaders believe the city should do much more to promote economic and community development. Despite its financial problems, Rochester does have one key financial strength: a comparatively low debt burden ($775/capita). Unlike many of its peers, it has not issued a lot of bonds or other long-term debt that it will need to repay over time. Some leaders believe it could borrow money to invest in infrastructure projects that would spur economic growth, grow the tax base and, in effect, pay for themselves. Or at least that's the theory.

Others disagree. They concur that the city has carefully managed its borrowing and does not owe investors much money. However, they point out that Rochester has an enormous amount of "other" long-term debts ($3,927/capita). Principal among them is "other post-employment benefits" or OPEB. Like many of its peers, Rochester allows its retired city workers to remain on its health insurance

plan. Moreover, it pays most of the insurance premiums for those retirees and their families. Many thousands of retired City workers are expected to take advantage of this benefit for years to come.

Under governmental accounting rules, the money Rochester expects to spend on OPEB benefits over the next 30 years must be recognized as a long-term liability today. Those rules follow from the idea that employees earn OPEB benefits as part of their salary. Once earned, those benefits become a liability that appears on the City's balance sheet. Rochester can change those benefits at any time, but until they do, they remain a long-term obligation of the government.

This anecdote highlights one of the key points of this chapter: How we account for – or "recognize" – financial activity can have a major impact on how an organization perceives its financial strengths and weaknesses and how it might choose to manage its finances in response. That is why all public managers must not only know how to analyze financial statements but also understand the origins of the numbers that appear in those statements. In other words, they need to know a bit of accounting. That is the focus of this chapter.

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Understand how typical financial transactions affect the fundamental equation of accounting.
- Recognize revenues and expenses on the accrual basis of accounting.
- Contrast an organization's assets and liabilities with its revenues and expenses.
- Prepare rudimentary versions of the three basic financial statements.
- Understand how routine financial transactions shape an organization's basic financial statements.
- Contrast the recognition concepts in accrual accounting with cash accounting and fund accounting.

CORE CONCEPTS OF ACCOUNTING

Now that we've toured the basic financial statements let's take a step back and review how we produce those statements. Financial statements are useful because they're prepared according to generally accepted accounting principles (GAAP). To understand financial statements, you must know a few of those principles and how typical financial transactions shape the numbers you see in those statements. This section covers both these topics.

THE ACCRUAL CONCEPT

Most of us organize our personal finances around the *cash basis* of accounting. When we pay for something, we reduce our bank account balance by that amount. When we receive a paycheck, we increase our bank account balance by that amount. In other words, we recognize financial activity when we receive or spend cash.

Many small organizations also use cash basis accounting. Many small non-profits and governmental

entities (e.g., irrigation districts and mosquito abatement districts) keep separate books to track revenues received and other operating expenses paid.

But for larger and more complex organizations, cash basis accounting tells an incomplete story. For instance, imagine that Treehouse (the organization in our previous examples) plans to purchase $20,000 of furniture for its main office. Treehouse will purchase that equipment *on credit*. That is, they will order the equipment, the supplier will deliver that equipment and send an *invoice* requesting payment, and a few weeks later, Treehouse will write the supplier a check and pay off that invoice.

This transaction will have an impact on Treehouse's balance sheet. It will draw down its cash and report a fixed asset that will stay on the organization's balance sheet for several years. Treehouse's stakeholders should know about this transaction sooner rather than later.

But on a cash basis, those stakeholders will not know about this transaction until Treehouse pays off the invoice. That might be several weeks away. If it is toward the end of the fiscal year – and several large purchases happen toward the end of the fiscal year – those transactions will not appear on Treehouse's financial statements until the following year. That is a problem.

That is why most public organizations use the *accrual basis* of accounting. On an accrual basis, an organization records an expense when it receives a good or service, whether or not cash changes hands. In this case, as soon as Treehouse signs the purchase order for the equipment, that purchase will appear as a $20,000 increase in non-current assets on its balance sheet. It will also record – or *recognize*, in accounting speak – an account payable for $20,000. On the accrual basis of accounting, we can see how this transaction will affect Treehouse's financial position now and in the future.

Keep in mind that accrual accounting assumes the organization is a *going concern*. That is, it assumes the organization will continue to deliver services indefinitely. If we are not willing to make that assumption, then accrual accounting does not add value. In some rare cases, the audit report will suggest that the auditor believes the organization is not a going concern. In other words, the auditor believes the organization's financial position is so tenuous that it might cease operations before the close of the next fiscal year.

We can apply similar logic to the revenue side. Imagine that Treehouse staff run a day-long outreach program at a local school. The program sensitizes public school teachers about the unique challenges facing children in the foster care system. They typically charge $2,500 for this type of event. Assume that Treehouse staff deliver the program and then send the school district a bill for their services. Treehouse used a lot of staff time, supplies, travel, and other expenses to produce this program, but they might not get paid for it for several weeks.

On a cash basis, it will be several weeks before we know about expenses incurred and that Treehouse has earned $2,500 in revenue. But on an accrual basis, Treehouse would recognize expenses incurred and the revenue earned immediately after delivering the program.

In accrual accounting, revenues are recorded when entitled, irrespective of receipt of payment, and expenses are recorded when resources are used, irrespective of when payment is made.

These two simple transactions illustrate a key point: If the goal of accounting and financial reporting

is to help stakeholders understand an organization's ability to achieve its mission, then accrual accounting is far better than cash accounting. That's why the accrual concept is a central principle of GAAP. From this point forward, we will focus exclusively on how to apply accrual accounting to public organizations.

THE GENERAL LEDGER AND CHART OF ACCOUNTS

A chart of accounts lists all the organization's financial accounts, along with definitions that clarify how to classify or place financial activity within those accounts. When accountants record a transaction, they record it in the organization's general ledger. The general ledger is a listing of all the organization's financial accounts. When the organization produces its financial statements, it combines its general ledger into aggregated account categories. Generally accepted accounting principles (GAAP) produced by FASB and GASB do not specify a uniform chart of accounts, so account titles and definitions will vary across organizations. Some state governments require non-profits and governments to follow such a chart, but for the most part, public organizations are free to define their chart of accounts on their own.

RECOGNITION AND THE FUNDAMENTAL EQUATION

Accountants spend much of their time on revenue and expense *recognition*. When accountants recognize a transaction, they identify how it affects the organization's financial position. We recognize transactions relative to the fundamental equation of accounting.

The fundamental accounting equation, **Assets = Liabilities + Net Assets**, must remain balanced following every transaction. In other words, the net effect of any transaction on the fundamental equation must be zero. This is also known as *double-entry bookkeeping*. Consider the previous example:

Transaction 1a: Treehouse signs a purchase agreement with Furniture Superstores, Inc. for $20,000 in office furniture and equipment. It agreed to pay for the purchase within 30 days.

Assets		= Liabilities	+ Net Assets
Equipment	+ $20,000	Accounts Payable	+ $20,000

Here, we recognize (or "*book*") the purchase of furniture and equipment on the asset side of the accounting equation. We also need to book an equivalent amount on the liability side to recognize that we've received a good, but payment has not been made. The liability account – Accounts Payable – recognizes monies owed to Furniture Superstores. This transaction adds to both sides of the fundamental equation, so the net effect on the equation is zero.

The purchase of furniture and equipment results in an increase in a non-current asset (equipment). Amounts due to Furniture Superstores are a current liability, as Treehouse expects to pay it off within the fiscal year (in this case, 30 days). As a result of this transaction, the non-profit is less liquid. Note that the impact of a transaction depends on the size of the organization's current or non-current assets. The transaction will be meaningful if the organization is small but insignificant if the organization is large.

What happens three weeks later when Treehouse pays for the equipment?

Transaction 2: Treehouse pays the invoice for equipment received in Transaction 1.

Assets		= Liabilities		+ Net Assets
Equipment	– $20,000	Accounts Payable	– $20,000	

This transaction decreases both sides of the equation. The decrease in cash balances represents payments to the supplier (accounts payable).

Organizations execute a wide variety of transactions in their day-to-day operations. For most transactions, you can identify the correct accounting recognition by asking a few simple questions:

1. Did the organization deliver a good or service?
2. Did the organization receive a good or service?
3. Did the organization make a payment?
4. Did the organization receive a payment?

If the organization delivers or receives a service, the transaction affects revenues and expenses. Note that revenues will increase net assets, and expenses will decrease in net assets. If the organization delivered or received a good, the transaction likely affects assets, liabilities, or net assets (as either revenues or expenses). More importantly, whether or not the transaction affects a liability has to do with whether a payment was made or a payment was received.

The chart below presents these concepts as a flow chart. Take *Transaction 1* as an example. Recall that Treehouse agreed to purchase furniture and equipment and pay for it later. Has it received a good or service? Yes, it has received a good, but it has yet to make payment; as a result, we report an increase in equipment and a corresponding increase in accounts payable.

To reference the flow chart, identify whether the organization was *receiving* or *delivering* a good or service and whether payment has been made. We know Treehouse received the equipment order, but payment has yet to be made. Therefore, this transaction starts on the bottom left corner of the chart at "Receive a Good." We know goods have been received, but payment has not been made. We, therefore, follow the "Payment Not Delivered" line of the flow chart. We would recognize this transaction as an increase in equipment and accounts payable since Treehouse will pay for this equipment later.

TRANSACTION FLOW CHART

With this framework, we can do accounting recognition for most basic transactions. That said, governments and non-profit organizations have unique rules that apply just in those contexts. We will cover nuanced accounting rules in the discussion that follows. That said, always remember:

The fundamental accounting equation, Assets = Liabilities + Net Assets, must remain balanced following every transaction.

TRANSACTIONS THAT AFFECT THE BALANCE SHEET

Transaction 1 and *Transaction 2* are good examples of financial activity that affects the balance sheet. You should be aware of a few others. Some transactions affect only the asset side of the equation. For instance, imagine if Treehouse had purchased the equipment with cash rather than on credit.

Transaction 1b: Treehouse pays for the purchase of $20,000 in furniture and equipment in cash.

Assets		= Liabilities	+ Net Assets
Equipment	+ $20,000		
Cash	– $20,000		

In Transaction 1a, Treehouse purchased office furniture on credit, so we recognized in that transaction an increase in a liability account – accounts payable. In Transaction 1b, Treehouse paid for the purchase of equipment in cash. The transaction resulted in a decrease in cash and an increase in equipment. As we noted earlier, the net effect of any transaction on the fundamental equation must be zero, even when no liability account or net asset account was affected. Now assume the transaction was as follows:

Treehouse signs a purchase agreement with Furniture Superstores, Inc. for $20,000 in office furniture and equipment. It paid for the purchase of equipment upon delivery.

Assets		= Liabilities	+ Net Assets
Equipment	+ $20,000	Accounts Payable	+ $20,000
Cash	– $20,000	Accounts Payable	– $20,000

While we report two separate transactions here – the first being the purchase of equipment on credit and the second being the payment to the supplier – the net effect of this transaction would be an increase in equipment and a decrease in cash – the same as what we reported in Transaction 1b.

Like most organizations, Treehouse likely purchases a wide variety of services that it uses later. Examples include insurance, certifications, subscriptions, and professional association memberships. Treehouse will purchase these services in advance and then use or "*expense*" them throughout the fiscal year. These are known as *pre-paid expenses*. For example:

Transaction 3: Treehouse pays $1,500 for three of its staff to renew their annual memberships to the National Association for Social Workers.

Assets		= Liabilities	+ Net Assets
Cash	– $1,500		
Pre-paid Expense	+ $1,500		

Organizations like Treehouse almost always have *financial assets*. Assets like buildings and equipment are *tangible*; they have physical substance. *Intangible assets* include intellectual property, copyrights,

patents, trademarks, goodwill, and software. While rare, public organizations do report intangible assets.

Financial assets are in between tangible assets and intangible assets. While they are not physical assets, they are a claim of ownership or a contractual right to payment. If Treehouse holds Boeing stock, they have a right to dividends the corporation distributes to shareholders. Treehouse can also sell some or all of its Boeing stock, invest proceeds in the organization, or purchase alternative financial investments. So even though Boeing stock is not a tangible asset, it is valuable.

We account for financial assets differently. If Treehouse purchases supplies or equipment, it will record those supplies at *historical cost.* Supplies or the equipment purchased are valuable because they help Treehouse deliver programs and services. They are not, however, as valuable as a financial investment. That is, we do not purchase inventory in the hope that it would appreciate in value. That is why the historical cost is the appropriate way to value most of Treehouse's non-financial assets.

Financial assets are different because they are, by definition, purchased to generate income. Treehouse purchased Boeing stock because it expects Boeing to pay dividends to shareholders and the value of the stock to increase over time. If we want to know if investments added value to Treehouse's mission, the organization's accounting records need to reflect *the market value* of those investments at the end of each financial period. If those investments became more valuable, they are contributing to the mission. If they have lost value, they are taking resources away from the mission.

That is why we record financial assets at *fair value* rather than historical cost. Fair value means the current, observed market price. Investments the organization intends to hold for less than a year that can be converted to cash are known as *marketable securities*. Investments the organization plans to hold longer than one year or those that are less liquid are known simply as *investments.* Marketable securities are current assets. Investments can be classified as either a current or a non-current asset.

When an organization puts money into an investment, we record that investment at the purchase price. In that sense, at the time of the initial investment, fair value is the same as historical cost. For example:

Transaction 4a: Treehouse purchased 500 shares of Boeing stock on July 1, 2019, at $350.11 per share.

Assets	= Liabilities	+ Net Assets
Cash	– $175,055	
Investments (Boeing)	+ $175,055	

The value of any investment portfolio will change unpredictably throughout the financial period. Since these assets generate investment income, we need to reflect the change in the investment value in our accounting records.

An increase in value would be reported as a gain, whereas a decrease in value would be reported as a loss. If Treehouse decided to sell the stock, the gain or loss in the investment value would be reported as a *realized gain or loss*. If Treehouse still owns its interest in the stock but the value of that stock has changed, that gain or loss in value of the investment would be reported as an *unrealized gain or loss*. **The increase or decrease in value is recorded as a change in net assets.** For example:

Transaction 5a: Treehouse sold its 500 shares of Boeing stock on June 30, 2020, at $194.49 per share.

Assets	= Liabilities	+ Net Assets	
Cash	+ $97,245	Net Asset *(Realized Loss)*	– $77,810
Investments (Boeing)	– $175,055		

In Investments, we record the sale of these assets at historical cost ($175,055) and deposit the proceeds from the sale in Cash ($97,245). On the Net Asset column, we report realized loss from the sale of the stock (i.e., $175,055 – $97,245 =$77,810).

A realized loss has roughly the same effect on the organization's financial position as an unprofitable program. Both result in a decrease in Treehouse's overall net assets and available resources or assets. In contrast, if:

Transaction 4b: Treehouse purchased 100 shares of Amazon stock on July 1, 2019, at $1,922.19 per share.

Assets	= Liabilities	+ Net Assets
Cash	– $192,219	
Investments (Amazon)	+ $192,219	

and

Transaction 5b: Treehouse sold its 100 shares of Amazon stock on June 30, 2020, at $2,680.38 per share.

Assets	= Liabilities	+ Net Assets	
Cash	+ $268,038	Net Asset *(Realized Gain)*	+ $75,819
Investments (Amazon)	– $192,219		

In Investments, we record the sale of these assets at historical cost ($192,219) and deposit the proceeds from the sale of the asset in Cash ($268,0385). On the Net Asset column, we report realized gain from the sale of the stock (i.e., $268,038 – $192,219=$75,810).

DIVERSIFIED INVESTMENT PORTFOLIO

Boeing and Amazon stock are included in this discussion for illustrative purposes only. In practice, Treehouse, like most other non-profits, does not hold individual stocks or bonds but instead invests in mutual funds. Mutual funds pool money from multiple investors and invest in a diversified portfolio of financial instruments.

Mutual funds diversify on the basis of sector (e.g., technology, financial, retail, consumer, materials, healthcare, utilities), geography (e.g., domestic, emerging markets, developed markets), size of firm (large – >$10 billion – versus small – <$2 billion), and investment type (e.g., public equity, private equity, corporate bonds, municipal bonds, and treasury bonds) to name a few. Investing in mutual funds has the benefit of maximizing returns while mitigating risk at significantly lower investment management fees.

Fair value accounting is a bit more complex – and interesting! – than historical cost because it requires organizations to *restate* the value of their financial assets at the end of every fiscal period. For Treehouse, this means it would restate the value of all financial investments at the end of each year, even if it did not sell these investments.

If the stock's price at the time of the re-statement is higher than the previously recorded price, Treehouse will record an increase in investments on the balance sheet and an *unrealized gain* on the income statement. If the stock's price at the time of re-statement is lower than the previously recorded price, Treehouse will need to record a decrease in investments on the balance sheet and an unrealized loss in the income statement.

Transaction 6: Treehouse recognizes unrealized gains and losses in Amazon and Boeing stock at the end of FY 2020.

Assets		= Liabilities	+ Net Assets	
Investments (Amazon)	+ $75,819		Net Asset *(Unrealized Gain)*	+ $75,819
Investments (Boeing)	– $77,810		Net Asset *(Unrealized Loss)*	– $77,810

Unrealized gains and losses do not directly affect the amount of cash reported – hence why they are euphemistically referred to as *paper gains* and *paper losses*. Notwithstanding, unrealized gains or losses matter, as they represent a real change in the value of financial assets and the resources in an organization. If Treehouse's holdings of Amazon stock contribute substantial unrealized gains for several years, management might consider selling its holdings to realize gains and invest in programs, equipment, or facilities.

PRACTICE PROBLEM: REALIZED AND UNREALIZED GAINS ON INVESTMENTS

The **National Breast Cancer Foundation (NBCF)** has a large investment portfolio whose income is used to subsidize the non-profit's operations. At the start of FY 2020 (i.e., July 1, 2019), NBCF reported $14,780,000 in investments. Over the next 12 months, NBCF transferred $1,650,000 from cash to investments. It received $450,000 in investment income (i.e., dividend and interest income).

At the end of the year, the investment manager reported realized losses of $175,000 and unrealized gains of $1,250,000.

The investment manager invoiced NBCF $135,000 for investment management services rendered in the year. NBCF paid these in full.

Assets		= Liabilities		+ Net Assets	
Cash	-$1,650,000				
Investments	+$1,650,000				
Transfer of funds from Cash to Investments.					
Cash	+$450,000			Net Asset Without Donor Restriction *(Investment Income)*	+$450,000
Assuming the non-profit received direct payment of interest and dividends, that would be reported in Cash. If the investment manager receives payment on behalf of the organization, that income would be reported under Investments. For simplicity, we assume NBCF received payments directly.					
Investments	-$175,000			Net Asset Without Donor Restriction *(Realized Loss – Investments)*	-$175,000
Investments	+$1,250,000			Net Asset Without Donor Restriction *(Unrealized Gain – Investments)*	+$1,250,000
Realized loss lowers the balance in the investment account and unrealized gains increase the balance in the investment account.					
		Investment Manager	+$135,000	Investment Manager Fee	-$135,000
Cash	-$135,000	Investment Manager	-$135,000		
Investment managers invoiced NBCF for services provided. The non-profit would report the fee as an expense and make a payment. The investment manager's fees would not be recorded as a payment from investments.					

Assuming there were no restrictions on investment income, how much did NBCF report in investment income (net of expenses) at the end of FY 2020?

= Dividend & Interest Income + Unrealized Gain (or Loss) + Realized Gain (or Loss) – Management Fee
=$450,000 + $1,250,000 – $175,000 – $135,000
=$1,390,000

How much did NBCF report in investments at the end of FY 2020?

= Beginning Balance + Additions – Withdrawals + Unrealized Gain (Loss) + Realized Gain (Loss)
= $14,780,000 + $1,650,000 – $0 + $1,250,000 – $175,000
= $17,505,000

RELIABILITY AND FAIR VALUE ESTIMATES

GAAP (specifically, FASB Statement 157) classifies investments by a three-level scheme according to the availability of market prices. *Level 1* assets have a quoted price on a public exchange. This includes stocks of public companies and money market funds, among others. Level 2 assets are primarily sold "over-the-counter," like corporate bonds, futures contracts, stock options, etc. Here the owner must report an estimated price based on prices of comparable assets that have traded recently. Level 3 assets are not bought and sold and therefore do not have a market price. This includes more exotic investments like venture capital funds, hedge funds, and private equity. For Level 2 and Level 3 assets, the owner must discount the reported asset value to account for uncertainty in that valuation.

Public organizations frequently borrow money to finance the purchase of equipment, pay for renovations to property, purchase new property, or cover operating expenses. Loans include *lines of credit, notes payable*, *mortgages*, and *municipal bonds*. A line of credit is an agreement between an organization and a bank that allows that organization to borrow money on short notice at a pre-determined interest rate. A line of credit can be especially useful if an organization has unpredictable cash flows. Notes payable are short-term loans with maturities ranging from 18 months up to 60 months. A mortgage is a loan secured with real estate. Unlike mortgages, municipal bonds and notes are unsecured or secured with pledged revenues, not property. Like mortgages, municipal bonds have a longer *maturity* of up to 30 years.

Borrowers have to pay interest on the loans at a fixed rate. There are exceptions. Interest rates on lines of credit and some municipal bonds are *variable* or *floating* rates (e.g., prime rate + 4.00%).

The initial accounting recognition of a loan is simple. The borrowed money, or loan *principal*, is recognized as a liability that offsets the cash received from the loan:

Transaction 7: Treehouse borrows $30,000 from a local bank to finance the purchase of a van. The loan is for five years at seven percent annual interest, and interest is paid annually. Treehouse purchased the van immediately after the loan closed.

Assets		= Liabilities	+ Net Assets
Cash	+ $30,000	Loan Payable *(current)*	+ $6,000
Cash	– $30,000	Loan Payable *(non-current)*	+ $24,000
Equipment	+ $30,000		

The purchase of a van results in an increase in a non-current asset (equipment). However, the full loan amount is not a current liability – only the amount due in the next 12 months is reported as a current liability – and the remainder is a non-current liability. As a result, the non-profit is not less liquid, as only the current portion of the loan is considered a current liability. On the asset side, cash remains unaffected, as all the proceeds from the loan were used to purchase the equipment.

Transactions related to repaying debt present some special accounting considerations. Consider the previous example. Treehouse has agreed to pay interest on the loan each year the loan is active. The $30,000 loan principal is a liability; the interest on that loan principal is not. Payment of interest on

the loan is an expense. Treehouse will be paying the bank (or lender) for access to credit, which in essence, is a "service." For that reason:

Transaction 8: Treehouse makes its first annual principal and interest payment on the loan described in Transaction 7.

Assets		= Liabilities		+ Net Assets	
Cash	– $8,100	Loan Payable *(current)*	– $6,000	Interest Expense	-$2,100

Since the $30,000 loan is paid off annually over five years, the annual payment on the principal is $6,000, or *$30,000/five years*). The interest rate on the loan is seven percent, so interest expense is equal to *$2,100, or $30,000 X 0.07*.

In year 2, the current portion of the loan would be $6,000, and the non-current portion would be $18,000. The total loan outstanding would be $24,000 (i.e., *$30,000 – $6,000* or *$6,000 + $18,000*).

Treehouse would pay $7,680 to cover a $6,000 payment on the loan principal and $1,680 of interest expense *(i.e., $24,000 X 7%).*

If Treehouse did not make its interest payments on time, the expense would be recognized as a liability. The non-profit would also need to recognize as an expense (if paid) or liability (if unpaid) if the lender imposes additional fines or penalties as a result of non-payment.

TRANSACTIONS THAT AFFECT THE INCOME STATEMENT

Treehouse's mission demands that it focus most of its efforts on delivering services. As a result, most of its day-to-day financial activity will involve revenues and expenses. Revenues and expenses affect the income statement.

For instance, recall from the earlier discussion that Treehouse delivers outreach programs at local schools. When one of those programs is delivered, it records revenue.

Transaction 9a: Treehouse delivers an outreach program at a local school and sends that school district an invoice for $2,500.

Assets		= Liabilities	+ Net Assets	
Accounts Receivable	+ $2,500		Program Revenue	+ $2,500

Here Treehouse has earned revenue because it delivered a program. It recognizes those earned revenues as "program revenue." Program revenues represent an increase in net assets *"without donor restrictions*." Restrictions would apply for public support, including donations, in-kind contributions, and foundation grants—more on this below.

Did it receive a payment? No. We, therefore, need to recognize a receivable on the asset side. The receivable is an *accounts receivable* since revenue is earned. For donations, the receivable would be *pledges receivable;* for grants, the receivable would be *grants receivable*.

Three weeks later, when Treehouse collects payment, it will convert that receivable into cash. That transaction is as follows:

Transaction 10: Treehouse receives payment from the school district for the outreach program delivered three weeks ago.

Assets		= Liabilities		+ Net Assets	
Cash	+ $2,500				
Accounts Receivable	– $2,500				

Transaction 10 does not affect the income statement but remember that the transaction that resulted in the original accounts receivable did.

Note, if Treehouse had received payment immediately at the end of the session, then:

Transaction 9b: Treehouse delivered an outreach program at a local school and received a payment of $2,500.

Assets		= Liabilities	+ Net Assets	
Cash	+ $2,500		Program Revenue (*Net Assets, Without Donor Restrictions*)	+ $2,500

In *Transaction 9,* Treehouse earned revenue. Of course, that revenue did not just appear. Treehouse incurred various expenses – staff time, travel, supplies, etc. – to deliver that service. When should it recognize the expenses incurred to deliver that program? One of the core principles of GAAP is the *matching principle*. That is, when we recognize revenue, we should recognize expenses that were incurred to produce that revenue. This is not always clear for services. Services are driven by personnel, and we incur personnel expenses constantly. Services also require equipment, certifications, and other assets where it is not always clear what it means to "use" that asset.

The matching principle is more applicable when the transaction involves a good rather than a service. When an organization sells a good, it presumably knows what it costs to produce that good. Those costs, known generally as the *cost of goods sold*, are immediately netted against the revenue collected from the transaction. That is why, in the flow chart above, you see some additional recognition related to delivering goods.

That said, public organizations encounter a few typical transactions that account for many of their expenses. First and most important is when Treehouse pays its staff and recognizes salary expenses.

Transaction 11: Treehouse recognizes and pays bi-weekly payroll of $15,000.

Assets		= Liabilities		+ Net Assets	
Cash	+ $2,500	Wages Payable	+ $15,000	Wage Expense	– $15,000
Cash	– $15,000	Wages Payable	– $15,000		

Payroll is critical because personnel is the largest expense for most public organizations. From the organization's perspective, payroll is an expense because it receives services from its employees. That "service" is their day-to-day work. This is different than if the organization hired the one-time services of, say, a plumber from another company to fix some leaky pipes. But the accounting recognition is essentially the same.

Keep in mind that there is frequently a lag between when wage expense is recognized and when

payroll is remitted. The first transaction recognizes the expense; the second transaction recognizes payment on an outstanding liability. The initial transaction would be reflected in the income statement; the subsequent transaction would not.

Treehouse incurred other expenses to deliver the school outreach program. The program was held at a school 100 miles from the non-profit's headquarters. The two staff members who delivered that program rode together to that off-site location in their personal vehicles. They will expect to be reimbursed. Many non-profits and government organizations follow the federal government's guidance and reimburse mileage at a fixed rate of 57.5 cents per mile.

Transaction 12: Treehouse pays mileage expenses of 57.5 cents/mile for a 100-mile round trip for two staff members.

Assets	= Liabilities	+ Net Assets	
Cash	– $115	Mileage Expense	– $115

To deliver the outreach program, staff used up $100 of construction paper, colored pencils, and other supplies. Recall that supplies are an asset. To account for the full cost of the outreach program, we should also recognize that Treehouse "used up" or "expensed" these assets. For example:

Transaction 13: Treehouse expenses $100 in supplies related to its outreach program.

Assets	= Liabilities	+ Net Assets	
Supplies	– $100	Supplies Expense	– $100

LIFO AND FIFO

Inventory presents some unique challenges for accounting recognition. Organizations use inventory all the time, so most have to estimate the value of inventory assets at any moment. There are several ways to produce those estimates, including ***First In, First Out (FIFO)*** , and ***Last In, First Out (LIFO).*** For organizations that use a lot of inventory, small changes to inventory valuation can significantly change the reported value of inventory and inventory expense. That said, for most public managers, the technical aspects of inventory valuation fall squarely within the realm of "know what you don't know."

PRACTICE PROBLEM: EARNED INCOME AND EXPENSES

The **Museum of Contemporary Art (MCA)** operates a gift shop and coffee bar. The gift shop reported $1,425,000 in revenues (all cash sales). Payroll expenses for the year were $650,000. The Museum purchased $325,000 in inventory (for the gift shop) and $145,000 in supplies (for the coffee bar) and reported a balance of $45,000 in inventory and $7,000 in supplies.

Assuming all purchases and expenses had been paid in full, how much did the gift shop report in profits or losses in its gift shop operations for the fiscal year?

Assets		= Liabilities		+ Net Assets	
Cash	+$1,425,000			Program Revenue (Net Assets, Without Donor Restrictions)	+$1,425,000
Earned income reported as revenue without donor restrictions. Cash sales increase MCA cash balances.					
Cash	-$325,000				
Inventory	+$325,000				
Cash	-$ 145,000				
Supplies	+$ 145,000				
MCA purchased $325,000 in inventory for the gift shop and $145,000 in supplies for its coffee shop operations. Vendors were paid in full, upon delivery.					
Inventory	-$280,000			Inventory Expense	-$280,000
Supplies	-$138,000			Supplies Expense	-$138,000
Of the $325,000 in inventory, MCA reports a balance of $45,000. Assuming there was no inventory at the start of the financial period, inventory expense would be the difference between inventory purchased and balances at the end of the year (i.e., $325,000 - $45,000). The same applies for supplies. Supplies expense is equal to purchased supplies less supplies available at the end of the year ($145,000 - $7,000).					
		Wages Payable	+$650,000	Payroll Expense	-$650,000
Cash	-$650,000	Wages Payable	-$650,000		
Payroll expense of $650,000. Wages payable were paid in full.					

