

# 2012

Public Employees Retirement  
Association of Minnesota



## ***Membership Eligibility Study***

*In 2012, the Minnesota Legislature directed the Public Employees Retirement Association (PERA) to conduct a membership study in order to identify options for revising the membership threshold under Minnesota Statutes Section 353.01, Subdivision 2a and 2b. The PERA report must be presented to the Legislative Commission on Pensions and Retirement on or before February 15, 2013.*

# Membership Eligibility Study

## Public Employees Retirement Association of MN

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## INTRODUCTION

### Scope

In 2012, the Minnesota Legislature directed PERA to prepare a report that:

1. Identifies options for revising the membership threshold under M.S. §353.01, subdivisions 2a and 2b;
2. Determines the actuarial impact on the retirement plans, the financial impact on employers, and the financial impact on prospective public employees of each option; and
3. Formulates the recommendations for structuring each identified option.

To conduct this study, PERA engaged a cross-section of agency staff members, obtained information from its consulting actuary, Gabriel, Roeder, Smith & Company (GRS), and conducted a survey of employers that contribute to PERA on behalf of their employees. Staff reported its progress to the PERA Board of Trustees at two meetings in October 2012 and January 2013. PERA submitted its Membership Eligibility Study to the Legislative Commission on Pensions and Retirement on February 15, 2013.

### Guiding Principles and Goals

At the onset of the study, PERA staff referred to the “Principles of Pension Policy” developed by the Legislative Commission on Pensions and Retirement (Commission). The Commission’s Pension Policy Principle II.B.2, states that “to the extent possible, membership in a public pension plan should be mandatory for the personnel employed on a recurring or regular basis.” The policy does not define recurring or regular basis; therefore, PERA set out to define those terms when considering changes to the membership criteria.

PERA staff set the following goals and evaluation criteria for any proposed membership eligibility change:

1. Maintain membership base at its current level or at least do not significantly reduce it
  - Membership requirements that significantly reduce the number of employees that enter the retirement plan in future years could add financial stress when a plan has an unfunded liability, because the total payroll is the basis for determining the supplemental contribution required to be paid to pay off the unfunded liability. As the total payroll declines, the supplemental contribution will have to increase.
2. Establish rules that will maintain themselves (not require legislative up-keep)
  - The purpose of any membership threshold is to restrict coverage to only positions that meet the specified requirement. When the minimum salary threshold goes unchanged for several years, its relevancy as a standard of the level of part-time employment to be excluded from plan participation diminishes as wages increase.

3. Provide increased flexibility for employers
  - Employers want the ability to sometimes vary the work schedule of part-time or casual employees without requiring retirement plan membership for the employees because of the irregular increase in work hours and compensation.
4. Equalize position coverage throughout the state – fairness in pension coverage
  - The membership threshold should provide retirement plan membership to all public employees who are similarly employed, regardless of whether they work in the Twin Cities metropolitan area or in greater Minnesota.
5. Ensure administrative ease
  - Employers need to be able to easily administer the rules and PERA staff needs to be able to easily monitor employers’ actions for compliance.
6. Ensure ease of understanding
  - Simple rules allow public employees, their employers, and PERA staff to understand what drives membership in the defined benefit plan, which better ensures that coverage is provided to employees who are eligible.

## PERA Membership

### Purpose

PERA was established by legislative act in 1931 to serve cities, counties, school districts, townships, and other local units of government in Minnesota by administering statewide defined benefit (DB) plans for eligible employees. In Fiscal Year 2012, PERA served 2,501 employers (Figure 1).

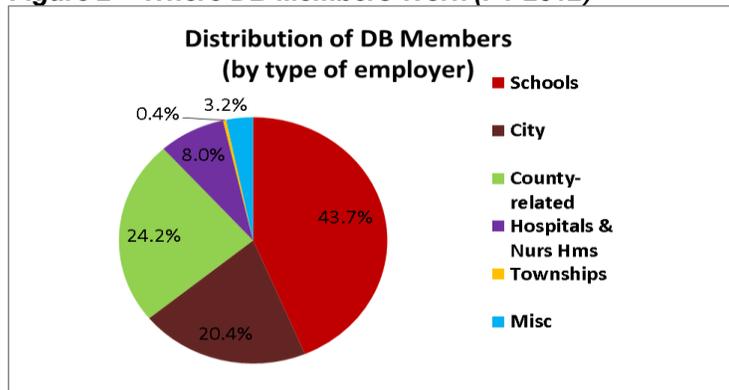
**Figure 1 - Participating Employers (FY 2012)**

Type	Number
City	773
County or County-Related	106
School District (includes charter schools)	524
Township	728
Hospital or Nursing Home	63
Misc. (water districts, joint boards, etc.)	307
<b>Total PERA-Covered Employers</b>	<b>2,501</b>

Employers participating in PERA range in size from very large (over 9,000 employees) to extremely small (1 or 2 employees).

In FY 2012, the PERA defined benefit plans had 154,437 members. Figure 2 shows the distribution of members by type of employer.

**Figure 2 – Where DB Members Work (FY 2012)**



PERA administers three statewide multi-employer DB plans (the General Employees Retirement plan, the Police and Fire plan, and the Correctional plan.)

Participation in a retirement plan is dependent on the occupation of the employee.

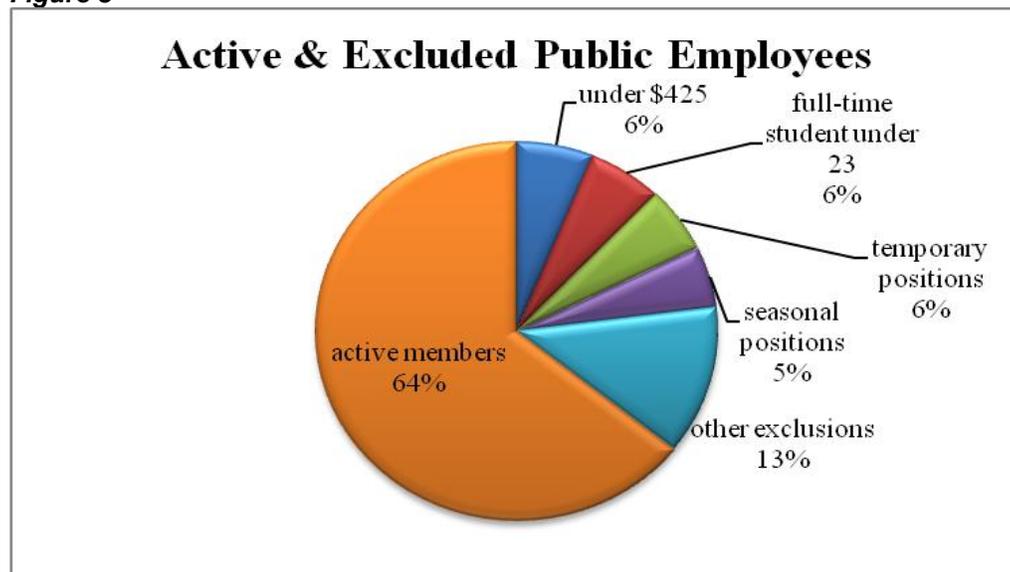
### Current Membership Eligibility

Membership in a DB plan is mandatory for any public employee filling a non-elected position whose salary from one governmental subdivision exceeds \$425 in a single month, unless coverage is otherwise prohibited or optional under the law. Once enrolled, the employee's membership continues on all future salary, even if monthly earnings fall below \$425 during employment.

The PERA law lists a number of classifications of positions or employees that are not eligible to participate as members of a DB plan. In 2011, a total of 85,731 employees were excluded from PERA membership. The most common exclusions are as follows:

1. Monthly salary never exceeds \$425. In 2011, 14,878 employees were exempt from DB plan coverage based on their level of monthly earnings. This is 6.2 percent of the total number of public employees in 2011.
2. Part-time employees who are full-time students and are under age 23. In 2011, 14,451 employees were exempt from PERA coverage under this exclusion. This is 6 percent of the total number of public employees in 2011.
3. Temporary Position. In 2011, 13,431 employees were excluded because their employers did not hire them to work for more than 6 consecutive calendar months. This is 5.6 percent of the total number of public employees in 2011.
4. Seasonal Position. In 2011, 12,376 employees were excluded because they were hired to fill seasonal positions that are limited by the employer to 185 consecutive calendar days or less in each year of employment. This is 5.2 percent of the total number of public employees in 2011.

**Figure 3**



## Historical Requirements

Membership in a PERA retirement plan was voluntary from July 1, 1931 through June 30, 1949 and contributions were required on all salary for a person who elected coverage. From July 1, 1949 through June 30, 1956, contributions were made on salary only up to \$400 per month – and during that period – on July 1, 1951 – DB plan membership became mandatory. Contributions were required on salary up to specific limits until June 30, 1967, but membership was not allowed unless a person earned at least \$50 per month. Beginning July 1, 1967, contributions were again required on all salary earned after the person was eligible to be enrolled in one of PERA’s plans.

