



April 2024

# RETIREMENT SECURITY

## The U.S. Virgin Islands' Pension Plan Faces Risks Paying Government Employee Benefits

Accessible Version

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# GAO Highlights

View [GAO-24-105862](#). For more information, contact Tranchau (Kris) T. Nguyen at (202) 512-7215 or [nguyentt@gao.gov](mailto:nguyentt@gao.gov), or Frank Todisco at (202) 512-2700 or [todiscof@gao.gov](mailto:todiscof@gao.gov).  
Highlights of [GAO-24-105862](#), a report to congressional requesters

April 2024

## RETIREMENT SECURITY

### **The U.S. Virgin Islands' Pension Plan Faces Risks Paying Government Employee Benefits**

#### **Why GAO Did This Study**

GERS is a defined benefit pension plan that covers all USVI government employees and retirees. It includes nearly 19,000 participants. The plan has historically been underfunded by the USVI government. In 2021, GERS actuaries projected that the plan would be insolvent by March 2025. The USVI government has made changes to the plan over the years to maintain its solvency, including providing GERS with additional funding in 2022. However, the plan continues to face uncertainties. GAO was asked to review the financial position of GERS.

This report describes (1) how GERS compares with other public defined benefit pensions regarding funding and benefits, (2) risks GERS faces in being able to pay promised pension benefits, and (3) options for the USVI government and GERS to better ensure GERS provides promised pension benefits.

GAO analyzed 2021 data on the characteristics of selected public pension plans from the Center for Retirement Research at Boston College, as well as 2021 and 2022 GERS data from the USVI government. In both cases, these were the most recently available data at the time of GAO's analysis. GAO reviewed publicly available information from eight public pension plans, selected to represent a mix of plan size and funding status. GAO also reviewed information from GERS actuaries and investment consultants and from relevant literature. GAO interviewed USVI and GERS officials; stakeholder groups such as actuary, state retirement administrator and other associations; and Department of the Interior officials.

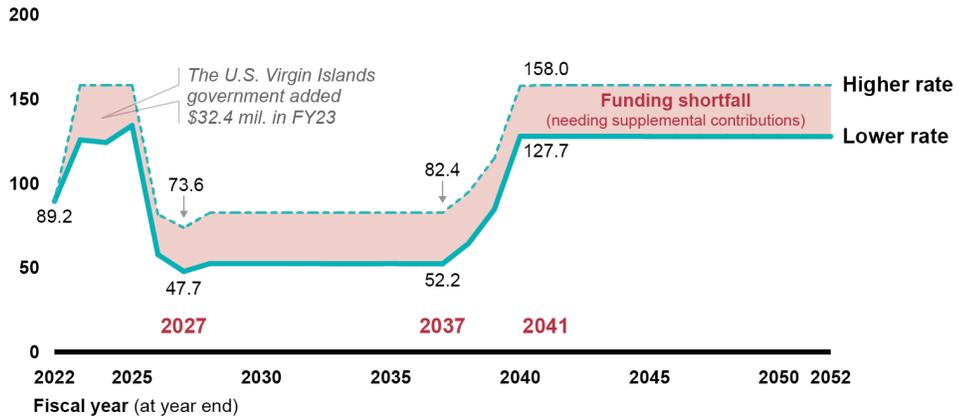
#### **What GAO Found**

The U.S. Virgin Islands' (USVI) Government Employees' Retirement System (GERS) remains one of the lowest funded public pension plans in the United States, according to GAO's analysis of national data. These plans offer a lifetime benefit for government workers. While most public plans in GAO's review had sufficient expected assets to cover between 60 and 111 percent of plan liabilities as of 2021, GERS had enough to cover about 10 percent. To improve plan solvency, GERS has made changes to its plan since 2005—similar to eight other selected public plans, including in the four U.S. territories. These changes applied to all new hires and included decreasing benefits, increasing the retirement age, and increasing employee contributions.

The USVI government secured additional funding for the plan through an excise tax on rum in April 2022. However, GERS continues to face the risk of insolvency. According to GAO’s analysis, GERS may face insolvency within the next 10 years if the excise tax rate is lower than expected or if rum sales decline, among other risks. For example, the GERS’ revenue projections for the excise tax used a \$13.25 per proof gallon tax rate that expired in 2021 and reverted to a lower statutorily defined rate in 2022 (\$10.50). While the USVI government has paid the resulting shortfall in 2023, it is not required and may not be sustainable. This could result in a long-term funding shortfall (see figure).

### GERS Funding Projections Using Different Excise Tax Rates on Rum

Funding Note proceeds (in millions of dollars)



Source: GAO analysis of information from the Government Employees’ Retirement System (GERS). | GAO-24-105862

### Accessible Data Table for GERS Funding Projections Using Different Excise Tax Rates on Rum

Fiscal year (at year end)	Higher rate	Lower rate	Funding shortfall (needing supplemental contributions)
2022	89.2	89.2	0
2023	158	125.6	32.4
2024	158	124	34
2025	158	134.1	23.9
2026	81.5	57.7	23.8
2027	73.6	47.7	25.9
2028	82.4	52.3	30.1
2029	82.4	52.3	30.1
2030	82.4	52.3	30.1
2031	82.4	52.3	30.1
2032	82.4	52.3	30.1

<b>Fiscal year (at year end)</b>	<b>Higher rate</b>	<b>Lower rate</b>	<b>Funding shortfall (needing supplemental contributions)</b>
2033	82.4	52.2	30.2
2034	82.4	52.2	30.2
2035	82.4	52.3	30.1
2036	82.4	52.2	30.2
2037	82.4	52.2	30.2
2038	94.5	64.2	30.3
2039	114.7	84.4	30.3
2040	157.6	127.7	29.9
2041	158	127.7	30.3
2042	158	127.7	30.3
2043	158	127.7	30.3
2044	158	127.7	30.3
2045	158	127.6	30.4
2046	158	127.6	30.4
2047	158	127.6	30.4
2048	158	127.6	30.4
2049	158	127.6	30.4
2050	158	127.6	30.4
2051	158	127.6	30.4
2052	158	127.6	30.4

Source: GAO analysis of information from the Government Employees' Retirement System (GERS). | GAO-24-105862

According to interviews with stakeholders and plan officials, and literature GAO reviewed, a shared commitment between the government and the plan to ensure funding is adequate, resilient, achievable, and enforceable can help ensure a plan's promised benefits. The USVI government could consider several options to better ensure such benefits. For example, some governments have dedicated additional specific revenue streams, such as a portion of sales taxes, to their plans. In the past, GERS also received government funding for administrative expenses. The Department of the Interior can provide limited technical assistance upon request, such as for examining strategies to address risks.

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### Abbreviations

ADC	Actuarially Determined Contribution
ARPA	American Rescue Plan Act of 2021
CNMI	Commonwealth of the Northern Mariana Islands
COLA	cost-of-living adjustment
CRR	Center for Retirement Research
DB	defined benefit
DC	defined contribution
DOI	Department of the Interior
ERS	Commonwealth of Puerto Rico Employees' Retirement System
GDP	Gross Domestic Product
GERF	American Samoa Government Employees' Retirement Fund
GERS	Government Employees' Retirement System
GGRF	Government of Guam Retirement Fund
GVI	Government of the U.S. Virgin Islands
HERS	Employees' Retirement System of the State of Hawaii
KERS	Kentucky Employees Retirement System
NMIRF	Commonwealth of the Northern Mariana Islands' Retirement Fund
NMISF	Commonwealth of the Northern Mariana Islands' Settlement Fund
OIA	U.S. Department of the Interior's Office of Insular Affairs
PayGo	Pay-As-You-Go
PERF	Indiana Public Employees Retirement Fund
PPD	Public Plans Database
PR	Puerto Rico
PRT	Pension Reserve Trust
SDRS	South Dakota Retirement System
USVI	United States Virgin Islands

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April 17, 2024

The Honorable Raúl M. Grijalva  
Ranking Member  
Committee on Natural Resources  
House of Representatives

The Honorable Stacey E. Plaskett  
House of Representatives

A longstanding financial challenge for the United States Virgin Islands (USVI) is the historically underfunded Government Employees' Retirement System (GERS). With nearly 19,000 participants in 2021, GERS is a defined benefit pension plan that covers all USVI government employees, including teachers and public safety workers. About 30 percent of USVI workers were employed by the USVI government, as of 2020.<sup>1</sup>

According to GERS actuaries, in 2021 this system had about 10 percent of the funds needed to cover promised pension benefits and was projected at that time to become insolvent by March 2025, due in part to the USVI government not making adequate employer contributions toward the fund for decades.<sup>2</sup> Over the years, both USVI and GERS have implemented various reforms to help address funding shortfalls, including lowering retirement benefits and increasing the retirement age for new employees. In addition, a 2012 USVI executive order created a pension reform taskforce that identified the need for increased contributions to the plan and a sustainable funding source as key issues.

In 2022, USVI refinanced outstanding debt that is intended to help fund GERS with additional revenue.<sup>3</sup> However, the extent to which this

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<sup>1</sup>USVI Workforce Assessment and Laborshed Study; U.S. Economic Development Administration; October 2022.

<sup>2</sup>If GERS were to become insolvent, GERS actuaries projected employer and employee contributions would cover only about 45 to 50 percent of the projected benefits in the years immediately following insolvency and retiree benefits would have to be reduced without some additional action, such as direct payments from the USVI government.

<sup>3</sup>In 2022, USVI refinanced existing debt at a more favorable rate so that USVI could have a dedicated source from which to provide GERS with annual payments.

revenue stream will be sufficient to cover promised benefits for retirees remains uncertain and will depend on various factors. You asked us to review the financial position of GERS. This report describes (1) how GERS compares with other defined benefit pensions on characteristics, such as the way it is funded and the benefits it provides; (2) risks GERS faces in being able to pay promised benefits to employees; and (3) options for GERS and the USVI government to better ensure the pensions it has promised to its employees.

To address our first objective, we analyzed national data from the Center for Retirement Research (CRR) at Boston College Public Plans Data (PPD) website.<sup>4</sup> The database contained annual data for 229 state and local pension plans in the United States on over 100 variables. We included in our analysis 126 plans that serve only general employee populations (i.e., we did not include pension systems designed specifically for teachers, educators, or public safety officers). We analyzed data from 2021 for these 126 plans to align with the most recently available information from GERS at the time of our analysis. We conducted an assessment to ensure the data's reliability, which included reviewing related documentation, interviewing Center for Retirement Research staff, and electronic data testing. We determined that the data elements we analyzed from the PPD were reliable for purposes of our reporting objectives.

We reviewed the PPD to calculate certain funding metrics and measures of benefits for the 126 plans in our analysis, as well as for Guam and American Samoa. We compared these data to information on GERS from the plan's 2021 actuarial valuation report. This was the most recently available report at the time of our analysis. The 2022 actuarial valuation report was subsequently published and we incorporated elements of the new information in our report, as appropriate.

To further understand how GERS benefits compare to other plans, we conducted a comparative review of a non-generalizable selection of eight public pension plans—including from the other four U.S. territories—that were chosen to represent a mix of factors, such as plan size and funding status. We also interviewed nine stakeholders, such as the National Association of State Retirement Administrators and the National

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<sup>4</sup>The PPD is developed and maintained through a collaboration of the Center for Retirement Research (CRR) at Boston College, the MissionSquare Research Institute, the National Association of State Retirement Administrators, and the Government Finance Officers Association.

Conference on Public Employee Retirement Systems.<sup>5</sup> We interviewed these stakeholders to obtain their perspectives and expertise on public pension plans and their options to improve funding. For more information on the scope and methodology used for comparing GERS to other plans, including which plans were part of our comparative review and a full list of stakeholders we interviewed, see appendix I.

To address our second objective, we analyzed information from GERS actuaries and their investment consultants, including the plan's actuarial valuation reports and financial statements.<sup>6</sup> Specifically, we identified risks GERS faces by comparing how the funding level for GERS was projected to change before refinancing outstanding debt were issued and after. We also reviewed and analyzed documents related to the recent bond refinance to assess various factors such as the risks associated with its structure and the assumptions made for securing the contribution to GERS. In addition, we interviewed GERS staff and board members about the plan's current and projected financial status.

To address our third objective, we interviewed nine stakeholders mentioned above on their perspectives. We also reviewed four actuarial and public pension related publications recommended by these stakeholders and our actuaries. These were published within the last 10 years and describe recommended actuarial or governance principles, concepts, and practices to help stabilize public pension plans. We also compiled information from our eight selected comparison plans on strategies these pension plans used to improve their sustainability. For more information on the scope and methodology, see appendix I.

We conducted this performance audit from March 2022 to April 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our

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<sup>5</sup>The National Association of State Retirement Administrators is a non-profit association whose members are the directors of the nation's state, territorial, and largest statewide public retirement systems. The National Conference on Public Employee Retirement Systems is a network of trustees, administrators, public officials, and investment professionals who collectively oversee approximately \$4 trillion in retirement funds.

<sup>6</sup>Our projections of GERS assets in this report are based on the 2021 actuarial valuation report and supplementary data on subsequent asset returns and plan contributions, which was the most recent data available to us as of December 2023, the time of our analysis. Subsequently, in February 2024 GERS provided their 2022 actuarial valuation report after we had completed our analysis. We estimated the impact of the information in the 2022 actuarial valuation report on our analysis. For more information, see appendix I.

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findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

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### United States Virgin Islands' Economic Status

USVI is currently facing difficult economic and fiscal conditions, including challenges from weather-related disasters, a decline in tourism during the COVID-19 pandemic, and its severely underfunded public pension plan.<sup>7</sup> In September 2017, two back-to-back hurricanes—Irma and Maria—significantly impacted USVI, causing widespread damage to and destruction of critical infrastructure, livelihoods, and property, which placed additional financial pressures on its already strained economy. Also, USVI's revenue has declined in recent years due to the lack of tourism and a recent increase in out-migration for education or employment opportunities. The U.S. Department of the Interior's Office of Insular Affairs (OIA) coordinates federal policy for the territories and has provided financial assistance to USVI, but the financial condition of the USVI economy remains a concern.<sup>8</sup>

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### USVI's Government Employees' Retirement System Plan Overview

All full-time government employees, including teachers, judges, and public safety employees who work for territorial or local agencies in the USVI are enrolled in GERS. The plan has two tier groups with their own sets of employee contribution rates and benefit structures: Tier 1 is made up of employees hired on or before September 30, 2005, and Tier 2 is made up of employees hired on or after October 1, 2005. In 2021, GERS had about 3,660 active Tier 1 employees and about 5,260 active Tier 2

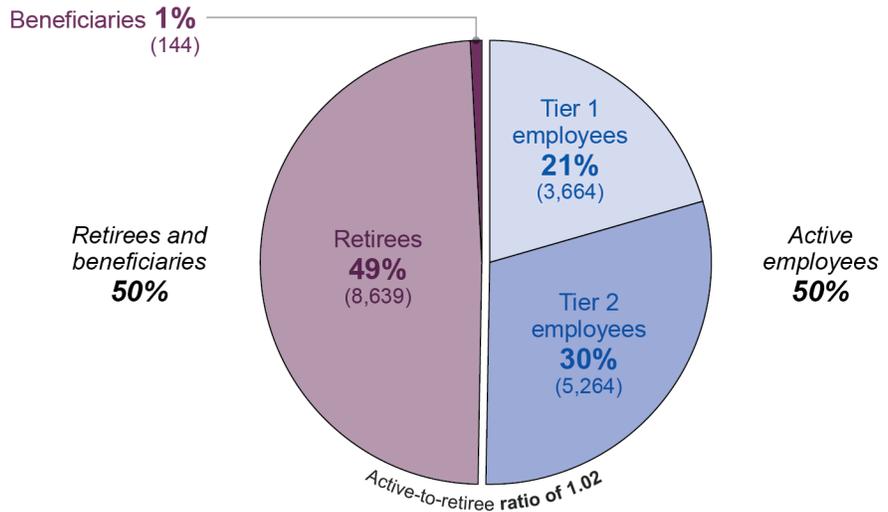
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<sup>7</sup>According to the USVI Office of Management and Budget, the American Rescue Plan Act of 2021 (ARPA) provided an estimated \$547.2 million in direct federal payments to the USVI government to respond to the negative economic consequences of COVID-19.

<sup>8</sup>In fiscal year 2022, OIA provided over \$2.9 million in federal grants to USVI to support economic development and other initiatives proposed as priorities by the USVI government.

employees. The plan has roughly equal numbers of retirees and active employees (see fig 1).

**Figure 1: Percentage of Government Employees' Retirement System Participants Who Are Retired and Active Participants, as of 2021**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

Note: Tier 1 is made up of employees hired on or before September 30, 2005, and Tier 2 is made up of employees hired on or after October 1, 2005. Not shown in the figure are 1,200 inactive vested members who are no longer contributing but would be eligible for a benefit upon retirement. Additionally, numbers do not add to 100 percent, due to rounding.

GERS is managed by an executive administrator and a seven-member board, and rules governing GERS are set in statute.<sup>9</sup> GERS actuaries reported the plan was 9.8 percent funded in 2021 with \$475 million in assets and \$4.4 billion in unfunded liabilities. At that time, GERS was projected to be insolvent by March 2025 if no changes were made, which could have resulted in a significant reduction in benefits to current and future retirees.

## Retirement Plans and GERS' Funding

The two predominant types of retirement plans are defined benefit and defined contribution plans. Defined benefit plans (commonly known as pension plans) generally promise to provide a specified level of monthly

<sup>9</sup>Board requirements include representation from each of the three islands of the U.S. Virgin Islands and representation from both main plan membership types (e.g., retiree and active employee).

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retirement income for life that is determined by a benefit formula based on factors such as a worker's salary, years of service, and age at retirement, generally regardless of how the plan's investments perform. In contrast, defined contribution plans provide benefits based on the contributions to and the performance of the investments in individual worker's accounts, which may fluctuate in value. In defined contribution plans, participants bear the investment risks associated with their retirement savings.

