2018 NCPERS Public Retirement Systems Study

January 30, 2019

Study conducted by the

National Conference on Public Employee Retirement Systems and

Cobalt Community Research

Table of Contents



This study
reviews funds'
current fiscal
condition and
steps they are
taking to ensure
fiscal and
operational
integrity.

Overview	3
Who Responded	5
Fund Confidence	7
Expenses	8
Actuarial Assumptions	10
Trends in Plan Changes	13
Trends in Retirement Benefits	14
Cost-of-Living Adjustments	15
Trends in Business Practices	16
Trends in Engagement	17
Trends in Communication	18
Trends in Oversight Practices	19
Investment Returns	20
Investment Asset Allocation	22
Funding Levels	24
Sources of Funding	26
Health Plans	27
Reducing Liability	28
Innovations/Best Practices	31
Appendix A: Other Investments	34
Appendix B: 2018 Study Instrument	36

Overview

Over the last eight years, responding funds have continued to adapt and address the concerns and challenges surrounding public pensions.

About Cobalt Community Research

Cobalt Community Research is a nonprofit research coalition created to help governments, local schools, and other nonprofit organizations measure, benchmark, and manage their efforts through analysis of demographics, population segmentation, and high-quality, affordable surveys and focus groups. Cobalt is headquartered in Charlotte, Michigan.

Executive Summary

From September to December 2018, the National Conference on Public Employee Retirement Systems (NCPERS) undertook a comprehensive study exploring retirement practices of the public sector. In partnership with Cobalt Community Research, NCPERS has collected and analyzed the most current data available on funds' fiscal condition and steps they are taking to ensure fiscal and operational integrity.

The 2018 NCPERS Public Retirement Systems Study includes responses from 167 state and local government pension funds with more than 18.7 million active and retired members and assets exceeding \$2.5 trillion in actuarial assets and \$2.6 trillion in market assets. The majority (62 percent) were local pension funds, while 38 percent were state-wide pension funds.

NCPERS is the largest trade association for public sector pension funds, representing more than 500 funds throughout the United States and Canada. It is a unique, nonprofit network of public trustees, administrators, public officials, and investment professionals who collectively manage \$3 trillion in pension assets. Founded in 1941, NCPERS has been the principal trade association working to promote and protect pensions by focusing on advocacy, research, and education for the benefit of public sector pension stakeholders.

To access the interactive 2018 NCPERS Public Retirement Systems Study dashboard, please contact Amanda Rok, communication and social media manager, at Amanda@NCPERS.org.

To view previous editions of this report, please visit: www.NCPERS.org/surveys.

2018 Key Findings

- 1. Funding levels continue to rise despite more conservative actuarial assumptions. For funds reporting in both 2017 and 2018, the average funded level rose more than 3 percent to 72.2 percent. The average funded level for all funds rose from 71.4 percent to 72.6 percent.
- 2. The average investment assumption is 7.34 percent compared to 7.49 percent in 2017. About 83 percent of funds that responded in 2018 have reduced their assumption or are considering doing so.
- 3. The one-year investment returns averaged 13.4 percent for plans reporting in 2018, well above 7.8 percent reported in 2017. The five- and 10-year returns were also higher, and the 20-year returns averaged 7.2 percent.
- 4. The market value of fund assets continues to exceed the actuarial value of assets for the 2018 respondents, and the one-year, five-year, and 20-year investment returns are near or above investment assumptions.
- 5. Funds continue to become more conservative in their assumptions. In addition to lower investment return assumptions, amortization periods have shortened from 23.8 years to 22.4 years. In addition, the percentage of plans using a closed/fixed amortization has increased from 62 percent to 73 percent.
- 6. Despite more conservative assumptions, contribution rates have been stable. Employer contribution rates declined from 21 percent to 20 percent of payroll for those funds that responded in both 2018 and 2017. Employer contribution rates were flat for all funds reporting in both 2018 and 2017.
- 7. The trend of public funds remaining cost-effective continues. For funds reporting in both 2017 and 2018, the average expense (total of administrative and investment) remained flat at 60 basis points (100 basis points equals 1 percentage point). For all funds, the total expense is 60 basis points, compared with 55 basis points in the prior year. According to the 2018 Investment Company Fact Book, the average expenses of equity funds average 59 basis points and hybrid funds average 70 basis points. This means public funds with lower expenses provide a higher level of benefit to members for each dollar invested and produce a higher economic impact for the communities those members live in.
- 8. In 2018, about 46 percent are offering a health plan or subsidy and 54 percent do not. In 2017, only about 40 percent offered a plan and 60 percent did not. There has been an increase in the inclusion of actives and retirees by 6 and 3 percent, respectively; however, inclusion of beneficiaries dropped by 5 percent compared with 2017.

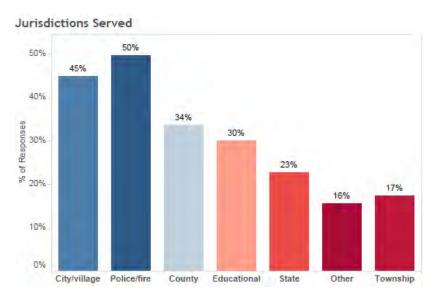
Who Responded

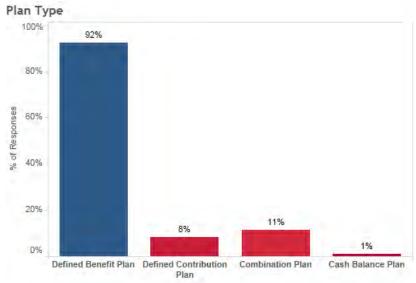
There were 167 public retirement funds that responded to the 2018 NCPERS Public Retirement Systems Study. There were 163 respondents in 2017.

Of the 167 respondents, 98 also completed the study in 2017.

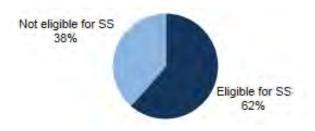
About 45 percent of all 2018 responding funds serve city and village employees and beneficiaries. About 50 percent of the responding funds serve police and fire employees. The top graph shows the distribution of employee types served by the funds. The bottom graph shows response by type of plan provided. Totals may exceed 100 percent because of multiple responses.

The overall distribution of responding funds is similar to prior years; however, there was a 10 percent increase in the number of educational funds and a 6 percent decrease in county funds.

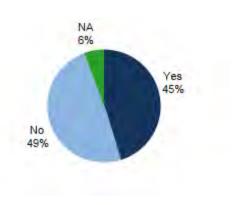




Members' Social Security Eligibility



Includes Overtime in Benefit Calculation



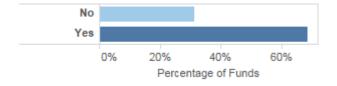
About 62 percent of responding funds have members who are eligible for Social Security, and 38 percent are not eligible. In this report, breakdowns are presented for "eligible for Social Security" and for "not eligible for Social Security."

Funds whose members are not eligible for Social Security tend to offer higher levels of benefits to make up for the loss of income typically supplemented by Social Security.

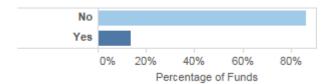
Inclusion of overtime in the calculation of a retirement benefit has been an area of interest to public funds.

According to the 2018 study, 45 percent of respondents include overtime in the benefit calculation, which is the same as last year.

Call and Vote via Conference Call



Discussed State Plan for Private Sector



The ability for Board members to participate and vote by phone has grown from 58 percent in 2017 to 69 percent.

The percentage of funds that have been consulted about, been involved in, or had internal discussions about a state-sponsored retirement program for the private sector is about the same as in 2017: 14 percent.

Fund Confidence

The study asked respondents "How satisfied are you with your readiness to address retirement trends and issues over the next two years?" Respondents provided an overall "confidence" rating of 8.1 on a 10-point scale (very satisfied = 10). This is about the same as the 8.0 reported last year and well above the 7.4 in 2011.

Over the last eight years, responding funds have become increasingly confident in their ability to adapt and address issues in this volatile environment surrounding public pensions.

Responding funds have been proactive in making changes to their plan assumptions and benefits to ensure sustainability.

Social Security eligible and not eligible funds rated this question 8.0 and 8.1, respectively.

Fund Confidence

How satisfied are you with your readiness to address retirement trends and issues over the next two years? (Scale 1 to 10)



Expenses

The overall average expense for all respondents to administer the funds and to pay investment manager fees is 59.7 basis points (100 basis points equals 1 percentage point). This is an increase from 55.3 basis points in the prior year.

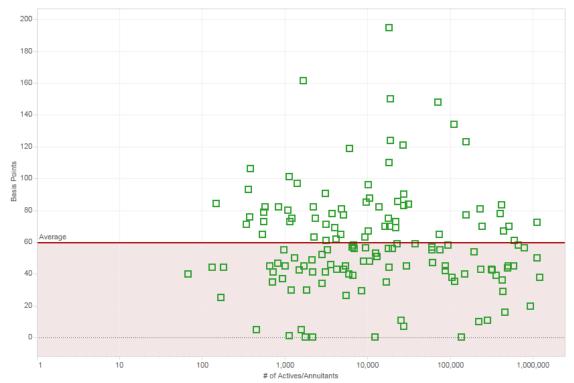
According to the 2018 Investment Company Fact Book, the average expenses of most equity funds average 59 basis points and hybrid funds average 70 basis points.

Based on the data, funds continue to contain expenses by automating processes, gaining workflow efficiencies, and negotiating fee structures with investment managers.

The top graph shows distribution of total expenses (in basis points) on the vertical axis and the size of the fund (by total participants) on the horizontal. The red line represents average expense.

The bottom graph shows average administrative and investment expenses. Note: the averages below do not total the average expense above because not all plans reported both investment and administrative numbers.

