



TO: Members of the Legislative Commission on Pensions and Retirement
FROM: Ed Burek, Deputy Director *EB*
RE: Summary of Proposals for Actuarial Services to the Commission
DATE: June 3, 2009

Introduction

The 2008 Legislature (Laws 2008, Chapter 349, Article 10, Sections 7-9, and 17-18) revised the provision of actuarial services to the major public pensions plan administrations and to the Legislative Commission on Pensions and Retirement. The requirement that the pension funds jointly retain an actuary was revised by removing the joint actuary requirement. Instead, each plan system retains its own actuary. The Pension Commission was authorized to retain an actuary to audit or review the actuarial valuations, experience studies, and other reports and services provided by the actuaries retained the various pension plan governing boards.

In late January 2009, the Pension Commission requested proposals from qualified actuarial consulting firms to provide a range of actuarial audit/review services to the Commission as specified in the Request for Proposal (RFP). Seven actuarial service firms responded to the RFP: Cheiron (pronounced ki' ron), Deloitte, Gabriel Roeder Smith and Company (GRS), Hay Group, Kenney Consulting, Milliman, and PricewaterhouseCoopers. Summaries of the proposals received are attached. The remainder of the cover memo briefly indicates the scope of the proposed tasks outlined in the RFP and makes a few observations on the received proposals.

Proposal Requirements

The Commission's RFP requested actuarial audit/review services to be provided to the Commission. The RFP asked the firms to submit fixed fee compensation for the following purposes:

1. to review the quadrennial experience studies of the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General), the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), and the Teachers Retirement Association (TRA); and
2. to review or replicate the annual actuarial valuations of the 13 defined benefit plans in MSRS, PERA, TRA, the first class city teacher plans, and the Minneapolis Employees Retirement Fund (MERF).

It is considered good practice to fully replicate the annual actuarial valuations once every four or five years, and to do a thorough review in years where full replication does not occur.

The RFP also requested hourly rates to review or replicate actuarial cost estimates for proposed benefit, contribution, actuarial assumption, or other changes; to review or audit optional annuity form tables; to review or audit prior service credit purchase payment amount determinations; to review or audit privatization gain or loss estimates; to attend Pension Commission meetings; to provide advice and counsel on pension benefit design and funding; and to provide other special studies.

The RFP specified minimum firm and team qualification standards, which include:

1. that the provider be regularly engaged in the business of providing actuarial services and be a Fellow in the Society of Actuaries (FSA);
2. that the firm have sufficient size to meet the Commission's needs and that of its other clients;
3. that the firm and the individuals assigned to the Commission's account have prior public plan experience and prior reviewing/auditing actuary experience;
4. that the team working on the Commission's account be able to meet Commission timeframes and be readily accessible on short notice; and
5. that, to the extent possible, there are no contractual liability limits.

In addition, the RFP requested information on the firm's structure, how the assigned team will be organized and will function, who will replace team members if there was staff turnover or a key member was otherwise not available, and whether the firm's computerized valuation system is sufficiently flexible to handle the Commission's needs and has sufficient capability to handle the large membership in

Minnesota public plans. The RFP also asked for client additions and subtractions in recent years, for references, and whether the firm had current or potential conflicts of interest due to current services it provides to Minnesota pension plans or other interested parties.

Comments on the Attached Summaries

The firms vary in size from international firms with hundreds of employees to a small firm with only four employees. All of the firms have prior public plan experience, although for the smallest firm, Kenney Consulting, that experience seems limited to a few small plans. The proposed teams also have team members with public plan experience. That team experience may be thin when one looks beyond the team leader. The team leader serves as the Commission's contact and the individual who will meet with the Commission when needed, but in general, most of the work will be done by other team members. A few teams have team leaders or other team members with considerable experience working on Minnesota pension plans.

It was sometimes difficult to determine from the proposals the extent to which a firm or team has served as reviewing/auditing actuaries, rather than as production actuaries. This may or may not be an issue for the Commission. The teams have public plan experience, and any actuarial firm retained to provide actuarial valuations will begin by performing a detailed review or replication of a prior actuary's work, to ensure as seamless a transition as possible and to spot possible errors. Thus, even if an actuary has not officially been an actuarial auditor, they are likely to have performed that function informally as a first step on prior projects.

Accessibility may be an issue with some of the companies. Only one company would service the contract locally (from Minneapolis). The others are located in other states, as far away as Washington DC and California. In a few cases the individual who is to provide backup if the key contact person is not available may be an independent contractor rather than a company employee.

The Commission presumably is interested in contracting with a company willing to back up its work with high or unlimited liability limits. Only one company, Cheiron, is clearly willing to enter into a contract that does not set liability limits, but the proposed cost of full replication from that company was more than twice that of the lowest bids.

A few firms have conflict of interest problems. The Deloitte team has for several years provided actuarial advice to Minneapolis regarding its dealings with MERF and the two Minneapolis relief associations. If the Pension Commission were to need advice regarding any proposed merger of MERF or these relief associations into PERA, the same firm would be advising both the city and the state. If this were to occur, the Deloitte proposal indicates that an individual from Deloitte's Chicago office, rather than the Minneapolis team, would advise the state. The Commission may need to decide if that is a reasonable solution. Another company, GRS, currently is the retained actuary for MERF and the St. Paul Teachers Retirement Fund Association (SPTRFA). If GRS is retained by the Commission, GRS would be responsible for auditing their own work. The solution GRS proposes is to simply not perform audits of the MERF and SPTRFA actuarial valuations, auditing only 11 plans rather than the 13 plans requested in the RFP. Auditing some but not all plans is not consistent with the RFP and the Commission may conclude that the GRS proposal is not consistent with the Commission's needs. Milliman does not currently have a conflict, but one could develop. Milliman has responded to a Duluth Teachers Retirement Fund Association (DTRFA) RFP to be the production actuary for that fund. Milliman has proposed a reasonable solution. If it is retained by DTRFA before the Commission decides on a firm to retain, it will withdraw from Commission consideration. If the Commission chooses to retain Milliman before DTRFA makes a decision, Milliman will withdraw from DTRFA consideration.

