Georgia Department of Audits and Accounts
Performance Audit Division

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Why we did this review

The Senate Appropriations Committee requested a special examination of Georgia's Teachers Retirement System (TRS), and the Optional Retirement Plan (ORP). Based on the request, we reviewed the process for calculating the University System of Georgia's budgetary request for employer contributions to TRS and ORP.

This report follows the report on State Retirement Plans issued January 2019 (Report No. 18-11).

About TRS and ORP

TRS represents the largest public retirement system in Georgia. TRS administers retirement benefits for employees of local school systems and other education entities, including the University System of Georgia (USG). ORP is an optional defined contribution 401(a) plan for certain employees of USG created in 1990 as a more portable alternative to TRS.

Employer contributions to TRS and ORP total approximately $2.2 billion annually. There are approximately 226,000 active members in TRS and 14,000 active members in ORP.

State Retirement Plans

Requested information on ORP and TRS

What we found

The creation of ORP as an alternative retirement plan for University System of Georgia (USG) employees decreased the number of employees (and the associated payroll) that support the Teachers Retirement System (TRS) pension fund. To mitigate the impact of allowing USG employees to join ORP, the ORP enabling legislation requires two payments to be made to the TRS pension fund for ORP members. However, one of these payments has not been made to the TRS pension fund since 2008, and the other has never been made. As a result, TRS employers have been charged higher TRS employer contribution rates. While not desirable from the employers' perspective, the higher employer contribution rates did help ensure that the fund received its actuarially determined annual required contribution.

The first payment required by O.C.G.A. § 47-21-5 directs USG to remit an unfunded accrued liability payment determined by the TRS Board of Trustees to TRS equal to the amount that would have been made for ORP employees had they joined TRS. However, TRS did not bill USG for unfunded accrued liability payment amounts from 2008 to 2018, which would have totaled an estimated $600 to $660 million. For fiscal year 2019, the required unfunded accrued liability remittance to TRS is approximately $170 million.

It should be noted that during this same time period USG requested appropriations to cover its TRS retirement costs, which included $250 million for the unfunded accrued liability payment associated with its state-paid ORP positions, which should have been made to TRS.[1] USG budget staff indicated they did not know

[1]Although USG's appropriation calculation includes retirement costs associated with state-paid employees only, USG is expected to fund the retirement costs of all of its employees. Retirement costs may be paid using other sources of USG revenue, including grants, fees, tuition, etc.

or understand all of the underlying assumptions of their budget calculations.

Regarding the second statutorily required payment, the TRS board has never determined whether a difference in normal cost associated with ORP members exists. As a result, there have been no normal cost rate payments from USG to TRS for its ORP members since the plan's creation in 1990. The value of these current and unpaid normal cost amounts is not known at this time and would need to be calculated by an actuary.

Neither USG nor TRS staff were familiar with the O.C.G.A. § 47-21-5 requiring the payments when we raised this concern during our review.

The Office of the Attorney General has provided informal advice that "[T]he board of trustees [of TRS] must calculate the amounts to be due, if any, under O.C.G.A § 47-21-5(a)(1). If those amounts are determined by the board of trustees, USG is required to remit the amounts determined for fiscal year 2019 and each year going forward. For all prior years where the board of trustees did not separately determine the amounts due, USG is not required to remit payment."

Lastly, we identified an administrative error that resulted in underpayment of ORP member accounts in fiscal year 2007 estimated at $12.8 million (2007 dollars).[2] In fiscal year 2007, the TRS board set the normal cost rate for TRS at 9.85%. However, USG only contributed 8.13% to ORP member accounts.

While there may or may not be a legal requirement to make members whole as a result of the error, the Government Finance Officers Association (GFOA) best practices indicate that contributions to member accounts should be made to remedy the error. GFOA states that administrators of government-sponsored defined contribution plans have the fiduciary duty to act exclusively for the benefit of plan participants and beneficiaries, and to administer plans efficiently and properly. Additionally, according to a Governmental Accounting Standards Board (GASB) concept statement, "even if the agreement may not be legally enforceable, the government may have a liability due to the social, moral, or economic consequences."

What we recommend

1. TRS should calculate and bill for the amount of the unfunded accrued liability and normal cost owed by USG associated with ORP members for fiscal year 2019 and each year going forward.

2. Given the problems associated with the unfunded accrued liability remittance payment, the General Assembly should review the current budget process to determine whether USG is receiving an appropriate amount to fund retirement benefits.

3. If the General Assembly wishes to relieve USG from making payments to TRS on behalf of ORP members, O.C.G.A. § 47-21-5 will need to be repealed or revised. If the General Assembly wishes to revise the statute, **Exhibit 7** on page 8 provides the basis for other states' mitigating rates that provide lower cost alternatives to the current structure of the unfunded accrued liability and normal cost payments. However, any consideration of removing ORP members from TRS funding should involve carefully weighing the financial impact of reducing TRS's payroll base. To mitigate the shifting burden to the remaining TRS employers, it should consider contracting for an actuarial debt calculation to compensate the fund for ORP members being removed from the TRS accrued liability calculation.

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[2]Assuming an estimated annual investment return of 6%, the value of the unpaid amount grows to approximately $25.8 million in 2019 dollars.

4. USG or the General Assembly should consider making contributions to ORP member accounts to remedy the fiscal year 2007 error.

A detailed listing of our recommendations can be found in Appendix A.

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Glossary of Terms and Definitions

Term	Definition
Accrued Liability*	The accrued liability is the present value of promised pension benefits. If the plan assets are less than the accrued liability, the difference between the two figures would be the unfunded accrued liability (UAL).
Actuarial Assumptions*	Projections about future events. These fall into two categories: demographic and economic. Examples include expected rate of investment returns, expected career lengths, life expectancies of retirees, and wage growth of active employees.
Amortization Period, Closed*	A closed amortization schedule means a plan has a particular set date it is targeting to eliminate unfunded liabilities. A plan with a 25-year closed amortization period would pay off a portion of the unfunded liabilities each year. Ideally, after year 25 there will be no more unfunded liabilities, as long as there are no additional actuarial losses.
Amortization Period, Open*	An open amortization schedule has no set date for eliminating unfunded liabilities. Instead, the payments are reset annually, comparable to refinancing a mortgage each year.
Benefit Formula*	A calculation that determines the specific amount of monthly retirement income an employee receives, usually based on the employee's salary, years of service, and age.
Defined Benefit (DB) Plan*	A plan where the employer promises a specific amount of retirement income based on a formula that usually takes into account an employee's salary, years of service, and age.
Defined Contribution (DC) Plan	A plan where retirement savings are based on accumulated employer and employee contributions, and the investment returns on those contributions. A common example is the 401(k) account.
Defined Contribution Employer Match	The amount an employer will match of an employee's contribution to the employee's defined contribution 401(k)-style account.
Funded Ratio*	The ratio of plan assets to plan liabilities. For example, a funded ratio of 80% means the plan has 80 cents in assets for every $1 dollar of liability.
Normal Cost*	Employees accrue new pension benefits every year. The normal cost is the annual equivalent of this and the result of spreading the value of the benefits earned over time.
Pension Support Ratio*	The ratio of active to retired members of a pension plan. The active members' contributions and the assets of the pension fund pay for the benefits paid out to plan retirees.
Valuation*	An analysis conducted on a regular basis that determines the financial position of the plan and the future contribution rates needed to ensure its long-term funding using various assumptions concerning future events and behaviors.
Vesting Requirement/ Schedule**	The number of years an employee must work before becoming eligible to receive benefits. Vesting may occur when an employee becomes fully eligible at a specified time or it may be gradual, where an employee becomes partially vested in increasing amounts over time.

*Denotes term and definition used in defined benefit plans
**Denotes term and definition used in both defined benefit and defined contribution plans

Source: Pew Research Center and Internal Revenue Service (IRS)

Purpose of the Special Examination

This review of Georgia's Teachers Retirement System (TRS) and Optional Retirement Plan (ORP) was conducted at the request of the Senate Appropriations Committee. This report is in addition to the report State Retirement Plans issued January 2019 (Report No. 18-11). Based on the request from the Senate Appropriations Committee and subsequent meetings with the Senate Budget and Evaluation Office, this examination will answer the following question:

1. What is the process for calculating the University System of Georgia's budgetary request for employer contributions to TRS and ORP?

A description of the objectives, scope, and methodology used in this review is included in Appendix B. A draft of the report was provided to the Teachers Retirement System and the University System of Georgia for their review, and pertinent responses were incorporated into the report.

Background

The state's retirement plans provide designated employee groups with retirement benefits. The plans have different characteristics but the same purpose: to provide income at retirement for employees. The responsibility for an employee's retirement is generally shared by the employee, employer, and the federal government through Social Security. Typically, the retirement benefits are funded through employer contributions, employee contributions, and investment earnings. Retirement benefits include traditional defined benefit pensions and defined contribution 401(k)-style accounts.

The Teachers Retirement System (TRS) represents the largest public retirement system in Georgia. Established in 1943, TRS administers retirement benefits for employees of local school systems, charter schools, technical colleges, county and regional libraries, Regional Education Service Agencies (RESAs), the University System of Georgia (USG), and certain state agencies. TRS is a cost-sharing, multiple-employer plan. In these plans, participating government employers pool their pension assets and obligations to provide defined benefit pensions. The plan assets can be used to pay the pensions of the retirees of any participating employer. Established in 1990, the Optional Retirement Plan (ORP) is an optional defined contribution 401(a) plan for certain TRS-eligible employees of USG. It is administered by USG.

State Constitution, Laws, and Board Rules

The state's pension plans are managed within a complex environment of state laws, board rules, and federal laws. State laws govern many provisions of the systems, such as benefits and eligibility criteria. The General Assembly retains the power to statutorily modify the state's pension plans within certain limits and create new plans.

Additionally, oversight bodies, which include the TRS Board of Trustees and USG's Board of Regents, are given the authority to develop board rules. Some board rules primarily deal with the maintenance of the retirement plans, while others determine more specific provisions like the annual interest rate on employee contributions or the criteria for offering cost-of-living-adjustments (COLAs).

Attributes of Defined Benefit and Defined Contribution Plans

Public sector defined benefit and defined contribution plans are typically funded by employee contributions, employer contributions, and investment returns. A defined benefit is a guaranteed lifetime benefit where the investment and some inflation risk[3] are borne by the employer. The funding for defined benefit plans is based on the employee's contribution, as well as the employer's actuarially determined contribution. The employer contribution includes two components: the normal cost and the unfunded accrued liability rate. The normal cost is the contribution allocated for the benefits accrued by employees in a given year. The unfunded accrued liability rate is the contribution to amortize, or pay off, the unfunded liability. These rates can vary year to year based on market conditions, changes in actuarial assumptions, and changes in active membership.

