

NDPERS BOARD SPECIAL MEETING

Agenda

Location:
ND Attorney General's Office
Conference Room
17th Floor, State Capitol
Bismarck, ND

October 11, 2016

Time: 8:30 a.m.

- I. Taxability of Wellness Benefit – Sparb (Board Action)
- II. Highway Patrol Validation Results – Sharon (Information)
- III. Dental/Vision Open Enrollment – Rebecca (Board Action)
- IV. Sanford Health Plan Implementation – Sparb

Any individual requiring an auxiliary aid or service must contact the NDPERS ADA Coordinator at 328-3900, at least 5 business days before the scheduled meeting.



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Memorandum

TO: PERS Board
FROM: Sparb
DATE: October 5, 2016
SUBJECT: Taxability of Wellness Benefit

At the last Board meeting we discussed the IRS information on the taxability of wellness benefits (see attached September Board memo). It was noted that based upon the most current advice, our present wellness program benefit of \$250 is taxable. We also reviewed with you information from our meetings with our two largest payroll system administrators that indicated that it would very difficult, to impossible, to do the tax reporting on the payroll system given the present program timelines and other considerations. After discussion the Board asked staff to develop information on the effects of maintaining/eliminating the program and identify options to redirect the benefit in non taxable ways and to review them at a special Board meeting along with a suggested plan to address this situation.

Effects of Eliminating the Incentive or Maintaining the Benefit

1. In order to maintain the program for active members our participating employers must be able to do the tax reporting.
2. It seems this is difficult to impossible; therefore, we are offering a program that can not be supported by employers, thereby putting them in a very difficult position that could expose them to penalties.
3. If reporting was possible, the tax implications to the member would be seen as a reduction in the take home pay of members, which would be confusing and distressing.
4. If the program is eliminated, it will be very frustrating for our members who utilize this option. Therefore, it will be important to make sure we communicate why we took this action and provide them an opportunity to "buy into" a new program.

Redirecting or Reducing the \$250 Wellness Benefit Options

Attached is a matrix of options for the Board's consideration. Identified for each option are pros and cons as well as some comments. Overall a couple of observations:

1. The number of options is extensive.
2. There are pros and cons to most options.
3. It is difficult to effectively sort through all the options in this limited timeline.
4. The clearest option at this point is option #1 which would discontinue the \$250 wellness benefit, but continue to provide the on-line resource for members.

Suggested Plan of Action

1. That as of January 1, we discontinue providing the \$250 incentive due to the tax implications for our members and employers.
2. That we ask our members for ideas that might motivate wellness in the letter we send them discussing that the program will be terminating.
3. That we continue to offer Option #1, the on-line resource, to all members.
4. That we sort through the list of other options, as well as member suggestions, and narrow those to around three or four by the first of the year.
5. We share the list with our wellness coordinators and members and ask them which one they favor.
6. We determine at the April or May meeting which option to implement on July 1, 2017.
7. By the end of October 2016, we inform our employers and members of the decision to suspend the benefit as of January 1, 2017 and our plan of action for evaluating options for the program.

Other Items

Sanford has determined that the cost of the \$250 wellness benefit is approximately \$1.96 per member per month. In recognition of this, we will need to update our contract. Two options on how to go forward are:

1. Reduce our premiums by this amount on January 1, 2017 and amend the contract accordingly.
2. Instead of reducing premiums immediately, have this added to the close out procedure in the contract and not make it subject to the gain/loss procedure.

Board Action Requested

- 1. Determine how to move forward with the \$250 wellness benefit.**
- 2. If we stop it on January 1, determine how to recognize this in our contracts or close out process.**



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Memorandum

TO: PERS Board

FROM: Rebecca

DATE: September 14, 2016

SUBJECT: Taxability of Wellness Benefit

At the August meeting, staff reviewed an IRS Advice that clarified the taxability of wellness benefits. Since the meeting, NDPERS staff and legal counsel have discussed the Advice with Ice Miller, a national law firm that deals specifically with employer and benefit issues. Ice Miller concurred with Deloitte's assessment that the NDPERS \$250 wellness benefit would not be considered de minimis by the IRS and therefore, should be included as taxable income on an employee's W2 and subject to payroll taxes. Ice Miller also agreed that the reporting should reflect the amount of benefit paid in the calendar year. Therefore, fitness center reimbursements for December 2016 that are paid in 2017 should be included as taxable income for the 2017 calendar year, rather than 2016. The firm did confirm that for retirees, the amount of the benefit falls below the 1099 reporting requirements. However, they did recommend that notice be provided to the retirees that the benefit is taxable. NDPERS plans to provide this insert with upcoming mailings already scheduled to be sent to the retirees.

Staff also met with OMB to discuss the IRS Advice and the implications for payroll and tax reporting purposes for the employer. The burden for compliance with this provision will fall on our participating employers since they must do the tax collection and reporting.

OMB discussed with us the difficulty in administering this as a taxable benefit. Specifically discussed were:

- Obtaining the data and integrating it into the payroll system would be cumbersome as it is not a benefit paid through OMB. In order for the benefit to be reported as taxable income and to have payroll taxes withheld, the information would need to either be manually entered into the payroll system by each agency, or the payroll system would need to be enhanced to accept a file feed of this information.

- Timely reporting of the benefit would be required to ensure that payroll taxes can be withheld from the employee's pay in the appropriate tax year. This can not occur within the current redemption timeframe, which allows redemption up until midnight on December 31, as there would no longer be a pay period in the current tax year to withhold the required payroll taxes.
- The amount of tax that may be withheld if the reporting is done at the end of the year could be significant. Since the benefit does not fall under the category of regular pay, the federal tax withholding rate is 25%. An additional 7.65% in FICA taxes would be withheld along with state tax withholding. If the full benefit amount is reported on a single paycheck, this could result in a significant reduction in the employee's net paycheck as a result of the additional tax withholding. This would likely result in concerns from employees.

Some other employee specific issues and questions on reporting requirements that were considered include:

- How reporting should be done if both the subscriber and the spouse are state employees and both on the payroll system. Guidance from Deloitte is that the employee who is the subscriber should be the responsible party for the spouse's benefit and it should be reported as the subscriber's taxable income. This may not be perceived as equitable by the subscriber.
- How reporting should be done if an employee transfers employment during the year. For example, if an employee received fitness center reimbursements for 10 months based upon employment with a county and then transferred to the state for the final 2 months of the year, who is responsible for reporting the benefit and the applicable taxes? If reporting is only done at year-end, the employer at the end of the year has a liability for months that the employee was not employed by them.
- How reporting should be done for retirees who were active employees for part of the year and then retired for the remainder of the year. Should the employer report the amount of benefits that were received by the employee during the months employed, and if so, how would tax withholdings be done when there are no further paychecks.

As noted, the implications for employers and payroll are significant and staff wanted to provide an update since the last meeting regarding the discussions held with Ice Miller and OMB, as well as, the concerns expressed by OMB. Staff will also be meeting with Higher Education before the next meeting to solicit their thoughts. However given the above, it appears there would be a significant effort required on the part of our employers and the implications for our members are troublesome as well.

Staff recommendation:

In recognition of the above staff is recommending:

1. That staff develop options for the board's consideration to be discussed at a special meeting in early October. Given the need to address this before the beginning of the tax year we should have a plan in place to communicate to our employees and employers no later than the end of October.
2. The options to be considered will include:
 - a. Redirecting the incentive so it is not taxable
 - b. Reducing the incentive so it is not taxable
 - c. Effects if the incentive is eliminated
 - d. Effects if the incentive is maintained

Wellness Benefit Alternatives

| Alternatives | Pros | Cons | Observations |
|--|--|---|--|
| <p>1) Continue Novu as a wellness resource without the \$250 benefit which includes discontinuing the fitness center reimbursement</p> <ol style="list-style-type: none"> a. Impact to 2015-2017 premium, agreement between SHP & NDPERS regarding remaining 6 months and accounting, \$ returned to NDPERS. b. Impact to 2017-2019 projected premium? Apply to \$250 to buy down premium. | <ul style="list-style-type: none"> • Novu still available as wellness education tool & HRA (SHP requirement due to NCQA) • Able to reallocate funds to reduce premium or remove benefit reduction of similar value • Can be applied across all members, including retirees • <i>This could serve as a cost-savings measure to lower premiums.</i> • <i>It would create savings the last 6 months of 2017 biennium to add to the general cash reserve fund.</i> | <ul style="list-style-type: none"> • Loss of funds towards wellness initiatives • Potential employee dissatisfaction with program as a whole. • Overall decrease in participation • Diminishes perceived value of program • <i>Not converting this to something that benefits member wellness could be perceived as a reduction in benefits by members.</i> | <p><i>All NDPERS members will continue to have access to the Novu portal regardless of the new direction of the wellness program.</i></p> <p><i>Worksites will continue to be able to use the portal to create special groups, wellness events and challenges.</i></p> |
| <p>2) Add SHP educators/coaches to increase the educator to coordinator ratio state-wide</p> <ol style="list-style-type: none"> a. Offer more enhanced onsite activities b. Offer education and coaching programs to retirees | <ul style="list-style-type: none"> • Allows additional funds to be available to worksites for wellness initiatives • More education for employees • Additional support for Wellness Coordinators • <i>Having more SHP educators/coaches throughout the state would allow for the following:</i> • <i>An organizational wellness plan is developed for each NDPERS worksite;</i> • <i>The SHP educator/coach is accountable for implementation of the plan and developing and</i> | <ul style="list-style-type: none"> • Employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. • Field employees may not have flexibility to attend. • Additional programs may need to be developed. • <i>There is a potential that agency leaders may still not engage with SHP wellness staff and/or implement wellness plans.</i> | <p><i>Employees who are designated as Wellness Coordinators have other full-time public sector jobs, making it difficult for them to stay focused on organizational wellness plans. They indicate their barrier in being able to do more for their organization is "time."</i></p> <p><i>Most NDPERS organizations do not have a wellness plan. When SHP assists sites in the development of a plan, it often gets pushed to the wayside as the result of other work priorities.</i></p> |

| Alternatives | Pros | Cons | Observations |
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| | <p><i>leading new wellness initiatives, such as Fresh to Desk fruit clubs, vending machine overhauls, break room makeovers, food and tobacco policies, etc.</i></p> <ul style="list-style-type: none"> • <i>NDPERS worksites would be able to offer onsite wellness services, such as coaching opportunities (individual and group), including Diabetes Prevention and Tobacco Cessation, as well as blood pressure checks.</i> • <i>This option would allow SHP to expand programming to include retirees at local community centers and gyms.</i> | | <p><i>Some Wellness Coordinators are simply not engaged in their roles. Increasing the number of educators/coaches would create more consistent wellness programming and accountability at all NDPERS sites.</i></p> <p><i>Onsite programming today is limited to just work sites. This option would allow SHP to expand it to community centers to reach the retiree groups.</i></p> <p><i>This option could be offered in combination with Options 3 & 5.</i></p> |
| <p>3) Use funding towards other programs:</p> <ol style="list-style-type: none"> a. National Diabetes Prevention Program b. Hypertension c. Tobacco Cessation – political subs/retirees d. Chronic Disease Management | <ul style="list-style-type: none"> • <i>Able to offer initiatives that have been presented to Board but funding hasn't been available</i> • <i>SHP would use the funds to deliver targeted onsite wellness classes and programs, including:</i> <ul style="list-style-type: none"> • <i>Diabetes Prevention</i> • <i>Hypertension</i> • <i>Dietician</i> • <i>Tobacco Cessation</i> • <i>Chronic Disease Management</i> • <i>Habit Change</i> • <i>Individual Wellness Coaching</i> • <i>Group Wellness Coaching</i> | <ul style="list-style-type: none"> • <i>Benefits only those individuals with condition, not global benefit to all members</i> • <i>Members may not see this as a transferrable benefit if they are not interested or qualified to participate in these programs.</i> | <p><i>Currently political subs aren't eligible to participate in the Tobacco Cessation program we currently administer so we would need to coordinate with other programs available throughout state.</i></p> <p><i>This option is similar to Option #2, but instead has a programmatic focus. The concept could be combined with Option #2.</i></p> |