2018 Total Plan Expense by Fund Size



2018 Study Plan Expenses (Basis Points)



Below are expenses separated by funds eligible for Social Security and not Social Security eligible. Total expenses are 62.3 and 55.8, respectively. Investment expenses were slightly above last year, while administrative expenses were slightly lower.

Plan Expenses: Social Security Eligible

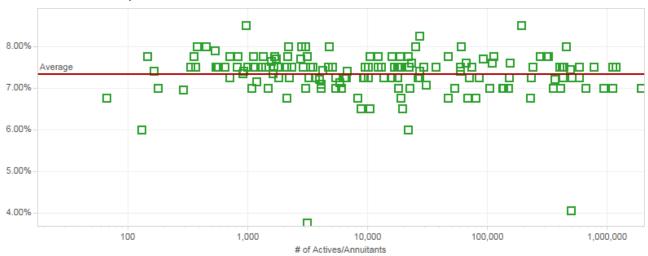


Plan Expenses: Not Social Security Eligible



Actuarial Assumptions

Investment Assumption



Retirement funds utilize a long-term planning horizon to ensure liabilities are fully funded at the time the liability is due to be paid. To help a fund set contribution rates and measure progress toward meeting its financial obligations, funds make actuarial assumptions to estimate what investment and demographic experience is likely to be over that time horizon.

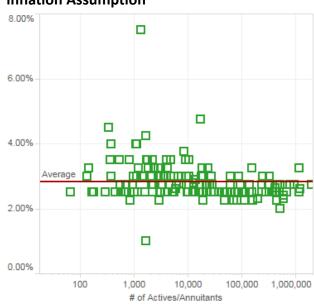
Such assumptions have powerful effects on the funded level of a plan and what the required contributions will be to pay for future benefits. Assumptions that are overly optimistic (high market returns, lower-than-expected retirement rates) tend to increase a plan's funded level and reduce the contribution rates an employer is obligated to pay today. Conversely, overly pessimistic assumptions reduce the funded level and increase short-term contribution rates.

The average investment assumption for responding funds is 7.34 percent compared with 7.47 percent last

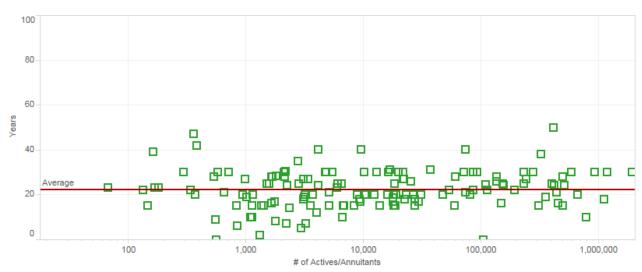
year. However, about 83 percent of funds that responded in 2018 reduced their assumption or are considering doing so.

The aggregated inflation assumption is 2.8 percent, which is about the same as last year.

Inflation Assumption



Amortization Period



Pension funds are designed to fund liabilities over a period of time, which ensures long-term stability and makes annual budgeting easier through more predictable contribution levels.

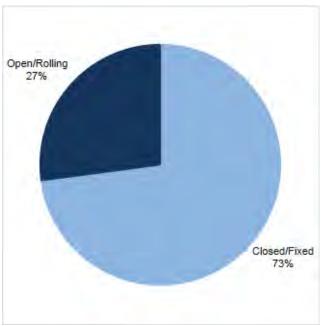
For responding funds, that period of time averages to 22.4 years, which is below the 23.8 years of 2017.

Groups can tighten their amortization period by adjusting the period in years or using a fixed (or closed) method which pays all liabilities in a fixed time frame.

Open (or rolling) amortization periods are used to determine the actuarially required payment, but they are recalculated each year. The same number of years is used in determining the payment each year. The percentage of closed/fixed funds increased from 62 percent to 73 percent.

Seventy-seven percent of Social Security eligible funds have a closed amortization period, while 66 percent of not eligible funds have a closed period.

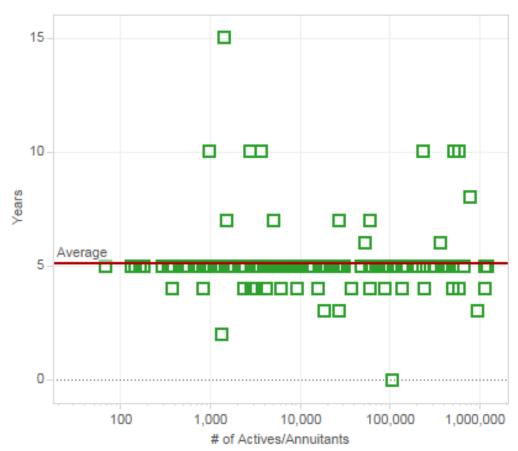
Type of Amortization Period



The investment-smoothing period is a key factor in calculating the assets currently held by the fund and the contribution levels required to continue moving toward full funding over the amortization period. By smoothing investments, funds are able to dampen sharp changes in short-term investment returns. This helps stabilize contribution levels over time without undermining the long-term integrity of the funding mechanism.

The average investment-smoothing period for respondents is 5.1 years, which is nearly the same as last year's 5.0. The distribution of responding funds on the graph below shows the majority have five-year smoothing periods or fewer. For Social Security eligible funds, the smoothing period averages 5.3 years. Not Social Security eligible plans have an average smoothing period of 4.8 years.

Investment Smoothing

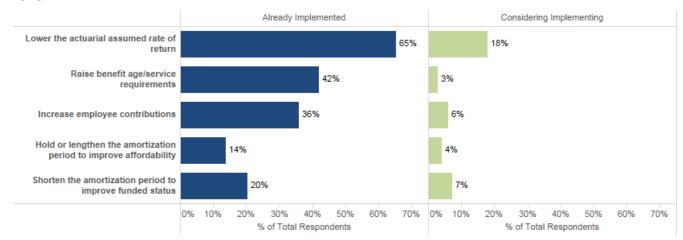


Trends in Plan Changes

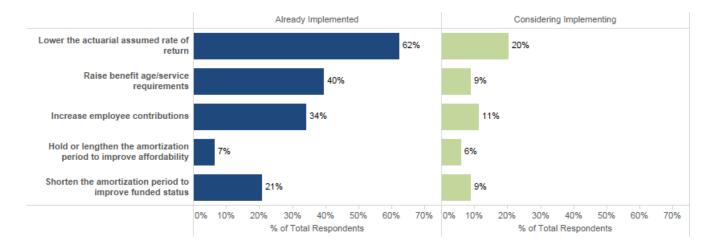
As changes emerge in the political, economic, and demographic landscape, funds are adapting their design and assumptions to respond and to maintain the sustainability of the plans. It is important to note more than 80 percent of all responding funds are considering or have lowered their actuarial assumed rate of return.



2018

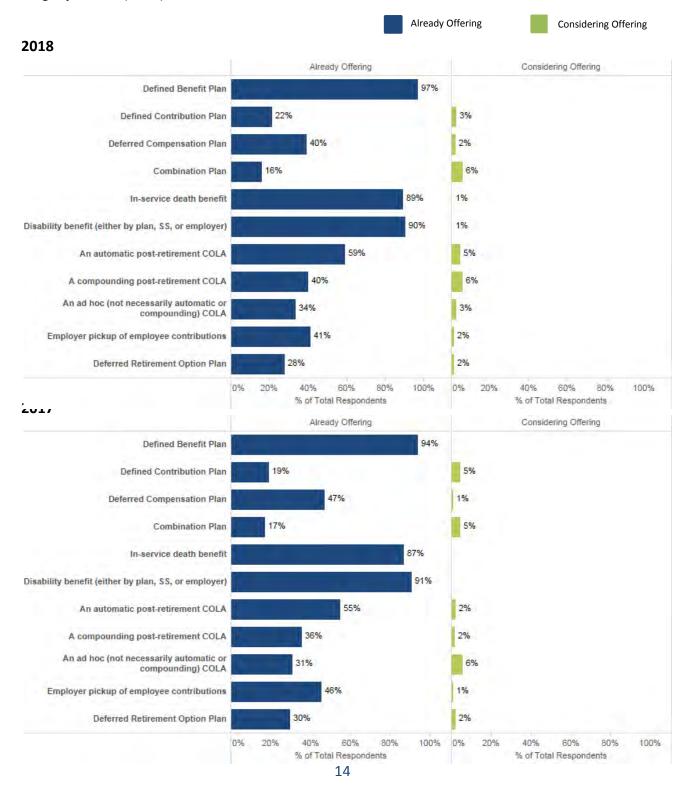


2017



Trends in Retirement Benefits

There is minimal activity in terms of responding funds considering offering additional benefits to their members. Most funds provide a disability benefit, in-service death benefit, and some variation of a cost-of-living adjustment (COLA).

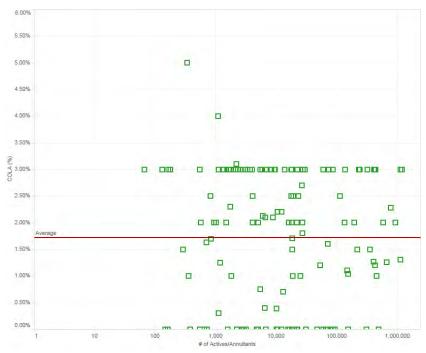


Cost-of-Living Adjustments

The top chart shows the distribution of funds offering various percentages of cost-of-living adjustments (COLAs). The aggregated average COLA offered to members was 1.7 percent, which is the same as in 2017. Many responding funds did not offer a COLA in the most recent fiscal year.

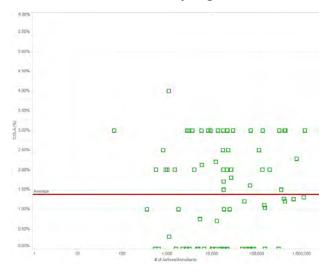
Funds with members who are not eligible for Social Security tend to offer higher cost-of-living adjustments (2.3 percent) than those with members who are eligible for Social Security (1.4 percent).