Public sector defined benefit plans, which are government-sponsored, are funded primarily by employee and employer contributions. GERS contribution rates are set in the governing statute for the plan. Investment returns also provide the pension system with additional revenue and GERS' asset allocation is set according to its investment policy. Along with investments in equities and fixed income, GERS maintains a real estate portfolio that is valued at about \$66.9 million, representing about 15 percent of plan assets as reported in its 2022 audited financial statements.

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## Compared to Other Plans, GERS Remains Underfunded, Although Some Provisions and Aspects of Its Modified Plan Are Similar

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### GERS Is among the Lowest Funded Public Plans Due to Insufficient Employer Contributions

GERS has been underfunded for decades and remains one of the lowest funded public plans. Similar to other underfunded public plans, the current financial position of GERS is, in part, the result of insufficient employer contributions over time, according to stakeholders knowledgeable about public plans. While stakeholders told us that public plans have unique challenges and many are not fully funded, GERS is among the lowest funded at 10 percent as of September 30, 2022.<sup>10</sup> In our review of a national dataset of state and local pension plans, we found that on average public plans were about 80 percent funded and that most plans

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<sup>10</sup>"Fully funded" is defined as at least 100 percent funded, or a plan without an unfunded liability—that is, plan assets are the same as or larger than plan liabilities.

were between 60 percent to 111 percent funded.<sup>11</sup> We also compared the financial position of GERS to public sector plans in the other territories and found that GERS had a lower funded status in comparison to the comparable territorial plans.

One reason for GERS' underfunding has been a lack of contribution discipline—maintaining consistent and actuarially adequate contributions. In a 2022 report, the National Association of State Retirement Administrators noted that timely contributions were vital to the sustainability of public plans and that failing to pay actuarially determined contributions resulted in higher future costs. The report also noted that many public plans historically lacked a consistent method for determining contributions and did not prioritize pre-funding of their plans. Accounting and actuarial professionals have developed measures for determining an Actuarially Determined Contribution (ADC)—an amount that both fully pays for promised benefits earned in a given year and makes a systematic payment towards any unfunded liability.<sup>12</sup> While the public plans we analyzed in the PPD are generally contributing an ADC, the gap between the ADC and employer contributions for GERS grew considerably between 2000 and 2021 (see fig. 2).

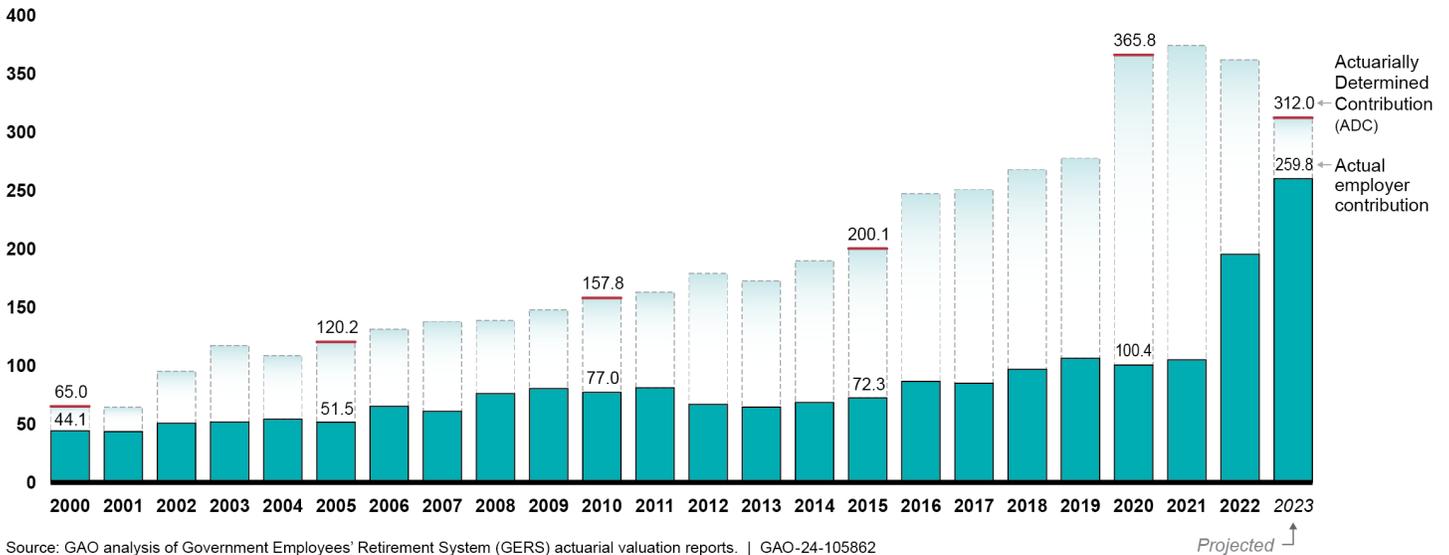
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<sup>11</sup>National data were sourced from the PPD. CRR collects annual information for state and local government defined benefit retirement plans directly from plan actuarial valuation and annual financial reports. We included in our analysis 126 plans that serve only general employee populations (i.e., we did not include pension systems designed specifically for teachers and judicial or public safety employees. When comparing plans in the PPD, we analyzed ranges for plans within the 10<sup>th</sup> to 90<sup>th</sup> percentiles of all plans.

<sup>12</sup>In 2012, the Governmental Accounting Standards Board issued revised standards for pension accounting, in which it specified that sponsors of pension plans should report on their balance sheet the difference between plan liabilities and plan assets.

**Figure 2: GERS Employer Contributions Compared to Actuarially Determined Contributions (Fiscal Years 2000-2023)**

Contributions (in millions of dollars)



Source: GAO analysis of Government Employees' Retirement System (GERS) actuarial valuation reports. | GAO-24-105862

Projected ↗

**Accessible Data Table for Figure 2**

Fiscal year	Actual employer contribution	Actuarially Determined Contribution (ADC)
2000	44.1	65.0
2001	43.4	64.2
2002	50.6	95.2
2003	51.6	117.1
2004	54.1	108.4
2005	51.5	120.2
2006	65.1	131.1
2007	60.8	137.8
2008	75.9	138.5
2009	80.2	147.5
2010	77.0	157.8
2011	80.9	162.8
2012	66.7	178.7
2013	64.4	172.4
2014	68.3	189.7
2015	72.3	200.1
2016	86.4	247.2

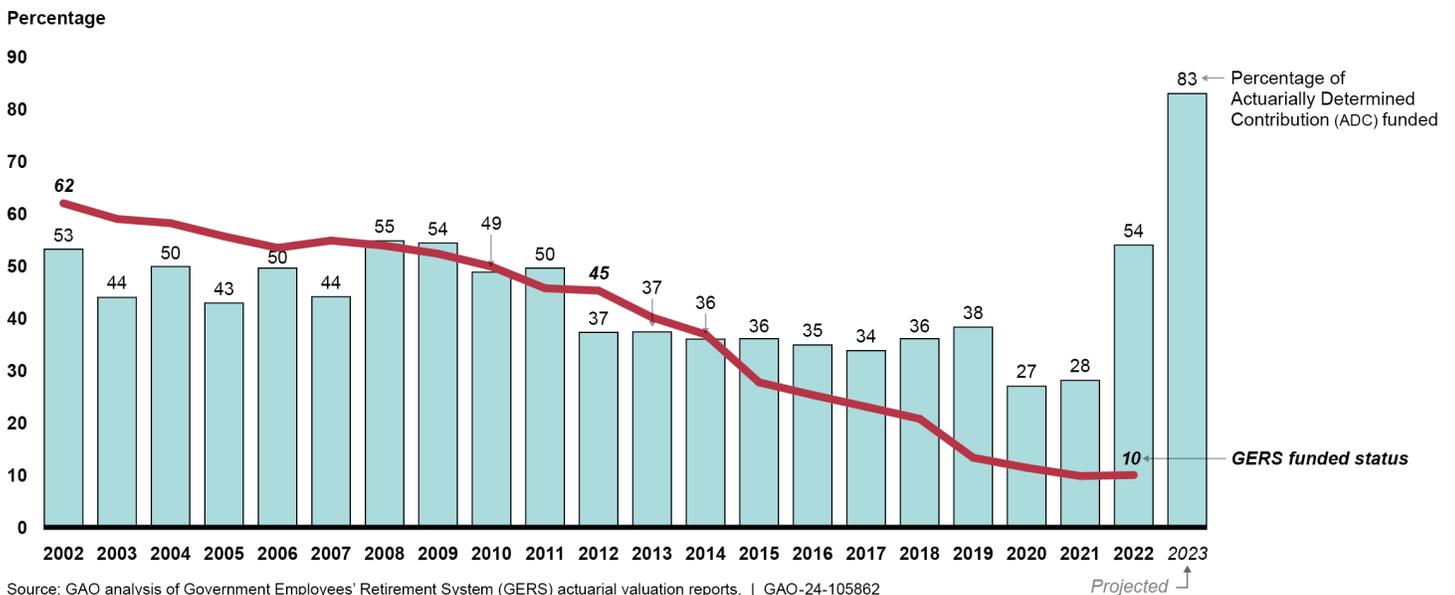
Fiscal year	Actual employer contribution	Actuarially Determined Contribution (ADC)
2017	84.8	250.6
2018	96.8	267.8
2019	106.2	277.5
2020	100.4	365.8
2021	104.8	373.7
2022	195.1	361.8
2023 (Projected)	259.8	312.0

Source: GAO analysis of Government Employees' Retirement System (GERS) actuarial valuation reports. | GAO-24-105862

Note: The Actuarially Determined Contribution uses an actuarial cost method and other actuarial methods to determine the periodic contribution for the plan. It may or may not be the amount actually paid by the plan sponsor or other contributing entity. The decrease in the 2023 ADC is attributable to a reduction in GERS' targeted level funding which was primarily driven by an assumption of higher future investment returns. The most recent estimate of the 2023 actual employer contribution has not yet been audited.

The impact of making inconsistent and low contributions is reflected in the decreasing funded status that GERS has experienced over the last 2 decades. For example, during most years since 2002, USVI has contributed 50 percent or less of the ADC and less than 40 percent over the period from 2012 to 2021 (see fig. 3).

Figure 3: GERS Funded Status (Oct. 1, 2002 – 2023)



Source: GAO analysis of Government Employees' Retirement System (GERS) actuarial valuation reports. | GAO-24-105862

**Accessible Data Table for Figure 3**

Fiscal year	Percentage of Actuarially Determined Contribution (ADC)	Percentage of GERS funded status
2000	53.2	62.0
2001	44.0	59.0
2002	49.9	58.2
2003	42.9	55.7
2004	49.6	53.5
2005	44.1	54.9
2006	54.8	53.9
2007	54.4	52.4
2008	48.8	49.9
2009	49.6	45.7
2010	37.3	45.3
2011	37.4	40.2
2012	36.0	36.9
2013	36.1	27.7
2014	34.9	25.3
2015	33.8	23.1
2016	36.1	20.8
2017	38.3	13.3
2018	27.0	11.4
2019	28.1	9.8
2020	54.0	10.0
2021	83.0	20.0
2022	53.2	62.0
2023 (Projected)	44.0	59.0

Source: GAO analysis of Government Employees' Employees' Retirement System (GERS) actuarial valuation reports. | GAO-24-105862

Note: An ADC uses an actuarial cost method and other actuarial methods to determine the periodic contribution for the plan. It may or may not be the amount actually paid by the plan sponsor or other contributing entity. For 2023, data were not available on funded status. A portion of the increased percentage of ADC funded in 2023 was attributable to the reduction in the ADC, which in turn was driven by a reduction in GERS' targeted level of funding. Most of the increases in 2022 and 2023 were attributable to increased employer contributions. The most recent estimate of the 2023 percentage of ADC funded has not yet been audited.

In addition to a plan's funded status and a plan sponsor's contribution discipline, stakeholders we interviewed and literature we reviewed described the benefits of examining other funding measures to gain a more complete picture of the financial health of a plan. In 2014, a Society of Actuaries Blue Ribbon Panel noted that two public plans can have the

same reported funded status, but their overall financial strength may differ.<sup>13</sup> One such strength is a jurisdiction's economic capacity, or the ability to raise additional funds. One measure of this ability is the ratio of the plan's unfunded liability to the government's economic output, or its Gross Domestic Product (GDP).<sup>14</sup> This ratio can help identify the economic burden of the unfunded liability relative to the economic capacity of the jurisdiction. In our analysis, we found that USVI's unfunded liability was nearly 100 percent of its GDP in 2021, which was higher than the public plans we reviewed for American Samoa and Guam.<sup>15</sup> While the USVI can spread this debt over time, approximately 1 year of its economic output would be needed to pay for prior pension costs that were not funded. The text box describes several funding measures that can be used to understand how well funded a public pension plan is.

**Selected Funding Measures Used to Evaluate Public Pension Plans**

- **Funded status:** This measure compares a plan's assets to its liabilities, commonly expressed as assets as a percentage of liabilities; for example, 80 percent funded. A higher percentage indicates more of the plan's liabilities are backed by assets in a pension fund.
- **Contribution discipline:** This measure is the ratio of the annual employer contribution made to the actuarially determined contribution. It is used to represent a plan's funding discipline, for example, how well plan contributions are on track to pay for ongoing benefit accruals and to reduce the plan's unfunded liabilities. One hundred percent would indicate that contributions were adequate to reduce unfunded liabilities over a reasonable period determined by the plan and its actuary. Contribution discipline is typically looked at over a period of years, and contribution discipline should be consistent to achieve funding objectives.
- **Unfunded liability to payroll:** This measure is a ratio of the plan's unfunded liability to the annual payroll of workers covered by the plan. It is used to represent the number of years of total annual payroll that would be required to pay for the unfunded liability. For example, a ratio of 1 indicates that the employer would need to double its payroll expense for 1 year to fully fund the plan.

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<sup>13</sup>*Report of the Blue Ribbon Panel on Public Pension Plan Funding*; Society of Actuaries; February 2014.

<sup>14</sup>Gross Domestic Product (GDP) is the standard measure of the value added through the production of goods and services in a jurisdiction (such as country, state, or territory) during a certain period, generally a year.

<sup>15</sup>Ratios of unfunded liability to GDP, by U.S. Territory in 2021: USVI (98.3 percent); American Samoa (35.3 percent); and Guam (18.7 percent). We did not include funding measures for the Commonwealth of the Northern Mariana Islands (CNMI) and Puerto Rico (PR). While CNMI and PR maintain legacy defined benefit plans for current and former employees of their governments, these benefits are primarily funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. The security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund.

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|--|
| <ul style="list-style-type: none"><li>• Asset-to-benefit coverage: This measure is a ratio of plan assets to current year benefit payments. It is used to represent the number of years of benefit payments that are supported by current plan assets.</li></ul> |
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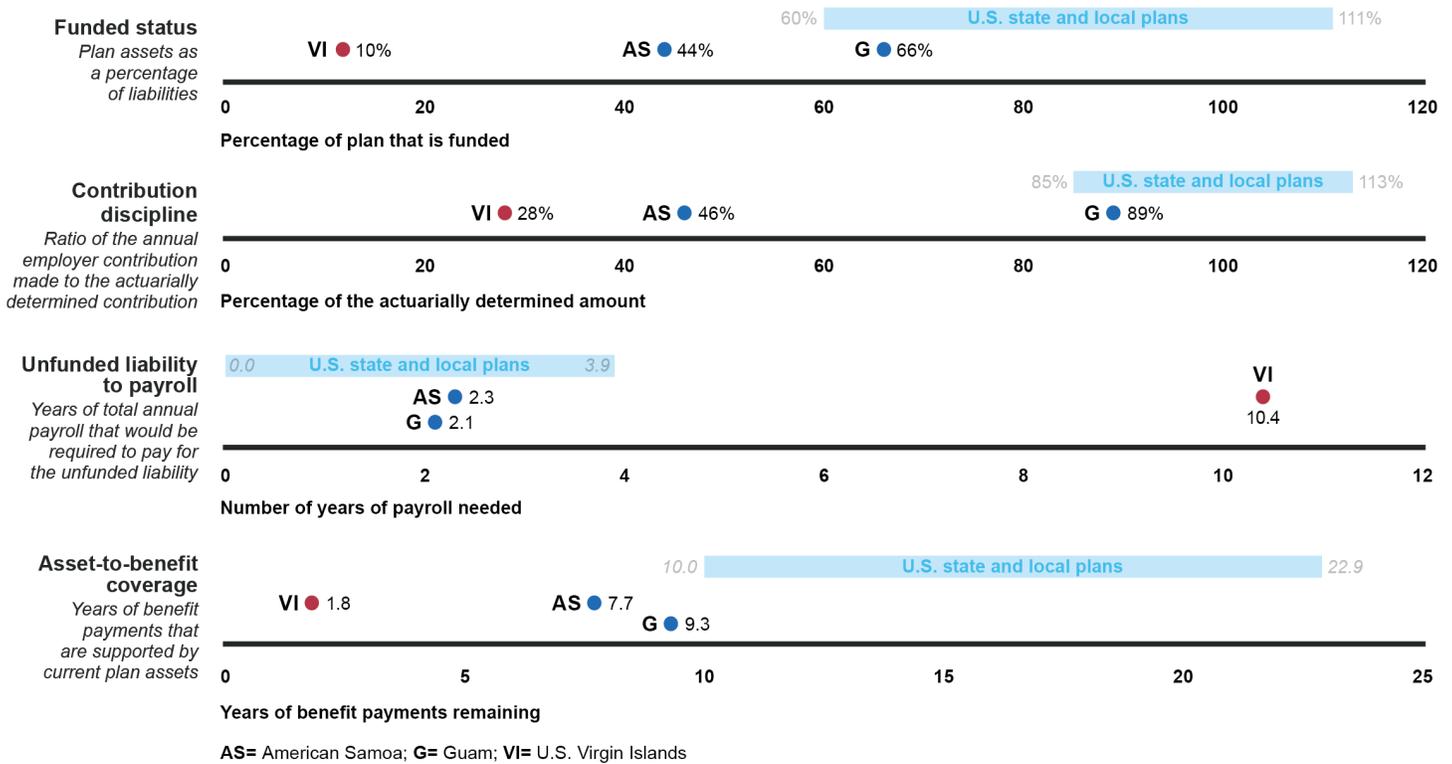
Source: GAO summary of selected funding measures. | GAO-24-105862

Our analysis showed that public plans in the three territories reviewed generally fell near the lower end of the range of state and local plans or below it on these funding measures. In addition, among the territories, GERS scores lower than the other comparable territorial plans for American Samoa and Guam.<sup>16</sup> Figure 4 below compares GERS to state and local public plans within the PPD and to public plans within the comparable territories on selected funding measures used to evaluate public pension plans. (For more information on each of the territories, see app. II.)