The compensation requirements stated in the proposals vary considerably between firms. Some firms provided several different sets of compensation requirements, depending on specific mixes of services the Commission might request in a given year. That information is included in the summary of each proposal. Because that presentation makes it difficult to compare fees across firms, Commission staff has also included a one page compensation summary which may make comparison easier. For purposes of that compensation summary, Commission staff selected the compensation requirements specified in the proposals assuming that the first major work assigned to the team occurs in fiscal 2009 and is a review of the 2008 actuarial valuations, followed by work in fiscal 2010 to review the three experience studies and to have a full replication of the 2009 actuarial valuations. This is followed in 2011 and 2012 by a review of the actuarial valuations. The charge for services varies considerably between the companies. No company is consistently lower for all services. A given company may have submitted a high bid for full

replication of actuarial valuations, but have a rather low charge for an actuarial review. For this specific set of services, Kenney Consulting had the lowest overall cost.

A problem for the Commission is that one firm may define actuarial review, actuarial audit, and full replication differently than another firm, making it difficult to determine whether the firms provided compensation requirements for comparable services. Some of the proposals imply that an actuarial review is a very limited check for reasonableness and consistency with statutes and actuarial standards, while an audit is more thorough than a review but less than a full replication of the actuarial valuation results. Other proposals suggest that an audit requires full replication. The Commission may need to explore this more to ensure it can make valid comparisons across firms.

Only one firm, Kenney Consulting, provided the requested fixed hourly rates to audit service credit purchase procedures, review of cost estimates, and similar work. Other firms indicated that the price could not be known in advance; it would depend on the specific request and the mix of team members needed on any given task.

Actuarial Services Proposal Summary

Firm: Cheiron (*pronounced ki'ron*)

A. Minimum Qualification Standards and Important Qualification Factors

1. Prior Public Pension Experience by Actuarial Firm. Before Cheiron was formed in 2002, consultants now at Cheiron provided actuarial services for more than 25 years to statewide defined benefit retirement systems in Maryland, Florida, and Maine. Since Cheiron was founded, the company has provided actuarial services to the state retirement system of Delaware, the Pennsylvania Municipal Retirement System, the Oregon PERS, CalSTRS, the State of New Jersey, numerous cities (including Baltimore, Philadelphia, Annapolis, San Francisco, Norfolk and Chattanooga) and several counties, and the Maryland State Legislature.
2. Prior Public Pension Experience by Assigned Firm Personnel. The peer reviewers have extensive public plan experience, but they will play a limited role. One of the two “actuarial consultants” (Linda Bournival) has considerable public plan experience but is not an employee of Cheiron. She is identified as the Executive Vice President of Ricci Consultants. The other actuarial consultant has 18 years of experience with defined benefit plans and headed actuarial audits for a state Blue Cross/Blue Shield system. The project managers have lesser amounts of public plan experience.
3. Prior Reviewing/Auditing Actuary Experience. The firm has provided auditing and evaluation of the work of other actuaries for the California State Teachers’ Retirement System, the Oregon Public Employees Retirement System, the Wichita Employees Retirement System, the Wichita Police and Fire Retirement System, and the Michigan Laborers Pension Fund. Proposal does not specifically mention involvement of the proposed Pension Commission’s team in these activities.
4. Accessibility. Proposal claims work products will be timely, with highly qualified individuals available to meet tight deadlines and attend required legislative or other meetings. Three individuals are responsible for presenting reports and results to Pension Commission. The primary contact is Scott Greeno, an ASA with 18 years of experience. Backups are Linda Bournival, an FSA with 25 years of experience, and Fiona Liston, an FSA with 25 years of experience.
5. Absence of Contractual Liability Limits and Contractual Third-Party Reliance Disclaimers. No liability limitations. Proposal states that the key Cheiron consultants worked together for many years in the Washington DC office of a major international actuarial firm. Cheiron was formed after its founders took exception to the efforts of their prior employer and the actuarial industry in general to unilaterally impose liability limitations on clients.

B. Firm Information

1. Firm Size, Structure, Operational Method, and Communications Capability.
 - a. Firm size, structure:
 - Employee-owned corporation.
 - Full staff component is 46 full-time staff (including 26 credentialed actuaries) and two part-time staff.
 - Offices in Washington DC, Chicago, New York City, Philadelphia, and San Diego.
 - Firm also has an alliance with Ricci Consultants enabling both companies to act as a single entity. (Ricci Consultants may eventually be acquired by Cheiron.)
 - Company also has an affiliate, Arene Health Partners, LLC, providing healthcare consulting.
 - b. Operational method:
 - Employs internal quality controls to minimize frequency and impact of any mistakes.
 - Each actuary is adept at computer programming and does not rely solely on “back rooms” to provide all calculations.
 - Each lead consultant knows in detail the process that produces all of the actuarial numbers.
 - c. Communications capability:
 - Stresses open lines of communication with clients.
2. Five Major References
 - a. Mr. David Craik, Pension Administrator, Delaware Retirement System
 - b. Ms. Gail Drake-Wright, Executive Director, Maine State Retirement System
 - c. Mr. David Wescoe, Executive Director, San Diego City Employees’ Retirement Systems
 - d. Mr. Robert L. Mears, Executive Director, Fairfax County Retirement Systems
 - e. Ms. Kimla T. Milburn, Director of Human Resources, City of Annapolis
 - f. Mr. James Allen, Secretary, Pennsylvania Municipal Retirement Systems
3. Client Additions and Subtractions. The proposal lists approximately 135 clients added since 2004, and claims to have lost only one account. Some of these are health/welfare plans.
4. Firm’s Valuation System. Actuarial valuation software, called ProVal, is leased from Winklevoss Technologies. The software can handle large amounts of data, use select and ultimate interest rates, multiple funding methods, multiple decrements, actuarial gain and loss by source, and open and closed

group forecasts. Computations and reports are produced on PCs. Client projects and files distributed among many multiple employees. Proposal claims this is not as susceptible to catastrophic failures as in a central computer approach. Work is backed up to centralized network storage device with redundant power supplies. All computers use encryption to ensure data security. Can do projection valuations, extensive graphic capability, and sensitivity analysis.