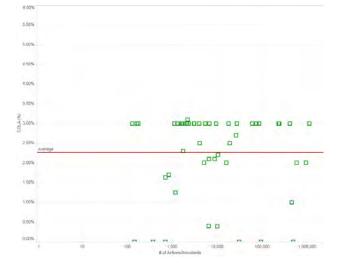
Overall Cost-of-Living Adjustment Offerings



Social Security Eligible

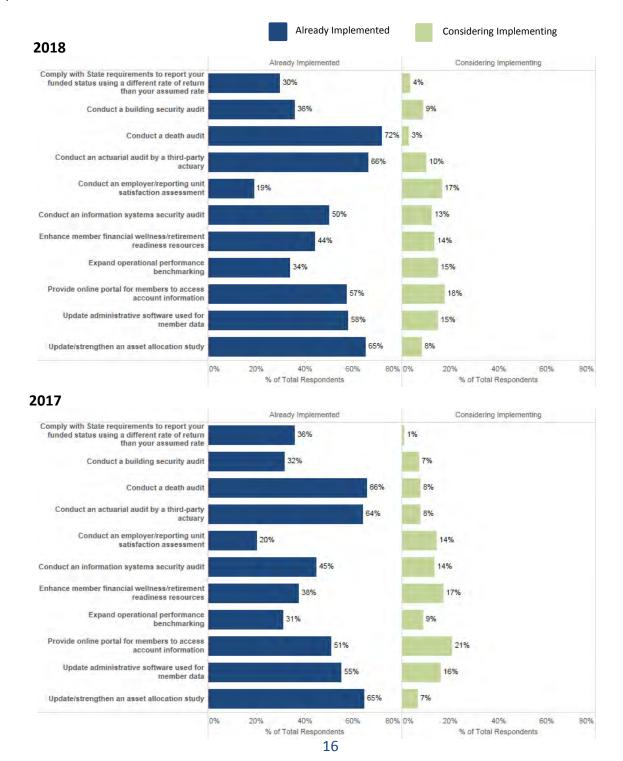
Not Social Security Eligible





Trends in Business Practices

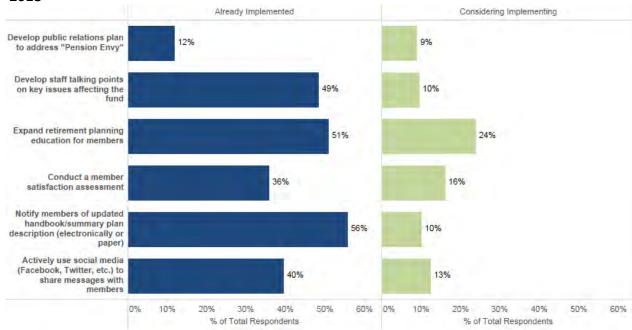
Several areas have seen significant increases in implementation compared to 2017. Conducting a death audit, enhancing member financial wellness/retirement readiness resources, and providing an online portal for members are up 6 percent over a year ago. Conducting an information systems security audit is up 5 percent.

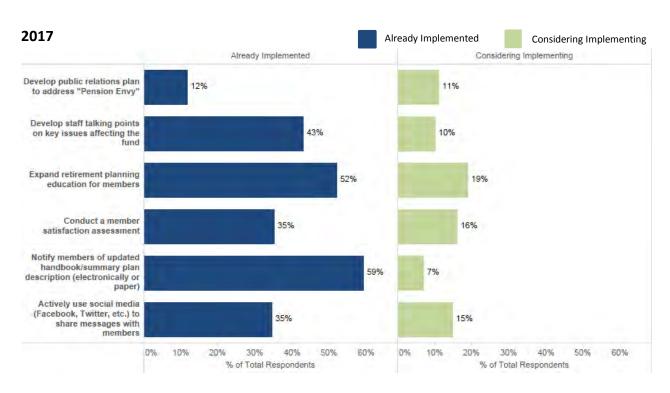


Trends in Engagement

In 2018, the three largest activities are notification of updated handbook/summary plan descriptions, expanding retirement planning education for members, and developing staff talking points on key issues.



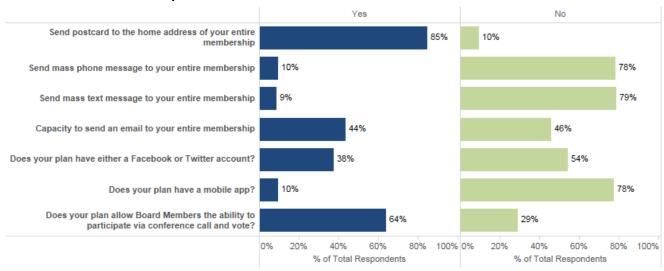


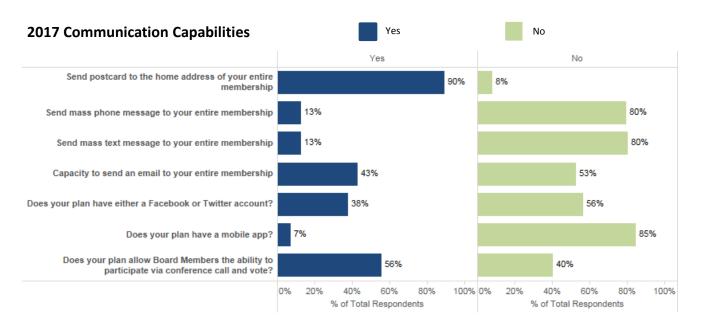


Trends in Communication

Communication capabilities are very similar to 2018 with a slight decline in sending of postcards to home addresses.

2018 Communication Capabilities

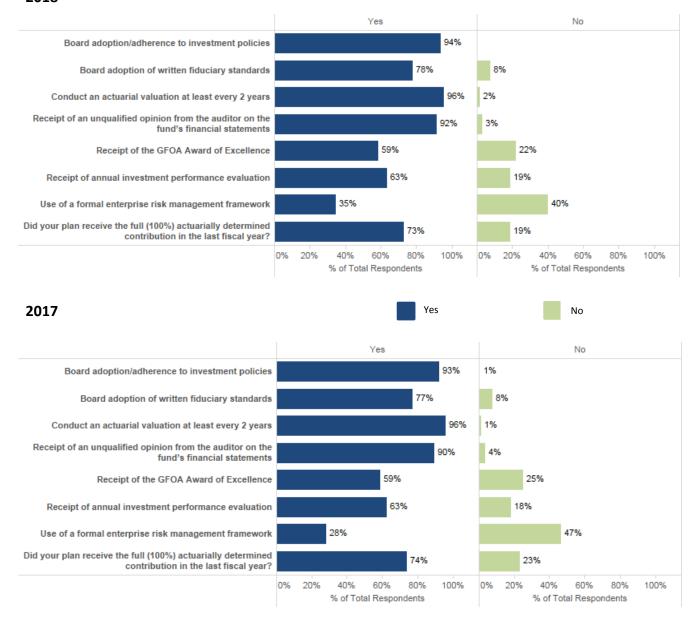




Trends in Oversight Practices

Most oversight practices saw little fluctuation between the 2017 and 2018 studies. Overall, responding funds showed a modest increase in the use of a formal enterprise risk management framework.

2018

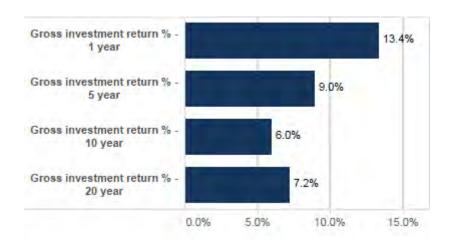


Investment Returns

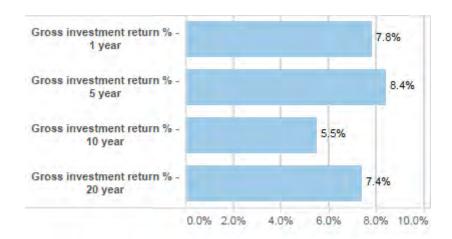
Reporting funds saw, on average, one-year returns around 13.4 percent. The five-year and 20-year average returns also hovered near or above the assumed rate of return.

It is important to note not all responding funds have the same fiscal year-end date. The timing of when a fiscal year ended accounts for significant difference in investment experience between funds. Funds that have a December fiscal year-end date saw one-year returns averaging over 15 percent.

2018 Study Investment Returns

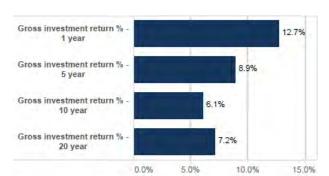


2017 Study Investment Returns

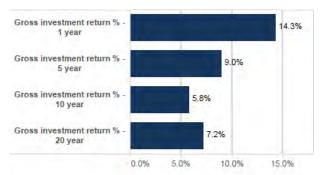


Funds with members who are not Social Security eligible reported slightly higher one-year returns than Social Security eligible funds. However, both experienced similar returns over time.

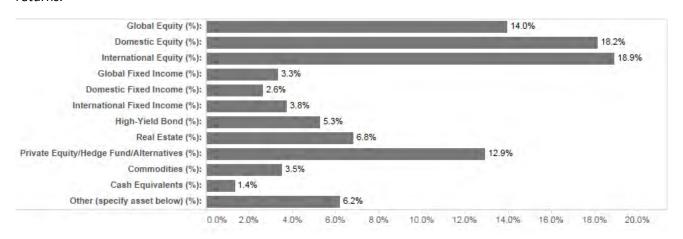
2018 Returns: Social Security Eligible



2018 Returns: Not Social Security Eligible



The graph below shows the one-year gross investment returns based on the various asset classes in which responding funds are invested. Equity and private equity/hedge fund/alternatives saw the largest returns.