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<sup>16</sup>We do not provide analysis on CNMI and PR because their benefits are primarily funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. While both plans maintain legacy defined benefit plans for current and former employees of their governments, the security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund.

**Figure 4: GERS Funding Measures Compared to Selected Public Plans, as of Fiscal Year 2021**



Source: GAO analysis of Public Plans Database (PPD) and the 2021 actuarial valuation reports from American Samoa, Guam, and U.S. Virgin Islands. | GAO-24-105862

Note: U.S. state and local government pension plans represent plans falling in the 10th-90th percentiles of the Public Plans Database. We did not include funding measures for the Commonwealth of the Northern Mariana Islands (CNMI) and Puerto Rico (PR). While these two territories maintain legacy defined benefit plans for current and former employees of their governments, these benefits are primarily funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. The security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund. The comparative measures shown for contribution discipline are for the single year 2021. This year was chosen for the comparison based on the availability of data for our selected public plans at the time of our analysis. In February 2024 GERS provided its 2022 actuarial valuation report, after we had completed our analysis. GERS improved considerably on the measure of contribution discipline in 2022 and 2023, largely as a result of increased employer contributions to the plan, as shown earlier in figure 3. A deeper comparison of contribution discipline would compare it over a period of years because contribution discipline should be consistent to achieve funding objectives. Our analysis of GERS's 2022 actuarial valuation report indicates that, for the other three measures shown in this figure, GERS's rankings relative to the 2021 measures for other territories and the 10th-90th percentiles of the Public Plans Database would not have changed.

Stakeholders we interviewed noted that recovering from historical contribution deficits is difficult. One way public pensions have sought to overcome these deficits is by increasing contributions. GERS increased the contribution rates of employees by 1 percentage point per year over fiscal years 2015, 2016, and 2017. Additionally, on January 1, 2015, the

employer contribution rate was increased from 17.5 percent to 20.5 percent of payroll. On January 1, 2020, the employer contribution rate was increased again by 3 percentage points, bringing the contribution rate to 23.5 percent, which is higher than most other plans in PPD. GERS officials said that the increased contributions have allowed them to make benefit payments that have been promised to retirees; however, improving GERS' overall funded status remains a challenge given its historical underfunded position. In addition, the GERS employer contribution is still significantly less than the ADC.

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### GERS Modified Benefits, Similar to Other Public Plans

Like other public plans, GERS changed its benefit structure to help lower costs. For example, in 2005, GERS reformed its plan and created a new level of benefits (Tier 2) that increased the retirement age, decreased benefits, and increased employee contributions for all new employees (see text box).

#### **GERS Benefit Tiers**

Tier 1 benefits currently account for a substantial portion of the total benefit payments for GERS. Specifically, benefit payments for Tier 1 employees accounted for nearly 99 percent of the total benefit payments made by GERS in 2022. Tier 2 became effective for new hires who were employed on or after October 1, 2005. In general, Tier 2 has reduced benefit levels, later retirement ages, and higher employee contributions. Since Tier 2 employees are only those hired since 2005, it will be a gradual process before the lower-formula portion of benefits attributable to Tier 2 will outweigh those from Tier 1, easing the plan's cash flow situation.

Source: GAO Analysis of Government Employees' Retirement System (GERS) projections and plan benefit provisions. | GAO-24-105862

As we have previously reported, many public plan sponsors have adjusted benefits since 2008 to address asset shortfalls.<sup>17</sup> While the specific steps taken have differed among these plans, many of the steps involved benefit reductions. Below are descriptions of some of the benefit changes GERS has made and how they compare to the eight other selected public plans. (See app. III for a benefit comparison of GERS with selected plans.)

- **Increased retirement age.** With the creation of Tier 2 in 2005, GERS increased the regular retirement age from 60 to 65 for individuals in that tier. Plan officials from two of the eight comparison plans included in our study also described how their plan increased the retirement

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<sup>17</sup>State and Local Government Pension Plans: Economic Downturn Spurs Efforts to Address Costs and Sustainability, [GAO-12-322](#) (Washington, DC: Mar. 2, 2012).

age for employees when they created a separate tier within their plans. One national stakeholder we interviewed said many pension plans across the country have adjusted the retirement age to account for increases in life expectancy.

- **Adjustments to the benefit formula.** Tier 2 decreased the benefit multiplier—one of the components of the benefit formula—for GERS participants to 1.75 percent from the original 2.5 percent for Tier 1. Additionally, GERS changed the earnings base from an average of the highest 5 years of earnings to the employee career average annual earnings for Tier 2 employees.<sup>18</sup> Officials we interviewed from four of our eight selected plans also described adjusting their benefit formulas when they made the transition to a new tier of benefits. For example, for participants in the Kentucky Employees Retirement System, the Tier 1 calculation uses an average of the employee's highest annual earnings for any 5 years while they worked for the state, whereas Tier 2 uses an average of the 5 years of earnings immediately preceding retirement.
- **Increase in employee contributions.** As of 2021, GERS had the highest employee contribution rates compared to our selected plans. The average GERS employee contribution rate for Tier 2 employees is 11.7 percent, while the other eight public pension plans included in our study had an employee contribution rate between 0 percent and 10 percent.<sup>19</sup> One stakeholder we interviewed noted that increasing employee contributions was one remedy that plans use to address underfunding. In addition, the Equable Institute's 2022 report on the State of Pensions noted that the average employee contribution rate for public employees who are eligible for Social Security benefits was 5.98 percent.
- **Reduction or suspension of cost-of-living adjustments (COLA).** In 2013, GERS suspended COLA increases for non-disabled

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<sup>18</sup>The benefit formula for GERS includes a benefit multiplier and an earnings base to which the benefit multiplier is applied. The basic retirement benefit is equal to the benefit multiplier times the employee's years of service times the earnings base. Thus, for Tier 1 employees with 30 years of service, the retirement benefit would be 2.5 percent times 30 years times the earnings base, i.e., 75 percent of the earnings base. A career average benefit formula averages the annual earnings over an employee's entire career, whereas a highest 5-year average benefit formula averages the earnings in the highest 5 years of the employee's career, which are typically at the end of the career. Over the course of a 20-year career the difference in the average earnings could be substantial, for example, the highest 5-year average could exceed the career average earnings by more than 10 percent.

<sup>19</sup>GERS Tier 2 employee contribution rates range from 11.5 to 13.625 percent, depending on the type of employee.

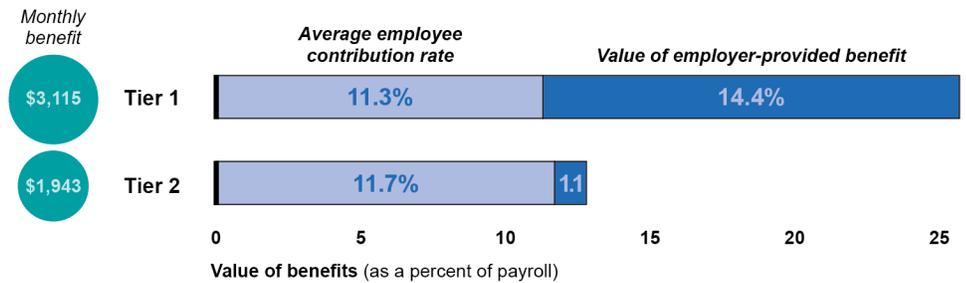
members. Stakeholders and officials from three comparison plans we interviewed told us that COLA benefits can be based on the plan's overall funding level, so that if the plan falls below a specific funding threshold, the COLA benefit can be reduced or suspended. For example, officials with the South Dakota Retirement System said the COLA varies depending on how much the plan is funded each year above a 100 percent threshold. According to officials with Kentucky's retirement system, it has not had a COLA since 2011 as Kentucky's statute dictates COLAs cannot be paid unless the plan is fully funded or the COLA has been pre-funded in the state budget.

GERS officials discussed the impact of decreased benefits on employment, and the balance that is needed so that employees could find value in their benefits. The officials noted that if benefits were too low, the pool of public employees would diminish. In our analysis of GERS' documents, we found that the estimated value of employer-provided benefits earned by GERS' actively employed participants averaged 7 percent of their earnings in 2021 for Tier 1 and Tier 2 employees combined, and 14.4 percent for Tier 1 employees alone.<sup>20</sup> In contrast, the estimated value of employer-provided benefits earned by those hired on or after 2005 was 1.1 percent of their earnings in 2021. As a result, there is little room to further reduce benefits or increase employee contributions for Tier 2 employees without the estimated value of employer-provided benefits reaching zero. If this were to become the case, Tier 2 employees would be receiving no value from the plan. (See fig. 5. for a comparison of Tier 1 and Tier 2 plans.) For state and local plans within the Public Plans Database, the estimated average value of employer-provided benefits ranged from 2.1 percent to 12.7 percent of employee earnings.

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<sup>20</sup>We measure the estimated value of employer-provided benefits using the employer normal cost. The normal cost is the portion of the value of expected future benefits that is "earned" in the current year, based on the actuarial cost method used and expressed as a percentage of active employee payroll. This measure allows for broad comparison of benefits amongst different pension plans.

**Figure 5: Average GERS Benefit Comparison for Tiers 1 and 2**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 5**

	Monthly benefit (in dollars)	Average employee contribution rate Value of benefits (as a percent of payroll)	Value of employer-provided benefit Value of benefits (as a percent of payroll)
Tier 1	3115	11.3	14.4
Tier 2	1943	11.7	1.1

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

Note: Tier 1 employees were hired on or before September 30, 2005 and Tier 2 employees were hired on or after October 1, 2005. The illustration of monthly benefits assumes two employees entered GERS-covered regular service at age 42, worked 23 consecutive years, and retired at age 65, with annual earnings starting at \$43,000, and 3.25 percent annual earnings growth.

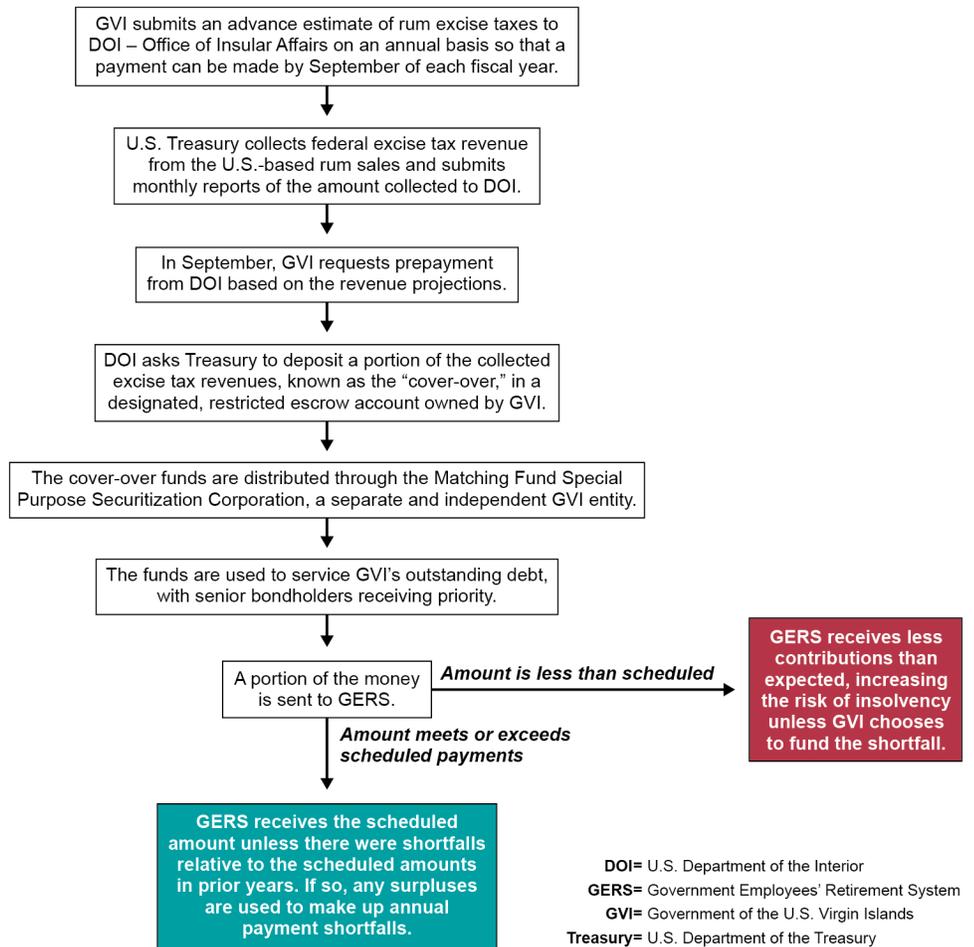
## While GERS Secured Revenue through a Tax on Rum Sales, the Plan Still Faces Several Risks in Meeting Promised Benefit Obligations

### GERS' Financial Outlook Improved in April 2022 through Dedicated Funding from Taxes on Rum Sales

In April 2022, USVI finalized a debt refinancing plan to provide dedicated funding to GERS with revenue from an excise tax on rum sales. The Funding Note, issued by the Virgin Islands Public Finance Authority, promises to pay GERS in annual installments over a period of 30 years. These annual scheduled projected payments vary from \$73.6 million to \$158 million through 2052. However, if the annual installments paid to GERS fall short of the promised scheduled payments, the USVI government can choose to fund the shortfall. Prior to the Funding Note, GERS actuaries projected the plan to be insolvent in 2025. However, with

the additional payments through the Funding Note, GERS and its actuaries projected that GERS would remain solvent even though assets are projected to decline through 2038. They also projected that after 2038, GERS assets are expected to increase thereafter. (See fig. 6 for a description of the process by which Matching Fund receipts flow to GERS via a Funding Note.)<sup>21</sup>

**Figure 6: Flow of U.S. Virgin Islands Matching Fund Receipts via a Funding Note**



Source: GAO analysis of Matching Fund Special Purpose Securitization Corporation Bond Offering Circular (April 1, 2022). | GAO-24-105862

<sup>21</sup>The Matching Fund Special Purpose Securitization Corporation ('Matching Fund') is a statutorily established, independent entity enacted by the Legislature of the Virgin Islands to distribute receipts from excise taxes collected on U.S.-based rum sales to bondholders and other debt service of USVI, including GERS.

In the event of an insolvency—or asset depletion—employer and employee contributions would cover about 80 to 85 percent of the projected benefits in the years immediately following insolvency, according to our analysis of information from GERS' most recent actuarial valuation. Retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government.

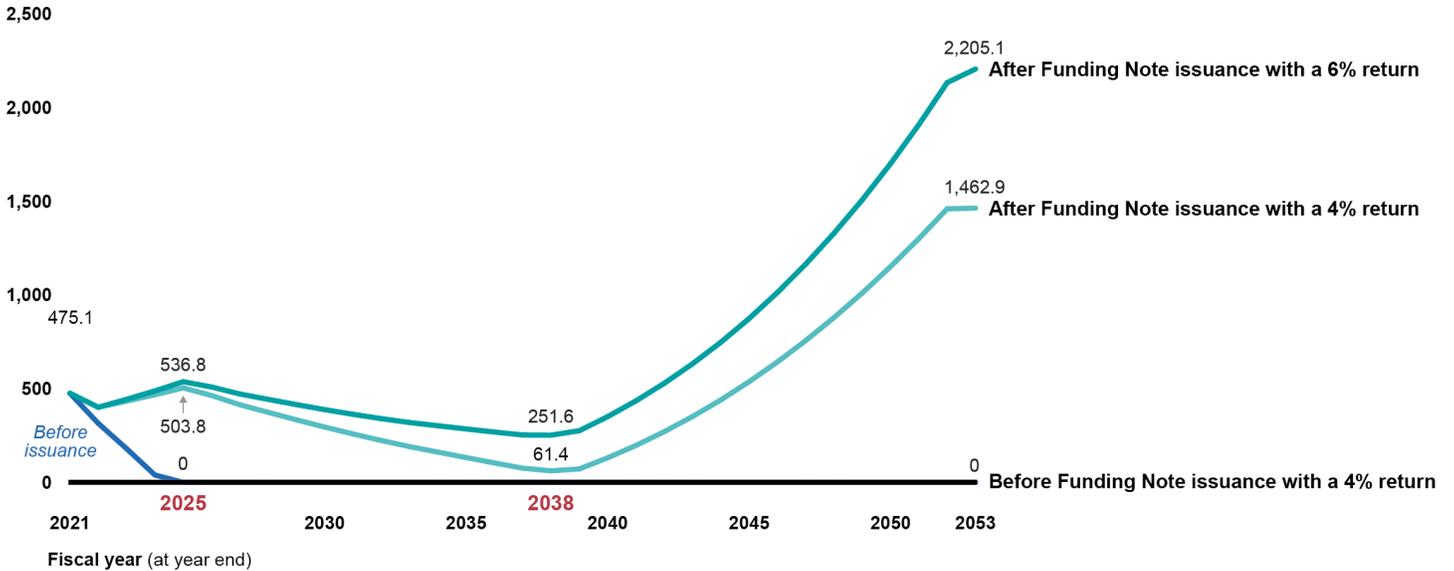
GERS assets are expected to decline every year from 2025 through 2038, even with the inclusion of the Funding Note proceeds. However, proceeds from the Funding Note improves the trajectory of GERS' assets. For example, using the assumptions set in the September 30, 2021 GERS actuarial valuation, the plan was projected to become insolvent prior to the Funding Note issuance, but after the Funding Note the plan is projected to narrowly avoid insolvency (see fig. 7). These projections, developed by GERS actuaries, use a 4 percent asset return assumption and assume a \$13.25 per proof gallon excise tax rate.<sup>22</sup> At the lowest point in 2038, the asset value is projected to be \$61 million, representing a funded status—the ratio of the plan's assets to the plan's liabilities—of less than 2 percent. For comparison purposes, figure 7 also shows the projections using a 6 percent asset return assumption and assume a \$13.25 per proof gallon excise tax rate.