Historically, membership eligibility in a PERA DB plan has been based on a monthly earnings test; however, employees hired to temporary or seasonal positions that have limited work periods have been excluded from coverage regardless of their level of earnings. See Figure 4.

**Figure 4 - History of Earnings Thresholds (Defined Benefit Plans)**

Threshold Period	Minimum Earnings in a Month	Increase Amount	Temporary/Seasonal Exclusion
Prior to 7/1/1961	\$50		Prior to 7/1/1971: 90 days
7/1/1961 – 3/23/1974	\$75	\$25	7/1/1971 – 6/30/1988: 120 working days
3/24/1974 – 6/2/1977	\$150	\$75	7/1/1988 – present: Temporary positions pre- determined to be a period of 6 months or less
6/3/1977 – 6/30/1981	\$250	\$100	
5/1/1981 – 6/30/1988	\$325	\$75	
7/1/1988 to present	\$425	\$100	7/1/2002 – present: Seasonal positions expected to have a duration of less than 185 days per year

## Comparison with Other Systems

### In Minnesota

In Minnesota, there are three statewide retirement systems that provide DB plan coverage to state and public employees. Unlike PERA, the other two retirement systems do not have an earnings threshold and generally cover all positions:

- The Minnesota State Retirement System (MSRS) administers four retirement plans that provide DB plan coverage to employees of the State of Minnesota. The largest DB plan, called the General State Employees Retirement Plan, provides coverage to non-temporary employees of the State classified services, the University of Minnesota civil

service employees, MNSCU non-faculty, and certain metropolitan-level government employees. Employees who are excluded from coverage include those appointed for a definite period of not more than six months and who are employed less than six months in any one-year period.

- The Teachers Retirement Association covers all public K-12 teachers and administrators in the state, except for the teachers in Duluth and Saint Paul School Districts, which are covered by separate systems. TRA is also available as a retirement plan option for State Universities' and Community Colleges' faculty through an election process.

It is a long-standing goal of the Pension Commission (Pension Policy Principle ILC.6) to have uniformity in retirement benefit coverage for state and public employee. In 2000, the Legislature passed Chapter 392 (HF 3127/SF 2984), which would have removed the minimum monthly salary threshold for new PERA plan entrants after June 30, 2002 and would have required PERA to prorate service credit for certain employees.<sup>1</sup> The Legislature, however, repealed Chapter 392 before it took effect and the \$425 salary threshold remained a requirement for PERA membership. In light of this prior legislative action, PERA staff did not, as part of this study, consider having no membership threshold.

## Outside Minnesota

PERA staff researched the membership provisions of other public or state retirement systems and found that, of the 50 systems reviewed, 86 percent have a membership threshold. Figure 5 shows that 7 of these systems generally cover all employee positions, 10 systems extend coverage to employees who are defined as full-time or part-time by their employers, and 33 systems use some measure of employment hours. The review uncovered only two systems that include an employee's salary as part of the membership criteria. Refer to Appendix A for more details about this research.

**Figure 5 – Membership Coverage - Other Systems**

<b>Criteria Used for Member Eligibility</b>	<b>Number of Systems</b>	<b>% of All Systems Reviewed</b>
<b>System Covers All Positions</b>	7	14%
<b>System uses Employment Status</b>	10	20%
<b>System Uses Employment Hours for a Specified Period</b>	33	66%

<sup>1</sup> The prior legislation established prorated service credit for new members who worked less than 80 hours in a month, but did not affect members who were active on June 30, 2002; they were to continue to receive one service credit for each month in which contributions were made to the plan.

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## Membership Threshold Options

During the 2012 legislative session, House File 2360 was introduced calling for an increase in the monthly earnings threshold that determines when a public employee becomes eligible to be enrolled in a defined benefit plan administered by PERA. The proposal used the past inflation rates to increase the current monthly salary threshold of \$425 to \$773. The increased salary threshold would have applied to public employees first employed after July 1, 2012. In addition, the proposal called for the threshold amount to be annually adjusted up or down to the nearest full dollar amount based on the percentage change in the Consumer Price Index – All Urban Consumers (CPI-U).

There is clear interest from employers to raise the minimum salary threshold. In addition, employers have indicated that the threshold should be periodically adjusted using inflation. Following are some of the comments that employers shared about the current salary threshold.

- The system does not seem to be broken but the threshold of earnings needs to be raised to reflect the changes in wage inflation.
- I think that \$425 threshold should be raised and part-time employees that work only 10 hours per week should not be eligible for PERA. That \$425 seems to have been the standard number for over 20 years....should keep up with inflation.
- I commend PERA for moving ahead with a change to the \$425 a month threshold. It is long and I mean long, overdue. We are a small outstate school district and our STARTING wage for staff working at least 3 hours a day for the entire school year of 174 days is a bit over \$10 an hour.
- If the current \$425 threshold were adjusted for inflation, something that hasn't happened since 1988, the \$425 would be two to three times higher. I suggest tying the eligibility threshold to inflation. That way it would automatically go up and be adjusted on a consistent basis but first it needs to be raised much higher.

PERA staff met with some employee group representatives and discussed the options prepared for this study. While the representatives appreciated the work done by the PERA staff to review membership requirements in other states and to propose options for modifying PERA's rules, there is continuing concern about the lack of uniformity in coverage across the state given the difference in wages paid for similar part-time positions held in local government employment positions.

To respond to the directive of the study, PERA staff has prepared the following four options for determining membership in the defined benefit plans administered by PERA.

## Option #1

If membership in a PERA defined benefit plan continues to be tied to wages earned in a single calendar month, the following option should be considered.

**Raise the current salary threshold from \$425 in a month to \$737 and increase this amount when the cumulative increases in the Consumer Price Index – Urban Wage Earners and Clerical Workers (CPI-W) reach \$100.**

Subsequent increases would be made only when the cumulative increases in the CPI-W reach \$100. The revised threshold amount would reflect the nearest full dollar amount based on the percentage change in the CPI-W. As shown in Figure 6, had such changes been made in past years, the monthly salary threshold would have changed three times since 1988.<sup>2</sup>

*Figure 6*

YEAR	THRESHOLD AMOUNT
1988	\$425
1994	\$529
2001	\$630
2007	\$737

### Additional Changes to Consider

Through past discussions with employers, PERA staff learned that many employers are not able to separate an employee's earnings when the person holds multiple positions, one of which is excluded as a temporary or seasonal employment. Membership eligibility decisions would be easier to make if the wages from all jobs were combined when applying the salary threshold.

Through the 2012 survey, employers shared two additional concerns associated with administering membership eligibility using an employee's earnings in a month. These concerns are described in the following two statements from employers:

- a. Considering that very few employers currently pay on a monthly basis, calculating the monthly salary can be time consuming and is generally done after the fact.
- b. Going over the salary amount one month a year does not seem like a good test of membership. The monthly salary method creates a burden, both in bookkeeping and financially, for the employer. When part-time employees exceed the \$425 threshold once because of an unexpected event, the employer will continue to pay PERA on their very minimal ongoing wages. The membership is often times not wanted by the employee.

Both of these concerns could be resolved by implementing the following in conjunction with an increase in the monthly threshold amount:

1. Use the paid date of wages, rather than the earnings period, when calculating monthly wages, and

<sup>2</sup> Appendix B shows the historical CPI-W figures since 1988 and the corresponding theoretical salary threshold.

2. Allow those part-time employees who do not usually earn more than \$425 in a month to exceed the salary threshold amount in three separate months (not necessary to be consecutive months) without mandating PERA membership. Once earnings exceed \$425 in three separate months, membership would be required on a prospective basis.

Some employers find it burdensome to determine an employee's earnings for a calendar month when the pay period coverage dates cross two calendar months. Basing eligibility on the total earnings paid within a calendar month would eliminate the need to prorate any earnings. However, this method could cause some employees to qualify for membership solely because they receive three pay checks in a single month (which occurred twice in 2012). Allowing the salary threshold to be exceeded in three separate months would alleviate this issue and give the employer some flexibility to vary the work schedule of certain part-time or intermittent employees without hitting the mandatory PERA coverage requirement.

- Under this option, PERA does not suggest that the monthly earnings threshold be lowered based on the effects of inflation. Additionally, the current exclusions (such as temporary, seasonal, full-time student, etc.) would remain in place.<sup>3</sup>

## Option #2

Prior changes in the PERA salary threshold have been made by increasing the monthly amount by either \$75 or \$100. (Refer to Figure 4 on page 4.) The basis for choosing those amounts is not known but this action could be repeated to provide for an initial increase in the threshold that is not as significant as the increase proposed in Option #1.