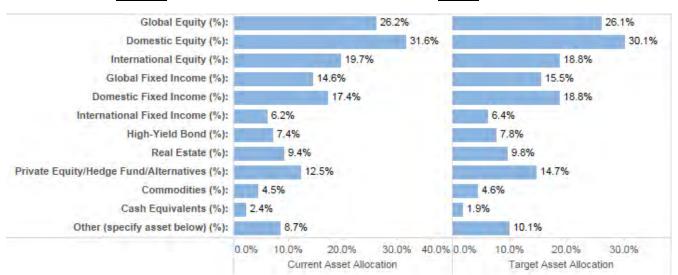
Investment Asset Allocation

Responding funds had very similar allocations to asset classes as they did in 2017. There was a slight decrease in targeted allocation to global and domestic equities, global fixed income and domestic fixed income. There was a slight increase in targeted allocation to high-yield bond and private equity/alternatives.

Note: Average allocations in each asset class do not total to 100 percent because of how individual allocations were reported.

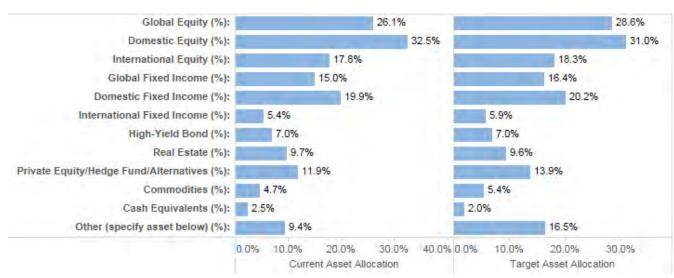
2018 Current Investment Asset Allocation

2018 Target Investment Asset Allocation



2017 <u>Current</u> Investment Asset Allocation

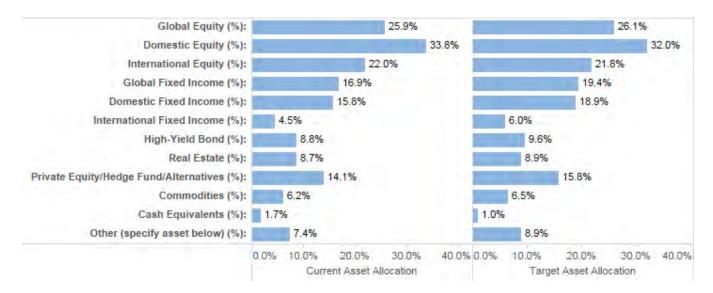
2017 Target Investment Asset Allocation



Highest One-Year Return

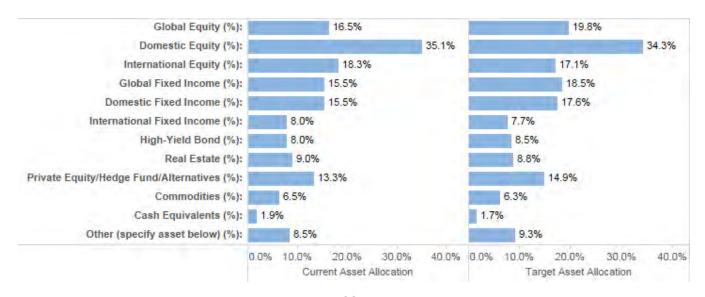
Below are two graphs that show the asset allocations for 20 funds that reported the highest one-year and 10-year investment returns.

Funds with the highest one-year returns had higher allocations to domestic equity, international equity, global fixed income, private equity/alternatives, and commodities. They had lower allocations to domestic fixed income and international fixed income.



Highest 10-Year Return

Similarly, funds with the highest 10-year returns had higher allocations to domestic equity, international equity, global fixed income, international fixed income, high-yield bond, private equity/alternatives, and commodities. They had lower allocations to global equity and domestic fixed income.



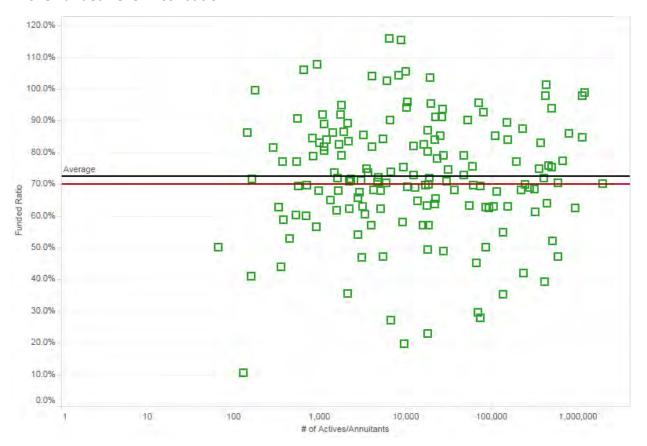
Funding Levels

The average funded level is 72.6 percent, up from 71.4 percent in 2017. Plans eligible for Social Security tended to have higher funded levels.



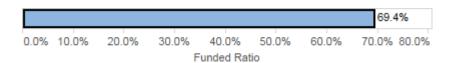
The bottom graph shows the distribution of funded levels and fund size. The vertical axis shows level of funding, and the horizontal axis shows the size of the fund by total active and retired participants. The black center line denotes the average of 72.6 percent, and the red center line denotes the 70 percent funding target that Fitch Ratings considers to be adequate.

2018 Funded Level Distribution



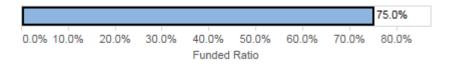
Many funds include members who are not eligible to receive Social Security at the time of retirement. For this reason, such funds often have higher benefit levels to offset the loss of this source of retirement funding. Those funds that include such members report an average funded level of 69.4 percent, which is above the 63.5 percent in the 2017 study.

Funds Not Eligible for Social Security



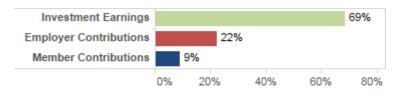
The graph below shows the funded level for those plans that include members who are eligible for Social Security. The average funded level for this group is 75.0 percent, up from 71.4 percent in the 2017 study.

Funds Eligible for Social Security

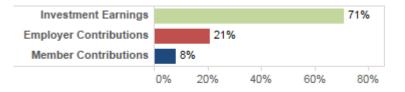


Sources of Funding

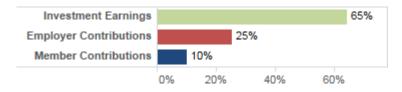
Overall Sources of Revenue



Social Security Eligible



Not Social Security Eligible



Income used to fund pension programs generally comes from three sources: member contributions, employer contributions, and investment returns. The chart to the left shows the proportion of funding provided through each of these sources based on reported data.

Investment returns are by far the most significant source of revenue (69 percent). This is a slightly lower percentage than the 71 percent reported in 2017. Members' share of total revenue stayed the same, but employers' share increased 1 percent.

The graphs to the left also show funds with members who are not eligible for Social Security. Not Social Security eligible funds reported a slightly higher share of revenue from members and employers.

Contribution Rates as a Percentage of Payroll

	2017	2018
Employer Contributions	22%	22%
Member Contributions	8%	9%
Total Contributions	30%	31%

Contribution rates as a percentage of payroll were stable, and they declined slightly for employers for those funds that responded both last year and for the current year.

Contribution Rates – Respondents in Both Years

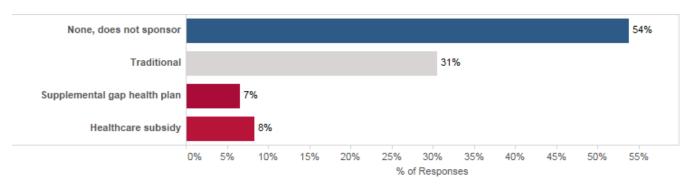
	2017	2018
Employer Contributions	21%	20%
Member Contributions	9%	9%
Total Contributions	29%*	29%

*Does Not Equal 30 Percent Because of Rounding

Health Plans

Responding funds were asked whether or not the plan sponsor offers a health plan. In 2018, about 46 percent are offering a plan or subsidy, while about 54 percent of funds do not sponsor a plan. In 2017, only about 40 percent offered a plan, while about 60 percent did not.

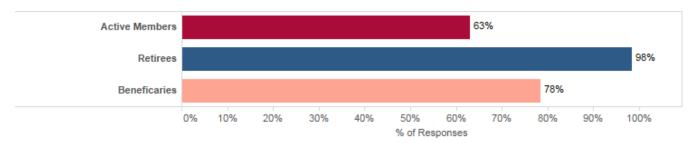
What type of health plan does your pension plan sponsor?



The funds that do sponsor a health plan or subsidy were also asked to report which types of members are eligible to participate.

About 63 percent of the sponsors with a health plan or subsidy are also open to the sponsor's active members, 98 percent include retirees, and 78 percent include beneficiaries. When looking at overall responses year over year, inclusion of actives and retirees increased by 6 and 3 percent, respectively; however, inclusion of beneficiaries dropped by 5 percent. The same pattern of increased inclusion for actives and retirees and decreased inclusion of beneficiaries is seen when looking at the population of funds that responded to both of the 2017 and 2018 studies.

Who is eligible for the health plan?