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<sup>22</sup>Per the October 1, 2019, GERS actuarial valuation report: "Due to the short-term horizon of the plan as a result of the projected insolvency, the need to liquidate assets over the coming years and the expectations for investment returns over the next few years, the investment return assumption used for the funding valuation was lowered from 7 percent to 4 percent as approved by the Board for this valuation." GERS retained the 4 percent investment return assumption for the 2020 and 2021 valuations. The investment return assumption was raised to 6 percent in the September 30, 2022 valuation, which was published after we completed our analysis.

**Figure 7: GERS Projected Assets by Fiscal Year, before and after Funding Note Issuance, Using a \$13.25 per Proof Gallon Excise Tax Rate**

Assets (in millions of dollars)



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 7**

Assets (in millions of dollars)

Fiscal year (at year end)	Before Funding Note issuance with a 4% return	After Funding Note issuance with a 4% return	After Funding Note issuance with a 6% return
2021	475.1	475.1	475.1
2022	314.7	400.5	400.5
2023	179.6	433.2	442.9
2024	39.2	467.2	487.9
2025	0	503.8	536.8
2026	0	463.5	508.8
2027	0	414.1	471.4
2028	0	373.6	442.8
2029	0	333.6	414.8
2030	0	294.9	387.9
2031	0	258.1	362.9
2032	0	223.2	339.8
2033	0	190.6	319.1

Fiscal year (at year end)	Before Funding Note issuance with a 4% return	After Funding Note issuance with a 4% return	After Funding Note issuance with a 6% return
2034	0	161.4	301.9
2035	0	132.2	284.8
2036	0	103.3	268.2
2037	0	75.5	252.8
2038	0	61.4	251.6
2039	0	71.4	275.4
2040	0	130.6	350.4
2041	0	196.7	434.5
2042	0	270.1	528.2
2043	0	351	632.3
2044	0	439.7	747.2
2045	0	536.9	873.9
2046	0	642.3	1012.7
2047	0	756.3	1164.2
2048	0	878.9	1328.8
2049	0	1010.3	1507.3
2050	0	1150.9	1700.4
2051	0	1300.6	1908.6
2052	0	1459.5	2132.6
2053	0	1462.9	2205.1

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

Notes: Projections include the assumption of \$13.25 per proof gallon excise tax rates, with actual Funding Note revenue amounts plus any U.S. Virgin Islands supplemental contribution for fiscal years 2022, 2023, and 2024 as of December 2023, and assume a 4 or 6 percent return on assets, with observed -3.8 percent asset return in 2022.

Under both the 4 percent and 6 percent investment return scenarios, during the 13-year period from 2026–2038, projected benefit payments (money “out” of the plan) exceed plan contributions (money “into” the plan), and the projected assets decline. Plan investment returns will be relatively low during this 13-year period since there will be relatively few assets to generate investment returns.

It is important to note that, even under projections that show the plan remaining solvent, when a plan is projected to become dangerously close to insolvency over a projection period, any number of factors could result in plan experience falling short of what was assumed and potentially lead to insolvency, as illustrated in some of the alternative projections in the next section. In addition, each year the plan’s actuaries perform an

actuarial valuation of the plan, and while the most recent actuarial valuation might project the plan to just avoid insolvency, the next year's valuation, based on updated data and assumptions, could potentially show a projection of insolvency.

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## GERS Continues to Face Several Risks As It Addresses Low Asset Levels and Uncertainty in Projected Revenue

Since the Funding Note was issued in April 2022, it has provided GERS with additional revenue to address some of its cash flow concerns, but GERS still faces significant risks regarding paying promised benefits if certain key assumptions are not met. The most impactful risks are those risks related to the Matching Fund receipts, in particular, the risk to GERS annual contributions resulting from the reduced federal excise tax rate to \$10.50 per proof gallon as of January 2022.<sup>23</sup> Other risks include uncertain rum sales, uncertain contributions, uncertain investment returns, and physical asset holdings. That is, GERS plan assets include physical assets that are hard to value and may be difficult to liquidate if the plan's assets fall too low. To better understand these risks, we analyzed how the plan's assets would change under various scenarios if assumed revenue to the plan is less than expected as described below.

**Lower federal excise tax rate.** Current scheduled contributions to GERS from the Funding Note are based on a federal excise tax rate of \$13.25 per proof gallon, which is higher than the current statutory rate of \$10.50 per proof gallon. Initial GERS Funding Note revenue projections for the excise tax used a higher tax rate that expired in 2021 and reverted to a lower statutorily defined rate in 2022. Although the higher rate had been regularly extended, the extension expired in 2021 and USVI was reimbursed at the \$10.50 per proof gallon rate beginning January 1, 2022.<sup>24</sup> The USVI government made a contribution to GERS in fiscal year 2023 to supplement the difference.<sup>25</sup>

USVI and GERS officials said they expect the higher rate of \$13.25 per proof gallon to be reinstated and potentially retroactive to January 1,

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<sup>23</sup>A proof gallon is one liquid gallon of spirits that is 50 percent alcohol at 60 degrees Fahrenheit. For example: Distilled Spirits bottled at 80 proof (40 percent alcohol) would be 0.8 proof gallons per gallon of liquid.

<sup>24</sup>26 U.S.C. § 7652(f).

<sup>25</sup>As of February 2024, the USVI government has not contributed to supplement the full amount of the shortfall in fiscal year 2024.

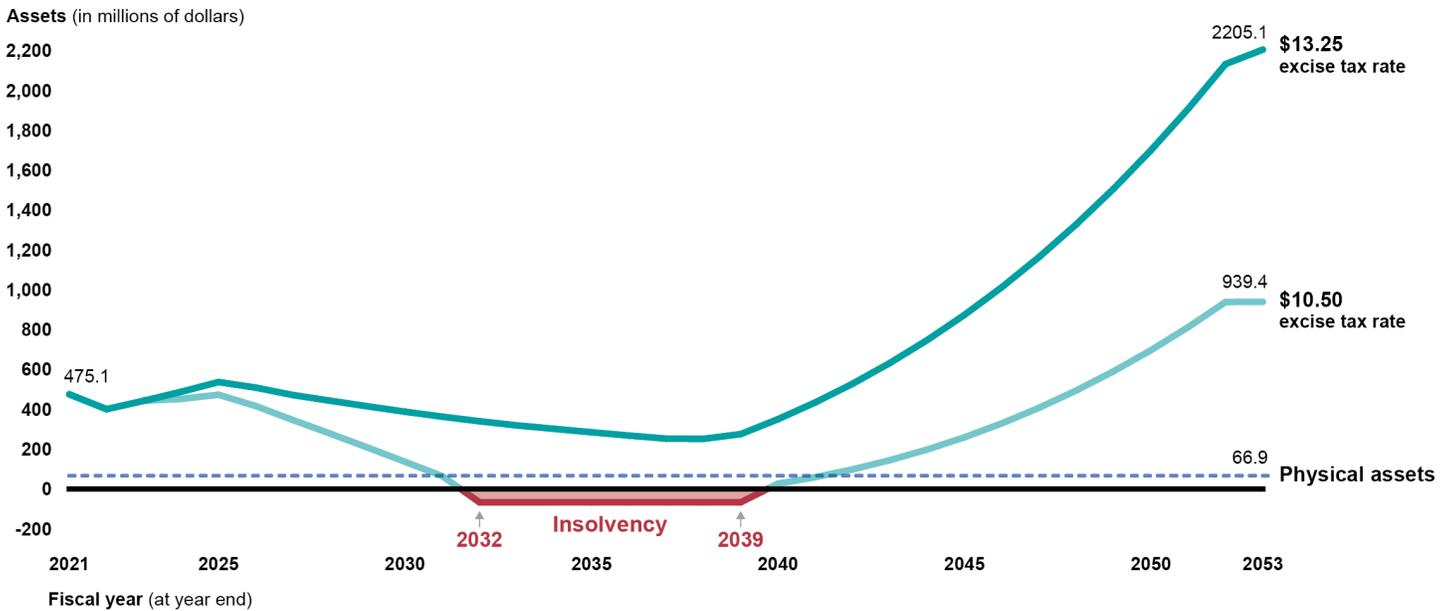
2022.<sup>26</sup> However, based on current statute with a reimbursement rate of \$10.50 per proof gallon, GERS assets would be projected to be depleted—and the plan insolvent—for a period of time from approximately 2032 through 2039.<sup>27</sup> If GERS were to become insolvent, our further analysis shows that projected employer and employee contributions would only cover about 80 to 85% of the promised benefits in the years immediately following insolvency. As a result, retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government. Further, during the years preceding 2032, GERS' plan assets are projected to approach the physical asset holding amount of \$66.9 million. GERS would then need to utilize these assets to cover promised benefit obligations, which could result in distressed sales (see fig. 8).

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<sup>26</sup>No legislation has been passed at the time of report issuance.

<sup>27</sup>As noted earlier, our projections of GERS assets in this report are based on the most recent data available to us as of December 2023, the time of our analysis. Using information from the 2022 valuation report, which subsequently became available, we estimated that the projected year of insolvency would be earlier than our analysis shows. Specifically, we estimated that the year of insolvency shown in figure 8 would advance to 2031 once more recent data is considered. GERS also provided information that indicated asset returns during 2023 were greater than expected, which would improve the status of GERS funding relative to our analysis. To examine whether this could have a significant effect on our projections, we used our model to estimate future cash flows assuming GERS assets returned 8 percent in 2023, instead of the originally assumed 6 percent. The additional return reduced the shortfall in assets needed to pay full benefits in 2031. However, the year of insolvency remained 2031. GAO actuaries note that higher investment rates of returns have relatively little effect on the projected insolvency due to the system's low level of funding.

**Figure 8: GERS Projected Assets by Fiscal Year, Comparing \$10.50 and \$13.25 Per Proof Gallon Federal Excise Tax Rates**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 8**

**Assets (in millions of dollars)**

Fiscal year (at year end)	\$13.25 excise tax rate	\$10.50 excise tax rate	Physical assets
2021	475.13	475.13	66.9
2022	400.54	400.54	66.9
2023	442.91	442.91	66.9
2024	487.92	451.88	66.9
2025	536.77	473.26	66.9
2026	508.8	416.2	66.9
2027	471.39	345.75	66.9
2028	442.82	277.7	66.9
2029	414.8	207.83	66.9
2030	387.87	136.55	66.9
2031	362.94	64.59	66.9
2032	339.81	<i>Insolvency</i>	66.9
2033	319.1	<i>Insolvency</i>	66.9
2034	301.89	<i>Insolvency</i>	66.9

Fiscal year (at year end)	\$13.25 excise tax rate	\$10.50 excise tax rate	Physical assets
2035	284.78	<i>Insolvency</i>	66.9
2036	268.18	<i>Insolvency</i>	66.9
2037	252.76	<i>Insolvency</i>	66.9
2038	251.6	<i>Insolvency</i>	66.9
2039	275.39	<i>Insolvency</i>	66.9
2040	350.4	26.83	66.9
2041	434.47	59.33	66.9
2042	528.21	98.4	66.9
2043	632.31	144.56	66.9
2044	747.19	198	66.9
2045	873.91	259.59	66.9
2046	1012.66	329.3	66.9
2047	1164.17	407.61	66.9
2048	1328.78	494.62	66.9
2049	1507.28	590.87	66.9
2050	1700.41	696.8	66.9
2051	1908.63	812.58	66.9
2052	2132.64	938.59	66.9
2053	2205.08	939.38	66.9

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

Notes: Assumes 6 percent return on assets. Projections are based on September 30, 2021 actuarial valuation results, performed by GERS' actuarial consultant. They include the effect of Matching Fund receipts at \$10.50 and \$13.25 per proof gallon excise tax rates, with actual Funding Note revenue amounts plus any U.S. Virgin Islands (USVI) supplemental contribution for fiscal years 2022, 2023, and 2024, as of December 2023, and assumes a 6 percent return on assets, with observed -3.8 percent asset return in 2022. The dashed line represents the value of physical assets held by GERS; the fiscal year 2022 financial statements disclose a value of \$66.9 million. These projections assume that physical assets are able to be sold at their stated value without distress-sale discounts, and that the USVI government covers benefit shortfalls during the insolvency period, so that the plan does not have to make back payments after coming out of insolvency. Projected assets would be lower if either of these assumptions did not hold. If GERS were to become insolvent, projected employer and employee contributions would cover only about 80-85 percent of promised benefits in the years immediately following insolvency, and retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government.

The effect of reducing the federal excise tax rate from \$13.25 per proof gallon to \$10.50 per proof gallon was estimated by assuming Matching Fund revenue reductions would be shared similarly amongst GERS and the domiciled rum companies. However, because GERS has a particular priority ranking among other bondholders and USVI, the actual revenue received by GERS under this scenario could be substantially less, or more.

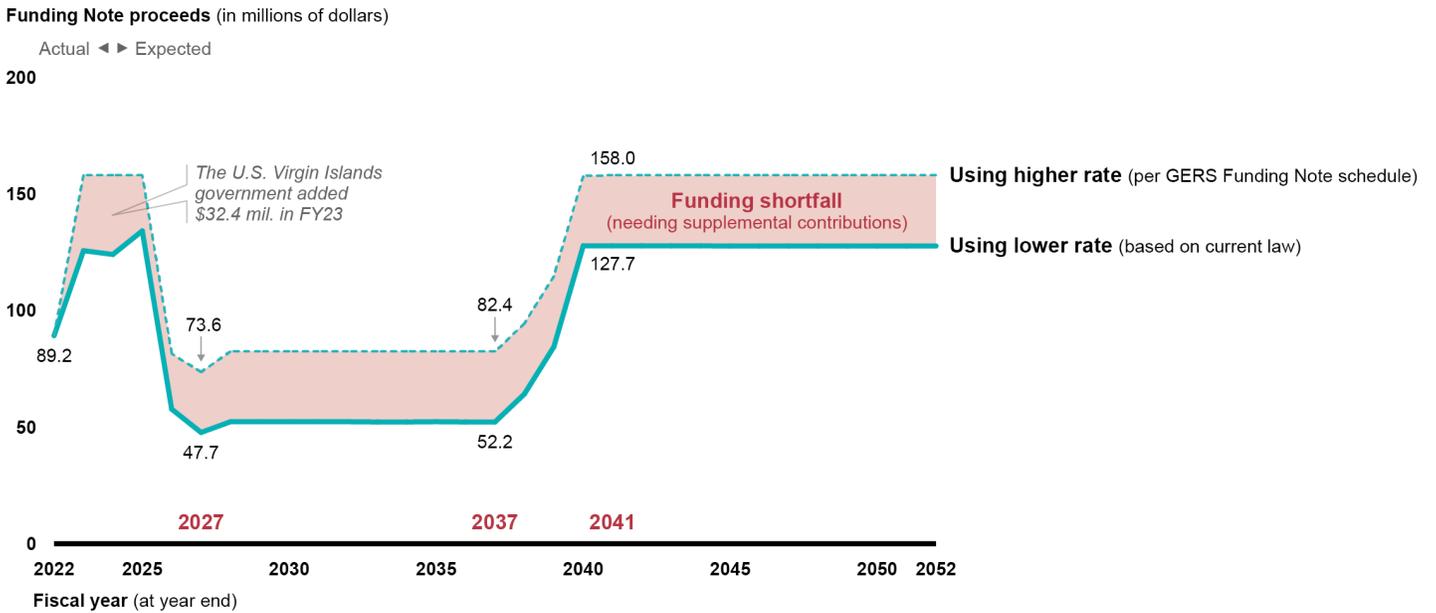
**Lower than expected rum sales.** Assumptions for contributions to GERS are based on Matching Fund revenue remaining constant, or correspondingly, constant rum sales. Rum sales could be lower than expected due to decreased U.S.-based demand. Lower rum sales would correspond to lower Matching Fund revenue and ultimately a lower contribution amount to GERS. A USVI official told us the government may or may not be able and willing to help make up for the shortfall. It is possible that the combined effect of the lower federal excise tax rate of \$10.50 per proof gallon and lower than expected rum sales would result in GERS receiving no contributions from the Matching Fund in a particular year. Further, a substantially lower level of rum sales alone could also result in GERS receiving no contribution from the Matching Fund.

**Uncertain contributions from the USVI government.** In 2023, the USVI government contributed monies from the general fund to make up the shortfalls in expected Matching Fund receipts, but USVI officials told us that they are not certain if they would be able to sustain that level of funding in future years. As of December 2023, \$371.2 million had been paid to GERS from a combination of Matching Fund receipts and supplemental payments from the USVI general fund to make up for the shortfall from Matching Fund receipts.<sup>28</sup> USVI general fund monies are already competing for scarce budgetary resources, thus, leading to additional contribution uncertainty. If a shortfall is not funded, GERS will receive less in contributions than scheduled (see fig. 9).

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<sup>28</sup>Payments included \$89.2 million in fiscal year 2022; \$158 million in fiscal year 2023; and \$124 million in fiscal year 2024 (through December 2023). In fiscal year 2021, the USVI government received funding from the U.S. government through the ARPA to aid public health and economic recovery from COVID-19, which provided a substantial infusion of resources to meet pandemic response needs and rebuild a stronger and more equitable economy, according to the USVI Office of Management and Budget. Moreover, USVI and its localities are generally prohibited from using funds distributed under sections 602 and 603 of ARPA to pay off pension liabilities.