**Increase the current \$425 a month salary threshold by \$100 (to \$525) and have subsequent increases in exact \$100 increments (\$625, \$725, etc.) based on the cumulative increases in the CPI-W.**

For discussion and analysis purposes, PERA staff looked at the history of membership threshold changes relative to the federal minimum wage rates for state and local government employees. Staff then converted PERA's minimum monthly earnings level to an hourly threshold (by month and week) using the federal minimum wage for public employees. Figure 7 shows that PERA's first salary threshold of \$75 correlated to 75 hours of work a month; a salary threshold of \$525 correlates to 72.4 hours a month based on the current federal minimum wage.

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<sup>3</sup> 86 percent of the employers participating in the PERA 2012 survey said they support continuing to exclude employees who are not expected to work more than 6 months per year.

Figure 7 - PERA Earnings Threshold and Federal Minimum Wages

Date of Change in Earnings Threshold	PERA Monthly Salary Threshold	Federal Minimum Wage Rate Per Hour	Monthly Hours of Work	Weekly Hours of Work
7/1/1965	\$75	\$1.00	75	17.3
3/24/1974	\$150	\$1.90 (eff. 5/1/1974)	78.9	18.2
6/3/1977	\$250	\$2.30	108.7	25.1
5/1/1981	\$325	\$3.35	98	22.4
7/1/1988	\$425	\$3.35	126.9	29.3
	\$425	\$3.80 (1990)	111.8	25.8
	\$425	\$4.25 (1991)	100	23.1
	\$425	\$4.75 (1996)	889.5	20.6
	\$425	\$5.15 (1997)	82.5	19.0
	\$425	\$5.85 (2007)	72.6	16.8
	\$425	\$6.55 (2008)	64.9	15.0
	\$425	\$7.25 (7/24/2009)	58.6	13.5
	\$525 (assumed)	\$7.25	72.4	16.7

As part of option #2, the additional changes discussed in Option #1 could also be implemented.

### Option #3

A third option for consideration is to use annual earnings and employment status to determine membership eligibility. Under this option, membership would be as follows:

- Continuous Full-Time Regular Position**  
 Employees enter membership when hired to a position that provides full-time continuous employment in excess of 6 consecutive calendar months.
- Part-Time Regular Position**  
 Employees enter membership when hired to a position that is expected to be longer than six months and expected to provide annual compensation in excess of \$6,300 on average, or \$4,600 on average for employment covering the school term only.<sup>4</sup>

If the salary paid to an employee is not expected to reach the applicable minimum annual amount, the employer must monitor the total wages paid to the employee during any calendar year, or fiscal year ending June 30 for school districts. PERA contributions must be made on behalf of the employee beginning with the first pay period following the pay period in which the applicable minimum annual salary amount (\$6,300 or \$4,600) is reached.

<sup>4</sup> The annual amount of \$6,300 is based on a person receiving average wages of \$525 for 12 months; the amount of \$4,600 covering school term employment represents approximately 73 percent of \$6,300.

- **Employment not fixed at More than 6 Months**

Persons in full- or part-time employment that is not expected to exceed six consecutive months must be monitored. If employment continues for more than six months, the employee's wages must be monitored and membership must begin as of the first pay period after the person's annual earnings have exceeded \$6,300 or \$4,600 as applicable. (No back contributions would be due.)

- **Multiple Positions**

If an employee works in more than one position for a single employer, the hours of all jobs are combined when applying the 6-month requirement and the annual compensation standard.

Similar to Options #1 and #2, there should be an automatic escalator. Under Option #3, the minimum annual salary amounts of \$6,300 or \$4,600 should be raised by \$1,200 or \$900 respectively when the cumulative annual increases in the CPI-W as measured to the previous June 30 reach \$100 increments based on a monthly salary of \$525 (i.e. the next increase would be to \$7,500 or \$5,500 for school term positions.)

Lastly, the current definitions of temporary and seasonal positions in PERA law would be eliminated.

## **Option #4**

The last option considered is to move away from an earnings test to a threshold that uses the expected employment duration and annual hours of work.

**Membership would be required if an employee meets the following two-prong test:**

1. The employer *expects* the employee to work for more than 6 months per year, *and*
2. The employer *expects* the employee to work more than 780 hours annually; or for school district employees who are hired to work during the school term only, the person is *expected* to work more than 525 hours each year.

If the test is met, the employer would enroll the employee into PERA as of the person's date of hire. If the test is not met, the employer would monitor the employment to determine if the person would qualify for coverage later in the year.

In proposing the number of annual work hours, PERA staff gave consideration to school districts that have several part-time positions that require services for only 3 hours a day, 5 days a week. Generally, these employees earn more than \$425 in a month and are PERA members. To continue to provide these part-time employees with PERA coverage, the annual

hours proposed is equivalent to working just over 15 hours per week in a calendar year (15 x 52) or in a school year (15 x 35).

The proposed annual number of hours is also just over the number of hours in the Public Employment Labor Relations Act (PELRA), which defines a part-time employee as a person “whose service does not exceed the lesser of 14 hours per week or 35 percent of the normal work week ...” Minn. Stat. § 179A.03, subd. 14(a)(5). (728 is 35 percent of a full-time 40-hours per week equivalent. The 780 hours proposal is slightly higher at 37.5 percent of full-time 40-hours per week employment.) PERA staff is aware that there are other measures of full-time employment, such as 37.5 hours per week for some cities and 32.5 hours per week for some school district employees.

In both 1998 and 2012, PERA surveyed employers to gauge their support of the concept of using hours, rather than monthly earnings, as the membership criteria. The 2012 survey says that 74 percent of the responding 1,052 employers support the concept.<sup>5</sup> The 2012 survey showed that 61% percent of the responding employers strongly or somewhat support replacing the current monthly salary threshold with an annual hours test.<sup>6</sup> Figure 8 shows the responding employers by type of entity.

**Figure 8**

Employers that Responded to 2012 Survey	Respondents
City	369
County or County Agency	99
School District	159
Township	332
Other	173
<b>Total</b>	<b>1052</b>

Employers had these comments in support of using annual hours of work:

- Like the fact you are keeping wages earned out of the picture.
- The earnings threshold is problematic now as our payroll time frames do not coincide with a calendar month. So, it is cumbersome to determine when a part time person has exceeded the \$425 earnings threshold from our payroll records - a manual review of time sheets and manual computations must be performed to make this determination. A change to monthly hours would be a problem for this same reason. But an annual threshold would make more sense.
- I agree with setting up the employee in PERA at time of hire versus monitoring pay based on \$425 rule.
- As a municipal liquor store, would like to see the 780 hour threshold. With part-time bartenders, due to the large turnover of help, a bartender may make that \$425 a month

<sup>5</sup>The percentage of employers supporting the concept of using annual hours of work for membership eligibility dropped from 84 percent in 1998 to 74 percent in 2012.

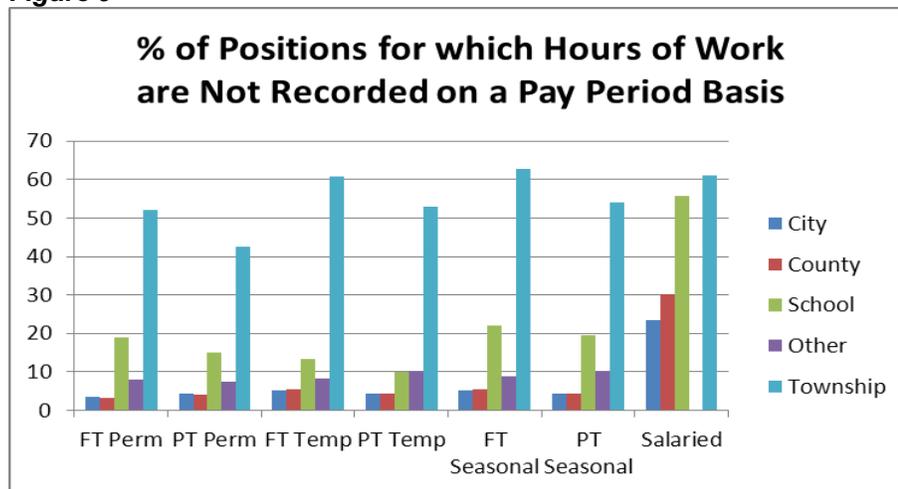
<sup>6</sup> Appendix C contains highlights from the 2012 PERA survey of employers.

once and then make around \$250 during the rest of the employment. It would be more cost effective for the 780 hour threshold.