Reducing Liability

Respondents were asked to share strategies they have put in place to reduce accrued actuarial liabilities beyond traditional amortization. Below is a text cloud showing the words that appear most often in respondents' comments. Larger words appear more often. Below are the themes of the comments surrounding each of the largest, must frequently-used words:

Rate - Reduce assumed rate of returns in order to have more realistic projections for future planning **Board** – Uses its authority to establish funding policy and limit benefit improvements; legislature providing authority to do so

Contribute - Employee and employer contributions increased to ensure stable funding for future obligations



Verbatim Comments

- Working with members to develop legislative package to improve sustainability.
- Worked with County to firm up and enhance the employer contribution.
- Work closely with plan sponsors and other stakeholders to make plan changes that will allow the plan to be more sustainable in the long run.
- With the Plan's 95.3% funded ratio, we feel that traditional amortization will be sufficient to reach full funding over the next 15 years.
- We have utilized a reserve fund to maintain our employer contribution rate at a level above what the actuarially determined rate would call for.
- We have kept contribution rate stable and not decreased them to the ADC each year which allows the fund to improve overall financial condition.
- We have implemented a little more risk with our investment strategy.
- We ensure that we collect employer and member contributions.
- Trustees are working with the City and the actuary to address this issue.
- TRA recently reduced COLAs; increased employee and employer contributions. (2018 legislative session)
- Tier A / Tier B.

- Continued

- Tied age requirement to Social Security. Implemented DC for new hires with mandatory annuity.
- The System has kept contribution rate stable and not decreased them to the ADC each year which allows the fund to improve overall financial health
- The State of Kansas sold \$1.0 billion in bonds in 2015 and deposited the proceeds into the KPERS Trust Fund. This was in additional to regular contributions.
- The only step has been to shorten the amortization period from 30 years to 20 years.
- The City has been paying over the required contribution amount to pay down certain bases of the unfunded liability.
- The Board recently concluded a five-year actuarial study which included several recommendations. The board is reviewing for possible implementation.
- The Board recently adopted a new funding policy to address the System's unfunded actuarial accrued liability.
- The board adopted a funding policy with a scorecard component. The scorecard is a risk tool to gauge the financial and economic status of the plan.
- Steadily reducing the assumed rate of return so our required contributions increase.
- State statutes require certain surplus funds to be appropriate to the UAL. Changes in plan design for new members since 2006 are designed to
 limit accumulation of UAL.
- State Statute requires employer funding as a level percent of payroll to achieve 90% by 2059.
- State contributions under state law are too low to begin reducing the unfunded liability. The board certifies both the amount required under state law and the amount required under an actuarial process (different cost method, shorter amortization) that does begin reducing the unfunded liability. This approach is needed because our funded status is low.
- Significant plan design changes were put in place through pension reform, including development of the Hybrid Retirement Plan. Statutory
 requirement to fund the full Board-certified rates (fiscal year 2017 for the State plans and 2018 for the Teachers),
 shortened amortization period, lowered assumed rate of return, increased employer & employee contribution rates.
- Reducing the amortization by 1 each year until 2026, then switching to a rolling 15-year period.
- Reduce multiplier, reduced COLA, started Employer Contributions.
- Recent pension reform gave Board authority to establish a COLA consistent with the change in CPI-W versus an automatic 3% simple COLA. Previous pension reform included changes to age and length of service requirements. Established a Board-approved funding policy to provide guidelines for funding pension liability and healthcare programs.
- Recent legislation passed to increase employer contribution to cover or exceed ARC.
- Primary employer paying additional contributions towards unfunded liability.
- Plan design changes are accomplished through legislation and assumption changes are adopted by the FRS Assumptions conference comprised
 of representatives from the Governor's Office and the Florida Legislature.
- Payment of Actuarially Determined Employer Contribution (ADEC) is required including a closed amortization period not to exceed 25 years.
 Additional employer contributions are permitted to reduce liability.
- Our Plan was new as of 2/1/2013. We are on track to be fully funded within 10 years if not sooner. The City continues to pay 100% of the
 required contributions.
- New contribution policy based on future pension surtax.
- Multiple employer agent plan; new employers joining regularly with unfunded AAL affects overall plan funded ratio slightly.
- Middlesex County Retirement is a multi-employer retirement system. Some units make additional payments toward their unfunded liability.
- Making annual required contributions, looking at investment funds to look for opportunities to get better return.
- Lower benefit tiers.
- Level dollar method of funding, and use of a CIO to address investment practices.
- Legislation to increase contributions. Legislation to transfer/increase funding.
- Increased member and employer contributions until plan reaches 100% funding; raised benefit eligibility age and service requirements; raised
 FAS period and vesting requirements.
- Increased employer contributions over 4 years (2017-2020); 2012 New Tier of New Members with: Lower Benefit Multipliers, Higher vesting and age requirements, Higher member contributions, Lower post-retirement benefits, Lower average final compensation, Restricted eligible compensation to base pay.
- Increased employee, employer, and state contributions were part of 2018 legislative package.
- Increase in employee contributions.
- Increase employer contributions.

- Continued

- In 2018, the general assembly lowered COLAs for current and future retirees, raised member and employer contributions, increased age and service requirements for new hires, and created a closed 30-year funding corridor that will automatically adjust COLAs, member, and employer contributions to maintain amortization schedule.
- In 2015 and 2016 the Board redesigned DROP to be actuarially neutral. Also, an experience study is in process to provide better information generally about the plan for the Board to assess what, if any, next steps are in order to improve funding.
- Having municipality contribute a payment out of free cash.
- Funding Rehabilitation Program.
- Funding policy goal is to be 100% funded and Board will not support any benefit enhancements unless the proposal includes funding for the benefit enhancement.
- Funding Plan with government through fiscal responsibility act.
- Fraud prevention measures, measures to ensure correct benefit calculations and payments, enhanced financial reporting, conservative actuarial
 assumptions.
- Format funding policy in code to fund at actuarially recommended levels.
- Employers are allowed (and encouraged) to pay additional contributions toward their unfunded liability.
- Employer additional payment towards UAAL, Employees contribute towards UAAL -- these are employer strategies, not SCERA strategies.
- Education to members and funding sources as to what creates liability beyond investment returns.
- Contribution Rate Increase for members & employers.
- Continue to work with actuary and investment consultants to make sure plan is funded.
- Continue to evaluate every two years once a re-evaluation is completed.
- Closer control of Liabilities; limit creation of new employee positions, practice employee attrition.
- Closed the amortization schedule and ensure all employers remit the full actuarial required contribution.
- Closed the amortization period to 30-yr closed, reduced assumed rate from 8% to 7.5% for 2019, raised contribution rate for employees to 8%, raised vesting to 8 years for new hires 1-1-2013 & beyond, min age of 50 for Rule of 75 for all new hires 1-1-2016 onward.
- Closed amortization schedule, 18-year layering of annual UAAL changes.
- Closed amortization period, employer makes 100% of ARC.
- Changed retirement eligibility (service/age). Contribution rate increases.
- Broaden the number and type of investment holding trying to spread the risk and enhance the ability to earn over a wider variety of investments. In addition the Board has requested and been granted a four-year implementation of contribution increases at the rate of .25 per year beginning with 2018 and ending in 2021 whereby the contribution rate will be 9% employee/employer match.
- Benefit changes, increase contributions, attend funding conferences, make changes in investments.
- Assembly Bill 1469 was signed into law on June 24, 2014, to fully fund the DB program by 2046.
- Amortization period has reduced from 30 to 20 years since fiscal year 2017 as our funded ratio has reached 72%.
- ALM, Risk Mitigation, Reduction of Discount Rate.
- Adjusted the plan retirement provisions and increased contribution funding.
- Accelerated amortization for closed groups, bridge down future benefit accruals, lowered the assumed rate of return and updated mortality tables
- 2018 legislation was passed which eliminated augmentation of early retirement benefits. This is a benefit reduction which accelerates the rate
 of improvement towards full funding.
- 2018 legislation created layered amortization for future losses or gains over a closed, 20-year period.
- 2012 pension reform. Adoption of a funding policy. Asset/Liability Study.
- Currently reviewing COLA; currently directing all contributions to fund pension and none to fund health care.

Innovations/Best Practices

In the study, respondents were asked to share a success story regarding a best practice or innovation that other plans may like to learn about. Below is a text cloud showing those words that appear most often in respondents' comments. Underneath the text cloud are the verbatim comments. Below are the themes of the comments surrounding each of the largest, must frequently-used words:

Member - Increased education for members, online access to retirement accounts, processes to ensure proper payments to member, audit to ensure member is still alive

Secure - Increased emphasis on security, increased security for online access

Process - Improved online processes, improved investment processes



Verbatim Comments:

- Weekly death march run to post date of death to database. When an identified retiree has no continuing benefit and the last benefit payment has been issued, the account is automatically closed and a letter to the member's estate automatically generated to confirm no further benefit eligibility.
- We successfully initiated a step towards tying retiree increases to an inflation index. This has not previously been done in Minnesota. Prior
 to that change, the annual post-retirement increase was dependent on plan funding status.
- We recently overhauled our employer web portal, which streamlined the payroll reporting process. We saw a 114% increase in remitted revenue for April 2018 (when the new portal was launched) vs. April 2017.
- We recently implemented a custom-developed pension administration system, built from the ground up. We used a mixture of consultants and staff on the project.
- We are in the process of launching an online member resource portal called "Ask Rob" (Retirement Options and Benefits). We are excited about this project, as it replaces our annual paper booklet.