Defined contribution plans are also funded by employee and employer contributions. However, these rates are not adjusted annually due to actuarial calculations. Usually, the contribution rates are consistent. In some plans, employees and employers are required to contribute a specific amount. In others, employers will match optional employee contributions on a specific matching schedule. The defined contribution payout is dependent on market returns on contributions made by the employee and employer. As a result, the investment and inflation risk is borne by the employee.

Teachers Retirement System (TRS)

TRS is a defined benefit plan that provides a guaranteed lifetime benefit for those who have 30 years[4] of creditable service within the system or attain age 60 with 10 years of service. The employee contribution rate is currently set at 6%. As shown in **Exhibit 1**, the benefit formula is based on years of service and the final average salary multiplied by 2%. There were approximately 127,000 retirees and 226,000 active members as of June 30, 2018. A TRS retiree with a final average salary of $50,000 and 30 years of creditable service would receive an annual benefit of $30,000.

Exhibit 1
TRS Plan Characteristics, Fiscal Year 2018

	Fiscal Year 2018
Active Members	226,000
Retirees	127,000
Employee Contribution Rate	6%
Employer Contribution Rate	16.81%
Defined Benefit Formula	Final Average Salary[1] x 2% x Years of Creditable Service
Cost of Living Adjustments	1.5% Adjustment Issued Semiannually if CPI Increases
Average Monthly Benefit	$3,079

[1]*Final Average Salary* is the average of the highest 24 consecutive months of salary.

Source: TRS documents

[3]In defined benefit plans that do not provide COLAs or that provide COLAs below the consumer price index (CPI), some or all of the inflation risk is borne by the retiree.
[4]Members may receive a reduced early retirement benefit after 25 years of service.

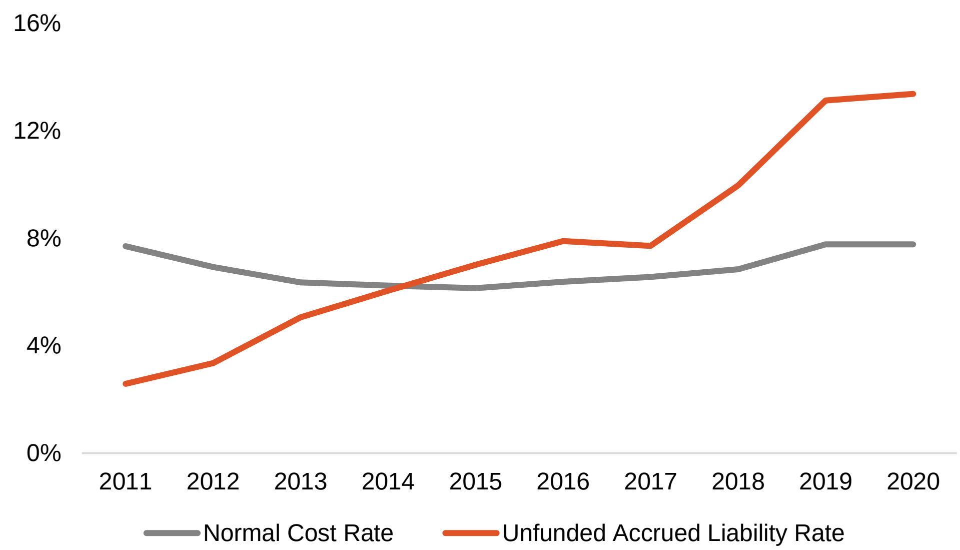
Actuarial Valuation

O.C.G.A. § 47-3-23 requires TRS to designate an actuary who will conduct annual valuations of the assets and liabilities of the retirement system. In addition, at least every five years the actuary is required to conduct an actuarial investigation into the mortality, service, and compensation experience of members and retirees and recommend adoption, to the board of trustees, of any updated actuarial tables. O.C.G.A. § 47-3-48 states that the normal and unfunded accrued liability rates, as determined by the last valuation, be certified by the board of trustees.

Funding Status

As shown in **Exhibit 2**, the unfunded accrued liability contribution rate has increased significantly since 2011 due to the 2008 recession resulting in poor asset returns, improved mortality rates, and a decision by the TRS Board of Trustees to match industry best standards and move the fund from an open to a closed amortization period. The normal cost rate remained stable over this time period. The TRS employer contribution rate varies annually because of changes in the actuarial valuation of the pension fund (i.e., an increase in the unfunded accrued liability due to unmet actuarial assumptions). For fiscal year 2019, the employer contribution rate is 20.9%, of which 13.13% is the unfunded accrued liability rate and the remaining 7.77% is the normal cost rate.

Exhibit 2
TRS Unfunded Accrued Liability Rate Has Increased Since 2011



Source: TRS documents

TRS Board Composition

The TRS Board of Trustees is the oversight body for TRS and is statutorily composed of 10 members. Board members include:

- five members appointed by the governor,
- one member appointed by the USG Board of Regents,

- two members elected by the TRS Board of Trustees, and
- the State Auditor and State Treasurer, who serve as ex-officio members.

With the exception of the ex-officio board members, members are appointed for three year terms. The Board appoints TRS's executive director, as well as the chair and vice-chair of the Board.

Optional Retirement Plan (ORP)

In 1990, the Optional Retirement Plan (ORP) was established to provide USG employees an alternative to the TRS defined benefit plan. As a defined contribution plan, ORP retirement benefits consist of accumulated employee contributions, employer contributions, and investment returns.

ORP is designed to provide employees who opt in with a more portable retirement benefit. Current plan provisions allow them to vest immediately (as opposed to the 10-year vesting period required under the TRS plan), allowing them to leave at any point and take 100% of their earned retirement benefit. As such, ORP was intended to appeal to USG employees who were not likely to stay with the USG for their careers.

When ORP was established in 1990, certain USG employees who were participating in TRS were given the option to transfer their retirement to ORP.[5] Going forward, eligible new USG employees have been given the option to participate in either TRS or ORP within a set time period (currently 60 days) of beginning employment. As shown in **Exhibit 3**, approximately 14,000 current USG employees participate in ORP. Currently ORP's employee contribution rate is 6%, the same as TRS, and its employer contribution rate is 9.24%.

Exhibit 3
ORP Characteristics, Fiscal Year 2019

	Fiscal Year 2019
Members	14,000
Employee Contribution Rate	6%
Employer Contribution Rate	9.24%
Vesting	Immediate

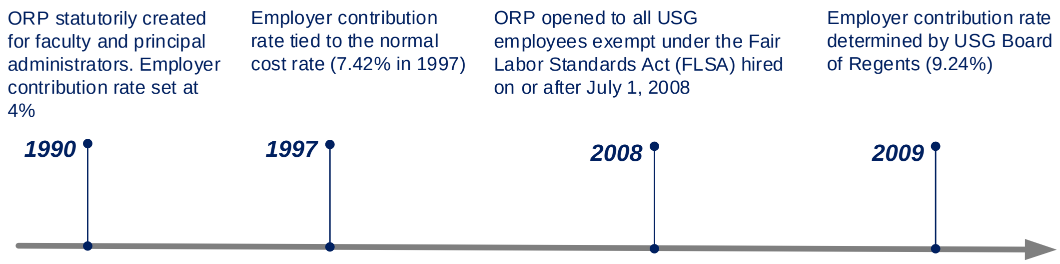
Source: USG documents

Plan Modifications

The most significant modifications to the plan include an expansion of eligibility to all exempt USG employees and increases to the employer contribution rate. **Exhibit 4** shows plan modifications to the ORP plan.

[5] USG employees who were principal administrators or faculty members with less than 10 years of service were eligible to transfer to ORP.

Exhibit 4
Major ORP Plan Modifications



Source: USG documents and the O.C.G.A.

USG Transfer Payments

As shown in **Exhibit 5**, O.C.G.A. § 47-21-5 specifies two payments from USG to TRS to mitigate the impact of allowing USG employees to opt into ORP rather than TRS.

Exhibit 5
The Statute Creating ORP Requires USG to Make Two Payments to TRS for ORP Members

47-21-5. Remittances by the University System of Georgia.

(a) In addition to the contributions specified in Code Section 47-21-4, the University System of Georgia shall remit to the Teachers Retirement System of Georgia the following payments:

(1) An amount equal to the accrued liability contribution determined by the board of trustees in accordance with the provisions of Code Section 47-3-48 that would have been made on behalf of participating employees if they had been members of the Teachers Retirement System of Georgia; and

(2) An amount, if any, equal to the increase in the normal contribution rate determined by the board of trustees in accordance with the provisions of paragraph (2) of Code Section 47-3-43 which results directly from participating employees ceasing to be or failing to become members of the Teachers Retirement System of Georgia.

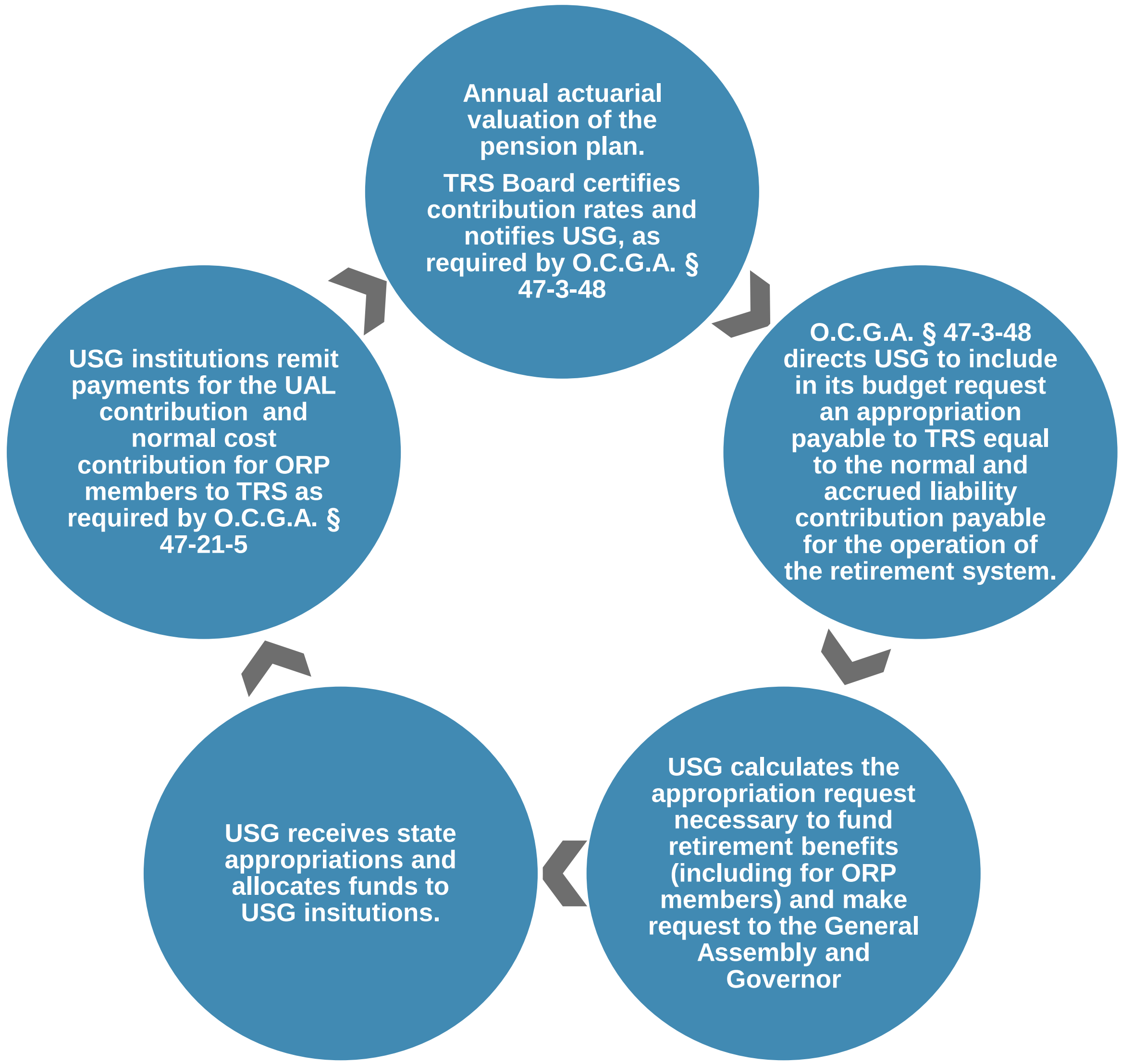
(b) The remittances provided for in subsection (a) of this Code section shall be made at the same time and in the same manner as those made on behalf of members of the Teachers Retirement System of Georgia.