**Figure 9: GERS Annual Projected Funding Note Proceeds, Using Different Excise Tax Rates**



Source: GAO analysis of information from the Government Employees' Retirement System (GERS). | GAO-24-105862

**Accessible Data Table for Figure 9**

Fiscal year (at year end)	Higher rate	Lower rate	Funding shortfall (needing supplemental contributions)
2022	89.2	89.2	0
2023	158	125.6	32.4
2024	158	124	34
2025	158	134.1	23.9
2026	81.5	57.7	23.8
2027	73.6	47.7	25.9
2028	82.4	52.3	30.1
2029	82.4	52.3	30.1
2030	82.4	52.3	30.1
2031	82.4	52.3	30.1
2032	82.4	52.3	30.1
2033	82.4	52.2	30.2
2034	82.4	52.2	30.2
2035	82.4	52.3	30.1
2036	82.4	52.2	30.2

Fiscal year (at year end)	Higher rate	Lower rate	Funding shortfall (needing supplemental contributions)
2037	82.4	52.2	30.2
2038	94.5	64.2	30.3
2039	114.7	84.4	30.3
2040	157.6	127.7	29.9
2041	158	127.7	30.3
2042	158	127.7	30.3
2043	158	127.7	30.3
2044	158	127.7	30.3
2045	158	127.6	30.4
2046	158	127.6	30.4
2047	158	127.6	30.4
2048	158	127.6	30.4
2049	158	127.6	30.4
2050	158	127.6	30.4
2051	158	127.6	30.4
2052	158	127.6	30.4

Source: GAO analysis of information from the Government Employees' Retirement System (GERS). | GAO-24-105862

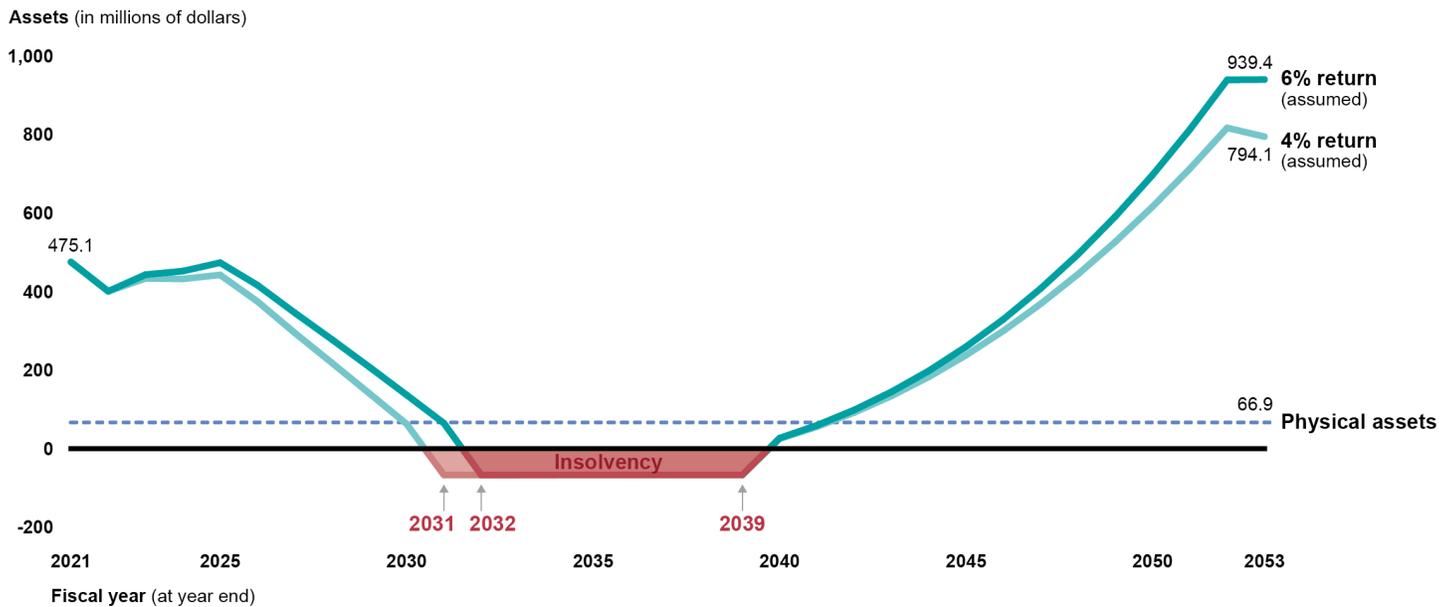
Notes: Proceeds are based on GERS Funding Note, dated April 2022. The higher rate projection is based on the \$13.25 per proof gallon excise tax rate. The lower rate projection is based on the \$10.50 per proof gallon excise tax rate. Both lines are based on the rum sale projections included in the Funding Note. If actual rum sales are lower than projected, the funding shortfalls would be bigger.

The lower line represents the actual amounts received via the Funding Note in fiscal years 2022-2024, and the amounts for years 2025 and beyond are estimated based on a lower excise tax rate on U.S.-based rum sales per proof gallon. The difference between the lines represents necessary additional contributions to GERS from the USVI government, in order to ensure the amount of contributions projected according to the Funding Note.

In addition to uncertainty over whether the USVI government would continue to make up any Matching Fund receipt shortfalls, another area of uncertainty is USVI's contribution discipline regarding contributing the required employer contribution rate. Moreover, this required employer contribution rate (combined with Matching Fund receipts) still falls short of the actuarially determined contribution, although with the addition of the Funding Note, the percentage of the actuarially determined contribution made to the plan has improved significantly.

**Uncertain investment returns.** GERS had been assuming a 4 percent return on plan assets, and GERS officials told us that they anticipate increasing that return assumption to 6 percent in the September 30, 2022 actuarial valuation.<sup>29</sup> GERS is projected to be in a negative cash flow situation beginning in 2026, meaning that money going out of the plan to pay benefits and expenses exceeds contributions coming into the plan, with plan assets projected to decline over the next decade. This situation makes the plan especially vulnerable to “sequence risk,” such as the risk of lower-than-expected investment returns, or even investment losses, in the next few years from which the plan may not be able to recover because of a dwindling asset base. The plan’s investment policy currently targets the plan’s liquid assets (i.e., not including its physical asset holdings) to be invested about 65 percent in equities, which poses additional risk to the plan (see fig.10).

**Figure 10: GERS Projected Assets by Fiscal Year, Comparing 6 and 4 Percent Investment Return**



Source: GAO analysis of Government Employees’ Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

<sup>29</sup>The potential that investment returns will be different than expected is commonly referred to as Investment risk. See *Central States Pension Fund: Investment Policy Decisions and Challenges Facing the Plan*, GAO-18-106 (Washington, D.C.: June 4, 2018) for an example of the impact of investment returns falling short of the investment return assumption.

**Accessible Data Table for Figure 10**

**Funding Note proceeds (in millions of dollars)**

<b>Fiscal year (at year end)</b>	<b>Using higher rate (per GERS Funding Note schedule)</b>	<b>Using lower rate (based on current law)</b>	<b>Funding shortfall (needing supplemental contributions)</b>
2022 (actual)	89.2	89.2	0
2023 (actual)	158	125.6	32.4
2024 (actual)	158	124	34
2025 (Expected)	158	134.1	23.9
2026 (Expected)	81.5	57.7	23.8
2027 (Expected)	73.6	47.7	25.9
2028 (Expected)	82.4	52.3	30.1
2029 (Expected)	82.4	52.3	30.1
2030 (Expected)	82.4	52.3	30.1
2031 (Expected)	82.4	52.3	30.1
2032 (Expected)	82.4	52.3	30.1
2033 (Expected)	82.4	52.2	30.2
2034 (Expected)	82.4	52.2	30.2
2035 (Expected)	82.4	52.3	30.1
2036 (Expected)	82.4	52.2	30.2
2037 (Expected)	82.4	52.2	30.2
2038 (Expected)	94.5	64.2	30.3
2039 (Expected)	114.7	84.4	30.3
2040 (Expected)	157.6	127.7	29.9
2041 (Expected)	158	127.7	30.3

Fiscal year (at year end)	Using higher rate (per GERS Funding Note schedule)	Using lower rate (based on current law)	Funding shortfall (needing supplemental contributions)
2042 (Expected)	158	127.7	30.3
2043 (Expected)	158	127.7	30.3
2044 (Expected)	158	127.7	30.3
2045 (Expected)	158	127.6	30.4
2046 (Expected)	158	127.6	30.4
2047 (Expected)	158	127.6	30.4
2048 (Expected)	158	127.6	30.4
2049 (Expected)	158	127.6	30.4
2050 (Expected)	158	127.6	30.4
2051 (Expected)	158	127.6	30.4
2052 (Expected)	158	127.6	30.4

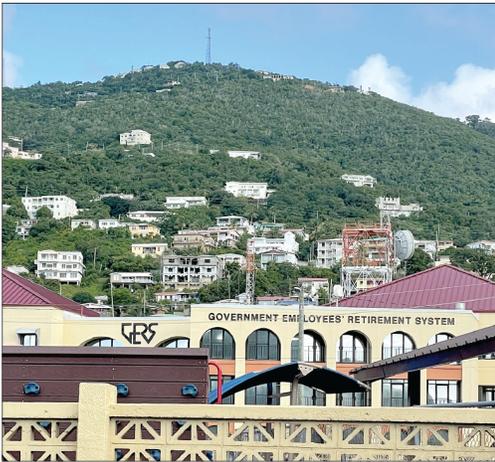
Source: GAO analysis of information from the Government Employees' Retirement System (GERS). | GAO-24-105862

Notes: Projections include the effect of Matching Fund receipts at \$10.50 per proof gallon excise tax rates, with actual Funding Note revenue amounts plus any U.S. Virgin Islands (USVI) supplemental contribution for fiscal years 2022, 2023, and 2024 as of December 2023, and assume a 4 or 6 percent return on assets, with observed -3.8 percent asset return in 2022. The dashed line represents the value of physical assets held by GERS; the fiscal year 2022 financial statements disclose a value of \$66.9 million. These projections assume that physical assets are able to be sold at their stated value without distress-sale discounts, and that the USVI government covers benefit shortfalls during the insolvency period, so that the plan does not have to make back payments after coming out of insolvency. Projected assets would be lower if either of these assumptions did not hold. If GERS were to become insolvent, projected employer and employee contributions would cover only about 80-85 percent of the promised benefits in the years immediately following insolvency, and retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government.

**Physical asset holdings.** As noted above, in the event GERS reaches particularly low asset levels, earning the assumed investment return on the portfolio may become more difficult. In that case, GERS may need to sell some or all of its physical asset holdings, potentially under distressed sale conditions, further exacerbating its financial position and contributing to asset depletion. For example, one of GERS' most valuable physical assets is the Havensight Mall, which is located near the cruise ship dock and houses several shops attractive to tourists (see fig. 11). GERS

officials said they do not expect to get full market value for the mall if they must sell it under distressed conditions.

**Figure 11: Havensight Mall and the GERS Office Complex Represent 85 Percent of GERS Physical Assets**



The GERS building is a three-story office complex of more than 68,000 square feet.



Havensight Mall encompasses just under 9 acres.

Source: GAO and Government Employees' Retirement System (GERS) photos. | GAO-24-105862

## Options to Better Ensure Promised Benefits Involve a Shared Commitment to an Adequate Funding Policy and Addressing Underfunding

### Funding That is Adequate, Resilient, Achievable, and Enforceable Can Help Ensure Promised Benefits

Addressing the ongoing risk of insolvency for GERS is a shared responsibility of the USVI executive and legislative branches, according to literature we reviewed. In a November 2019 publication, the National Association of State Retirement Administrators stated that the authority to make the most consequential decisions regarding the long-term health of a public pension plan typically lies with policymakers, including the executive and legislative branches. Specifically, policymakers enact the

laws that establish the plan, its design, and financing; and authorize the public entities responsible for key areas of governance.<sup>30</sup>

A shared commitment to the long-term health of a pension plan includes ensuring that the plan has sound governance practices. Such practices include ensuring that funding is sustainable and communicating the financial status and risks of the plan to the public. All nine stakeholders we interviewed underscored the importance of governance in ensuring a financially sustainable pension plan. For example, several stakeholders said that sustainable pension plans have systems in place to ensure funding regardless of political or economic shifts. The following are several actuarial or governance-related principles, concepts, or practices described in literature we reviewed to better ensure that promised benefits are met and to demonstrate a long-term shared commitment to funding pension plans.<sup>31</sup> We also describe how these principles, concepts, or practices can be relevant to GERS, according to stakeholders and USVI officials we interviewed, and the eight selected plans we reviewed.

Funding policy principles. These include funding that is adequate, resilient, achievable, and enforceable.

- **Adequate.** Having adequate funding is key to ensuring long-term sustainability.<sup>32</sup> GERS officials said their statute states that GERS should be actuarially funded to ensure the plan has adequate funds to pay promised benefits. GERS officials and stakeholders we spoke with said that the USVI government has not adequately funded the plan for decades, which has contributed to its current financial difficulties. For example, the government has funded 27 to 83 percent

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<sup>30</sup>Governance includes the systems and processes that comprise the oversight and control of an organization.

<sup>31</sup>To identify these, we reviewed four actuarial and public pension related publications that stakeholders and our internal actuaries identified for our review.

<sup>32</sup>For example, the 2014 Society of Actuaries Blue Ribbon Panel recommended that funding entities and plan trustees should strive to fund 100 percent of the obligation for benefits, while an American Academy of Actuaries issue brief on pension funding stated that “All plans should have a reasonable funding or contribution strategy to accumulate assets equal to 100 percent of a relevant pension obligation, unless reasons for a different target have been clearly identified and the consequences of that target are well understood.” American Academy of Actuaries, *Issue Brief: The 80% Pension Funding Myth* (Washington, D.C.: Oct. 2021).

of the actuarially determined contribution annually since 2002, according to our analysis of GERS information.<sup>33</sup>

- **Resilient.** Ensuring a financially stable pension plan requires setting a funding policy that ensures the plan is well-positioned to address economic risks or shocks.<sup>34</sup> Stakeholders we spoke with and officials from GERS and other public plans noted that competing financial priorities will necessarily arise, such as addressing weather events, natural disasters, and public health emergencies that strain public budgets.<sup>35</sup> Some public plans use budget surpluses or windfall revenue to bolster the plan's finances, according to other stakeholders and plan officials we interviewed. While there is no requirement to pre-fund plan benefits, pre-funding can help plans maintain financial reserves and better position them to provide benefits owed in the future, according to literature we reviewed. In addition, we have previously reported that pre-funding can help protect a plan sponsor from higher costs in the future.<sup>36</sup>
- **Achievable.** A funding policy that is achievable and realistic is more likely to be financially sustainable over time. For example, the USVI Finance Commissioner told us that the Matching Fund revenue has helped address GERS' primary funding challenges by providing a cash infusion. GERS board members and others have expressed concerns about the assumed income from the Matching Fund. In particular, the payment schedule was based on a \$13.25 per gallon rum excise tax, which decreased to \$10.50 per gallon in January 2022, as scheduled. According to GERS officials, this led to a shortfall of about \$32.4 million in fiscal year 2023, which was provided by USVI government funds but may not be sustainable in future years.

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<sup>33</sup>See figure 3 above for more detail.

<sup>34</sup>For example, the 2014 Society of Actuaries Blue Ribbon Panel recommended that programs should be funded at levels that will enable them to respond to changing conditions and maintain a high degree of resilience to cope with uncertain future conditions.

<sup>35</sup>The American Academy of Actuaries described multiple factors to consider in evaluating the security of pension benefits: funding levels; riskiness of investments; financial resources of plan sponsor; plan sponsor's legal obligation to fund the plan; predictability of benefit payments; and sources of external support. American Academy of Actuaries, *Issue Brief: The Security of Pension Plan Benefits* (Washington, D.C.: May. 2021)

<sup>36</sup>For a discussion of the advantages of prefunding retirement benefits for both plan participants and enterprises that sponsor retirement plans, see *U.S. Postal Service: Status, Financial Outlook, and Alternative Approaches to Fund Retiree Health Benefits*, [GAO-13-112](#) (Washington, D.C.: Dec. 4, 2012).

- **Enforceable.** Developing mechanisms to ensure contributions are made to the plan in a timely fashion and paid in full is consistent with recommended practices for oversight of a public pension plan. GERS officials described challenges collecting contributions from some government agencies. For example, GERS sued the Water and Power Authority in 2022 to collect alleged unpaid contributions, which totaled over \$10 million by 2023.<sup>37</sup> GERS officials said they are unsure if the lawsuit will result in full repayment because the Water and Power Authority does not have sufficient assets. Other government agencies have also underpaid contributions to GERS, according to GERS documentation.

**Sustainable benefit.** A sustainable benefits policy balances the needs for benefits to be both valuable to workers and affordable to the government. For example, lifetime income benefits become more expensive as life expectancy increases. The cost of providing that benefit must be considered over the long term. To that end, when GERS reduced benefits for Tier 2 employees, the plan's prospects for sustainability increased.<sup>38</sup> Still, given the amount GERS benefits have already been reduced, one stakeholder and GERS officials said that a further large benefit reduction could lead to an economic downturn in the USVI or could cause workers to move away from the USVI.<sup>39</sup>

**Ongoing communication.** The Society of Actuaries Blue Ribbon Panel reported in 2014 that it is important for stakeholders—such as trustees, funding entities, plan members, union officials—to have comprehensive information about the current and expected future financial position and risks of a pension plan. According to GERS officials, GERS shares information about the plan's financial position with the legislature, the Governor, and the Finance Commissioner annually and presents before the legislature annually. One stakeholder and officials we interviewed from three public plans said improved communication helped

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<sup>37</sup>GERS officials said the lawsuit was ongoing as of February 2024.