5. Firm's Potential Conflicts of Interest. No conflicts. Firm has no other Minnesota clients.
6. Most Recent Audited Annual Financial Report. Firm is not publicly held. Would be willing to share detailed financial statements if selected as a finalist.

C. Approach and Work Plan

1. Ability to Meet Service Timeframes. States that all time requirements will be met.
2. Organization of Assigned Staff. The organization and function of assigned personnel in the proposal is very confusing. The structure appears to be, starting from the bottom:
 - a. actuarial analysts to do most of the number crunching;
 - b. project managers to ensure that tasks are on schedule;
 - c. actuarial consultants who will deliver the work products to the Commission, provide any needed presentations, and attend Pension Commission meetings; and
 - d. peer reviewers who will provide peer review of all work products.

What is confusing is that three individuals are identified as “the proposed project manager” without any explanation of why there are three project managers or who has final project management responsibility, and two individuals are identified as “the proposed actuarial consultant.” Perhaps this is due to poor editing of the proposal, or perhaps it is an intended structure to ensure that, if necessary, a request can be promptly filled, but an explanation is needed. As presented, one wonders whether anyone is truly in charge.

3. Plan for Coordinating Services with Commission Staff. Firm intends to meet with Pension Commission staff to determine appropriate lines of communication with Commission staff, discuss expectations, intermediate goals, and deadlines.
4. Primary Contact Person and Replacement Personnel. Primary contact is Scott Greeno, ASA, located in Chicago. Multiple individuals are assigned to each function (peer review actuaries, consulting actuary, project manager, etc.), so if someone leaves or is unavailable, other individuals totally familiar with the account can step in.

D. Actuarial Services Compensation

1. Proposal includes compensation requirements for three levels of service, referred to as Plans A, B, and C.
 - a. Plan A is a review of 2008 valuations for all 13 plans. For 2009, firm would do full replication of the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General), the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), and the Teachers Retirement Association (TRA), and review the remaining ten plans. In 2010 would perform full replication of four additional plans and review remaining nine. In 2011 full replication of final six plans, review of others.
 - b. Plan B is annual review of 13 plans with no full replication.
 - c. Plan C is full replication of all 13 plans.

Proposed Costs for Plan A:

Fixed Fees, Plan A	Year 1	Year 2	Year 3	Year 4
Review/replication of annual actuarial valuation reports for 13 plans	\$68,000	\$130,000	\$131,000	\$133,000
Review/replication of quadrennial experience studies for MSRS-General, PERA-General, and TRA	\$20,000			
Hourly Fees, Plan A	Year 1	Year 2	Year 3	Year 4
Review/replication of actuarial cost estimates for proposed benefit, contribution, actuarial assumption, or other changes	Rate per hour			
Review/audit of optional annuity form table or annuity reserve factor changes	Rate per hour			
Review/audit of prior service credit purchase payment amount determination	Rate per hour			
Review/audit of privatization gains or losses	Rate per hour			
Attendance at Commission meetings	Rate per hour			
Provision of advice and counsel on pension benefit design and funding	Rate per hour			
Preparation of special studies for the Commission	Rate per hour			

Proposed Costs for Plan B:

Fixed Fees, Plan B	Year 1	Year 2	Year 3	Year 4
Review/replication of annual actuarial valuation reports for 13 plans	\$68,000	\$71,000	\$73,000	\$75,000
Review/replication of quadrennial experience studies for MSRS-General, PERA-General, and TRA	\$20,000			
Hourly Fees, Plan B	Year 1	Year 2	Year 3	Year 4
Review/replication of actuarial cost estimates for proposed benefit, contribution, actuarial assumption, or other changes	Rate per hour			
Review/audit of optional annuity form table or annuity reserve factor changes	Rate per hour			
Review/audit of prior service credit purchase payment amount determination	Rate per hour			
Review/audit of privatization gains or losses	Rate per hour			
Attendance at Commission meetings	Rate per hour			
Provision of advice and counsel on pension benefit design and funding	Rate per hour			
Preparation of special studies for the Commission	Rate per hour			

Proposed Costs for Plan C:

Fixed Fees, Plan C	Year 1	Year 2	Year 3	Year 4
Review/replication of annual actuarial valuation reports for 13 plans	\$68,000	\$240,000	\$250,000	\$260,000
Review/replication of quadrennial experience studies for MSRS-General, PERA-General, and TRA	\$20,000			
Hourly Fees, Plan C	Year 1	Year 2	Year 3	Year 4
Review/replication of actuarial cost estimates for proposed benefit, contribution, actuarial assumption, or other changes	Rate per hour			
Review/audit of optional annuity form table or annuity reserve factor changes	Rate per hour			
Review/audit of prior service credit purchase payment amount determination	Rate per hour			
Review/audit of privatization gains or losses	Rate per hour			
Attendance at Commission meetings	Rate per hour			
Provision of advice and counsel on pension benefit design and funding	Rate per hour			
Preparation of special studies for the Commission	Rate per hour			

2. Additional Fee-Related Items:

- Current (2009) hourly rates for other clients for firm personnel assigned to account:
 - Senior lead consultant, \$285–\$450
 - Other consultants, \$235–\$285
 - Actuaries, \$190–\$235
 - Actuarial students/interns, \$109–\$190
 - Administrative staff, \$76–\$125

Bill rates anticipated to increase approximately 3% to 5% per year.