- Continued

- VRS's comprehensive financial wellness program is aimed at helping members make informed and educated decisions on everyday financial matters while saving for the future. The program includes interactive courses, personalized action plans and content recommendations based on the member's interests as well as their demographics and history. VRS is in the midst of a multi-year modernization program which is phasing out the legacy system, RIMS, and replacing it with VNAV. VRS continues the final phase of its technology modernization project by developing new technology systems to support interactions with VRS members. The new system allows members to electronically request refunds and initiate a service purchase request, and in the future will allow members to manage beneficiaries and file for retirement online. A redesigned benefit estimator allows members to easily create VRS retirement benefit estimates based on different retirement dates or payout options. VRS introduced a new goal-based retirement planner where members can input a benefit scenario and add other sources of income and expenses, including income taxes, health insurance and living expenses. Based on their individualized retirement goals, the planner helps members project their income and expenses in retirement and take a broader view of life after work.
- Use of "Alive and Well" Letters annually, as databases alone are insufficient to prevent overpayments. Increasing terms of board member service from 2 or 3 years, to 4 years.
- Implementation of Board: Education Policy, Code of Conduct, Code of Ethics Policy. Annual Pension Status mailing, along with annual benefit statement.
- The Plan is exploring advanced investment risk management techniques with the hopes to deploy them in the coming years.
- The MEABF performs an annual Signature Verification process to ensure that Pension Benefits are being sent/used to the intended recipient. This program has retrieved over-payments to non-members and identified fraudulent activity.
- The fund is in the process of enhancing cyber security and data security.
- Started new program that pairs Defined Contribution plan with our supplemental savings program to function as a single, flexible plan with multiple benefits: (1) Employers can require mandatory participation in the DC portion of this plan, (2) Employers can incentive employee savings through matching pre-tax contributions.
- Separate funding mechanism for post-retirement benefit increases.
- STRS Ohio is using Monte Carlo simulations to provide probability analysis of funded ratios and funding periods 10 years in the future.
- Recently developed strategic plan working with Board and staff.
- New closed 30-year amortization funding corridor.
- Modify Investment Allocation to minimize downside risk.
- Middlesex County Retirement System employs a part-time social security consultant to deliver educational programs regarding social security benefits, the Government Pension Offset, and Windfall Elimination Provision. Further, MCRS educates its employer units through Advisory Council meetings, attendance at Boards of Selectmen/Finance Committee meetings, and onsite Employer Training Programs.
- Methods to monitor retiree benefit compliance (i.e., reemployment, disability, children, widows).
- Issue debt certificates to lower or eliminate unfunded liability while interest rates are at historic lows.
- Investments is using Bloomberg Port/Port+ for improved risk management. We are in negotiations with XTP to improve cost transparency. Administration is adopting Concur for expense management and BoardDocs for board agenda and document management. Benefits has contracted for additional death reporting services. We have updated websites for the public and employers.
- In November 2017 NYSTRS began offering members the ability to file for retirement online. By fiscal year-end, more than half of all retirement applications received were filed online. The electronic application is designed to ensure a member cannot inadvertently miss a step or make a mistake that would cause the paper application to be rejected. Also, because electronic filing requires the creation of a secure member account, the percentage of members with an account increased.
- In 2017 IMRF was awarded the ILPEx Gold Award for performance excellence. This qualified us to apply for the Baldrige Award in 2018. Our application has been reviewed and we have been awarded a site visit from Baldrige in Oct. 2018.
- In 2016, we shifted from self-insured health care for the eligible over-65 retirees to a health care exchange market offering connectivity to the exchange via a vendor selected by OPERS. Additionally, we provide an allowance to this group to cover eligible health care costs, including, but not limited to, the premiums on medical plans obtained through the market. Prior to implementation of this plan change, health care costs had grown to approximately \$1.8 billion annually. Subsequent to this change, costs have declined annually by approximately \$600 million.
- Implemented an immunization program for benefit shortfalls.
- The reserve fund has maintained a stable contribution rate (albeit a high one) so employers have confidence for budgeting and the reserve has further reinforced our funding by holding the rate above where it would be absent the reserve fund.
- Idaho PERSI has recently relocated staff within our main office building in order to free up space to create an on-site member/employer training/education center. We plan for this space to be outfitted for face-to-face educational opportunities, and with the technological capabilities necessary for multi-media presentations and remote (webinar, etc.) participation via the internet. In order to have on-site capabilities, we are in the process of expanding available off-street parking to accommodate future guest populations.
- Hired third-party investment firm to perform an Independent Evaluation study on the Fund's investment performance and strategies.
- Have provided members with online access to their accounts.

- Continued

- Establishment of a formal funding policy.
- Enhance online user security features beyond username and password. Executive Workshops held throughout the state for city officials, with presentations by Trustees and key staff.
- Disaster recovery site and plan. We have staff test the site by working there at least one day per year.
- Created a matched 457 with annuity and life insurance to bridge time between separation and collection of first pension check at Social Security age.
- Contracted with an independent third party to perform a Governance and Asset allocation review.
- Continue to enhance security for member portal. Created two-step process for account setup, which includes sending a time-sensitive PIN
 to the address we have on file, and requiring stronger passwords for existing accounts.
- Comparing fees with other systems and see if we are being overcharged.
- Communication, by providing and enhancing the employee portal whereby any active member can access their account and see the
 balance, contributions plus interest, cash out value, and potential monthly benefit as of normal retirement age, (65), and perform their
 own future dated projection.
- COAERS recently launched a multiasset strategic partnership with BlackRock in order to garner best-in-class insights into asset allocation and risk management.
- CalSTRS administers a three-part hybrid system that includes traditional DB, CB, and voluntary DC plans.
- An Enterprise Risk Management Program has been implemented to assess risks across the plan.
- 1) Oversight -- in 2016 the Board adopted Board Bylaws to better discern the role of ED vs. Board. 2) Investment -- Board just concluded a robust review and selection process for an investment consultant.

Appendix A: Other Investments

Respondents were asked to specify what "other" asset class they invested in. Below is a text cloud showing those words that appear most often in respondents' comments. The size of the word is based on the frequency of its use. Underneath the text cloud are the verbatim comments.



Verbatim Comments:

- We are part of the State of MA-PRIT Fund.
- TIPS = 9.31% actual, 10% target. MLPs = 5.35% actual, 5% target.
 TIPS net of fee return = 1.80%, MLPs net of fee return = -0.22%.
 Commodities was net of fee as well.
- TIPS = 8.93% current, 10.00% Target; MLPs = 5.21% current, 5.00% target. TIPS net return = 1.80%, MLPs net return = -0.24%; Commodities was a net return.
- Timber, Farmland.
- Timber 2.2% (2.2% actual) and Infrastructure 5.8% (4.7% actual) targets.
- Timber.
- Target Date Fund (OSGP) *Alternatives 11.03%.
- Tangible assets portfolio and Innovation portfolio.
- Strategic Investments.
- Strategic.
- Risk Parity, GTAA, Other Pension Assets, and Rebalancing.
- Risk Parity + MLPs.
- Risk Parity.
- Risk Diversifying, Opportunistic.
- Real return, absolute return, and other real assets.
- Real Return.
- Real Estate Debt (2.0% 1-yr return), Private Debt (13.7% 1-yr return).
- Real Assets 7.5%.

- Real Assets (MLPs and Infrastructure).
- Real Assets.
- Private Credit.
- Preferred/convertible securities.
- Other emerging markets; note domestic equity includes 20% SMID CAP and 29.6%.
- Large CAP; Large CAP returned 29.6% & SMID CAP 20.0%.
- Other: timber and infrastructure.
- OTHER: Column 1 Infrastructure 2.9 and Risk Parity 4.6 OTHER Column 2 Infrastructure 4 Risk Parity 5.
- OTHER Column 3 Infra 5.03 Risk parity 12.35.
- Other is floating-rate debt.
- Opportunity Fund includes timber, tactical, credit, risk-parity, and other opportunistic strategies.
- Natural Resources.
- Natural resources and infrastructure.
- Mutual TIPS 5.31%, Emerging public market equities (7%).
- Multiasset -- GTAA and Risk Parity.
- MLPs.
- MLP 5%, emerging markets 9%.
- Master Limited Partnership.
- Liquid diversifying assets.

Continued

- Investment-grade credit and mortgage-backed securities.
- Infrastructure, Risk Parity.
- Infrastructure, Multi Asset Strategies.
- Infrastructure, Multi-Asset Funds, Derivative Positions.
- Infrastructure 3.1% current, 3% target; private credit 3.8% current, 8% target; cash held for overlay 2.6%; 1-yr returns: Infrastructure 18.1%; private credit 8.5%.
- Infrastructure 0 for current for end of year 17; we wanted 5%.
- Infrastructure.
- Inflation Sensitive (1.81%, 2.0%, 9.09%); Risk Mitigating Strategies (8.69%, 9.0%, -8.9%); Innovative Strategies (0.21%, 0.0%, 5.91%).
- Inflation Protection.
- Hedge Funds, TIPS, MLPs.
- Hedge Funds classified separately. Private Equity/Alternatives reported separately above.
- GTAA.
- Global Asset Allocation.
- Energy MLPs.
- Emerging Markets, Total Timberland, Total PCS.
- Emerging Markets Bonds (4.5/5/7), Real Return (7.4/8/10.8),
 Absolute Return (10.9/10/6.4).
- Emerging Equity.
- Dynamic Asset.
- CURRENT/TARGET/RETURN. Real Assets = 9.5%/13.5%/1.74%; Diversifying Strategies = 9.2%/12.5%/9.10%.
- Current: Non-Core FI--16.2%; Real Return--10.2%; Target: Non-Core FI--20%; Real Return--10%; Gross Inv Return: Non-Core-8.06%; Real Return--8.32%.
- Credit--current allocation is 11.3% with target of 14% and one-yr gross of 6.53%; Risk Parity--current allocation is 13% with target of 14% and one-year gross of 13.25%; Crisis Risk Offset--current allocation is 16.7 with a target of 20% and one-year gross return of 3.65%; Private Appreciation--current allocation is 11.4% with target of 12% and a one-year return of 15.14%. Private real estate makes up 7% of the private appreciation class and has been included on the Real Estate line item.