<sup>38</sup>According to GERS actuaries, the estimated cost to the USVI government of employee accruals in GERS was 7 percent of pay in 2021. Tier 1 accounted for 14.4 percent and Tier 2 accounted for 1.1 percent. As Tier 1 employees phase out of active service estimated costs to the USVI government will decline from the current amount of 7 percent to the Tier 2 cost of 1.1 percent. These amounts would likely be sustainable at today's contribution levels if not for the historical underfunding of the Tier 1 legacy benefits.

<sup>39</sup>Moreover, Tier 2 employees' benefits are primarily self-funded, so further cuts to that population's benefits could result in some of their employee contributions effectively becoming transfers to Tier 1 retirees. Alternative cuts would need to come from retirees or near retirees.

policymakers understand the need for potentially unpopular policies that can improve plan solvency, such as reduced cost-of-living adjustments.

**Prudent investment policy.** GERS plan asset levels are low, and projected to continue to decline, possibly to a period of insolvency, before starting to rise after 2040 as Tier 2 employees and retirees, with their lower benefits, become a bigger portion of the plan population. As noted earlier, the plan’s current investment policy targets an allocation of 65 percent of its liquid assets in equities. This exposes the plan to substantial additional risk over the next decade, when the plan is projected to be in a negative cash flow situation.<sup>40</sup> Looking further ahead, if and when plan assets become more substantial in future decades, a prudent investment policy will become particularly important, especially given GERS is a relatively “mature” plan, with a high ratio of retirees to active employees.

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## Public Plans Have Used a Range of Options to Improve Sustainability

Public pension plans have taken a variety of steps to improve sustainability, according to stakeholders and public plan officials we spoke with and literature we reviewed. While not an exhaustive list, below are several options stakeholders and plan officials said could increase plan revenue or reduce costs and manage liabilities. The USVI and GERS have taken some of these steps to varying degrees, and they may want to consider a combination of these options, or others, to improve GERS’ sustainability.<sup>41</sup>

**Increase plan revenue.** Some public plans have increased revenues by establishing a dedicated funding source, according to stakeholders we spoke with and literature we reviewed.<sup>42</sup> This can be done through a special purpose vehicle, such as the GERS Matching Fund, or by dedicating specific revenue streams. For example, one stakeholder said that some cities have dedicated a portion of their sales tax to the pension

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<sup>40</sup>As previously discussed, risks include lower than expected investment returns and investment losses.

<sup>41</sup>GAO is not endorsing any particular option or combination of options.

<sup>42</sup>For examples of dedicated funding streams, see Doonan, Dan and Bond, Tyler, *Beyond the Arc: Innovative Funding Strategies from the Public Sector*, National Institute on Retirement Security (December 2020) and National Association of State Retirement Administrators, Issue Brief: State and Local Government Contributions to Statewide Pension Plans: FY21 (December 2022).

plan for city employees. According to a 2022 Urban Institute report, narrow revenue streams such as targeted sales taxes may be less susceptible to political pressure than other broad-based taxes.<sup>43</sup>

Having a dedicated funding stream also helps ensure that funds cannot be redirected to another purpose, according to two stakeholders. For example, one stakeholder and officials from one of our selected public pension plans said that some plans may take a “pension holiday” and stop funding pension plans to pay for other competing needs. However, that can lead to further underfunding, particularly during economic downturns. Northern Mariana Islands officials described the challenges that arise when a funding source is not dedicated. For example, they said that funds from hotel occupancy and alcohol taxes were temporarily earmarked for the public plan but were suspended by legislators and no longer help fund the public plan.<sup>44</sup>

In addition to increasing plan revenue through dedicated revenue from a sales tax or other source, stakeholders and plan officials cited other strategies to do so:

- **Seek additional funding for administrative expenses.** To increase overall plan assets, GERS has asked the USVI government to pay GERS’ administrative expenses, which it had done from 1959 until 1998.<sup>45</sup> See appendix IV for our illustrations of the effects of reinstating the policy of the USVI government paying for all of GERS’ administrative plan expenses. In our illustrative scenario with this policy reinstated, plan finances improve, but this change alone does not lead to the plan remaining solvent.<sup>46</sup>
- **Increase profitability of physical assets.** GERS officials and one stakeholder noted that the plan could try to increase the profitability of

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<sup>43</sup>Andrew Biggs et al., *Addressing and Avoiding Severe Fiscal Stress in Public Pension Plans*, Urban Institute (Washington, D.C.: January 2022).

<sup>44</sup>As we reported previously, earmarks may be available for a specified period or until the funds are expended. See [GAO-22-105467](#).

<sup>45</sup>Administrative expenses relate to plan operations beyond the management of the assets, such as actuarial, audit, bookkeeping, and legal services. While the government adds revenue to GERS through employer contributions, it can also increase plan assets by decreasing or eliminating the amount of plan expenses that are paid out of plan assets. In fiscal year 2022, GERS administrative expenses were \$14.8 million.

<sup>46</sup>The scenarios are meant to illustrate the potential effects, not model or predict the precise effects of the selected strategies. For further information on our scenario assumptions and results, see appendices I and IV.

its real estate portfolio, though the viability and potential impact of such a proposal would need to be analyzed.<sup>47</sup> Specifically, they noted that GERS owns Havensight Mall, a tourist destination for cruise ships, and said that GERS could focus on increasing the mall's operating income, and thus increase profits for GERS. To that end, in September 2023 GERS announced the construction of a 5-story hotel at Havensight Mall.

- **Increase employer contributions.** To increase plan revenue, the GERS board of trustees has increased the employer contribution rate twice over the last 10 years. The current employer contribution rate is 23.5 percent of payroll, which is less than the Actuarially Determined Contribution, even when combined with Matching Fund revenue, as we described earlier in this report. Our illustrative scenario shows that a 5-percentage point increase narrowly allows GERS to remain solvent (see text box).<sup>48</sup> However, further increasing the employer contribution rate could be challenging, and an increased contribution rate alone does not ensure that employers will make the required contributions to the plan.

**Illustrative Scenario on Increasing Employer Contributions**

In our scenario that illustrates the effect of increasing the employer contribution by 5 percentage points (from 23.5 to 28.5 percent), we found that the plan remains solvent if certain assumptions are met.<sup>a</sup> Further, our scenario shows plan assets staying above the physical asset holding amount, below which point GERS may need to sell its physical assets, for all years in the projection. At the lowest point in 2038, our scenario shows plan asset level of \$104.2 million. This is notably less than the asset level in 2021 (\$475 million), according to the most recent information reported by GERS actuaries at the time of our analysis. In contrast, our scenario shows that a 3-percentage point increase in the employer contribution rate results in plan insolvency with the plan asset level dropping below zero in 2036 through 2039.

Source: GAO analysis of Government Employees' Retirement System (GERS) plan information. | GAO-24-105862

<sup>a</sup>The scenarios described in this text box assumed a 6 percent investment return and an excise tax rate of \$10.50 per proof gallon of rum. An investment return of 4 percent would produce less favorable results, and an excise tax rate of \$13.25 per proof gallon of rum would produce more favorable results.

**Restructure plan liabilities.** Some public plans have chosen a reform strategy that decouples the unfunded liabilities associated with prior generations of workers from the future liabilities associated with the

<sup>47</sup>We have not analyzed the viability or potential impact of such a proposal.

<sup>48</sup>The scenarios are meant to illustrate the potential effects, not model or predict the precise effects of the selected strategies. For further information on our scenario assumptions and results, see appendices I and IV.

current workforce.<sup>49</sup> This type of restructuring can allow plans to use one account to fund the benefits for current workers and another account to address the legacy of funding shortfalls for prior generations. This can enable plans to use different strategies to fund each account. For example, the Teachers' Retirement Fund in Indiana separated its legacy unfunded liability from its new tier of benefits. With the creation of the new tier, the employer began fully prefunding the new tier (i.e., making the full actuarially determined contribution for the new tier) and set up a funding strategy to cover the legacy tier.<sup>50</sup>

While restructuring does not by itself eliminate or decrease liabilities, it can help policymakers better understand and manage legacy costs. A 2022 Center for Retirement Research study found that separating legacy costs from current costs can lead to more transparent and rational funding policies.<sup>51</sup> The study projected that although annual contributions under a new approach are initially higher, which the employer would have to manage, ultimately costs will be lower and more consistent over time. Moreover, it found that perceived costs were lower under the new approach.

**Freeze plan benefits.** Puerto Rico and some states have frozen their defined benefit plans and are providing defined contribution accounts for future benefits. In Puerto Rico, currently employed members of the frozen defined benefit pension plan no longer accrue additional defined benefit pension benefits for their continued years of service. Instead, currently employed members are enrolled in defined contribution accounts.<sup>52</sup> Plans in Oklahoma and other states also enacted legislation closing their defined benefit plans and placing newly hired workers into defined contribution accounts. We previously have reported that employers may freeze or close their defined benefit plan when encountering financial difficulties, but this also limits workers' future defined benefit pension

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<sup>49</sup>In December 2020, the National Institute on Retirement Security provided examples of public pension plans partitioning the legacy liability and assigning dedicated revenue sources. Doonan and Bond, 2020.

<sup>50</sup>While GERS created a new tier of benefits, it has not separated its legacy unfunded liability.

<sup>51</sup>Jean-Pierre Aubry, *Legacy Debt in Public Pensions: A New Approach*, Center for Retirement Research at Boston College, State and Local Pension Plans, No. 84 (Chestnut Hill, MA: June 2022).

<sup>52</sup>Going forward, already accrued pension benefits will be paid from the government's central revenue. For more information, see appendix II.

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benefits.<sup>53</sup> However, if the plan freeze or plan closing is accompanied by a new or more generous defined contribution plan, workers who participate in the plan will get benefits from this source.

**Reduce plan costs.** Some plans, including GERS, have taken steps to reduce future benefits, such as by eliminating cost-of-living adjustments or increasing the retirement age. While further reducing future benefits may offer some relief to GERS, it is not clear if it would be adequate to help GERS avoid critical funding shortfalls. For example, most of the benefit payments causing the depletion of GERS assets have already been accrued by retirees. Further, benefits for Tier 2 employees have already been substantially reduced, as mentioned earlier, and further benefit reductions would not necessarily reduce legacy liabilities. Literature we reviewed also noted that reductions in benefits that have already been accrued, such as for Tier 1 employees, may be subject to legal challenges.

**Other options.** When requested, the U.S. Department of the Interior's Office of Insular Affairs (OIA) has the authority to provide technical assistance to territories as available. This assistance could include helping USVI assess strategies to mitigate the risks to GERS. According to OIA officials, prior technical assistance has included paying for territorial staff to attend trainings that could help GERS improve financial reporting. OIA officials told us that their annual closure date for Technical Assistance Program grants is typically in March and that requests for this grant would be made through USVI's Governor's office. Officials said that OIA's funding available for technical assistance is limited and is based primarily on priorities identified by the USVI government. GERS officials said they applied for but were not awarded a grant to upgrade their pension management system in 2022.

Stakeholders we spoke with also described some strategies that are not viable for severely underfunded plans, such as GERS. For example, three stakeholders and officials from one public plan told us that severely underfunded pension plans cannot invest their way out of a poorly funded situation. For example, some plans may be tempted to find high-risk, high-yield investments that could increase the income of the plan. One stakeholder noted that such investments could result in large financial gains or losses, which GERS may not be able to absorb. Moreover,

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<sup>53</sup>GAO, *The Nation's Retirement System: A Comprehensive Re-evaluation Is Needed to Better Promote Future Retirement Security*, [GAO-18-111SP](#) (Washington, D.C.: Oct. 18, 2017).

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stakeholders said that severely underfunded plans would be better served by investing conservatively so they can maintain their liquid assets and cover immediate liabilities.

The options above could help improve GERS' financial situation, but one option alone may not be sufficient for the plan to avoid insolvency. Our illustrations provide estimates of the extent to which specific options may help under a set of given assumptions, which are subject to uncertainty. As noted earlier, GAO is not endorsing any particular option or combination of options.

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## Agency Comments

We provided a draft of this report to the Department of the Interior, the USVI government, and GERS for their review and comment. The Department of the Interior provided technical comments, which we incorporated in the report as appropriate. The USVI government and GERS did not provide a formal comment letter, but the USVI government provided written comments via email on the report which stated: "We believe the GAO assessment of options is balanced and bi-partisan, and the timeliness of this report will assist the members of Congress and our federal partners to develop federal fiscal policy to ensure the solvency of our retirement system. We continue to believe the best approach is Congressional enactment of legislation making the temporary cover-over rate permanent, avoiding the uncertainties and effects of non-action. We will continue to engage in collaborative approach with our federal partners to ensure the security of our Retirement System for the overall economic benefit to the People of the Virgin Islands."

We will send copies of this report to the appropriate congressional committees, the Secretary of the Interior, the Administrator of GERS, the Governor of the USVI, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact Tranchau (Kris) Nguyen at (202) 512-7215 or [nguyentt@gao.gov](mailto:nguyentt@gao.gov) or Frank Todisco at (202) 512-2700 or [todiscof@gao.gov](mailto:todiscof@gao.gov). Mr. Todisco meets the qualification standards of the American Academy of Actuaries to address the actuarial issues contained in this report. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

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Letter

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Tranchau (Kris) T. Nguyen, Director  
Education, Workforce, and Income Security Issues



Frank Todisco, Chief Actuary  
Applied Research and Methods

## Appendix I: Objectives, Scope, and Methodology

In this report we describe (1) how the Government Employees' Retirement System (GERS) compares with other public defined benefit pensions on characteristics, such as the way it is funded and the benefits it provides; (2) risks GERS faces in being able to pay promised benefits to employees; and (3) options for GERS and the U.S. Virgin Islands (USVI) government to better ensure the pensions it has promised to its employees.

To understand how GERS compares with other defined benefit pensions with respect to its funding and benefits, we analyzed national data housed in the Public Plans Database (PPD), administered by the Center for Retirement Research (CRR) at Boston College.<sup>1</sup> At the time of our analysis, the database contained annual data for 229 state and local pension plans on over 100 variables from 2001 to 2021, the most recent full-year data available. We included in our analysis 126 plans that serve only general employee populations (i.e., we did not include pension systems designed specifically for teachers, educators, or public safety officers). In addition, since some plans had very high or low values for the metrics we reviewed, which could result in a misleading comparison, we included only those plans within the 10th and 90th percentiles for each metric. Using these data, we calculated certain funding and benefits metrics, including:

- funded status (which compares a plan's assets to its liabilities, commonly expressed as assets as a percentage of liabilities);
- contribution discipline (the ratio of the annual employer contribution made to the actuarially determined contribution. It is used to represent a plan's funding discipline, for example, how well plan contributions are on track to pay for ongoing benefit accruals and to reduce a plan's unfunded liabilities);

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<sup>1</sup>The PPD is developed and maintained through a collaboration of the CRR at Boston College, the MissionSquare Research Institute, the National Association of State Retirement Administrators, and the Government Finance Officers Association. The CRR collects annual information for state and local government defined benefit retirement plans directly from plan actuarial valuation and annual reports.

- unfunded liability to payroll (the ratio of the plan's unfunded liability to the annual payroll of workers covered by the plan. It is used to represent the number of years of total annual payroll that would be required to pay for the unfunded liability); and
- asset-to-benefit coverage (the ratio of plan assets to current year benefit payments. It is used to represent the number of years of benefit payments that are supported by current plan assets).

We calculated these metrics for GERS, Guam, American Samoa, and 126 other U.S. public plans using 2021 data to align with data used for the most recent GERS actuarial valuation report at the time of our analysis.<sup>2</sup> This report was published April 5, 2023. In February 2024 we received the 2022 actuarial valuation report, which was published January 25, 2024. We incorporated elements of the new report in our description of GERS' financial status and outlook, as appropriate. Specifically, the comparison to PPD data relies on information from the 2021 actuarial report but other discussions about GERS' financial status and outlook include information from the 2022 report.

We found the data elements we analyzed from the PPD to be reliable for the purposes of our reporting objectives. We conducted an assessment to ensure the data's reliability, which included reviewing related documentation, interviewing CRR staff, and electronic data testing. When we learned that particular data were not reliable for our purposes, we did not use them. Nonetheless, the data have limitations. For example, they do not represent the universe of all public plans.

To further understand how GERS benefits compare to other plans, we reviewed a non-generalizable selection of eight public pension plans. The plans are the public pension plans for the other four U.S. territories (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and Puerto Rico) and the Kentucky Employees Retirement System, Hawaii Contributory Plan, South Dakota Retirement System, and Indiana Public Employees' Retirement Fund Hybrid Plan. We chose these plans to represent a mix of factors, such as plan size, funding status, plan

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<sup>2</sup>We excluded 102 public plans in the database that are solely for teacher/educators or public safety officers (i.e., police officers and fire fighters), and one plan for which there were no data. We did not include funding measures for the Commonwealth of the Northern Mariana Islands (CNMI) and Puerto Rico. While CNMI and Puerto Rico maintain legacy defined benefit plans for current and former employees of their governments, these benefits are primarily funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. The security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund.

membership and the unique circumstances that public plans in the territories may face. For each of the plans, we reviewed publicly available plan documents and relevant literature. When follow up was needed, we interviewed plan officials. We are sending relevant sections of the draft report to officials in each of the other four territories and will incorporate their comments, as appropriate.<sup>3</sup>

To inform all objectives, we interviewed nine stakeholders to obtain their perspectives and expertise on public pension plans and their options to improve funding. These stakeholders consisted of the American Academy of Actuaries, the Center for Retirement Research at Boston College, Equable Institute, the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement Systems, the National Institute on Retirement Security, the Pew Charitable Trusts, a credit rating agency, and GERS' actuaries. We also interviewed Department of the Interior's Office of Insular Affairs officials and officials from the USVI government, including members of the legislature, GERS staff, and the GERS board.

To describe the risks GERS faces in being able to pay promised benefits to employees, we analyzed actuarial valuation reports, financial statements, and other information from USVI and GERS, its actuaries, and investment consultants.<sup>4</sup> For example, we compared how the funding level for GERS is projected to change before and after the refinanced rum bonds were issued. We also reviewed and analyzed documents related to the Funding Note to assess the risks associated with its structure, the assumptions made for securing the contribution to GERS, the macroeconomic environment, such as the condition of the USVI economy, and other related factors.