So, how much did MCA report in earned income from the gift shop and coffee bar? To estimate profit, we review transactions in the Net Asset column of the transaction sheet. As discussed in this chapter, all revenues are reported as an increase in net assets, and all expenses are reported as a decrease in net assets. **Net income (or Change in Net Assets) is the difference between revenues and expenses**.

We estimate the overall profitability was **$357,000 (i.e., $1,425,000 – $280,000 – $138,000 – $ 650,000).** Net income represents an increase in MCA's net worth. If you were to estimate the balances in each asset account reported on the right-hand side, you would find the organization's assets also increased by $357,000.

Gift Shop Balance Sheet

Assets	
Cash*	$305,000
Inventory	$45,000
Supplies	$7,000
Total Assets	**$357,000**
Liabilities	**$0**
Net Assets	
Without Donor Restrictions	$357,000
With Donor Restrictions	$0
Total Net Assets	**$357,000**

**Assuming MCA reported a zero cash balance at the start of the year, year-end balances were $305,000 (i.e., $1,425,000 – $325,000 – $145,000 – $650,000).*

Recall that Treehouse also pre-pays for many of its ongoing expenses, such as insurance and certifications. The choice of when to expense pre-paid items is admittedly arbitrary. Most organizations have accounting policies and assumptions that state when and how this happens. Most will record those expenses monthly or quarterly. Recall that Treehouse pre-paid $1,500 for some annual professional association memberships. Assume that it expenses those memberships quarterly. At the end of the first quarter, since the membership was paid, it would record:

Transaction 14: Treehouse records quarterly professional association membership expenses. Recall that annual association dues are $1,500.

Assets		= Liabilities	+ Net Assets	
Prepaid Expenses	– $375		Membership Expense	– $375

Remember that after this first portion is expensed, $1,125 in pre-paid association membership expenses remains on the balance sheet. In other words, this transaction expenses one-quarter of the original $1,500 asset.

Another crucial set of accounting assumptions is around *depreciation*. To deliver services, Treehouse must use up some portion of its building, vehicles, audiology equipment, and other capital items. Like with salaries and pre-paid expenses, it's not always clear when and how those assets are "used up." Some of that use is normal wear and tear. Some of it might happen if the asset bears a particularly heavy workload. Some capital items might be largely out of use, but they will lose value because, each year that goes by, they'll become harder for Treehouse to sell should they choose to liquidate them.

Without a detailed way to measure that wear and tear, accountants typically deal with depreciation by simplifying assumptions. One of the most common is to use *straight-line depreciation,* also known as the *straight-line method*. Under the straight-line method, when an organization purchases a new capital asset, it determines the length of time it can use that asset to deliver services. This is known as the *useful life*. The organization must also determine the value of that asset once it is no longer useful for delivering services. This is the *salvage value*, *residual value,* or value at *write-off*. If we subtract the salvage value from the historical cost and divide it by the useful life, we get the annual depreciation expense.

For example, let's return to Treehouse's office furniture. Recall that it purchased that furniture for $20,000. Say that equipment has a useful life of 10 years. Also, assume that at the end of its useful life Treehouse will be able to sell it for $2,500. To calculate the annual depreciation expense using the straight-line method, we take the purchase price of $20,000, subtract the salvage value of $2,500, and divide the difference by 10. The estimated depreciation expense would be $1,750 per year. Using this assumption, we could record the following transaction:

Transaction 15: Treehouse records an annual depreciation expense of $1,750 on its equipment.

Assets		= Liabilities	+ Net Assets	
Equipment	– $1,750		Depreciation Expense	– $1,750

After this first recording for depreciation expense, the value of the equipment reflected in the Balance Sheet will be $18,250 (*i.e., $20,000 – $1,750*). We refer to the value of assets, net of depreciation, as the "*book value.*"

Other methods of calculating depreciation expense include *accelerated method*, *declining balance*, and *sum-of-the-years method*. Underlying assumptions in each method produce different estimates of depreciation expenses.

PRACTICE PROBLEM: DEPRECIATION

Dorchester Home Health Services (DHHS) is a private, non-profit home health agency. At the start of FY 2020 (i.e., July 1, 2019), DHHS reported $5,900,000 in fixed assets (net of depreciation).

The non-profit sold its existing fleet of vehicles, with a book value of $12,000, for $15,000.

It paid for the new vehicles in cash on October 1, 2019, at a cost of $200,000. Assuming that these vehicles have a useful life of five years and a salvage value of $20,000, how much should DHHS report in fixed assets (net of depreciation) at the end of the year? You may assume DHHS uses the straight-line depreciation method, and the estimated depreciation expense on existing equipment for FY 2020 was $195,000.

Assets		= Liabilities	+ Net Assets	
Cash	+$15,000			
Fixed Assets	-$12,000		Profits from the Disposal of Assets	+$3,000
The purchase of four new vehicles at a cost of $200,000, all of which was paid in cash.				
Cash	-$200,000			
Fixed Assets	+$200,000			
The purchase of four new vehicles at a cost of $200,000, all of which was paid in cash.				
Fixed Assets *(Depreciation)*	-$195,000		Depreciation Expense	-$195,000
Fixed Assets *(Depreciation)*	-$27,000		Depreciation Expense	-$27,000
Depreciation expense for the new equipment = ($200,000 - $20,000)/five years = $36,000. Note, however, the vehicles were purchased on October 1, 2019. We therefore need to pro-rate the depreciation expense, as DHHS owned the vehicles for nine months. Pro-rated depreciation expense is $27,000 (i.e., ($36,000/12 months) x nine months).				

Fixed assets, net of depreciation, at the end of FY 2020:

= Beginning Balance + Additions – Eliminations – Deprecation
=$5,900,000 + $200,000 -$12,000 – ($195,000+$27,000)
=**$5,866,000**

This same concept of spreading out the useful life also applies to intangible assets. Say, for example, Treehouse purchases some specialized case management software that allows it to store client records

safely. That software requires Treehouse to purchase a five-year license. That license is an intangible asset, and the non-profit expects to utilize the software over the next five years. In this case, Treehouse would *amortize* the intangible asset – i.e., recognize that the value of the intangible asset decreases every year. The expense associated with using that intangible asset is referred to as *amortization expense*. If Treehouse purchased a five-year license for $5,000, it would record a $5,000 software license as an asset at that purchase. After that, if it amortized that license in equal annual installments, the effect on the fundamental equation is as follows:

Transaction 16: Treehouse purchased a records management software for $5,000. Assuming a useful life of five years, the annual amortization expense is estimated to be $1,000.

Assets		= Liabilities	+ Net Assets	
Cash	– $5,000			
Software License	+$5,000			
Software License	– $1,000		Amortization Expense	– $1,000

Following this first amortization expense, the license would remain on Treehouse's balance sheet at $4,000.

Finally, we must consider what happens if Treehouse is paid for a service before it delivers it. This is known as *deferred revenue* or *unearned revenue*. Deferred revenue is a liability because it represents a future claim on Treehouse resources. By taking payment for a service not yet delivered, Treehouse is committing future resources to deliver that service. Once it delivers that service, it incurs expenses and removes that liability.

For example, imagine that Treehouse arranges a $1,500 outreach program with a different school district. That school district is nearing the end of its fiscal year, so it agrees to pay Treehouse for the program several weeks in advance. Once it receives that payment, it would recognize that transaction as follows:

Transaction 17: Treehouse takes a $1,500 payment for a school outreach program to be delivered in the future.

Assets		= Liabilities	+ Net Assets	
Cash	+ $1,500		Deferred Revenue	+ $1,500

This initial transaction does not affect the income statement. However, when Treehouse delivers the program a few weeks later, it records the following:

Transaction 18: Treehouse delivers the school outreach program for which it was paid previously.

Assets		= Liabilities		+ Net Assets	
		Deferred Revenue	– $1,500	Program Revenue *(Net Assets, Without Donor Restrictions)*	+ $1,500

The key takeaway from all these income statement transactions is simple: For Treehouse to be profitable, it must take in more revenue from its programs and services than the total payroll and other expenses it incurs to deliver those programs. If revenues exceed expenses, then its net assets

will increase. If expenses exceed revenues, then net assets will decrease. That is why, as previously mentioned, change in net assets is the focal point for much of our analysis of an organization's financial position.

RECOGNITION CONCEPTS FOR SPECIAL CIRCUMSTANCES

PLEDGES AND DONOR REVENUES

Non-profits aren't traditionally paid for their services. In fact, large parts of the non-profit sector exist precisely to provide services to those who cannot pay for those services. People experiencing homelessness, foster children, and endangered species come to mind immediately. Non-profits depend on donations and contributions to fund those services.

At the outset, it might seem like the accrual concept breaks down here. How can a non-profit recognize revenue if the recipients of its services do not pay for those services? In non-profit accounting, we address this problem by simply drawing a parallel between donations and payments for service. Donors who support a non-profit are, in effect, paying that non-profit to pursue its mission. Donors may not benefit directly from their contribution, but they benefit indirectly through tax benefits and a feeling of generosity. Those indirect benefits are substantial enough to support the accrual concept in this context.

Practically speaking, we address this with a category of net assets called "donor revenue" and a category of assets called "pledges receivable." For example:

Transaction 19: Treehouse received pledges of gifts in the amount of $2,500 to be used as its Board of Directors considers appropriate.

Assets		= Liabilities	+ Net Assets	
Pledges Receivable	+ $2,500		Net Asset without Donor Restrictions *(Public Support)*	+ $2,500

Most donor revenues happen through the two-step process suggested here. A donor pledges to donate which is recognized as pledges receivable. GAAP stipulates that a signed donor card or other documented promise to give constitutes a pledge that can be recognized. Once the donor writes Treehouse a check for the pledged amount, Treehouse will book the following:

Transaction 20: Treehouse collects the $2,500 pledge recognized in Transaction 19.

Assets		= Liabilities	+ Net Assets
Cash	+ $2,500		
Pledges Receivable	– $2,500		

NET ASSETS SUBJECT TO DONOR RESTRICTIONS

One of the big financial questions for any non-profit is how much control it has over where its money comes from and where it goes. In a perfect world, non-profit managers fund all their operations

through unrestricted program revenues and donations. It is much easier to manage an organization when no strings are attached to its money.

Most non-profit managers aren't so lucky. Virtually all non-profits have some restrictions on when and how their organization can spend money. Donors who want to ensure the organization accomplishes specific goals will restrict how and when their donation can be spent. Governments do the same with restricted grants or loans. Some resources, namely endowments, can't ever be spent.

Restricted resources usually appear as "net assets with donor restrictions." Consider this example:

Transaction 21: Treehouse receives a cash donation of $5,000. That gift was accompanied by a letter from the donor to Treehouse's executive director requesting that the donation be used for staff development.

Assets	= Liabilities	+ Net Assets	
Cash	+ $5,000	Net Asset with Donor Restriction *(Public Support)*	+ $5,000

This is a typical revenue subject to donor restrictions. The donor has specified how Treehouse will use these donated resources. We'd see a similar restriction if the donor had specified that the donation could not be spent for some period of time.

Previously, net assets with donor restrictions were reported as either temporarily or permanently restricted net assets. Temporarily restricted net assets were restricted with respect to time or use. Permanently restricted net assets were permanently restricted and could never be spent. Recent changes in financial reporting altered the reporting of restricted gifts and aggregated these two categories, now reported as "Net Assets with Donor Restrictions." While this change altered the presentation of financial information in the audited financial statements, it did not alter donor intent. In other words, if a donor had provided a gift to be used in perpetuity, the accounting rules do not alter that donor's intent. They change how we report that information. The focus is now on all assets subject to donor restrictions – irrespective of whether they are time-restricted, use-restricted, or the *corpus* is restricted in perpetuity.

Our accounting recognition for net asset restrictions is not unlike other transactions that affect the income statement. The main difference is that with restricted net assets, we have to take the additional step of "undoing" the restriction once the donor's conditions have been satisfied. For instance:

Transaction 22: Treehouse staff attend a national training conference. Travel, lodging, and conference registration expenses were $3,990. Staff are reimbursed from the resources donated in Transaction 21.

Assets	= Liabilities	+ Net Assets	
		Released from Restrictions (***From*** *Net Assets with Donor Restrictions)*	– $3,990
		Released from Restrictions (***To*** *Net Assets without Donor Restrictions)*	+ $3,990
Cash	-$3,990	Professional Development Expense	– $3,990

The first part of this transaction converts donations subject to restrictions to unrestricted revenue. This is reported in the income statement as *"released from restrictions."* Treehouse can do this conversion because it has met the donor's condition: staff attended a professional development conference. The second part of the transaction recognizes the professional development expenses. Not all expenses are reported under "Net Assets Without Donor Restriction." No expenses are reported in the "Net Assets with Donor Restrictions" column. Why? All expenses originate within the organization and, therefore, cannot be restricted by an external third party. Revenues, on the other hand, are resources provided to the organization and therefore, can be restricted. After the transaction, $1,010 of the original gift remains in Treehouse's balance sheet and income statement as "Net Assets with Donor Restriction."

While we often think of restricted gifts as contributions, restricted gifts do include property and equipment. Following FASB's Accounting Standards Update (ASU) 2016-14, assets should be released from donor restrictions when they are placed in service rather than releasing donor restrictions over estimated useful life (unless otherwise stipulated by the donor). In other words, if the gift of a vehicle or building is being used as intended by the donor, that asset is reported under "Net Assets without Donor Restriction."

Net assets restricted in perpetuity (previously classified as permanently restricted net assets) most often appear as endowment investments. Endowment investments represent a pool of resources that exists to generate other assets to support the organization's mission. By definition, the donation that comprises the original endowment – also known as the *corpus* – cannot be spent. In practice, the accounting recognition for the formation of an endowment looks like this:

Transaction 23: An anonymous benefactor donates 3,500 shares of Vanguard's Global Equity Investor Fund (a mutual fund) to Treehouse. The gift stipulates that the annual investment proceeds from that stock support general operations and that Treehouse cannot, under any circumstance, liquidate the endowment. At the time of the gift, the investment had a fair market value of $100,000.

Assets	= Liabilities	+ Net Assets	
Investments	+ $100,000	Net Asset with Donor Restriction *(Public Support)*	+ $100,000

Once the endowment is established, it generates investment earnings that are not subject to donor

restrictions unless otherwise stipulated by the donor. Income from endowment investments is recorded as "distribution from endowment" or "endowment investment income."

Transaction 24: At the end of the Endowment's first fiscal year, Treehouse receives a dividend check from Vanguard (the mutual fund manager) for $4,500.

Assets		= Liabilities	+ Net Assets	
Cash	+ $4,500		Net Asset without Donor Restriction *(Investment Income)*	+ $4,500

If the anonymous benefactor designated the income from the mutual fund to be used for a specific program or activity, the investment income would be reported under "Net Asset with Restriction."

Assets		= Liabilities	+ Net Assets	
Cash *(With Restrictions)*	+ $4,500		Net Asset with Donor Restriction *(Investment Income)*	+ $4,500

Remember, not all investments are endowment investments. The non-profit could report an investment portfolio significantly larger than its endowment, especially if income from the endowment exceeds distributions or the non-profit has diverted excess cash to investments over time. While unrestricted investments are reported together with restricted investments, restricted investments remain subject to donor restrictions.

Even though the format of the financial statements – Net Assets without Restrictions and Net Assets with Restrictions – simplifies the presentation of financial information, non-profits must report in detail about the nature and purpose of Net Assets with Donor Restrictions.

PRACTICE PROBLEM: PUBLIC SUPPORT WITH DONOR RESTRICTIONS

The Museum of Contemporary Art (MCA) receives a $1,000,000 cash gift from Mr. and Mrs. Carter. The donors have asked the museum to create an endowment for $750,000 and use all other funds to curate a collection of contemporary music. The donors expect the MCA to create a contemporary music collection in the summer of 2022.

Assets		= Liabilities	+ Net Assets	
Cash *(With Restrictions)*	+$1,000,000		Net Asset with Donor Restriction *(Public Support)*	+$250,000
			Net Asset with Donor Restriction *(Public Support)*	+$750,000

The cash gift is subject to donor restrictions. We therefore record receipt of donation and an increase in net assets "with donor restrictions." Note, we separate out the funds that can be expended in the near-term, having met donor requirements from those that cannot be expended. Recent changes in accounting rules eliminated previous categories – temporarily restricted versus permanently restricted. That said, the accounting rules only apply to reporting. The reporting requirement does not eliminate donor intent. The non-profit has to maintain accounting records that accommodate donor intent. In this instance, the $750,000 can never be expended, whereas the $250,000 would be expended at a future date on purposes designated by the donor.

Cash *(With Restrictions)*	-$750,000
Investments *(With Restrictions)*	+$750,000

MCA transferred funds from Cash to Investments. Note, while the gift of $750,000 is restricted, income from the gift is not restricted, unless the donor has imposed that restriction.

IN-KIND CONTRIBUTIONS

In addition to donated revenue, non-profits also depend on donations of goods and services. These are called in-kind contributions. According to GAAP, a non-profit can record as an in-kind contribution to specialized services that it would otherwise purchase. This usually means professional services like attorneys, counselors, accountants, or professional development coaches. We recognize in-kind services once they've been received, and all the recognition happens in the net assets part of the fundamental equation. For instance:

Transaction 25: A local attorney agrees to represent Treehouse "pro bono" in a lawsuit filed by the family of a former client. The attorney's regular rate is $500/hour, and the case requires ten billable hours. Without these pro bono services, Treehouse would have had to hire outside counsel.

Assets	= Liabilities	+ Net Assets	
		Net Asset without Donor Restriction *(In-Kind Public Support)*	+ $5,000
		Attorney Fees	– $5,000

If in-kind contributions don't result in a net increase or decrease in net assets, then why do we bother recognizing them? Because recognizing them helps us understand the organization's capacity

to deliver its services. If it had to pay for otherwise donated goods and services, those purchases would undoubtedly affect its financial position and its service-delivery capacity.

Some in-kind contributions produce both an in-kind contribution and a donated asset. This is especially important for services like carpentry or plumbing. For example:

Transaction 26: A local contractor agrees to donate the labor and materials to construct a new playground at Treehouse. Total labor expenses for the project were $3,000, and the contractor purchased the new playground equipment for $8,000.

Assets	= Liabilities	+ Net Assets	
		Net Asset without Donor Restriction *(In-Kind Public Support)*	+ $3,000
		Contractor Fees	– $3,000
Equipment	+ $8,000	Net Asset Without Donor Restrictions *(In-Kind Public Support)*	+ $8,000

The contractor's donated labor is reported as a revenue and an expense, whereas the donated equipment is reported as an asset and revenue. The asset would then be depreciated over its useful life.

BAD DEBT

Unfortunately, pledges do not always materialize into contributions. Sometimes the donors' financial situation changes after making a pledge. Sometimes they have too much wine at a gala event and promise more than they can give. Sometimes they change their mind. For these and many other reasons, non-profits rarely collect 100 percent of their pledged revenues.

Most non-profits re-evaluate at regular intervals – usually quarterly or semi-annually – the likelihood they'll collect their pledges receivable. Once they determine that a pledge cannot or will not be collected, the amount of pledges receivable must be adjusted accordingly. The accounting mechanism to make this happen is an expense called "*bad debt*." Bad debt is a specific type of reconciliation entry known as a *contra-account*. Like with depreciation, amortization, and other reconciliations, contra-account entries do not affect cash flows. They are "*write-off*" transactions to offset the reduction of an asset, in this case, pledges receivable. Consider this example:

Transaction 27: Treehouse determines it will not be able to collect $3,000 of pledges made earlier in the fiscal year.

Assets	= Liabilities	+ Net Assets	
Pledges Receivable	– $3,000	Bad Debt Expense	– $3,000

When is a pledge deemed uncollectable? That depends on the organization's policies. GAAP rules only state that an organization must have a policy that dictates how it will determine collectability. To that effect, non-profit policies state that a pledge is uncollectable after a certain number of days past the close of the fiscal year or if the donor provides documentation that the pledge is canceled.

Among non-profits, pledges receivable is the most common type of asset to be offset by bad debt

expense. However, be aware that bad debt is not unique to non-profits or pledges receivable. For-profits and governments can and often do record bad debt expenses. Those expenses can apply to any receivable, including accounts receivable for goods and services previously delivered or grants receivable from a donor or a government.

MINI CASE: SEATTLE COMMUNITY FOUNDATION

The Seattle Community Foundation (herein referred to as "Foundation"), a non-profit entity that supports charitable organizations in the Puget Sound area, reported the following transactions for FY 2020 (July 1, 2019 – June 30, 2020). Use this information to prepare a Statement of Activities.

1. The Foundation has a large portfolio of investments. At the beginning of the year, the fair value of the portfolio was $76,850,000. In a 12-month period, the Foundation transferred $4,250,000 from cash to investments.

Assets	= Liabilities	+ Net Assets
Cash	– $4,250,000	
Investments	+ $4,250,000	

2. For the year ending June 30, 2020, the Foundation received $650,000 in interest and dividend payments. Investment managers reported $675,000 in realized gains and $215,000 in unrealized losses. The Foundation reports all investment income (interest and dividend payments, realized gains or losses, and unrealized gains or losses) as revenue without donor restrictions.

Assets	= Liabilities	+ Net Assets	
Cash	– $650,000	Net Asset without Donor Restriction *(Investment Income)*	+ $650,000
Investments	+ $675,000	Net Asset without Donor Restriction *(Realized Gains on Investments)*	+ $675,000
Realized gains from investments are reported under investments – not cash – if the investments were sold and the investment manager immediately purchased alternative investments. If investments were sold and proceeds were transferred to cash, a secondary transaction would be reported here. For simplicity, we assume that the non-profit did not transfer funds from investments to cash.			
Investments	– $215,000	Net Asset Without Donor Restriction *(Unrealized Loss on Investments)*	– $215,000

3. The Foundation held its annual fundraising dinner event on February 18, 2020. The dinner raised $1,600,000 in unrestricted support and $3,200,000 in restricted support.

Assets	= Liabilities	+ Net Assets	
Pledges Receivable *(Without Donor Restriction)*	+ $1,600,000	Net Asset without Donor Restriction *(Public Support)*	+ $1,600,000
Pledges Receivable *(Without Donor Restriction)*	+ $3,200,000	Net Asset with Donor Restriction *(Public Support)*	+ $3,200,000

Public support with donor restrictions is reported separately from public support without donor restrictions on both the asset side (as pledges receivable) and on the net asset column (as public support or revenue). See the Statement of Activities below.

4. As of June 30, 2020, the Foundation had received $825,000 of the $1,600,000 in unrestricted support and $1,250,000 of the $3,200,000 in restricted support. Historically, 1.5 percent of all pledges have been uncollectable.

Assets	= Liabilities	+ Net Assets	
Pledges Receivable *(Without Restrictions)*	– $825,000		
Cash *(Without Restrictions)*	+ $825,000		
Pledges Receivable *(With Restriction)*	– $1,250,000		
Cash *(With Restriction)*	+ $1,250,000		
Pledges Receivable *(With Restrictions)*	– $48,000	Bad Debt Expenses	– $72,000
Pledges Receivable *(Without Restrictions)*	– $24,000		

Even though the Foundation received payment on a portion of the pledges subject to donor restriction, receipt of payment does not eliminate the donor restriction. We therefore report the funds separately as cash balances without restrictions and cash balances with restrictions. See transaction 5 below.

The Foundation's expenses were as follows:

5. The Foundation made $2,100,000 in cash awards to various charitable organizations. Of the total, $1,250,000 was funded with restricted public support. The remainder was funded with unrestricted revenues.

Assets	= Liabilities	+ Net Assets	
		Released from Restrictions (***From*** *Net Assets with Donor Restrictions)*	– $1,250,000
		Released from Restrictions (***To*** *Net Assets without Donor Restrictions)*	+$1,250,000
Cash	– $2,100,000	Grant Expense	– $2,100,000

Public support has to be released from restrictions before it can be expended. Note all expenses are reported in the column "Without Donor Restrictions." See the Statement of Activities below.

6. Foundation salaries and benefits were $420,000 for the year. Of the total, $35,000 remained unpaid at the end of the year. Fundraising and marketing costs for the year were $150,000. All fundraising and marketing expenses had been paid in full by year-end. Other expenses paid in

full included rent and utilities ($144,000), equipment lease ($12,000), office supplies ($8,500), and miscellaneous expenses ($15,000).

Assets		= Liabilities		+ Net Assets	
		Wages Payable	+ $420,000	Wage Expense	– $420,000
Cash	– $385,000	Wages Payable	– $385,000		
Cash	– $150,000			Marketing Expense	– $150,000
Cash	– $144,000			Rent Expense	– $144,000
Cash	– $12,000			Lease Expense	– $12,000
Cash	– $8,500			Supplies Expense	– $8,500
Cash	– $15,000			Miscellaneous Expenses	– $15,000

7. On June 28th, the investment manager sent the Foundation an invoice for services rendered in FY 2020 for $82,000. The Foundation expected to write a check for the full amount on July 15, 2020.

Assets		= Liabilities		+ Net Assets	
		Accounts Payable	+ $82,000	Investment Manager Fee	– $82,000

8. The Foundation purchased $21,000 in computing equipment in cash. The new equipment is expected to have a useful life of three years and zero salvage value. Depreciation expenses on existing equipment for FY 2020 were expected to be $32,500.

Assets		= Liabilities	+ Net Assets	
Fixed Assets	+ $21,000			
Cash	– $21,000			
Fixed Assets	– $7,000		Depreciation Expense	– $7,000
Fixed Assets	– $32,500		Depreciation Expense	– $7,000

Depreciation expense for the new equipment = ($21,000 – $0)/three years = $7,000.

9. For FY 2020, the Foundation reported $25,000 in interest expense on its long-term debt. The Foundation had also made $75,000 in principal payments for the year.

Assets		= Liabilities		+ Net Assets	
Cash	– $100,000	Loan Payable	– $75,000	Interest Expense	– $25,000

Seattle Community Foundation
Statement of Activities
for the year ending June 30, 2020

Revenues	Without Donor Restrictions	With Donor Restrictions	Total
Public Support			
Donor Revenue	$ 1,600,000	$ 3,200,000	**$ 4,800,000**
Net Assets Released from Restrictions	1,250,000	(1,250,000)	-
Earned Income			
Investment Income	650,000		**650,000**
Realized Gains	675,000		**675,000**
Unrealized Gains	(215,000)		**(215,000)**
TOTAL REVENUES	**$ 3,960,000**	**$ 1,950,000**	**$ 5,910,000**
Expenses			
Grant Expense	2,100,000		**2,100,000**
Bad Debt Expense	72,000		**72,000**
Wage Expense	420,000		**420,000**
Fundraising Expense	150,000		**150,000**
Rent and Utilities	144,000		**144,000**
Equipment Lease	12,000		**12,000**
Supplies Expense	8,500		**8,500**
Miscellaneous Expense	15,000		**15,000**
Investment Manager Fee	82,000		**82,000**
Depreciation Expense	39,500		**39,500**
Interest Expense	25,000		**25,000**
TOTAL EXPENSES	**$ 3,068,000**		**$ 3,068,000**
CHANGE IN NET ASSETS	**$ 892,000**	**$ 1,950,000**	**$ 2,842,000**

How much did the Foundation report as Investments on June 30, 2020?

= Beginning Balance + Additions – Withdrawals + Unrealized Gain (Loss) + Realized Gain (Loss)
= $76,850,000 + $4,250,000 + $675,000 – $215,000
= **$81,560,000**
(Note: Investment income of $650,000 was reported under Cash, not Investments, so it is not included in the balance here)

How much was reported as pledges receivable on June 30, 2020?

=Public Support – Payment Received – Bad Debt Expense
=$4,800,000 – $825,000 – $1,250,000 – $24,000 – $48,000
=**$2,653,000**

DEBITS AND CREDITS

You've probably heard accountants talk about debits and credits. They are the basis for a system of accounting shorthand. In this system, every transaction has a debit and a credit.

A debit increases an asset, decreases a liability, or decreases net assets. Debits are always on the left of the account entry. **A credit decreases an asset account, increases a liability, or increases net assets.** Credits are always on the right of the account entry.

Debits and credits must always balance.

To illustrate, let's say Treehouse delivers a service for $1,000 and is paid in cash. Here, we would debit cash and credit services revenue. That entry is as follows:

	Debit	Credit
Cash	$1,000	
Revenue (Net Assets, without Donor Restrictions)		$1,000

For another illustration, imagine that Treehouse receives $500 cash in payment of an account receivable. That entry is:

	Debit	Credit
Cash	$500	
Accounts Receivable		$500

If Treehouse purchased $750 of supplies on credit, we would debit supplies and credit accounts payable:

	Debit	Credit
Supplies	$750	
Accounts Payable		$750

This system is popular because it's fast, easy to present, and appeals to our desire for symmetry. However, it also assumes you're familiar with the fundamental equation and how different types of transactions affect it. If you're new to accounting, this can be a big conceptual leap. That's why throughout this text, we present transactions relative to the fundamental equation of accounting rather than as debits and credits. We encourage you to try out debits and credits as you work the practice problems throughout this text.