| Alternatives | Pros | Cons | Observations |
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| <p>4) Develop incentives that meet de minimis definition to be used with any wellness related activity, including onsite, through Novu, special programs, walking events, etc.</p> | <ul style="list-style-type: none"> • Will maintain a modest rewards system • <i>De minimis incentives, such as a \$25 gift card, may be a good incentive for individuals who sign up for or complete a program as described in Option #3.</i> | <ul style="list-style-type: none"> • The limitation of size is further diminished by our previous program. | |
| <p>5) Apply benefit to wellness improvements</p> <p>a. Each employer would get an allocation through SHP to be used for worksite initiatives designed to create a culture of wellness. Examples include:</p> <ol style="list-style-type: none"> i. Stand-up desks ii. Breakroom improvements, including water dispensers to encourage hydration, refrigerators to encourage healthy lunch and snack storage, etc. iii. Incentives to encourage participation in on-site wellness education and activities, such as t-shirts. iv. Onsite education or onsite fitness activities; v. Leadership training; and/or vi. Employee recognition programs. | <ul style="list-style-type: none"> • Allows additional funds to be available to worksites for wellness initiatives • Incentives may help keep employees engaged in the wellness programs. • <i>While we can no longer provide employees with a direct financial benefit, choosing this option still benefits members in a meaningful way by improving their worksite and making it more conducive to individual wellness.</i> • <i>We spend the majority of our waking hours at work. Most of what we eat and drink is while we are at work; therefore, it is important that water and healthy eating options are accessible and convenient.</i> | <ul style="list-style-type: none"> • Administration: <ul style="list-style-type: none"> ○ Follow existing funding program criteria? ○ Application process ○ Distribution between various size employers, state vs political sub • Establishing eligible use of funds difficult if existing criteria not followed: <ul style="list-style-type: none"> ○ Equipment if purchased by state is then state property, NDPERS or employer? ○ Programs viewed as unfavorable use of taxpayer dollars • Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. • Based on examples provided, are these items valued by | <p><i>SHP has received feedback from several wellness coordinators indicating they do not feel they have access to resources to improve the culture of wellness at their worksites.</i></p> <p><i>Oftentimes agencies are reluctant to spend money on worksite improvements that improve employee health due to constrained budgets and/or taxpayer scrutiny.</i></p> <p><i>This option could be offered in combination with Option 2.</i></p> |

| Alternatives | Pros | Cons | Observations |
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| | | <p>employees.</p> <ul style="list-style-type: none"> • <i>Might be difficult to maintain a perception of equity across members using this approach.</i> | |
| 6) Establish Health Reimbursement Accounts | <ul style="list-style-type: none"> • Would allow funds earned to be diverted into an account to be used by member towards out of pocket expenses • Can be established for both actives & retirees • Flexibility for participants in use of funds • May help keep employees engaged in wellness activities • <i>Allows members to spend dollars on IRS-approved health and dental services in a tax-free environment.</i> | <ul style="list-style-type: none"> • Administrative fees – who would pay • Set-up & administration – worth the \$250 benefit? • Would require monitoring to confirm eligibility of funds expended. • <i>There are several administrative challenges with HRAs. Per IRS rules, services have to be paid by the HRA on the exact same date they are provided, which does not match up with all provider billing processes. This causes the payment to get rejected and the member has to call in to rectify and substantiate the date of service.</i> • <i>Distribution and loading accounts would carry administrative complexity and would require a strong specialized customer service arm.</i> | <p>Would not legal guidance</p> <p><i>Sanford Health has administered HRAs in the past with its employees and found the administrative barriers left employees feeling more dissatisfied than satisfied with the benefit. As a result, Sanford Health no longer offers the HRA as part of its employee benefit set.</i></p> |
| 7) Premium waiver/reduction | <ul style="list-style-type: none"> • Encourages completion of specified wellness activities for achieving specific wellness goals. • May help keep employees | <ul style="list-style-type: none"> • If state continues to pay full family, this option doesn't help state employees. • Administration: | <p>Per Ice Miller, need to review impact of GINA & ADA, notice requirements</p> <p><i>Wellness dollars would go toward</i></p> |

| Alternatives | Pros | Cons | Observations |
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| | <ul style="list-style-type: none"> engaged in wellness activities • <i>Employees who attest to being tobacco free could be eligible for a premium and/or deductible reduction.</i> | <ul style="list-style-type: none"> ○ Criteria to be established ○ Confirmation mechanism ○ When is reduction applied? • <i>Will need to be sensitive towards discrimination laws and statute</i> | <p><i>premium and/or deductible reduction in addition to randomized testing at NDPERS sites. Randomized tobacco testing is strongly encouraged.</i></p> |
| <p>8) Deductible reduction/plan design change</p> <ul style="list-style-type: none"> a. Reduce deductible b. Increase \$200 preventive screening benefit in GF plan | <ul style="list-style-type: none"> • Encourages completion of specified wellness activities for achieving specific wellness goals. • May help keep employees engaged in wellness activities • <i>Employees who attest to being tobacco free could be eligible for a premium and/or deductible reduction.</i> • <i>This could be referred to as the Tobacco-free Deductible Discount.</i> | <ul style="list-style-type: none"> • Administration: <ul style="list-style-type: none"> ○ Criteria to be established ○ Confirmation mechanism ○ When is reduction applied? ○ Reprocessing of claims/Timing? • Would not apply to Medicare retirees. • <i>Will need to be sensitive towards discrimination laws and statute</i> | <p>Per Ice Miller, need to review impact of GINA & ADA, notice requirements</p> <p>For plans in which we are not primary, such as Medicare retirees, we are limited as to plan design changes.</p> <p><i>Wellness dollars would go toward premium and/or deductible reduction in addition to randomized testing at NDPERS sites. Randomized tobacco testing is strongly encouraged.</i></p> |
| <p>9) Offer SHP's onsite Health and Wellbeing Screening with follow-up coaching:</p> <ul style="list-style-type: none"> a) Offer more enhanced onsite activities. | <ul style="list-style-type: none"> • Allows additional funds to be available to worksites for wellness initiatives • May result in improved overall health and reduce health plan costs. • <i>Employees who are thriving in all 6 dimensions of wellbeing can have up to 40 percent less health care costs.</i> • <i>SHP's Health and Wellbeing</i> | <ul style="list-style-type: none"> • Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. • Difficult to have statewide access • Perceived value of benefit to employees. • <i>Employees who are not on the</i> | <p><i>If administered every-other year (as recommended to all employers) the cost would be relatively the same as the current wellness investment. SHP's screening team would visit half of PERS sites each year so that each site had one screening event per biennium.</i></p> |

| Alternatives | Pros | Cons | Observations |
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| | <p><i>screen goes further than a typical biometric screen, providing members with a snapshot of how they are doing across all 6 dimensions, and connects them with community resources to help them in their wellness pursuit.</i></p> <ul style="list-style-type: none"> • <i>Aggregated data is provided to the employer, providing the employer with insight on the overall health and wellbeing of their employees.</i> | <p><i>NDPERS plan would not be eligible, unless the employer paid for them directly.</i></p> | |
| <p>10) Negotiate with fitness centers to offer a reduced membership fee to NDPERS members</p> | <ul style="list-style-type: none"> • Provides benefit similar to Fitness Center Reimbursement to those that utilize it • <i>Reduces the financial barrier of joining a gym.</i> | <ul style="list-style-type: none"> • Limited timeframe to negotiate with facilities statewide • Access retirees/actives living outside ND • Does not address online portal and members that received benefit directly through this option. • Difficult to administer if done as a payroll deduction with multiple payrolls. Also would not work if deduction for retirees. • Many facilities already provide an employer discount to employees • <i>Everyone gets it, so it is no longer a reward for active gym-goers.</i> • <i>There are no guarantees that gyms will participate.</i> | <p><i>The fitness industry is more competitive than ever before; therefore, this is a reasonable request to gyms, and is in their best interests for attracting PERS employees and retirees as members.</i></p> <p><i>This option can be combined with any other selected option.</i></p> |

| Alternatives | Pros | Cons | Observations |
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| 11) Paid time off for meeting wellness goals | <ul style="list-style-type: none"> • Employer discretion • Political subdivisions already have this as an option and a few offer this already. • <i>Would be well-received by members.</i> | <ul style="list-style-type: none"> • Who pays for this? Allocate wellness funds to employers? • Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. • <i>Attainment of “wellness goals” may be difficult to define and measure.</i> | Legislative action needed for state agencies to be able to offer. Political subs can do so now. |
| 12) Onsite clinics | <ul style="list-style-type: none"> • Allows additional funds to be available to worksites for wellness initiatives • May result in improved overall health and reduce health plan costs. • <i>Creates convenience in accessing care and impacts presenteeism.</i> | <ul style="list-style-type: none"> • Difficult to have statewide access • Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. • Would need to hire adequate, trained staff. Onsite clinics are most efficient <i>when a high volume of staff is in one location; therefore, it would be difficult to create equity across all NDPERS sites.</i> | Could be a confidentiality issue under HIPAA. <i>With virtual care becoming increasingly prevalent, onsite clinics are not used as much as they were in the past.</i> |
| 13) Cafeteria plan to defer funds to be used by employees towards eligible expenses | <ul style="list-style-type: none"> • Would allow employees the opportunity to use the rewards for a variety of options on a pretax basis | Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. | Would need to define eligible expenses/seek legal counsel for federal law |

| Alternatives | Pros | Cons | Observations |
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| <p>14) Provide specialized staffing to go onsite statewide</p> <ol style="list-style-type: none"> Nutritionist Nurse Doctor | <ul style="list-style-type: none"> Allows additional funds to be available to worksites for wellness initiatives May result in improved overall health and reduce health plan costs. <i>Can assist with prevention efforts and offers convenience.</i> <i>Would work well where there is a large concentration of members, such as the Capitol area and surrounding agencies.</i> | <ul style="list-style-type: none"> Retirees and those employees who do wellness on their own as their employer does not offer wellness since worksite enhancements will not impact them. Would need to hire adequate, trained staff. <i>Because we do not have the luxury of knowing when we will get sick, it is inconvenient for employees if the provider (i.e. nurse, doctor) cannot be onsite every day of the week.</i> | <p>Could be a confidentiality issue under HIPAA.</p> <p><i>With virtual care becoming increasingly prevalent, onsite clinics are not used as much as they were in the past.</i></p> |
| <p>15) Retirees – continue to offer \$250 benefit</p> <ol style="list-style-type: none"> Offer both Novu & Fitness Center Reduce to only offer Fitness Center | <ul style="list-style-type: none"> May help keep retirees engaged in wellness activities <i>The fitness center reimbursement is popular with retirees. Maintaining the fitness center reimbursement benefit with just the retiree group keeps the 12-visit requirement at the forefront with that group.</i> | <ul style="list-style-type: none"> Lose consistency between active & retiree population How to handle new retirees and transition from active to retired status How to handle retirees that return to work and have employer paid insurance Equity issue between the two populations. <i>Could create dissatisfaction that only some members are continuing to receive the benefit.</i> | <p><i>Retirees struggle with the Novu online interface; therefore, maintaining only the fitness center reimbursement is recommended.</i></p> |



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Memorandum

TO: NDPERS Board

FROM: Sharon Schiermeister

DATE: September 13, 2016

SUBJECT: Highway Patrol Validation Results

At the August 2016 meeting, we provided an update on the transition process to our new actuary, GRS. The first step in the transition is replicating the results of the 2015 valuations prepared by Segal. Last month, GRS reviewed their results for all the plans except Highway Patrol.