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<sup>3</sup>For information on the other territories in appendix II, we reviewed audited financial information from 2021, if available, to align with the most recently available information for GERS at the time of our analysis. For CNMI, we reviewed the most recent information, which was from 2020. In some cases, more recent audited information may have become available after we conducted our analyses.

<sup>4</sup>Our projections of GERS assets in this report are based on the September 30, 2021, actuarial valuation report and supplementary data on subsequent asset returns and plan contributions, which was the most recent data available to us as of December 2023, the time of our analysis. Subsequently, in February 2024 GERS provided their September 30, 2022, actuarial valuation report after we had completed our analysis. We estimated that the use of the more recent information would accelerate the projected year of insolvency—earlier than our analysis projected.

We conducted illustrative scenarios to assess the financial risks facing GERS and how they might change under different assumptions. For example, we illustrated the effects of an investment return of 4 percent compared to 6 percent, and a rum excise tax rate of \$10.50 compared to \$13.25 per proof gallon. We also conducted illustrative scenarios to explore options to improve sustainability. For example, we illustrated the potential effects of increasing the employer contribution rate by 3 and 5 percentage points and of shifting all administrative expenses from GERS to the central government, respectively. For these scenarios, we assumed a 6 percent investment return and an excise tax rate of \$10.50 per gallon of rum.

For all illustrative scenarios, we used information from GERS via Segal, a consulting firm that works with GERS and conducts GERS' actuarial valuations. For example, we used their projections of future benefit payments. To illustrate the scenarios described above, we calculated plan assets and liabilities from fiscal years 2021 through 2053 using certain assumptions. For example, we assumed a 2.5 percent annual increase in payroll (with a maximum total payroll amount of \$580.3 million to reflect the current salary cap) and a 2 percent annual increase in administrative expenses. We incorporated observed historical values when available, such as the experienced return on assets in 2022 (-3.8 percent). The illustrative scenarios are meant to illustrate the risks and effects, not model or predict the precise risks facing the plan or the effects of the selected strategies.

To describe the options for the USVI government to better ensure the pensions it promised to its employees, we reviewed four actuarial and public pension related publications suggested by the nine stakeholders and our internal actuaries.<sup>5</sup> These publications were published within the last 10 years and described recommended actuarial or governance principles, concepts, and practices, among other things. We also interviewed the nine stakeholders and reviewed information from the eight selected comparison plans about any steps they have taken to better ensure their plans are able to provide the benefits they have promised.

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<sup>5</sup>National Association of State Retirement Administrators, Standing Resolutions (accessed at <https://www.nasra.org/resolutions> on 11/20/2023); National Conference on Public Employee Retirement Systems, *Best Governance Practices for Public Retirement Systems* (May 2019); S&P Global, *Ratings Direct: For The Five Highest-Funded U.S. State Pension Plans, Being Proactive Keeps Liabilities Manageable* (Oct. 24, 2017); Society of Actuaries (2014).

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**Appendix I: Objectives, Scope, and  
Methodology**

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When follow-up was needed, we interviewed plan officials and supplemented this by reviewing additional relevant literature.<sup>6</sup>

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<sup>6</sup>GAO is not endorsing any particular option or combination of options.

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## Appendix II: Key Features of Retirement Plans in Other Territories

This appendix provides information on the public plans in each of the other four U.S. territories: American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and Puerto Rico. See Appendix I for more information about our review.

## American Samoa Government Employees' Retirement Fund



Source: CIA World Factbook. | GAO-24-105862

### Overview of pension liability

According to audited financial information in 2021, pension liabilities for public sector employees and retirees represented a large obligation for the American Samoa government. Specifically, the American Samoa government reported having almost \$262 million in net pension liabilities—about 37 percent of its gross domestic product, as of September 30, 2021. Net pension liability is the difference between the total pension liability and the assets set aside for paying benefits to current employees, retirees, and their beneficiaries. In January 2022, American Samoa passed legislation to increase contributions to the pension fund to avoid insolvency within the next decade.

### Retirement plan population

As of 2021, there were 7,149 total participants, including 5,155 who were current employees actively contributing to the fund; 1,901 retirees; and 93 vested former employees (not yet eligible to receive benefits). The plan covered about 14 percent of the population of American Samoa. All government employees are eligible to participate in the plan.

Source: GAO interviews with plan officials and analysis of government documents. | GAO-24-105862

### What is the plan's funding status?

As of 2021, the retirement plan was estimated to be about 44 percent funded, with just over \$195 million in assets and \$251 million in unfunded actuarial liabilities.

Contribution discipline*	46.3%
Unfunded liability to payroll ratio	2.3
Asset-to-benefit coverage (years)	7.7

\* Ratio of the annual employer contribution made to the actuarially determined contribution. The actuarially determined contribution is an employer contribution amount that both fully pays for promised benefits earned in a given year and makes a systematic payment towards any unfunded liability.

### What strategies have been used to address funding challenges?

American Samoa is addressing its unfunded public pension liability primarily by increasing both employer and employee contributions. Retirement plan officials told us the legislature is committed to funding the defined benefit (DB) plan because they know how important the retirement benefits are for the people of American Samoa.

To that end, legislation passed in January 2022 includes an escalating contribution rate schedule for both employers and employees over 3 years. Under this new schedule, total contributions will increase from 11 percent to 20 percent in 2024, with an employer contribution rate of 14 percent and an employee contribution rate of 6 percent. The increased contribution rate amounts are projected to maintain fund solvency for the foreseeable future.

### Retirement age

The American Samoa Government Employees' Retirement Fund currently has a DB plan with one benefit tier.

	Retirement age for benefits
DB plan	55 and 30 years of service, or 65 and 5 years of service

### Do plan members qualify for Social Security?

No

### Do plan members receive a cost-of-living adjustment in 2021?

Yes



Source: CIA World Factbook. | GAO-24-105862

# Commonwealth of the Northern Mariana Islands Retirement Fund and Settlement Fund

## Overview of pension liability

The most recently available information (in fiscal year 2020) for CNMI indicates that it has struggled to fund its pensions. In 2013, a U.S. district court approved a settlement agreement with the territory's government pension plan, after it applied for bankruptcy in 2012. In fiscal year 2020, CNMI contributed \$42 million to the fund, some of which was from a loan. As a result, CNMI reported a net pension liability of \$470.4 million—or about 50 percent of gross domestic product—as of September 30, 2020. Net pension liability is the difference between the total pension liability and the assets set aside for paying benefits to current employees, retirees, and their beneficiaries. However, independent auditors found in 2023 that identified misstatements or potential undetected misstatements in CNMI's fiscal year 2020 financial statements were or could be material and pervasive, which brought into question the reliability of this information .

## Fund populations

Plan officials said that Retirement and Settlement Funds had about 3,350 total participants, including 350 who were current employees actively contributing to the fund and 3,000 retirees. The plans cover about 7 percent of the population of CNMI.

Source: GAO interviews with plan officials and analysis of government documents. | GAO-24-105862

## What is the plan's funding status?

Funding measures for the Commonwealth of the Northern Mariana Islands (CNMI) are not included. CNMI maintains a legacy defined benefit plan for current and former employees of their government, primarily through a legally enforced settlement agreement. The Settlement Fund benefits are funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. The security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund. Beginning in 2018, the retirement benefits for CNMI are unfunded and CNMI pays current year benefits through the current year's budgetary funds. As of 2020, the retirement plan has no assets and about \$470.4 million in unfunded actuarial liabilities.

## What strategies have been used to address funding challenges?

CNMI officials said the pension plan's underfunded status resulted from years of insufficient contributions by the government, as the employer. In addition, officials said employer contributions from other agencies participating in the plan were insufficient. Consequently, they said retirees were receiving reduced benefits and often were not paid on time.

In 2013, the Northern Mariana Islands Settlement Fund was created after retirees sued the plan. The settlement agreement requires the government to make minimum payments to this fund—partly funded by a separate loan—and the Settlement Fund covers at least 75 percent of retiree benefits. A separate fund was created for about 20 retirees who opted out of the settlement.

## Retirement age

CNMI offers three benefit structures: the Retirement Fund (for retirees who opted out of the settlement), the Settlement Fund, and a defined contribution plan (for employees hired on or after January 1, 2007).

	Retirement age for benefits
Retirement Fund	Any age after 20 years of service
Settlement Fund	Any age after 20 years of service; minimum benefit equals 75 percent of the Retirement Fund amount
Defined Contribution	Not applicable

## Do plan members qualify for Social Security?

Yes

Do plan members receive a cost-of-living adjustment in 2021?

No

# Government of Guam Retirement Fund



Source: CIA World Factbook. | GAO-24-105862

## Overview of pension liability

According to the audited financial information in 2021, the Government of Guam reported a \$2.8 billion liability for pension and other postemployment benefits, such as health insurance, for public sector employees and retirees. They also reported a \$1.1 billion unfunded pension liability, equal to 18.7 percent of Guam's gross domestic product. Officials told us that current annual contributions to the pension fund are based on actuarial recommendations. Officials said they expect the pension to be fully funded by 2033 (i.e., assets will be equal to or greater than the estimated liability). In addition, the Government of Guam makes other postemployment benefit payments as they are due, since these benefits are not funded in advance like the pension plan.

## Retirement plan population

As of 2021, plan officials said that the fund had 14,830 total participants, including 4,220 who were current employees actively contributing to the plan; 7,488 retirees; and 3,121 vested former employees (not yet eligible to receive benefits). The plan covered just under 10 percent of the population of Guam. All government employees must participate in the plan.

Source: GAO interviews with plan officials and analysis of government documents. | GAO-24-105862

## What is the plan's funding status?

As of 2021, the retirement plan was estimated to be about 66.5 percent funded, with about \$2.3 billion in assets at market value and \$1.1 billion in unfunded actuarial liabilities.

Contribution discipline*	89.1%
Unfunded liability to payroll ratio	2.1
Asset-to-benefit coverage (years)	9.3

\* Ratio of the annual employer contribution made to the actuarially determined contribution. The actuarially determined contribution is an employer contribution amount that both fully pays for promised benefits earned in a given year and makes a systematic payment towards any unfunded liability.

## What strategies have been used to address funding challenges?

Plan officials said that in 1995 when the defined benefit (DB) plan was insufficiently funded, the Guam legislature created a defined contribution (DC) plan. Employees in the DC plan contributed 5 percent, which was matched by the government (i.e., the employer). The Government of Guam has continued to contribute to the original DB plan to help pay off its unfunded liability by 2033, according to plan officials.

To address insufficient savings by members in the DC Plan, the Guam legislature reformed its pensions in 2016 and created a new "DB 1.75" plan with modified benefits (see table). Until 2018, active members with a DC plan could elect to transfer it to the new DB 1.75 plan. Plan officials said recent legislation would allow active DC plan members and new employees, the option to transfer to the DB 1.75 plan in early 2024.

## Retirement age

The Government of Guam has three tiers of benefits: the original DB plan, the Defined Contribution Retirement System, and the DB 1.75 plan.

	Retirement age for benefits
Original DB plan	(since 1984) 65 years with 15 years of service, or any age after 30 years of service
Defined Contribution Retirement System	Not applicable
DB 1.75 Plan	62

## Do plan members qualify for Social Security?

No

## Do plan members receive a cost-of-living adjustment in 2021?

Yes

# Puerto Rico Government Employees Retirement System



Source: CIA World Factbook. | GAO-24-105862

## Overview of pension liability

According to Puerto Rico’s audited financial information in 2021, Puerto Rico’s debt restructuring effort included several initiatives to reform the pension system. For example, to limit future pension liabilities, all remaining members of Puerto Rico’s DB pension plan for public employees are no longer accruing credit for future benefits. Instead, current employed members are enrolled in a DC plan, where future benefits are based on contributions and earnings in retirement accounts with no government contributions.

Puerto Rico also established a trust fund to support future DB pension payments. The PRT is funded with a portion of the government’s annual surpluses. In fiscal year 2022, a government general fund surplus provided \$1.4 billion to the PRT, according to data from Puerto Rico. After fiscal year 2031, the government can make withdrawals from the trust to fund pension payments if it meets certain conditions.

## Retirement plan population

Puerto Rico’s retirement plan is a multiple employer system covering more than 290,000 current employees who are active participants, retirees receiving benefit payments, and employees entitled to but not yet receiving benefit payments.

Source: GAO interviews with plan officials and analysis of government documents. | GAO-24-105862

## What is the plan’s funding status?

Funding measures for Puerto Rico are not included. While Puerto Rico maintains a legacy defined benefit plan for current and former employees of their government, these benefits are primarily funded on a Pay-As-You-Go (PayGo) basis, meaning current year budgetary funds are used to meet current year benefit payments. The security of these benefits primarily relies on the availability of budgetary funds, rather than a pension fund. Beginning in 2017, the defined benefit (DB) plan for Puerto Rico is unfunded and pays current year benefits through the current year’s budgetary funds. As of 2021, the DB plan has no assets and about \$49 billion in unfunded liabilities.

## What strategies have been used to address funding challenges?

Puerto Rico restructured its retirement plan in 2017 to focus on paying accrued benefits and fully funding benefits earned in the future. It did so by freezing the DB plan and having active government employees accrue benefits in a defined contribution (DC) plan going forward. The DC plan is funded solely through employee contributions. In the future, the DB portion of the plan will primarily be funded from the government’s annual budget and the Pension Reserve Trust (PRT).

According to plan documents, the PRT’s goal is to provide assurance to government employees that funds are being set aside to pay their pension benefits. Additionally, the PRT is designed to function independently of the government to help provide confidence that decisions regarding the funds are beneficial to current and future retirees. Further, the government established enforcement mechanisms for collecting the statutorily required contributions as well as setting aside budget surpluses to pay future pension benefits when budget deficits are expected, according to plan documents.

## Retirement age

Puerto Rico currently provides a legacy DB plan and a DC plan.

	Retirement age for benefits
Legacy DB	Varies, depending on date of hire
DC	Not applicable

## Do plan members qualify for Social Security?

No

## Do plan members receive a cost-of-living adjustment in 2021?

Yes

## Appendix III: Benefit Comparison for Selected Public Pension Plans, as of 2021

**Table 1: Benefit Comparison for Selected Public Pension Plans, as of 2021**

Retirement plan <sup>a</sup>	Plan type <sup>b</sup>	Benefits <sup>c</sup>	Employee contribution (% of earnings) <sup>d</sup>	Vesting requirement and retirement eligibility <sup>e</sup>	Social Security eligibility <sup>f</sup>	COLA in 2021 <sup>g</sup>
USVI Government Employees' Retirement System (GERS)	Defined benefit	1.75% of career average earnings per year of service up to 100%	11.7%	10 years Age 65 with 10 years of service	Yes	No
Kentucky Employees Retirement System (Non-Hazardous) (KERS)	Cash balance	Based on accumulated account balance value and an actuarially determined factor based on age at retirement.	5%	5 Years Age 65 with 5 years of service, or 'Rule of 87' Age 57 or older if age plus service equals 87	Yes	No
Employees' Retirement System of the State of Hawaii (Hybrid Plan) (HERS)	Defined benefit	1.75% of highest 5 years of earnings per year of service up to maximum monthly allowance	8.0%	10 years Age 65 with 10 years of service; or Age 60 with 30 years of service	Yes	Yes
South Dakota Retirement System (SDRS)	Defined Benefit	1.8% of highest 5 years of earnings per year of service	6%	3 years Age 67 with 3 years of service, or Age 57 or older if age plus service equals 85	Yes	Yes
Indiana Public Employees Retirement Fund (PERF)	Defined Benefit	1.1% of highest 5 years of earnings per year of service	0%	10 years Age 65 with 10 years of service, or Age 60 and 15 years of service, or Age 55 or older if age plus service equals 85	Yes	Yes
Government of Guam Retirement Fund (GGRF)	Defined benefit	1.75% of highest 3 years of earnings per year of service up to 85%	9.5%	5 Years Age 62 with 5 years of service	No	Yes

**Appendix III: Benefit Comparison for Selected  
Public Pension Plans, as of 2021**

<b>Retirement plan<sup>a</sup></b>	<b>Plan type<sup>b</sup></b>	<b>Benefits<sup>c</sup></b>	<b>Employee contribution (% of earnings)<sup>d</sup></b>	<b>Vesting requirement and retirement eligibility<sup>e</sup></b>	<b>Social Security eligibility<sup>f</sup></b>	<b>COLA in 2021<sup>g</sup></b>
American Samoa Government Employees' Retirement Fund (GERF)	Defined benefit	2.0% of highest 3 years of earnings per year of service up to 60%	4% thru 2023	10 Years Age 55 and 30 years of service, or 65 and 5 years of service	Yes	No
Commonwealth of the Northern Mariana Islands' Retirement Fund and Settlement Fund (NMIRF, NMISF)	Defined contribution	Accumulated account balance value	10%	Immediate	Yes	N/A
Commonwealth of Puerto Rico Employees' Retirement System (ERS)	Defined contribution	Accumulated account balance value	8.5%	Immediate	Yes	N/A

Source: GAO analysis of selected plan documents and interviews with plan officials. | GAO-24-105862

<sup>a</sup>'Retirement Plan' is the select retirement plan, by most recent benefit tier, for comparison.

<sup>b</sup>'Plan Type' is the type of plan offered by the sponsoring entity. A defined benefit plan is a traditional pension plan whose benefit formula is typically based on years of service and annual earnings, promising a dollar amount of monthly lifetime benefit at retirement. A cash balance plan is a type of defined benefit plan that typically defines the benefit in terms of an accumulated account balance, where the participant accounts are credited annually with pay and interest credits. A defined contribution plan is an individual account-based plan funded by employee and/or employer contributions and the investment returns earned on the account. Note that the listed employers may offer defined contribution accounts in addition to the listed defined benefit plans. Puerto Rico and Northern Mariana Islands do not have active defined benefit plans; defined contribution accounts are the primary retirement savings vehicle for their government employees.