MINI CASE CONTINUED, DEBITS AND CREDITS: SEATTLE COMMUNITY FOUNDATION

1. The Foundation has a large portfolio of investments. At the beginning of the year, the fair value of the portfolio was $76,850,000. In the 12-month period, the Foundation transferred $4,250,000 from cash to investments.

	Debit	Credit
Investments	4,250,000	
Cash		4,250,000

2. For the year ending June 30, 2020, the Foundation received $650,000 in interest and dividend payments. Investment managers reported $675,000 in realized gains and $215,000 in unrealized losses. The Foundation reports all investment income (interest and dividend payments, realized gains or losses, and unrealized gains or losses) as revenue without donor restrictions.

	Debit	Credit
Cash	650,000	
Net Asset Without Donor Restriction (Investment Income)		650,000
Investments	675,000	
Net Asset Without Donor Restriction (Realized Gains on Investments)		675,000
Net Asset Without Donor Restriction (Unrealized Loss on Investments)	215,000	
Investments		215,000

3. The Foundation held its annual fundraising dinner event on February 18, 2020. The dinner raised $1,600,000 in unrestricted support and $3,200,000 in restricted support.

	Debit	Credit
Pledges Receivable	1,600,000	
Net Asset Without Donor Restriction (Public Support)		1,600,000
Pledges Receivable	3,200,000	
Net Asset With Donor Restriction (Public Support)		3,200,000

4. As of June 30, 2020, the Foundation had received $825,000 of the $1,600,000 in unrestricted support and $1,250,000 of the $3,200,000 in restricted support. Historically, 1.5 percent of all pledges have been uncollectable.

	Debit	Credit
Cash (Without Restrictions)	825,000	
Cash (With Restrictions)	1,250,000	
Pledges Receivable		2,075,000
Bad Debt Expense	72,000	
Pledges Receivable		72,000

The Foundation's expenses were as follows:

5. The Foundation made $2,100,000 in cash awards to various charitable organizations. Of the

total, $1,250,000 was funded with restricted public support. The remainder were funded with unrestricted revenues.

	Debit	Credit
Released from Restrictions (From Net Assets with Donor Restrictions)	1,250,000	
Released from Restrictions (To Net Assets without Donor Restrictions)		1,250,000
Grant Expense	2,100,000	
Cash		2,100,000

6. Foundation salaries and benefits were $420,000 for the year. Of the total, $35,000 remained unpaid at the end of the year. Fundraising and marketing costs for the year were $150,000. All fundraising and marketing expenses had been paid in full by year-end. Other expenses paid in full included rent and utilities ($144,000), equipment lease ($12,000), office supplies ($8,500), and miscellaneous expenses ($15,000).

	Debit	Credit
Wage Expense	420,000	
Wages Payable		420,000
Wages Payable	385,000	
Cash		385,000
Fundraising Expense	150,000	
Cash		150,000
Rent Expense	144,000	
Cash		144,000
Equipment Lease Expense	12,000	
Cash		12,000
Office Supplies Expense	15,000	
Cash		15,000
Miscellaneous Expenses	8,500	
Cash		8,500

7. On June 28th, the investment manager sent the Foundation an invoice for services rendered in FY 2020 of $82,000. The Foundation expected to write a check for the full amount on July 15, 2020.

	Debit	Credit
Investment Advisor Expenses	82,000	
Accounts Payable		82,000

8. The Foundation purchased $21,000 in computing equipment in cash. The new equipment is expected to have a useful life of three years and zero salvage value. Depreciation expenses on existing equipment for FY 2020 were expected to be $32,500.

	Debit	Credit
Property and Equipment	21,000	
Cash		21,000
Depreciation Expense	39,500	
Property and Equipment		39,500

9. For FY 2020, the Foundation reported $25,000 in interest expense on its long-term debt. The

Foundation had also made $75,000 in principal payments for the year.

	Debit	Credit
Loan Payable	75,000	
Interest Expense	25,000	
Cash		100,000

RECOGNITION CONCEPTS FOR MODIFIED ACCRUAL ACCOUNTING

Governmental funds, and the modified accrual basis of accounting on which they are prepared, focus on expendable financial resources. Taxpayers want to know that their government used its current financial resources to meet its current financial needs. This is, once again, a core part of how accountants think about inter-period equity. If a government pushes costs into future fiscal periods, future taxpayers will have to pay more taxes or expect fewer services.

For this reason, when thinking about the fund financial statements, we need to re-think how we recognize certain revenues. Instead of focusing recognition on when a government "earns" revenue, we focus instead on when the government has an inflow of financial resources. As a corollary, this focus on financial resource inflows means we naturally focus on resources that are available to pay for obligations or will become available soon. Specifically, GAAP for governments requires that for revenue to be recognized in the current fiscal period, it must be *measurable* and *available*.

- *Measurable* means the government can reasonably estimate how much it will collect. For taxes like property taxes, this is easy. They're measurable because the government determines what a taxpayer owes and then sends a bill. But for sales taxes, income taxes, or other revenues, measurable might require some reasonable estimates.
- According to GAAP, *available* means revenue is recognized during the fiscal period for which it's intended to pay liabilities or up to 60 days after the close of that fiscal period. Again, this is not always clear. For instance, when does an intergovernmental grant become available if it requires the government to perform certain services or incur certain expenditures?

These adaptations to GAAP are collectively known as *modified accrual* accounting or euphemistically as *fund accounting*.

Here are a few hypothetical transactions to illustrate those concepts. We'll recognize all these transactions in the fund financial statements and, thus, on the modified accrual basis. If we recognized these transactions in the government-wide statements, the normal accrual concepts would apply. To simplify, we restate the fundamental equation as

Assets = Liabilities + Fund Balance.

In Chapter 1, we said the property tax is the local revenue workhorse. So, let's start there. Let's assume Bothell sends out its annual property tax bills in January. Those bills are based on the City's assessed value, property tax rates, and applicable tax preferences. After running calculations, Bothell

determines it will send out $515 million in property tax bills. From past experience, it also knows it will only collect a portion of those bills.

Property taxes are *imposed non-exchange* revenues, meaning they are not related to a specific transaction. As such, they become measurable and available when the government imposes them. As soon as property taxes are imposed, Bothell has a legal claim to them and can expect to receive a payment within 60 days. In this case, to impose them means to levy them or to send out property tax bills.

Transaction 28: In January 2019, Bothell levies property taxes of $515 million for the year. It is estimated that $15 million will be uncollectible.

Assets		= Liabilities		+ Net Assets	
Property Tax Receivable	+ $515MM	Deferred Property Tax Revenue	+ $500MM		
				Allowance for Uncollectable Property Taxes	+ $15MM

This recognition records Bothell's property tax levy. What happens then when Bothell collects these property taxes?

Transaction 29: Throughout 2019, Bothell collected $410 million in property taxes. It collects $30 million of the remaining 2019 taxes during each of the first two months of 2020 and estimates that the $15 million balance will be uncollectable.

Assets		= Liabilities		+ Net Assets	
Part a					
Cash	+ $470MM				
Property Tax Receivable	– $470MM				
Part b					
		Deferred Property Tax Revenue	– $410MM	Property Tax Revenue	+ $410MM
		Deferred Property Tax Revenue	– $60MM	Property Tax Revenue	+ $60MM
Part c					
Property Tax Receivable	– $15MM			Delinquent Property Tax	– $15MM

Note of the $515 million in property tax revenue, $410 million is collected in the year and $60 million will be collected in the first 60 days (i.e., $30 million/month x two months).

We recognize these collections in four different parts. Part a) recognizes the collection of property taxes throughout 2019 and during the first two months of 2020. Bothell collected $30 million in each of the first three months, but according to GAAP, only the first 60 days are available. Part b) converts deferred revenues into property tax revenues for the taxes collected during 2019 and does the same for the taxes collected during the first two months of 2020. Part c) recognizes a write-down of the uncollectable property taxes.

Note that this recognition approach would also apply to the other non-exchange revenues, including fines and fees. Those revenues are also recognized when they are levied or imposed.

Sales and income taxes are the most common type of *derived* taxes, meaning the taxes collected are derived from another transaction. For derived taxes, the revenues become measurable and available when the underlying transaction occurs. For sales taxes, those transactions are taxable retail sales. For income taxes, it's a bit more abstract. The "transaction" in question is when an employer pays wages to an employee, and that transaction denotes the earnings on which the income tax is based.

Let's look at a hypothetical sales tax recognition in Bothell:

Transaction 30: In December 2019, merchants in Bothell collected $20 million in local sales taxes; $12 million was collected prior to December 15 and must be remitted by February 15, 2020, and the remaining $8 million must be remitted by March 15, 2020. How should Bothell recognize these December 2019 sales?

Assets		= Liabilities		+ Net Assets	
Sales Tax Receivable	+ $20MM				
		Deferred Sales Tax Revenue	+ $8MM	Sales Tax Revenue	+ $12 MM

According to GAAP, Bothell should recognize the assets from derived revenues during the period when the underlying transaction takes place. That's why it records all $20 million as sales taxes receivable. At the same time, it will only collect $12 million within 60 days of the end of the fiscal year, so only that portion is considered available and should be recognized now. The remaining $8 million will become available later, so for now, it's considered deferred revenue. We would see a similar pattern with income taxes and other derived revenues.

A government recognizes an inter-governmental grant when it has satisfied all the eligibility requirements. Only then are grants considered measurable and available.

Transaction 31: In October 2019, Bothell was notified that it would receive a $15 million grant from the state's Clean Water Revolving Fund. The funds, transmitted by the state in December 2015, must be used for stormwater infrastructure upgrades but may be spent at any time.

Assets		= Liabilities	+ Net Assets	
Cash	– $15MM			
			Grant Revenue	– $15 MM

The State has placed a purpose restriction on this grant. **Purpose restrictions do not affect the measurability or availability of the grant revenues**. That said, because they are subject to a purpose restriction, Bothell should recognize these revenues in a special revenue fund.

Many intergovernmental grants take the form of reimbursements. In this case, the revenues are not available until the government incurs the *allowable costs* stipulated by the grant.

Transaction 32: In December 2019, Bothell was awarded a grant of $400,000 to train community police officers. During the year, it spends $300,000 in allowable costs, for which it is reimbursed $250,000. It expects to be reimbursed for the $50,000 balance in January 2020 and to expend – and be reimbursed – for the remaining $100,000 of its grant throughout

2020. It must incur allowable costs to remain eligible for the grant.

Assets		= Liabilities	+ Net Assets	
Cash	– $300,000		Training Expenditures	– $300,000
Grant Receivable	+ $300,000		Grant Revenue *(Community Policing)*	+ $300,000
Cash	+ $250,000			
Grant Receivable	– $250,000			

We recognize police officer training expenditures first, as the grant is on a reimbursement basis. The second transaction recognizes reimbursement on the grant. Note the reimbursement falls short of total expenditures, so the balance on the grant receivable is $50,000.

For this grant, Bothell must first incur the requisite expenditures before it recognizes the grant revenues. In part a) it incurs those expenditures. In part b) it recognizes that it was reimbursed $250,000 cash. The city records grants receivable for the portion it expects to collect within 60 days of the end of the fiscal year and records the $300,000 in grant revenue (Community Policing Special Revenue Fund) – the amount of the grant it expects to be reimbursed.

And finally, let's look at another unique revenue recognition treatment: sales of fixed assets. It's not uncommon for governments to sell buildings and other fixed assets. In the fund financial statements, the value of such a sale is equal to the sale proceeds. This seems simple, but it's quite different from the government-wide statements, where we'd recognize the difference between the sale proceeds and historical cost plus accumulated depreciation.

Transaction 33: On December 31, 2019, Bothell purchased a new police car for $40,000. On January 2, 2020, the vehicle was damaged in an accident. The city is able to sell the nearly demolished vehicle for $5,000.

Assets		= Liabilities	+ Net Assets	
Cash	+ $5,000			
			Other Financing Sources *(Proceeds from Sale of Assets)*	+ $5,000

It might seem strange that $35,000 worth of a $40,000 vehicle was lost, but the only impact on Bothell's governmental fund statements is an increase in cash. And yet, that's precisely how we would recognize this transaction on the modified accrual basis. Why? Recall that we do not recognize fixed assets in the governmental fund statements because those funds are focused on near-term financial resources. Fixed assets are, of course, a long-term financial resource.

Fortunately for the readers of Bothell's financial statements, Bothell would recognize the sale of the $35,000 of asset value in the *Statement of Net Position*.

EXPENDITURE RECOGNITION CONCEPTS

Expenditures in the governmental funds, according to GAAP, result in a decrease in the net financial resources. An expense is, on an accrual basis, a reduction of overall net assets. How are they different? Or, to put it more practically, when are expenses, not expenditures?

For most governments, major expense items are expenditures because they result in a reduction of financial resources. When a government pays salaries, it has less cash and, in turn, fewer current financial resources to use to apply to other spending needs in the immediate future. So practically speaking, expenditures and expenses are not that different.

There are, however, a few instances where expenses are not expenditures. If a government agrees to pay a legal settlement, it will recognize an expenditure only if that settlement is paid out of current financial resources. If that payment is paid by the government's insurance company or is paid out of long-term financial reserves, then no expenditure is recognized. Another is repayments of long-term debt. Here a government reports an expenditure as payments are made, but unlike on the accrual basis, interest on the debt is not accrued. This also applies to other occasional transactions in areas like inventory and pre-paid items. But in general, most expenditures are recognized much the same as expenses.

CHAPTER 5.

COST ANALYSIS

COST ANALYSIS: WHAT DOES THIS COST?

Cost analysis is useful for addressing several key questions that managers ask:

- Will the revenue from a new grant opportunity cover the costs of expanding a program?
- Will a program or service benefit from economies of scale? If not, why not?
- How much should we budget for a new staff member? To add a new shift or another group of new staff?
- How much "overhead" or "indirect costs" should we negotiate into a contract with a government?
- What price should we set for a new fee-based service?
- When will we need to add more staff, and how will adding staff affect our cost structure?
- What's the best way to share costs between departments within an organization? Between organizations? Between units of government?

In February 2016, a federal judge in Albuquerque, NM, approved a $1 billion settlement between the Obama administration and nearly 700 Native American tribes. This settlement ended a decades-long class action lawsuit over how the Bureau of Indian Affairs (BIA) had distributed aid to tribes since the mid-1970s.

This case came about because of some disagreements over how to measure costs. For over 150 years, the BIA was directly responsible for most of the health care, education, economic development, and other core services delivered on Native American reservations. But then, starting in the mid-1970s, it shifted its focus from direct service provision to helping tribes become self-sufficient. Instead of managing services, it redirected its resources toward training, technical assistance, and other efforts to help tribes launch and maintain their own services.

To make that transition, BIA re-classified many of its activities as "contract support costs." This change was not just semantic. Funding for direct BIA-administered services is part of a regular federal budget appropriation. That appropriation was stable and predictable. By contrast, funding for support costs on federal government contracts is variable and is often subject to renegotiation. Perhaps not surprisingly, BIA spending declined steadily under this new capacity-building model.

Tribes across the US argued that by re-classifying many of BIA's costs, the federal government gave itself permission to slash BIA's budget without Congressional approval. The tribes alleged that this simple cost measurement maneuver allowed BIA to operate well outside its authority and inflict

substantial harm on Native Americans around the country. BIA argued that the cost reclassification was a standard accounting change that had been happening across the federal government for decades. The case was ultimately settled for far less than the tribes requested. Still, the federal government did agree to re-classify contract support costs as direct service costs, for which federal funding is far more transparent and predictable.

This case illustrates the central point of this chapter. How we define and measure costs matters tremendously. In this instance, cost measurement is not just a technical exercise; it had real impacts on the lives of hundreds of thousands of Native Americans. The same is true for virtually all public services. How we define, measure, and plan for costs affects which services we deliver and how we deliver them.

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Define the cost objective and relevant range for the goods and services that public organizations deliver.
- Contrast fixed costs with variable costs.
- Contrast direct costs with indirect costs.
- Allocate costs across departments, organizations, and jurisdictions.
- Determine the full (or total) cost of a good or service.
- Prepare a flexible budget for a program or service.
- Calculate the break-even price and break-even quantity for a good or service.
- Contrast cost-based pricing with price-based costing.
- Recommend management strategies and policies informed by analysis of costs "at the margin."
- Analyze budget variances, both positive and negative.

WHAT IS COST ANALYSIS?

If you've ever flown on an airplane, there's a good chance you know Boeing. The Boeing Company generates around $90 billion each year from selling thousands of airplanes to commercial and military customers around the world. It employs around 200,000 people, and it's indirectly responsible for more than a million jobs through its suppliers, contractors, regulators, and others. Its main assembly line in Everett, WA, is housed in the largest building in the world, a colossal facility that covers nearly a half-trillion cubic feet. Boeing is, simply put, a massive enterprise.

And yet, Boeing's managers know the exact cost of everything the company uses to produce its airplanes, every propeller, flap, seat belt, welder, computer programmer, and so forth. Moreover, they know how those costs would change if they produced more or fewer airplanes. They also know the price at which they sold that plane and the profit the company made on that sale. Boeing's executives expect their managers to know this information in real time if the company is to remain profitable.

Cost accounting **(also known as managerial accounting) is the process of creating information about costs to inform management decisions.**

Managers need good information about costs to set prices, determine how much of a good or service to deliver, and manage costs in ways that make their organization more likely to achieve its mission. Managers in for-profit entities like Boeing have instant access to sophisticated cost information that would assist with those types of decisions. But managers in the public and non-profit sectors usually don't. There are many reasons for this:

- Large parts of the public sector do not produce a "product," but they deliver services like counseling juvenile offenders, protecting the environment, or housing people experiencing homelessness. Sometimes, we know the "unit" of production and can measure costs relative to that unit. In the case of counseling juvenile offenders, we might think about the cost per offender to provide those services. But for services without a clear "end user," like environmental protection, this analysis is much more difficult.
- Most (usually around 80 percent) of the costs incurred by a typical public sector organization are related to people. A parole officer will see many different types of parolees. Some will demand a lot of attention and follow-up. Some will need next to none. Some parole officers are comfortable giving each case equal time and attention. Others are not. This type of variability in how and where people spend their time, and as a result, where labor costs are incurred, can make cost analysis quite difficult.
- Employees often work across multiple programs. A program manager at a non-profit organization might work across two programs funded by two different grants from two funding agencies. Unless that program manager allocates their time exactly equally across both programs – and that's unlikely – we can't know the exact cost of each program without a careful study of how and where that employee spends their time.
- Public services often share buildings, equipment, vehicles, and other costs. It isn't easy to know the full cost of services without a system to track which staff and programs use exactly which resources.
- Good cost analysis has no natural political constituency. Careful cost analysis requires substantial investments in information technology, staff capacity, accounting information systems, and other resources. Most taxpayers and funders would rather see that money is spent on programs and services to help people in the short term rather than on information systems to analyze and plan for future costs.

These are just a few of the many barriers that prevent public organizations from acting more like Boeing, at least with respect to cost analysis.

And yet, good **cost analysis is critical to public organizations**. Public financial resources are finite, scarce, and becoming scarcer. Public managers must understand how and where they incur costs, how those costs will differ under different service delivery models, and whether that pattern of costs is consistent with their organization's mission and objective. In this chapter, we introduce the core concepts of cost accounting and show how to apply those concepts to real management decisions.

At the outset, it is essential to distinguish between *full-cost accounting* and *differential-cost accounting*. Full cost accounting is the process of identifying the full cost of a good or service. Differential cost accounting – sometimes called *marginal cost analysis* – is the process of determining how the full cost of a good or service changes when we deliver more or less of it. Sound financial management requires careful attention to both.

Let us start with a simple example. Imagine a copying machine that is shared among three departments within the Environmental Health Department of a county government. Those three departments are:

1. Food Protection. This includes inspection and licensing of restaurants and other establishments that serve food. This program is designed to prevent outbreaks of food-borne diseases like E. coli, botulism, and Hepatitis A. Staff in this division make around 500 copies each day, mostly related to documenting restaurant inspections.
2. Animals and Pests. This includes animal control, rodent testing and control, and educational programs to promote pet safety and neutering/spaying. These programs are designed to prevent communicable diseases, including rabies, that vagrant animals most often spread. Staff in this division make around 250 copies each day, but that number can increase in the event of an outbreak of avian flu or other communicable disease.
3. Wastewater. The Wastewater Department is responsible for treating wastewater. Staff in this division issue water discharge permits to businesses and industrial operations and test water quality near wastewater discharge sites. These programs are necessary to prevent waterborne communicable diseases like cryptosporidium. Wastewater staff typically make around 100 copies daily but make up to 1,000 per day when processing complex industrial building permits. They process around six such permits each year.

As a manager, you would want to know what it costs to operate the copier and how those costs should be spread across the three departments. To put this question in the language of cost accounting, we want to know:

a. What is the *full cost* of operating the copier?
b. How should we *allocate* the costs of operating the copier across the three departments?

To answer these questions, we first need to know all of the different ways the copier incurs costs. A few come to mind immediately: paper and toner to make the copies, a lease or rental payment to take possession of the copier, and the occasional maintenance and repairs. A few might be less obvious: electricity to run the machine, space within a building to house the copier, and an office manager's time to coordinate maintenance and repairs. We can observe many of these costs, but we'll need to estimate or impute others.

COST VS. PRICE

It's important at the outset to distinguish between cost and price. Cost is what you give up. Costs include money, time, uncertainty, and, most importantly, the opportunity to invest time or money in another project. In public financial management, we usually talk about cost in terms of the measurable, direct, and indirect financial expenses required to produce or acquire a good or service. Price is the market rate, or "sticker price," of a good or service.

Most public services are delivered "at cost," meaning they are priced to generate enough revenue to cover the full cost to deliver them, but not more. The late management guru Peter Drucker called this **cost-based pricing**. By contrast, many for-profit goods and services are sold at prices well in excess of cost. For instance, most wines are priced at 100-200% above the full cost to produce them. A box of popcorn at the movies is usually priced at 700-800% above cost. And so forth. Wine retailers and cinemas will sell these products at whatever price consumers are willing to pay, regardless of what they cost to produce. Drucker called this **price-based costing**. Virtually all highly profitable businesses design the cost structure of their products and services around what consumers will pay. The opposite is also true. For-profits often sell goods and services at prices well below cost – a so-called "loss leader" – to attract customers. Most public organizations cannot engage in price-based costing tactics and expect to accomplish their missions and remain financially sound.

The next question is how the departments should share these costs. Imagine, for instance, that they split those costs one-third for each department. This approach is simple, easy, and transparent. But what's wrong with it? Each department makes a different number of copies, and each has a different workflow related to the copier. These departments also have different potential "economies of scale" for copying. Also, keep in mind that the Animals and Pests department will need "emergency" or "surge" capacity while the other two departments may not. So, if an even distribution is not the most appropriate, what is? With careful attention to cost accounting methods, we can begin to address these and other questions.

FULL COST ACCOUNTING

MEASURING FULL COST: THE SIX-STEP METHOD

To answer the question "what does this service cost?" cost accountants follow a six-step process. Each step of this process is driven by policies and procedures that are defined by an organization's management:

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1. **Define the cost object**. The *cost object* is the product or deliverable for which costs are measured. Service-oriented public organizations typically define cost objects in terms of the end user or recipient of a service. Examples include the cost to shelter a person experiencing housing insecurity for an evening, the cost per counseling session delivered to recovering substance abusers, the cost to place a family in affordable housing, and so forth.
2. **Determine cost centers**. A *cost center* is a part of an organization that incurs costs. It could be a program, a unit within a department, a department, a grant, a contract, or any other entity defined for cost accounting purposes. Generally, cost centers work best for homogeneous groupings of activities.

3. **Distinguish between direct and indirect costs**. *Direct costs* are connected to a specific cost center. In fact, they are often called "traceable costs." Examples include salaries for staff who work entirely within a cost center, facilities and supplies used only by that cost center, training for cost center-specific staff, etc. Many public organizations further stipulate that a cost is direct to a cost center only if that center's management can control it. *Indirect costs* apply to more than one cost center. They include shared facilities, general administration, payroll processing services, and information technology support. Some managers call them *service center costs*, *internal service* costs, or *overhead costs* because they are usually for support services provided within an organization.
4. **Choose allocation bases for indirect costs.** One of the main goals of full-cost accounting is to distribute indirect costs to cost centers. This follows from the logic that all direct costs require support from within the organization. An *allocation basis* is an observable metric we can use to measure the relationship between direct and indirect costs within a cost center. For example, a non-profit might allocate indirect costs according to the number of full-time equivalent (FTE) employees within a cost center or the percentage of the organization's overall payroll earned by employees within that cost center. **The full cost of any service is the sum of direct costs plus the unit's share of indirect costs.**
5. **Select an allocation method**. There are two main methods to *allocate* or *apportion* indirect costs to cost centers. One simply calls indirect costs their own cost centers and plans accordingly. For instance, a non-profit could choose to call the executive director its own cost center. In that case, it would plan for and report the executive director's salary, benefits, and other costs as a stand-alone entity rather than allocate those costs as an indirect cost to other direct service cost centers. A more common approach is to allocate by a denominator that is common to all the cost centers that incur a particular indirect cost (see below).
6. **Attach costs to cost objects**. One of the biggest challenges for public organizations is that cost objects are usually people, and no two people are alike. For instance, a parole officer might have 30 clients, but each requires a different amount of time, attention, and counseling. When the cost per client varies a lot, the cost accounting system should reflect those differences, usually by applying different overhead rates or percentages to different types of clients.

Let's illustrate some of these concepts with the copier example. To begin, assume that the copier is a cost center. Services like copying, information technology, and payroll exist to serve clients within the organization, so they are called *service centers*. One of the goals of cost accounting is to allocate service center costs to *mission centers* that are more directly connected to the organization's core programs and services. In this case, we can assume Food Inspection, Animals and Pests, and Wastewater are mission centers that will ultimately receive costs allocated from the copier service center. Given those assumptions about cost centers, we can assume the cost object for the copier service center is the cost per copy.

With those assumptions established, we can define direct and indirect costs for the copier service center. Direct costs include paper, toner, rental/lease fees for the copier, and machine maintenance. These costs are incurred exclusively by the copier. Electricity, building space, and the

office manager's time are indirect costs. They are incurred by the copier cost center and by other cost centers.

To illustrate, the table below lists some details on the copier's costs.

Annual Full Cost of Environmental Health Department Copier Cost Center

Direct Costs			
	Number	**Unit Cost**	**Total Cost**
Paper	500 reams	$20/ream	$10,000
Toner	30 cartridges	$90/cartridge	$2,700
Machine Rental	$500/month	12 months	$6,000
Machine Maintenance	$75/month	12 months	$900
Total Direct Costs			**$19,600**
Indirect Costs			
	Cost Driver/Amount	**Unit Cost**	**Total**
Electricity	1,500 kWh	.12/kWh	$180
Building Space	100 sq. ft.	$15/sq. ft.	$1,500
Office Manager Time	5 hours	$20/hour	$100
Total Indirect Costs			**$1,780**
FULL COST			**$21,380**

THE GAP IN COST ACCOUNTING STANDARDS

Keep in mind that there are no national or international standards for how public organizations measure and define their cost structures, also known as their cost accounting practices. Governments employ a variety of state- and local-specific cost accounting methods. Non-profits tend to follow the cost accounting conventions prescribed by federal and state grants or major foundations, but those conventions do not equate to national standards. By contrast, financial accounting – or accounting designed to report financial results to outside stakeholders – is dictated by GAAP. That's why it's possible to compare a government's financial statements to that of another government and a non-profit's financial statements to that of another non-profit, but not necessarily possible to compare different organizations' budgets or internal cost accounting systems.

INDIRECT COST ALLOCATION: COST DRIVERS AND ALLOCATION BASES

To find the full cost of the copier cost center, we'll need to find some way to allocate its share of indirect costs to it. A good cost allocation scheme follows from a clear understanding of an organization's cost drivers. A *cost driver* is a factor that affects the cost of an activity. A good cost driver is a reliably observable quantity that shares a consistent relationship with the indirect cost in question. Fortunately, we have an intuitive cost driver for the copier cost center: the number of copies.

Ideally, we can allocate indirect costs according to their key cost driver(s). An *allocation basis* is a cost driver common to all the cost centers that incur an indirect cost. For building space, for example, we might find the portion of the total building space that is occupied by the copier and allocate a proportionate share of the building space costs to the copier copy center.

For example, this county government allocates electricity costs to different cost centers per kilowatt

hour (kWh). Sometimes it is feasible to measure electricity use with this level of precision, and sometimes it is not. Assume that the copier has an individualized meter measuring its electricity use.

This government allocates building space costs per square foot. This assumes it has a reasonably sophisticated way to measure how much space each cost center uses. Allocations by space can be contentious because not every unit uses space in quite the same way to accomplish its mission. For instance, most Food Protection staff spend most of their time in the field inspecting restaurants. They report to the office at the beginning and end of the day but infrequently during the day. This is quite different from the Animals and Pets center, where most of the staff spend most of their time in the office.

These figures also assume that the government allocates the office manager's time to individual cost centers. The office manager can do this if they track the amount of time they spend on work related to each cost center. Some public organizations have systems, often based on a billable hours concept, similar to those used by professionals like lawyers or accountants. Many do not.

MORE ON COST DRIVERS

One of the big challenges in cost accounting is identifying appropriate cost drivers and allocation bases. Each indirect cost item is a bit different and requires a slightly different concept to support an allocation basis. In fact, many public organizations do not allocate indirect costs precisely because they cannot agree on allocation bases that make sense across an entire organization. That said, many of the most common indirect costs can be allocated using simple metrics that can be computed with existing administrative data.