3. Charging of out-of-pocket expenses:

- Out-of-pocket expenses, such as travel expenses, will be billed at cost.

4. Charging computer expenses:

- No additional charge.

5. Charging development costs:

- i. Any necessary changes to the firm's current computer systems:
 - No additional charge.
- ii. Any necessary changes for data entry:
 - No additional charge.
- iii. Gaining familiarization with the Minnesota pension plans and systems:
 - No additional charge.

- iv. Obtaining other data and information necessary to perform actuarial services tasks:
 - No additional charge.

6. Billing practices, timing, and procedures:

- Basic retainer and non-retainer services will be billed monthly.

E. Human Rights Affirmative Action Certificate

Not applicable. Firm has no Minnesota employees.

F. Workers Compensation Coverage Compliance

Not applicable. Firm has no Minnesota employees.

G. Additional Proposal Content Requirements

1. Copies of examples of best work product for a prior or current client: actuarial valuation, experience study, and benefit cost estimate results.

Provided examples of actuarial valuation, experience study, and benefit cost estimates to unnamed or hypothetical client.

2. Other Minnesota relationships:

N/A

H. Comments

Strengths:

- a. Large firm so should be able to draw resources when needed.
- b. Considerable public plan experience both in the firm and on the team.
- c. Has lost only one account in recent years.
- d. No contractual limit on liabilities.

Concerns:

- a. High proposed cost.
- b. Key team member is employee of a firm which has an alliance with Cheiron rather than being an employee of Cheiron, which could cause turnover trouble on our account if relationship between companies changes.
- c. Confusing staff arrangement. Our account would have multiple peer review actuaries, multiple consulting actuaries, and multiple team leaders. Proposal contends this assures prompt response to our needs and highly accurate work products. However, may simply indicate that our account would be serviced from a large pool of staffers, whoever has available time, without anyone giving the account high priority or becoming expert in the particulars of Minnesota pension funding law and our actuarial standards.
- d. Out-of-pocket expenses may be high. Proposal states that a peer review actuary will be present at any Pension Commission meeting where results are being presented, in addition to the actuarial consultant. Depending on the topic involved, a project manager may also be in attendance. Commission is likely to be billed for travel expenses for all of these individuals, and possibly the hourly rate for all these individuals.
- e. Concern about excessive growth. The firm has added over 135 clients in recent years. May be more concerned about revenue growth than quality of work.
- f. Very wide ranges of hourly rates, creating considerable uncertainty about any work billed based on hourly fees.

Actuarial Services Proposal Summary

Firm: Deloitte

A. Minimum Qualification Standards and Important Qualification Factors

1. Prior Public Pension Experience by Actuarial Firm. Considerable. Has provided services to statewide pension systems in 34 states and many cities and local plans, including Minneapolis.
2. Prior Public Pension Experience by Assigned Firm Personnel. The team has considerable public plan experience providing actuarial valuations, experience studies, actuarial auditing, and generally advising public plans. Details were provided on three cases in which team members play or played extensive roles: State of Illinois, City of Minneapolis, and Los Angeles City Employees' Retirement System. With the State of Illinois, found that required contributions were high and would grow extensively in future; is working with that state's Office of Management and Budget to develop cost-effective solutions and to educate interested parties regarding implications. Was hired in 2004 by Minneapolis to review escalating contribution requirements to Minneapolis plans, helped Minneapolis develop proposals to control costs. Reviewed Los Angeles pension programs and found liabilities seriously underestimated due to shortcuts used by other actuaries.
3. Prior Reviewing/Auditing Actuary Experience. The team leader, Michael de Leon, is the reviewing actuary to the City of Minneapolis, and the proposal includes an actuarial audit report by Mr. de Leon. He has performed both limited scope and comprehensive audits of large plans. Lance Weiss, another team member, is the reviewing actuary for the State of Illinois. Members of the team provide over 75 limited scope audits per year.
4. Accessibility. Highly accessible. The team leader, Michael de Leon, and most or all of the other team members work out of Deloitte's Minneapolis office and are available on short notice any time of year. One team member, Lance Weiss, who will be peer advisor and supporting actuary, works from firm's Chicago office.
5. Absence of Contractual Liability Limits and Contractual Third-Party Reliance Disclaimers. Will require some limitation on liabilities, but Deloitte is "prepared to negotiate in good faith with the Commission to achieve reasonable performance guarantees that address service concerns."

B. Firm Information

1. Firm Size, Structure, Operational Method, and Communications Capability
 - a. Firm size, structure:
 - Deloitte, a limited liability partnership, is the second largest consulting firm in the world.
 - b. Operational method:
 - Not directly addressed.
 - c. Communications capability:
 - Claims to be committed to delivering pension fundamentals in non-technical manner.
2. Five Major References
 - a. Mr. Patrick Born, Finance Director, City of Minneapolis
 - b. Mr. John Filan, Director of Illinois Finance Authority, State of Illinois
 - c. Mr. Li Hsi, Administrative Services Manager, Los Angeles City Employees' Retirement System
 - d. Mr. Eric Samuels, Assistant Controller, Eastman Kodak Company
 - e. Ms. Ginger Hall, Human Resources, Metropolitan Government of Nashville and Davidson County, Tennessee
3. Client Additions and Subtractions. Claims it does not have a database that tracks clients gained or lost in the last five years for entire national practice. For the Minneapolis office, in the last five years lost 11 clients and gained 21 new clients. Does not disclose names due to company policy. Claims most common reason for client loss was due to merger or acquisition, and contends that none of losses was due to performance issues of actuarial team.
4. Firm's Valuation System. Has several systems referred to as Employee Benefit Tools (EBT), all developed in-house. These include the Census Management System which prepares the data for use in the valuation. Actuarial Computing Environment does the computing. Report and Actuarial Valuation Expediter is a pension worksheet and reporting system. Report Writer is used to write reports.
5. Firm's Potential Conflicts of Interest. Michael de Leon, the lead actuary on the proposed team, is the reviewing actuary for the City of Minneapolis. If mergers of MERF or the two relief associations into PERA are considered, the firm would be representing both the city and state. Proposal states that if this occurs, Lance Weiss from the Chicago office would advise the state on the merger. While at least the same individual would not be advising both parties, we would still have the same firm advising both parties.