Attachment 1 is a letter from GRS regarding the status of the replication for the Highway Patrol plan. The initial results were not as close as would have been expected. After further review, GRS determined that the difference was the result of how the IRC Section 415 benefit limits were being applied when calculating projected future benefits. The approach recommended by GRS increases the actuarial employer contribution rate by about 6 percent of pay. An option to mitigate the increase in employer contributions is reviewed by GRS in their letter which is to change amortization period. This will be discussed more at our meeting and is something to consider changing for next year's valuation.

We also asked GRS to prepare funded status projections based on this updated information, which is Attachment 2.

A representative from GRS will be available at the Board meeting, via conference call, to review their results.

Attachments

September 14, 2016

ATTACHMENT 1

Board Members
North Dakota Public Employees Retirement System
Bismarck, North Dakota

Re: Results of Replication of July 1, 2015, Actuarial Valuation Results – Highway Patrolmen’s Retirement System

Members of the Board:

In accordance with your request, we have replicated the actuarial valuation results from the actuarial valuation of the Highway Patrolmen’s Retirement System as of July 1, 2015, performed by Segal Consulting.

This letter contains the following exhibit which compares the actuarial valuation results from the July 1, 2015, actuarial valuation of the of the Highway Patrolmen’s Retirement System performed by Segal with the comparable July 1, 2015, actuarial valuation performed by GRS using the same census data, methods and assumption as used in the 2015 actuarial valuations (based on information provided to us by Segal).

- Exhibit I Detailed Comparison of Actuarial Valuation Results – Highway Patrol

Summary of Results

As shown in Exhibit I in the column “GRS”, the active member actuarial accrued liability (active member AAL) and active member present value of future benefits (active member PVFB) that GRS calculated were significantly higher than the amounts calculated by Segal in the actuarial valuation as of July 1, 2015. (The present value of future benefits is defined as the current discounted value of all future monthly benefits payable to a pensioner. The actuarial accrued liability is the portion of the present value of future benefits allocated to past service.) PVFB results within 5% generally indicate that calculations of projected benefits to be paid from the Systems were performed consistently between the two firms.

Because the results were not as close as we would have expected, we requested and Segal provided additional information regarding the valuation of the active member PVFB and AAL. Based on our analysis of the additional information provided by Segal, we discovered that the projected benefits used to calculate the PVFB and the AAL were being limited by the Internal Revenue Code (IRC) Section 415 limits applicable to the year 2015. These benefit limit amounts are shown in Exhibit II.

Applying this same methodology (i.e., limiting projected future benefits to the 2015 IRC Section 415 limits), GRS was able to replicate the Segal results. The results using this method are shown in Exhibit I in the column “GRS – frozen 415 limits”. Although GRS was able to replicate the Segal results very closely, we do not recommend limiting future benefits that could be payable

20-30 years from the current valuation date by the Section 415 limit that is applicable to the current year.

Our recommendation is to limit projected future benefits of active members by projected Section 415 limits (instead of by the Section 415 limit that is applicable to the current year.) We believe this is a more reasonable approach and is the typical approach that is used by most public sector pension plans. We projected the 2015 limits into future years using the price inflation assumption of 3.50 percent per year.

The active member actuarial valuation results based on using a projected IRC 415 limit are shown in Exhibit I in the column “GRS – projected 415 limits”. These results are slightly lower than those shown in the column “GRS”. We recommend that beginning with the 2016 actuarial valuation, the method consistent with the results in the column “GRS – projected 415 limits” be incorporated into the annual actuarial valuation. This is expected to increase the actuarial employer contribution rate by about 6 percent of pay. This method anticipates future year increases in the 415 limit and is not expected to result in unanticipated actuarial increases in the AAL in future years as the 415 limit increases in the future.

Employer Actuarial Contribution Rate Under Alternative Amortization Periods

The current employer statutory contribution rate (19.70%) is less than the actuarial employer rate using a 20-year level percentage of payroll amortization method (27.48%). In the table below, we have illustrated the actuarial employer contribution rate based on the actuarial valuation results that reflect projected 415 limits using alternative amortization periods. For illustrative purposes, we have shown amortization periods longer than 30 years. However, we recommend a funding policy that uses an amortization period of no longer than 30 years. As the table indicates, using an amortization period of 30 years, instead of 20 years, reduces the statutory employer rate deficit from 7.78% to 3.99%.

| | <u>Alternative Number of Years for Amortization Period</u> | | | |
|---|---|--------------|--------------|--------------|
| | 20 | 30 | 40 | 50 |
| Unfunded Actuarial Accrued Liability | \$25,182,487 | \$25,182,487 | \$25,182,487 | \$25,182,487 |
| Estimated Annual Salaries of Covered Members | 10,725,877 | 10,725,877 | 10,725,877 | 10,725,877 |
| Employer Normal Cost | 1,157,658 | 1,157,658 | 1,157,658 | 1,157,658 |
| Administrative Expenses | 32,007 | 32,007 | 32,007 | 32,007 |
| Amortization of the UAAL as a Level % of Payroll | 1,757,493 | 1,350,931 | 1,158,204 | 1,050,410 |
| Total Employer Cost for Ensuing Year | 2,947,158 | 2,540,597 | 2,347,870 | 2,240,076 |
| Total Employer Cost as % of Pay | 27.48% | 23.69% | 21.89% | 20.88% |
| Statutory Employer Contribution Rate | 19.70% | 19.70% | 19.70% | 19.70% |
| Statutory Employer Rate Deficiency | -7.78% | -3.99% | -2.19% | -1.18% |

Disclosures and Additional Information

The actuarial assumptions used by GRS were the same assumptions used in the actuarial valuation as of July 1, 2015, as disclosed in the Segal report, including an assumed rate of investment return of 8.00 percent, with the exception of the approach to projecting Section 415 limits.

Future actuarial measurements may differ significantly from the current measurements presented in this cost analysis, 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; and changes in plan provisions, contribution amounts or applicable law.

If any of the provisions, underlying data or assumptions used in this analysis appear to be incorrect or unreasonable, please let us know as soon as possible so we can update the analysis.

The signing actuaries are independent of the plan sponsor.

Lance J. Weiss and Amy Williams are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions or would like to discuss the results of this analysis further.

Sincerely,



Lance J. Weiss, EA, MAAA, FCA
Senior Consultant and Team Leader



Amy Williams, ASA, MAAA, FCA
Consultant

AW:rl

cc: Mr. Sparb Collins, NDPERS
Mr. Bryan Reinhardt, NDPERS
Ms. Sharon Schiermeister, NDPERS
Mr. Alex Rivera, Gabriel, Roeder, Smith & Company
Ms. Kristen Brundirks, Gabriel, Roeder, Smith & Company
Mr. Neil Nguyen, Gabriel, Roeder, Smith & Company

North Dakota Public Employees Retirement System
 July 1, 2015 Valuation
 Summary - Highway Patrol

| | Comparison of Replication Results - No IRC Section 415 Limits Applied | | | | Comparison of Replication Results with Segal Results - IRC Section 415 Limits Applied | | | | | |
|--|---|----------------|---------------|---------|---|--------------|---------|----------------------------|---------------|---------|
| | Segal | GRS | Delta \$ | Delta % | GRS - frozen 415 limits | Delta \$ | Delta % | GRS - projected 415 limits | Delta \$ | Delta % |
| Number of Active Members | 161 | 161 | - | 0.00% | 161 | - | 0.00% | 161 | - | 0.00% |
| Average Age | 35.3 | 35.3 | - | 0.00% | 35.3 | - | 0.00% | 35.3 | - | 0.00% |
| Average Years of Benefit Service | 8.6 | 8.6 | - | 0.00% | 8.6 | - | 0.00% | 8.6 | - | 0.00% |
| Average Years of Vesting Service | | 9.2 | NA | | 8.6 | NA | | 8.8 | NA | |
| Total Payroll | \$ 9,967,249 | \$ 9,967,249 | \$ - | 0.00% | \$ 9,967,249 | \$ - | 0.00% | \$ 9,967,249 | \$ - | 0.00% |
| Projected Annual Compensation | 10,774,341 | 10,725,877 | (48,464) | -0.45% | 10,725,877 | (48,464) | -0.45% | 10,725,877 | (48,464) | -0.45% |
| Average Compensation | 61,908 | 61,908 | - | 0.00% | 61,908 | - | 0.00% | 61,908 | - | 0.00% |
| Average Projected Annual Compensation | 66,921 | 66,620 | (301) | -0.45% | 66,620 | (301) | -0.45% | 66,620 | (301) | -0.45% |
| Contribution Account Balance | 12,312,314 | 12,312,358 | 44 | 0.00% | 12,312,358 | 44 | 0.00% | 12,312,358 | 44 | 0.00% |
| 1. Present Value of Benefits | | | | | | | | | | |
| Active Members | \$ 50,242,223 | \$ 65,315,619 | \$ 15,073,396 | 30.00% | \$ 50,123,417 | \$ (118,806) | -0.24% | \$ 64,025,537 | \$ 13,783,314 | 27.43% |
| Retired Members and Beneficiaries | 50,308,102 | 50,174,079 | (134,023) | -0.27% | 50,174,079 | (134,023) | -0.27% | 50,174,079 | (134,023) | -0.27% |
| Inactive Non-Retired Members | 3,816,342 | 3,650,680 | (165,662) | -4.34% | 3,650,680 | (165,662) | -4.34% | 3,650,680 | (165,662) | -4.34% |
| Total | \$ 104,366,667 | \$ 119,140,378 | \$ 14,773,711 | 14.16% | \$ 103,948,176 | \$ (418,491) | -0.40% | \$ 117,850,296 | \$ 13,483,629 | 12.92% |
| 2. Actuarial Accrued Liability | | | | | | | | | | |
| Active Members | \$ 25,987,773 | \$ 30,642,960 | \$ 4,655,187 | 17.91% | \$ 25,762,839 | \$ (224,934) | -0.87% | \$ 30,233,259 | \$ 4,245,486 | 16.34% |
| Retired Members and Beneficiaries | 50,308,102 | 50,174,079 | (134,023) | -0.27% | 50,174,079 | (134,023) | -0.27% | 50,174,079 | (134,023) | -0.27% |
| Inactive Non-Retired Members | 3,816,342 | 3,650,680 | (165,662) | -4.34% | 3,650,680 | (165,662) | -4.34% | 3,650,680 | (165,662) | -4.34% |
| Total | \$ 80,112,217 | \$ 84,467,719 | \$ 4,355,502 | 5.44% | \$ 79,587,598 | \$ (524,619) | -0.65% | \$ 84,058,018 | \$ 3,945,801 | 4.93% |
| 3. Actuarial Value of Assets | | | | | | | | | | |
| | \$ 58,875,531 | \$ 58,875,531 | \$ - | 0.00% | \$ 58,875,531 | \$ - | 0.00% | \$ 58,875,531 | \$ - | 0.00% |
| 4. Funded Ratio (3./2.) | | | | | | | | | | |
| | 73.5% | 69.7% | | -3.8% | 74.0% | | 0.5% | 70.0% | | -3.4% |
| 5. Unfunded Actuarial Accrued Liability (2.-3.) | | | | | | | | | | |
| | \$ 21,236,686 | \$ 25,592,188 | \$ 4,355,502 | 20.51% | \$ 20,712,067 | \$ (524,619) | -2.47% | \$ 25,182,487 | \$ 3,945,801 | 18.58% |
| 6. Total Normal Cost for Ensuing Year | | | | | | | | | | |
| | \$ 2,226,286 | \$ 2,633,932 | \$ 407,646 | 18.31% | \$ 2,029,467 | \$ (196,819) | -8.84% | \$ 2,584,200 | \$ 357,914 | 16.08% |
| 7. Estimated Annual Salaries of Covered Members | | | | | | | | | | |
| | \$ 10,774,341 | \$ 10,725,877 | \$ (48,464) | -0.45% | \$ 10,725,877 | \$ (48,464) | -0.45% | \$ 10,725,877 | \$ (48,464) | -0.45% |
| 8. Member Normal Cost | | | | | | | | | | |
| | \$ 1,432,987 | \$ 1,426,542 | \$ (6,445) | -0.45% | \$ 1,426,542 | \$ (6,445) | -0.45% | \$ 1,426,542 | \$ (6,445) | -0.45% |
| 9. Employer Normal Cost (6.-8.) | | | | | | | | | | |
| | \$ 793,299 | \$ 1,207,390 | \$ 414,091 | 52.20% | \$ 602,925 | \$ (190,374) | -24.00% | \$ 1,157,658 | \$ 364,359 | 45.93% |
| 10. Employer Normal Cost as % of Pay | | | | | | | | | | |
| | 7.36% | 11.26% | | 3.89% | 5.62% | | -1.74% | 10.79% | | 3.43% |
| 11. Amortization Payment - Equals 20-Year Amortization of the UAAL as a Level % of Payroll | | | | | | | | | | |
| | \$ 1,482,114 | \$ 1,786,086 | \$ 303,972 | 20.51% | \$ 1,445,501 | \$ (36,613) | -2.47% | \$ 1,757,493 | \$ 275,379 | 18.58% |
| 12. Administrative Expenses | | | | | | | | | | |
| | \$ 32,007 | \$ 32,007 | \$ - | 0.00% | \$ 32,007 | \$ - | 0.00% | \$ 32,007 | \$ - | 0.00% |
| 13. Total Employer Cost for Ensuing Year (9.+11.+12.) | | | | | | | | | | |
| | \$ 2,307,420 | \$ 3,025,483 | \$ 718,063 | 31.12% | \$ 2,080,433 | \$ (226,987) | -9.84% | \$ 2,947,158 | \$ 639,738 | 27.73% |
| 14. Total Employer Cost as % of Pay (13./7.) | | | | | | | | | | |
| | 21.42% | 28.21% | | 6.79% | 19.40% | | -2.02% | 27.48% | | 6.06% |
| 15. Statutory Employer Contribution Rate | | | | | | | | | | |
| | 19.70% | 19.70% | | 0.00% | 19.70% | | 0.00% | 19.70% | | 0.00% |
| 16. Employer Statutory Rate - Actuarial Rate (15.-14.) | | | | | | | | | | |
| | -1.72% | -8.51% | | | 0.30% | | | -7.78% | | |