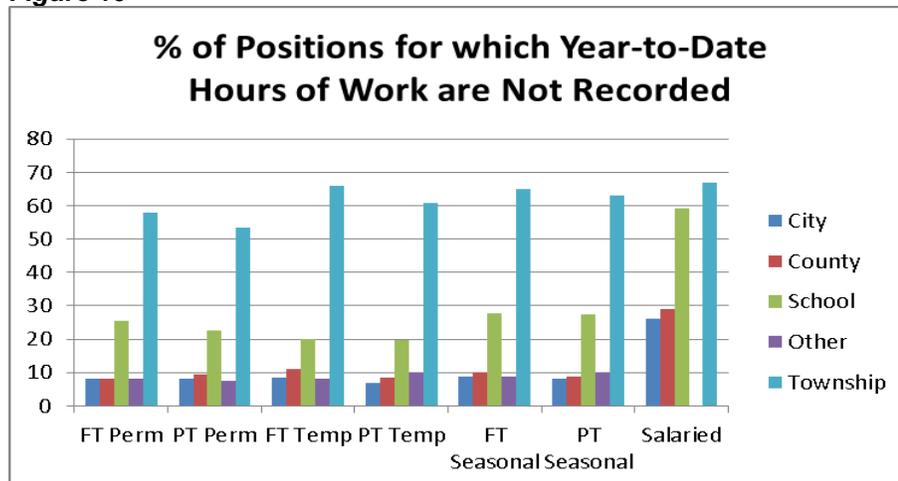
- I strongly support if the two-prong test comes after it is determined if the employee is permanent, temporary or seasonal. Still need to determine what classification substitute staff are. A sub could work all 9 months of the school year but there is no guarantee if they work 4 days a week or 1 day a month.

The survey revealed, however, that employers do not always record hours of work on a pay period or year-to-date basis for their employees. As shown in Figure 9, townships do not record work hours on more than half of their full- or part-time permanent or temporary employees. Schools do not record the data on an average of 23.8 percent of their full- or part-time employees. Cities, counties and other types of employers do not record the data on an average of 8-9 percent of their full- or part-time workers. These percentages increase slightly when the responses relating to recording accrued hours of work over a year are evaluated. See Figure 10.

**Figure 9**



**Figure 10**



Some employers have concerns about using annual hours for membership eligibility purposes as reflected in the following comments:

- We agree that hours per year would be an equitable way to determine eligibility; however, it would be impossible to administer. It would be hard to determine what an on-call employee's hours would be.
- At this point, our system does not currently calculate total number of hours as they are accumulated. I am not sure if this is something that could be changed.
- I think our system would have to be reprogrammed to meet your needs. I don't think our system has the accumulated hours. I like the idea of not monitoring on a monthly basis if they are eligible for PERA.
- In our system year-to-date amounts would be what was paid year to date, not worked or earned in the year.
- It would be difficult for counties to monitor 780 hours, what would be included, medical leave, personal leave, one year 800 hours -- the next year 640. This rule could never be defined enough for employers to monitor. Keep it simple!!
- The biggest problem I see is trying to keep track of subs and part-time employees. In a District where everything is done by one person, I feel it may make it more difficult than it already is to keep track of.
- The difficulty would be with our fairly high number of salaried employees. As we don't track hours how would we convert it into days or months.

In light of the number of employees for whom hours of work are not recorded in the payroll system, employers would need sufficient time to modify their systems before they could adequately provide hours of work to PERA. This option has unknown cost impacts for the employers that do not now record hours of work on a pay period and annual basis. In addition, PERA's recordkeeping systems and processes would require significant adjustments in order to factor in members' hours of work.

## Impact from Potential Changes

The Minnesota Legislature directed PERA to report on the actuarial impacts of potential changes to the current membership threshold. In response, the PERA actuary makes the following findings:

Actuarial Study 1: Increase monthly earnings threshold from \$425 to \$773.

A data file of 16,832 current active members who became members of the PERA General Plan between Fiscal Years 2002 and 2012 was provided to the actuary. Of those records, 964 were excluded due to data issues. It was determined that 4,200 of the remaining records would not have earned the \$773 threshold as of July 1, 2012, so those records were also excluded from the data set.

The financial impact to the plan from the 4200 fewer participants was negligible, meaning there was no change in the normal contribution rate of 6.84 percent of pay and no change in the total required contribution rate of 14.46 percent of pay.

Actuarial Study 2: Change membership determination to an 'hours worked' threshold.

Currently, most employers do not report to PERA the number of hours worked by each employee. The reporting fields were modified in 2001, in anticipation of prorating service credit based on hours worked in each month (that requirement was repealed in 2002 before implemented), and some employers had the capability of reporting hours worked so have been doing so since 2002. PERA provided a data file of 49,604 member records, with hours reported, to the actuary of which 49,517 were active as of July 1, 2012. The statistics of the members included in the study group are as follows:

	School	Non-School	Total
Members with hours reported – exceed threshold	10,183	34,991	45,174
Members with hours reported – did not exceed threshold	6	4,337	4,343
Total number of members with data available	10,189	39,328	49,517

Total number of members in July 1, 2012 valuation 139,330

% of membership data for which hours were available for the study 35.5%

The number of member records with hours reported that are recorded as not meeting the hourly thresholds proposed for school and non-school employees was 8.8 percent (4,343 out of 49,517) of the total number of records PERA provided to the actuary for this study. The actuary applied this same percentage to the total number of PERA members as a means of assessing the potential number of fewer members reported to PERA if the proposed hourly threshold were adopted.

The actuary found that assuming a total membership count of 8.8 percent less applied to the membership count of the PERA General Plan on July 1, 2012, indicates a 1.9 percent lower actuarial accrued liability would be expected. The normal cost as a percent of pay would decrease by 0.01 percent (6.84 percent to 6.83 percent), and the total required contribution would increase 0.03 percent (14.46 percent to 14.49 percent), for a net increase in contributions of 0.02 percent of pay.

A complete copy of the actuarial analysis using the higher earnings threshold and suggested hours worked threshold can be found in the appendix. The other two options presented as part of the study were not included in the analysis PERA asked the actuary to prepare.

### Impact on Individual Public Employees

As noted above, it was determined that 15,868 members would have had fewer months of service credited if a \$773 monthly earnings threshold had been implemented in 2002, with

4200 individuals not having become members at all. The remaining 11,668 members who would have had a later entry date into the plan would have, on average, 19.71 fewer months of service credit on which their eventual retirement benefits would be based. For a normal retirement benefit payable at the end of fiscal year 2012, assuming a single life benefit payable at age 66, the loss of one year and eight months of service credit would result in the following equivalent loss of benefits. For purposes of the study, we used two different average salaries to demonstrate the impact on a member's benefit:

Average Salary	Lower Present Value	Lower Lifetime Income	Lower Annual Income	Lower Single Life Monthly Annuity
\$34,000	\$10,700	\$21,661	\$963	\$80
\$16,000	\$5,300	\$10,830	\$482	\$40

We did an analysis of the data provided to the actuary and found that 9,757 members would have had a membership change if a \$525 monthly earnings threshold had been implemented in 2002. Of the data set reviewed, 2,052 individuals would not have become members at all. The remaining 7,705 individuals who would have entered the plan later would have, on average, 11.17 fewer months of service credit. A normal retirement benefit payable at the end of fiscal year 2012, with service credit included in the calculation of the benefit missing 11 months due to the later enrollment in the plan, and assuming the average salaries shown, would have been less by the following amounts:

Average Salary	Lower Present Value	Lower Lifetime Income	Lower Annual Income	Lower Single Life Monthly Annuity
\$34,000	\$5,884	\$11,912	\$529	\$44
\$16,000	\$2,942	\$5,956	\$264	\$22

## Other Considerations

There are additional policies or transitional issues to consider as part of changing the membership threshold. These include:

1. Potential grandfathering of current members

Regardless of the option selected for the future, the new eligibility requirement should be applied to new employees hired after the effective date of the legislation and to current employees who are not members of the plan on the effective date of the legislation. Employees who are members of a DBP on the effective date of any law change would keep their PERA coverage and would not need to meet the newly enacted membership criteria.

## 2. Written disclosure to employees exempt from membership

As noted earlier, PERA staff found that about 17 percent of the workers employed in 2011 with a local unit of government or a school district were exempt from PERA membership because their earnings were too low or their employment was temporary or seasonal. PERA staff concluded that employers should be required to give a notice of exclusion from PERA membership to employees who are excluded for one of these three reasons. A notice of exclusion would document the employer's decision and would inform the employee of the reason for the absence of PERA coverage. This disclosure may reduce the number of omitted deduction situations.

## 3. Implementation time frames

Remaining with a membership test that uses earnings should not require significant system programming changes for employers or PERA. Staff concluded that PERA could implement an annual earnings threshold if given six months in which to do so. Employers would need sufficient time, possibly one year or more, to modify their payroll systems if a decision is made to move to a threshold based on hours of work.

## Conclusion

The objective of this study was to identify retirement plan membership eligibility standards and analyze viable options. PERA staff discussed each option with respect to the goals established at the onset of this study (listed below). PERA staff concluded that if the PERA membership threshold is changed, Option #3, subject to discussion of the specific initial annual salary thresholds to be applied, best meets those goals.

1. Maintain membership base at its current level or at least do not significantly reduce it
  - The proposed annual salary threshold (\$6300 or \$4600 for school-term employees) is based on an average monthly salary of \$525, which represents an increase of only 25 percent over the current salary of \$425 a month, would not appear to cause significant reductions in new enrollments.
  - This option includes the reporting of all salary for employees who hold multiple positions, some of which is currently excluded (e.g. coaching pay). This has the potential to increase new memberships and help offset some of the membership decreases expected by moving to an annual threshold.
2. Establish rules that will maintain themselves (not require legislative up-keep)
  - The annual threshold would be raised in \$1200 increments when the cumulative increases in the CPI-W reach or exceed \$100.
3. Provide increased flexibility for employers
  - Employers would have the ability to vary the work schedule of certain part-time employees with membership being triggered only when the annual compensation paid to the employees exceeds the established threshold.