6. Most Recent Audited Annual Financial Report. None provided. Deloitte Consulting LLP is a limited liability partnership and is not a publicly held company.

C. Approach and Work Plan

1. Ability to Meet Service Timeframes.

- Review of standards for actuarial work will be performed upon request.
- Review or audit of actuarial valuations by April 1 (and for the first set within 60 days of execution of the contract).
- Review or experience studies within 60 days of receipt of the experience study.
- Actuarial cost estimate, seven days.
- Review or audit of optional annuity form table or reserve factor within 30 days of receipt of request.
- Review of prior service credit purchase procedure within 30 days of request.
- Review of privatization gain or loss, 30 days.
- Presentations to Commission, upon request.
- Provide advice to Commission and staff, throughout engagement.
- Prepare special studies or research, upon request.

With some of the above, the nature and detail of work to be provided depends upon whether Deloitte is hired to do full actuarial replication, comprehensive actuarial audit, or actuarial review.

2. Organization of Assigned Staff. Names and titles are provided, but little is stated regarding how the team will actually operate.

- Michael de Leon, engagement manager and lead actuary.
- Judy Stromback, engagement principal and supervising actuary.
- David Pitts, lead consultant and valuation process actuary.
- Zack Miller, primary staff actuary.
- Lance Weiss, peer advisor and supporting actuary.
- Steve Dahl, lead client service partner for the State of Minnesota and is responsible for the overall satisfaction of the state with the services Deloitte will provide.

3. Plan for Coordinating Services with Commission Staff. Committed to being accessible to the Commission. All communications coordinated with Commission staff through lead actuary. The lead actuary, Michael de Leon, will closely collaborate with and be supported by Judy Stromback (supervising actuary), David Pitts (valuation process actuary) and local Minneapolis actuarial team.

4. Primary Contact Person and Replacement Personnel. Primary contact is lead actuary Michael de Leon. If Mr. de Leon is unavailable, Judy Stromback (supervising actuary), David Pitts (valuation process actuary), or Lance Weiss (peer advisor) can step in. Claims to be committed to maintaining the same team. Any substantive changes in the team will be discussed with the Commission.

D. Actuarial Services Compensation

1. Proposed Costs:

a. Deloitte provided fees depending upon the nature of the work they are hired to provide.

- i. Work on actuarial valuations, the cost in the first year would be:
 - \$135,000 if full replication;
 - \$95,000 if comprehensive actuarial audit; and
 - \$65,000 if actuarial review.

These costs would increase over time by CPI adjustments.

- ii. Work on quadrennial experience studies would be:

- \$95,000 if full replication; and
- \$25,000 if actuarial review.

All of above would be escalated over time by CPI. Commission could select in any given year the level of service it wants.

b. All other projects would be done on an hourly basis, with total cost of project depending upon the time needed for the project and the personnel assigned. Hourly rates for first year are as follows (these escalate over time by CPI):

- Judy Stromback, principal, \$400
- Michael de Leon, senior manager, \$325
- Lance Weiss, senior manager, \$325
- David Pitts, manager, \$295
- Unassigned staff, senior consultant, \$240
- Zach Miller, consultant \$185
- Unassigned staff, analyst, \$160

2. Charging of out-of-pocket expenses:
Charged as incurred. Since nearly all of team is in Minneapolis “travel expenses are expected to be minimal and total out-of-pocket expenses are not anticipated to exceed 3% of annual engagement costs.”
3. Charging computer expenses:
No additional charge.
4. Charging development costs:
 - a. Any necessary changes to the firm's current computer systems:
 - No additional charge.
 - b. Any necessary changes for data entry:
 - No additional charge.
 - c. Gaining familiarization with the Minnesota pension plans and systems:
 - No additional charge.
 - d. Obtaining other data and information necessary to perform actuarial services tasks:
 - No additional charge.
5. Billing practices, timing, and procedures:
Not addressed.

E. Human Rights Affirmative Action Certificate

Statement is included.

F. Workers Compensation Coverage Compliance

Statement will be provided if Deloitte is awarded the contract.

G. Additional Proposal Content Requirements

1. Copies of examples of best work product for a prior or current client: actuarial valuation, experience study, and benefit cost estimate results.

Includes sample actuarial audit of “client XYZ” and an analysis of a legislative proposal.
2. Other Minnesota relationships: Minnesota public employee pension plan, public employing unit, organization of Minnesota public employees, or a comparable group or entity with an interest in Minnesota public pension policymaking.

<u>Plan or Employer</u>	<u>Type of Consulting</u>	<u>Office/Staff</u>
City of Minneapolis	Pension plan advising	Minneapolis office

H. Comments

1. Strengths:
 - a. Familiarity with some Minnesota public plans should minimize learning curve.
 - b. Minneapolis location should minimize travel expenses and aid fast communication when needed.
2. Concerns:
 - a. Possible conflict given Deloitte’s relationship with City of Minneapolis. Deloitte may be asked to review or provide the Pension Commission with actuarial advice regarding merger of MERF or Minneapolis relief associations into PERA. Would be advising both sides (the state and the city). If this occurred, Mr. Weiss from the firm’s Chicago office would advise the state.
 - b. Seems to have high degree of automation; possible cookie cutter approach.
 - c. Commission may wish to inquire about relatively high number of lost clients.