(Code 1981, 47-21-5, enacted by Ga. L. 1990, p. 1811, 2.)

The accrued liability is the present value of future benefits and is an actuarially determined amount. The accrued liability can have a portion that is unfunded. An unfunded accrued liability exists when the accrued liability exceeds TRS's assets. The normal cost is the annual amount contributed over a member's career to fully fund the member's retirement benefit, assuming actuarial assumptions are met.

O.C.G.A. § 47-21-5 and O.C.G.A. § 47-3-48 outline the process for remitting these payments to TRS for ORP members. As shown in **Exhibit 6**, this process begins with the actuarial valuation and certification of TRS contribution rates. USG makes a request for an appropriation to fund the required contributions to TRS on behalf of both TRS and ORP members, based on the certified TRS contribution rates. Finally, USG remits to TRS both the required unfunded accrued liability contribution, as well as any changes in the normal cost rate of TRS due to ORP.

Exhibit 6
USG Process for Remitting Payments to TRS



Source: O.C.G.A.

Other States Optional Retirement Plans

Other states provide an optional retirement plan similar to ORP for employees of public universities or university systems. Like ORP, these optional plans are designed to provide employees with a more portable benefit option.

In addition, we identified eight (of 31) other states with optional plans that also include a mechanism to mitigate the impact on the defined benefit plan due to the creation of the optional plan. Some use the same mechanism as is outlined in the Georgia code, requiring a remittance of an amount equal to the unfunded accrued liability contribution to the defined benefit pension fund. Other states use different methods, including a required remittance equal to the difference between the employer contribution rates for the optional plan and the defined benefit pension plan or an actuarial calculation to determine an amount associated with the impact of the optional plan on the defined benefit plan. **Exhibit 7** shows the mitigating rate currently paid by other states' universities or university systems that we identified. We did not determine why the other 23 states do not have a mitigating rate requirement.

Exhibit 7
Mitigating Payments Occur in Other States

	Current Mitigating Rate	Basis for Mitigating Rate
Louisiana	21.8%	Amount equal to the defined benefit pension unfunded accrued liability
Georgia	13.13%	Amount equal to the defined benefit pension unfunded accrued liability
South Carolina	9.41%	Difference between the optional plan employer rate and defined benefit plan employer rate
California (University System)	6%	Contribution towards UC's unfunded pension liability
Kentucky	5.1%	Flat rate
Ohio	4.47%	Designed to mitigate impact of optional plan on the defined benefit plan
Florida	3.5%	Amount equal to the defined benefit pension unfunded accrued liability
Mississippi	2.5%	Flat rate
Oklahoma	2.5%	Flat rate, can be increased by the retirement board of trustees to pay off the unfunded accrued liability

Source: Other state plan documents

USG's Response: *"While the DOAA special review identified 31 states that offer a similar defined contribution retirement program like ORP, the TRS actuary has not identified a single state that 'charges higher education employers the full accrued unfunded liability amortization rate.' Even the DOAA special review acknowledged that only 8 of 31 states identified required any type of payments on behalf of participants similar to those in ORP in order to reduce the unfunded liabilities of non-ORP participants."*

Auditor's Response: *As shown in Exhibit 7, we identified two states (Florida and Louisiana) that charge higher education employers the full unfunded accrued liability amortization rate. As discussed in the finding starting on page 21, an independent actuary hired for this engagement explained that there is actuarial purpose to O.C.G.A. § 47-21-5. The actuary indicated it appears to have the goal of maintaining an equally shared burden amongst all participating employers. There could be a variety of reasons a state chose not to have a mitigating payment as part of the financial structure of the plan. Additionally, we found a 2016 study of the University of California optional plan that looked at the impact of the new defined contribution plan on the existing defined benefit pension. When we followed up with the actuarial group who conducted the study, its representative explained that mitigating payments discussed in the study are considered a best practice in this situation.*

Findings

Unfunded accrued liability payments designed to "compensate" the TRS fund for USG employees who join ORP were not made from 2008 to 2019.

Our review found that neither current TRS staff and board members nor USG staff were aware of O.C.G.A. § 47-21-5(a)(1) requiring USG to make unfunded accrued liability payments to TRS for USG employees who join ORP (see **Exhibit 5** on page 6). Further investigation into the matter revealed several circumstances that occurred around 2001 that led USG to cease making unfunded accrued liability contributions, even when the accrued liability later returned to an underfunded status beginning in 2008.

The failure to make unfunded accrued liability contributions to TRS resulted in:

- USG requesting appropriations to cover the unfunded accrued liability payment for its ORP members that were not transferred to TRS; and
- Higher unfunded accrued liability rates, resulting in higher employer contribution rates for all employers[6] who participate in TRS. The higher employer contribution rates, however, did allow the TRS pension fund to receive the same level of assets as if the transfer payments had been made.

An independent actuary has estimated that USG should have remitted approximately $600 to 660 million (depending on actuarial assumptions) to TRS to mitigate the impact of USG employees opting into ORP between 2008 and 2018 in accordance with O.C.G.A. §47-21-5. As shown in **Exhibit 8**, for fiscal year 2019, the required remittance should be approximately $170 million.

Exhibit 8
The FY2019 Accrued Liability Remittance to TRS Should Total Approximately $170 Million

FY2019 USG ORP Payroll	FY2019 Accrued Liability Rate	Required Remittance to TRS
$1.3 billion	**13.13%**	**$170 million**

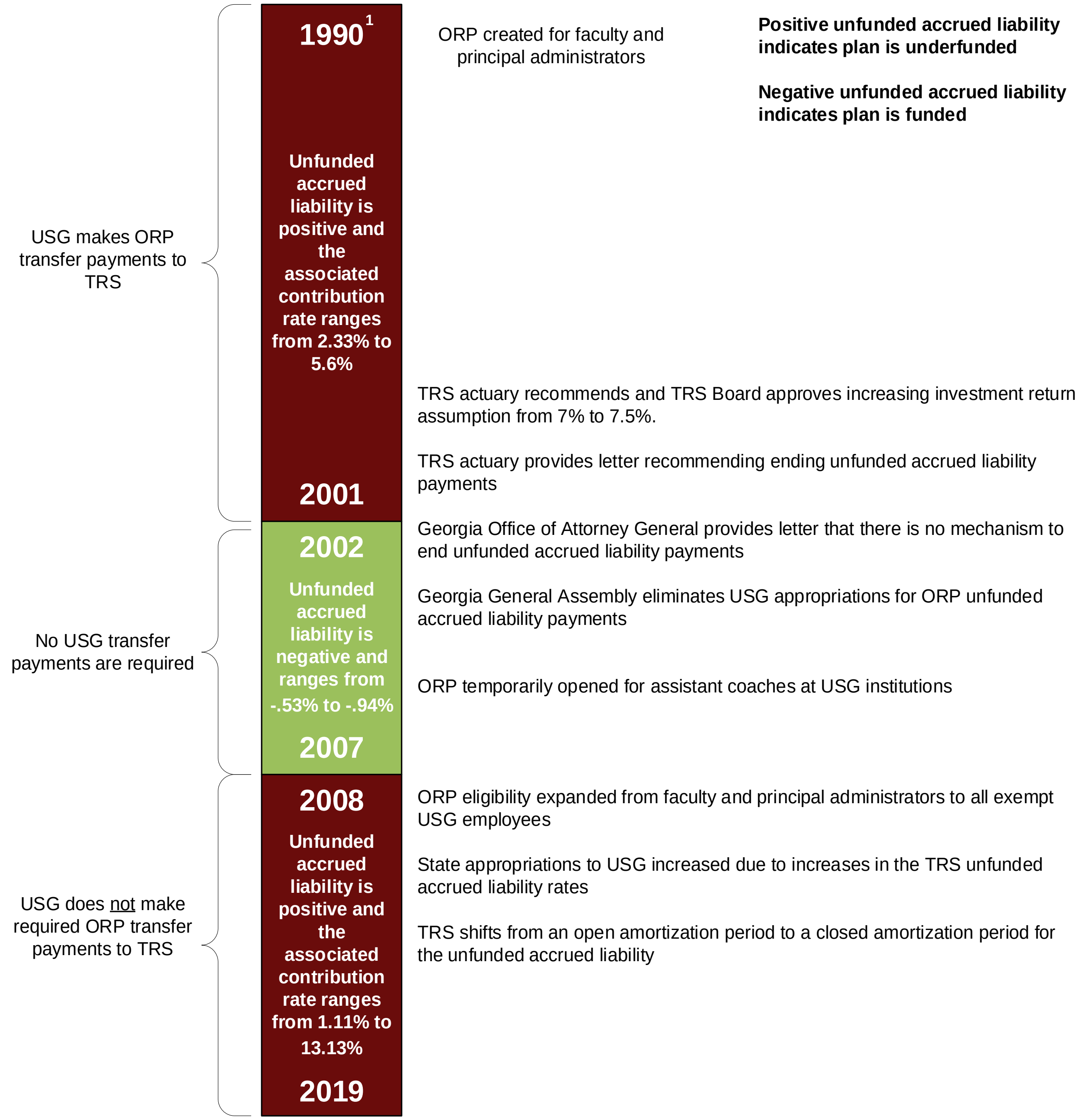
Source: DOAA analysis of USG data and the O.C.G.A

Unfunded Accrued Liability Contribution History

The circumstances that led to the unfunded accrued liability payments not being made occurred over time, as shown in **Exhibit 9**.