Earnings in a single month would no longer drive membership enrollment in these situations.

4. Equalize position coverage throughout the state – fairness in pension coverage
  - Using annual salary does not equalize coverage to the extent that annual hours of work would; however, an annual salary threshold does a better job at equalizing pension coverage for part-time employees than the current threshold which uses earnings in a single month.
  - Moving from a monthly to an annual threshold would equalize the coverage of new members through the requirement that the average monthly salary must *consistently* exceed a set amount, rather than only once.
5. Ensure administrative ease
  - While this option moves to an annual earnings threshold, employers track that data as part of their normal payroll and tax reporting processes.
  - The PERA survey says that 70 percent of the responding employers have a high degree of certainty about the hours that most new hires will work in a 12-month period; therefore, the employers would also be able to determine the average annual wages to be paid to their new employees.
  - Moving to an annual salary threshold would alleviate the burden some employers expressed in having to frequently monitor employees whose salary is always close to the current monthly threshold.
  - Employers will no longer have to suppress the reporting of some of the salary earned by employees holding multiple positions, and PERA staff will no longer expend time and effort verifying the eligibility of the salary.
6. Ensure ease of understanding
  - This option removes the definitions of temporary and seasonal from PERA law – two terms that are somewhat difficult for employers to apply.
  - It should be fairly easy for all stakeholders to understand how an employee’s employment status and earnings in a year are used to determine PERA eligibility.

PERA staff is prepared to discuss potential changes with stakeholders and others and to prepare legislation covering the final direction, if established.

**APPENDIX A**

PERA staff reviewed 50 retirement systems that cover public and/or state employees and found that 86 percent of the systems use some measure of employment hours to determine membership eligibility.

*Table 1*

Criteria Used for Member Eligibility	Number of Retirement Systems	% of All Systems Reviewed
Hours for a specified period	33	66%
Employment Status (FT, PT as defined by the employer)	10	20%
Covers All Positions	7	14%

**Systems Using an Hours Threshold**

The 33 systems that use a minimum number of hours of work to determine member eligibility fall into three groups – those with minimum hours per week, per year, or per month as described below.

**Hours per Week**

Eighteen systems require a minimum number of scheduled work hours per week with 67 percent of them having 20 hours as their membership threshold. (Table 2) Most of these systems also require that the position expect the employee to be scheduled to work the weekly minimum hours for a specified length of time, i.e. for a full year or for the school term; but a few systems have other durations such as for any 20 weeks, 5 consecutive months, or 6 or 9 months out of 12. None of these systems set a different hour threshold for positions in school districts.

*Table 2 – Systems requiring a minimum number of work hours per week*

Hours Per Week	No. of Systems
15	2
20	12
30	1
32	1
35	2

As for creditable service, 39 percent of these systems give one service credit for each month in which contributions are made. On the other hand, 61 percent reduce the service credits that are granted to members who do not meet certain requirements, such as work a normal full-time schedule, a set number of annual work hours (such as 1000, 1560 or 1720), or earn the normal level of pay for the position.

**Hours per Year**

Eleven retirement systems cover only positions that require a minimum number of work hours per year with 82 percent having a threshold set at 1,000 hours or above. (Table 3) Two systems set a lower threshold for school districts to allow for the summer gap in employment.

Five of the eleven systems that use hour per year as their membership threshold prorate service credits. Three systems prorate credits in direct proportion to a full-time schedule, one system prorates credit based on the reported hours worked versus the standard hours for the position, and one gives a month of credit if the member receives at least half of his/her normal monthly salary.

**Table 3 – Systems requiring a minimum number of work hours per year**

Hours Per Year	No. of Systems
500	1
600	1
1000	5*
1040	3
1200	1*
*Use a lower number for school districts (630 & 880 respectively)	

### Hours per Month

Only four retirement systems use a monthly hours' threshold with the minimum hours per month ranging from 50 to 100. (Table 4) The one system that uses 100 hours has a lower number (80) for school districts. Three systems require the minimum hours for a specific period (i.e., 9 months, 5 or more months for two consecutive years, or average hours per month over a calendar year). All but one system prorates service credits and each system uses a different basis for determining when a month of credit is earned.

**Table 4 – Systems requiring a minimum number of hours per month**

Hours Per Month	No. of Systems
50	1
70	1
80	1
100	1*
*Sets a lower minimum (80) for schools	

### Systems Using Employment Status

Ten retirement systems provide coverage only to employees who are defined as full-time and/or part-time by their employers. Seven of these systems cover both full- and part-time positions. One system covers only employees who are regularly employed on a full-time basis. Two systems mandate coverage for full-time positions and provide optional coverage for part-time positions. Half of these systems prorate service credit and each system uses a different basis for determining when a month of credit is earned.

### Systems that Generally Cover All Positions

Seven retirement systems, one of which is the Minnesota State Retirement System, generally cover all positions. One system has a waiting period meaning that all employees who complete six months of employment are then enrolled in the plan.

All of these systems prorate service credits. Two systems prorate service credit if the member does not have earnings that meet a set amount per month. The remaining systems use hours of work to determine service credits (i.e. ratio to full-time employment, ratio to 35 hours a

week, ratio to 1020 hours a fiscal year, when 600 hours or more of service is rendered in a calendar year).

### **Systems that Include the Salary in their Membership Criteria**

The PERA review uncovered only two systems that include an employee's salary as part of the membership criteria as summarized below.

- Membership in the Oklahoma Public Employees Retirement System is mandatory for employees who hold a permanent position (not seasonal or temporary position) that requires at least 1,000 hours of work per year (within 12 months after the first day of employment) and the salary of a full-time employee must be equal to or greater than the minimum wage.
- The Retirement System of Alabama (RSA) requires participation in the Employees Retirement System (ERS) if a person is employed in a position in a non-temporary capacity on at least a one-half time basis earning at least the federal minimum wage.

PERA staff also found that prior to June 28, 2011 the New Jersey Public Employees Retirement System had a salary threshold for membership and replaced it with an hours-of-work requirement. This system now requires employees to work at least 32 hours per week, (35 hours for State employees) to be eligible to join the plan. Previously, employees were eligible to enroll if they had annual earnings of \$7,800 for 2012 (\$7,700 for 2010 and 2011; \$7,500 for 2008 and 2009).

## APPENDIX B – HISTORICAL CPI-W

Historical Midwest Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) figures since 1988 and corresponding theoretical PERA salary thresholds.

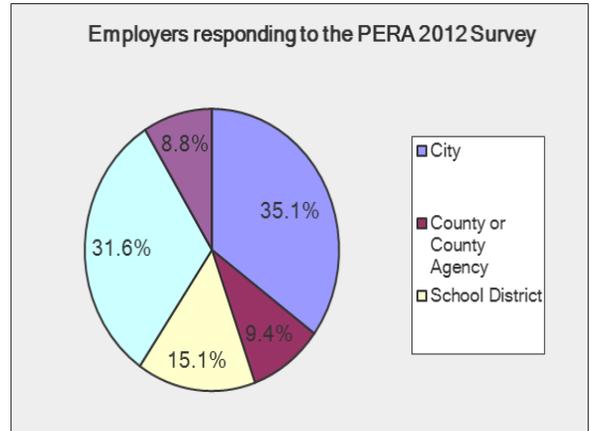
YEAR	% CPI-W	LIMIT	% CPI –W - MW	LIMIT
1988	4.0	\$425	3.8	\$425
1989	4.8	\$445	4.6	\$445
1990	5.2	\$469	4.9	\$466
1991	4.1	\$488	3.8	\$484
1992	2.9	\$502	2.6	\$497
1993	2.8	\$516	2.8	\$511
1994	2.5	\$529	2.8	\$525
1995	2.9	\$544	3.0	\$541
1996	2.9	\$560	3.0	\$557
1997	2.3	\$573	2.3	\$570
1998	1.3	\$580	1.5	\$578
1999	2.2	\$593	2.3	\$591
2000	3.5	\$614	3.7	\$613
2001	2.7	\$630	2.6	\$629
2002	1.4	\$639	0.9	\$635
2003	2.2	\$653	1.8	\$646
2004	2.6	\$670	2.4	\$662
2005	3.5	\$694	3.4	\$684
2006	3.2	\$716	2.4	\$701
2007	2.9	\$737	2.7	\$720
2008	4.1	\$767	3.9	\$748
2009	-0.7	\$762	-0.9	\$741
2010	2.1	\$778	2.4	\$759
2011	3.6	\$806	3.7	\$787
2012	2.1	\$822	2.1	\$803