Here are a few examples:

Cost Item	Potential Cost Driver/Allocation Basis
Accounting	– Number of transactions processed
Auditing	– Direct audit hours
Data Processing	– System usage
Depreciation	– Hours that equipment is used
Insurance	– Dollar value of insurance premiums
Legal services	– Direct hours/Billable hours
Mail	– Number of documents handled
Motor Pool	– Miles driven and/or days used
Office machines	– Square feet of office space occupied
Management	– Number of employees; total payroll
Procurement	– Number of transactions processed

Also, note that the copier cost center does not receive overhead from other service centers. We don't see, for example, that the copier center is allocated a portion of the county administrator's salary, insurance expenses, or other organization-wide indirect costs. This is a policy choice. Some public organizations do not require service centers to receive overhead costs, mostly to keep down the rates

they must charge their internal clients. Many state and local governments have budgeting rules that state programs – if *independently financed* or paid for with specific fees or charges rather than general fund resources – do not need to allocate their indirect costs or receive an indirect cost allocation.

That said, many public organizations allocate overhead to internal cost centers. In fact, when they do, they typically use the *step-down method* of allocating indirect costs. That is, they allocate organization-wide indirect costs to *all* cost centers first, then allocate service center costs, including their portion of the organization-wide indirect costs, to the mission centers.

With those assumptions in place, recall that:

- The Food Protection mission center averages 500 copies each day. Assuming 260 workdays/year, that is 130,000 copies (i.e., 500 copies x 260 days). In this case, the 130,000 copies are the *relevant range* or the amount of activity upon which our cost analysis is based. Assuming the Food Protection mission center would require twice as many copies, our per-unit costs and cost allocations would look quite different. Good cost analysis follows from clear, defensible *assumptions* about the relevant range of activity that will drive costs.
- The Animals and Pests mission center makes 250 copies each day but makes many more in the event of a communicable disease outbreak. Assuming no outbreak, that is 65,000 copies (i.e., 250 copies x 260 days).
- The Wastewater division makes 100 copies daily and up to 1,000 copies around six times yearly when processing complex permits. Let's assume a typical surge in copies for a complex permit will last for five days. That would mean 230 typical days and 30 "surge days" (i.e., six permits x 5 days/permit). So total number of copies would be around 53,000 (i.e., typical day copies of 100 copies X 230 days + and surge days copies of 1,000 copies X 30 days).

From these figures, we can determine that the copier will make 248,000 copies each year (i.e., 130,000 copies + 65,000 copies + 53,000 copies).

If we divide the full annual cost of the copier by the number of copies ($21,380/248,000 copies), we arrive at a *unit cost* of $0.0862/copy (i.e., 8.62 cents per copy).

With those full costs established, we must ask how the Environmental Health Department should allocate the full costs of the copier cost center across the three mission center departments. Fortunately, this is easy to do because the copier cost center has a clear cost object (cost per copy), and each department/cost center measures the number of copies it makes. As a result, each department would be assigned copier center indirect costs at a rate of 8.62 cents/copy.

- Food protection would be assigned $11,206 (i.e., 130,000 copies X $.0862/copy).
- Animals and Pests would be assigned $5,603 (i.e., 65,000 copies X $.0862/copy).
- Wastewater would be assigned $4,569 (i.e., 53,000 copies X $.0862/copy).
  Due to a rounding difference, the total adds up to $21,378.

With an appropriate allocation basis, it is possible to allocate any indirect costs in a similar way.

This copier example also shows why the cost center and cost object are essential to the cost allocation

process. For instance, imagine that the copier was defined not as one cost center but as separate cost centers for large copying jobs (say, more than 500 copies) and small copying jobs, or for color copies vs. black and white copies. This would also require different cost objects, such as the "cost per black and white copy" or "cost per color copy." The cost per black and white copy would presumably be less than the cost per color copy, and the cost per copy for large print jobs would presumably be less than that for small jobs. Different cost centers, cost objects, and allocation methods can mean substantially different answers to the question, "What does a copy cost?"

One potential drawback of the step-down method is that it allows "double counting" or *"cross-allocation"* of service center costs to service centers already allocated to mission centers. For example, recall that the annual full cost of the copier service center was $21,380. That full cost incorporated the indirect costs of the office manager's time to manage the copier. Under the step-down method, the cost of the office manager's time is allocated to the copier cost center, and the copier cost center costs are then allocated across the mission centers. But what happens if the office manager makes copies? Under this indirect cost allocation scheme, the office manager's copies would not be reflected in the total volume of copies made, and the office manager would not receive any of the copy center's costs. As a result, the mission centers subsidize the office manager's copying by absorbing a larger share of the copy center's costs.

In this particular example, those subsidies are a negligible amount. But in many other scenarios, cross-allocation of service center costs can significantly impact the full cost of a good or service. For instance, imagine a non-profit organization with three mission centers, a service center for the executive director, and a human resources service center. The human resources service center spends most of its time interacting with the executive director, as is often the case in small non-profits. If this organization uses the typical step-down approach, and it first allocates the executive director's costs to the other service centers, then the full costs of the three mission centers will include a sizable subsidy for the costs of the executive director-human resource center's interactions.

To address this problem, many public organizations instead use the *double-step-down method*. After each service center/department's costs have been allocated once, each center/department's cost not included in the original allocation is totaled and allocated again. To illustrate, let's return to the copy center-office manager example above. If this allocation were done with the double-step-down method, the office manager's copies would be included in the total copy figure. The copy center would first allocate its costs to the mission centers, excluding the office manager's copies. Then in a second step, the office manager's share of the copying costs would be allocated to the mission centers separately. This double-step method minimizes the cross-allocation of service center costs. For more on cost allocation methods for governments, see several chapters in Zach Mohr, ed. (2016), Cost Accounting in Government: Theory and Applications (New York: Routledge); also see the chapter "Cost Accounting and Indirect Costs" in Dittenhoffer and Stepnick, eds. (2007), Applying Government Accounting Principles (Lexis-Nexus Publishing).

DOUBLE STEP-DOWN COST ALLOCATION

The Iron River Transportation Agency (IRTA) has two mission departments – ***Rapid Transit*** and ***Para-Transit***. Rapid transit uses high-speed trains and is highly equipment-intensive, while Para-Transit uses mopeds and is far more labor-intensive.

IRTA has two service departments: maintenance and administration. Management has decided to allocate maintenance costs on the basis of depreciation dollars in each department and administration costs on the basis of labor hours worked by the employees in each department.

The following data appear in the agency's records for the current period. Allocate the service center costs to production centers using the step-down method and determine the relevant total costs. Begin with the maintenance department.

	Mission Centers		Service Center		
	Rapid-Transit	Para-Transit	Maintenance	Administration	Total Costs
Direct plus Distributed Costs	$8,000,000	$4,000,000	$1,160,000	$2,400,000	$15,560,000
Allocation factors					
Indirect Depreciation Costs	$ 3,000,000	$ 800,000	$ 200,000	$ 2,000,000	$ 6,000,000
Labor Hours	10,000	40,000	20,000	10,000	80,000

We need to allocate two different service centers: Maintenance and Administration. It makes sense to allocate maintenance by depreciation dollars because depreciation is a proxy measure of each cost center's scale of capital assets.

Depreciation costs, excluding maintenance, are $5,800,000 (i.e., $3,000,000 + $800,000 + $2,000,000). If we divide total maintenance costs by the total depreciation dollars excluding maintenance, we get $0.20 per depreciation dollar (i.e., $1,160,000/$5,800,000).

The Administration service center had $2,000,000 in depreciation, so we allocated it $400,000 in maintenance costs (i.e., $0.20 x $2,000,000). The Rapid Transit mission center had $3,000,000 of depreciation, so we allocated $600,000 (i.e., $0.20 x 3,000,000). Finally, the Para-Transit mission center had $800,000 of depreciation, so we allocated $160,000 (i.e. $0.20 x 800,000).

We then allocate administration by labor hours. This makes sense because supervising staff is the administration's most significant cost driver. Since we've already allocated maintenance costs, let's allocate the $2,800,000 costs from Administration (i.e., $2,000,000 in direct costs + $800,000 in indirect maintenance costs) to the mission centers based on the number of labor hours. There are 50,000 labor hours each at $56 per labor hour (i.e., $2,800,000/50,000). To Rapid Transit, we allocate $560,000 ($56 x 10,000 hours), and to Para-Transit, we allocate $2,240,000 ($56 x 40,000 labor hours). As the table shows below, we exclude Maintenance from this step since we've already assigned those costs to Rapid-Transit, Para-Transit, and Administration.

	Rapid-Transit	Para-Transit	Maintenance	Administration	Total Costs
Direct plus Distributed Costs	8,000,000	4,000,000	1,160,000	2,400,000	15,560,000
Allocated Maintenance Costs	600,000	160,000	(1,160,000)	400,000	-
Step 1 Total Cost	**8,600,000**	**4,160,000**	**-**	**2,800,000**	**15,560,000**
Allocated Administration Costs	560,000	2,240,000	-	(2,800,000)	-
Step 2 Total Cost	**9,160,000**	**6,400,000**	**-**	**-**	**15,560,000**

The total cost of the Rapid Transit program is $9,160,000 and the total cost of the Para-Transit program is $6,400,000.

Note, if we **change the order of cost allocation** to administration first followed by maintenance, total costs in the mission centers will be different. Recall that administration costs are allocated based on labor hours ($34.28 per labor hour, i.e., $2,400,000/70,000 hours). Maintenance costs will be allocated by depreciation costs ($0.49 per dollar of depreciation costs, i.e., $1,845,714/$3,800,000).

	Rapid-Transit	Para-Transit	Maintenance	Administration	Total Costs
Direct plus Distributed Costs	8,000,000	4,000,000	1,160,000	2,400,000	15,560,000
Allocated Administration Costs	342,857	1,371,429	685,714	(2,400,000)	-
Step 1 Total Cost	**8,342,857**	**5,371,429**	**1,845,714**	**-**	**15,560,000**
Allocated Maintenance Costs	1,457,143	388,571	(1,845,714)		-
Step 2 Total Cost	**9,800,000**	**5,760,000**	**-**	**-**	**15,560,000**

The order of cost allocation affects the full costs in the mission center. Rapid-Transit costs are higher (lower) if administration (maintenance) costs are allocated first. **Irrespective of the order of "steps," Total Costs for the department do not change**.

INDIRECT COST ALLOCATION: INDIRECT COST RATES

Cost drivers and allocation bases work well when the service has a clear cost objective and a measurable unit of service. Most public organizations, as described above, don't have this luxury. Many don't deliver services with measurable outcomes. Most public organizations' costs relate to personnel, and personnel costs are not distributed evenly across clients or cases. Moreover, a growing number of public services are delivered through partnerships and collaborations where it's often unclear how costs are incurred and murkier how those costs ought to be allocated across the partner organizations. Traditional cost allocation methods often don't work in the public sector for these and many other reasons. And yet, it's still critically important to measure and properly account for full costs, especially indirect costs that can be difficult to measure.

To address these problems, many public organizations rely on indirect cost rates. An *indirect cost rate* is a ratio of indirect costs to direct costs. For instance, a city police department might determine that its indirect cost rate is 15 percent. That means that for every dollar of direct costs like police officer salaries and squad cars, it will incur 15 cents of payroll processing, insurance, procurement expenses, and other indirect costs.

TAKING STOCK OF COSTS

Public organizations rarely have sophisticated cost tracking and measurement systems that you might find at manufacturers like Boeing, logistics companies like FedEx, or retail entities like Amazon. So how do budgeting and finance staff understand what a public organization's services cost? There are three basic methods:

- Time in Motion. Public organizations occasionally send analysts to see where and how employees spend their time. For instance, a city planning department might allow analysts into their office to watch how much time staff spend on different types of permits, appeals, and other activities. After observing the department's activities for a sample of days over weeks or months, cost analysts can estimate how much time staff spends on each of their different activities and then build out cost estimates.
- Self-reported Allocations. Some organizations ask staff to keep track of their own time, much like the billable hours method used by attorneys, accountants, and other professionals. Some of these tracking schemes are pretty detailed, requiring time reported in 15-minute intervals. Others are more general and allow for estimates on larger intervals like days or weeks.
- Statistical Analysis. Cost accountants occasionally use regression analysis and other statistical tools to estimate the relationship between costs and services delivered. One of the most common is to determine the linear trend, if any, between total expenses and the volume of service delivered over time. Variation around that trend (i.e., the residuals from the regression analysis) suggests a potential pattern of variable costs.

Let's illustrate this with a more detailed example. Surveys show that many local public health departments would like to offer more services related to hypertension outreach and management. Chronic health conditions like heart disease and diabetes are known to be related to high blood pressure, so better management of high blood pressure can affect public health in a substantial, positive way. However many citizens, especially those without health insurance, cannot access regular blood pressure screening and other services needed to identify and manage hypertension.

Say, for example, that Smallville County and Riverdale County would like to launch a new, shared hypertension prevention and management (HPM) program. Neither currently has a formal program in this area, but both offer services through a patchwork of partnerships with local non-profits. Smallville County has roughly twice the population of Riverdale County, and Riverdale's per capita income and property values are 30 to 40 percent higher than Smallville's.

What does it cost to deliver this service? As with most public health programs, the main costs will be related to personnel, namely public health nurses, outreach counselors, and nutritionists. The program will also require space and other overhead costs. The outreach and education components will require advertising, travel, and other costs. For a service-sharing arrangement to work, the two counties must decide how to share these costs.

Suppose the counties also agree in advance to share costs evenly. This approach is simple and straightforward. However, it ignores many of the program's underlying cost drivers. Smallville has a much larger population than Riverdale, so more participants will probably come from Smallville. Simply splitting these costs "50-50" means Riverdale will likely subsidize Smallville, an arrangement Riverdale's leaders might find unacceptable.

So, what's the alternative? Smallville could bill Riverdale for each Riverdale resident who participates in the program. They could use an allocation basis like population or assessed property values. A more cutting-edge scheme might be to share the costs according to the incidence of the chronic diseases the HPM program is designed to prevent. Each of these strategies demands a trade-off. Some are simpler but at the expense of fairness. Some require additional data that might result in an expensive cost measurement process or one that is not feasible. Others are more feasible but might place costs disproportionately on the population the program is designed to serve.

To begin, let's assume Smallville will structure the new HPM as a cost center within the Health Behaviors division of its Public Health department. Let's also assume that since HPM's main "deliverable" will be blood pressure screening, it will define its unit cost as the cost per blood pressure screening performed.

Given those assumptions, Smallville's budget analysts estimate that for the first year of operations, the HPM program will serve 400 clients, and its costs will include:

- *Direct Labor*. This includes seven full-time and one half-time licensed nurse practitioners who can administer blood pressure screening. The annual salary for each nurse practitioner is $67,500. The program will also employ a health counselor to guide clients on managing hypertension through healthier eating and fitness. The counselor's annual salary is $74,500.
- *Direct Non-Labor*. Nurses and the health counselor will need to travel to visit clients and deliver outreach programs. Staff estimates total travel of 20,400 miles at $0.40/mile. The HPM program will also require medical supplies, office supplies, and a few capital items. Budget staff estimates $6,142 of annual direct non-labor costs for each nurse and $7,566 for the health counselor. This difference is due to a heavier expected travel schedule for the counselor. The program will also execute an annual contract, valued at $15,725, with a communications consultant who will develop and deliver a healthy eating outreach marketing effort in both counties. Even though most of these costs are related to labor, they're considered non-labor "contractual" costs.
- *Indirect Labor*. Smallville County's Health Behaviors Manager will supervise the HPM staff, and Smallville County's Executive will provide policy direction and other leadership. A portion of both administrators' salaries is allocated to HPM as indirect labor costs. HPM staff will also incur indirect labor costs like payroll support, accounting and auditing services, and procurement support. Budget staff estimates $10,456 of annual indirect labor costs for each nurse and $8,519 for the health counselor.
- *Indirect Non-Labor*. HPM staff must also have access to office space, liability insurance, association memberships, and other indirect non-labor costs. Budget staff estimates annual indirect non-labor costs of $4,799 for each nurse and counselor.

With that information and a few additional assumptions, we can begin to detail HPM's cost structure and compute some indirect cost rates. The table below lists HPM's direct, "observable" costs. We know the program will employ nurses and counselors, and we know it will demand mileage and the communications contract as direct, non-labor costs. These "observable" direct costs total $604,635, or $1,512 per client given the estimated 400 clients.

Direct, "Observed" Costs

	Units		Cost per Unit		Total Cost
Nurse Salaries	7.5	$	67,500	$	506,250
Health Counselor Salaries	1	$	74,500	$	74,500
Mileage	20,400	$	0.40	$	8,160
Outreach				$	15,725
Total Direct, Observed HPM Program Costs				**$**	**604,635**
			Estimated # Clients		**400**
			Cost per Client	**$**	**1,512**

IS IT ALLOWABLE?

One of the key questions when computing indirect cost rates is which indirect costs are allowable or reasonable. For example, in some cases, it's unclear whether staff who contribute marginally to a program's operations – such as development directors, general outreach coordinators, and others – should be included as an indirect cost. Certain types of training might be helpful, but not essential, for staff to understand their jobs and deliver the service. And of course, there's always a reason to define indirect costs as broadly as possible, especially if you can recover those costs through some external funding source.

There are no national standards, per se, for what constitutes a relevant indirect cost. Each project, program, and funder is different. That said, the federal government has guidelines on what types of indirect costs it will reimburse. Many states and local governments also use these standards – or some adaptation of these standards – for their internal cost accounting. You can find more information on those guidelines in OMB Circular a-87: Cost Principles for State, Local, and Indian Tribal Governments. This publication is available at http://www.whitehouse.gov/omb/circulars_a087_2004.

But the much more important question is how we account for the indirect costs and for the direct costs that are more difficult to observe. The lower part of this table outlines those costs. When we include the indirect labor and indirect non-labor costs, we see the full cost of the program increases to $785,997, or $1,965/client. Or, put differently, the full cost of the program increases by more than 30 percent if we include all the indirect costs in our estimate of the full costs. Recall that Smallville County plans to bill Riverdale County for its share of program costs. If Smallville bills only for the direct costs, it undercharges Riverdale by nearly 30 percent. That is why it is important to measure full costs, especially when pricing services or requesting reimbursements for expenses incurred.

Full Cost, by Main Direct Labor Inputs

Nurses	Cost Per Nurse	Total Cost	% of Costs
Direct Labor	$ 67,500	$ 506,250	74%
Direct Non-Labor Mileage	960	7,200	1%
Direct Non-Labor Outreach	1,850	13,875	2%
Other Direct Non-labor	6,142	46,065	7%
Indirect Labor	10,456	78,420	11%
Indirect Non-labor	4,799	35,993	5%
Full Cost of Nurses		**687,803**	**100%**

Health Counselor	Cost Per Counselor	Total Cost	% of Costs
Direct Labor	$ 74,500	74,500	76%
Direct Non-Labor Mileage	960	960	1%
Direct Non-Labor Outreach	1,850	1,850	2%
Other Direct Non-labor	7,566	7,566	8%
Indirect Labor	8,519	8,519	9%
Indirect Non-labor	4,799	4,799	5%
Full Cost of Counselor		**98,194**	**100%**

Full Cost of HPM Program	**$**	**785,997**
Cost per Client	**$**	**1,965**

What about potential indirect cost rates? According to these figures, 74 percent of the full cost to employ a nurse is direct labor costs, and 10 percent is direct non-labor costs (i.e., mileage, outreach, and other direct non-labor). It follows that the remaining 16 percent is indirect costs related, in a predictable way, to those direct costs. Each nurse and health counselor will be insured, have their payroll processed by the payroll office, occupy space, and so on. If those figures are predictable, we can assume the current indirect cost rate for nurses is 16 percent. For the health counselor, the direct costs are a bit higher at 76 percent. Direct non-labor costs are 11 percent, and indirect costs are 14 percent.

In practice, this means that in future budgets, the HPM program could **assume** that for every dollar it will spend on nurse salaries, it can expect to incur 16 cents of indirect costs, and for every dollar it will spend on health counselor salaries, it can expect to incur 14 cents of indirect costs (i.e., indirect cost rate).

Some organizations compute indirect cost rates based only on direct labor costs. In that case, the rate for nurses would be the indirect cost rate would be 22.6 percent – i.e., $10,456+$4,799)/$67,500. For healthcare counselors, the indirect cost rate would be 22.8 percent.

We can also consider an indirect cost rate for the entire HPM program. For that, we compare the total indirect costs to the total direct costs. Total indirect costs for the nurses are $114,413; for the counselor, $13,318. That means total indirect costs are $127,731. Total direct costs are $573,390 for the nurses and $84,876 for the counselor, for total direct costs of $658,266. The indirect cost rate would be 19.4 percent (i.e., $127,731/$658,266). Again, all these figures assume the HPM program serves 400 clients.

Information about indirect cost rates is relevant to many types of decisions. For instance:

- HPM staff might compare their indirect cost rate to the rates of other programs within

Smallville County. If its rates are noticeably higher or lower, it might more carefully review its cost structure and how it manages its costs. If its rates seem grossly out of line with other units, it might request an additional review by Smallville County's budget staff.

- The counties might use these rates when applying for federal or state grants or for support from philanthropic foundations to support the HPM program.
- The counties might eventually decide to contract out some or all of HPM's operations to a non-profit healthcare provider. In that case, these rates would be a focal point for negotiating the per-client rate at which the counties would reimburse a prospective contractor.
- Other governments might review these rates as an initial indicator of whether they can afford their own HPM program.

EASY AS ABC?

Some governments – and many private sector organizations – try to address this problem through activity-based costing (ABC). ABC identifies the full cost of different activities within organizations that drive costs, regardless of the original cost center to which those costs were assigned. It then allocates those full costs according to changes in those underlying cost drivers.

If Smallville County followed an ABC model in the HPM example, the information services staff might have identified the unit costs of different types of information service requests. More complex activities, like the information-gathering about Riverdale County residents, would incur costs at a different rate than simpler activities. To the earlier point, this sort of small discrepancy could easily dissuade Smallville from continuing to participate in this sharing arrangement. A better alternative might have been to measure the number of hours or percentage of total time on this project attributable to gathering information specifically on Riverdale residents. And yet, the additional time and effort to gather that information might far outweigh the benefit of more precise cost allocation. This is a small-scale example, but it illustrates that every cost allocation basis comes with trade-offs that all the parties involved must understand and agree to upfront.

COST SHARING ALTERNATIVES

Traditional cost allocation works best when it's possible to observe when and where all the costs are incurred. When that information is unavailable, as is often the case for partnership arrangements that span multiple organizations, there are several alternative ways to organize a cost allocation plan. To illustrate, assume the full annual cost of HPM was $800,000 and that Smallville County must bill Riverdale County for Riverdale County's share of those costs.

- *Equal share*. Total costs are divided equally across all participating partners. This is more typical for informal arrangements. It's also common for services where it is unclear who "receives" or "uses" the service or to observe all the relevant indirect costs predictably and consistently. In equal share approaches, one partner often subsidizes the other, sometimes unknowingly. In the HPM example, Smallville would keep $400,000 of the costs and bill Riverdale its equal share of $400,000.
- *Per capita*. Total costs are divided by the population proportion in each partner jurisdiction. This approach is good for services without an observable "client" or discrete individual services. It's less useful when population size is not the best cost driver or when the

populations involved are different on some key characteristic that might affect the utilization of the service in question. Per capita sharing is often the most transparent way to share costs. In the case of HPM, recall that Smallville's population is 240,000 and Riverdale's population is 160,000. In other words, 60 percent of the population served resides in Smallville and 40 percent resides in Riverdale. Under a per capita model, Smallville would bill Riverdale $320,000.

- *Cost Plus Fixed Fee*. Personnel costs are often step-fixed costs, and it can be challenging to know when those costs will "step up" at higher levels of service (more on step-fixed costs below). To account for that uncertainty, some cost allocation strategies call for non-weighted cost sharing plus some fixed periodic fees. The fee part of the plan is designed to buffer the sharing arrangement against the uncertainty surrounding step-fixed costs. For HPM, one potential application of this method would be for the counties to share costs per capita but for Smallville to receive an annual payment of $35,000 at the start of its fiscal year to compensate in advance should it need to hire an additional nurse during the year. The cost-plus fixed fee model can also be used where overhead costs (e.g., space, utilities, administration, and accounting) would be shared one way, and incremental costs (e.g., costs for lab work or medical supplies) are charged based on volume.
- *Ability to Pay*. Some cost allocation arrangements are designed to make a service available where citizens and clients are otherwise unable to pay for it. In these cases, allocating costs according to the ability to pay makes sense. We can approximate the ability to pay through assessed property values, median household income, or other measures of income or wealth. In the HPM example, consider the following scenario: Riverdale's median household income is $50,000, and Smallville's is $40,000. Riverdale has a smaller population but is wealthier. In this case, Riverdale's median household income ratio to Smallville's is 1.25 ($50,000/$40,000). This is commonly known as a *wealth factor*. Recall that an equal share allocation is $400,000 for each jurisdiction. If 50-50 share is adjusted by a wealth factor, Riverdale's share of costs would be $400,000 X 1.25, or $500,000, while Smallville's share would be $300,000.
- *Prevalence*. In this method, the parties share costs according to the prevalence of the public health problem the service is designed to address. In the HPM example, the partners could share the total program costs according to observed instances of diabetes or heart disease. The logic here is simple: diabetes and heart disease tell us something about the expected number of people with hypertension. If the prevalence of the disease is not known, the partners can use a proxy, like socioeconomic status, to project the anticipated need for services in each population. In the HPM example, Riverdale's higher overall wealth suggests its residents are at lower risk for hypertension compared to Smallville residents. Sharing by prevalence adds substantial complexity because cost sharing is now based on data from a series of measurements unrelated to costs. In this case, those measurements are the incidence of disease or an indicator of socioeconomic status, which can be difficult to measure reliably, and other health-related behaviors like smoking or medication adherence. That said, this approach is especially good where population, property values, income, and other measures vary too much among sharing jurisdictions to offer meaningful comparisons. In this instance, we assume Smallville will have an estimated 12,740 cases of type 2 diabetes during the coming year, and Riverdale County will have an estimated 5,460 cases. This strategy considers each

county's share of the total incidence across both counties. According to that logic, 70 percent of the cases will be found in Smallville and 30 percent in Riverdale. Allocating costs this way leads to a share of $560,000 for Smallville and $240,000 for Riverdale. Some versions of prevalence also incorporate a moving average so that one community does not incur huge costs in a single year, and costs are recovered over time.

- *Weighted formula*. This plan addresses some of the big problems with the per capita sharing approach. For example, in a weighted formula approach, the participants might agree to share total costs according to a combination of population, median household income, usage, and other factors. By incorporating these other factors, the cost apportionment method will better reflect differences in fixed costs in urban vs. rural areas, differences in travel distances within each county, and a wide variety of other factors that may affect service delivery. For HPM, assume that Smallville and Riverdale decide to share costs according to a three-factor formula that incorporates population, ability to pay, and prevalence of type 2 diabetes. This formula reflects both counties' shared understanding of the cost structure and cost drivers of the HPM program. The counties, realizing the difference in the prevalence of type 2 diabetes, agree to weigh that difference in prevalence more heavily in the cost-sharing formula. They agree to a three-factor formula where population accounts for 25 percent, prevalence is 50 percent, and ability to pay is 25 percent of the total costs allocated to each county. Recall that Smallville accounts for 60 percent of the population served by HPM, and Riverdale accounts for 40 percent. At the same time, Smallville accounts for 70 percent of the prevalence factor and Riverdale for 30 percent. We would apply that formula as follows:
    - Cheng County: $800,000 X ((.6 X .25) + (.7 X .5) + (.44 X .25)) = $488,000;
    - Duncombe County: $800,000 – $488,000 = $312,000

DIFFERENTIAL COST ACCOUNTING

In the previous section, we explained how to measure the full cost of a service. Those techniques assume we're measuring the cost of the service for a given level or volume of the service. Until now, for instance, we've assumed our hypothetical HPM program will serve 400 clients a year. But sometimes, the more interesting question is: How do a program's costs change if we deliver more or less of it? For instance, how does HPM's cost per client change if we expand it to 500 clients? Or restrict it to 300 clients? These questions sound simple, but they require careful attention to different concepts. We turn to differential cost accounting when we want to know how costs change in space and time. **Differential cost accounting is, simply put, comparing how costs change at different levels of output**.