**IRC SECTION 415(b)(1)(A) DOLLAR LIMITS – 2015
 APPLICABLE TO BENEFITS PAID AS STRAIGHT LIFE OR QUALIFIED JOINT & SURVIVOR ANNUITIES**

For Members with at least 10 Years Participation in a Public Employee Retirement Plan
 and Who Do Not Have at Least 15 Years of Police, Fire and/or Armed Forces Service as Defined in the Final Regulations Issued on April 5, 2007

| Retirement Age | Completed Months | | | | | | | | | | | | |
|----------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| 65 | 210,000 | | | | | | | | | | | | |
| 64 | 210,000 | 210,000 | | | | | | | | | | | |
| 63 | 210,000 | 210,000 | 210,000 | | | | | | | | | | |
| 62 | 210,000 | 210,000 | 210,000 | 210,000 | | | | | | | | | |
| 61 | 194,636 | 195,916 | 197,197 | 198,477 | 199,757 | 201,038 | 202,318 | 203,598 | 204,879 | 206,159 | 207,439 | 208,720 | |
| 60 | 180,688 | 181,850 | 183,013 | 184,175 | 185,337 | 186,500 | 187,662 | 188,824 | 189,987 | 191,149 | 192,311 | 193,474 | |
| 59 | 167,995 | 169,053 | 170,111 | 171,168 | 172,226 | 173,284 | 174,342 | 175,399 | 176,457 | 177,515 | 178,573 | 179,630 | |
| 58 | 156,414 | 157,379 | 158,344 | 159,309 | 160,274 | 161,239 | 162,205 | 163,170 | 164,135 | 165,100 | 166,065 | 167,030 | |
| 57 | 145,825 | 146,707 | 147,590 | 148,472 | 149,355 | 150,237 | 151,120 | 152,002 | 152,884 | 153,767 | 154,649 | 155,532 | |
| 56 | 136,122 | 136,931 | 137,739 | 138,548 | 139,356 | 140,165 | 140,974 | 141,782 | 142,591 | 143,399 | 144,208 | 145,016 | |
| 55 | 127,213 | 127,955 | 128,698 | 129,440 | 130,183 | 130,925 | 131,668 | 132,410 | 133,152 | 133,895 | 134,637 | 135,380 | |
| 54 | 119,017 | 119,700 | 120,383 | 121,066 | 121,749 | 122,432 | 123,115 | 123,798 | 124,481 | 125,164 | 125,847 | 126,530 | |
| 53 | 111,465 | 112,094 | 112,724 | 113,353 | 113,982 | 114,612 | 115,241 | 115,870 | 116,500 | 117,129 | 117,758 | 118,388 | |
| 52 | 104,492 | 105,073 | 105,654 | 106,235 | 106,816 | 107,397 | 107,979 | 108,560 | 109,141 | 109,722 | 110,303 | 110,884 | |
| 51 | 98,043 | 98,580 | 99,118 | 99,655 | 100,193 | 100,730 | 101,268 | 101,805 | 102,342 | 102,880 | 103,417 | 103,955 | |
| 50 | 92,070 | 92,568 | 93,066 | 93,563 | 94,061 | 94,559 | 95,057 | 95,554 | 96,052 | 96,550 | 97,048 | 97,545 | |
| 49 | 86,528 | 86,990 | 87,452 | 87,914 | 88,375 | 88,837 | 89,299 | 89,761 | 90,223 | 90,685 | 91,146 | 91,608 | |
| 48 | 81,380 | 81,809 | 82,238 | 82,667 | 83,096 | 83,525 | 83,954 | 84,383 | 84,812 | 85,241 | 85,670 | 86,099 | |
| 47 | 76,590 | 76,989 | 77,388 | 77,788 | 78,187 | 78,586 | 78,985 | 79,384 | 79,783 | 80,183 | 80,582 | 80,981 | |
| 46 | 72,128 | 72,500 | 72,872 | 73,244 | 73,615 | 73,987 | 74,359 | 74,731 | 75,103 | 75,475 | 75,846 | 76,218 | |
| 45 | 67,967 | 68,314 | 68,661 | 69,007 | 69,354 | 69,701 | 70,048 | 70,394 | 70,741 | 71,088 | 71,435 | 71,781 | |
| 44 | 64,082 | 64,406 | 64,730 | 65,053 | 65,377 | 65,701 | 66,025 | 66,348 | 66,672 | 66,996 | 67,320 | 67,643 | |
| 43 | 60,451 | 60,754 | 61,056 | 61,359 | 61,661 | 61,964 | 62,267 | 62,569 | 62,872 | 63,174 | 63,477 | 63,779 | |
| 42 | 57,054 | 57,337 | 57,620 | 57,903 | 58,186 | 58,469 | 58,753 | 59,036 | 59,319 | 59,602 | 59,885 | 60,168 | |
| 41 | 53,873 | 54,138 | 54,403 | 54,668 | 54,933 | 55,198 | 55,464 | 55,729 | 55,994 | 56,259 | 56,524 | 56,789 | |
| 40 | 50,892 | 51,140 | 51,389 | 51,637 | 51,886 | 52,134 | 52,383 | 52,631 | 52,879 | 53,128 | 53,376 | 53,625 | |
| 39 | 48,096 | 48,329 | 48,562 | 48,795 | 49,028 | 49,261 | 49,494 | 49,727 | 49,960 | 50,193 | 50,426 | 50,659 | |
| 38 | 45,471 | 45,690 | 45,909 | 46,127 | 46,346 | 46,565 | 46,784 | 47,002 | 47,221 | 47,440 | 47,659 | 47,877 | |
| 37 | 43,005 | 43,211 | 43,416 | 43,622 | 43,827 | 44,033 | 44,238 | 44,444 | 44,649 | 44,855 | 45,060 | 45,266 | |
| 36 | 40,687 | 40,880 | 41,073 | 41,267 | 41,460 | 41,653 | 41,846 | 42,039 | 42,232 | 42,426 | 42,619 | 42,812 | |
| 35 | 38,506 | 38,688 | 38,870 | 39,051 | 39,233 | 39,415 | 39,597 | 39,778 | 39,960 | 40,142 | 40,324 | 40,505 | |

Before Age 62: The limit at age 62 is reduced for early commencement using 5.0% interest, beginning of month payments, the 2015 Applicable Mortality Table (as published in IRS Notice 2013-49), and assumes forfeitable accrued benefits upon death prior to retirement.

After Age 65: The table is designed for plans that do not provide for actuarial increases in benefits for delayed retirement; consequently, the values do not increase after age 65.

Caution: *This table is intended to illustrate the age-reduced IRC §415(b) limits, but should not be used to test an individual member's benefit. Testing an individual's benefit involves many factors, some of which may be adjusting for the form of benefit or for post-tax member contributions, or testing coverage under multiple plans sponsored by a single employer. An individual member's benefits should never be adjusted directly from this table before consulting with qualified actuarial consultants and legal counsel.*

This exhibit shall not be construed to provide tax advice, legal advice or investment advice.

September 14, 2016

ATTACHMENT 2

Board Members
North Dakota Public Employees Retirement System
Bismarck, North Dakota

Re: North Dakota Highway Patrolmen's Retirement System Projections Based on Measurement Date of July 1, 2015

Dear Board Members:

In accordance with your request, we have performed a projection of the North Dakota Highway Patrolmen's Retirement System based on a measurement date as of July 1, 2015, using the methodology that GRS is recommending to implement in the actuarial valuation as of July 1, 2016.

Our recommendation is to limit projected future benefits of active members by projected Section 415 limits (instead of by the Section 415 limit that is applicable to the current year, which is the method that was used by Segal in the July 1, 2015 valuation) We believe this is a more reasonable approach and is the typical approach that is used by most public sector pension plans. We projected the 2015 limits into future years using the price inflation assumption of 3.50 percent per year. Additional information about the recommended methodology can be found in our letter dated September 14, 2016 and titled *Results of Replication of July 1, 2015, Actuarial Valuation Results – Highway Patrolmen's Retirement System*.