[6]TRS employers include local school systems, charter schools, technical colleges, county and regional libraries, Regional Education Service Agencies (RESAs), certain state agencies, and USG.

Exhibit 9
TRS Accrued Liability History



[1] Payments began in 1991

Source: DOAA analysis of TRS data, USG ORP plan documents, the O.C.G.A and state appropriations.

After ORP was created in 1990, USG remitted annual unfunded accrued liability payments to TRS on behalf of all employees who opted into ORP. USG calculated the payments based on the annual payroll for all employees[7] in ORP multiplied by the

[7]This includes both employees who transferred from TRS to ORP and employees who selected ORP at the start of employment.

unfunded accrued liability rate, and USG institutions remitted these funds to TRS in the same manner as it makes employer contributions for its TRS members.

USG continued these payments until March 2001, at which point the General Assembly amended the 2001 state budget and eliminated funding for USG payments to TRS on behalf of its ORP members. This was due to the 2000 actuarial valuation of TRS which projected that the TRS unfunded accrued liability would go negative, meaning fully funded, in 2002. To address the surplus funding to USG for these payments, the General Assembly also eliminated funding in the 2002 state budget.

In addition, a 2001 letter from the TRS actuary stated, "based on the June 30, 2000 actuarial valuation of TRS in which the unfunded accrued liability is negative, we recommend permanently ceasing the ORP accrued liability contribution to TRS." TRS then sought informal legal advice from the Office of the Attorney General (OAG) about USG ceasing payments required by O.C.G.A. § 47-21-5(a)(1). This OAG letter indicated, however, that "Chapter 21 [of the O.C.G.A] specifies no mechanism by which Regents is to be relieved of its statutory duty to make contributions to TRS….[S]tated differently, that Regents is obligated to submit contributions in the amount of zero. The alternative is that Regents continues making contributions to TRS until it is legislatively relieved of its obligation." Despite this direction, TRS interpreted this to mean that USG should stop making unfunded accrued liability payments indefinitely. Even though the law remained, no formal TRS board action was taken to officially remove USG from its payment obligation, and the accrued liability would later become underfunded (i.e., a positive unfunded accrued liability).[8]

In 2008, there was an unfunded accrued liability, but USG payments did not resume. The former executive director of TRS stated that he assumed the payments were no longer required and, as such, did not notify the Board of Trustees of any requirements for USG to pay. Over this 29-year period, there has been turnover of TRS and USG staff and board members. Both current USG and TRS personnel were unaware of the requirements of the statute.

Legal Guidance

To better understand the implications of this situation, DOAA requested guidance from the Office of the Attorney General (OAG). Specifically, we asked whether USG should have remitted payments to TRS for the unfunded accrued liability contributions from 2008 to present and whether TRS can collect any unpaid amounts. OAG clarified the following:

- "[T]he board of trustees [of TRS] must calculate the amounts to be due, if any, under O.C.G.A § 47-21-5(a)(1). If those amounts are determined by the board of trustees, USG is required to remit the amounts determined going forward. For all prior years where the board of trustees did not separately determine the amounts due, USG is not required to remit payment."

[8]It should be noted that although there is some question about the 2001 actuarial recommendation's meaning and basis, the statute is still in effect and the accrued liability is positive (underfunded).

- The TRS "board of trustees is presumed to carry out its statutory duties appropriately and was operating under prior informal legal advice and actuarial advice regarding the payments under O.C.G.A § 47-21-5(a)(1)."

- "While it is the board of trustees' responsibility to inform USG of the amount owed, the board of trustees does not have the authority to arbitrarily alter the required rate determined to be due by actuarial analysis under O.C.G.A § 47-3-48 or 47-3-43." This prohibits the Board from setting the rate for USG different than other employers.

RECOMMENDATION

1. TRS should determine the unfunded accrued liability payment owed by USG for fiscal year 2019 and each year going forward. This calculation is the certified unfunded accrued liability rate for fiscal year 2019 multiplied by the ORP payroll. Once determined, TRS should notify USG of the amount due.

TRS's Response: *"We believe that the TRS administration ceased such calculation and subsequent notification based on an [actuarial study] and two letters received by the actuary serving TRS. While no current administrative personnel nor TRS Board of Trustees were serving in official capacities with the system at that time, that decision had been in place for approximately 17 years with no mention in any communications or records since July 25, 2001. Our research concurs there has been no change in Georgia law nor official action of the Board of Trustees since that time."*

USG's Response: *"As part of the legislation, USG was required to contribute additional funding to TRS to offset the [unfunded accrued liability] created by these employees. [O.C.G.A § 47-21-5] The [unfunded accrued liability] was the actuarially expected result of TRS members leaving TRS and joining ORP."*

"Contrary to the DOAA special review's assertion that TRS and USG were unaware of the laws' requirements, TRS made a conscious, informed decision after consulting with its outside actuary and the Attorney General that the USG had made sufficient payments to make TRS whole for any losses it had sustained from members joining the ORP and that no further payments were required or appropriate….[t]o further clarify the issue, the TRS actuary provided a letter on Jan. 30, 2019, to the TRS Executive Director that supports that no payment is owed by USG. TRS, together with advice from the TRS actuary, made the determination in 2001 that going forward it should not assess USG for extra payments for any UAL [unfunded accrued liability], and since that time TRS has not assessed USG for any such extra payments. This determination by TRS that no extra payments are required has been upheld by the attached advice from the Attorney General as a reasonable TRS decision. Therefore, USG does not agree with the recommendation that TRS should calculate and bill USG for the UAL and normal cost for FY19 or future fiscal years."

Auditor's Response: *USG's statement that the additional funding to TRS was intended to offset the unfunded accrued liability created by the initial employees who were allowed to leave TRS and join ORP is incorrect. The purpose of mitigating payments is to prevent the portion of the unfunded accrued* *liability for USG's TRS retirees from being borne by other employers of TRS active members by maintaining the appropriate support ratio between active members and retirees. This is a critical factor in a cost-sharing multi-employer pension plan.*

This finding recommends that TRS come into legal compliance with O.C.G.A. § 47-21-5. As a result, it is questionable for USG to assert an opinion that suggests another state agency not follow state law to the detriment of other employers contributing to TRS. USG appears to be making an argument that payments directed by O.C.G.A. § 47-21-5 are not necessary due to letters by actuaries; however, regardless of what anyone thinks about the actuarial basis for the payments, the law directing the payment is still on the books, and the payment is not optional if an unfunded accrued liability exists. Nevertheless, USG's argument against TRS billing USG for the unfunded accrued liability from an actuarial standpoint appears to ignore or misconstrue important aspects of the latest letter from the TRS actuary provided in USG's response.

The January 30, 2019 letter from the TRS actuary does not definitively state that it believes no unfunded accrued liability payment is owed by USG. In fact, the TRS director summarized the letter by stating the TRS actuary "provided information that seemingly suggests that there possibly would be perpetual impact to the system…" resulting from the creation of ORP. Furthermore, the TRS actuary does not definitively affirm the May 17, 2001 advice from the TRS actuary that "should the accrued liability contribution of TRS become negative, the ORP accrued liability contribution should permanently cease." Rather, the current TRS actuary states:

- *"The statute provides appropriate protection for all TRS employers and ensures that the USG's portion of the liability, which had accrued up to the point of the ORP's establishment would continue to be funded by USG."*

- *"To be equitable to all participating employers, the statutory provisions require USG to maintain the payments that would have been expected to fully fund their share of the unfunded liability attributable to USG so as not to cause the accrued liability contribution rate of TRS to increase due to the establishment of ORP."*

- *"The main question to be considered is whether the intent of the statute was to maintain equity among TRS participating employers, as well as ensure the actuarial condition of TRS was not negatively impacted by the establishment of the ORP or whether the statute intended to establish an additional and long-term source of funding into TRS. If the latter is the intent of the policy, the contribution of the full UAL amortization rate on ORP covered payroll, currently determined as 13.37%, would represent an annual actuarial gain to TRS that would eventually result in higher funded ratios and lower accrued liability rates. If, however, the policy was to maintain equitability, we recommend that the study of the impact of ORP participation on the actuarial condition of TRS be performed as soon as feasible to determine an appropriate rate required of USG to mitigate the impact of ORP."*

The independent actuary engaged for this review noted "[t]he TRS actuary states 'the contribution of the full UAL amortization rate on ORP covered payroll, currently determined as 13.37%, would represent an annual actuarial gain to TRS that would eventually result in higher funded ratios and lower accrued liability rates but would require a significant appropriation for the ORP contribution required to TRS.' The TRS actuary is failing to consider that the statute calls for the UAL contribution 'that would have been made on behalf of participating employees if they had been *members' of TRS. To the extent ORP payroll was part of TRS, the resulting UAL contribution would be less for all. That is, the total UAL contribution would be the same, but spread over a larger payroll. Such an approach avoids the creation of an annual actuarial gain."*

In addition, the letter of informal advice from the OAG dated January 9, 2019 does not characterize TRS's failure to bill USG as reasonable as asserted by USG's response. The letter states "[b]ased on the above analysis, the board of trustees must calculate the amounts to be due, if any, under O.C.G.A. § 47-21-5(a)(l) and (2.)"