Actuarial Services Proposal Summary

Firm: Gabriel Roeder Smith and Company (GRS)

A. Minimum Qualification Standards and Important Qualification Factors

1. Prior Public Pension Experience by Actuarial Firm. GRS, which dates back to 1938, claims to specialize in public sector pension plans and public sector consulting. The firm has 620 public sector clients in over 30 states including more than 20 statewide retirement systems.
2. Prior Public Pension Experience by Assigned Firm Personnel. Assigned personnel have considerable public sector experience. The lead actuary on the account would be Ms. Leslie Thompson, who has nearly 30 years of actuarial experience and who, while employed by The Segal Group, Inc., was the lead actuary on Minnesota's account during most of the years in which the Minnesota retirement plans' directors (of MSRS, PERA, TRA, the first class city teacher plans, and MERF) were jointly responsible for retaining an actuary to perform the actuarial valuations on all the plans. Ms. Thompson performed extensive other work with public plans as consulting actuary and as auditing actuary. Other team members also have public plan service including work on Minnesota public plans, and work on PERA privatization gain/loss calculations.
3. Prior Reviewing/Auditing Actuary Experience. Company and team have auditing actuary experience. Ms. Thompson is an auditing actuary to various State of Alaska plans. GRS also contends team members have conducted audits of the major Minnesota public plans, most recently of MERF.
4. Accessibility. Ms. Thompson, who would be the lead consultant and our primary contact, is located in Colorado. Other team members believed to be in Colorado. May wish to seek clarification. GRS claims can be available for meetings on short notice and can be reached by phone at any time.
5. Absence of Contractual Liability Limits and Contractual Third-Party Reliance Disclaimers. GRS willing to accept having no contract liability limits. However, if the Pension Commission is willing to accept limit of \$250,000, GRS will offer a 5% reduction in quoted fixed fee rates.

B. Firm Information

1. Firm Size, Structure, Operational Method, and Communications Capability

Firm size, structure:

- GRS focuses on public sector actuarial and benefit consulting services. Firm has 119 professional staff, including 72 in pension practice, ten in health and welfare, six in technology services, five in database administration, 15 in administrative support, nine in corporate support, and two in information technology. The firm has 13 FSAs (Fellow of the Society of Actuaries), 12 CCAs (Conference of Consulting Actuaries), 19 ASAs (Associate of the Society of Actuaries), and 33 EAs (Enrolled Actuary). The firm has a Midwest Region, Southwest Region, and Southeast Region. In 2001, GRS created an alliance with Watson Wyatt, through which they have joint consulting projects.

Operational method:

- Not directly addressed.

Communications capability:

- GRS claims to emphasis clear communication of technical results to lay audiences.

2. Five Major References

- a. Mr. Gary Bader, Chief Investment Officer, State of Alaska
- b. Ms. Jan Goodwin, Executive Director, New Mexico Educational Retirement Board
- c. Ms. Fay Kopp, Deputy Executive Director, North Dakota Teachers' Fund for Retirement
- d. Mr. Luther C. Thompson, Executive Director, Minneapolis Employees Retirement Fund
- e. Mr. Rich Harris, Finance and Compliance Officer, Denver Employees' Retirement Plan

3. Client Additions and Subtractions. GRS does not keep statistics on clients as requested in Commission's RFP, but did include a sample listing of clients gained or lost during last five-year period claimed to be similar in size to our plans. Includes 24 accounts gained and two lost.

Problem: If this is a sample, cannot be sure that gain/loss ratio is reflective of the whole.

4. Firm's Valuation System. Developed internally and claims to be unique in being directed solely to public sector requirements and needs. Easily customized to address unique features of any plan. Can handle select and ultimate salary assumptions. Has internal IT department to address any needs. Also has various plan administration tools, including optional annuity factor program, benefit calculators, service credit purchase calculator, and various projection tools.
5. Firm's Potential Conflicts of Interest. GRS is the retained actuary for MERF (currently serviced from the GRS office in Denver) and the St. Paul Teachers Retirement Fund Association (SPTRFA) (currently serviced by a GRS office in Southfield, MI). If GRS is awarded the Pension Commission contract, it intends to keep these other contracts. GRS contends that conflict of interest can be avoided by having those accounts serviced from a different GRS office than the office that will handle the Commission's contract.

6. Most Recent Audited Annual Financial Report. Most recent audited financial statement is included in an appendix of the GRS proposal.

C. Approach and Work Plan

1. Ability to Meet Service Timeframes. Has considerable number of professional staff which could be tapped if needed, and provided a detailed spreadsheet outlining the duties of each team member and timelines for completing tasks specified in the RFP for initial contract year and for a future year. Most work would be done by consultant/project manager Susan Hogarth, who is an EA, and by senior analyst Todd Kanaster, ASA, and analyst Andy Paine, described in his bio as an actuarial student. He has a BS in actuarial science and an MS in mathematics. Leslie Thompson would be involved in meetings and presentations and internal review of results/confirmation of discrepancies.
2. Organization of Assigned Staff. The assigned staff consists of a senior consultant (Leslie Thompson, FSA, FCA); a consultant/ project manager (Susan Hogarth, EA, MAAA); a senior analyst (Todd Kanaster, ASA, MAAA); and an analyst (Andy Paine). Ms. Hogarth acts as project manager and is responsible for ensuring completion/quality of work products, with bulk of work presumably performed by senior analyst and analyst. Ms. Hogarth and Ms. Thompson share responsibility for confirming discrepancies/problems found during audits, preparing reports, and meeting with the Pension Commission and Commission staff to discuss/present findings.
3. Plan for Coordinating Services with Commission Staff. Detailed spreadsheet indicates when contact with Pension Commission staff will be needed. (Within seven days of signing the contract to clarify scope of activities expected to be performed; discussing audit results with staff; presenting reports.)
4. Primary Contact Person and Replacement Personnel. Ms. Leslie Thompson (see above). Replacement personnel are specified for each team position. Brain Murphy (FSA, FCA) would be Ms. Thompson's replacement. The replacement consultant/project manager is Jim Koss (ASA, EA). The senior analyst or analyst could be replaced by Joe Herm (no credentials specified).