Below is a summary of the projected funded ratio and employer contribution rates on an actuarial value of assets basis and a market value of assets:

| Year | Highway Patrolmen's Retirement System | | | | |
|------|---------------------------------------|--------|---|--------|-------------------------|
| | Funded Ratio | | Employer Actuarial Contribution Rate Based on 20-Year Amortization Period | | Employer Statutory Rate |
| | AVA | MVA | AVA | MVA | |
| 2015 | 70.0% | 79.3% | 27.48% | 22.40% | 19.70% |
| 2016 | 69.9% | 79.5% | 27.18% | 22.03% | 19.70% |
| 2017 | 71.2% | 80.0% | 26.33% | 21.64% | 19.70% |
| 2018 | 72.1% | 80.6% | 25.75% | 21.24% | 19.70% |
| 2019 | 72.1% | 81.2% | 25.68% | 20.87% | 19.70% |
| 2020 | 72.8% | 81.9% | 25.37% | 20.53% | 19.70% |
| 2025 | 75.9% | 85.4% | 24.08% | 18.84% | 19.70% |
| 2030 | 79.1% | 89.0% | 22.75% | 17.00% | 19.70% |
| 2035 | 82.3% | 92.7% | 21.34% | 14.98% | 19.70% |
| 2040 | 85.6% | 96.6% | 19.57% | 12.66% | 19.70% |
| 2045 | 89.4% | 100.8% | 17.27% | 9.96% | 19.70% |

Summary of Projection Results

The following exhibits provide additional information on the projection of the North Dakota Highway Patrolmen's Retirement System

- Exhibit I: Summary of Actuarial Valuation Results as of July 1, 2015
- Graph I: Projected Funded Ratio and Contribution Rate for the Highway Patrol
- Exhibit II: Projected Actuarial Valuation Results for the Highway Patrol

The statutory employer contribution rate is lower than the actuarial employer contribution rate until 2040 based on the actuarial value of assets and until 2023 based on the market value of assets. Based on the market value of assets and assuming all assumptions are realized, including earning an annual rate of investment return of 8.0 percent, the System is projected to be 100% funded by 2045.

Under the current asset valuation method, if the investment return assumption of 8.0 percent is realized in future periods, the actuarial value of assets will consistently be lower than the market value of assets. **We recommend reviewing the asset smoothing method along with the economic assumptions (rate of inflation, investment return, payroll growth assumption) before the next actuarial valuation as of July 1, 2017.**

We recommend evaluating whether a change is needed in the statutory employer contribution rate after fully reviewing the asset smoothing method and economic assumptions used in the actuarial valuation.

Projection Assumptions

Following is a summary of the assumptions made for new hires used in the projections. The average new hire information is based on the average of members with at least one year and less than five years of service. The average assumed new hire salary is based on projecting the valuation salary from the 2015 valuation back to hire age using the assumed salary increase assumption and then projecting forward to the 2015 valuation using the assumed wage inflation assumption of 4.5 percent per year. The projections assume that the number of active members remains the same in each future year as the number as of the most recent valuation of July 1, 2015.

| | <u>Highway Patrol</u> | |
|-----------------------------|------------------------|--------------------------|
| | <u>Current Members</u> | <u>Assumed New Hires</u> |
| Average Age | 35.3 | 26.1 |
| Average Benefit Service | 8.6 | 0.0 |
| Average Salary | \$66,620 | \$53,529 |
| Normal Cost Rate (Benefits) | 24.09% | 23.71% |

Disclosures and Additional Information

GRS has prepared this analysis exclusively for the Trustees of the North Dakota Highway Patrolmen's Retirement System; GRS is not responsible for reliance upon this report by any other party. This report may be provided to parties other than the North Dakota Highway Patrolmen's Retirement System only in its entirety and only with the permission of the Board.

The actuarial assumptions used in this analysis were the same assumptions used in the actuarial valuation as of July 1, 2015 prepared by Segal, including an assumed rate of investment return of 8.00 percent on the market value of assets in each future year, with the exception of the approach to projecting Section 415 limits. A summary of the actuarial assumptions can be found in Appendix I of this letter.

A summary of the current benefit provisions can be found in Appendix II of this letter.

Future actuarial measurements may differ significantly from the current measurements presented in this cost analysis, 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; and changes in plan provisions, contribution amounts or applicable law.

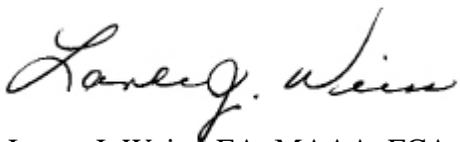
If any of the provisions, underlying data or assumptions used in this analysis appear to be incorrect or unreasonable, please let us know as soon as possible so we can update the analysis.

The signing actuaries are independent of the plan sponsor.

Lance J. Weiss and Amy Williams are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions or would like to discuss the results of this analysis further.

Sincerely,



Lance J. Weiss, EA, MAAA, FCA
Senior Consultant and Team Leader



Amy Williams, ASA, MAAA, FCA
Consultant

AW:rl

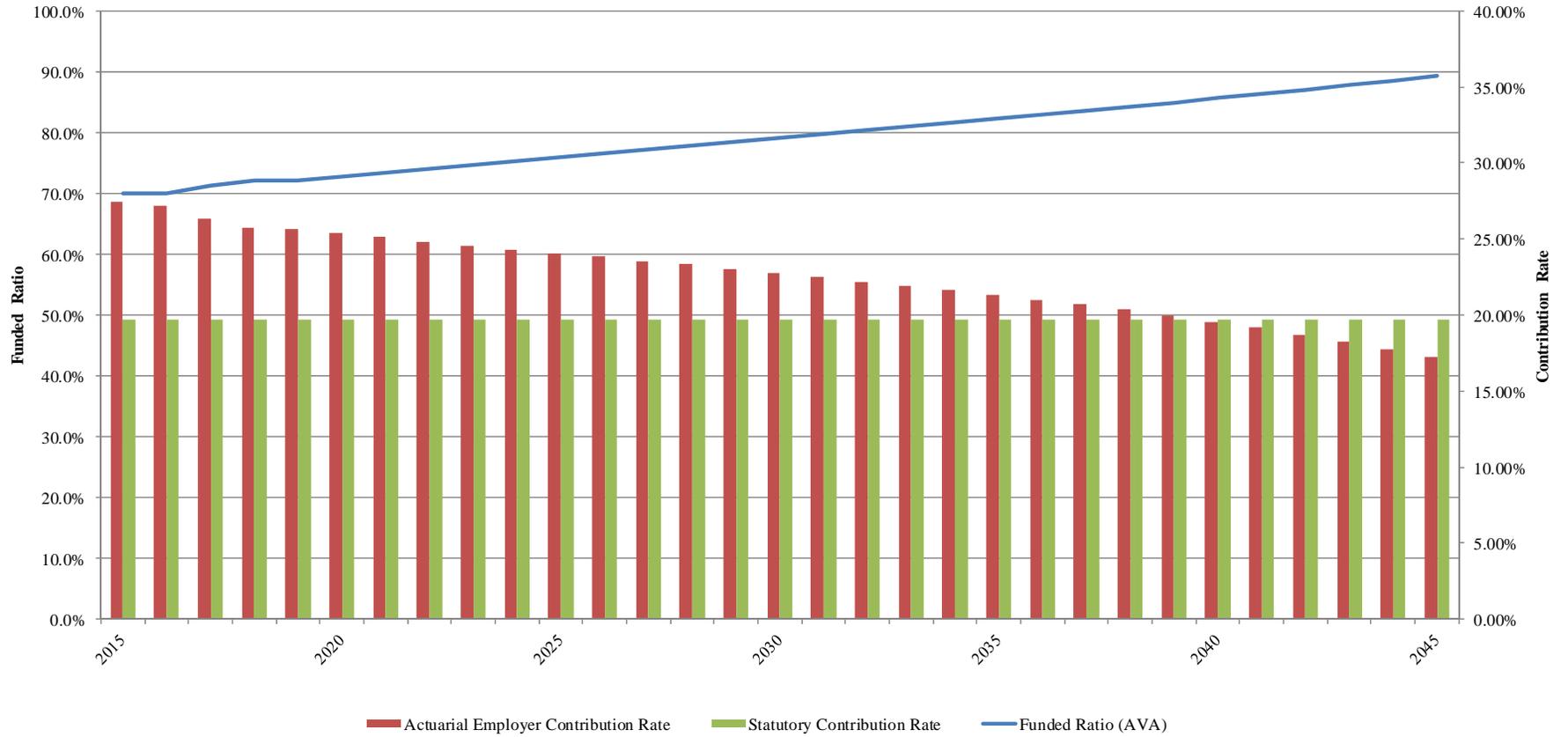
cc: Mr. Bryan Reinhardt, NDPERS
Ms. Sharon Schiermeister, NDPERS
Mr. Alex Rivera, Gabriel, Roeder, Smith & Company
Ms. Kristen Brundirks, Gabriel, Roeder, Smith & Company
Mr. Neil Nguyen, Gabriel, Roeder, Smith & Company

| | | | | Actuarial Value of Assets Basis | | | | Market Value of Assets Basis | | | |
|------------------------------|--------------------|---------------|--------------------------|---------------------------------|-------------------------------|-------------------------|---------------------------|------------------------------|-------------------------------|-------------------------|---------------------------|
| | Total Normal Cost* | Employee Rate | Net Employer Normal Cost | Unfunded Liability Rate | Total Employer Actuarial Rate | Employer Statutory Rate | Statutory Rate Deficiency | Unfunded Liability Rate | Total Employer Actuarial Rate | Employer Statutory Rate | Statutory Rate Deficiency |
| Highway Patrol | | | | | | | | | | | |
| 2015 Valuation Results | 20.96% | 13.30% | 7.66% | 13.76% | 21.42% | 19.70% | 1.72% | 8.70% | 16.36% | 19.70% | -3.34% |
| GRS 2015 Replication Results | 24.39% | 13.30% | 11.09% | 16.39% | 27.48% | 19.70% | 7.78% | 11.31% | 22.40% | 19.70% | 2.70% |

*Includes assumed administrative expenses.

Unfunded liability rate is based on 20-year open level percentage of payroll amortization of the unfunded liability.