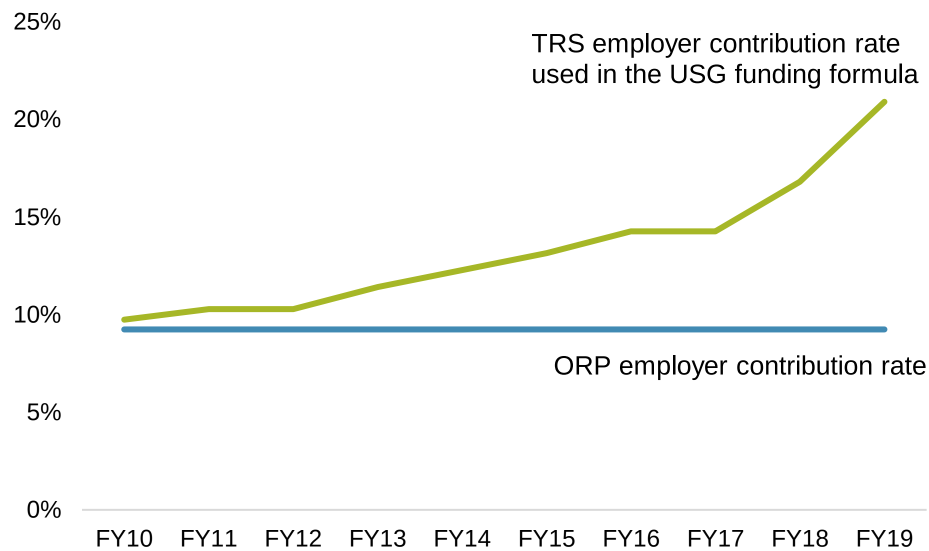
Lastly, contrary to USG's characterization of the facts presented in this finding, the report accurately states that neither current TRS staff and board members nor USG staff were aware of the law's requirements. The report clearly indicates that historically TRS and USG staff were aware of the law's requirements. TRS made a decision in 2001 when the UAL was negative (indicating the pension was fully funded). TRS did not reassess, consult with its actuary, discuss the situation with the Board of Trustees, consult with the OAG, or consider the consequences of O.C.G.A. § 47-21-5 when the UAL became positive, (indicating a return of an unfunded accrued liability) in 2008. As TRS indicated in its response to this report, it has no records, communications, or official actions of the Board of Trustees regarding this matter since July 25, 2001. As stated in two letters from the OAG (2001 and 2019), when the unfunded accrued liability is positive, O.C.G.A. § 47-21-5(a)(1) requires USG to make a contribution in the amount of the UAL rate to TRS. The second letter of legal advice indicates that TRS must notify USG of the amount of the contribution.

From fiscal year 2008 to 2019, USG requested appropriations to cover its TRS retirement costs which included funds for the unfunded accrued liability payment outlined in O.C.G.A. § 47-21-5.

USG's annual budget request includes a calculation to determine the cost of providing retirement benefits to state-funded USG employees.[9] The calculation is based on TRS employer contribution rates and does not distinguish between the cost difference for the TRS and ORP retirement plans. USG's budget calculation includes the amount intended to fund USG's required unfunded accrued liability transfers to TRS for ORP members. As the unfunded accrued liability increased from 1.11% in fiscal year 2008 to 13.13% in fiscal year 2019, USG received an increasing amount for the required unfunded accrued liability transfers to TRS. For the reasons previously discussed, USG did not transfer the payments and allocated these funds for other purposes.[10]

Exhibit 10 shows the employer contribution rate for ORP (9.24%) compared to the rate USG used in its funding formula when seeking state appropriations (equal to the TRS employer contribution rate). This is because, while not explicit, the funding formula for USG does contemplate the required remittance payment outlined in O.C.G.A. § 47-21-5.

Exhibit 10
USG's Budget Calculations Do Not Account for the Lower Employer Costs Associated with its ORP Members



Source: DOAA analysis of the Georgia budget and USG data

Exhibit 11 shows the additional state appropriations that were associated with ORP state-funded positions, based on the higher TRS rate requested by USG. Because USG

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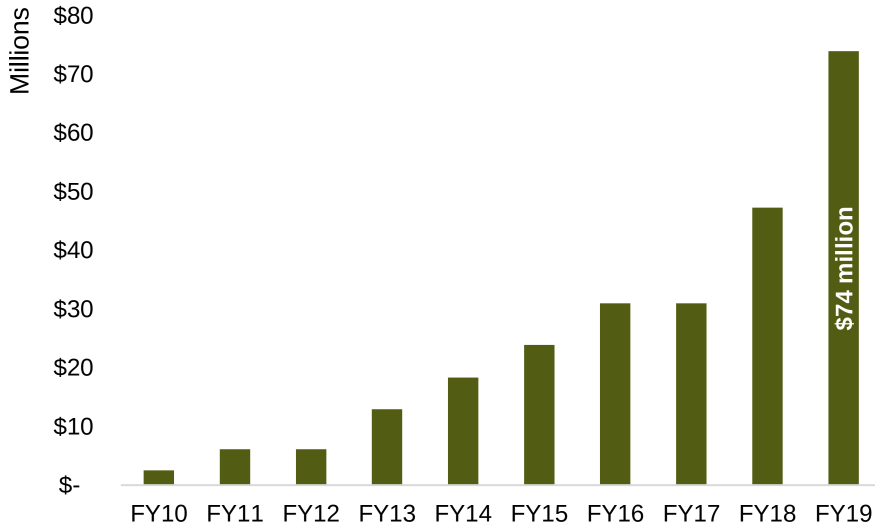
[9]Non-state funded employees are funded through grants, contracts, and other means.
[10]USG receives appropriations in a lump sum and is allowed to allocate funds among institutions under its control as it wishes according to the Georgia Constitution, article VIII § VI, Section I(c).

did not transfer the funds related to its ORP members to TRS, USG received the increased appropriations for ORP members with no corresponding increase in cost.

Exhibit 11
USG Requested State Appropriations That Should Have Been Remitted to TRS, Including $74 Million in FY2019



Source: DOAA analysis of the Georgia budget and USG data

Initially, when asked why USG was receiving state appropriations to fund the required unfunded accrued liability payments for employees participating in ORP, USG personnel indicated they did not know all of the underlying assumptions of the budget calculations. After the initial response, USG researched the budget assumptions and provided a further explanation. According to USG, when the ORP plan was created, USG institutions were responsible for paying the ORP rate into employee retirement accounts and making a remittance to TRS based on an unfunded actuarial value. At the time unfunded accrued liability payments ceased, the combined ORP employer contribution rate and the unfunded liability rate for ORP members equaled the TRS employer contribution rate.

RECOMMENDATION

1. Given the problems associated with the unfunded accrued liability remittance payment required by O.C.G.A. § 47-21-5(a)(1), the General Assembly should review the current budget process to determine if USG is receiving an appropriate amount to fund retirement benefits.

USG's Response: *The DOAA special review "notes USG received an increasing amount for the required UAL transfers to TRS. This presentation represents a misunderstanding of USG's funding formula and how it is meant to be used in the General Assembly's appropriations process. The funding formula is used by policymakers to determine the lump-sum funding needed by USG to operate its institutions and fulfill its obligations. The funding formula is not structured to calculate the amount intended to fund USG's required UAL payment for ORP, if any. The funding formula uses data inputs from prior fiscal years to estimate anticipated need. USG will spend approximately $364.6M on* *retirement benefits in FY19, which represents an increase of $59.3M from FY18. However, USG received only $56.9M in the FY19 budget for retirement cost increases. To suggest that the actual FY19 appropriation contains $74M in funding to be remitted to TRS simply is incorrect. Additionally, USG is not receiving excess funds in its formula and is still sustaining $1.2 billion in annual austerity reductions as of FY19 - in other words, any purported increasing amount referred to by the special review is more than offset by the overall reduction in the formula funding."*

Auditor's Response: *We do not have a misunderstanding of USG's funding formula and how it is meant to be used in the General Assembly's appropriations process. While it is true that under O.C.G.A. § 20-3-53 appropriations are paid to the Board of Regents as a lump sum, and the Board has the authority to allocate the appropriations, the total appropriations are derived by the General Assembly based on the USG funding formula. As part of this review, we were specifically asked to review the process for calculating USG's budgetary request for employer contributions to TRS and ORP. Legislative budget staff wanted to better understand why USG was being appropriated funds for members of ORP at the higher TRS employer contribution rate. Once we determined the budget process, we conferred with the Office of Planning and Budget (OPB) and Senate Budget Office. Each agreed with our understanding of the process as we describe in this finding.*

In addition, USG provided us with a 3-page document (see ***Appendix C****) discussing the "Formula for Excellence" and stated it includes a line item to fund the cost of providing retirement benefits to employees of USG. The first table on page 3 of Appendix C shows that a decoupling of the ORP employer contribution rate from the TRS employer contribution rate in the budget request would decrease the state appropriations generated by the USG funding formula by more than $68 million in fiscal year 2019 alone.*[11] *USG notes that the increase in appropriations received by USG for fiscal year 2019 did not cover the total increase in retirement costs that USG anticipates. This is because state appropriations are not supposed to cover all of USG's retirement costs; rather other fund sources (including tuition and fees) are expected to cover a portion of retirement costs. Furthermore, the second table on page 3 of Appendix C shows that for five out of the last six years, the actual total retirement expenditure for USG was less than the formula earnings for retirement, including approximately $30 million for fiscal year 2019.*

Finally, USG's contention that any increasing funds it received for ORP members have been offset by austerity cuts is irrelevant to this issue. If the General Assembly wanted to reverse its austerity cuts, it would not do so by overfunding one portion of the retirement funding formula.

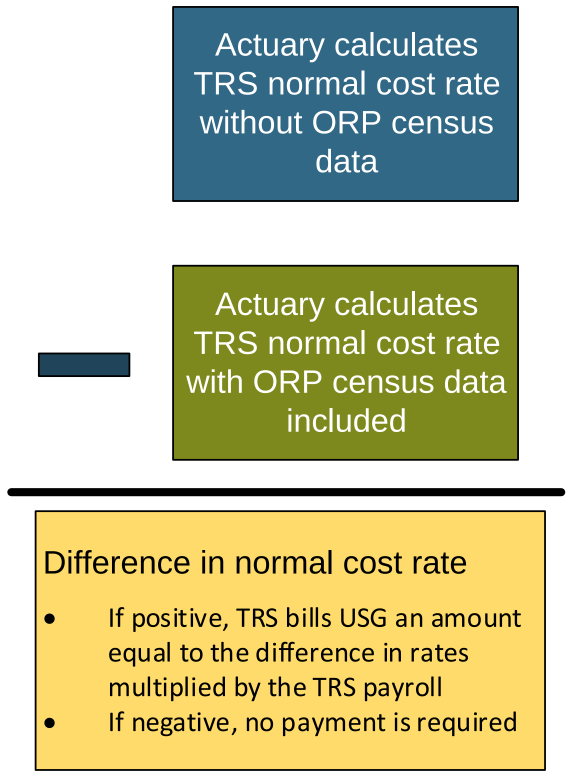
[11] According to the Senate Budget and Evaluation Office, the state appropriates funds to cover approximately 75% of the retirement earnings calculated in the USG funding formula. Other sources, including tuition and fees, are used for the remainder.

The TRS board has not calculated the difference in normal cost as outlined in statute since ORP was created in 1990.

Normal cost is the annual amount contributed over a member's career to fully fund the member's retirement benefit, assuming actuarial assumptions are met.

O.C.G.A. § 47-21-5(a)(2) requires USG to remit payment to TRS if the normal cost contribution rate increases due to the absence of ORP members, as determined by the TRS board. The payment for any potential increase in the normal contribution rate is designed to mitigate any increased costs resulting from USG employees joining ORP instead of TRS. Given the time that has lapsed since ORP was created in 1990, we were not able to fully understand why TRS never calculated the difference in the normal rate; however, based on interviews with the former and current TRS director, it appears that TRS staff were unfamiliar with the statute's provisions. **Exhibit 12** shows how this normal cost calculation should be determined.