D. Actuarial Services Compensation

1. Proposed Costs:

GRS submitted a very detailed set of costs, depending on the scope of services desired by the Commission and the extent of the Commission's budget for this purpose. GRS also included a calculation of the average cost-per-year for the Commission, but those estimates seem to be in error.

GRS first provides a sheet indicating that any experience study review would be \$25,000 per plan. The cost for reviewing valuations would be:

- i. \$15,000 per plan for MSRS-General, PERA-General, TRA;
- ii. \$10,000 per plan for MSRS-Correctional and PERA-P&F;
- iii. \$8,000 per plan for MSRS State Patrol and PERA Local Government Correctional;
- iv. \$7,000 for DTRFA;
- v. \$1,500 each for MSRS Judges and MSRS Legislators;
- vi. \$1,000 for MSRS Elected State Officers.

The cost of a replication valuation would be twice the review amounts just stated. Under this proposal, no review or replication of MERF or SPTRFA, the two plans for which GRS currently does the actuarial valuations, would be performed.

GRS also provided a set of costs for services which it felt would be more in line with the Pension Commission's available budget:

- i. In 2009, GRS would charge \$92,000 to review all plans except MERF and SPTRFA.
- ii. In 2010, GRS proposes to review the three experience studies and replicate the three PERA plans for \$146,640.
- iii. In 2011, GRS would replicate all MSRS plans and TRA for \$127,629.
- iv. In 2012, GRS would replicate MSRS-General, PERA-General, and TRA, and review the other plans for \$153,232.
- v. In 2013, GRS would "review all plans" for \$107,000.
- vi. In 2014, GRS would "review all plans" for \$111,932.

Note: Given the earlier GRS cost sheet, presumably "review all plans" means all plans except MERF and SPTRFA.

The GRS proposal claims that the average per year is \$107,859, but the average that Commission staff computes from the above numbers is \$123,177.

GRS also presents a more full-service version:

- i. In 2009, GRS would charge \$92,000 to review all plans except MERF and SPTRFA.
- ii. In 2010, GRS proposes to review the three experience studies and replicate all plans for \$191,360.
- iii. In 2011, GRS would replicate all plans for \$199,014.
- iv. In 2012, GRS would replicate all plans for \$206,975.

- v. In 2013, GRS would replicate all plans for \$215,254.
- vi. In 2014, GRS would replicate all plans for \$223,864.

Note: Again, presumably these replications do not include MERF or SPTRFA.

The GRS proposal claims that the average per year is \$225,693, but the average that Commission staff computes from the above numbers is \$188,078.

GRS also presents a third scenario, combining plan reviews with plan replications. Under this version:

- i. In 2009, GRS would charge \$92,000 to review all plans except MERF and SPTRFA.
- ii. In 2010, GRS proposes to review the three experience studies and replicate all plans for \$191,360.
- iii. In 2011, GRS would review all plans for \$99,507.
- iv. In 2012, GRS would replicate all plans for \$206,975.
- v. In 2013, GRS would review all plans for \$107,627.
- vi. In 2014, GRS would replicate all plans for \$223,864.

Note: Again, presumably these replications do not include MERF or SPTRFA.

The GRS proposal claims that the average per year for this version is \$284,267, but the average that Commission staff computes from the above numbers is \$153,267.

Under any of the above scenarios, any additional work for benefit cost estimates or reviews, privatization reviews, etc., as specified in the RFP would be in addition to any above-stated costs and would be billed at applicable hourly rates, depending on the staff needed on the particular project.

Hourly rates, which will increase by 4% per year after the first year of the contract, are:

- Consultants and senior consultants, \$350-\$450 per hour
- Senior actuarial analysts/analysts, \$225-\$300 per hour
- Team administrative assistants, \$90-\$150 per hour

Proposal states that GRS would take a 5% reduction in fixed rates if Commission would accept a \$250,000 liability limit.

2. Charging of out-of-pocket expenses:

Billed at cost.

3. Charging computer expenses:

No additional charge.

4. Charging development costs:

- i. Any necessary changes to the firm's current computer systems:
 - No charge.
- ii. Any necessary changes for data entry:
 - No charge.
- iii. Gaining familiarization with the Minnesota pension plans and systems:
 - No charge (and indicates that the team is already familiar with these plans).
- iv. Obtaining other data and information necessary to perform actuarial services tasks:
 - Any other information will be obtained at the initial scoping meeting.

5. Billing practices, timing, and procedures:

“GRS bills clients in accordance with contract terms and fees and hourly rates indicated in our bid. We issue monthly invoices which reflect time and expense incurred by GRS in the prior month.”

E. Human Rights Affirmative Action Certificate

GRS has an affirmative action program, but the firm has no Minnesota employees.

F. Workers Compensation Coverage Compliance

No Minnesota employees.

G. Additional Proposal Content Requirements

- 1. Copies of examples of best work product for a prior or current client: actuarial valuation, experience study, and benefit cost estimate results.

Provided.

- 2. Other Minnesota relationships: Minnesota public employee pension plan, public employing unit, organization of Minnesota public employees, or a comparable group or entity with an interest in Minnesota public pension policymaking.

<u>Plan or Employer</u>	<u>Type of Consulting</u>	<u>Office/Staff</u>
MERF	Pension	Denver office
SPTRFA	Pension	Southfield, MI office

H. Comments

1. Strengths:

- a. Large firm with considerable public plan experience.
- b. Team members have first-hand experience with Minnesota plans; little learning time needed.