- Credit strategies.
- Credit Fixed Income.
- Convertible Bonds.
- Bond Fund, Inflation Protection Fund, and Socially Responsive.
 Fund.
- Bank Loans.
- As of 06/30/2018: (Actual) Broad Growth = 74.7%, Principal Protection = 8.3%, Crisis Risk Offset = 12.9%, Real Return = 3.1%, Opportunities = 0.2%, Other = 0.9%. (Target) Broad Growth = 72.0%, Principal Protection = 8.0%, Crisis Risk Offset = 13.0%, Real Return = 7.0%, Opportunities = 0%, Other = 0%.
- Alternative investments include private equity, private real estate, and hedge fund.
- Alternative.
- Absolute Return: 8.5% / 8.0% / 3.73% & Natural Resources/Infrastructure: 3.0% / 4.0% / 5.74%.
- Absolute Return.
- 8% is allocated to commingled funds, 2% is allocated to bank loans
- 8.6% 10% Public Real Assets, 2.5% Credit Opportunities.
- 2% Emerging Markets Debt, 8.63% return.
- 1) Other Fixed: Current 4.0; Target 5.0; IRR -.65 2) Multi-asset: Current 4.0; Target 5.0; IRR .81.
- Private Equity return: 18.38; Hedge Fund return: 10.81; Opportunistic return: 21.61.

Appendix B: 2018 Study Instrument



2018 NCPERS PUBLIC EMPLOYEE RETIREMENT SYSTEMS STUDY

Please share your feedback so we can continue to provide the most up-to-date data addressing retirement issues for public pension plans across the nation. Your response will remain confidential and will not be shared without your permission.

Your most recent Comprehensive Annual Financial Report will help answer most questions.

If you administer more than one plan, please copy this survey for each and note the name of the fund. If you are a multiple employer plan, you may use aggregate numbers from your CAFR and respond to the questions in the generally applicable way for most of the plans you administer.

	Please enter your ID number from the cover email:
	Plan name:
	What type of plan is this? (Mark all that apply.)
	Defined Benefit Plan (Traditional Pension Plan) Combination Plan (Blends Defined Benefit & Defined Contribution)
	Defined Contribution Plan (Mandatory Retirement Account) Cash Balance Plan
Ī	Plan Statistics
1.	Fund statistics from most recently completed fiscal year (if applicable). Please do not use commas, dollar signs or percentage marks in the field - it is numeric only.
	Total number of members (actives + deferred + retirees + beneficiaries):
	Total number of staff who administer the fund (full-time equivalent):
	Fiscal year of your CAFR referenced for this survey (MM/DD/YYYY):
	Market value of plan assets (\$ in thousands from actuarial valuation):
	Plan fiduciary net position (a) (\$ in thousands from actuarial valuation):
	Total pension liability (b) (\$ in thousands from actuarial valuation):
	Current funded ratio (a divided by b) (%):
	Cost of Living Adjustment (COLA) offered by plan in last fiscal year (%):
	Did your plan receive the full (100%) actuarially determined contribution in the last fiscal year?
	Member contributions as percent of payroll (%):
	Employer contributions as percent of payroll (%):
	Investment manager expenses (basis points):
	Administrative expenses (basis points):
	Investment assumption/discount rate (%):
	Inflation assumption (%):
	Investment smoothing period (years):
	Amortization period (years):
	Type of amortization period: Open/Rolling Closed/Fixed

Gross investment return % (5 years) Gross investment return % (10 years)		
Gross investment return % (20 ye		
	rent and Target Asset Allocation / Inv ow, please specify your CURRENT and TARGET as	
	each asset class. Please note: percentages for asse	et allocation should equal 100%.
IRRENT asset allocation:	TARGET asset allocation:	Gross investment return % (1 yr):
obal Equity (%):	Global Equity (%):	Global Equity (%):
mestic Equity (%);	Domestic Equity (%):	Domestic Equity (%):
ernational Equity (%):	International Equity (%):	International Equity (%):
obal Fixed Income (%):	Global Fixed Income (%):	Global Fixed Income (%):
mestic Fixed Income (%):	Domestic Fixed Income (%):	Domestic Fixed Income (%):
ernational Fixed Income (%):	International Fixed Income (%):	International Fixed Income (%):
gh Yield Bond (%):	High Yield Bond (%):	High Yield Bond (%):
al Estate (%):	Real Estate (%):	Real Estate (%):
vate Equity/Hedge Fund/ ernatives (%):	Private Equity/Hedge Fund/ Alternatives (%):	Private Equity/Hedge Fund/ Alternatives (%):
mmodities (%):	Commodities (%):	Commodities (%):
sh Equivalents (%):	Cash Equivalents (%):	Cash Equivalents (%):
her (specify asset below) (%):	Other (specify asset below) (%):	Other (specify asset below) (%):
If you entered an "Other" asset of	ass above, please specify what other class(es) your	fund is currently invested?
Which retirement benefits be applicable.	elow does your plan offer or is considering offer	Already Offering Considering O
based on service and average was Defined Contribution Plan (retiren	nent account such as a 403(b) or 401(k) in which an	
based on service and average was Defined Contribution Plan (retirent employer's contribution is specified	nges) hent account such as a 403(b) or 401(k) in which an ed and employee participation is generally mandatory deferred retirement savings account such as a 457	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is v	nges) hent account such as a 403(b) or 401(k) in which an ed and employee participation is generally mandatory deferred retirement savings account such as a 457	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is v	ages) nent account such as a 403(b) or 401(k) in which an ad and employee participation is generally mandatory deferred retirement savings account such as a 457 oluntary)	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is vice Combination Plan (blends Define In-service death benefit	ages) nent account such as a 403(b) or 401(k) in which an ad and employee participation is generally mandatory deferred retirement savings account such as a 457 oluntary)	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is vice Combination Plan (blends Define In-service death benefit Disability benefit provided either the Combination Plan (blends Define In-service death benefit Disability benefit provided either the Combination Plan (blends Define In-service death benefit Disability benefit provided either the Combination Plan (blends Define In-service death benefit Disability benefit provided either the Combination Plan (retirement plan (retirem	nges) nent account such as a 403(b) or 401(k) in which an and and employee participation is generally mandatory adeferred retirement savings account such as a 457 oluntary) d Benefit and Defined Contribution elements)	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is vice Combination Plan (blends Define In-service death benefit Disability benefit provided either the An automatic post-retirement adjusted Control of the Plan (transported to the provided either the Plan (transported to the provided to the Plan (transported to the provided to the pr	ages) hent account such as a 403(b) or 401(k) in which an ad and employee participation is generally mandatory deferred retirement savings account such as a 457 oluntary) d Benefit and Defined Contribution elements) within the plan, by Social Security or by employer	,
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is vice Combination Plan (blends Define In-service death benefit Disability benefit provided either that automatic post-retirement adjud compounding post-retirement adjud compound	ages) hent account such as a 403(b) or 401(k) in which an ad and employee participation is generally mandatory deferred retirement savings account such as a 457 coluntary) d Benefit and Defined Contribution elements) within the plan, by Social Security or by employer ustment of payments (e.g. COLA)	
based on service and average with Defined Contribution Plan (retirent employer's contribution is specific Deferred Compensation Plan (tax which employee participation is vice Combination Plan (blends Define In-service death benefit Disability benefit provided either vice An automatic post-retirement adjuit A compounding post-retirement and An ad hoc (not necessarily automatic post-retirement and post-retirement	need account such as a 403(b) or 401(k) in which an ed and employee participation is generally mandatory adeferred retirement savings account such as a 457 coluntary) d Benefit and Defined Contribution elements) within the plan, by Social Security or by employer astment of payments (e.g. COLA) djustment of payments (e.g. COLA) latic or compounding) post-retirement adjustment of	

	Already implemented	Considering Implementing
Lower the actuarial assumed rate of return		
Raise benefit age/service requirements		
Increase employee contributions		
Hold or lengthen the amortization period to improve affordability		
Shorten the amortization period to improve funded status		
Which business practices below have been implemented or are being considered by the items below if not conducted.	e plan or plan sponsors?	Please skip individual
items below if not conducted.	Aiready Implemented	Considering Implementing
Conduct a death audit		
Conduct an actuarial audit by a third party actuary (includes replication of valuation and opinion on actuarial assumptions)		
Conduct an information systems security audit		
Conduct a building security audit		
Update/strengthen an asset allocation study		
Expand operational performance benchmarking		
Update or enhance administrative software used for member data		
Update or enhance online portal provided for members to access account information		
Conduct an employer/reporting unit satisfaction assessment		
Comply with new State statutory or regulatory requirements to report your funded status based on a rate of return different from your assumed rate of return		
Enhance member financial wellness/retirement readiness resources		
	CANCES OF SECURIOR SEASON	
Which communications and member engagement practices below have been implemplan sponsors? Please skip individual practices below if not conducted.		
plan sponsors? Please skip individual practices below if not conducted.	Aiready Implemented	considering implementing
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy"		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members Conduct a member satisfaction survey		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members Conduct a member satisfaction survey Notify members of updated handbook/summary plan description (electronically or paper)		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund. Expand retirement planning education for members. Conduct a member satisfaction survey. Notify members of updated handbook/summary plan description (electronically or paper). Actively use social media (Facebook, Twitter, etc.) to share messages with members.		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund. Expand retirement planning education for members Conduct a member satisfaction survey Notify members of updated handbook/summary plan description (electronically or paper)		
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund. Expand retirement planning education for members. Conduct a member satisfaction survey. Notify members of updated handbook/summary plan description (electronically or paper). Actively use social media (Facebook, Twitter, etc.) to share messages with members. Conduct online educational sessions (webinars) for participants.	Already Implemented	Considering Implementin
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members Conduct a member satisfaction survey Notify members of updated handbook/summary plan description (electronically or paper) Actively use social media (Facebook, Twitter, etc.) to share messages with members Conduct online educational sessions (webinars) for participants Which of the following communication methods does your plan or plan sponsor have the	Already Implemented	
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members Conduct a member satisfaction survey Notify members of updated handbook/summary plan description (electronically or paper) Actively use social media (Facebook, Twitter, etc.) to share messages with members Conduct online educational sessions (webinars) for participants Which of the following communication methods does your plan or plan sponsor have the Capacity to send a postcard to the home address of your entire membership	Already Implemented	Considering Implementin
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund. Expand retirement planning education for members. Conduct a member satisfaction survey. Notify members of updated handbook/summary plan description (electronically or paper). Actively use social media (Facebook, Twitter, etc.) to share messages with members. Conduct online educational sessions (webinars) for participants. Which of the following communication methods does your plan or plan sponsor have the Capacity to send a postcard to the home address of your entire membership.	Already Implemented	Considering Implementin
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund Expand retirement planning education for members Conduct a member satisfaction survey Notify members of updated handbook/summary plan description (electronically or paper) Actively use social media (Facebook, Twitter, etc.) to share messages with members Conduct online educational sessions (webinars) for participants Which of the following communication methods does your plan or plan sponsor have the Capacity to send a postcard to the home address of your entire membership Capacity to send a mass phone message to your entire membership	Already Implemented	Considering Implementin
plan sponsors? Please skip individual practices below if not conducted. Develop public relations plan to address "Pension Envy" Develop staff talking points on key issues affecting the fund. Expand retirement planning education for members. Conduct a member satisfaction survey. Notify members of updated handbook/summary plan description (electronically or paper). Actively use social media (Facebook, Twitter, etc.) to share messages with members.	Already Implemented	Considering Implementin