**Highway Patrolmen's Retirement System
 Projected Funded Ratio (Actuarial Value of Assets) and
 Actuarial Employer Contribution Rate**



North Dakota Highway Patrolmen's Retirement System
 Projection Results Based on the Actuarial Valuation as of July 1, 2015
 (\$ in thousands)

| Year | Results Based on Actuarial Value of Assets | | | | | | | | | | Statutory Contribution Amount (\$) | | | Results Based on Market Value of Assets | | | Member Counts | |
|------|--|-------------------|-----------|-------------------|--------------|-----------|-----------------------------|---------------------|--------|----------|------------------------------------|----------|-------------------------------|---|--------------|-------------------------|---------------|------------|
| | Present Value | Actuarial | Assets | Unfunded | Funded Ratio | Projected | Employer Actuarial Rate (%) | | | Employer | Employee | Total | Benefit Payments and Expenses | Assets | Funded Ratio | Employer Actuarial Rate | Active | Ben Recip. |
| | Future Benefits | Accrued Liability | | Accrued Liability | | Payroll | Normal Cost | Amortization of UAL | Total | (19.70%) | (13.30%) | | | | | | | |
| 2015 | \$ 117,850 | \$ 84,058 | \$ 58,876 | \$ 25,182 | 70.0% | \$ 10,726 | 11.09% | 16.39% | 27.48% | \$ 2,002 | \$ 1,448 | \$ 3,451 | \$ 4,776 | \$ 66,676 | 79.3% | 22.40% | 161 | 128 |
| 2016 | 122,904 | 87,568 | 61,231 | 26,337 | 69.9% | 11,400 | 11.06% | 16.12% | 27.18% | 2,113 | 1,427 | 3,540 | 5,811 | 69,649 | 79.5% | 22.03% | 161 | 130 |
| 2017 | 129,060 | 92,400 | 65,803 | 26,598 | 71.2% | 12,135 | 11.03% | 15.30% | 26.33% | 2,246 | 1,516 | 3,762 | 4,976 | 73,960 | 80.0% | 21.64% | 161 | 131 |
| 2018 | 135,714 | 97,707 | 70,432 | 27,275 | 72.1% | 12,895 | 10.99% | 14.76% | 25.75% | 2,391 | 1,614 | 4,004 | 5,073 | 78,766 | 80.6% | 21.24% | 161 | 132 |
| 2019 | 142,914 | 103,498 | 74,663 | 28,835 | 72.1% | 13,671 | 10.96% | 14.72% | 25.68% | 2,540 | 1,715 | 4,255 | 5,203 | 84,082 | 81.2% | 20.87% | 161 | 133 |
| 2020 | 150,588 | 109,775 | 79,877 | 29,898 | 72.8% | 14,460 | 10.94% | 14.43% | 25.37% | 2,693 | 1,818 | 4,512 | 5,373 | 89,913 | 81.9% | 20.53% | 161 | 136 |
| 2021 | 158,887 | 116,489 | 85,493 | 30,996 | 73.4% | 15,252 | 10.93% | 14.18% | 25.11% | 2,849 | 1,923 | 4,772 | 5,632 | 96,212 | 82.6% | 20.21% | 161 | 139 |
| 2022 | 167,753 | 123,622 | 91,503 | 32,120 | 74.0% | 16,083 | 10.90% | 13.94% | 24.84% | 3,005 | 2,029 | 5,033 | 5,941 | 102,966 | 83.3% | 19.86% | 161 | 144 |
| 2023 | 177,078 | 131,234 | 97,973 | 33,262 | 74.7% | 16,942 | 10.87% | 13.70% | 24.57% | 3,168 | 2,139 | 5,307 | 6,236 | 110,238 | 84.0% | 19.52% | 161 | 147 |
| 2024 | 186,997 | 139,347 | 104,930 | 34,417 | 75.3% | 17,844 | 10.84% | 13.46% | 24.30% | 3,337 | 2,253 | 5,591 | 6,550 | 118,060 | 84.7% | 19.17% | 161 | 150 |
| 2025 | 197,629 | 147,867 | 112,289 | 35,578 | 75.9% | 18,715 | 10.81% | 13.27% | 24.08% | 3,515 | 2,373 | 5,889 | 7,004 | 126,346 | 85.4% | 18.84% | 161 | 154 |
| 2026 | 208,970 | 156,722 | 119,983 | 36,738 | 76.6% | 19,604 | 10.78% | 13.08% | 23.86% | 3,687 | 2,489 | 6,176 | 7,551 | 135,025 | 86.2% | 18.50% | 161 | 160 |
| 2027 | 220,584 | 166,087 | 128,196 | 37,891 | 77.2% | 20,604 | 10.74% | 12.83% | 23.57% | 3,862 | 2,607 | 6,469 | 7,956 | 144,282 | 86.9% | 18.13% | 161 | 163 |
| 2028 | 232,828 | 175,901 | 136,878 | 39,023 | 77.8% | 21,589 | 10.71% | 12.62% | 23.33% | 4,059 | 2,740 | 6,799 | 8,488 | 154,070 | 87.6% | 17.77% | 161 | 167 |
| 2029 | 245,575 | 186,231 | 146,098 | 40,133 | 78.4% | 22,650 | 10.68% | 12.37% | 23.05% | 4,253 | 2,871 | 7,124 | 8,985 | 164,462 | 88.3% | 17.39% | 161 | 170 |
| 2030 | 258,812 | 197,174 | 155,959 | 41,215 | 79.1% | 23,783 | 10.66% | 12.09% | 22.75% | 4,462 | 3,013 | 7,475 | 9,449 | 175,567 | 89.0% | 17.00% | 161 | 172 |
| 2031 | 272,895 | 208,667 | 166,404 | 42,262 | 79.7% | 24,903 | 10.63% | 11.84% | 22.47% | 4,685 | 3,163 | 7,848 | 10,039 | 187,336 | 89.8% | 16.61% | 161 | 175 |
| 2032 | 287,514 | 220,784 | 177,515 | 43,269 | 80.4% | 26,103 | 10.61% | 11.57% | 22.18% | 4,906 | 3,312 | 8,218 | 10,594 | 199,853 | 90.5% | 16.21% | 161 | 178 |
| 2033 | 303,286 | 233,286 | 189,066 | 44,219 | 81.0% | 27,193 | 10.60% | 11.35% | 21.95% | 5,142 | 3,472 | 8,614 | 11,451 | 212,894 | 91.3% | 15.83% | 161 | 182 |
| 2034 | 319,533 | 246,196 | 201,090 | 45,106 | 81.7% | 28,381 | 10.57% | 11.09% | 21.66% | 5,357 | 3,617 | 8,974 | 12,287 | 226,482 | 92.0% | 15.42% | 161 | 185 |
| 2035 | 336,337 | 259,695 | 213,790 | 45,906 | 82.3% | 29,701 | 10.55% | 10.79% | 21.34% | 5,591 | 3,775 | 9,366 | 13,001 | 240,822 | 92.7% | 14.98% | 161 | 188 |
| 2036 | 353,928 | 273,803 | 227,201 | 46,602 | 83.0% | 31,046 | 10.53% | 10.48% | 21.01% | 5,851 | 3,950 | 9,801 | 13,777 | 255,957 | 93.5% | 14.54% | 161 | 191 |
| 2037 | 372,653 | 288,315 | 241,134 | 47,181 | 83.6% | 32,349 | 10.52% | 10.18% | 20.70% | 6,116 | 4,129 | 10,245 | 14,800 | 271,700 | 94.2% | 14.10% | 161 | 195 |
| 2038 | 391,913 | 303,183 | 255,556 | 47,626 | 84.3% | 33,702 | 10.51% | 9.86% | 20.37% | 6,373 | 4,302 | 10,675 | 15,893 | 288,013 | 95.0% | 13.65% | 161 | 199 |
| 2039 | 411,627 | 318,656 | 270,737 | 47,920 | 85.0% | 35,295 | 10.49% | 9.48% | 19.97% | 6,639 | 4,482 | 11,122 | 16,786 | 305,168 | 95.8% | 13.16% | 161 | 202 |
| 2040 | 432,661 | 334,579 | 286,555 | 48,024 | 85.6% | 36,875 | 10.48% | 9.09% | 19.57% | 6,953 | 4,694 | 11,647 | 17,934 | 323,048 | 96.6% | 12.66% | 161 | 206 |
| 2041 | 454,360 | 350,915 | 302,997 | 47,917 | 86.3% | 38,486 | 10.47% | 8.69% | 19.16% | 7,264 | 4,904 | 12,169 | 19,146 | 341,641 | 97.4% | 12.15% | 161 | 210 |
| 2042 | 476,401 | 367,931 | 320,346 | 47,585 | 87.1% | 40,294 | 10.47% | 8.24% | 18.71% | 7,582 | 5,119 | 12,700 | 20,143 | 361,237 | 98.2% | 11.63% | 161 | 212 |
| 2043 | 499,587 | 385,611 | 338,613 | 46,998 | 87.8% | 42,148 | 10.46% | 7.78% | 18.24% | 7,938 | 5,359 | 13,297 | 21,261 | 381,860 | 99.0% | 11.08% | 161 | 215 |
| 2044 | 524,010 | 403,874 | 357,743 | 46,131 | 88.6% | 44,092 | 10.46% | 7.30% | 17.76% | 8,303 | 5,606 | 13,909 | 22,517 | 403,463 | 99.9% | 10.53% | 161 | 218 |
| 2045 | 549,155 | 422,809 | 377,859 | 44,951 | 89.4% | 46,131 | 10.47% | 6.80% | 17.27% | 8,686 | 5,864 | 14,550 | 23,754 | 426,175 | 100.8% | 9.96% | 161 | 221 |

ACTUARIAL ASSUMPTIONS

Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using *the Individual Entry Age Normal actuarial cost method* having the following characteristics:

- The normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Financing of Unfunded Actuarial Accrued Liabilities. The unfunded actuarial accrued liability is amortized using 20-year open level-percentage of pay amortization of the unfunded liability as of the valuation date.

Actuarial Value of Pension Plan Assets. The asset value is the actuarial value of assets which is calculated by recognizing 100 percent of the current year's interest and dividends and 20 percent of the current year and previous four years' total appreciation/(depreciation). The total appreciation/(depreciation) for a given year is fully recognized after a five year period.

Valuation Assumptions

The contribution and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described above.

The principal areas of financial risk which require assumptions about future experiences are:

- Long-term rates of investment return to be generated by the assets of the Plan;
- Patterns of pay increases to members;
- Rates of mortality among members, retirees and beneficiaries;
- Rates of withdrawal of active members;
- Rates of disability among members; and
- The age patterns of actual retirement.

In a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the Plan will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). Thus, an experience review of the North Dakota Highway Patrolmen's Retirement System for the period July 1, 2009, to July 1, 2014, was performed to compare the demographic and economic experience against the actuarial assumptions used in the valuations. The actuarial assumptions described in this section were adopted by the Board for use beginning with the July 1, 2015, valuation. Additional information regarding the rationale for the assumptions may be found in the 2015 experience review report. **The experience review was performed by the prior actuary.** All actuarial assumptions are expectations of future experience, not current market measures.

ACTUARIAL ASSUMPTIONS

The assumed rate of investment return used was 8.00%, net of expenses, annually.

The assumed rate of price inflation is 3.50 percent.

No Cost of Living Adjustments (COLA) are provided to benefits recipients. Therefore, there is no assumption for this valuation.

The rates of annual salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based.

| Service At Beginning of Year | Increase Rate |
|---|--------------------------|
| 0 | 15.00% |
| 1 | 10.00% |
| 2 | 8.00% |
| Age | |
| Under 36 | 8.00% |
| 36 - 40 | 7.50% |
| 41 - 49 | 6.00% |
| 50+ | 5.00% |

The assumed rate of total payroll growth used in amortizing the unfunded liability as a level percentage of pay is 4.50 percent

The assumed rate of benefit indexing for inactive vested benefits is 4.00 percent.

Application of Internal Revenue Code Section 415 Limits

Benefits for future retirees are assumed to be limited by the IRC Section 415 limits.

The limit for retirement ages of 62 and older is \$210,000 in 2015. The limits for retirement ages before age 62 are reduced from age 62 for early commencement using 5.0% interest, beginning of month payments, the 2015 Applicable Mortality Table (as published in IRS Notice 2013-49), and assumes forfeitable accrued benefits upon death prior to retirement.

The projected limits are assumed to increase by 3.50 annually.

ACTUARIAL ASSUMPTIONS

The mortality assumptions are as follows:

| | Male Setback | Female Setback |
|--|-------------------------|---------------------------|
| RP-2000 Combined Healthy Mortality Table (healthy mortality) | 2 years | 3 years |
| RP-2000 Disabled Retiree Mortality Table (disabled post retirement)* | 1 year | 0 years |

*Rates multiplied by 125 percent.