COST BEHAVIOR

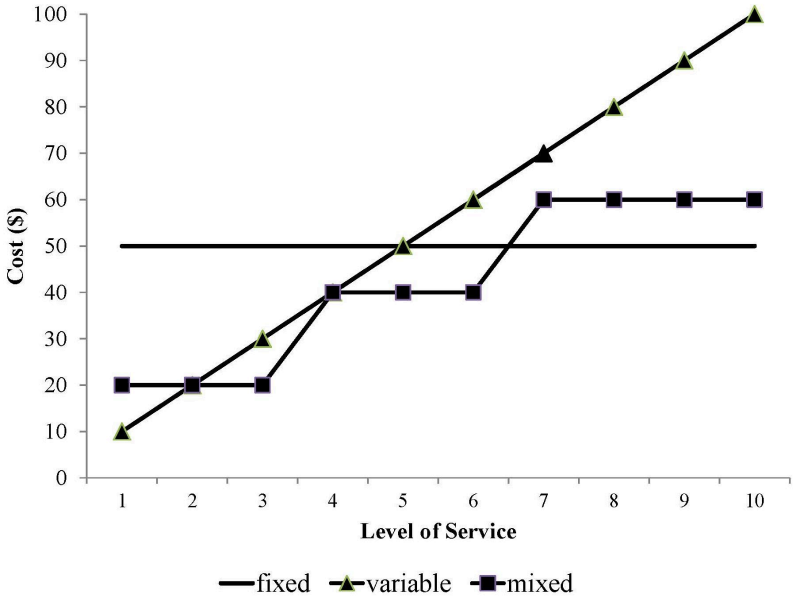
We know that what a service costs largely depends on how much of it we deliver. This is broadly known as *cost behavior.* Every cost type falls into one of three different cost behavior categories:

- *Fixed costs* do not change in response to the amount of service provided. In the HPM case, Smallville County owns some of its own blood pressure screening equipment, so the costs of acquiring equipment costs won't change even if the HPM program delivers a lot more blood

pressure screenings. There, however, is a caveat to this. It is reasonable to assume that fixed costs will not change within a *relevant range*. Relevant range frequently refers to capacity. If current demand exceeds capacity, we'll need to incur additional costs to expand capacity (e.g., room size, equipment that is available, etc.).

- *Step-Fixed Costs* are fixed costs within a relevant range. Step-fixed costs are frequently personnel costs. A nurse, for example, can see eight patients per day, and a counselor can see five patients per day. They are paid a fixed rate, regardless of number of patients they see. That said, they will likely not have the time to see more patients than the current workload. Therefore, we need to hire an additional nurse if we expect to see more than eight patients daily and an additional counselor if we expect to see more than five patients daily. So, if nurse visits per day were 20, we would need to hire three nurses and have the excess capacity to see an additional four patients (i.e., three nurses x a maximum of eight patient visits = 24 visits per day).
- *Variable Costs* change directly in response to the amount of service provided. For the HPM program, this might include copies and other office supplies needed to process physician referrals and mileage required to travel to outreach sessions, among others.
- *Mixed Costs (or Semi-Variable Costs)* have both a fixed and variable component. Utilities and equipment lease agreements are frequently semi-variable, with a fixed monthly charge irrespective of use and rate per unit of service consumed. Returning to our example of the copier, the monthly rate is fixed and the per-page service fee would be variable.

The figure below illustrates the cost behavior concepts for a generic, hypothetical service. The horizontal axis is the quantity of service provided, and the vertical axis is the total cost. The horizontal line at $50 represents a fixed cost. It does not change, regardless of the level of service provided. The triangle-marked line identifies a variable cost. Here we see each additional unit of service increases the total cost by $10, and that change is constant from zero to three units of service. The line marked with squares shows a step-fixed cost. Here, the cost is fixed at $20 from zero to three units of service. Once we reach four units of service, that total cost steps up to $40, where it stays fixed until seven units of service.



FIXED COSTS DEFINED DIFFERENTLY

"Fixed Cost" can mean different things in different settings. For our purposes, it means a cost that does not change in response to the volume of service delivered. By contrast, cost accountants sometimes use fixed cost to describe a cost that does not change during a given time period. This is an important difference.

It's useful to think about a program or service with reference to these main cost behaviors. In fact, we can place most programs/services/organization units into one of six cost behavior categories. Those categories are outlined below, along with examples of each from typical non-profit organizations and government programs.

COST STRUCTURES WITH ILLUSTRATIONS		
	Direct	**Indirect**
Fixed or Step-Fixed	*Typical cost items:* Salaried FTE program staff, program-specific equipment Programs with this cost structure tend to: – Have salaried staff that work across an organization's core programs or services. – Have low overhead. Example program: Drop-in center for youth experiencing housing insecurity.	*Typical cost items:* Payroll services, facilities maintenance Programs with this cost structure tend to: – Have mostly salaried staff that serve multiple programs/units – Allocate their costs to other units on a "billable hour" or similar allocation basis Example program: Development/fundraising staff at a large non-profit
Variable	*Typical cost items:* Program-specific inventory used by program participants Programs with this cost structure tend to: – Focus on "inventory management" – Focus on "surge capacity" Example programs: Food banks, county prosecutor home detention programs (e.g., "ankle monitors")	*Typical cost items:* Inventory, equipment, commodities Programs with this cost structure tend to: – Allocate their costs to other units by outputs – Focus on inventory management Example program: Procurement staff within a non-profit hospital
Step-Fixed	*Typical cost items*: Hourly/part-time program staff, shared facilities or equipment Programs with this cost structure tend to: – Focus on workload and staffing ratios. – Focus on enrollment caps, waitlists, other workload management strategies. Example program: Non-profit after-school daycare program	*Typical cost items:* Liability insurance, shared facilities Programs with this cost structure tend to: – Allocate their costs to other units according to "jobs" or "engagements" – Market their services outside their home organization Example program: Employee assistance program at a non-profit hospital

It's immensely helpful to think about cost behavior when we have to make decisions about how to design and fund programs. Consider this simple example based on the previously mentioned HPM program.

HPM staff have some rough budget projections. Their program is expected to incur fixed costs of $800,000 and variable costs of $400 per client. The program has expanded a lot since it launched, and it now expects to serve 550 clients but could serve up to 600 with current staffing levels. Meanwhile, nearby Emerald County has offered to pay $750 per client to expand the program to include an additional 50 Emerald County residents. Should Smallville and Riverdale counties agree to partner with Emerald County on these terms?

HPM's cost behavior is outlined in the table below. Given its projected fixed and variable costs, at 550 clients, the average per-client cost is $1,855. If HPM scales up to serve 600 clients, its average cost will decrease to $1,734 per client. However, that average cost of $1,734 is still much higher than the $750 per client that Emerald County offering. On the basis of "average" unit costs, this proposal is a definite "no-go" for Smallville and Riverdale.

HPM Program Cost Calculations

# of Clients	Fixed Costs	Variable Costs	Total Costs	Average Cost/Client
500	$800,000	$200,000	$1,000,000	$2,000
550	$800,000	$220,000	$1,020,000	$1,855
600	$800,000	$240,000	$1,040,000	$1,734

However, keep in mind the relationship between fixed and variable costs. Recall that HPM staff have said they can add 50 more clients without taking on additional fixed costs. If that is true, then the new cost to add a client is only the additional variable cost. Put differently, the average cost of each client is $1,734, but the *marginal cost*, or the cost of a new client, is $400. If HPM is reimbursed $750 per client, the additional "profit" is $350. If HPM makes this decision "at the margin" or with reference only to the marginal cost, it should take the deal with Emerald County. This is a good example of a service with positive *economies of scale*; the marginal cost of each unit of service decreases as the volume of service delivered increases.

Of course, there are trade-offs here. At 600 clients, the HPM program will operate at full capacity. HPM staff will almost certainly have to spend less time with clients. This could lead to a decline in the quality of service and could even increase staff burnout and turnover. But if we look just at the marginal cost, it makes sense for Emerald County to join the program.

This example also illustrates the key concept of *sunk costs*. Many fixed costs are for capital items like equipment, land, and buildings that can be bought and sold. A public health department can, in concept at least, recover some of those costs by selling those capital items. However, HPM's spending on employee salaries, training, insurance, and many other costs cannot be recovered. Those costs are sunk.

Some economists argue that sunk costs ought to be irrelevant to future decisions. In other words, at the margin, all that matters are the future, measurable, variable costs. Of course, this is difficult in practice. In the HPM case, scaling up to full capacity will mean additional stress on staff, and perhaps more importantly, it would mean giving up the opportunity to take on additional clients without taking on additional fixed costs. These costs are much harder to measure, but they are key components of decisions about cost sharing. The key takeaway here is that when considering a service-sharing arrangement, be sure to consider both the marginal costs and the opportunity costs.

DIFFERENTIAL COST ANALYSIS

You are the director of the **Department of Human Services for Algonquin Bay.** One of your public health programs provides services to senior citizens and children. The full-time direct staff includes licensed nurses and drivers (senior citizen program only). The department has also hired a program administrator and a secretary to manage the 20 full-time program staff (17 nurses and 3 drivers). Total costs for the two cost centers are expected to be $1,459,620. The program expects to receive $829,400 in reimbursements from Medicaid. A family foundation has pledged to support your efforts with an unrestricted grant ($100,000).

	Children	Seniors	Total
Patient Visits	18,200	9,360	
Nurses	7	10	
Drivers	-	3	
Direct Costs			
Nurses	390,600	558,000	**948,600**
Drivers	-	113,400	**113,400**
Supplies	45,500	23,400	**68,900**
Fuel	-	18,720	**18,720**
Total Direct Costs	***436,100***	***713,520***	***1,149,620***
Indirect Costs			
Depreciation (Vehicles)	-	10,000	**10,000**
Rent (Building)	92,453	47,547	**140,000**
Administrator and Secretary	56,000	104,000	**160,000**
Total Indirect Costs	***148,453***	***161,547***	***310,000***
Total Costs	**584,553**	**875,067**	**1,459,620**
Reimbursement Rev.	455,000	374,400	**829,400**
Unrestricted Grant	25,000	75,000	**100,000**
Total Revenue	**480,000**	**449,400**	**929,400**
Surplus (Deficit)	**(104,553)**	**(425,667)**	**(530,220)**
Surplus (Deficit) as % of Costs	***-18%***	***-49%***	***-36%***

The Department recently received an unsolicited bid from a local non-profit. The non-profit has proposed to take on the senior citizen program if the city agreed to reimburse the non-profit at a rate of $65 per patient visit. Should the department accept this proposal? What are the policy tradeoffs of delivering this service via a third party?

Assuming the non-profit provides services to the projected clients (9,360), the direct cost of the contract would be **$608,400 (=$65 x 9,360).** The direct costs of the contract would be significantly lower than the agency's direct costs ($713,520/9,360 = $76.23. Assuming the average costs do not change significantly as the number of clients increases (for the department and the non-profit), the department would be better off contracting out with the non-profit.

Before the department accepts the non-profit proposal, they should consider the ramifications of having a third party provide services to their clients. That includes the quality of service provided to the senior citizens, as well as the capacity of the non-profit to deliver services. Accepting the bid at a cost lower than the department average could be an indicator of efficiency. It could also be the case that the non-profit has understaffed its program, resulting in lower average costs per visit. An inspection of the non-profit facility and a review of the home-visit practices should be considered in the bid review process.

The budget analyst assigned to your agency has recommended that you eliminate the senior citizen program since its costs far exceed revenues. Should the Department accept this proposal? What are the policy tradeoffs of dropping a cost center (i.e.,

senior citizens)?

Dropping the senior program would eliminate direct costs only! The total costs for the children's program would increase by $161,547 to **$746,100** (i.e., $584,553 + $161,547 or $436,100 + $310,000). Assuming there are no changes to unrestricted grants received, the children's center would receive $555,00 in revenues (i.e., 455,000 + $100,000), and the deficit would decrease from $530,200 to $191,100 (i.e., $555,000 – $746,100). The analyst's recommendation would result in a smaller deficit if laying off the nurses and drivers in the senior citizen program is at no cost to the department.

While eliminating the senior citizen cost center cuts the deficit by more than $339,000, the program will no longer serve clients in need of outreach and support. There would likely be unanticipated costs associated with eliminating the program. For example, failure to monitor the health and well-being of senior citizens could lead to these clients being hospitalized. Costs associated with their hospital visits and inpatient care would more than likely exceed the savings projected here. Thus, the strategy would be short-sighted.

The budget analyst assigned to your agency has recommended that the program eliminate off-site visits (i.e., lay off all drivers). In other words, nurses will no longer make site visits but rather, their clients will come to one central location for all their appointments. What are the financial benefits of this proposal? What are the policy tradeoffs of pursuing this strategy?

Laying off the drivers in the senior program would cut costs for the program from $875,067 to $732,947 – the costs associated with the nurses (keep in mind eliminating the drivers would also eliminate the indirect costs for the program (i.e., depreciation of $10,000)). The cuts to the program would shrink the budget deficit from $425,667 to $283,547.

While eliminating drivers in the senior citizen program would shrink the budget deficit for the cost center and the program, the strategy assumes that senior citizens would be able to make the trip to see the nurses at the program office. We could therefore see the workload for the department drop significantly and nurses be underutilized. The clients would likely turn to alternatives like relying on emergency services, which could end up costing the city even more over the long run (e.g., the nurses would be underutilized if visits fall below current levels), and use of emergency services (in-patient or out-patient hospital visits) would likely cost the city more than the costs associated with having the drivers.

COST-VOLUME-PROFIT ANALYSIS

So far, we have reviewed how public managers can identify the full cost of their services and how that full cost changes as they deliver more or less of a service. Those are crucial questions that all good managers can answer.

However, public managers must often confront a different question: What should we charge for this service? They are also routinely asked a corollary question: What volume of service should we deliver, given that service's cost structure? To answer these questions, we turn to a particular set of concepts within differential cost accounting known as *cost-volume-profit* analysis (CVP). CVP is how an organization determines the volume of activity needed to achieve its profit or mission goal. It is the price it needs to charge to break even or make a profit or the cost limits that it must manage to achieve its profit or mission goal. CVP analysis is usually done for a particular program or service within an organization. The basic equation is:

$$\textbf{Profit} = \textbf{Total Revenue} - \textbf{Total Costs}$$

From this discussion so far, we also know that Total costs = Fixed costs + Variable costs. And since fixed costs are fixed, we can represent the cost equation as:

$$\textbf{TC} = \textbf{a} + \textbf{bx}$$

Where *TC = total costs*, *a = fixed costs*, and *b = variable costs*. We also know that total revenue is simply the price of service (p) times the volume of service delivered (x). That said, we can show the *fundamental profit equation* as:

$$\textbf{Profit} = \textbf{px} - \textbf{(a} + \textbf{bx)}$$

For any service, the *break-even volume* is the point at which total revenue (px) equals total costs (a + bx). To illustrate how we use this formula, let's go back to the Environmental Health Department's copier. Assume for the moment that the county government's leadership wants to make copying more affordable, so it caps the price of copying at 7 cents per copy. At that price, how many copies must the copier center deliver each year to break even? In other words, what's its annual break-even volume?

We know that the copier cost center's fixed costs (a) include $6,000 for the machine rental, $900 for machine maintenance, and $1,500 for its space allocation. Let's also assume electricity and the office manager's time allocation are fixed costs of $180 and $100, respectively. So total annual fixed costs are $6,000 + $900 + $1,500 + $180 + $100, or $8,680.

Variable costs (b) are the largest cost items. Recall that last year the copier made 248,000 copies. Total paper costs were $10,000, so the per-copy cost for paper is ($10,000/248,000), or $.04/copy. Total printing cartridge costs were $2,700, so the per-copy cost for printing cartridges was ($2,700/248,000), or $.011/copy. These two variable costs together give us total variable costs of $.051/copy.

At break-even, profit = 0, so we can re-arrange the fundamental profit equation to px = a + bx. Since the price per copy is capped, per management's policy, at $.07, we can then express this equation as:

$$\textbf{\$0.07x} = \textbf{\$8,680} + \textbf{\$0.051x}$$

To solve, we first subtract $0.051x from both sides, leaving us with $0.019x = $8,680. To solve for x, we divide both sides by $0.019, and we're left with x = 456,842. In other words, at 7 cents per copy, the copier cost center's *break-even quantity* is 456,842 copies. That's nearly twice as many copies as it produced so far. Management might want to rethink this decision.

We can also express break-even quantity as a/(p-b). Arranged this way, the previous quantity is $8,680/($0.07 – $0.051), or $8,680/$0.019 = 456,842. The price minus variable costs is known as the *contribution margin*. In some ways, break-even quantity is finding how many units of volume we need to spread the contribution margin to arrive at break-even quantity.

BREAK-EVEN ANALYSIS

The fixed costs of running a fund-raising gala for the Wenatchee Symphony are $10,000, and the variable costs are $75 per attendee. The facility where the event is being held can accommodate 400 people.

What minimum amount can the Wenatchee Symphony charge for a ticket and still break even?

$$Px = a + bx$$
$$P= (a+ bx)/x$$
$$P = (\$10,000 + \$75 \text{ X } 400)/400$$
$$P=\$100$$

Assuming 400 people attend the gala, how much does the Wenatchee Symphony have to charge for each ticket for the Symphony to earn $20,000?

$$P = ((\$10,000 +20,000) + \$75 \text{ X } 400)/400$$
$$P=\$150$$

If the Symphony received a donation of $2,000, would its breakeven ticket price for the gala would increase, decrease, or stay the same?

$$P = ((\$10,000 - \$2,000) + \$75 \text{ X } 400)/400$$
$$P=\$95 — \$5 \text{ less than the break-even point of } \$100$$

Let's ask a different question. Assume that the copier technician says the current copier is aging and will likely break down if asked to make more than 150,000 copies per year. At that volume, how should the copier cost center adjust its prices, so it continues to break even?

Here we re-arrange the formula as p = (a/x) + b. In other words, the break-even price is the fixed costs divided by the volume plus the variable cost per unit. For the copier cost center, this is ($8,680/150,000) + $0.051, or ($0.0579 + .051) = $0.1089. Put differently, if capped at 150,000 copies, the copier cost center would need to charge 10.89 cents per copy to break even. Once again, management should take a careful look before implementing this policy.

The copier cost center is a useful illustration but is also an outlier because most of its costs are variable. This is typical in for-profit manufacturing, logistics, and other industries but atypical among public organizations. For a more typical public organization example, let's return to the HPM program.

Recall from earlier that HPM has estimated fixed costs (a) of $800,000 and variable costs (b) of $400/client. Say HPM's management wants to keep the program relatively small to ensure a quality service, so it decides to limit its enrollment to 400 clients. At that volume (x), its break-even price is ($800,000/400) + $400, or $2,400/client. If management is willing to expand enrollment to 500 clients, the break-even price becomes ($800,000/500) + $400, or $2,000/client.

In another CVP scenario, management reports that governments and philanthropies will pay a maximum of $1,800 per client to participate in the HPM program. At that price, what is HPM's break-even quantity? Once again, the formula is a/(p-b), or $800,000/ ($1,800-$400), or 571 clients. To break

even at that comparatively low price and contribution margin ($1,800-$400, or $1,400), the program will need to serve substantially more clients than it has served recently.

The table below summarizes these various cost-volume-profit calculations.

Calculation	Formula	Question the Calculation Answers
Break-Even Price	(a/x) + b	At a given level of service, at what price per unit does total revenue equal total costs?
Break-Even Quantity	a/(p-b)	How many units do we need to sell at a given price to ensure that revenue equals total costs?
Contribution Margin	p-b	By how much price exceeds variable costs?

Note: For all formulas p = price, x = quantity, a = fixed costs, b = variable costs

CVP is a powerful tool that can directly illuminate many important management decisions. Most CVP today is done in spreadsheets to allow for maximum flexibility when exploring alternative cost scenarios, especially when analyzing services with step-fixed costs. That said, it's still important to understand the basic concepts.

COST ANALYSIS AND FLEXIBLE BUDGETING

Once we've identified a program or service's cost structure, we can take our first steps toward preparing a budget. A *budget* is simply a plan for what an organization wants to accomplish and the resources it will use to accomplish it. Budgets are important – for governments, an adopted budget is the law. It describes taxes and other resources the government intends to collect. Since taxpayers must pay those taxes, the government must spend those resources per the adopted or amended budget. Recall from the earlier discussion that the budget is one of citizens' most important tools to hold the government accountable. Non-profits' budgets don't have the force of law, but they're also critically important. Why? Because if a non-profit deviates substantially from its budget, its funders, and donors will question its ability to make good on its promises and accomplish its mission.

Budgets are made and organized in many ways (see the next chapter). Regardless of an organization's overall budget process, effective cost accounting is paramount to effective budgeting and management, particularly at the program or service level. Public managers must know what portion of the costs they're responsible for are fixed, variable, and step-fixed. They must also understand how different cost items connect to service delivery outputs and how their cost center is assigned indirect costs. And perhaps most important, they must understand how their program's cost structure and cost behavior will change under different performance scenarios. That is why the best budgets are flexible budgets.

A flexible budget allows a manager to quickly and easily perform sensitivity analysis to explore how changes in key cost assumptions affect a program's unit costs, total costs, and service-delivery volume.

Flexible budgeting follows a basic four-step process:

1. ***Identify types of output or activity***. Sometimes those levels of activity correspond to cost centers. Sometimes they relate to programs or "lines of business" within cost centers.

Sometimes they correspond to entire departments or divisions, especially if that department or division delivers a single good or service.

2. ***Collect cost and price data***. For most budget-making, last year's budget is the best source of data on costs and prices. Pay careful attention to past budget trends unless you're tasked with developing a budget for a new service (and someday you will be!). Two basic types of costs are reflected in most public organizations' budgets: operating and capital costs. Operating costs are incurred through the organization's regular, year-to-year activities, like salaries, benefits, and training. Capital costs are related to capital assets like property, equipment, and buildings. Recall that the portion of a capital asset that is "used up" each year is reflected in the organization's operating costs as depreciation expense.
3. ***Classify inputs***. Every organization classifies its cost inputs a bit differently. For a simple budget, it's appropriate to classify the spending inputs in broad *objects of expenditure* like "salaries" or "commodities" and to call the revenue inputs "service revenues," "fees," or some other appropriate broad label. Some organizations prepare budgets using the same chart of accounts used to prepare the basic financial statements. Others have much more detailed *budget item codes* to identify specific types of budget inputs. The key to a classification scheme is that it's as consistent as possible. Once you make a budget with it, make every budget with it.
4. ***Develop a cost rate or unit cost for each key budget input***. A *cost rate* measures the resources needed to staff a service, usually expressed as a unit of output. A *unit cost* is the cost to acquire or produce a unit of a good or service.

Personnel costs are the largest and most visible budget inputs for most public organizations. That's why effective budgeting for public organizations starts and often ends, with careful attention to budgeting for personnel.

So, let's illustrate this four-step process with a personnel budgeting example.

PERSONNEL COST ESTIMATION[1]

You are the director of a non-profit organization that delivers meals to elderly persons in their homes. The state reimburses you a flat rate per person. Your non-profit provides three meals a day per person, seven days per week, 365 days per year. You hire two types of direct program staff: cooks and drivers – all of whom are full-time employees working eight hours per day, five days a week, and are eligible for 10 days of paid vacation.

Cooks get paid $17 per hour and drivers $14 per hour. Staff are eligible for a 25 percent salary bonus if they work on weekends. Your organization contributes $100 per employee per month in health insurance, contributes five percent of wages to a state-run pension plan, and pays regular rates for Social Security and Hospital Insurance (7.65 percent) and Workers' Compensation and Unemployment Insurance (five percent).
Cooks can prepare three meals per day for a maximum of 50 clients per day and drivers can deliver

1. This example was developed by William Duncombe, a beloved member of the faculty at the Maxwell School – Syracuse University. It is included here with minor modifications.

three meals per day for a maximum of 35 clients per day. How many cooks and drivers do you need to hire and what are the related personnel costs for providing three meals per day to 200 clients?

	Cooks	Drivers	Total
1) Demand (individuals served per day)	200	200	
2) *Divided* by productivity rate (individuals served per employee)	50	35.0	
3) *Equals* staff per day	4.00	5.71	
Round up FTE (Full-time employees cannot be fractional)	4 FTE	6 FTE	10 FTE
4) Times operational days equals annual labor time required			
Annual days (or shifts) required (#FTE x 365 days)	1,460	2,190	
Annual hours required (#FTE x 365 days x 8 hrs./day)	11,680	17,520	
5) Bonus pay shifts for excess compensation			
(2 weekend days x 52 weeks x #FTE)	416	624	
Bonus pay hours	3,328	4,992	
(2 weekend days x 52 weeks x #FTE x 8 hours per day)			
6) Annual labor time per employee			
Paid days per year (365 days minus 104 days off)	261	261	
Paid hours per FTE per year	2,088	2,088	
Minus vacation days	10	10	
Equals annual workdays per employee	251	251	
Actual work hours per FTE per year	2,008	2,008	
7) Required Staff?			
(Labor time step (4) divided by labor time per employee step (6))	5.82	8.73	
Rounded up, full-time employees cannot be fractional	6	9	15
8) Calculate the equivalent annual salary per FTE:	2,088 x $17	2,088 x $14	
(Paid hours (which includes vacation) x hourly wage)	$35,496	$29,232	
9) Calculate the salary budget:			
Base salary budget (number of staff times equivalent salary)	$212,976	$263,088	$476,064
Bonus pay (bonus hours from step (5) x hourly wage x .25)	$14,144	$17,472	$31,616
TOTAL SALARY BUDGET	**$227,120**	**$280,560**	**$507,680**
Fringe benefits:			
Health insurance (# of employees x $100 x 12 months)	$7,200	$10,800	$18,000
Pension (0.05 x total salary budget)	$11,356	$14,028	$25,384
Social Security (0.0765 x total salary budget)	$17,375	$21,463	$38,838
UI and WC (0.05 x total salary budget)	$11,356	$14,028	$25,384
TOTAL FRINGE BENEFITS	**$47,287**	**$60,319**	**$107,606**
TOTAL PERSONNEL BUDGET	**$274,407**	**$340,879**	**$615,286**

What about a scenario where most of the key input items are variable costs? Here we would use the unit cost method. The steps for that method are as follows:

1. Project the demand for the service

2. Estimate the resources consumed per unit of output
3. Determine the average cost per unit of output
4. Multiply these three items together to determine the appropriate budgeted amounts

To illustrate, let's return to the HPM program and focus on the counselor's travel costs. Recall that the counselor travels to deliver outreach programs on healthy eating and active lifestyles designed to prevent hypertension among Smallville and Riverdale County residents. Let's assume that for the coming fiscal year, the number of programs will be a bit lower than in previous years but robust nonetheless:

HPM staff project 175 outreach programs

The average mileage per outreach program is 75 miles, and the rate per mile is $0.40.

175 programs X 75 miles per program X $0.40/mile = $5,250

In this case, the "unit cost" and the "object of expenditure" are the same– individual outreach programs. And once again, we'd ideally set this analysis up in a flexible spreadsheet-based budget.

PRACTICE PROBLEM: UNIT COST TABLE AND PROGRAM BUDGET

You are a new budget analyst working in the Department of Motor Vehicles (DMV). Your first task at the DMV is to analyze costs for the Driver's License Unit (herein Unit). The Unit processes two types of transactions: new license applications and license renewal applications. You have been asked to provide unit cost estimates if the Unit were to review 30,000 new license applications and 270,000 license renewal applications. Operational information is as follows:

- The Unit is open five days a week (Monday through Friday), 52 weeks a year. It employs clerks to process license applications. Because of the specialized requirements, clerks are assigned to work on either new license applications or license renewal applications, but not both. On average, it takes a clerk two hours to process a new license application and 30 minutes to process a license renewal.
- Clerks are full-time employees (FTE). They work eight hours per day and are paid $17.50 per hour. They are entitled to two 15-minute breaks and one 30-minute lunch break. As a result, clerks are only able to process applications seven hours a day. As FTEs, the clerks receive three weeks of paid vacation and one week of paid sick leave. Their benefits are estimated to be 25 percent of their wages.
- Clerks are required to copy and scan application materials to a central processing system. Clerks working on new license applications can use one of three workstations to copy, print, and scan application materials. Clerks working on license renewals can use one of the seven workstations to copy, print, and scan renewal application materials. The Unit estimates that each new license application would require 15 pages of printed material, and each license renewal application would require 10 pages of printed material. The Unit has leased these workstations from a local vendor at $250 per month and $0.05 per page of printed material.

- Once all application materials are received, and the application for either a renewal or new license is approved, the clerks in the respective centers are required to process a state-valid driver's license. The license, regardless of type, is at a cost of $3.00 per license.
- Administration and maintenance costs for the Unit are expected to be $750,000 and $400,000, respectively. The DMV requires administration costs to be allocated on the basis of direct services staff and maintenance costs on the basis of output.

Estimate the required operating personnel and non-personnel costs and estimate the operating budget for the Unit.

Begin the process by identifying the unit or units of activity or output produced by the organization and the mission centers. The mission centers are "*New License*" and "*License Renewal*." You want to organize the cost data around these mission centers.

Step 1: Cost Center Workload

A renewal license clerk can process an application in 30 minutes or 0.5 hrs.
The workload for "*License Renewal* "for the year is 135,000 hrs. = 0.5 hrs. x 270,000 applications.

A new license application clerk can process an application in 2 hrs.
The workload for "*New License*" for the year is 60,000 hrs. = 2 hrs. x 30,000 applications.

Step 2: Hours per Employee

Estimate the number of hours each employee can work in any single year. This is an intermediate step in the process of determining the number of employees.

Work hours = (52 – 3 vacation – 1 sick) weeks x 5 days a week x 7 hrs. per day = 1,680 hrs.

Recall that full-time employees are eligible for three weeks of vacation and one week of paid sick leave. Moreover, even though they work eight hours per day, they are eligible for two 15-minute breaks and one 30-minute lunch break. They, therefore, only process applications for seven hours per day.

Step 3: # of Employees

- # of Clerks "*New License*" = 60,000 hrs/1,680 hrs = 35.71, round up to 36 full-time employees.
- # of Clerks "*License Renewal*" = 135,000 hrs/1,680 hrs = 80.35, round up to 81 full-time employees.

Step 4: Cost per Employee

Paid hours = 52 weeks x 5 days a week x 8 hrs. per day = 2,080 hrs.

The annual wage for clerks in both mission centers = 2,080 hrs. x $17.50 = $36,400.