Exhibit 12
USG Makes a Payment to TRS for Any Increase in the TRS Normal Cost Resulting From ORP Members Opting Out of TRS



Source: O.C.G.A § 47-21-5

According to an independent actuary, the failure to calculate and pay the difference in the normal cost related to ORP members likely resulted in employers of TRS members being charged a higher normal cost contribution rate. However, it should be noted that charging a higher contribution rate allowed the TRS fund to remain adequately funded by shifting the cost to other employers of TRS members. The value of these unpaid normal cost amounts is not known at this time and would need to be calculated by an actuary if past payments were owed.

Given these circumstances, DOAA requested guidance from the OAG. Specifically, we requested if USG should have remitted payments to TRS for the normal cost contribution increases pursuant to O.C.G.A § 47-21-5(a)(2) and whether TRS can collect any unpaid amounts. In response the OAG stated "the board of trustees [of TRS] must calculate the amounts to be due, if any, under O.C.G.A § 47-21-5 (a)(1) and (a)(2). If those amounts are determined by the board of trustees, USG is required to remit the amounts determined going forward. For all prior years where the board of trustees did not separately determine the amounts due, USG is not required to remit payment."

RECOMMENDATION

1. TRS should calculate the difference in the normal cost rate due to the absence of ORP members and determine if payment is required by USG in the fiscal year 2019 and each year going forward. This calculation is the difference in the normal rate for fiscal year 2019 multiplied by the TRS payroll. Once determined, TRS should notify USG of the amount due.

TRS's Response: *"TRS administration has requested ORP payroll census data from the Board of Regents for the actuary to determine the difference, if any, in the normal cost rate due to the absence of ORP members."*

USG's Response: *"USG does not agree with the recommendation that TRS should calculate and bill USG for the UAL and normal cost for FY19 or future fiscal years."*

Auditor's Response: *This finding recommends that TRS come into legal compliance with O.C.G.A. § 47-21-5. As a result, it is questionable for USG to assert an opinion that suggests another state agency not follow state law to the detriment of other employers contributing to TRS.*

The TRS actuary, in a letter dated Jan. 30, 2019, stated that "[w]e have reviewed the limited data available to us and preliminarily estimate that the normal cost rate of the current ORP participants is higher than the normal cost rate of TRS. Therefore, we expect no payments would be required under § 47-21-4 (a)(2) since the TRS normal cost rate would increase if the ORP participants were included in the latest actuarial valuation. This outcome is intuitive to us and we would expect similar outcomes in prior valuations. Based on our experience, higher education employees are typically older at date of hire than are teachers and a pension plan's normal cost rate is typically positively correlated to age at hire. We are prepared to run the latest valuation with more complete data of the ORP participants, when available, to verify our preliminary findings."

The TRS actuary's letter does not address the likely different demographic behaviors of the ORP participants relative to TRS as a whole. To the extent employees do not believe they will stay in TRS long enough to earn sufficient benefits when hired, they will be more likely to self-select into ORP to receive larger expected benefits. (This was presumably a key driver in the creation of ORP, which, according to USG, was created as a recruiting tool). Therefore, it is likely that ORP participants have higher expected termination rates than TRS as a whole. As a result, the TRS normal cost rate would be lower when including ORP participants.

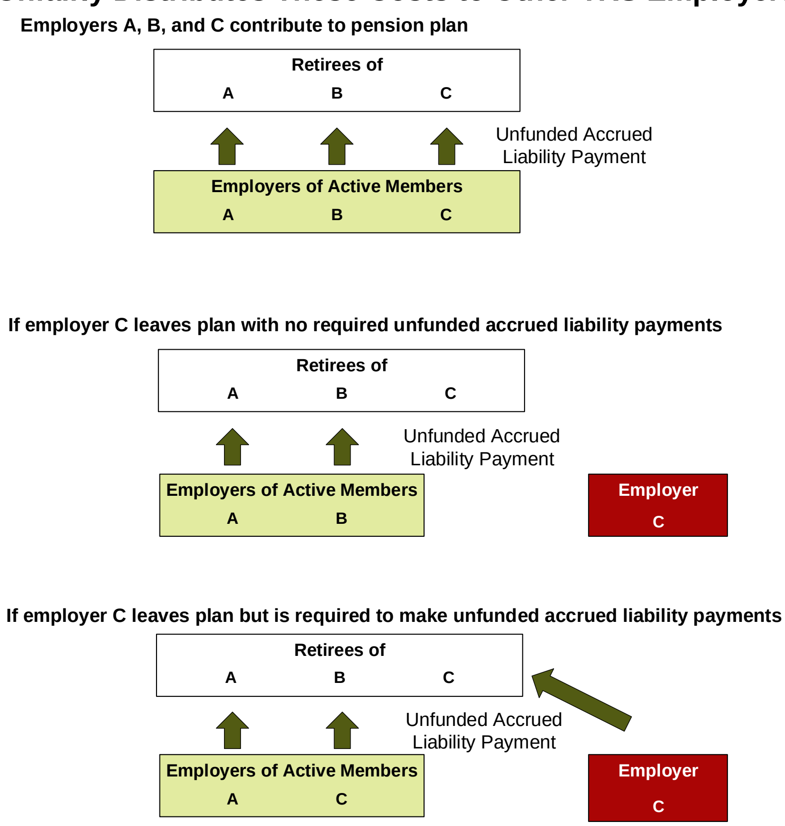
Careful consideration should be given to any proposed changes to O.C.G.A § 47-21-5. If this statute were changed to relieve USG of its TRS payments for ORP members, TRS pension costs will be shifted to the other TRS employers.

Employers of active members bear the cost of the unfunded accrued liability for all retirees in the plan.

TRS is a cost-sharing, multiple-employer plan. In these plans, participating employers pool their pension assets and obligations to provide defined benefit pensions. The plan assets can be used to pay the pensions of the retirees of any participating employer. Employers of active TRS members currently bear the cost of the unfunded accrued liability for all retirees in the plan.

As shown in **Exhibit 13**, three hypothetical employers (A, B, and C) participate in a pension plan, and all three support the retiree group through unfunded accrued liability payments on their active employees. If entity C leaves the pension plan fully or partially and is permitted to eliminate or even reduce its payments into the pension fund, entities A and B bear the costs of the unfunded accrued liability for entity C's retirees. The removal of any one employer's payroll (fully or partially) will shift the burden to the remaining employers. There are a large number of employers[12] with participating employees and retirees in TRS; shifting the unfunded accrued liability to fewer employers is not reasonable or fair without financial compensation to offset an employer's withdrawal.

Exhibit 13
Eliminating an Employer's Unfunded Accrued Liability Contribution Unfairly Distributes These Costs to Other TRS Employers



[12]TRS employers include USG, local school systems, charter schools, technical colleges, county and regional libraries, Regional Education Service Agencies, and certain state agencies.

TRS started in 1943, and given its 78-year history, is a large pension fund in terms of its assets and the number of members. TRS is designed to provide a lifetime benefit to its retirees. As shown in **Exhibit 14**, an individual may retire and draw retiree benefits for an extended period of time, possibly more than 40 years. For example, a member who started in 1963 and retired in 1993 would draw 26 years of retirement benefits by 2019. Over this period of retirement, the TRS pension fund will experience gains and losses that may result in an unfunded accrued liability. TRS's unfunded accrued liability is approximately $24 billion, a portion of which is attributable to retirees. Because retirees no longer contribute to the pension plan, employers of active members bear the cost of the unfunded accrued liability for retirees.

Exhibit 14
USG Retirees May Draw Retirement Benefits for More Than 40 Years

Start Date	Retirement Date	Current Age if Start Age 21	Current Age if Start Age 25	Years Retired
1943	1973	97	101	46
1953	1983	87	91	36
1963	1993	77	81	26
1973	2003	67	71	16
1980	2010	60	64	9
1983	2013	57	61	6
1988	2018	52	56	1

Source: DOAA Calculation

During TRS's existence, the pool of USG retirees has grown. Prior to the creation of ORP, TRS was supported by the entire USG payroll (all USG employees eligible for TRS). When ORP was created, there was an immediate decrease in the USG payroll supporting the unfunded accrued liability of these USG retirees. This payroll supporting TRS continues to decrease as more USG employees choose ORP. In addition, the number of USG employees eligible for ORP was expanded in 2008. This further decreased the USG payroll available to support USG retirees. Also, the impact of the creation of ORP was not limited to the retiree pool as of 1991 (date of ORP creation). For example, a USG employee with a start date of 1980 would have been vested in TRS when ORP was created. As shown in **Exhibit 14**, this employee today could be between the ages of 60 and 64 and received retirement benefits for nine years and could potentially draw benefits for an additional 30 years. If not for the creation of ORP, all (as opposed to a portion of), USG employees would have become members of TRS and supported the 1980 employee in their retirement. The design of the statute retained the ORP payroll to continue to bear the cost of the unfunded accrued liability for these retirees.

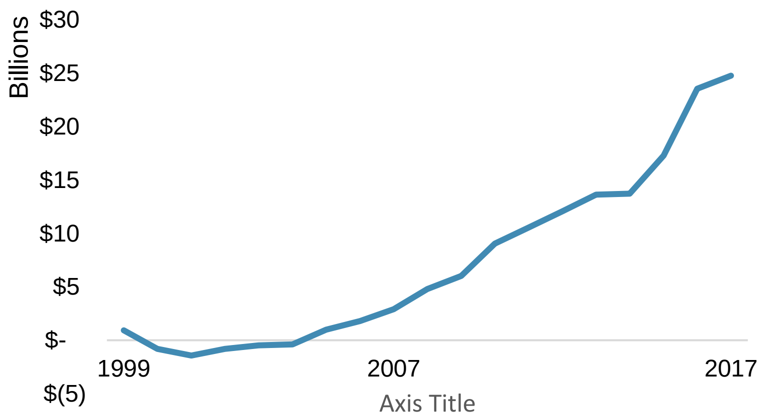
An independent actuary hired for this engagement explained that there is actuarial logic to O.C.G.A § 47-21-5. While the actuary did not provide a legal interpretation of the statute, the actuary indicated that it "appears to have the goal of keeping TRS from being harmed….by the exclusion of the ORP participants…[T]he fewer actives in the payroll (due to ORP), the higher the burden placed on the remaining contributing employers." Accordingly, there is logic to the statute as it is a mechanism for addressing gains and losses over time (via the unfunded accrued liability amortization). Thus, from the actuarial perspective, it is reasonable to interpret the statute as providing a permanent mechanism for dealing with the impact of ORP members not participating in TRS.