To provide a margin for future mortality improvements, generational mortality improvements from the year 2014 using the Social Security Administration (SSA) 2014 Intermediate Cost scale were assumed.

Following is a table with the life expectancies by age as of the valuation date.

| Age | Healthy Mortality | | Disabled Mortality | |
|------------|-----------------------------------|--------------|-----------------------------------|--------------|
| | Post-Retirement | | | |
| | Future Life | | Future Life | |
| | Expectancy (years) in 2015 | | Expectancy (years) in 2015 | |
| | Men | Women | Men | Women |
| 20 | 67.55 | 71.96 | 32.00 | 49.54 |
| 25 | 62.15 | 66.55 | 30.13 | 45.71 |
| 30 | 56.76 | 61.13 | 28.14 | 41.80 |
| 35 | 51.39 | 55.72 | 26.03 | 37.81 |
| 40 | 46.08 | 50.35 | 23.67 | 33.67 |
| 45 | 40.81 | 45.01 | 20.99 | 29.37 |
| 50 | 35.60 | 39.74 | 18.12 | 25.13 |
| 55 | 30.48 | 34.54 | 15.64 | 21.39 |
| 60 | 25.54 | 29.47 | 13.47 | 18.11 |
| 65 | 20.89 | 24.62 | 11.45 | 15.12 |
| 70 | 16.65 | 20.14 | 9.49 | 12.35 |
| 75 | 12.83 | 16.03 | 7.64 | 9.85 |
| 80 | 9.52 | 12.38 | 6.04 | 7.71 |
| 85 | 6.79 | 9.21 | 4.74 | 5.90 |
| 90 | 4.72 | 6.63 | 3.58 | 4.44 |
| 95 | 3.36 | 4.84 | 2.52 | 3.36 |
| 100 | 2.56 | 3.82 | 1.90 | 2.73 |
| 105 | 2.13 | 3.11 | 1.59 | 2.13 |

ACTUARIAL ASSUMPTIONS

Rates of separation from active membership are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment.

| Service Beginning of Year | Service and Age-Based Rates For First Five Years of Service |
|---------------------------------|--|
| Year | Rates |
| 0 | 10.00% |
| 1 | 5.00% |
| 2 | 5.00% |
| 3 | 5.00% |
| 4 | 5.00% |
| Age | Rates |
| Under 35 | 2.50% |
| 35+ | 1.00% |

Vested participants that terminate are assumed to elect the option with the greater present value:

- 1) *A refund of their accumulated contributions with interest or*
- 2) *A deferred benefit.*

Withdrawal rates end upon eligibility for early retirement.

Early retirement eligibility is as follows:

Age 50 and 10 years of service.

ACTUARIAL ASSUMPTIONS

Rates of disability:

Before age 65: Males: 20% of OASDI disability incidence rates.
 Females: 10% of OASDI disability incidence rates.
 Age 65 and later: 0.25% per year.

Rates of disability were as follows:

| Age | All Plans | |
|-----|-----------|---------|
| | Male | Female |
| 20 | 0.0120% | 0.0060% |
| 25 | 0.0171% | 0.0085% |
| 30 | 0.0220% | 0.0110% |
| 35 | 0.0295% | 0.0147% |
| 40 | 0.0440% | 0.0220% |
| 45 | 0.0719% | 0.0360% |
| 50 | 0.1212% | 0.0606% |
| 55 | 0.2018% | 0.1009% |
| 60 | 0.3254% | 0.1627% |
| 65 | 0.2500% | 0.2500% |

Rates of retirement for members eligible to retire during the next year were as follows:

| Age | Rates |
|-----|---------|
| 50 | 20.00% |
| 51 | 20.00% |
| 52 | 20.00% |
| 53 | 20.00% |
| 54 | 20.00% |
| 55+ | 100.00% |

Assumed Service

Credit:

All active members (full time and part time) are assumed to earn one full year of service for each assumed future year of service.

Transferred Members with Service in PERS:

For members that have transferred to or from PERS, there are liabilities held in each System based on the service in each System. The actuarial assumptions that are used are based on the System in which the member is active.

Marital Status:

It is assumed that 100 percent of participants have an eligible spouse at the time of retirement or pre-retirement death. The male spouse is assumed to be three years older than the female spouse.

ACTUARIAL ASSUMPTIONS

Form of Payment

| Election Assumption: | Form of Payment | Election Percentage |
|----------------------|------------------------|---------------------|
| | 50% Joint and Survivor | 100% |

Benefit Service: Exact fractional years of service are used to determine the amount of benefit payable.

Decrement Timing: All decrements are assumed to occur at the middle of the year.

Decrement

Operation: Turnover decrements do not operate after the member reaches retirement eligibility (early or normal).

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.

Pay Increase Timing: End of (fiscal) year.

Expenses: Assumed administrative expenses were added to the Normal Cost and are based on the prior year's expenses, adjusted for inflation. The assumed amount added to the Normal Cost is:

| Expenses | | |
|-----------------|----|--------|
| Assumed FY 2015 | \$ | 18,630 |
| Actual FY 2015 | | 30,925 |
| Assumed FY 2016 | | 32,007 |

Assumptions for Missing or Incomplete Data:

Changes in Valuation Assumptions and Methods Since the Previous Valuation

There have been no changes in valuation assumptions or methods since the previous valuation as of July 1, 2014.

BENEFIT PROVISIONS

This exhibit summarizes the major benefit provisions of the North Dakota Highway Patrolmen's Retirement System as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions.

1. **Normal Service Retirement:**

Eligibility:

Attainment of age 55 with at least 10 years of eligible employment, or at any age with age plus service equal to at least 80 (Rule of 80).

Benefit:

3.60% of final average salary for each of the first 25 years of service plus 1.75% of final average salary for service in excess of 25 years.

2. **Early Retirement:**

Eligibility:

Attainment of age 50 with 10 years of eligible employment.

Benefit:

The Normal Service Retirement benefit as determined above, reduced by one-half of one percent for each month before age 55.

3. **Disability Benefit:**

Eligibility:

Accumulation of six months of service and inability to engage in substantial gainful activity.

Benefit:

70% of the member's final average salary at disability minus workers' compensation, with a minimum of \$100 per month

4. **Deferred Vested Retirement:**

Eligibility:

Ten years of eligible employment.

Benefit:

The Normal Service Retirement benefit payable at age 55 or the Rule of 80, if earlier.

BENEFIT PROVISIONS

Vested benefits are indexed at a rate set by the Retirement Board based on the increase in final average salary from date of termination to benefit commencement date, as follows:

| <u>Year Beginning</u> | <u>Average Annual Increase</u> | <u>Three-Year Average Increase</u> | <u>Cumulative Salary Increase</u> |
|-----------------------|--------------------------------|------------------------------------|-----------------------------------|
| 7/1/1994 | 3.00% | 3.01% | 3.01% |
| 7/1/1995 | 2.00 | 2.86 | 5.95 |
| 7/1/1996 | 2.00 | 2.33 | 8.42 |
| 7/1/1997 | 3.00 | 2.33 | 10.95 |
| 7/1/1998 | 1.80 | 2.27 | 13.47 |
| 7/1/1999 | 1.26 | 2.02 | 15.76 |
| 7/1/2000 | 2.00 | 1.69 | 17.71 |
| 7/1/2001 | 1.81 | 1.69 | 19.70 |
| 7/1/2002 | 1.73 | 1.85 | 21.91 |
| 7/1/2003 | 0.00 | 1.18 | 23.35 |
| 7/1/2004 | 0.00 | 0.58 | 24.06 |
| 7/1/2005 | 4.00 | 1.33 | 25.72 |
| 7/1/2006 | 4.00 | 2.67 | 29.07 |
| 7/1/2007 | 4.00 | 4.00 | 34.23 |
| 7/1/2008 | 4.00 | 4.00 | 39.60 |
| 7/1/2009 | 5.00 | 4.33 | 45.65 |
| 7/1/2010 | 5.00 | 4.67 | 52.45 |
| 7/1/2011 | 2.00 | 4.00 | 58.55 |
| 7/1/2012 | 2.00 | 3.00 | 63.30 |
| 7/1/2013 | 3.00 | 2.33 | 67.11 |
| 7/1/2014 | 3.00 | 2.67 | 70.11 |
| 7/1/2015 | 3.00 | 3.00 | 73.11 |

Reduced early retirement benefits can be elected upon attainment of age 50.

BENEFIT PROVISIONS

5. Pre-Retirement Death Benefits:

(a) Eligibility:

Ten years of eligible employment.

Benefit:

One of the following options:

- Lump sum payment of member's accumulated contributions with interest.
- 50% of the member's accrued benefit (not reduced on account of age) for the surviving spouse's lifetime.

(b) Eligibility:

Less than 10 years of service.

Benefit:

Lump sum payment of member's accumulated contributions with interest.

6. Normal and Optional Forms of Payment:

Normal form of payment:

Monthly benefit for life with 50% of the benefit continuing for the life of the surviving spouse (if any).

Optional forms of payment:

- 100% joint and survivor annuity
- Twenty-year certain and life annuity
- Ten-year certain and life annuity
- A partial lump sum payment in addition to one of the annuity options above.
- An actuarially equivalent graduated benefit option with either a one percent or two percent increase to be applied the first day of January of each year. Not available for disability or early retirements or in combination with a partial lump sum option or a deferred normal retirement option.

BENEFIT PROVISIONS

7. Final Average Salary:

Average of the highest salary received by the member for any 36 months employed during the last 180 months of employment.

8. Contributions:

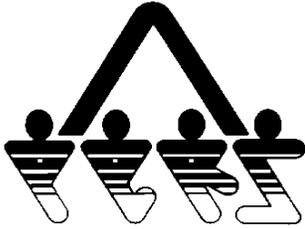
Member contributions as a percent of monthly salary: 13.30%

Member contributions earn interest at an annual rate of 7.50% compounded monthly.

State contributions as a percent of monthly salary for each participating member: 19.70%

Changes in Plan Provisions Since the Previous Valuation

There have been no changes in plan provisions since the previous valuation as of July 1, 2014.



**North Dakota
Public Employees Retirement System**
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Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 15, 2016

SUBJECT: Dental/Vision Plans – Retiree Open Enrollment

With the portability of the RHIC benefit, staff has heard from a limited number of retirees that they are not able to benefit from this portability as they do not have out-of-pocket health or prescription drug premiums from other sources. This has typically been a result of coverage being provided through Tri-Care or if coverage on a spouse's plan that is being paid by the spouse's employer.

You may recall that the RHIC benefit can now be used for other health or prescription drug coverage, but only for the NDPERS dental or vision plans. For those retirees that have contacted us, they elected not to enroll in the NDPERS dental and vision plans upon retirement and in most instances, had elected not to enroll during the other qualifying events available to them as that at the time of these events, the RHIC was still not portable and therefore, could not be applied to the dental or vision plans.

Therefore, staff has begun exploring the option of holding a one time open enrollment window to retirees to allow them to apply for coverage or increase the level of coverage that they have if already enrolled. Currently Jan is reviewing the law and administrative rules to determine if this type of window can occur without modification to law or rules. Staff has also discussed this with the current carriers for each plan. They have requested that if the board wishes to explore this option further that additional details are provided to them so that their underwriting departments can determine if a change in premium would be necessary to accommodate the special window opportunity.

At this time, staff is seeking direction from the board regarding if this is an item they would like staff to pursue further. Based upon Jan's feedback on the law and rules, if so desired by the board, staff would determine when the window can occur and bring back an action plan for the board's review and approval at a future meeting.