Fringe benefits are 25 percent of base wages = $36,400 x .25 = $9,100

Direct personnel costs for Renewals = ($36,400 x 81 FTE) = $2,948,400
Direct benefit costs for Renewals = ($9,100 x 81 FTE) = $737,100

Direct personnel costs for New License = ($36,400 x 36 FTE) = $1,310,400
Direct benefit costs for New License = ($9,100 x 36 FTE) = $327,600

Step 5: Estimate all other direct costs.

For renewals, workstation costs are = ($250 x 12 months x 7 workstations) + ($0.05 x 10 pages x 270,000) = $156,000. Printing costs are = $3 x 270,000 =$810,000

For new applications, workstation costs are = ($250 x 12 months x 3 workstations) + ($0.05 x 15 pages x 30,000) =$31,500. Printing costs are = $3 x 30,000 =$90,000

Step 6: Estimate indirect costs.

Indirect costs include administration costs ($750,000) to be allocated on the basis of personnel. Maintenance costs ($400,000) are to be allocated on the basis of the number of applications processed.

Administration costs (Direct Staff): 81 clerks in renewals + 36 clerks in new applications = 117 clerks. Allocation of administration costs (in %).

> Renewals administration cost share = (81/117) = 69.2%, in dollar terms = .692 x $750,000 = $519,000
>
> New License administration cost share = (36/117) = 30.8%, in dollar terms = .308 x $750,000 = $231,000

Maintenance costs (# of Licenses processed): 270,000 renewals+ 30,000 new applications = 300,000 applications. Allocation of administration costs (in %)

> Renewals = (270,000/300,000) = 90%, in dollar terms = .9 x $400,000 = $360,000
>
> New License = (30,000/300,000) = 10%, in dollar terms = .1 x $400,000 = $40,000

Step 7: Estimate Revenues.

For renewals, the Unit will charge $15 per renewal application. For new licenses, the Unit will charge $60 per application. Revenues =

Renewals = $15 x 270,000 = $4,050,000

New License = $60 x 30,000 = $1,800,000

Step 8: Prepare a Unit Cost Table for Driver's License Unit

UNIT COST TABLE FOR DRIVER'S LICENSE UNIT

		Renewals	New License	Total
# of Licenses		270,000	30,000	**300,000**
% of Licenses		90.0%	10.0%	
# of Employees		81	36	**117**
% of Employees		69.2%	30.8%	
Direct Costs				
Personnel Costs	***Step***	2,948,400	1,310,400	**4,258,800**
Benefits	***Step***	737,100	327,600	**1,064,700**
Total Personnel Costs		**$ 3,685,500**	**$ 1,638,000**	**$ 5,323,500**
Workstations	***Semi-variable***	156,000	31,500	**187,500**
State-Issued License	***Variable***	810,000	90,000	**900,000**
Total Direct Costs		**$ 4,651,500**	**$ 1,759,500**	**$ 6,411,000**
	Unit Costs	$17.23	$58.65	
Indirect Costs				
Administration	***Fixed***	519,000	231,000	**750,000**
Maintenance	***Fixed***	360,000	40,000	**400,000**
Total Indirect Costs		**$ 879,000**	**$ 271,000**	**$ 1,150,000**
Total Costs		**$ 5,530,500**	**$ 2,030,500**	**$ 7,561,000**
	Unit Costs	$20.48	$67.68	
Total Revenue		**$ 4,050,000**	**$ 1,800,000**	**$ 5,850,000**
	Charge per Application	$15.00	$60.00	
Total Surplus (Deficit)		**$ (1,480,500)**	**$ (230,500)**	**$ (1,711,000)**
Surplus/(Deficit per License)		**$ (5.48)**	**$ (7.68)**	**$ (5.70)**

BUDGET VARIANCE

The difference between actual results and budgeted results is known as a budget variance. Effective public managers understand when, where, and why variances happen. They also use insights from variances to identify inefficiencies and other current management concerns and how they make future budgets.

The simplest variance analysis approach is to compare budgeted expenses to actual expenses. For example, suppose the HPM program budgeted $759,000 for FY15, but actual spending for the year was $789,000. This would be a *total variance* of ($759,000/$789,000) = .962, or 96.2 percent. In other words, budgeted spending was only 96.2 percent of actual spending. This is a *negative variance* or *unfavorable variance* of 3.8 percent, and it directs HPM's management toward a few important questions about HPM's operations. Did HPM serve more clients than expected? Did it spend more than expected on variable costs like mileage or supplies? Was the contract for communications and outreach properly structured? Are its indirect cost allocations fair and consistent with its actual

operations? To address these questions, of course, it would help to compute variances on individual line items (known as *line-item variances*). Larger organizations often compute *department variances.*

Revenue-side variances demand a different type of interpretation. Imagine, for instance, that HPM budgeted for revenues of $800,000 but collected $750,000. The variance here would be ($800,000/$750,000) = 1.0667, for a negative variance of 6.667 percent. Here, Smallville County's HPM management should ask a different set of questions. For instance, is HPM collecting all its revenues? Is Riverdale County slow in reimbursing Smallville County?

Positive variances beg a different set of questions. For example, say HPM's total spending was just $700,000, compared to its budgeted spending of $759,000. This variance is ($759,000/$700,000) = 1.084, for a positive variance of 8.4 percent. But what does positive mean here? Was management able to drive down costs and deliver the expected volume of service at lower overall costs? Or did it not deliver as much of the service as expected?

BUDGET VARIANCE ANALYSIS

TerraWorks is a social enterprise based in Tanzania that manufactures premium kitchen goods from sustainable bamboo. During the recent quarter, the company manufactured 4,000 chopping blocks using 11,000 board feet of bamboo. TerraWorks paid $18,700 for that 11,000 board feet of bamboo. Its budget assumes that each chopping block requires 2.5 board feet of bamboo at a cost of $1.80 per board foot.

What was TerraWorks' spending variance for chopping block production during the most recent quarter? Is this a favorable or unfavorable variance?

If Actual Price = $18,700/11,000 = $1.70, then

Price Variance = (Actual Volume x (Actual Price – Budgeted Price))

= 11,000 chopping blocks x ($1.70 – $1.80) = -$1,100.

This is a positive/favorable variance. TerraWorks produced the chopping blocks at $1,100 under budget because they paid less than expected for bamboo.

In alternative analysis

The budgeted value of the chopping block was = $1.80 x 11,000 board feet = $19,800. The actual cost was $18,700. Price Variance then is $18,700 – $19,800 = -$1,100

What was TerraWorks' volume variance for chopping block production during the most recent quarter?

Volume Variance = Budgeted Price (Actual Volume – Budgeted Volume) = $1.80 (11,000-10,000) = $1,800.
Note that the budgeted volume was = 2.5 board feet x 4,000 chopping blocks.

This is an unfavorable variance. Producing these units required more bamboo than expected.

What was TerraWorks' total variance for the month? How much of that variance was attributable to price variance rather than volume variance?

$1,800 unfavorable volume variance – $1,100 favorable price variance = $700 unfavorable total variance.

In alternative analysis
The budget for the project was $18,000 (i.e., 2.5 board feet x 4,000 units x $1.80 per board foot).
The actual cost for the project was $18,700.

COST STRUCTURE AND MANAGEMENT STRATEGY

By now, it should be clear that the principles of cost behavior, differential cost analysis, and cost-sharing suggest various management strategies. One of the best approaches to manage costs and bolster profitability for organizations with mostly fixed costs is to "scale up." Since fixed costs are fixed, one way to manage them is to spread them across the largest possible volume of service. However, for organizations with mostly variable costs, scaling up will simply increase variable costs. The better approach in that circumstance is to invest in new technology, procurement processes, or other strategies that can drive down variable costs. With the core principles of cost analysis established, it becomes clear how a public organization's cost behavior might be most effectively managed.

It is also essential to consider how an organization's financial management strategy is contingent on the parts of its cost structure it can control. In other words, how much of its costs are direct and under the control of its management, and how much of its costs are indirect and assigned to it by management? For example, organizations with mostly direct costs often find themselves "scrubbing expenses" because they have the authority and ability to affect those costs. However, organizations with mostly indirect costs are more likely to partner with other organizations to leverage economies of scale, diversify their potential customer/client base, or access new technologies or processes they might not have the authority to pursue on their own.

When we consider these two main parts of an organization's cost structure – direct vs. indirect and fixed vs. variable vs. step-fixed – we begin to see a set of attenuated management strategies. The table below lists some of those strategies.

Main Cost Behaviors	Direct	Indirect
Fixed	1. Scrub expenses 2. Scale up. 3. Add value with volunteers. 4. Explore shared facilities/offices/capital equipment	1. Scale up 2. Diversify the client base 3. "Re-centralize" services 4. Consider partnering/outsourcing non-core competencies
Variable	1. Scrub expenses 2. Leverage new technology to drive down unit costs 3. Encourage cash over in-kind contributions	1. Leverage new technology to drive down unit costs 2. Re-centralize or decentralize services as necessary 3. Consider group purchasing 4. Improve workflow planning and efficiency
Step-Fixed	1. Increase "staffing ratios" 2. Set enrollment caps 3. Employ waitlists/enrollment caps/staggered enrollments	1. Diversify the client base 2. Employ waitlists/enrollment caps/staggered enrollments 3. Consider narrowing or limiting the scope of services 4. Leverage technology to "move the step" on certain costs

For example, in the bottom left section, we see financial management strategies commonly employed by organizations with primarily direct, step-fixed costs. For these organizations, the key is managing workflow. As their volume increases, so do their fixed costs. In turn, many organizations of this type work to spread their fixed costs within whichever step their fixed costs currently stand. That means maximizing staff-to-client ratios at all times, including queuing up clients with waiting lists or staggered enrollments before hiring new staff. Since most of those costs are direct, organizations have the latitude to employ these strategies.

By contrast, organizations with mostly indirect costs may not have the ability to enact new enrollment management policies. They must also “manage the step,” but for them, the better strategy is to narrow or limit the scope of services or to find new clients that can lead to more predictable enrollment patterns. In short, managing direct step-fixed costs is quite different from managing indirect step-fixed costs.

This table is by no means a comprehensive list of strategies, but it does orient you toward the interesting and nuanced relationship between cost structure and financial management strategy.

CHAPTER 6.

BUDGET STRATEGY

BUDGET STRATEGY: GETTING THE DEAL DONE

With a more sophisticated understanding of budget-making processes, public managers can answer a variety of questions and management concerns:

- How is "managing costs" different from "managing a budget"?
- What's the best way – financially and politically – to respond to a potential budget cut? To respond to a possible budget increase or expansion?
- How can we structure budget processes to minimize conflict and maximize employee engagement?
- How does the budget timeline, namely when new information is introduced to budget decision-makers, affect how the budget is made?
- What are decision-makers' key concerns throughout the budget process? How do loss aversion, incrementalism, and parochialism affect budget-making?
- How does the format and presentation of a budget document affect how staff, clients, and other stakeholders perceive it?
- Why do governments' actual budget processes regularly deviate from their statutory or legal budget processes?
- What are the most and least effective ways to engage citizens and other stakeholders in the budget-making process?

In the late 1990s, several dozen people died in major house fires throughout the City of Seattle. Critics blamed the Seattle Fire Department for its slow and insufficient response to those fires. The Fire Chief accepted that criticism and urged the City's leaders to invest in significantly upgrading the Fire Department's facilities, equipment, and training. Then-Mayor Greg Nickels proposed a new, 10-year, $197 million property tax levy to pay for that upgrade, and voters approved that levy in 2003. The centerpiece of that levy was a plan to rebuild or refurbish 33 fire stations.

In 2015, the City announced it had spent $306 million on those fire station projects. Of the 33 projects included in the plan, 32 had exceeded their original budgets. Many had cost twice their initial estimate. And the program is not yet complete. The City expected to spend at least $50 million more from other resources to complete those projects over the next five years.

How did this happen? How can a major city program staffed with many sophisticated budget and finance staff over-run its budget by more than 50 percent?

The problem is best captured by the late, great Yogi Berra's adage that "Predictions are hard, especially about the future." Costs of basic materials and labor change all the time, so it's difficult to forecast those costs seven to 10 years into the future. Indeed, basic construction costs increased by around one-third from early 2005 until late 2007. Moreover, during the ten years of the program, professional standards for firefighters changed. Under the new standards, fire stations must now have better training and fitness facilities, better information technology, and other upgrades that added costs to the project.

To others, the problem is politics. According to some accounts, Mayor Nickels' staff estimated the fire station program would cost around $300 million. The Mayor, however, did not believe voters would approve that large a tax increase. So instead, he proposed the highest possible levy he believed would pass, and he assumed the fire stations could be built at lower costs or that additional money for the program would come from future city budgets. Whether you believe the problem is forecasting, politics, or something else, it is clear that the legacy of the fire station levy is two-fold: better fire protection and, presumably, closer scrutiny of future long-term capital projects.

This story illustrates the central point of this chapter: How we make a budget is just as important as the revenues and spending proposed within it. Consider, for instance, how changes to the City's budget process might have produced a different outcome for the fire station levy:

- If the program had not required voter approval, Mayor Nickels might have proposed a much larger levy that better reflected the full cost of the program.
- At the same time, if the City had paid for the full cost of fire stations out of general fund resources that did not require voter approval, those projects might have crowded out the Mayor's other high-priority projects in areas like economic development and affordable housing.
- If the City Council had better access to more sophisticated cost estimates earlier in the approval process for the new levy, they might have supported a higher requested amount or been willing to spend additional city resources.
- If the City Council members were elected by districts (as they are today) rather than at-large (as they were then), then specific members would have had a stronger incentive to monitor the costs and timing of fire station projects within their districts. That might have produced more substantial changes to the program at both the planning and implementation stages.
- If the City's capital budgeting process had more stringent accountability features, then the mayor might have reduced the budget for projects scheduled later in the program once it was clear that the first few projects had run over budget.

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- Recognize the key components of a public organization's budget timeline/calendar and formal/legal budget process.
- Recognize the different ways that we define "budget balance" and the implications of those various definitions.
- Recognize that budgets ensure fiscal accountability but do not guarantee financial solvency.
- Know the typical sources of conflict and compromise in the budgeting process.
- Know managers' basic strategies to expand their budget authority or respond to potential cuts.
- Acknowledge the effectiveness of "doing nothing" as a budget-cutting strategy.
- Recognize when and why an organization's budget for a service might be quite different from what that service costs.

"Don't tell me what you value, show me your budget, and I'll tell you what you value."

President Joe Biden

BUDGETS ARE A STATEMENT OF OUR VALUES

Budgets frame values that permeate society. They translate those values into policies and programs and communicate priorities to stakeholders. Budgets provide information for policymaking, public scrutiny, and accountability. Budgets must speak to multiple audiences, including legislative body members, taxpayers, employees, and oversight agencies.

A government's budget is a prospective document that shows policy priorities and how it plans to pay for them. It facilitates the stewardship of resources – that expenses are reasonable, necessary, and incurred in the pursuit of the organization's mission. It identifies proposed spending and the means of financing proposed expenditures for the budget year (or multiple years). To that end, budgets must present a summary of revenues by source, expenditures (or expenses) by policy area, and any other source of funds (e.g., bond proceeds or proceeds from the sale of assets).

Budgets guide policy implementation and assess performance (program and financial performance). To that end, budget documents should include a statement of objectives for each unit within the organization (e.g., department, divisions, offices, or programs) and provide objective measures of performance and outcomes.

OPERATING VS. CAPITAL BUDGET

Most state and local governments have two different budgets: the operating budget for recurring expenditures and a capital budget for non-recurring capital expenditures (e.g., land acquisition and improvement costs). All day-to-day expenses of operating core programs are reported in the operating budget. However, capital expenditures may be included in the operating budget if they are recurring expenditures (e.g., purchase of computing equipment). Operating budgets frequently include spending on existing capital investments, including maintenance costs and principal and interest payments on outstanding debt obligations that finance infrastructure improvements.

Capital budgets typically include a capital improvement plan (CIP) that identifies long-term capital spending needs over a five- or 10-year period. The capital budget will identify funding sources over multiple years, including General Fund revenues, special taxes, user charges or fees, federal grants, reserve funds, and long-term debt (proposed or approved).

Creating and justifying capital expenditures is far more challenging for most state and local governments because these investments are not visible but considerably more expensive. Consider, for instance, that 70 percent of infrastructure assets are underground, but it costs $140,000/mile/year to maintain roads.

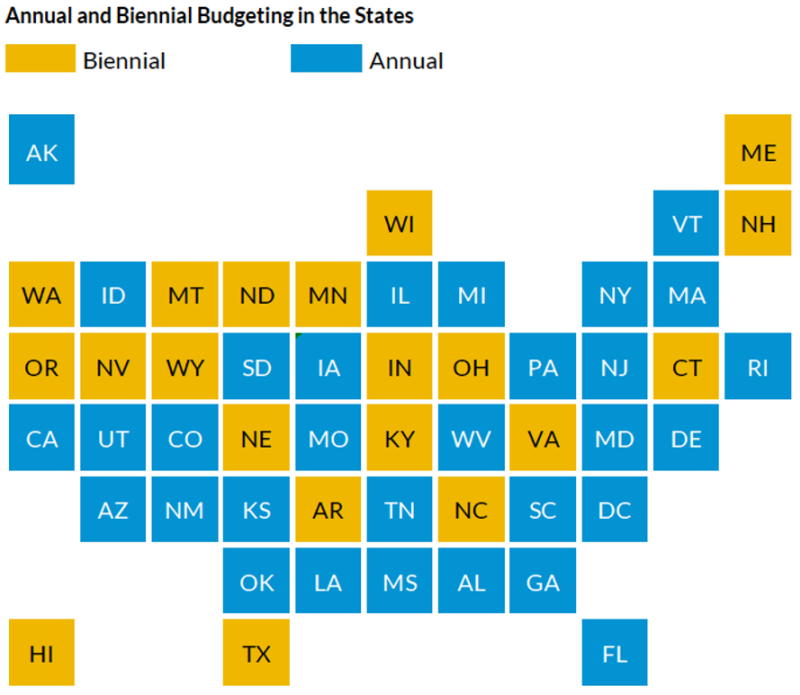
In some instances, spending on capital improvements may require voter approval, as related expenditures are paid for using special tax revenues (e.g., capital projects property tax levy) or general obligation bonds. Borrowing is an acceptable form of financing capital improvements so long as the repayment period does not exceed the asset's useful life. Borrowing should not be used to balance the operating budget. Given the significant costs associated with capital improvements and their potential impact on operating costs, operating budgets, and capital budgets are inextricably linked, as substantive changes in one will impact the other and vice versa.

Most people believe—incorrectly – that governments adopt a single budget. In reality, governments adopt multiple budgets, known as appropriation bills (or spending bills). Up to 13 different appropriation bills must pass both houses of Congress before they go to the President. Appropriation bills may be combined into an omnibus appropriations bill. State and local governments pass fewer bills. The Washington legislature, for example, approves three separate appropriation bills – operating budget bill, capital budget bill, and transportation budget bill.

Governments adopt separate budgets for off-budget entities that are reported in a separate stand-alone budget. While the Federal Reserve System (the Fed) is part of the federal government, the agency has autonomy over its finances with interest on U.S. government securities, foreign currency investments, fees for services provided to depository institutions (e.g., automated clearinghouse operations), and interest earned on loans to banks covering its operating expenses with remittance of any excess funds to the U.S. Treasury. Government-sponsored enterprises, such as the Federal Home Loan Banks, also fall outside the federal budget processes as they are privately owned, and their debt does not bear the full faith and credit of the U.S. government.

ANNUAL VS. BIENNIAL BUDGET

A vast majority of states prepare and present an annual budget. Several states prepare a biennial budget with an annual session. In other words, the state prepares and presents a two-year budget and adjusts the biennial budget at the end of the first year.



Biennial budgeting states generally enact separate budgets for each fiscal year at once. They include Arkansas, Connecticut, Hawaii, Indiana, Kentucky, Maine, Minnesota, Nebraska, New Hampshire, North Carolina, Ohio, Oregon, Virginia, Washington, and Wisconsin. True biennial budgeting—enacting a single two-year budget—is rare, although still practiced in North Dakota and Wyoming. States with biennial budgets and biennial sessions are some of the smallest in the nation — Montana, Nevada, and North Dakota. The exception here is Texas.

Source: National Association of State Budget Officers and Tax Policy Center

INCREMENTALISM AND BUDGET REFORMS

Budgeting is many things to public organizations. It's a mechanism to plan and develop a strategy for the coming year. It's a tool to evaluate how well managers manage. It's a way to evaluate if and how an organization's resources are connected to its priorities. It's a tool to get feedback from key stakeholders about an organization's successes and failures. For governments, the budget is a legally binding document that commits it to a spending plan for the coming year(s). But fundamentally, budgeting is a form of politics. Resources are scarce, and budgeting is the process by which organizations allocate those scarce resources. As such, budgeting is about managing conflict.

Budgeting in governments, and most large bureaucratic institutions, is an *incremental* process. That is, the focal point for each year's budget is an incremental increase or decrease over last year's budget. Put differently, there's an old adage: "Most budgets are last year's budget plus three percent."

Since the Great Recession, most budgets have been last year's minus three, five, or 10 percent. For budget policymakers, conflicts and compromises are often around that annual percentage change or *increment*. This assumes that last year's budget – or *base budget* – fairly represented the organization's goals and priorities. If this is not true, then debating on incremental change will amplify the disconnect between resources and priorities. In fact, for most public organizations, that disconnect is persistent and pervasive.

Historically, governments have prepared line-item budgets that place significant emphasis on inputs. Unfortunately, line-item budgets do not present information in a format that connects the mission to the organization's resources. Most have experimented with various budgeting models designed to "reform" the line-item format and incrementalistic tendency. One of the most popular reform strategies is to allocate resources not through political bargaining but in a more mechanical or formula-driven way driven by priorities or goals. For roughly 50 years, one of the most popular strategies has been *performance budgeting*. In this format, the organization allocates resources not according to inputs or line items like salaries or supplies but rather according to the level of overall resources, regardless of inputs needed to achieve some desired goal or outcome. Some governments extend this model into a *Price of Government* or *Priorities of Government* approach. Under this model, citizens identify the levels and outcomes of government services most important to them, and the government allocates packages of resources to achieve those outcomes.

Performance budgeting and the "Priorities of Government" approach are not mutually exclusive. Cities like Redmond, WA, and Somerville, MA, have implemented performance-based budgeting programs that are tightly connected to strategic priorities. In the Somerville model, departments orient their budget requests around outcomes rather than budget inputs or *line items*. For example, the library system requests its budget in terms of the cost per library patron served, not just in terms of payroll, commodities, equipment, and other line items.

A few state and local governments have experimented with versions of *zero-based budgeting* (ZBB). Under ZBB, the organization assumes there is no such thing as a base budget. Each year, departments and programs must justify everything in their budget. Much of the money state and local government spend is "required by law" or "necessary for public safety," so a large portion of a government's budget cannot be cut through a ZBB process. Some versions of ZBB require departments or programs to connect their non-required spending to the organization's strategic goals or priorities. Proposed spending most closely connected to those goals will likely make its way into the final budget and vice versa. In some ZBB models, departments and programs must present decision-makers with "scenarios" or "decision packages" that identify what will happen if their department or program does not receive a portion of its base budget. All these innovations are designed to remove some or all of the pure political bargaining from budgeting.

That said, most governments and non-profit organizations continue to practice traditional, incremental, line-item budgeting.

OPERATIONALIZING EQUITY AND SOCIAL JUSTICE IN STATE AND LOCAL BUDGETS

City of Seattle Race and Social Justice Initiative (RSJI) is a citywide effort to end institutionalized racism and race-based disparities in government. The Race and Social Justice Initiative leads with racism because race has shaped institutions and policies in the U.S. in ways that have prevented racial equity. When the City of Seattle launched RSJI in 2005, no other government had ever undertaken an effort that focused explicitly on institutional racism. Over the years, several city and county governments have initiated equity and social justice initiatives in their budget processes, including King County (WA), Minneapolis (MN), Madison (WI), Portland (OR), and San Antonio (TX), to name a few.

To be effective, race and social justice initiatives will require concerted efforts in every department in every state or local government. The Seattle Office for Civil Rights leads equity and social justice initiatives in the City and supports the City's departments and staff. Every department has a "Change Team" – i.e., teams facilitating discussions on race, racism, and strategies to overcome institutional barriers to racial and social equity. Departments develop processes that explicitly guide the development, implementation, and evaluation of policies, programs, or initiatives to promote racial equity. The City of Seattle's Racial Equity Toolkit guides the process and requires departments to

- **define racially equitable community outcomes** associated with their program or initiative, focusing on key opportunity areas (e.g., education, community development, public health, environment, criminal justice, and affordable housing)
- **analyze qualitative and quantitative data, and engage community partners**. Conversations with community stakeholders and comparative data would help identify the root causes or factors that can be used to explain racial inequities (e.g., lack of access, bias in processes, lack of racially inclusive engagement)
- **use data to design programs, policies, or initiatives**. They must also outline the expected outcomes (benefits) and unintended consequences (burdens). Recognizing that not all policies will have equitable results, departments must identify strategies that would lead to a long-term positive change or re-align the department's work to achieve racially equitable outcomes
- **evaluate programs to raise awareness and be accountable**. Evaluations would then be used to track impact and identify issues initiatives or programs could not address.

Social justice initiatives face significant challenges, the largest being existing mandatory expenditures, the incremental nature of budgets, and the pervasiveness of restricted revenues, making it extremely challenging to shift resources to under-resourced programs or policy priorities where racial inequities are prevalent. Without new revenues, preferably from progressive taxes, social justice initiatives will have to compete for limited resources.

THE BUDGET PROCESS

Public managers can't control many of the factors that affect their budgets. Managers in government can't control the broader economy. Non-profit managers can't do much to affect the financial health of the foundations that grant them money or individuals who support them through donations. Managers across the public sector can do little to affect rising costs for employee health care, new technology, wages and salaries, and other factors that drive growth in expenses. The best we can do is understand these trends, forecast them to the best of our ability, and help policymakers understand the trade-offs these trends put in play.

But public managers can control how they make their budgets, also known as the *budget process*. In fact, the process is the only part of budgeting that public managers can control. In particular, you alone can answer many of the key questions surrounding each of the three main budget process concerns:

- Who proposes the budget? Do you develop and propose your budget on your own? When developing your initial assumptions, do you solicit input from program managers or other subordinates, your board, council or other policy leaders, outside funders, or other key stakeholders? Do you ask department heads or other subordinates to develop and submit their budgets?
- What information is introduced into the budget process, and when? Do you share the key budget assumptions with program managers, line staff, and other stakeholders? Do you connect budgeted spending with key performance targets? If so, do you make those targets available to other stakeholders? If your budget calls for cuts, do you share when and how those cuts will happen? Do you explain why you chose the cuts you chose? Do you share that information with the entire organization at once or through meetings with individual program managers/department heads/etc.?
- Who decides on final budgeted revenues and spending? Do you afford program managers/department heads/etc., the latitude to propose their own final budget? Does your council/board approve the budget in one action or in stages? If you have the authority to make budget *amendments* or *re-appropriations?* Do you use it, and when? Does your budget include both operations and capital projects, or just operations?

For this and many other reasons, it is important to understand some of the main features of public organizations' budget processes. This discussion is focused on governments' budget processes, mostly because those processes are comparable and are often prescribed by law. That said, many of the basic features of those processes can also apply to non-profits. Moreover, non-profit managers need to understand how government budgets are made, given the centrality of government funding to many non-profit organizations.

BUDGET PROCESS
STATE AND LOCAL GOVERNMENTS

The budget processes of state and local governments share some common characteristics. Most governments follow these basic steps:

1. **Strategic and Department-Level Planning**: This process often begins five to six months before the start of the next fiscal year. The chief executive (governor, mayor, city manager, county administrator, etc.) will issue a budget call highlighting their policy priorities. Department heads and program managers must prepare budgets based on the executive's priorities and their own spending needs. The budget call will include information about expected revenue changes – based on the prevailing economic environment and detailed instructions and assumptions that must be used to prepare the budget (e.g., cost of living adjustments, and mileage rates). The call will also contain detailed instructions on how agencies and departments are expected to prepare budget proposals (e.g., format) and budget calendars to ensure program and departmental budgets are prepared in a timely fashion.
2. **Revenue Forecasting:** For most state and local governments, revenue forecasting begins with national and region-specific forecasts of economic activity. For this, governments frequently use proprietary and national data to predict changes in population, wages, employment/unemployment, income, consumer confidence, market performance, and assess changes in

key sectors in the state or region. Regression models are frequently used to forecast tax revenues. These models incorporate historical data and inputs on expected changes in policy (e.g., changes in marginal income tax rates). Most states and large local governments have a consensus revenue forecast group comprising executive and legislative staff. In seven states, the governor's office alone prepares the estimates (Arkansas, Georgia, Minnesota, New Jersey, Oklahoma, South Carolina, and West Virginia). Others hire consulting firms that prepare, present, and revise multi-year revenue forecasts (Hawaii, Nebraska, Nevada, and Washington). Revenue forecasting is an ongoing process that is revised throughout the preparation, approval, and execution phases of the budget cycle. Revenue officials (treasurer, chief financial officer, finance director, etc.) frequently track economic trends, compare revenue projections to actuals, and use that information to recommend changes during the budget year or the following fiscal year. Some governments' revenues are so volatile that within-year budget changes are frequently required. Volatility in revenues is a function of the volatility of the revenue stream and the share that the stream represents. For example, increased reliance on taxes on oil and minerals (also known as severance taxes) means states like Alaska, North Dakota, and Wyoming have higher volatility scores compared to states like Texas and Pennsylvania, as the latter report a smaller share of revenues from severance taxes. Personal income and sales taxes are typically more stable, while corporate income taxes, like severance taxes, are significantly more volatile.