Other Actuarial Considerations

An actuarial study was conducted in 1999 to study the effect ORP on TRS. According to the study's authors, "[o]ur analysis of experience indicates that the ORP has had no measurable effect on the TRS. *This is primarily because the accrued liability contributions have continued to be made to the System on behalf of members participating in ORP*" (emphasis added). The letter, however, is silent on the potential implications or effect of ORP on TRS if the accrued liability contributions had not been made by USG from 1991-1999.

In addition, in 1999, the TRS actuary stated "…should the accrued liability contributions of TRS become negative, the ORP accrued liability contribution should permanently cease." As noted earlier, the unfunded accrued liability became negative, and the payments ceased in 2001.[13] The independent actuary engaged for this review noted, however, that while TRS was temporarily fully funded, the risk of not meeting actuarial assumptions remained, and some of this risk was associated with USG retirees. This risk is evident when one sees the swings in fund values shown in **Exhibit 15**. The TRS fund went from an unfunded accrued liability of $931 million in 1999, to fully funded in 2000, to an unfunded accrued liability in of $2.9 billion in 2007, and finally, an unfunded accrued liability of approximately $25 billion in 2017 due to unrealized actuarial assumptions.

Exhibit 15
TRS Fund Swung From an Unfunded Accrued Liability in 1999, to No Unfunded Accrued Liability in 2000, to a $25 Billion Unfunded Accrued Liability in 2017



Source: Independent actuarial analysis of TRS data

In addition, if USG were no longer statutorily required to make payments for the difference in normal cost, if any, the normal cost for the remaining employers would

[13]A significant reason the TRS pension fund moved from an unfunded accrued liability to the fully funded was because of asset returns exceeding actuarial assumptions and the increase in the interest rate assumptions from 7.0% to 7.5% in May 2000.

likely be higher. However, as previously discussed, the magnitude of normal cost payments are not known because the difference in normal cost has never been calculated or paid.

RECOMMENDATION

1. If the General Assembly wishes to relieve USG from making payments to TRS on behalf of ORP members, O.C.G.A. 47-21-5 will need to be repealed or revised. If the General Assembly wishes to revise the statute, **Exhibit 7** on page 8 provides the basis for other states' mitigating rates that provide lower cost alternatives to the current structure of the unfunded accrued liability and normal cost payments. However, any consideration of removing ORP members from TRS funding should involve carefully weighing the financial impact of reducing TRS's payroll base. To mitigate shifting the burden to the remaining TRS employers, it should consider contracting for an actuarial settlement calculation[14] to compensate the fund for ORP members being removed from the TRS accrued liability calculation.

USG's Response: *"USG supports legislation to repeal O.C.G.A. § 47-21-5…[M]ultiple factors unrelated to origins of O.C.G.A. § 47-21-1 contribute to the UAL. As outlined in the Jan. 30, 2019, TRS actuary's letter, such factors include TRS fund's experience (e.g., fluctuating investment returns) combined with ad hoc cost of living adjustments (COLA) provided in the past. The DOAA special review's recommendation that TRS require USG to shoulder the burden for these liabilities even though USG has no control over investment returns or COLA adjustments is inconsistent with TRS' almost 30 years of interpreting and administering O.C.G.A. § 47-21-5."*

Auditor's Response: *USG's response shows a fundamental lack of understanding of a cost-sharing, multi-employer pension plan. No TRS employer has control over TRS's investment returns or COLA adjustments. Yet each has made the required employer contribution each year to ensure that the pension obligations are met. In fact, other employers have "shouldered" a portion of the burden for the unfunded accrued liability for USG's TRS retirees through higher employer contribution rates due to the lack of payments previously discussed. It appears that USG believes it should be treated differently from other TRS employers and that it is acceptable for other employers to instead shoulder a portion of USG's share of the TRS liabilities. Repealing O.C.G.A. § 47-21-5 would continue to shift the burden of supporting the pension costs of USG retirees in TRS to other TRS employers, including local school systems, local governments and increased costs to Georgia taxpayers. We noted the Jan. 30, 2019, TRS actuary's letter provided to us by USG states "[t]he provisions of O.C.G.A. § 47-21-5, from an actuarial perspective, protect the employers participating in TRS from the potential increase in both the normal cost contributions and the accrued liability due to the potential decrease in participating employees of USG."*

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[14]Actuarial debt calculation is the actuarially determined liability amount attributable to an employer within a multi-employer pension plan, such as TRS. This calculation determines the amount an employer is required to pay to exit such a plan. There are a number of methods available for both calculating such a liability and making payment of the liability.

USG contributed a lower amount to ORP members' accounts in 2007 than was set by the TRS board.

By statute, USG was required to make an employer contribution to ORP member accounts equal to the normal cost rate of TRS between 1997 and 2008. In fiscal year 2007, the TRS board set the normal rate for TRS at 9.85%. However, USG only contributed 8.13% to ORP member accounts, a difference of 1.72%. As shown in **Exhibit 16**, the difference in 2007 dollars was approximately $12.8 million. Assuming an estimated annual investment return of 6%, the total value of the underpayment would be approximately $25.8 million in 2019.

Exhibit 16
Statutorily Required Amount Was Not Made to ORP Member Accounts in FY2007

	FY2007 Rate	Payroll	Contribution
Required Contribution	9.85%	$745 million	$73.3 million
USG's Contribution	8.13%		$60.5 million
Difference	**-1.72%**		**$12.8 million**

FY2019
Assuming a 6% annual return
$25.8 million

Source: DOAA analysis of USG and TRS data

The normal contribution rate for TRS is adopted by the TRS Board of Trustees based on the actuarial valuation of the fund, as required by O.C.G.A. § 47-3-43. There is no dispute that the rate set by the TRS Board in fiscal year 2007 was 9.85%.

Based on the situation, DOAA requested guidance from the Office of the Attorney General (OAG). The OAG agrees that there is no dispute that the rate was correctly adopted at 9.85% for 2007. It is unclear whether USG is legally required to make contributions to member accounts to remedy the error.

While there may or may not be a legal requirement to make members whole as a result of the error, the Government Finance Officers Association (GFOA) best practices indicate that contributions to member accounts should be made to remedy the error. According to GFOA, administrators of government-sponsored defined contribution plans have the fiduciary duty to act exclusively for the benefit of plan members and beneficiaries and to administer plans efficiently and properly. Additionally, according to a Governmental Accounting Standards Board concept statement, "even if the agreement may not be legally enforceable, the government may have a liability due to the social, moral, or economic consequences."

RECOMMENDATION

1. USG or the General Assembly should consider making contributions to ORP member accounts to remedy the fiscal year 2007 error.

USG's Response: *"USG will seek guidance from the Attorney General as to any responsibilities to address DOAA's assertion of an alleged underpayment to our employees in FY07. However, as noted in the attached advice from the Attorney General, state agencies operate on a fiscal year basis and 'appropriations cannot reach back in time to activities in prior fiscal years.'"*

Auditor's Response: *USG's use of "alleged" to describe the underpayment issue we identified is incorrect. There is no dispute that the normal cost rate for fiscal year 2007 was 9.85%, and USG's vice chancellor for fiscal affairs and associate vice chancellor of accounting and reporting confirmed in writing that in fiscal year 2007 it contributed 8.13%. In addition, the USG Comprehensive Annual Financial Report and a memo sent from USG's Office of Human Resources to all USG chief business officers both state the incorrect 8.13% ORP employer contribution rate. If USG identified an error in our finding when reviewing a draft of this report and had actually paid the correct amount, we would expect that USG would have stated so in its response. Also, it is our opinion that the end of a fiscal year does not eliminate all fiscal, fiduciary, and moral responsibilities of a state agency.*

We agree legal guidance is needed, especially by someone with expertise in section 401(a) of the Internal Revenue Code (IRC). Qualified plans under section 401(a), such as ORP, must adhere to the requirements of the IRC. We requested guidance from the Office of the Attorney General on state and federal implications of this issue, but it did not provide advice related to the federal IRC.

Appendix A: Table of Recommendations

Payments designed to "compensate" the TRS fund for USG employees who opt into ORP were not made from 2008 to 2019. During this time period, the TRS pension fund had an unfunded accrued liability. (p. 10)
1. TRS should determine the unfunded accrued liability payment owed by USG for fiscal year 2019 and each year going forward. This calculation is the certified unfunded accrued liability rate for fiscal year 2019 multiplied by the ORP payroll. Once determined, TRS should notify USG of the amount due.
From fiscal year 2009 to 2019, USG has received an additional $250 million in state appropriations for the required unfunded accrued liability payments to TRS that mitigate impact over the TRS pension fund. (p. 16)
2. Given the problems associated with the unfunded accrued liability remittance payment required by O.C.G.A. § 47-21-5(a)(1), the General Assembly should review the current budget process to determine if USG is receiving an appropriate amount to fund retirement benefits.
The TRS board has not calculated the difference in normal cost as outlined in statute since the ORP was created in 1990, resulting in USG not making normal rate payments to TRS for its ORP members. (p. 19)
3. TRS should calculate the difference in the normal cost rate due to the absence of ORP members and determine if payment is required by USG in the fiscal year 2019 and each year going forward. This calculation is the difference in the normal rate for fiscal year 2019 multiplied by the TRS payroll. Once determined, TRS should notify USG of the amount due.
Careful consideration should be given to any proposed changes to O.C.G.A § 47-21-5. If this statute were changed to relieve USG of its obligation, a portion of the unfunded accrued liability cost for USG's retirees will be shifted to other employers of TRS members. (p. 22)
4. If the General Assembly wishes to relieve USG from making payments to TRS on behalf of ORP members, O.C.G.A. 47-21-5 will need to be repealed or revised. If the General Assembly wishes to revise the statute, **Exhibit 7** on page 8 provides the basis for other states' mitigating rates that provide lower cost alternatives to the current structure of the unfunded accrued liability and normal cost payments. However, any consideration of removing ORP members from TRS funding should involve carefully weighing the financial impact of reducing TRS's payroll base. To mitigate shifting the burden to the remaining TRS employers, it should consider contracting for an actuarial settlement calculation to compensate the fund for ORP members being removed from the TRS accrued liability calculation.
USG contributed a lower amount to ORP members' accounts in 2007 than was set by the TRS board. (p.26)
5. USG or the General Assembly should consider making contributions to ORP member accounts to remedy the fiscal year 2007 error.

Appendix B: Objectives, Scope, and Methodology

Objectives

This report examines the Teachers Retirement System (TRS), and the Optional Retirement Plan (ORP). Specifically, our examination set out to determine the following:

1. What is the process for calculating the University System of Georgia's (USG) budgetary request for employer contributions to TRS and the ORP?

Scope

This special examination generally covered activity related to the creation of ORP, from 1990 to current, with consideration of earlier or later periods when relevant. Information used in this report was obtained by reviewing relevant laws, rules, and regulations; interviewing officials at TRS, USG, and Georgia's Office of Attorney General (OAG); analyzing data provided by TRS and USG; analyzing data from the National Association of State Retirement Administrators (NASRA); and prior audit work.