**APPENDIX C – SURVEY OF PARTICIPATING EMPLOYERS**

**Membership Eligibility Survey of Employers 2012**

**Respondents by type of governmental employer.**

Answer Options	Response Percent	Response Count
City	35.1%	369
County or County Agency	9.4%	99
School District	15.1%	159
Township	31.6%	332
Other	8.8%	93
Other (please specify)		80
<i>answered question</i>		<b>1052</b>
<i>skipped question</i>		<b>1</b>

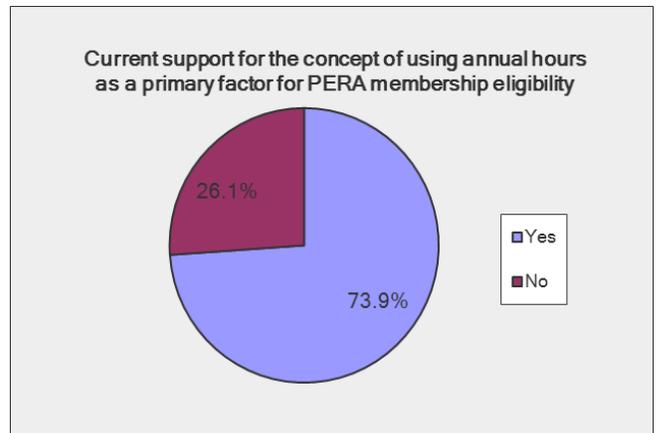


**The position level of the respondent**

Answer Options	Response Percent	Response Count
Business/Finance Manager	20.2%	198
HR Director	4.9%	48
Payroll Manager	26.1%	256
Other	48.8%	478
Other (please specify)		517
<i>answered question</i>		<b>980</b>
<i>skipped question</i>		<b>73</b>

**Employers have previously been highly supportive of the concept of using employee’s hours of work as PERA’s membership threshold. Do you currently support the concept of using annual hours, rather than monthly earnings, as a primary factor to determine future eligibility for PERA’s Defined Benefit Plans?**

Answer Options	Response Percent	Response Count
Yes	73.9%	730
No	26.1%	258
<i>answered question</i>		<b>988</b>
<i>skipped question</i>		<b>65</b>



**PERA Membership Eligibility Survey Continued**

The following is a policy of Minnesota's Commission on Pensions and Retirement:

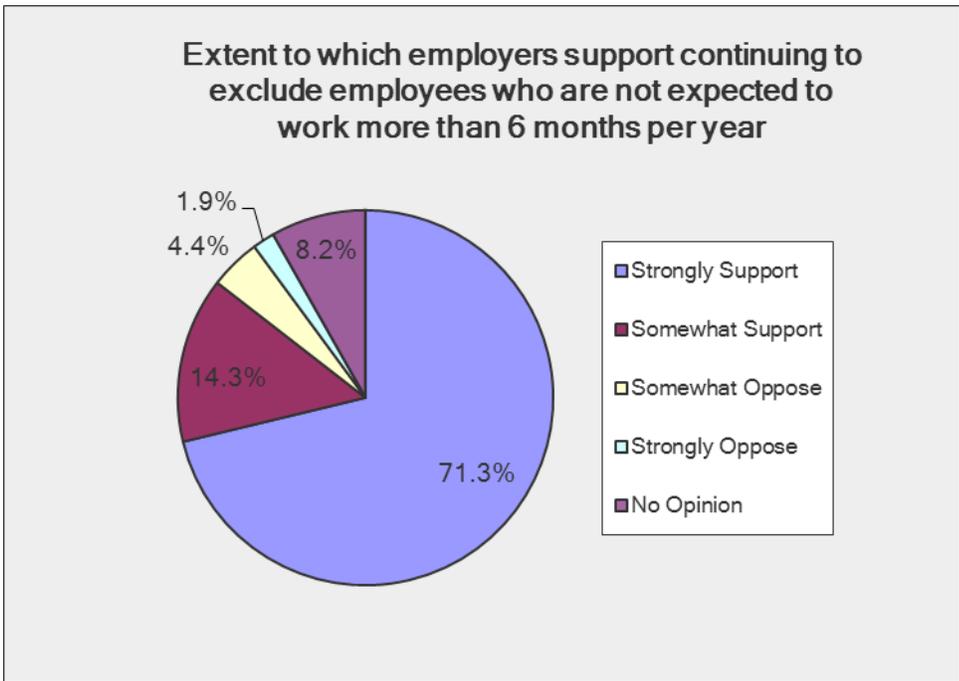
"To the extent possible, membership in a public pension plan should be mandatory for the personnel employed on a recurring or regular basis"

The policy does not define "recurring" or "regular" basis and PERA would like to try to define those terms in its future membership criteria. PERA's history reflects that the Legislature has intended for these terms to NOT include temporary or seasonal employees. (PERA's exclusion of these positions dates back to 1957.)

Currently, temporary workers are excluded from PERA if their positions are predetermined to be 6 months or less, and seasonal employees are excluded if their positions are limited to 185 consecutive calendar days in each year.

To what degree do you support continuing to exclude employees who are NOT expected to work more than 6 months per year?

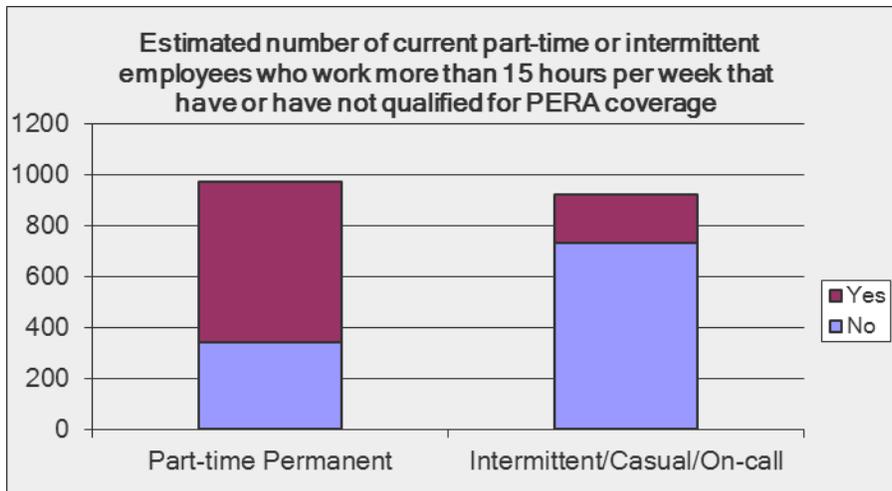
Answer Options	Response Percent	Response Count
Strongly Support	71.3%	729
Somewhat Support	14.3%	146
Somewhat Oppose	4.4%	45
Strongly Oppose	1.9%	19
No Opinion	8.2%	84
<i>answered question</i>		<b>1023</b>
<i>skipped question</i>		<b>30</b>



PERA Membership Eligibility Survey Continued

Historically, PERA has also excluded some level of part-time employment from membership. Thinking about your CURRENT PART-TIME OR INTERMITTENT EMPLOYEES, would you say that those who work more than 15 hours per week have qualified for PERA coverage?

Answer Options	Yes	No	Response Count
Part-time Permanent	630	342	972
Intermittent/Casual/On-call	189	734	923
	<i>answered question</i>		<b>988</b>
	<i>skipped question</i>		<b>65</b>



For each classification below, please identify whether the employees holding it must record in your payroll system both their regular hours of work AND their overtime hours on a pay period basis.

Answer Options	Our System has Regular and Overtime Hours Separately	Our System has Combined Hours	Our System does not Include Hours Worked	Response Count
Full-time Permanent	565	134	137	836
Part-time Permanent	555	178	141	874
Full-time Temporary	487	104	134	725
Part-time Temporary	512	129	133	774
Full-time Seasonal	471	99	148	718
Part-time Seasonal	503	127	145	775
Salaried Employees	311	173	307	791
Contract Employees	224	87	375	686
	<i>answered question</i>			<b>969</b>
	<i>skipped question</i>			<b>84</b>

## PERA Membership Eligibility Survey Continued

For each classification below, identify whether or not your payroll or personnel system contains the accumulative year-to-date regular hours worked and overtime hours worked for the noted employees.

Answer Options	Our System has Total Regular and Overtime Hours Separately	Our System has Total Combined Hours	Our System does not Include Total Hours	Response Count
Full-time Permanent	513	140	187	840
Part-time Permanent	507	171	204	882
Full-time Temporary	442	114	174	730
Part-time Temporary	463	135	181	779
Full-time Seasonal	426	112	179	717
Part-time Seasonal	451	130	192	773
Salaried Employees	285	167	328	780
Contract Employees	196	87	401	684
<i>answered question</i>				<b>968</b>
<i>skipped question</i>				<b>85</b>

On average, what percentage of positions filled each year would you estimate that you have NO expectation of the number of hours an employee will work in a 12-month period?