REVENUE FORECAST VS. CASH FLOW FORECAST

Forecasting has increasingly become an important fiscal planning tool. As the name suggests, to forecast is to "predict or estimate future events." This is often challenging in volatile economic environments. Finance officers will forecast revenues and incorporate estimates in the proposed and approved budget. Proposed and approved budgets are the basis for preparing cash flow forecasts (also known as cash budgets). Unlike revenue forecasts, which are multi-year projections, cash flow forecasts are frequently on a monthly basis. They translate an adopted budget to monthly cash inflows (receipts) and cash outflows (expenditures). This exercise is especially important if cash flows are lumpy. For example, cash inflows from sales taxes or cash outflows for salaries and benefits are monthly and more or less predictable. However, cash inflows from property tax or cash outflows on debt service are lumpy, with payments on a quarterly or semi-annual basis. Similarly, non-profits will receive sizeable cash donations at the end of the year or following a capital campaign/fundraising event. They will frequently be awarded grants and contracts but on a reimbursement basis. That means they'll incur costs – and make payments – before reimbursement is received. Therefore, managers need to plan when and to what extent they'll draw on existing cash reserves, liquidate investments, tap their line of credit, or issue short-term notes. Conversely, they'll use the cash flow forecast to plan how they will restore reserves, invest in safe money-market instruments, or pay off short-term debt.

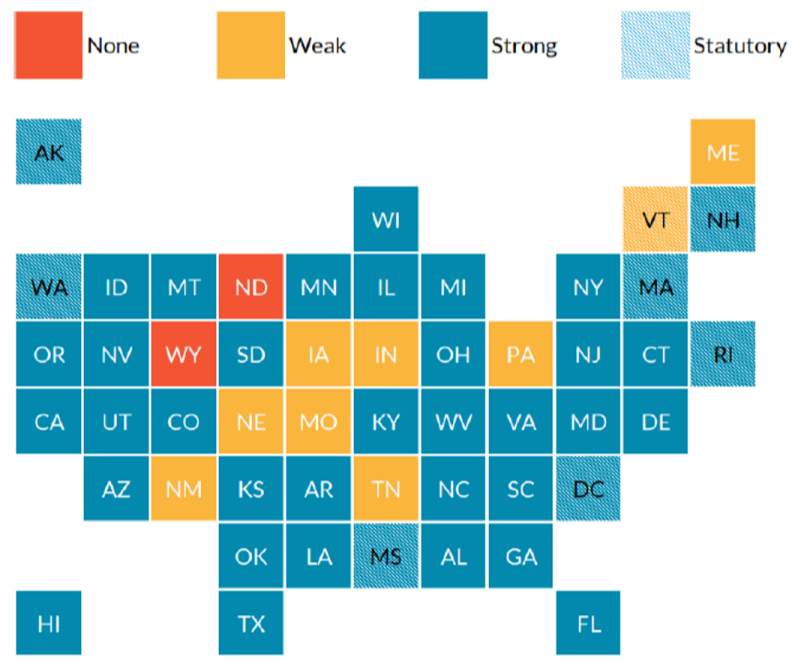
3. **Executive Preparation:** Once budgets are submitted to the executive office, budget staff will review departmental and program budget requests and use these requests to prepare the proposed budget. That's not to say that departmental and program budget requests are adopted as is. In fact, department heads and program directors are often asked to present and defend their budgets, especially if budgets are not consistent with the executive's priorities or exceed budgeted allocations.
4. **Legislative Review and Adoption:** The legislative review process, which often integrates public hearings, begins one to two months before the start of the fiscal year. Legislators will

review the executive's proposed budget, question department and agency heads about their spending plans, and recommend changes that would be included in the final appropriations bill or approved budget. A vast majority of legislative bodies in government will hold public hearings. For states, hearings are part of the regular budget legislative session. For local governments, budget hearings are typically stand-alone public meetings. Budgets are often adopted two to three weeks before the start of the fiscal year, though, in some instances, budget adoption may be delayed. Once legislators pass a budget, the chief executive (governor, mayor, city manager, county administrator, etc.) will sign it. Governors in 44 states can use their line-item veto powers to reject parts of the legislative budget even though doing so would infringe on the legislature's appropriation authority. (i.e., power of the purse). Vetoes can be overridden, typically with a legislative super-majority vote (three-fifths or two-thirds); otherwise, vetoed items do not become part of the approved appropriation, and the deletions or deductions stand.

BALANCED OPERATING BUDGET AND BALANCED BUDGET REQUIREMENTS

Balanced Budget Requirements (BBRs) are constitutional or statutory rules that prohibit states from spending more than they collect. For some governments, this means budgeted revenues must equal or exceed budgeted expenditures when the budget is passed. This is also known as balance "at adoption." For others, it means budgeted revenues and expenditures must equal actual revenues and expenditures, also known as balance "at conclusion."

In most states, the BBRs apply to just the General Fund; in others, the requirement applies to other governmental funds. In some governments, budgeted revenues and expenditures must equal or exceed actual revenues and expenditures at periodic intervals throughout the fiscal year.



Strong balanced budget requirement meets one or more of the following criteria: 1) requires the governor to sign a balanced budget; 2) prohibits the state from carrying over the deficit into the following year or biennium; or 3) requires the legislature to pass a balanced budget, accompanied by within fiscal-year fiscal controls or limits on supplemental appropriations. A statutory designation indicates that all balanced budget rules in that state are statutory, otherwise, the balanced budget rules are in the state's constitution.

Research shows stricter BBRs – particularly those that prohibit states from carrying over deficits into the following fiscal year – are associated with rapid spending adjustments resulting in greater spending volatility as governments cut spending to meet the balanced budget requirement. In some states, BBRs have incentivized unsound budgeting and accounting practices, including frequent use of inter-fund transfers, underestimations of long-term obligations, and the frequent use of asset sales. That said, states that have strict BBRs are more likely to maintain higher reserve balances. The presence of balanced budget laws and higher-than-average reserves means that these governments are more likely to have a higher credit rating and as a result, their borrowing costs are lower.

Source: *Tax Policy Center Briefing Book*

5. **Implementation:** Once the budget is approved, department heads and program managers will implement the approved budget over the next 12 months. Most organizations anticipate changes in forecasted revenues and budgeted spending. They'll plan for mid-year adjustments, some of which may require formal modifications to the adopted budget. The central budget

office will closely monitor the execution processes and adjust next year's budget instructions accordingly.

6. **Audit and Evaluation:** This stage starts at the end of the fiscal year. It can take many months, depending on the organization's size, the complexity of the jurisdiction's chart of accounts, the size, and the professional skills of budget staff and treasury officers, to name a few. Every organization must "close its books" and prepare financial statements before a financial audit. They will also engage in evaluation processes on program effectiveness. The Governmental Accountability Office (GAO) is the audit and evaluation arm of the federal government. Two tasks include "auditing agency operations to determine whether federal funds are spent efficiently and effectively" and "reporting on how well government programs and policies are meeting their objectives."At the state level, the state auditor's office would prepare the government's financial statements and act as watchdogs over state agencies performing internal financial and performance audits. In 24 states, auditors are elected (therefore partisan). Appointed auditors serve as nonpartisan officials.

Even though the stages of the budget cycle are presented here as separate and distinct, they overlap a great deal in practice. For example, the budget's preparation typically begins six to 18 months before the start of the fiscal year, depending on whether the budget is annual or biennial. Thus, when the government is preparing next year's budget request, it is implementing the current year's budget and, in some instances, completing audit reviews, performance evaluations, and financial reporting of the prior year's budget.

Cities, counties, schools, and special districts generally follow the same basic process. In Washington State, most local governments follow a January 1 fiscal year. The mayor/executive/superintendent's staff review departments' budget proposals throughout the late summer and early fall and propose a budget in early September. The Council/Board debates the budget and revises it in late fall and early winter. At the City of Seattle, those proposed changes are articulated in Green Sheets that suggest a change to the Mayor's proposed budget. State law requires a passed budget by December 2. Most local governments do not have the same executive-legislative tensions as the state and federal governments, and local budget processes are rarely as formal. Still, the same basic processes, institutions, and incentives are at play.

BALANCING STATE AND LOCAL GOVERNMENT BUDGETS AMID THE COVID-19 RECESSION

Unlike the federal government, state and local governments must balance their budgets within the budget period or in the next budget period (see Balanced Budget Requirements). Additionally, existing laws prohibit state and local governments from using borrowed funds to pay for operating expenditures.

Practically every economic forecast predicts that the fiscal shock from the COVID-19 recession will be greater than the Great Recession. A prolonged recession and sluggish recovery would likely mean state and local governments must make significant budget cuts. We know from prior recessions that these cuts are more likely to occur in core public services, including healthcare, assistance to older people, and education, as these programs make up more than three-quarters of state or local government

spending.

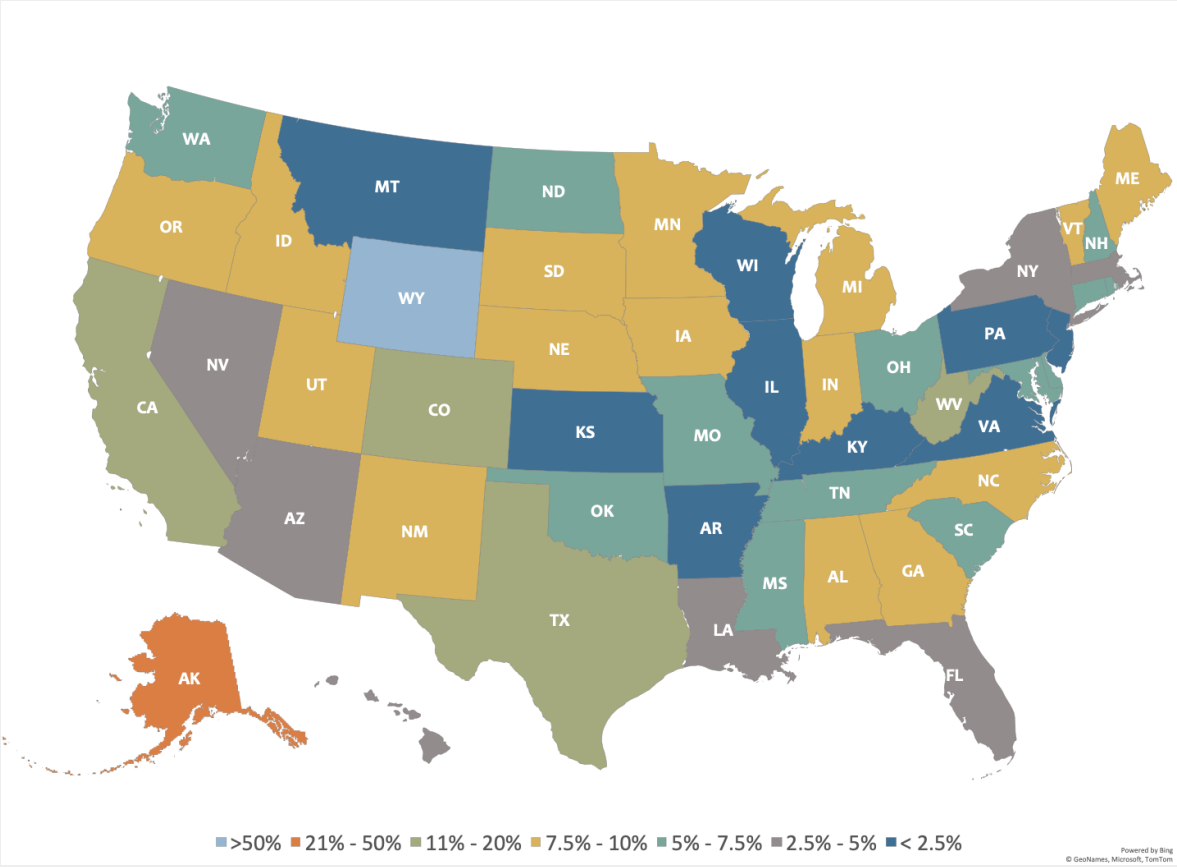
What will these governments do in the near term? Immediate expenditure responses will include hiring freezes, salary, and cost of living adjustment freezes, limits on the use of overtime, improved productivity by streamlining program delivery, cost-effective partnerships with other governments, non-profit organizations, and the private sector, audits of routine expenditures for savings, budget savings following reduced hours of operations, and data-driven targeted cuts in key programs and services. That said, balanced budget requirements frequently necessitate across-the-board (ATB) cuts – and practically every state and local government will use ATB cuts to address projected deficits. In the medium term, governments will likely eliminate programs and close facilities. In the long term, they'll lean on layoffs, furloughs, cuts to employee benefits, and delayed payments to vendors and other governments.

On the revenue side, they'll tap into reserve funds (e.g., Budget Stabilization Funds or unassigned General Funds balances) and rely on inter-fund (internal) loans to ease the cash flow crunch. They'll raise selected fees and taxes (e.g., vehicle registration fees, college tuition, fees for state parks, taxes on gambling (casinos, sports betting, and lotteries), tobacco, alcohol, and marijuana), improve revenue collection (including implementing tax amnesty programs), and mitigate fraud risk loss in government benefit programs (especially in benefit programs). Some will refinance outstanding debt obligations, especially in a low-interest environment. Over the long term, they will finance essential capital expenditures with debt to free up cash for the operating budget. They'll raise rates on major taxes (personal income, sales, and property) and revise their tax codes to reduce or eliminate deductions and exclusions – thereby expanding the taxable base.

SAVING FOR A RAINY DAY

Practically every state government (including the District of Columbia, Puerto Rico, and the U.S. Virgin Islands) has created a budget stabilization fund (BSF, also known as a rainy-day fund (or RDF)). They represent resources explicitly set aside to meet future needs. Many states maintain additional stabilization funds earmarked for specific expenses such as K-12 education (e.g., Idaho's Public Education Stabilization fund) or disaster relief (e.g., California Special Fund for Economic Uncertainties).

Budget Stabilization Funds (as a Percent of General Fund Revenues)



Source: National Association of State Budget Officers (NASBO)

Most local governments do not have formal rainy-day funds in the same way states do. According to recent research, only 11 of the 30 largest U.S. cities have an actual rainy-day fund. Instead, most localities use unassigned fund balances as informal reserves. However, unlike BSF, unassigned fund balances do not have formal constraints. These informal practices are not necessarily bad, but they're not as transparent and funds can be drawn down without setting limits or priorities on the use of these funds.

Funding mechanisms for BSF vary from state to state. Most states allow some or all year-end surpluses to flow to their BSFs. Others mandate deposits to the BSF based on a pre-determined formula. Others set aside funds each year through an annual appropriation process until the fund reaches its mandated cap. Research has shown that for governments to accumulate sufficient reserves, they must identify the source of funding using a pre-determined deposit formula and use approval procedures to withdraw funds from the BSF (e.g., meet the definition of emergency or deficit shortfall or require a super-majority vote). There are benefits to having BSFs. Not only do they provide budget flexibility – the reserves can prevent the need for mid-year budget cuts. Additionally, governments with strict deposit and withdrawal rules are more likely to have a higher credit rating and, as a result, incur lower borrowing costs.

BUDGET PROCESS
FEDERAL GOVERNMENT

The federal government's budget process is three processes in one. The president develops and proposes the *executive budget*, also known as the *budget request*. In Congress, the House Budget Committee and the Senate Budget Committee pass a *budget resolution* that identifies the main spending policies and targets for the Congressional side of the budget. The budget resolution allocates *budget authority*, or the power to incur spending obligations, and *budget outlays*, or the amount of cash that will flow from the Treasury to a federal agency. The budget authority must be re-authorized each year, even though many programs and services call for budget outlays that will span multiple years. It's not uncommon for a project to receive budget authority but not receive adequate budget outlays.

The third part of the process is that the House Ways and Means and Senate appropriations committees must pass a series of appropriations bills allowing the rest of the government to spend money. Once the appropriations bills are passed – usually following a lengthy conference committee process – and the President signs them, they become the federal budget.

The basic timeline for the federal budget process was outlined in the *Congressional Budget Act of 1974*. That process, with the goal of passing the new budget before the end of the federal fiscal year on September 30, is as follows:

The President's Budget

- ***October*** (or shortly after passage of the current fiscal year's budget): The President's *Office of Management and Budget* (OMB) works with executive agencies to develop their budget requests for the coming fiscal year. Executive agencies include all the cabinet-level agencies like the Departments of State, Treasury, Justice, and Education, as well as the federal judiciary, independent regulatory agencies, and several other parts of the federal government. OMB reviews the requests and makes changes, subject to the President's guidance, before combining those requests into the President's budget.
- ***February*****:** President submits the budget request, usually concurrent with the State of the Union address. The House and Senate Budget Committees and House and Senate Appropriation Committees, working through their subcommittees, hold hearings and develop appropriation bills that provide funds for agency operations.

Congressional Budget Process – Budget Resolution and Appropriations Process

- ***March-April***: No later than April 15th of each year, the House and Senate Budget Committees draft and manage the passage of their respective *budget resolutions*. The congressional budget resolution establishes overall revenue and spending totals, allocates spending among major government functions (e.g., national defense, transportation, health, and agriculture), sets limits on resources for discretionary spending programs, and establishes target levels for mandatory spending. Once Budget Committees pass their respective budget resolutions, they go to the House and Senate floors, where they can be amended by majority vote. Representatives from the House and Senate meet in conference to reconcile differences in the House and Senate budget resolutions. The House and Senate then vote on the conference

agreement, which, when passed, becomes the congressional budget resolution. Since the congressional budget resolution is an act of Congress, it does not require the President's signature. Since it does not go to the President, it cannot enact spending or tax law. The congressional budget resolution, therefore, serves as a blueprint for the actual appropriation process and sets targets for other congressional committees that can propose legislation directly.

- ***May-September:*** The adopted budget resolution includes a table called the "302(a) allocation" that sets the cap on spending for the appropriations bills. The House and Senate Appropriations Committees each have 12 subcommittees, and each subcommittee crafts an appropriations bill determining the spending authority for the programs under its jurisdiction. The House and Senate pass their appropriations and reconciliation bills. Conference committees resolve differences in the final appropriations and reconciliation bills. The President signs those bills.
- ***June-July:*** House and Senate committees prepare *reconciliation bills*. Reconciliation occurs if Congress needs to legislate policy changes in mandatory spending or tax laws to meet the annual targets laid out in the budget resolution. Said differently, the reconciliation bills implement changes in *authorizing legislation*, or the laws determining spending on entitlement programs, required by the budget resolution. Most resolution measures are related to entitlement spending like Medicare or to changes in tax law, namely tax cuts.
- ***October 1:*** Fiscal year begins.

The Congressional Budget Act of 1974 established the formal rules of the federal budgeting game. However, in the last few decades, the formal budgeting process explains less and less how the federal government spends money. Consider the following:

- If the appropriations bills are not signed into law by October 1, Congress must pass a *continuing resolution*. This is a temporary measure that extends the existing appropriations bills for a short time, usually 30 to 60 days. Missing the October 1 deadline to enact all 12 appropriation bills is not unusual; in fact, that deadline has not been fully met since FY 1997, and Congress has passed at least one continuing resolution in 16 of the last 20 years. In some years, the government operated on continuing resolutions for most of the next fiscal year.
- For most of the past 20 years, Congress has not passed a budget resolution. Without a resolution, the House and Senate usually pass different substitute versions of the budget targets that would otherwise appear in the budget resolution. Those substitutes or *deeming authorization* bills are advisory, rather than binding, on the appropriations committees. Said differently, the budget resolution mechanism has not been an effective tool for imposing fiscal discipline.
- At any point during the fiscal year, Congress can impose a *rescission* that cancels existing budget authority. The Impoundment Control Act of 1974 specifies that the president may propose to Congress that those funds be rescinded. If both Houses have not approved a rescission proposal (by passing legislation) within 45 days of continuous session, any funds being withheld must be made available for obligation. The threat of rescission, and in some cases the actual use of it, has become a way to enforce de facto budget priorities that were

never written into the budget resolution or appropriations bills. The best recent example is Congress's persistent attempts to strip funding for the Affordable Care Act (ACA, more commonly referred to as "Obamacare").

- In 2011, Congress passed the Budget Control Act (BCA). This law established that unless Congress can reduce the annual budget deficit by a predetermined target, automatic cuts in discretionary and selected entitlement – known broadly as the *sequester*– will take effect. Unless amended, BCA extends the sequester through 2021. Neither the Budget Act nor any other piece of federal budget legislation makes mention of anything like the sequester. BCA was the latest of many *statutory budget caps* designed to limit federal government spending automatically. Those caps are not part of the existing budget process framework laid out in the Congressional Budget Act.
- Many of the federal government's most expensive activities are now paid for outside the budget process. The best recent example is the wars in Iraq and Afghanistan. By some estimates, the two wars cost $1-3 trillion or somewhere between $2,000 and $10,000 for every US taxpayer. Congress appropriated around $50 billion for "The Surge" of US troops into Iraq as part of the FY2006 Defense Department Appropriations bill. The remainder of the funding was allocated through *supplemental appropriations* and *budget amendments*. Supplemental appropriations are appropriations bills that add to an existing appropriation. They are designed to provide resources for unexpected emergencies, such as disaster relief after a hurricane or earthquake. Budget amendments are changes to budget outlays to that same effect. Most of these supplemental/emergency appropriations were financed with debt.

SUPPLEMENTAL APPROPRIATIONS AND THE CORONAVIRUS PANDEMIC

Since March 6, 2020, lawmakers have enacted four laws in response to the pandemic – The Families First Coronavirus Act (March 18, 2020 – $192 billion), The Coronavirus Aid Relief and Economic Security Act (March 27, 2020 – $1.7 trillion), the Paycheck Protection Program and Healthcare Enhancement Act (April 24, 2020 – $483 billion), the Consolidated Appropriations Act (December 27, 2020 – $900 billion), and the American Rescue Plan (March 11, 2021 – $1.9 trillion). The five appropriation bills increased federal government outlays by $5.2 trillion.

For context, following the start of the Great Recession, Congress approved three major pieces of legislation, including the Economic Stimulus Act (February 2008 – $151.7 billion), the Emergency Economic Stabilization Act that created the Troubled Asset Relief Program (October 2008 – $700 billion; TARP recovered $443 billion), and the American Recovery and Reinvestment Act (February 2009 – $840 billion).

- Since roughly 1990, Congress has used budget *reconciliation to* pass several major pieces of legislation, including the "Bush tax cuts," the Medicare prescription drug benefit ("Part D"), and the Affordable Care Act. Reconciliation is a powerful tool because, by Senate rules, reconciliation bills are not subject to filibuster. A *filibuster* is when an individual Senator kills a proposed bill by "talking it to death," taking advantage of Senate rules allowing unlimited debate. To end a filibuster, the Senate must invoke *cloture* with a two-thirds majority vote of all Senators. Given the highly partisan character of the Senate throughout the past few decades, the threat of a filibuster is always present, which imposes a de facto two-thirds

majority to approve virtually every piece of legislation proposed in the Senate.

BUDGET PROCESS
NON-PROFIT ORGANIZATIONS

Unlike governments, non-profits are not required to prepare or adopt a budget prior to the start of the fiscal year (they are required to prepare audited financial statements and file with the Internal Revenue Service tax form 990 at the end of the fiscal year or tax year). Non-profits must therefore be internally motivated to prepare, review, and adopt a balanced operating budget – even though no requirements exist in law. Moreover, the adopted budget should become an unwavering policy guiding the organization throughout the budget period.

Non-profits' budgets should reflect the organization's priorities as outlined in their strategic plan. The non-profit board serves as the organization's governing body with responsibility and oversight of mission, leadership, and finances. While budgets are prepared by program managers together with finance officers and the chief executive, the non-profit board retains the ultimate responsibility of not only setting the organization's strategic direction but also ensuring that there are adequate resources to execute the strategic plan.

The chief executive, together with the finance director, will outline priorities as stated in the organization's strategic plan and given the uncertainty in the external operating environment (e.g., changes in federal or state laws or funding priorities, volatility in the market, and changes in contributions). Having prepared their program budgets, program managers must defend their proposals in a budget review meeting with the chief executive and the finance director. Following an amendment process, the finance director will merge the program budgets, incorporate administrative and overhead costs, and prepare a complete budget proposal for the board to consider.

Most non-profits prepare their operating budgets on a cash basis. Budgets prepared on a cash basis emphasize when cash is received or paid. Budgets prepared on an accrual basis shift the focus away from cash inflows instead of focusing on when revenues are earned and expenses accrued. Does this matter? Absolutely! If the organization is budgeting on a cash basis, expenses that do not result in a cash outflow (e.g., depreciation) would not be included in the budget – even though the expenses represent a real cost for the organization.

While the operating budget represents the organization's priorities for the budget period, non-profits that require capital investments to execute their business model (e.g., universities, museums, and hospitals) frequently consider their capital spending priorities separately from their operating budget. Why? Well, a couple of considerations are important. First, most non-profits finance capital expenditures with non-operating revenues (e.g., proceeds from a capital campaign, accumulated unrestricted reserves, or long-term debt). Second, an assessment of project viability is necessary, as capital investments should provide a return (or, at the very least, cover initial investment costs). Therefore, an assessment of project viability would be prudent. This process requires a different set of analytical tools (e.g., net present value analysis and annual cash flow forecast). Finally, the budget period for capital expenditures is irrelevant, as the focus shifts towards the asset's useful life (e.g., 30 years for buildings).

The (operating and capital) budget review and approval process will be contingent upon the size of the organization's budget, the number of board members, and the board committee structure. The review process frequently begins with a budget presentation to a finance committee. The finance committee pays special attention to the long-term fiscal implications of the proposed spending priorities given current revenue streams. Having approved the budget, an executive committee (made up of board officers and chairs of various committees) reviews and approves the budget, after which it is presented to the entire board for final approval. Once approved, the finance director should report, on a quarterly (or monthly) basis, year-to-date spending, budget versus actual reports (with variance analysis), working capital cash balances, and key changes in programs or policies that affect the operating budget.

"CREATING" BUDGET BALANCE

One of the main criticisms of state and local budgets is that "balanced budgets" might actually hide structural deficits. There are two reasons for this. First, most governments prepare their budgets on a cash basis rather than an accrual basis. Differences in timing and recognition of revenues or expenses mask the long-term effects of budget decisions. Second, managers and policymakers can employ various tactics to create a "phantom" balanced budget.

The pressure to present a balanced budget results in the frequent use of budget gimmicks. Gimmickry can be defined as a practice that intentionally violates accounting rules, budgeting norms, or legal requirements meant to ensure fiscal prudence. They are used to hide program costs, revenue shortfalls, projected deficits, or bypass formal budget process requirements (e.g., adopt a balanced budget).

The temptation of the quick fix has seduced just about every lawmaker. They include:

- **Use of unrealistic budget assumptions**. Use of overly optimistic assumptions that result in revenue projections far exceeding the economic reality, masking the size and magnitude of the government's structural deficit and growth in long-term obligations (e.g., federal debt or unfunded pension obligations).
- **Inter-fund transfers and fund sweeps**. The transfer of resources in and out of funds just before or after budget approval to present a balanced budget.
- **Use of one-time revenues**. State and local governments have used proceeds from asset sales, privatizations, and contract arrangements to balance the current period budget – even though budgets for the out-years remain unbalanced.
- **Accelerating revenue collection.** This changes when revenues are recognized, which can change the budget balance's complexion in a given fiscal period.
- **Putting off payments or ignoring known costs**. Preparing budgets on a cash basis means costs incurred in the current year that are due in a future period are not included in the current budget. When governments offer pension and OPEB benefits but fail to make the contributions necessary to meet future costs, they are essentially borrowing from their future taxpayers.
- **Keeping off the record**. Shift spending to off-budget entities (OBEs) that issue non-guaranteed debt backed primarily with non-tax revenues and are beyond the control and scrutiny of taxpayers.
- **Delaying intergovernmental payments**. This is a common tactic because governments have limited ability to collect revenues from each other.
- **Counting on revenues or savings that are unlikely to materialize – the "Magic Asterisk."** Resources to cover the new spending would come from vaguely described efficiency gains in existing programs. Programs expected to produce those new resources were identified with an asterisk in President Reagan's budgets, hence the name "Magic Asterisk."

"Using proceeds from the sale of government assets as revenues to cover operating costs and thinking you have made the public better off is about the same as burning pieces of your house for heat and thinking that you are better off because you haven't had to buy firewood. "

John Mikesell (2011) "Fiscal Administration: Analysis and Application for the Public Sector"

BUDGET POLITICS

Within the formal budget process, there are budget politics. For most public managers, the politics and strategy of making a budget are just as important, if not more important, than the formal budget process. Here we briefly discuss some of the most common budget-making strategies. Some of these strategies are more appropriate if the goal is to limit spending, while others are more appropriate if

a department or agency wants to expand programs, or at the very least maintain the status quo. They include:

- Cultivate a clientele. Effective public managers understand who "uses" and who "benefits" from their programs and services. They also understand that those users are the best advocates for a program. This is especially true for programs that benefit children, the disabled, and other vulnerable populations. A simple anecdote about a program from one of its clients can be exponentially more powerful than a well-done differential cost analysis.
- Make friends with legislators. Legislators are much more likely to support a program when they understand that program and who benefits from it. This is particularly true when that program benefits its constituents, and when the legislators played a role in creating, expanding, or protecting it. Of course, this strategy comes with risks. Governors, mayors, and other executives often try to limit department heads' and program managers' access to legislators to prevent staff relationships with legislators that might undermine their own budget priorities.
- "Round it Up." This is especially true on the spending side. Rounding up caseloads, spending estimates, interest expenses, and other costs will expand the budget authority and, if actual spending falls short of budgeted spending, create an end-of-year "surplus." The risk is that persistent over-budgeting for spending can undermine a budget maker's credibility.
- "We have a crisis." Some managers like to project that major revenue shortfalls or spending cuts are imminent, even if they aren't. Staff who believe they might face difficult budget cuts are more likely to manage their programs with careful attention to spending discipline and timely collection of revenues. Of course, this can also lead to staff burn-out and ruin a manager's credibility if said crisis never happens.