We obtained ORP member payroll data on current members from USG. This included data on personnel salaries by fund type. We assessed the data used for this examination and determined the data was sufficiently reliable for our analyses. We also obtained historical remittance payment data from TRS and used data from USG CAFRs to determine historical payments.

When issues were discovered, we sought expert advice and analysis, including the work of an independent actuary to fully analyze the impact of the lack of remittance payments from USG to TRS; OAG guidance on both required remittances and an administrative error impacting ORP accounts; and the Governmental Accounting Standards Board (GASB).

Methodology

To determine the process for calculating the University System of Georgia's (USG) budgetary request for employer contributions to TRS and the ORP, we interviewed staff at USG, the Office of Planning and Budget, and the Senate Budget and Evaluation Office, to determine how USG's budget request is generated for the retirement portion of the USG funding formula. We reviewed state law on how USG should submit their budgetary request for appropriations to cover the employer cost of TRS. We reviewed the state code pertaining to the Regents Retirement Plan (ORP) to determine what employer contributions were required by ORP. We also reviewed historical employer contribution payments to ORP member accounts and compared the contributions to the rates set in state law for each time period.

This special examination was not conducted in accordance with generally accepted government auditing standards (GAGAS) given the timeframe in which the report was needed. However, it was conducted in accordance with Performance Audit Division policies and procedures for non-GAGAS engagements. These policies and procedures require that we plan and perform the engagement to obtain sufficient, appropriate evidence to provide a reasonable basis for the information reported and that data limitations be identified for the reader.

It should be noted the State Auditor is an ex-officio member of the Board of Trustees of the Teachers Retirement System of Georgia.

Appendix C: Retirement Funding Document Provided by USG

Retirement Funding through the Board of Regents Funding Formula
Meeting with Department of Audits
10-23-18

Background

The "Formula for Excellence" includes a line item to fund the cost of providing retirement benefits to employees of the University System of Georgia (USG). The line for retirement does not distinguish between different retirement plans, i.e. Teachers Retirement System (TRS) vs. Optional Retirement Plan (ORP). It is instead one lump sum. Each year, during formulation of the next year budget request, the base retirement amount from the previous year is adjusted up or down due to three factors:

1. Changes in credit hours – as credit hours change, so too do the number of positions generated through the formula. The base amount for retirement is increased or decreased by the percentage change in positions. This is also known as "workload changes"
2. Change in salary – because retirement is funded as a percent of payroll, the base retirement amount has changed as salary increases have been provided through the formula. FY 2010 was the last year an across the board increase to salaries has been funded.
3. Change in rate – the base retirement amount is adjusted based on changes to the employer rate for contributions. The TRS rate has generally been the standard rate used to adjust the base, however, targeted adjustments for ERS and ORP have also been made in the past.

The table below shows a history of changes in the retirement portion of the formula over the last 10 years:

Year	Prior FY Base Formula Funding	Workload Changes (credit hours)		Salary Increase (including prior year annualizers)		TRS Rate	TRS Rate Change	ERS Rate Change	ORP Rate Change	New Base Formula Funding
FY 2009	123,915,511	5,255,742	4%	3,468,795	3%	9.28%				132,640,048
FY 2010	132,640,048	5,634,684	4%	1,637,532	1%	9.74%	6,574,830			146,487,094
FY 2011	146,487,094	7,824,822	5%			10.28%	8,121,461			162,433,377
FY 2012	162,433,377	11,788,437	7%			10.28%		70,293		174,292,107
FY 2013	174,292,107	5,673,066	3%			11.41%	19,158,568	193,705		199,317,446
FY 2014	199,317,446	4,784,622	2%			12.28%	15,197,737	224,345		219,524,150
FY 2015	219,524,150	(2,727,950)	1%			13.15%	15,552,607	230,826		232,579,633
FY 2016	232,579,633	(216,114)	0%			14.27%	19,809,064	192,059		252,364,642
FY 2017	252,364,642	3,138,998	1%			14.27%				255,503,640
FY 2018	255,503,640	5,592,468	2%			16.81%	45,478,574			306,574,682
FY 2019	306,574,682	5,020,258	2%			20.90%	74,591,936			386,186,876

Issue

TRS rate increases over the last 10 years have been the primary mechanism causing the formula retirement line item to increase. The TRS rate change is applied to the entire base retirement amount. When the ORP plan was created, the employer (USG institutions) were responsible for paying the ORP rate into employee retirement accounts and a remittance to TRS based on an unfunded actuarial value. When these two payments combined equaled the TRS employer rate, the logic of the formula was sound. However, the logic is no longer sound. At times, after the unfunded liability became negative, employers were paying more for ORP members than for TRS, but the formula did not account for this discrepancy. When the ORP employer rate was decoupled from the TRS employer rate in 2009, a permanent change to the formula structure was likely due. Some type of differentiation could have been incorporated in the calculation to only apply the TRS rate increase to a portion of the retirement base instead of the entire base.

1

Potential Revised Model

The revised model below uses the FY 2009 base as the starting point and splits it into TRS and ORP individual components. This split is achieved using the current salary distribution across the two plans (55.9% TRS and 44.1% ORP). As in the current model, the base of both TRS and ORP would be adjusted annually for workload and when applicable for salary increases. The major difference in calculation is the rate change adjustment.

Year	TRS Base	TRS Workload Changes	Salary Increase	Increase in Formula Due to TRS Rate Change	New TRS Formula Funding
FY 2009	69,251,206	5,255,742	1,938,565		76,445,512
FY 2010	76,445,512	3,247,483	915,148	3,789,325	84,397,469
FY 2011	84,397,469	4,508,214		4,679,120	93,584,803
FY 2012	93,584,803	6,791,822			100,376,625
FY 2013	100,376,625	3,267,177		11,033,617	114,677,420
FY 2014	114,677,420	2,752,835		8,744,028	126,174,283
FY 2015	126,174,283	(1,567,924)		8,939,057	133,545,416
FY 2016	133,545,416	(124,091)		11,374,210	144,795,536
FY 2017	144,795,536	1,801,017			146,596,552
FY 2018	146,596,552	3,208,708		26,093,570	175,898,830
FY 2019	175,898,830	2,880,399		42,797,514	221,576,744

Year	ORP Base	ORP Workload Changes	Salary Increase	Increase in Formula Due to ORP Rate Change	New ORP Formula Funding
FY 2009	54,664,305		1,530,230		56,194,536
FY 2010	56,194,536	2,387,201	722,384		59,304,120
FY 2011	59,304,120	3,167,816			62,471,936
FY 2012	62,471,936	4,533,837			67,005,774
FY 2013	67,005,774	2,180,983			69,186,757
FY 2014	69,186,757	1,660,830			70,847,587
FY 2015	70,847,587	(880,398)			69,967,189
FY 2016	69,967,189	(65,014)			69,902,175
FY 2017	69,902,175	869,467			70,771,643
FY 2018	70,771,643	1,549,051			72,320,693
FY 2019	72,320,693	1,184,274			73,504,968

The table on the next page sums the TRS and ORP components and calculates a variance of the new model compared to the current calculation. In FY19, the retirement component of the new calculation was $91 million less than the amount currently in the formula for retirement costs. With the 75/25 split, this could be viewed by some as $68 million in state funds that the BOR is "overfunded." Under the new model, the FY19 request would have been $35.7 million. This is $25 million less than the actual $60.7 million request.

This would be an overly simplistic analysis and does not take into consideration other important factors highlighted on the next page.

Year	New Total Retirement Formula Funding	Historical Actual Base Formula Funding	Variance	State Fund Portion of Variance (75%)	State Fund Portion of Variance at Actual Split (50%)
FY 2009	132,640,048	132,640,048	0	0	0
FY 2010	143,701,589	146,487,094	2,785,505	2,089,129	1,392,753
FY 2011	156,056,740	162,433,377	6,376,637	4,782,478	3,188,319
FY 2012	167,382,399	174,292,107	6,909,708	5,182,281	3,454,854
FY 2013	183,864,177	199,317,446	15,453,269	11,589,952	7,726,635
FY 2014	197,021,870	219,524,150	22,502,280	16,876,710	11,251,140
FY 2015	203,512,605	232,579,633	29,067,028	21,800,271	14,533,514
FY 2016	214,697,711	252,364,642	37,666,931	28,250,198	18,833,466
FY 2017	217,368,195	255,503,640	38,135,445	28,601,584	19,067,723
FY 2018	248,219,523	306,574,682	58,355,159	43,766,369	29,177,579
FY 2019	295,081,711	386,186,876	91,105,165	68,328,873	45,552,582

New State Fund Request	Historical Actual State Fund Request	Variance
8,437,190	10,561,834	(2,124,644)
9,423,891	12,163,027	(2,739,136)
8,638,646	9,045,246	(406,600)
12,571,476	19,088,077	(6,516,601)
10,036,031	15,412,663	(5,376,633)
4,950,808	9,958,070	(5,007,261)
8,531,439	15,091,016	(6,559,576)
2,036,912	2,394,271	(357,359)
23,531,851	38,954,437	(15,422,586)
35,744,134	60,724,201	(24,980,067)

Important Factors to Consider

1. *Actual Spend* – This new calculation generates a retirement spend of $295 million in FY19 for state funds and tuition. This is well below what is anticipated as the USG spend this year. The FY19 anticipated spend at this time is around $350 million. In fact, the new FY19 amount in the revised formula is below the FY18 actual spend of $305 million (including state funds, tuition, and SIF). Likewise, the FY18 new retirement amount of $248 million with the new calculation is well below the actual spend.

E&G Funds Only (State, Tuition, Special Inst.Fee)	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019 Estimated**
Actual Total Retirement Spend	**201,782,408**	**223,534,274**	**246,302,045**	**258,784,229**	**305,254,872**	**356,380,179**
Formula Earnings for Retirement	219,524,150	232,579,633	252,364,642	255,503,640	306,574,682	386,186,876
Variance	17,741,742	9,045,359	6,062,597	(3,280,589)	1,319,810	29,806,697

2. *Sustained Reductions* – While the incremental increases have been funded at a 75% rate, the sustained budget reductions taken to the formula during the economic recession have not been restored. State funding for the current "formula requirement" is approximately 50% of the overall amount. The USG receives approximately $1 billion less in state funding as generated by the formula due to sustained budget reductions. Any discussion of current state funding must consider the current reality.

FY19 "Formula Requirement"	$4,293,879,201
FY19 State Funds – if Fully-Funded	$3,220,409,401
FY19 State Funds - Actual	$2,153,266,402
Variance over/(under) funded	($1,067,142,999)
State Fund % of formula	50.1%
FY19 Original Budget (State, Tuition, Special Inst.Fee)	$4,464,732,359
FY19 State Funds Only	$2,153,266,402
State Fund %	48.2%

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