Answer Options	Response Percent	Response Count
0%	28.7%	270
1-10%	30.1%	283
11-15%	6.9%	65
16-20%	3.6%	34
21-30%	4.7%	44
31-50%	5.3%	50
51-70%	4.0%	38
71-90%	16.7%	157
<i>answered question</i>		<b>941</b>
<i>skipped question</i>		<b>112</b>

**PERA Membership Eligibility Survey Continued**

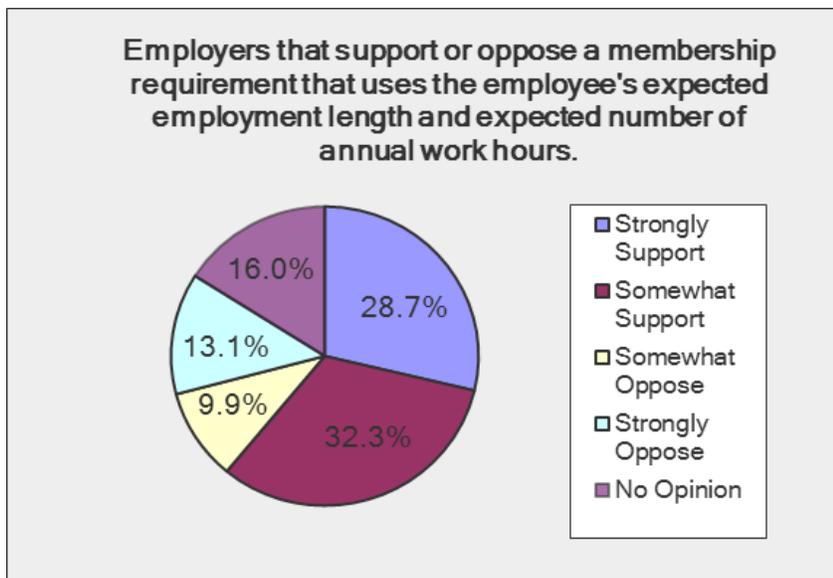
PERA is considering requiring membership when a new employee meets the following two-prong test:

1. The person is expected to work for more than 6 months per year, and
2. The person is expected to work more than 780 hours annually; or for school district employees hired to work during the school term only, the person is expected to work more than 525 hours.  
(The threshold is equivalent to working just over three hours per day in a calendar or school year.)

If the two-prong test is met: An employee who, at time of hire, is expected to meet the test would begin contributing to a PERA Defined Benefit Plan immediately upon his or her date of hire. (Note: Under the proposed rule, an employee’s hours of work in all positions for a single employer would be combined when determining eligibility. Currently, an employee’s earnings with a single employer from a temporary or seasonal position are not combined with that person’s earnings from a permanent part-time position.)

If the two-prong test is not met: An employee who does not meet the test would not be enrolled and the employer would need to monitor the employment to determine if the person would qualify for coverage later. (PERA will develop details about the monitoring process if this proposal would become law.) Considering the specifics of this proposal at this time, to what degree would you support replacing the current monthly salary threshold with this two-prong test?

Answer Options	Response Percent	Response Count
Strongly Support	28.7%	274
Somewhat Support	32.3%	308
Somewhat Oppose	9.9%	94
Strongly Oppose	13.1%	125
No Opinion	16.0%	153
<i>answered question</i>		<b>954</b>
<i>skipped question</i>		<b>99</b>



## APPENDIX D

January 11, 2013

Ms. Mary Most Vanek  
Executive Director  
Public Employees Retirement Association of MN  
60 Empire Drive, Suite 200  
Saint Paul, Minnesota 55103

**Re: Supplemental Actuarial Calculations – PERA General Eligibility**

Dear Mary:

Enclosed are two supplemental actuarial valuations for proposed eligibility changes to the Public Employees Retirement Association of MN General Employees Retirement Plan (PERA General). To the best of our knowledge and belief, within the confines of the limited data that is available, the calculations were completed in accordance with the requirements of Minnesota Statutes, Section 356.215, and the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by PERA, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries.

The actuaries issuing this report are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

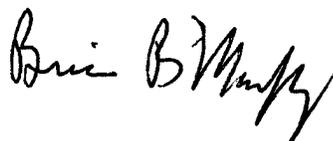
The signing actuaries are independent of the plan sponsor.

Please call if you have any questions regarding the calculations enclosed.

Sincerely,



Bonita J. Wurst, ASA, MAAA



Brian B. Murphy, FSA, MAAA

BJW/BBM:rmn  
Enclosures

# MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN

## EXECUTIVE SUMMARY

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**Requested By:** Ms. Mary Most Vanek, Executive Director  
**Date:** January 11, 2013  
**Submitted By:** Bonita J. Wurst, ASA, MAAA and Brian B. Murphy, FSA, MAAA  
Gabriel, Roeder, Smith & Company

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This report contains an actuarial valuation of proposed changes in membership eligibility for employees of the Minnesota General Employees Retirement Plan. The 2012 Omnibus Retirement Bill included a requirement that PERA “shall: (1) identify the options for revising the membership threshold salary under Minnesota Statutes, section 353.01, subdivisions 2a and 2b, for membership in a retirement plan administered by the association; (2) determine the actuarial impact on the retirement plans administered by the association, the financial impact on participating employers, and the financial impact on prospective public employees of each option; and (3) formulate the recommendations for structuring each identified option.”

The two alternative membership eligibility options for which we have completed actuarial analysis were identified by PERA, and are described below.

- Study 1: Eligibility threshold is increased from \$425 to \$773 in any month.
- Study 2: Eligibility threshold is changed from \$425 in any month to 780 hours in any year (525 hours if employed by a school)

Please see complete descriptions within this report.

Please note that determining the financial impact of each option on participating employers and on prospective public employees was out of scope and was not performed.

**The date of the valuation was June 30, 2012.** This means that the results of the supplemental valuations indicate what the June 30, 2012 valuation would have shown if the proposed benefit changes had been in effect on that date. Supplemental valuations do **not** predict the result of future actuarial valuations. Rather, supplemental valuations give an indication of the probable long-term cost of the **benefit change only** without comment on the complete end result of the future valuations.

It is our understanding that benefits for current inactive or retired members would not be affected by the proposed changes. They were excluded from this study.

## **MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN EXECUTIVE SUMMARY (CONCLUSION)**

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Unless noted otherwise, actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the PERA General Plan on the valuation date as prescribed by Minnesota Statutes Section 356.215, the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement (LCPR) and the Trustees for the June 30, 2012 PERA General Valuation. In particular:

- The assumed rate of interest was 8.0% pre-retirement and 7.0% post-retirement for the period beginning July 1, 2012 and ending June 30, 2017, and 8.5% pre-retirement and 7.5% post-retirement thereafter. Where applicable, payment of the 1.0% annual post-retirement benefit increases was accounted for by using a 7.5% post-retirement assumption (7.0% for the years 2012 to 2017), as required by statute.
- Payroll was assumed to increase 3.75% per year.
- The Unfunded Actuarial Accrued Liability was amortized over 19 years.

Please see the *General Employees Retirement Plan Actuarial Valuation Report as of July 1, 2012* dated November 2012 for a detailed description of the actuarial assumptions, methods and plan provisions that are not described in this report.

## MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN CALCULATION AS OF JUNE 30, 2012

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A brief summary of the data, as of June 30, 2012, used in this valuation is presented below.

Active Members				Retired Members		Deferred Vested Members
Number	Covered Payroll	Average in Years		Number	Annual Benefits	Number
		Age	Service			
139,330	\$5,201,524,000	47.3	11.1	75,535	\$1,015,249,000	44,354

The enclosed cost studies incorporate the baseline actuarial results shown below. Please see the *General Employees Retirement Plan Actuarial Valuation Report as of July 1, 2012* dated November 2012 for a detailed description of these baseline results.

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### Actuarial Statement

The baseline results as of July 1, 2012 are shown below:

	Required Contribution (Percent of Pay)			
	Normal Cost	Supplemental	Expenses	Total
Baseline results	6.84%	7.43%	0.19%	14.46%

The July 1, 2012 funding ratio is 73.5%.

**MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN  
STUDY 1– INCREASE EARNINGS THRESHOLD  
CALCULATION AS OF JUNE 30, 2012**

---

**PRESENT PROVISIONS:** Employees of participating employers are eligible for participation in the PERA General plan once the employee earns \$425 in any month. Membership continues even if the salary is less than \$425 in a subsequent month.

**PROPOSED PROVISIONS:** The earnings threshold would increase from \$425 in any month to \$773.

PERA provided us with a data file of 16,832 current active members of PERA General who became PERA members in 2002 or later that either:

- Would have entered the Plan at a later date if the \$773 earnings threshold had been in place (since 2002)
- Would not have entered the Plan yet had the \$773 earnings threshold been in place (since 2002)

From the data file of 16,832 employees that PERA provided, we confirmed that all 16,832 were active members in PERA as of July 1, 2012. Of these 16,832 members, 62 were duplicate records and 902 records had no change in service; therefore, 15,868 members are included in the study. Of these 15,868 members, 4,200 members would not have entered the Plan by July 1, 2012 had the increase in earnings threshold been in place. The remaining 11,668 members would have entered the Plan later than they actually did, and would have earned less service on July 1, 2012 had the new earnings threshold been in place.