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Memorandum

TO: PERS Board
FROM: Sparb
DATE: October 4, 2016
SUBJECT: Sanford Implementation

PERS Renewal Decision

Since the last meeting when it was decided to renew with Sanford staff has:

1. Developed the attached Renewal Decision announcement (Attachment #1).
2. Informed the OMB and Legislative Council of the Board's decision.
3. Sent the notice to our authorized agents and invited them to share it with employees in the agency.
4. Sent the notice to our wellness coordinators.
5. Sent the notice to several of our member organizations.
6. Included the information in our newsletters which are being mailed soon.
7. Responded to the BCBS letter (Attachment #2)

Please review the attached notice and at the meeting we will discuss any other items that should be added or include other considerations.

Request for Proposal

Staff is going to continue work to finish the RFP for the health plan. We approved starting the process this last summer. This work was contracted on a fixed fee basis or a not to exceed basis. Staff is going to work on finishing the RFP's at a slower pace with the goal of having it done by end of December.

Contracting and Update COI (Certificate of Insurance)

With the renewal decision made, it has been our past practice to update and approve the contract and COI after the legislative session. We have done in the past for the following reasons:

1. Since it is a renewal, the basic contract does not need to be negotiated and changes are generally limited dates, rates and any negotiated items.
2. Changes to the COI cannot be finalized until we know our funding level and that is not finalized until the end of the session.
3. We do not know the rates until after the session which is the majority of the changes in the contract and the reason for changes in the COI.

Given our past practice, we plan to start the contract process in April with the goal of having a finalized version for your approval in May or June of 2017.

Sanford Health Plan Renewal

September 23, 2016

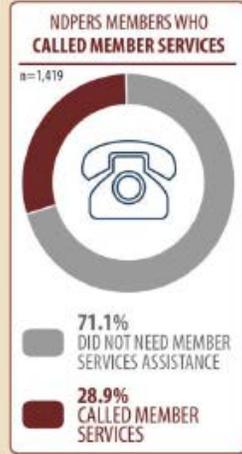
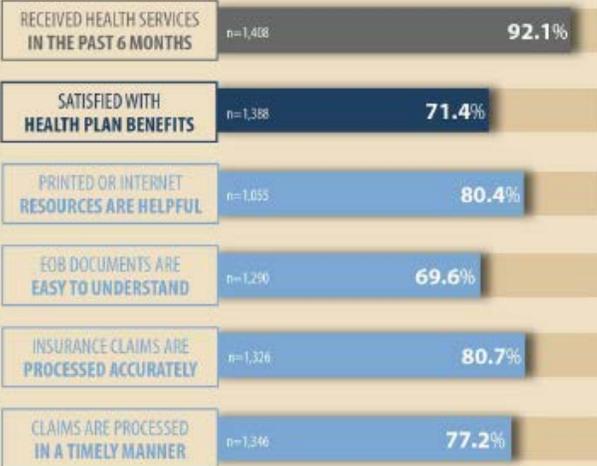
The PERS Board reviewed the Sanford Health Plan Renewal proposal for the PERS health plan as directed by North Dakota Century Code § 54-52.1-05 at its August 25, September 8 and September 22 meetings. The Board's statutory obligations required it to consider the carrier's performance and the reasonableness of the proposed renewal amount. The PERS Board renewed its contract with Sanford for the 2017-19 biennium after:

1. Reviewing information from its consultant indicating the proposed renewal amount was reasonable. Specifically, the consultant found:
“Sanford’s quoted renewal rates equate to a 16.7% increase overall which falls between the estimated increases calculated by Deloitte under the separate projection methodologies. Sanford’s proposed rates fall below our estimated premium increase utilizing Sanford claims experience. Additionally, Sanford’s final renewal proposal removes all risk from NDPERS. Based on the final proposal terms and our analysis, we consider Sanford’s renewal rates to be reasonable.”
2. Reviewing a survey of over 7,000 of its membership, and observing the surveys showed sound levels of satisfaction for the transition year to a new health carrier. Survey results found:



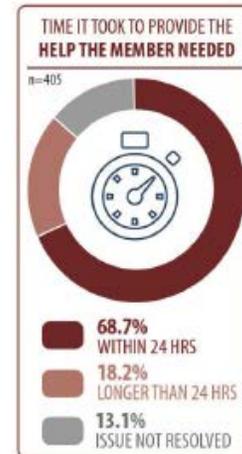
TOPLINE RESULTS: GENERAL MEMBERSHIP SURVEY

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Less than 30% of members surveyed reported calling the call center, but those members said they are more satisfied with their service experience than they are with their health plan benefits.



3. Considering the results of a claims processing and performance standards review by Deloitte Consulting for the first year of the contract. Review results found:

| Measurement | Review Result | NDPERS Performance Guarantee | Industry Benchmark |
|--------------------------------|----------------------|-------------------------------------|---------------------------|
| Claims Accuracy | | | |
| Financial Accuracy: | 99.7% | 99% | 99% |
| Payment Accuracy: | 97.7% | 97% | 97% |
| Procedural Accuracy: | 97.3% | - | 95% |
| Claims Turnaround Time* | | | |
| Average Days to Process: | 5.0 days | - | - |
| % within 30 Calendar Days: | 95.0% | 99% | - |
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4. Noting that as a cost savings measure Sanford offered to assume all risk for losses for the health plan for the 2017-19 biennium while continuing to offer NDPERS the same return of premium provisions if premiums exceed expenses.
5. Noting that Sanford agreed to increase its reserve requirement by \$32 million for 2017-19 biennium.
6. Noting that Sanford agreed to limit any increase in administrative expenses to growth in CPI if the plan is renewed for the 2019-21 biennium.
7. Noting that Sanford's efforts relating to wellness and prevention met or exceeded Board expectations.
8. Noting that the review undertaken and factors considered by the Board is consistent with its past practice in considering renewals for the group insurance program.



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Public Employees Retirement System
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Sparb Collins
Executive Director
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September 26, 2016

Attachment 2

Tim Huckle
President and CEO
Blue Cross Blue Shield of North Dakota
4510 13th Avenue South
Fargo, ND 58121

Thank you for your letter of September 1, 2016 requesting the opportunity to offer an alternative health plan option for NDPERS members. Under state law NDPERS has two options it may consider at this time.

The first option is a renewal with the existing carrier. This last session the legislature passed legislation at NDCC 54-52.1-05 (2) on how to conduct a renewal:

- a. *The board may renew a contract subject to this subsection without soliciting a bid under section 54-52.1-04 if the board determines the carrier's performance under the existing contract meets the board's expectations and the proposed premium renewal amount does not exceed the board's expectations.*
- b. *In making a determination under this subsection, the board shall:*
 - (1) *Use the services of a consultant to concurrently and independently prepare a renewal estimate the board shall consider in determining the reasonableness of the proposed premium renewal amount.*
 - (2) *Review the carrier's performance measures, including payment accuracy, claim processing time, member service center metrics, wellness or other special program participation levels, and any other measures the board determines relevant to making the determination and shall consider these measures in determining the board's satisfaction with the carrier's performance.*
 - (3) *Consider any additional information the board determines relevant to making the determination.*
- c. *If the board determines the carrier's performance under the existing contract does not meet the board's expectations or the proposed premium renewal amount exceeds the board's expectations and the board determines to solicit a bid under section 54-52.1-04, the board shall specify its reasons for the determination to solicit a bid.*

The second option would be for the Board not to renew and then we must go to bid pursuant to the applicable statutes that we followed last year.

The alternative health plan option you offered in your letter would have to be considered as part of a bid process. This would require the Board not to renew with Sanford and initiate a Request for Proposals with this being an option for consideration.

Page 2

At the Board's September 22 meeting, it was decided to renew with Sanford. I have attached, for your information, the reasons for that renewal. As a result of this renewal, we are not able to discuss the offer in your letter with you at this time. Thank you for your continued interest in NDPERS.

A handwritten signature in black ink, appearing to read 'Jon Strinden', written in a cursive style.

Jon Strinden, Chairman
NDPERS Board of Directors

A handwritten signature in blue ink, appearing to read 'Sparb Collins', written in a cursive style.

Sparb Collins
Executive Director

Sanford Health Plan Renewal

September 23, 2016

The PERS Board reviewed the Sanford Health Plan Renewal proposal for the PERS health plan as directed by North Dakota Century Code § 54-52.1-05 at its August 25, September 8 and September 22 meetings. The Board's statutory obligations required it to consider the carrier's performance and the reasonableness of the proposed renewal amount. The PERS Board renewed its contract with Sanford for the 2017-19 biennium after:

1. Reviewing information from its consultant indicating the proposed renewal amount was reasonable. Specifically, the consultant found:

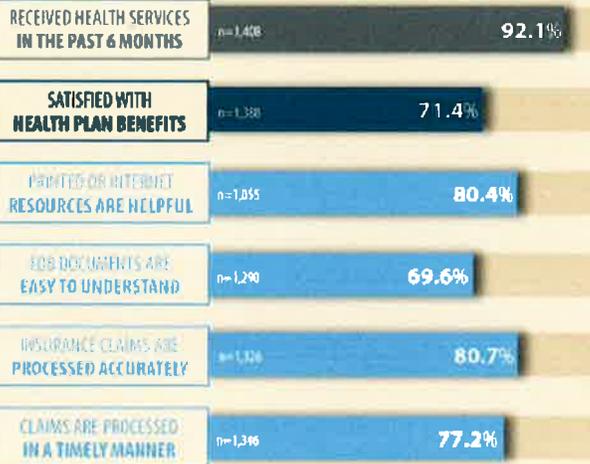
"Sanford's quoted renewal rates equate to a 16.7% increase overall which falls between the estimated increases calculated by Deloitte under the separate projection methodologies. Sanford's proposed rates fall below our estimated premium increase utilizing Sanford claims experience. Additionally, Sanford's final renewal proposal removes all risk from NDPERS. Based on the final proposal terms and our analysis, we consider Sanford's renewal rates to be reasonable."

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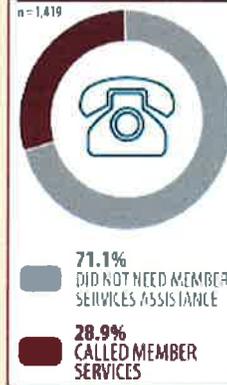


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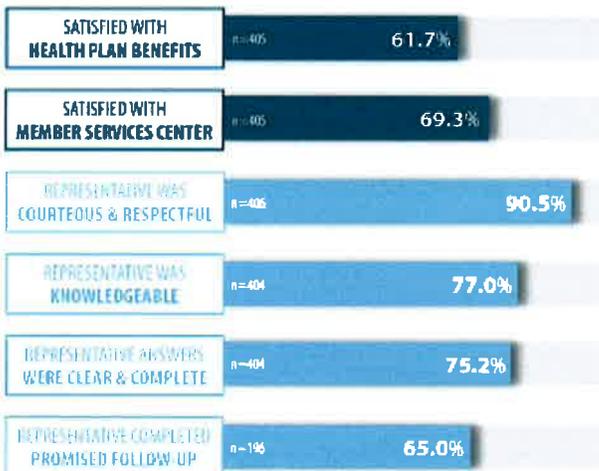


NDPERS MEMBERS WHO CALLED MEMBER SERVICES



TOPLINE RESULTS: MEMBER SERVICES CALL CENTER SURVEY

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TIME IT TOOK TO PROVIDE THE HELP THE MEMBER NEEDED



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