		And the first the state of the			ot conducted.	
				**	:s 	No.
- 1 /		Excellence for the most recent award	THE RESERVE OF THE PARTY OF THE	L		
		on from the auditor on the fund's finance with applicable laws and regulation				
	Conduct an actuarial valuation					
	Board adoption and adherence	to written investment policies				
	Board adoption of written fiduci	ary standards				100
	Receipt of annual investment p investment review entity	erformance evaluation from an outsid	de independent	Ī		
	Use of a formal enterprise risk	management framework				111
9.	How satisfied are you with your	plan's readiness to address retireme	ent trends and issue	s over the next	2 years?	-
	Very Dissads/fed= 2	3 4 5		7		9 Very Satisfied-
					П	
10	If you have an unfunded accrus	ed actuarial liability, what strategies h	ave you out in place	to reduce it be	vond tradition	al amortization?
	The street, and a			1.1.1.1	33.77	CONTRACTOR
11.	Think about best practices. Ple	ase share a success story or plan inn	novation you are cor	sidering that ot	her plans may	y like to learn about:
		THE STREET STREET, STREET		56.0		
12.	Which categories best describe	your innovation or best practice stor	y above? (Please n	nark all that ap	ply.)	
	Retirement benefit				atalia and alter	
	Tremement belief	Business practice	e	Over	sight practice	
	Plan change		e engagement practio		signi practice itment	
	Plan change	Communication/	engagement practic	e Inves	tment	
13.	Plan change Quest	Communication/	engagement practic Ir responses v	e Inves	tment	
13.	Plan change Quest What type of employees/benefi	Communication/ ions about your fund (you ciaries does your fund serve? (Pleas	engagement practic Ir responses v	e Inves	idential)	
13.	Plan change Quest What type of employees/benefi Township	Communication/ ions about your fund (you ciaries does your fund serve? (Pleas	engagement practic IF responses v e mark all that app	e Inves	tment	
	Plan change Quest What type of employees/benefi Township City/village	Communication/ ions about your fund (you ciaries does your fund serve? (Pleas County Police/fire	engagement practic IT responses v e mark all that app State Educational	e Investigation in the confinence of the confine	idential)	
	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y	Communication/ ions about your fund (you ciaries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please	engagement praction IT responses volume mark all that app State Educational mark all that apply	vill be confi	idential)	
	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is tip to Q16)	engagement practic IT responses v e mark all that app State Educational mark all that apply Supplementa	vill be confi	idential)	
14.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please in the Q16) DS, etc.)	engagement practic IT responses V e mark all that app State Educational mark all that apply Supplementa Healthcare si	vill be confi	idential) Other	
14.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO) Who is eligible for the health pl.	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is tip to Q16) OS, etc.) an? (Please mark all that apply.)	engagement practice If responses vote mark all that apply State Educational mark all that apply Supplementa Healthcare si	vill be confi	idential)	Beneficiaries
14. 15.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si Traditional (HMO, PPO, PO) Who is eligible for the health plan Are your members eligible for S	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please in the Q16) So, etc.) an? (Please mark all that apply.) Social Security coverage?	engagement practic If responses V e mark all that app State Educational mark all that apply Supplementa Healthcare si Active n	vill be confi	idential) Other	
14. 15. 16.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO) Who is eligible for the health pl. Are your members eligible for M	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is tip to Q16) OS, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage?	engagement practice If responses Vive mark all that apply State Educational mark all that apply Supplementa Healthcare si Active n Yes	vill be confi	other other etirees	
114. 115. 118.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si Traditional (HMO, PPO, PO) Who is eligible for the health plan Are your members eligible for Mo	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is to Q16) 25, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit?	engagement practic IT responses v e mark all that app State Educational mark all that apply Supplementa Healthcare si Active n Yes Yes	vill be confinely.) If gap health plaubsidy members R No No	idential) Other	
14. 15. 18. 17.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO Who is eligible for the health pl. Are your members eligible for M Do you include overtime in the	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is tip to Q16) OS, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit?	engagement practic If responses v e mark all that app State Educational mark all that apply Supplementa Healthcare s Active n Yes Yes Yes Yes	vill be confi	other other etirees	
114. 115. 116. 117. 118.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO Who is eligible for the health plan Are your members eligible for Mo Do you include overtime in the Does your plan provide retiree Has your plan been consulted,	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please is to Q16) 25, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit?	engagement practic If responses v e mark all that app State Educational mark all that apply Supplementa Healthcare s Active n Yes Yes Yes Yes	vill be confinely.) If gap health plaubsidy members R No No	other other etirees	
14. 115. 116. 117. 118. 119. 120.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO Who is eligible for the health pl. Are your members eligible for M Do you include overtime in the Does your plan provide retiree Has your plan been consulted, about a state-facilitated retirem	Communication/ ions about your fund (you claries does your fund serve? (Pleas County Police/fire your pension plan sponsor? (Please Police to Q16) OS, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit? health benefits?	engagement practic If responses v e mark all that app State Educational mark all that apply Supplementa Healthcare si Active n Yes Yes Yes Yes Yes Yes	vill be confinely.) If gap health plaubsidy If No No No	other other etirees	
14. 15. 16. 17. 18. 19. 20. 21.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO Who is eligible for the health pl. Are your members eligible for M Do you include overtime in the Does your plan provide retiree Has your plan been consulted, about a state-facilitated retirem Does your plan allow Board Meconference call and vote?	Communication/ ions about your fund (you claries does your fund serve? (Please County Police/fire your pension plan sponsor? (Please Please	engagement practic If responses V e mark all that app State Educational mark all that apply Supplementa Healthcare si Active n Yes Yes Yes Yes Yes Yes Yes Ye	vill be confined. vill be confined. vill be confined. vill gap health plant besidy nembers R No No No No No No	other other etirees	
14. 15. 16. 17. 18. 19. 20. 21.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (st Traditional (HMO, PPO, PO Who is eligible for the health pl. Are your members eligible for M Do you include overtime in the Does your plan provide retiree Has your plan been consulted, about a state-facilitated retirem Does your plan allow Board Meconference call and vote?	Communication/ ions about your fund (you claries does your fund serve? (Please County Police/fire your pension plan sponsor? (Please Please Pl	engagement practic If responses V e mark all that app State Educational mark all that apply Supplementa Healthcare si Active n Yes Yes Yes Yes Yes Yes Yes Ye	vill be confined. vill be confi	other other etirees	
114. 115. 116. 117. 118. 119. 120. 121.	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si Traditional (HMO, PPO, PO Who is eligible for the health pl Are your members eligible for S Are your members eligible for N Do you include overtime in the Does your plan provide retiree Has your plan been consuited, about a state-facilitated retirem Does your plan allow Board Me conference call and vote? Which role(s) best describe you	Communication/ ions about your fund (you claries does your fund serve? (Please County Police/fire your pension plan sponsor? (Please is to Q16) 25, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit? involved, or have had internal discussent program for the private sector? imbers the ability to participate via in relationship to the fund? (Please mark all that?)	engagement practice If responses V e mark all that app State Educational mark all that apply Supplementa Healthcare si Yes	vill be confined. vill be confi	other Other	
14. 15. 115. 117. 118. 119. 120. 121. 122. 123. 1	Plan change Quest What type of employees/benefi Township City/village What type of health plan does y None, does not sponsor (si Traditional (HMO, PPO, PO Who is eligible for the health pl. Are your members eligible for M Do you include overtime in the Does your plan provide retiree Has your plan been consulted, about a state-facilitated retirem Does your plan allow Board Me conference call and vote? Which role(s) best describe you Staff May we contact you if we have	Communication/ ions about your fund (you claries does your fund serve? (Please County Police/fire your pension plan sponsor? (Please is to Q16) 25, etc.) an? (Please mark all that apply.) Social Security coverage? Medicare coverage? calculation of the retirement benefit? involved, or have had internal discussent program for the private sector? imbers the ability to participate via in relationship to the fund? (Please mark all that?)	engagement practice If responses V e mark all that apply State Educational mark all that apply Supplementa Healthcare si Active n Yes	vill be confined. vill be confined. vill be confined. vill gap health plant besidy nembers R No No No No No No No No No N	other Other	

For more information:

National Conference on
Public Employee Retirement Systems (NCPERS)
444 N. Capitol St., NW Suite 630
Washington, D.C. 20001
Tel: 202-624-1456