<sup>c</sup>'Benefits' is the plan provision for the most recent benefit tier.

<sup>d</sup>'Employee Contribution' is the employee's share of the contribution, as a percentage of their salary.

<sup>e</sup>'Vesting Requirement' is the length of time for an employee to be unconditionally entitled to plan benefits. 'Retirement Eligibility' is the combination of age and service at which the employee becomes eligible to retire and begin receiving the full accrued benefit. Provisions for early retirement and disability retirement eligibility are not shown.

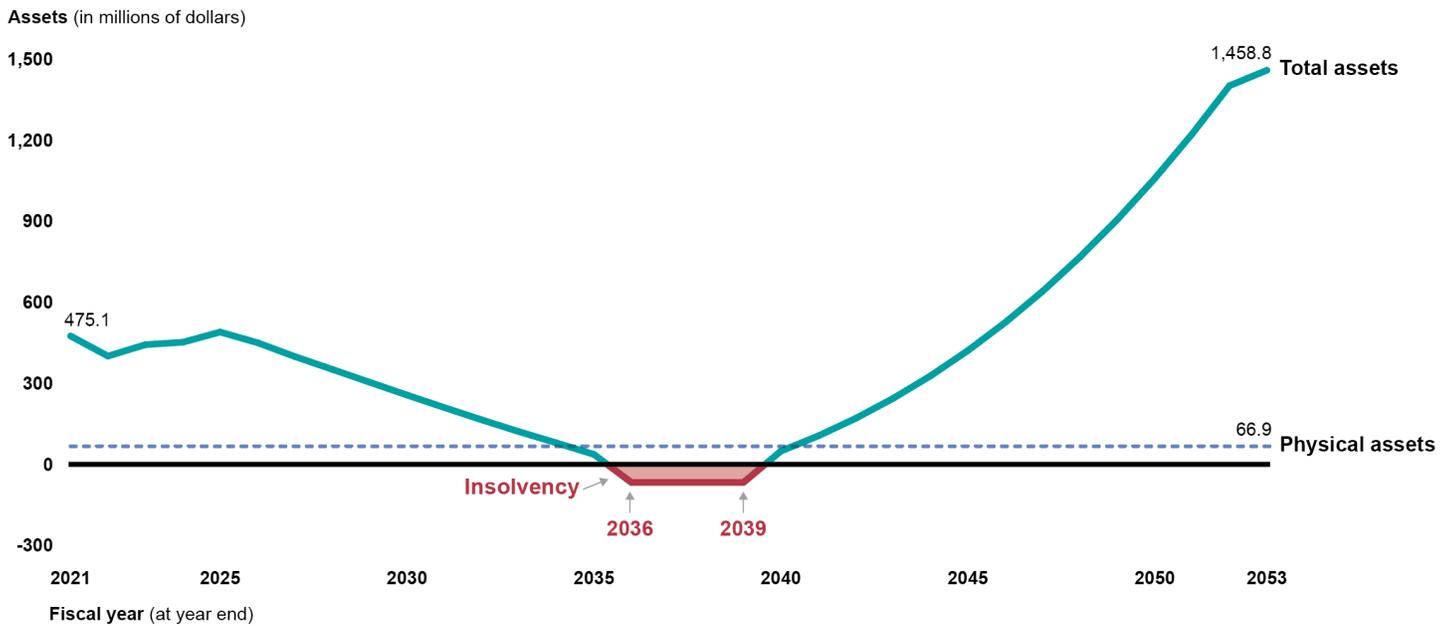
<sup>f</sup>'Social Security Eligibility' is the indicator whether the employees covered under the plan are able to participate in the Social Security program.

<sup>g</sup>'COLA in 2021' is the indicator whether a plan provided a cost-of-living-adjustment (COLA) in 2021. 'N/A' indicates the plan type does not provide for a COLA.

# Appendix IV: Additional Illustrative Scenario Results

Below are additional results from the illustrative scenarios that we conducted to describe options the U.S. Virgin Islands (USVI) government has to better ensure the pensions it has promised to its employees.<sup>1</sup>

**Figure 12: GERS Projected Assets if USVI Pays All GERS Administrative Expenses**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 12:**

**Assets** (in millions of dollars)

Fiscal year (at year end)	Total assets	Physical assets
2021	475.1	66.9
2022	400.5	66.9
2023	442.9	66.9

<sup>1</sup>The options we illustrated are not intended to be exhaustive, and GAO is not endorsing any particular option or combination of options.

**Appendix IV: Additional Illustrative Scenario Results**

<b>Fiscal year (at year end)</b>	<b>Total assets</b>	<b>Physical assets</b>
2024	451.9	66.9
2025	489.6	66.9
2026	450.2	66.9
2027	398.9	66.9
2028	351.5	66.9
2029	303.8	66.9
2030	256.4	66.9
2031	210	66.9
2032	164.6	66.9
2033	120.7	66.9
2034	79.2	66.9
2035	36.7	66.9
2036	<i>Insolvency</i>	66.9
2037	<i>Insolvency</i>	66.9
2038	<i>Insolvency</i>	66.9
2039	<i>Insolvency</i>	66.9
2040	48.9	66.9
2041	105.2	66.9
2042	170	66.9
2043	243.9	66.9
2044	327.2	66.9
2045	420.9	66.9
2046	525.1	66.9
2047	640.5	66.9
2048	767.4	66.9
2049	906.4	66.9
2050	1058.1	66.9
2051	1223	66.9
2052	1401.6	66.9
2053	1458.8	66.9

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

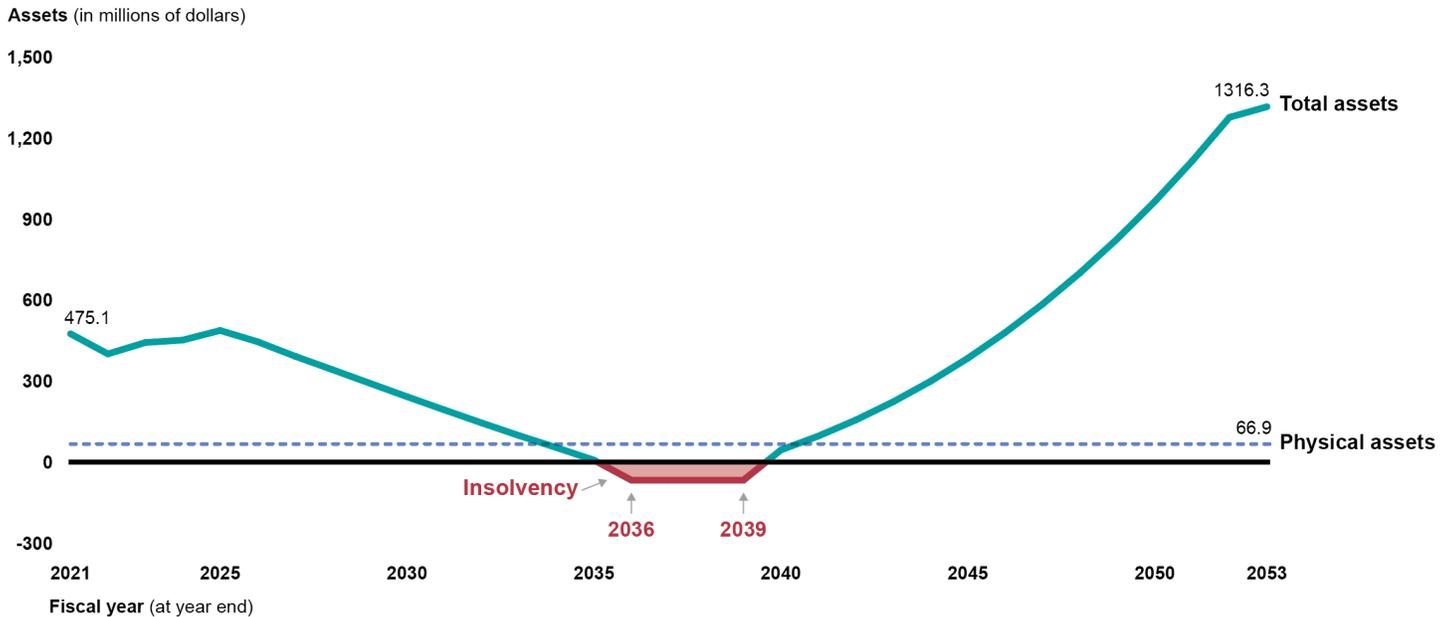
Notes: Our analysis includes information from the September 30, 2021 actuarial valuation report, the most recent available. In fiscal year (FY) 2022 the administrative expenses were \$14.8 million, and we assumed they were \$15.3 million in FY 2023, \$15.6 million in FY 2024, and \$0 thereafter. We assumed a \$10.50 per proof gallon excise tax rate, with actual Funding Note revenue amounts plus any U.S. Virgin Islands (USVI) supplemental contribution for FY22, FY23, and FY24, as of December 2023. We also assumed 6 percent return on assets, with observed -3.8 percent asset return in 2022. The dashed line represents the value of physical assets held by GERS; the FY22 financial statements disclose a value of \$66.9 million. These projections assume that physical assets are able to be sold at their stated value without distress-sale discounts, and that the USVI government covers benefit shortfalls during the insolvency period, so that the plan does not have to make back payments after

**Appendix IV: Additional Illustrative Scenario Results**

coming out of insolvency. Projected assets would be lower if either of these assumptions did not hold. If GERS were to become insolvent, projected employer and employee contributions would cover only about 80-85 percent of the promised benefits in the years immediately following insolvency and retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government.

The effect of reducing the federal excise tax rate from \$13.25 per proof gallon to \$10.50 per proof gallon was estimated by assuming Matching Fund revenue reductions would be shared similarly amongst GERS and the domiciled rum companies. However, because GERS has a particular priority ranking among other bondholders and USVI, the actual revenue received by GERS under this scenario could be substantially less, or more.

**Figure 13: GERS Projected Assets if Employer Contribution Rate Increases by 3 Percentage Points**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 13**

**Assets (in millions of dollars)**

Fiscal year (at year end)	Total assets	Physical assets
2021	475.1	66.9
2022	400.5	66.9
2023	442.9	66.9
2024	451.9	66.9

**Appendix IV: Additional Illustrative Scenario Results**

<b>Fiscal year (at year end)</b>	<b>Total assets</b>	<b>Physical assets</b>
2025	487.5	66.9
2026	446.0	66.9
2027	392.4	66.9
2028	342.5	66.9
2029	292.3	66.9
2030	242.2	66.9
2031	193.2	66.9
2032	144.9	66.9
2033	98.0	66.9
2034	53.4	66.9
2035	7.3	66.9
2036	<i>Insolvency</i>	66.9
2037	<i>Insolvency</i>	66.9
2038	<i>Insolvency</i>	66.9
2039	<i>Insolvency</i>	66.9
2040	44.8	66.9
2041	96.3	66.9
2042	155.5	66.9
2043	223.0	66.9
2044	299.1	66.9
2045	384.7	66.9
2046	479.8	66.9
2047	585.1	66.9
2048	700.7	66.9
2049	827.3	66.9
2050	965.3	66.9
2051	1115.1	66.9
2052	1277.2	66.9
2053	1316.3	66.9

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

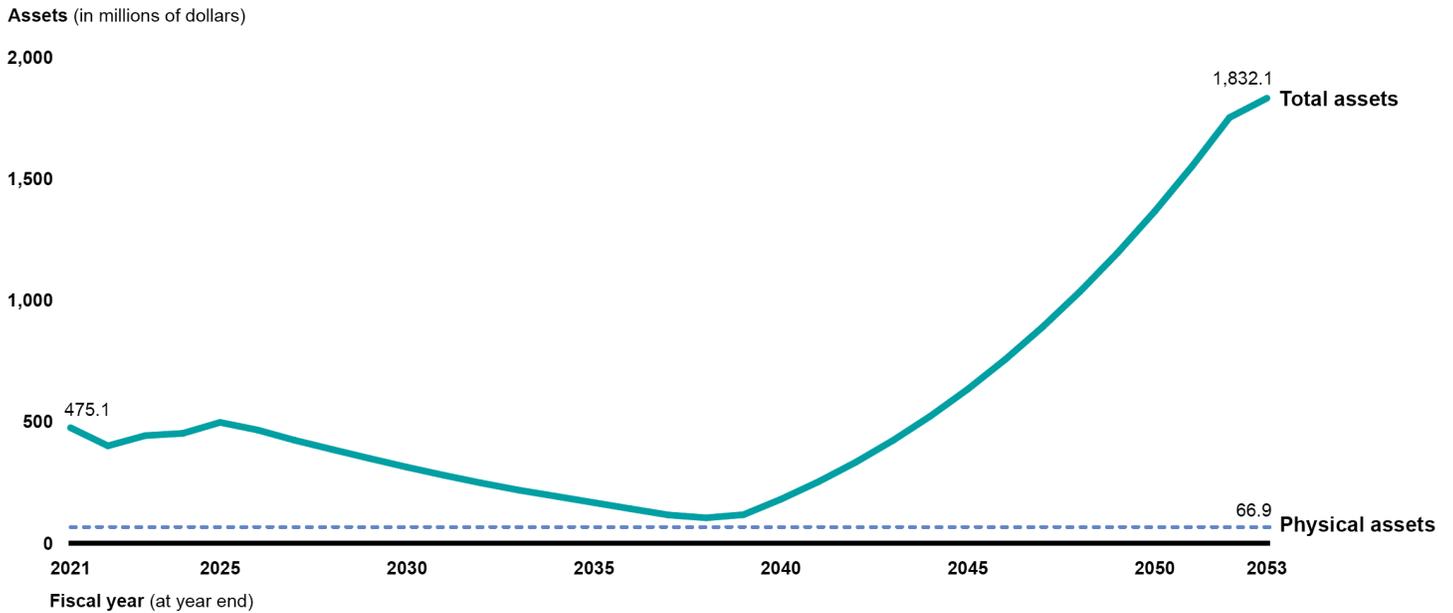
Notes: Our analysis includes information from the September 30, 2021 actuarial valuation report, the most recent available. In fiscal year (FY) 2022, FY 2023, and FY 2024, we assumed the employer contribution rate to be 23.5 percent of payroll, increasing to 26.5 percent in FY 2025. We assumed a \$10.50 per proof gallon excise tax rate, with actual Funding Note revenue amounts plus any U.S. Virgin Islands (USVI) supplemental contribution for FY22, FY23, and FY24, as of December 2023. We also assumed a 6 percent return on assets, with observed -3.8 percent asset return in 2022. The dashed line represents the value of physical assets held by GERS; the FY22 financial statements disclose a value of \$66.9 million. These projections assume that physical assets are able to be sold at their stated value without distress-sale discounts, and that the USVI government covers benefit shortfalls during the insolvency period, so that the plan does not have to make back payments after coming out of insolvency. Projected assets would be lower if either of these assumptions did not hold. If GERS were to become insolvent, projected employer and employee contributions would cover only

**Appendix IV: Additional Illustrative Scenario Results**

about 80-85 percent of the promised benefits in the years immediately following insolvency and retiree benefits would have to be reduced unless some additional action is taken, such as direct payments from the USVI government.

The effect of reducing the federal excise tax rate from \$13.25 per proof gallon to \$10.50 per proof gallon was estimated by assuming Matching Fund revenue reductions would be shared similarly amongst GERS and the domiciled rum companies. However, because GERS has a particular priority ranking among other bondholders and USVI, the actual revenue received by GERS under this scenario could be substantially less, or more.

**Figure 14: GERS Projected Assets if Employer Contribution Rate Increases by 5 Percentage Points**



Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

**Accessible Data Table for Figure 14**

**Assets** (in millions of dollars)

Fiscal year (at year end)	Total assets	Physical assets
2021	475.1	66.9
2022	400.5	66.9
2023	442.9	66.9
2024	451.9	66.9
2025	497.1	66.9
2026	465.9	66.9

**Appendix IV: Additional Illustrative Scenario Results**

<b>Fiscal year (at year end)</b>	<b>Total assets</b>	<b>Physical assets</b>
2027	423.4	66.9
2028	385.7	66.9
2029	348.6	66.9
2030	312.7	66.9
2031	278.9	66.9
2032	247.1	66.9
2033	217.9	66.9
2034	192.4	66.9
2035	166.6	66.9
2036	140.9	66.9
2037	115.7	66.9
2038	104.2	66.9
2039	117	66.9
2040	180.7	66.9
2041	252.4	66.9
2042	332.9	66.9
2043	423	66.9
2044	523.1	66.9
2045	634.1	66.9
2046	756.1	66.9
2047	889.9	66.9
2048	1035.8	66.9
2049	1194.4	66.9
2050	1366.4	66.9
2051	1552.3	66.9
2052	1752.5	66.9
2053	1832.1	66.9

Source: GAO analysis of Government Employees' Retirement System (GERS) 2021 actuarial valuation report. | GAO-24-105862

Notes: Our analysis includes information from the September 30, 2021 actuarial valuation report, the most recent available. In fiscal year (FY) 2022, FY 2023, and FY 2024, we assumed the employer contribution rate to be 23.5 percent of payroll, increasing to 28.5 percent in FY 2025. We assumed a \$10.50 per proof gallon excise tax rate, with actual Funding Note revenue amounts plus any U.S. Virgin Islands (USVI) supplemental contribution for FY22, FY23, and FY24, as of December 2023. We also assumed a 6 percent return on assets, with observed -3.8 percent asset return in 2022. The dashed line represents the value of physical assets held by GERS; the FY22 financial statements disclose a value of \$66.9 million. The effect of reducing the federal excise tax rate from \$13.25 per proof gallon to \$10.50 per proof gallon was estimated by assuming Matching Fund revenue reductions would be shared similarly amongst GERS and the domiciled rum companies. However, because GERS has a particular priority ranking among other bondholders and USVI, the actual revenue received by GERS under this scenario could be substantially less, or more.

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## Appendix V: GAO Contacts and Staff Acknowledgments

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### GAO Contacts

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### Staff Acknowledgments

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