The participant statistics for this group are shown below:

	<u>Study</u>	<u>Valuation</u>
Active Members	135,130	139,330
Average age	47.4	47.3
Average service	11.4	11.1
Average projected earnings	38,377	37,332

**MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN  
STUDY 1– INCREASE EARNINGS THRESHOLD  
CALCULATION AS OF JUNE 30, 2012**

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**Actuarial Statement**

The financial effect of the proposal is shown below:

<i>Dollars in Thousands</i>	<b>Baseline \$425 Threshold</b>	<b>Proposed \$773 Threshold</b>	<b>Difference</b>
Number of active members	139,330	135,130	(4,200)
Active actuarial accrued liability	\$ 7,813,875	\$ 7,797,256	\$ (16,619)
Total actuarial accrued liability	\$ 18,598,897	\$ 18,582,278	\$ (16,619)
Funding ratio	73.45%	73.52%	0.07%
Normal cost, \$ amount	\$ 355,782	\$ 354,765	\$ (1,017)
Projected valuation earnings	\$ 5,201,524	\$ 5,185,852	\$ (15,672)
Normal cost, % of pay	6.84%	6.84%	0.00%
Required contribution, % of pay	14.46%	14.46%	0.00%
Projected employee contributions	\$ 325,113	\$ 324,134	\$ (979)
Projected employer contributions	\$ 377,139	\$ 376,003	\$ (1,136)

The data provided by PERA for this study is limited to members who are currently active and became eligible during the past ten years only. The analysis does not incorporate any potential membership changes for actives who have more than ten years of service in PERA General or members who are currently inactive, nor does it contemplate the demographic profile of future members. Actual results could be significantly different.

**MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN**  
**STUDY 2 – CHANGE TO HOURS THRESHOLD**  
**CALCULATION AS OF JUNE 30, 2012**

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**PRESENT PROVISIONS:** Employees of participating employers are eligible for participation in the PERA General plan once the employee earns \$425 in any month. Membership continues even if the salary is less than \$425 in a subsequent month.

**PROPOSED PROVISIONS:** Employees are eligible for membership in the PERA General Plan once the employee works 780 hours in a year (525 for school employees).

Currently, most employers do not report hours to PERA. For this study, PERA provided us with a file of members of PERA General in 2011 that either:

- Had hours reported at least 80% of the time but did not exceed 780 hours in 2011 (525 if employed by a school)
- Had hours reported at least 80% of the time and did exceed 780 hours in 2011 (525 if employed by a school)

From the data files of 49,604 employees that PERA provided, we identified 49,517 active members in PERA as of July 1, 2012. The remaining 87 employees were not included in our 2012 valuation as active members (perhaps due to termination of employment) and were excluded from this study.

The participant statistics for this group are shown below:

	<b>School</b>	<b>Non-School</b>	<b>Total</b>
Members with hours reported - exceed threshold	10,183	34,991	45,174
Members with hours reported - did not exceed threshold	6	4,337	4,343
<b>Total members with hours data available</b>	<b>10,189</b>	<b>39,328</b>	<b>49,517</b>
<b>Total from July 1, 2012 valuation</b>			<b>139,330</b>
<i>% membership data utilized for study</i>			<i>35.5%</i>

	<b>Study</b>	<b>Valuation</b>
Count	49,517	139,330
Average age	47.7	47.3
Average service	13.1	11.1
Average projected earnings	47,230	37,332

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The actual cost savings will ultimately depend on how similar the study group is to the total membership base used in the valuation. For this study, we assumed the data used for this study was an accurate representation of the entire membership group.

**Actuarial Statement**

We determined the actuarial results of the study group under current plan provisions, and then determined the actuarial results of the study group under the proposal (i.e. members under the hours threshold were excluded). The financial effect of the proposal on the study group is shown below:

<i>Dollars in Thousands</i>	<b>Study Group</b>		
	<b>Excluding</b>		
	<b>Members under</b>		
	<b>Baseline</b>	<b>Hours Threshold</b>	<b>Change</b>
Number of active members	49,517	45,174	-8.8%
Active actuarial accrued liability	\$ 3,731,494	\$ 3,662,010	-1.9%
Normal cost, \$ amount	\$ 155,774	\$ 150,053	-3.7%
Projected valuation earnings	\$ 2,338,699	\$ 2,256,651	-3.5%

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If we apply the changes observed in the study group (increase/decrease percentage) to the entire PERA membership, the estimated financial effect on PERA due to the membership eligibility change is shown below.

<i>Dollars in Thousands</i>	<b>Estimated PERA General Valuation Results</b>		
	<b>Excluding</b>		
	<b>Members under</b>		
	<b>Baseline</b>	<b>Hours Threshold</b>	<b>Difference</b>
Number of active members	139,330	127,110	(12,220)
Active actuarial accrued liability	\$ 7,813,875	\$ 7,668,373	\$ (145,502)
Total actuarial accrued liability	\$ 18,598,897	\$ 18,453,395	\$ (145,502)
Funding ratio	73.45%	74.03%	0.58%
Normal cost, \$ amount	\$ 355,782	\$ 342,716	\$ (13,066)
Projected valuation earnings	\$ 5,201,524	\$ 5,019,040	\$ (182,484)
Normal cost, % of pay	6.84%	6.83%	-0.01%
Required contribution*, % of pay	14.46%	14.49%	0.03%
Projected employee contributions	\$ 325,113	\$ 313,708	\$ (11,405)
Projected employer contributions	\$ 377,139	\$ 363,909	\$ (13,230)

\* Supplemental contribution increases as a % of payroll but decreases as a \$ amount due to a decrease in projected payroll.

The data provided by PERA for this study is limited to data from employers who reported hours to PERA during 2011. The analysis does not incorporate any potential membership changes for actives who would have been excluded based on hours in other years or members who are currently inactive, nor does it contemplate the demographic profile of future members. Results for members with unknown hours were estimated assuming similar results to those members with reported hours. Actual results could be significantly different.

# MINNESOTA GENERAL EMPLOYEES RETIREMENT PLAN

## CALCULATION AS OF JUNE 30, 2012

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### Comments

**Comment 1** — The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon plan provisions that are outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

**Comment 2** — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

**Comment 3** — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

**Comment 4** — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

**Comment 5** — This report is intended to describe the financial effect of the proposed eligibility changes on the General Employees Retirement Plan. Except as otherwise noted, potential effects on other benefit plans were not considered.

**Comment 6** — The probabilities of retirement or withdrawal were not adjusted in connection with this proposal. If members exit the plan differently than our assumptions, as a result of this membership change, then the cost of the change will be different.

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**Comments (Continued)**

**Comment 7** — The allowances for combined service annuities were not adjusted in connection with this proposal. Currently, liabilities for active members are increased by 0.80% and liabilities for former members are increased by 60.0% to account for the effect of some participants having eligibility for a Combined Service Annuity. If Combined Service Annuity experience is different than our assumptions, as a result of this membership change, then the cost of the change will be different.

**Comment 8** — The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions about future events (which may or may not materialize). Please note that actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives). As a result, the cost impact of a benefit change may fluctuate over time, as the demographics of the group changes.

**Comment 9** — In the event the PERA General Plan becomes 90% funded on a market value of assets basis, post-retirement benefit increases will change from inflation up to 1.0% to 2.5%. For purposes of this valuation it was assumed that the post-retirement benefit increase will remain at the reduced level of 1.0% indefinitely, consistent with recent valuations of the PERA General Plan. If the plan does become 90% funded in the future, the liability for these retirees will substantially increase from what is presented in this report.

**Comment 10** — The State's actuary has provided guidance on the preferred method for valuing the select and ultimate discount rate changes effective with the July 1, 2012 valuation. The method includes a process that develops a single effective interest rate that is the mathematical equivalent of the select and ultimate discount rate structure. We have estimated this effective interest rate to be 8.34%. For the purposes of these studies, we have assumed this effective rate would be unchanged.

**Comment 11** — Statutes require the use of a post-retirement discount rate of 7.5% (7.0% for the years 2012 to 2017) to account for the annual post-retirement benefit increase of 1.0%. Mathematically, this assumption funds a post-retirement benefit increase of 0.9% ( $1.085/1.075 = 1.009$ ;  $1.080/1.070 = 1.009$ ) instead of 1.0%.

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**Comments (Concluded)**

**Comment 12** — We have provided this analysis in the same format as that used when plan changes are considered by the Board of Trustees. For any legislative proposals, it may be necessary to follow up with a more in-depth analysis to comply with the Standards for Actuarial Work. We will provide the additional information upon request.

**Comment 13** — A review of these proposals for compliance with federal, state, or local law or regulation was out of scope and not performed.