A few strategies are most effective when a manager is asked to trim their budget.

- "Across-the-Board." Some managers prefer to respond to budget cuts by cutting all their programs equally, or "across the board" (ATB). To staff, ATB cuts appear fair, transparent, and simple. Cutting all programs equally assumes those programs have identical cost structures, current staff openings, and the capacity to generate revenues. That's rarely true. The result is that ATB often affects different programs and services in quite different ways, even though the intent is to bring about a uniform impact. Sometimes those differential effects can themselves be valuable to managers.
- "Do Nothing." An unchanged budget is, in effect, a budget cut. If a program is given no new resources it must find other ways to address cost inflation, growth in caseloads, staff cost of living adjustments, and other growth in spending. Sophisticated managers argue, often successfully, that a "steady state" budget (i.e., no new resources, but no cuts) is a fair way to take a budget cut.
- Lean on precedent. In a cutback environment, what happened in the past can be a powerful tool for managers. No manager wants to have to choose how to cut his or her program. But if they can say, "I didn't really choose these cuts; we're just following past precedent," they're afforded some degree of political cover. Whether past precedent really dictated those cuts, or whether there even is a past precedent, is often debatable.

- "It's essential for public safety." Managers can try to position their program as vital to public health or safety. Sometimes these connections are obtuse, at best. For instance, during the Great Recession, many local libraries protested cuts to library hours by pointing out that libraries are a safe and supportive gathering place for teenagers. Unsupervised teenagers roaming the streets would create, they argued, a serious public safety concern.
- Propose a study. Public organizations can rarely predict – or so they say – exactly how a budget cut will affect their clients, staff, and overall mission. So, in response to a cut, managers routinely propose to "study the issue." A study allows for more time to either identify potential cuts or for the political or economic environment to shift in ways that will obviate the need for a cut at all.
- "Cut the main artery." One way to respond to a requested cut is to cut the largest program that's most central to your mission (i.e. the "main artery"). Cutting that program is, in effect, threatening to cripple your program. Some policymakers will respond with a request for a smaller cut or a cut to a less mission-centric program. The danger here is what happens if policymakers agree to allow a manager to cut the main artery.
- "Just take the whole thing." If a program was cut recently, managers can take the request for an additional cut as an opportunity to offer to end the program. They'll ask: "We've already been cut to the bone, so what's the point of staying open?" or something to that effect. Whether additional cuts would really harm the program is often incidental to the argument.
- "You pick." Instead of proposing cuts, offer policymakers a range of options and ask them to decide which option the program should pursue. Like with "lean on precedent," this allows managers to avoid direct responsibility for specific cuts to his or her staff and other resources. This strategy is prone to backfire when policymakers respond by saying, "It's not my job to pick. You know your program better than anyone. You pick."
- "Washington Monument." In 1994, the federal government shut down after President Clinton and House Speaker Gingrich could not agree on a continuing resolution. President Clinton responded by ordering the National Park Service to close all of the key historic sites in Washington, D.C. One of the first to close was the Washington Monument. As the shutdown dragged on, President Clinton was able to frame the closed Washington Monument as a symbol of Congressional intransigence. The essence of the Washington Monument strategy is to propose cuts to a small but highly visible program.

And finally, managers often deploy a different set of strategies when attempting to expand their program's budget:

- "*It pays for itself*." Managers can sometimes argue that investing in a program will "pay for itself" through cost savings later. For instance, public health advocates have long argued that expanding childhood immunization programs pays for itself by reducing the incidence of communicable diseases like tuberculosis, measles, and rubella that place enormous strain and expense on public hospitals.
- "*Spend to save.*" Investments in technology, equipment, and infrastructure can save staff time, reduce paperwork, collect revenues faster, etc. – or that's how managers sell those investments in the budget process.

- "*Foot in the Door*." Many large, long-standing, popular public sector programs began small. An effective way to expand a program is to run a small pilot program, study, or demonstration project. Legislators and board members are generally willing to appropriate small amounts of money to try "innovative" approaches. With time, many of those small experiments morph into large-scale programs.
- "*It's just temporary*." Like "small innovations," legislators and board members are much more willing to provide temporary funding for a program or project than they are to provide permanent funding or budget authority. Crafty managers are able to convert temporary funding into either "ongoing temporary funding" or even permanent authority.
- "*Finish what we started."* This approach is especially popular with respect to capital projects. Many capital projects begin with an appropriation to analyze, plan, and design a capital project. With that planning in place, managers can make a compelling argument that it's necessary to appropriate more money to "finish what we started," often without regard for whether the plans are complete or whether the analysis suggests the project is necessary.
- "*Re-categorize*." Sometimes shifting a program to a different part of the budget is a necessary step toward expansion. For example, public health advocates have successfully argued that many public health activities like smoking cessation or diabetes prevention are in fact education or outreach programs. Within the education budget, they have access to a much wider range of funding sources and constituent champions. We've seen a similar dynamic with homeland security. Many programs in areas like crime prevention and cybersecurity were once local public safety initiatives but have since migrated to far more lucrative state and federal homeland security budgets.

Amortization: refers to the expensing of acquisition costs (minus residual value) or an intangible asset. The term is also used to refer to the schedule of payments for a loan or mortgage. These are frequently referred to as *loan amortization schedules*. The schedules detail outstanding loan balance, payment per period, principal paid per period, and interest expense per period – through maturity or end of the lending period. See also **depreciation**.

Accrual accounting: reports on a transaction when it has an economic impact, regardless of whether it spends or receives cash. Said differently, under the accrual basis of accounting, revenues are reported when earned and expenses are reported when incurred, regardless of when payment is received or made. See also **modified accrual basis**.

Adverse opinion: is an opinion made by an auditor that states that the financial statements do not fairly present the entity's financial position, results of operations, or cash flows in conformity with generally accepted principles. Also see **unqualified opinion**, **qualified opinion**, and **disclaimer of opinion**.

Allocation basis: is an observable metric we can use to measure the relationship between direct and indirect costs within a cost center. For example, square footage is a metric that can be used to allocate rent or depreciation costs.

Assets: a resource with economic value owned by an individual, company, or government with the expectation it will provide future benefits. Assets are reported in the balance sheet in reducing order of **liquidity**.

Bad debt expense: also known as *allowance for doubtful accounts* or *allowance for uncollectable,* is an estimate of receivables management expects will not be paid. Bad debt expense reduces the number of accounts receivable reported in the balance sheet and provides a more realistic picture of the amount management should expect will turn to cash as payments come due.

Balance sheets: present a summary of an organization's assets, liabilities, and equity position at a particular point in time (e.g., as of December 31, 20XX). Also known as *Statement of Financial Position* or *Statement of Net Position*.

Bankruptcy: proceedings provide financially distressed municipalities with protection from creditors by creating a plan between the municipality and its creditors to resolve the outstanding debt.

Board-designated endowment: also known as a *quasi-endowment*, is a fund that functions like an endowment but without external restrictions. A non–profit's board may designate a portion of the non–profit's investments to a fund with a specific objective in mind (e.g., capital campaign, working-capital reserve). Board–designated funds will be reported under net assets "without donor restrictions." See also **net assets**, **true endowment**, and **term endowment**.

Book value: reports the historical cost of an asset, net of depreciation. Book value is always less than historical cost. See also **historical cost**.

Budgetary solvency: refers to the government's ability to create a balanced budget that provides enough revenues to pay for expenses that occur within the budget period. See also **cash solvency**.

Business-type activities: also known as *proprietary activities*, are supported by user charges and fees for the goods and services it delivers.

Budget resolutions: establish overall revenue and spending totals, allocate spending among major functions of government (e.g., national defense, transportation, health, and agriculture), set limits on resources for discretionary spending programs, and establish target levels for mandatory spending. Since the congressional budget resolution is an act of Congress, it does not require the President's signature. Since it does not go to the President, it also cannot enact spending or tax law. It, therefore, serves as a blueprint for the actual appropriation process and sets targets for other congressional committees that can propose legislation directly.

Budget stabilization funds (BSFs): also known as *rainy-day funds* (RDFs), allow state or local governments to set aside surplus revenue for use during unexpected deficits.

Capital budget: is a state or local government's budget that accounts for the acquisition of property and equipment and all costs related to infrastructure investments. See also **operating budget**.

Capital improvement plan (CIP): is a physical and fiscal planning document that coordinates the timing and financing of capital improvements. CIPs identify long-term capital spending needs over a three-year or five-year period based on a review of existing infrastructure's age, condition, degree of use, and capacity with recommendations to either renew, replace, expand, or retire capital improvements. See also **operating budget** and **capital budget**.

Capital Projects funds: are used to account for and report financial resources that are restricted, committed, or assigned to the expenditure of capital outlays. Restricted or committed revenues may be initially received in another fund (e.g., General Fund), but must be subsequently transferred to the Capital Projects fund. See also, **General Fund**.

Cash equivalents: are investment securities that are meant for short–term investing. They are highly liquid and of high credit quality. They include commercial paperand marketable securities like money market mutual fundsand overnight repurchase agreements (Repos).

Cash Flow Statement: presents a summary of how an organization receives and uses cash to fulfill its mission for a financial period (e.g., for the year ending December 31, 20XX). Also known as *Statement of Cash Flows*.

Cash solvency: is the government's ability to generate and maintain cash balances to pay all its expenditures as they come due. See also **budgetary solvency**.

Commercial paper: an unsecured promissory note issued by large corporations, with excellent credit ratings, with a fixed maturity rarely more than 270 days.

Continuing resolution: a temporary measure that Congress uses to fund the federal government and avoid a government shutdown.

Contingent liability: is a probable obligation that may or may not arise depending on how a future event (e.g., a lawsuit) unfolds. A contingent liability should be recorded as an expense or loss on the income statement and liability on the balance sheet, or otherwise disclosed in the notes to the financial statements.

Cost accounting: also known as *managerial accounting,* is the process of creating information about costs to inform management decisions. Managers need good information about costs to set prices, determine how much of a good or service to deliver and manage costs in ways that make their organization more likely to achieve its mission.

Cost driver: a factor that affects the cost of an activity. A good cost driver is a reliably observable quantity that shares a consistent relationship with the indirect cost in question and the basis for allocating indirect costs.

Credit rating: an independent assessment a rating agency assigns to an issuer (or related bond) to indicate the likelihood the obligor will make payments on time and in full. Ratings range from Aaa/AAA to D – the lowest rating, typically indicating the issuer or obligor is in default.

Current assets: are all the assets that are expected to be sold, used, or converted to cash within a year. Current assets include cash, short–term investments, receivables, and inventory. See also **non-current assets**.

Current liabilities: are all liabilities that need to be paid within a year. Current liabilities include accounts payable, accrued salaries (or wages payable), and the current portion of long-term debt. See also **non-current liabilities**.

Debt issuance costs: are costs paid by the issuer for services relating to the selling of municipal securities – including general obligation bonds, revenue bonds, and notes payable to investors – and managing elements of the transaction. Issuance costs include fees paid to a municipal advisor, credit rating agency, bond insurance, underwriter or underwriting syndicate, and bond counsel, to name a few.

Debt service: is the sum of principal and interest to be paid in the current period, given outstanding long-term debt obligations. On the occasion that the government issues municipal securities, the cost associated with debt issuance would be reported as debt service in the period incurred.

Debt Service funds: are used to account for and report financial resources that are restricted, committed, or assigned to principal and interest expenditures. Restricted or committed revenues may be initially received in another fund (e.g., General Fund), but must be subsequently transferred to the Debt Service fund. See also, **General Fund**.

Deduction: is a dollar amount that reduces taxable income. Taxpayers have a choice of either taking a standard deductionor itemizing their deductions.

Defaults: include *technical default* (failure to comply with bond contract provisions), *pre-monetary*

default (unscheduled draws on debt service reserves), and the most severe type of default, *monetary default* (failure to pay interest or principal).

Deficit: or budget deficit, occurs when expenditures in the budget exceed revenues. A *cyclical deficit*is the result of a decline in revenues as a result of fluctuations in the economic cycle (e.g., an economic recession), and the expected increase in expenditures. A *structural deficit*is when a government's long-term spending exceeds its long-term revenues. It represents a mismatch between revenues generated by a government's current tax laws to fund ongoing essential public services. A fundamental change in taxing and spending policies is required to eliminate a structural deficit.

Deferrals: include *deferred inflow of resources* and *deferred outflow of resources*. A deferred inflow of resources is the acquisition of net assets that apply to a future period, whereas a deferred outflow of resources is the consumption of net assets that apply to a future period. Deferred inflows are substantively different from **unearned revenue**.

Depreciation: is the loss in value of a fixed asset (including improvements on land – such as site preparation, buildings, and infrastructure, office furniture, equipment, computers, and vehicles) with time, due to wear and tear. There are a wide variety of ways of estimating depreciation expense, including **straight-linedepreciation**, accelerated method, declining balance, and sum-of-the-years method – all of which would produce different estimates of depreciation expenses. *Depreciable assets*include improvements on land, equipment, leased assets, etc. *Non-depreciable assets*include construction-in-progress, art, and land (except land bought for mining or extraction).

Differential cost accounting: sometimes called *marginal cost analysis*, is the process of determining how a good or service's full cost changes when we deliver more or less of it.

Disclaimer of opinion: states that the auditor does not express an opinion on the financial statements. Also see **unqualified opinion**, **qualified opinion**, and **adverse opinion**.

Discretionary spending: is government spending controlled in annual appropriation acts approved by Congress. See also **mandatory spending**.

Direct costs: also known as traceable costsor controllable costs, are directly attributable to a cost center. They include salaries for staff who work entirely within a cost center, facilities and supplies used onlyby that cost center, training for cost center-specific staff, etc. Many public organizations further stipulate that a cost is direct to a cost center only if it can be controlled by that center's management. See also **indirect costs**.

Dividends: represent payments made by a company to owners of the company's stock. They represent the distribution of net income to investors and one of the ways investors earn a return from investing in stock.

Effective tax rate: is the ratio of tax liability divided by taxable base (e.g., taxable income or market value of a property).

Fiduciary Fund Statements: are prepared on a full accrual basis and include a *Statement of Net Position* and *Statement of Changes in Net Position*.

Fiscal accountability: is the government's responsibility to justify that their actions in the current period have complied with public decisions concerning the raising and spending of public money in the short-term (usually one budgetary cycle or one year). See also **operational accountability** (from GASB Statement No. 34).

Fund: a stand-alone, self-balancing set of accounts with a specific purpose. A fund is classified as a major fundif government officials believe that fund is particularly important to financial statement users (e.g., the General Fund) or whose revenues, expenditures/expenses, assets, or liabilities are at least 10 percent of corresponding totals for governmental or enterprise funds. See also, **General Fund**.

Filibuster: when an individual Senator kills a proposed bill by "talking it to death," taking advantage of Senate rules allowing unlimited debate. Filibusters allow legislators to debate over a proposed piece of legislation to delay or entirely prevent a decision from being made on the proposal.

Full cost accounting: is the process of identifying a good or service's full cost. The full cost of any service is the direct costs plus the indirect costs.

General Fund: is a *major fund* reported in the **Governmental Fund Statements (GFS)**. The General Fund is frequently the largest fund reported in the GFS. It is used to account for unrestricted resources or resources that are not required to be accounted for in other funds. For a majority of state and local governments, it is the fund that will account for a large proportion of expenditures related to spending priority areas like education, public safety (police and fire), public health, and transportation. These are services that are paid for using unrestricted property and sales taxes.

General obligation bonds: are borrowing by state or local government, backed by its full faith and credit, which essentially means taxing powers. For local governments (and some state governments), voter approval via referendum is required for that entity to issue general obligation bonds. See also **Revenue bonds**.

Governmental activities: are supported by taxes and other non-exchange revenues.

Governmental Fund Statements (GFS): are prepared on a **modified accrual basis** and include a *Balance Sheet* and *Statement of Changes in Revenues, Expenditures, and Fund Balances*. Activities reported in the GFS are those that are generally financed with revenues from taxes, intergovernmental transfers, and other non-exchange or non-market transaction-based revenue sources. The General Fund is a major fund reported in the Governmental Fund Statements. See also **Proprietary Fund Statements** and **Fiduciary Fund Statements**.

Gross Domestic Product (GDP): is a measure of the value of all the final goods and services produced in a specific period.

Historical cost: costs incurred in the acquisition of non-financial assets.See also **book value** and **market value**.

Indirect costs: apply to more than one cost center. Some managers call them *service center*

costs, *internal servicecosts*, or *overhead costs* because they are usually for support services provided within an organization. See also **direct costs**.

In-kind contributions: are goods or services provided for free or at discounted rates. The market value of the in-kind contribution is recognized as revenue and expense in the budget period.

Income Statements: present a summary of an organization's revenues, expenses, and profitability (or *change in net assets*) for a financial period (e.g., for the year ending December 31, 20XX). Also known as an *Operating Statement*, *Profit and Loss Statement*, *Statement of Activities, Statement of Revenues, Expenditures, and Changes in Fund Balances*,or *Statement of Revenues, Expenses, and Changes in Net Position*.

Individual/interpersonal racism: pre-judgment, bias, stereotypes, or generalizations about an individual or group based on race. The impacts of racism on individuals include internalized privilege and oppression. Individual racism can result in illegal discrimination (source: Race and Social Justice Initiative, City of Seattle). See also **institutional racism** and **structural racism**.

Institutional racism: Policies, practices, and procedures that work to the benefit of white people and the detriment of people of color, usually unintentionally or inadvertently (source: Race and Social Justice Initiative, City of Seattle). See also **structural racism** and **individual/interpersonal racism**.

Intangible asset: an asset, other than a financial asset, that lacks physical form. Examples include intellectual property, patents, copyrights, franchises, goodwill, trademarks, and software, to name a few. See also **tangible asset**.

Inventory: goods an organization intends to use, sell, or give away as part of delivering its services.

Liability: sum of money an individual, company, or government owes to others. Liabilities are incurred as a result of general operations (e.g., accounts payable or accrued salaries) or the result of an investment in tangible assets (e.g., mortgages, loans, and bonds). Liabilities are reported in the balance sheet in increasing order of maturity. Maturity refers to the moment in time when payment is due.

Line-item veto: Power possessed by an elected chief executive (e.g., governor) to reduce or reject selected items in an appropriation bill before signing the bill into law.

Line of credit (LOC): sometimes referred to as a *credit line* or *overdraft facility,* is a preset amount of money that a financial institution has agreed to lend either unsecured or secured (using fixed assets or receivables as collateral). Users can draw on the LOC as needed, up to the maximum amount. Interest expense is based on the amount borrowed and the period of use. To be liquid, organizations have to zero out (clean-up or clean-down) for at least 30 consecutive days.

Liquidity: the ease with which an asset can be converted into cash with minimal loss in value.

Long-run solvency: refers to the government's ability to pay for its long-term liabilities given its current taxing or revenue authority. See also **budgetary solvency** and **service-level solvency**.

Mandatory spending: is government spending that is governed by existing law; it is not set by annual

appropriation acts. That said, changes in the level of benefits have to be approved by Congress. See also **discretionary spending**.

Matching principle: is an accounting principle associated with the accrual basis of accounting that requires we recognize expenses in the income statement in the period in which the related revenues were earned. Additionally, if those expenses created a liability, that liability should appear in the balance sheet at the end of the accounting period.

Market value: estimated value of an asset that a willing buyer would pay, and a willing seller would accept, in an open and competitive market. See also **historical cost**.

Modified accrual accounting: is a hybrid of cash basis and full accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recognized when they are both measurable(i.e., cash flow from the revenue can reasonably be estimated) and available(i.e., revenues are available to finance current expenditures within 60 days). Expenditures are to be recognized in the accounting period in which the fund liability is incurred, if measurable, except for interest on long-term liabilities, which should be recognized when due. The governmental fund statements are prepared using the modified accrual basis of accounting. See also **accrual basis of accounting**.

Money market mutual fund: a mutual fund that invests in fixed-income securities with short maturities and minimal credit risk (i.e., high credit quality). Securities frequently include U.S. Treasury bills and commercial paper. Returns from money market funds are minimal but retain value with minimal volatility.

Mortgage: is a debt instrument, secured with collateral of specified real estate property.

Municipal bond: is a debt security issued by the government or a governmental agency to finance capital improvements. Governments can issue two types of bonds: *general obligation bonds* which are backed by the taxing authority of the issuer or *revenue bonds* which are supported with a specific revenue stream (e.g., utility revenues, tuition fees or dormitory rents, patient revenues, or tolls). Non–profits can issue revenue bonds via a special agency or public authority, including healthcare facility authorities, housing finance agencies, higher education facility authorities, and industrial development finance authorities.

Mutual fund: investment instruments that pool money from multiple investors to invest in a diversified portfolio of financial investments (stocks and bonds).

Net assets: represent the difference between assets and liabilities. Non–profits will report net assets "*without donor restrictions*" and net assets "*with donor restrictions*." The latter represents net resources the organization holds that are subject to a donor provision over time or use. These were previously reported as either *temporarily restricted*(over time or use) net assets or *permanently restricted* (restricted in perpetuity) net assets.

Net pension liability: represents the net obligation of retirement benefits a government owes its current employees, retirees, and beneficiaries. It represents the difference between the present value of projected retiree benefits and the assets, most investments, reported at fair value. If accumulated assets exceed projected benefits, a *net pension asset* is reported instead.

Net position: represents the differences between assets and liabilities. Governments will report net position as net investment in capital assets, restricted net assets, and unrestricted net assets. *Net investment in capital*consists of capital assets, net of accumulated depreciation, reduced by outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. *Restricted net position* consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. The balance is reported under *unrestricted net position*, which represents the sum of net assets, deferred outflows, liabilities, and deferred inflows that are not included in the determination of net investment in capital or restricted component of net position (see GASB Statement 63).

Non-current assets: include assets that are not expected to be sold, used, or converted to cash within a year. Non-current assets include long-term receivables, investments (including restricted investments), and fixed assets. See also **current assets**.

Non-current liabilities: all liabilities that do not need to be paid within the current year. This will include long-term debt payable (net of the current portion) and pension liabilities. See also **current liabilities**.

Notes payable: unsecured short-term loans with maturities ranging from 18 months up to 60 months.

Notes to the Financial Statements: also known as *footnotes to the financial statements*, allow additional information and clarification to items presented in the basic financial statements (balance sheet, income state, and cash flow statement). It presents a summary of required disclosures, including accounting assumptions and any modifications that are material and relevant to financial disclosures, a discussion of financial policies, and a summary of upcoming transactions that may affect the organization's long-term financial position.

Operational accountability: is the government's responsibility to report the extent to which it has met its operating objectives efficiently and effectively, using all resources available for that purpose, and whether it can continue to meet objectives for the foreseeable future. See also **fiscal accountability** (from GASB Statement No. 34).

Operating budget: a state or local government's budget that accounts for recurring agency or program expenditures. See also **capital budget**.

Other financing sources: reported in the governmental fund statements account for inflows and outflows of resources that affect fund balance that are neither a revenue nor expenditure. Other financing sources and uses include proceeds from the sale of assets, insurance recoveries, bond or loan proceeds, and transfers in from or out to other funds.

Other Postemployment Benefits (OPEB): are benefits (other than pensions) that state and local governments provide to retired employees. Benefits principally involve healthcare benefits (including dental, vision, and hearing), but may also include death benefits, life insurance, disability, and long-term care.

Program revenue: includes fees linked to programs for "exchange-like" transactions (e.g., fees the

government charges for the goods and services it delivers) and grants and contributions (i.e., revenues from other governments). Grants are further broken out into operating grants and contributions and capital grants and contributions, with the latter dedicated to capital improvements and investments in infrastructure. See also **general revenue**.

Proprietary Fund Statements: are prepared on a full accrual basis and include a *Statement of Net Position* and *Statement of Revenues, Expenses, and Changes in Net Position*.

Qualified opinion: is an opinion made by an auditor that states that, except for a few issues to which the qualification applies, the financial statements present fairly, in all material respects, the entity's financial position, results of operations, and cash flows in conformity with generally accepted accounting principles. Also see **unqualified opinion**, **adverse opinion**, and **disclaimer of opinion**.

Race equity: if race can no longer be used to predict life outcomes, and outcomes for all groups improved (source: Race and Social Justice Initiative, City of Seattle). See also **Racial inequity**.

Racial inequity: race can be used to predict life outcomes, e.g., disproportionality in education (high school graduation rates), jobs (unemployment rate), criminal justice (arrest and incarceration), etc. (source: Race and Social Justice Initiative, City of Seattle). See also **Racial equity**.

Receivables: including *accounts receivable*, *pledges receivable*,and *grants receivable*, represent monies owed to an organization as a result of a sale of goods or services (accounts receivable), promise to give (pledges receivable), or grant award (grants receivable). Receivables will be reported under current assets if payment is expected within the year; otherwise, they would be reported as non-current assets.

Rescission: The cancellation of budget authority previously provided by Congress. The Impoundment Control Act of 1974 specifies that the president may propose to Congress that funds be rescinded. If both Houses have not approved a rescission proposal (by passing legislation) within 45 days of continuous session, any funds being withheld must be made available for obligation.

Realized gain (loss): results from the selling of a financial asset at a price higher (lower) than the original purchase price or value of the financial asset at the start of the financial period.

Repurchase agreement (Repos): short-term borrowing, mainly in government securities. Specifically, one part sells an asset (usually fixed–income government securities) to another at one price and commits to buying them back, usually the following day, at a slightly higher price.

Revenue bonds: borrowing by state or local government, government enterprises (e.g., water and sewer districts), and non–profits (e.g., hospitals, museums, and private universities) that is secured with non-tax revenues of the issuer. Unlike general obligation bonds, revenue bonds do not require voter approval and governments do not guarantee repayment of bonds with revenues other than those included in the contract. See also **general obligation bonds**.

Sequestration: automatic spending cuts that occur through funding withdrawal for certain (but not all) government programs.

Service-level solvency: a government's ability to pay for all the costs of providing services at the

level and quality that are required for the community's health, safety, and welfare. See also **budgetary solvency** and **long-run solvency**.

Special Revenue funds: used to account for and report on activities related to the use of resources that are restricted or committed for specified purposes other than debt service and capital projects. Those restricted or committed revenues may be initially received in another fund (e.g., General Fund), but must be subsequently transferred to a designated Special Revenue fund. Special Revenue funds should not be used to account for resources held in trust for individuals, private organizations, or other governments. These are reported under fiduciary funds. See also, **General Fund**.

Statement of Functional Expenses: an ancillary financial report used to show the relationship between expenses by type (e.g., salaries, payroll taxes) and key functional areas (e.g., programs, management and administration, and fundraising and development). Following the FASB issuance of Accounting Standards Update (ASU) 2016-14, all non–profits are now required to present a functional expense report.

Straight-line depreciation: estimated by dividing the difference between the asset's historical cost and its expected salvage value (or value at write-off) by the number of years it is expected to be used.

Structural racism: The interplay of policies, practices, programs, and differing institutions leads to adverse outcomes and conditions for communities of color compared to white communities. It occurs within the context of racialized, historical, and cultural conditions (source: Race and Social Justice Initiative, City of Seattle). See also **institutional racism** and **individual/interpersonal racism**.

Supplemental appropriations: Appropriations bill that adds to an existing appropriation and is frequently adopted after the start of the budget year. Legislative bodies may find it necessary to approve additional budget authority for unforeseen contingencies such as natural disasters.

Tangible asset: an asset that has a finite monetary value and usually a physical form (e.g., property and equipment). See also **intangible asset.**

Tax preference: a provision in tax law that allows preferential treatment for certain taxpayers. They include exclusions, exemptions, deductions, preferential tax rates, credits, and deferrals.

Unearned revenue: sometimes referred to as *deferred revenue*, represents revenue the organization has received for services it has yet to provide or goods that have not yet been delivered. If for any reason the organization is unable to deliver the goods or services, it will need to issue a refund to its customers or clients. That is why we recognize that revenue as a liability – the organization owes either goods/services or a refund.

Unrealized gain (loss): records the change in the value of the financial assets if the price is higher (lower) than the original purchase price or value of that financial asset at the start of the financial period. Unrealized gains or losses exist on paper, as the financial assets have not been sold.

Unqualified opinion: also known as a *clean report*, is an opinion made by an auditor that states that the financial statements present fairly, in all material respects, the financial position, results of

operations, and cash flows of the entity in conformity with generally accepted accounting principles. Also see **qualified opinion**, **adverse opinion**, and **disclaimer of opinion**.

Working capital: sometimes known as *net working capital,* is a measure of an organization's liquidity position. It is the difference between current assets (such as cash, cash equivalents, investments, and receivables) and current liabilities (such as accounts payable and wages payable). Every organization needs working capital. It is the excess cash that allows the organization to pay its obligations as they come due, invest in new opportunities as they become available, and have the necessary cushion when payments by clients, donors, grantors, or taxpayers are not received on time or there is a decline in operations.

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