2. Concerns:

- a. High proposed costs.
- b. Strong conflict of interest problem. GRS is the current actuary for MERF and SPTRFA. GRS feels conflict of interest can be avoided by shifting those contracts to another GRS office, but it is questionable whether one office of GRS can provide an arm's length audit of work of another GRS office. In any event, substance of the proposal implies that GRS would simply not review MERF and SPTRFA, just assume everything is alright. The Commission may not be satisfied with this arrangement particularly given that the Commission wants an impartial review/audit of all plans.
- c. Several Minnesota pension plan administrators were less than satisfied with the actuarial team, headed by Ms. Thompson, the proposed lead actuary on this project, when The Segal Company, her prior employer, had the contract to do all the Minnesota plan valuations.
- d. The Commission may wish to inquire about nature of claimed prior auditing work on Minnesota plans. Proposal claims that the firm performed audit work on large Minnesota public plans, most recently on MERF. This may not have been a contract to do audit work; rather, it may have been the activity any actuary taking over from a prior actuarial firm would do, a detailed review of prior work to provide as seamless a transition as possible.
- e. Need clarification of proposed costs to Commission, and explanation of what appears to be inconsistencies in yearly cost estimates for services. The average costs to the Commission per year as computed by GRS appear to be in error.

Actuarial Services Proposal Summary

Firm: Hay Group, Inc.

A. Minimum Qualification Standards and Important Qualification Factors

1. Prior Public Pension Experience by Actuarial Firm. Hay Group, Inc. has federal, state, and local public plan experience. Federal clients include the United States Coast Guard, the Department of State, the Department of Commerce, and the Postal Service. State-level government clients have included the Pennsylvania State Employees' Retirement System, Port Authority of New York and New Jersey, and continued involvement with the New York State Teachers' Retirement System (NYSTRS). Hay Group transferred valuation program to the NYSTRS actuarial staff who continue to use Hay Group's valuation system. Hay Group currently serves as actuary for over 50 counties in Pennsylvania, various county plans in Georgia and California, and many cities and townships, including various police and fire plans.
2. Prior Public Pension Experience by Assigned Firm Personnel. The team, which includes two Fellow of the Society of Actuaries (FSAs) and five other credentialed actuaries, has public plan experience. The project manager is the signing actuary on the Pennsylvania State Employees' Retirement System valuation. Other team members have lead actuary or other experience on the Pennsylvania plan, various federal plans, county plans, and various police and fire plans.
3. Prior Reviewing/Auditing Actuary Experience. The team includes individuals who have specifically worked as auditing actuaries in a capacity similar to the service we are seeking, for large pension systems.
4. Accessibility. Project manager is located in Washington DC. Could meet with Commission or Commission staff with eight hours' notice.
5. Absence of Contractual Liability Limits and Contractual Third-Party Reliance Disclaimers. Not specifically addressed.

B. Firm Information

1. Firm Size, Structure, Operational Method, and Communications Capability
 - a. Firm size, structure:
 - Hay Group, Inc. is a Delaware corporation, completely owned by Hay Group Holdings, Inc. The Benefits Practice component of Hay Group includes 20 credentialed actuaries and about 30 other actuarial and consulting staff. The actuaries and benefit consulting staff are located in the Washington DC area, and in the Philadelphia, New York, and Dallas offices.
 - b. Operational method:
 - The company uses a "matrix management model combining service areas expertise with geographic office management." The Benefits Practice leader for the company is Michael Cotter, who is in charge of local office practice leaders. Adam Reese, who would be the project manager for our account, is the local practice leader for the Washington DC office and interim practice leader for the Philadelphia office.
 - c. Communications capability:
 - Proposal claims the company's hiring practice focuses on not just technical expertise, but also requires its employees to have good communications skills and capability for effective teamwork.
2. Five Major References
 - a. Mr. Len Knepp, Executive Director, Pennsylvania State Employees' Retirement System
 - b. David Friedlander, Actuary, Office of Resource Management, United States Coast Guard
 - c. Mr. Michael Cavalier, Benefits Manager, or Mr. Michael Fabiano, Comptroller, both with the Port Authority of New York and New Jersey
 - d. Mr. Christopher H. Flaggs, United States Department of State
 - e. Ms. Cynthia F. Leitzell, Controller, Delaware County, Pennsylvania
 - f. Mr. Phil Durgin, Exec. Director, Pennsylvania Legislative Budget & Finance Committee
 - g. Mr. John Strand, Legislative Council Administrator, Michigan Legislative Council
3. Client Additions and Subtractions. Since 2004 Hay Group has added 18 clients (a few of these are nonprofits but not public entities). Two clients left, one of which was due to the termination of the retirement plan for which Hay Group was providing service.
4. Firm's Valuation System. The valuation system was developed in-house by Hay Group staff, and uses a unique programming language referred to as Hay's Pension Valuation Language (PVL). This system provides actuarial valuations, experience studies, gain and loss analysis, cash-flow analysis, and forecast valuations. The system permits quick estimates of benefit plan revisions. The New York State Teachers Retirement System has actuaries on staff, and Hay Group was able to transfer the program to these actuaries so they can perform their own actuarial valuations and experience studies.
5. Firm's Potential Conflicts of Interest. None. The firm has not provided actuarial work to any Minnesota public entity.

6. Most Recent Audited Annual Financial Report. Privately held firm. Audited financial statements are included in proposal.

C. Approach and Work Plan

1. Ability to Meet Service Timeframes
 - a. Review of 2008 actuarial valuations would begin as soon as contract awarded.
 - b. Workload distributed across three teams as described below.
 - c. Will hold conference call with the Commission or Commission staff to outline review process.
 - d. After 40 days will hold internal review of findings, observations, and identify questions.
 - e. Provide draft report; upon receipt of any comments the report will be finalized.
 - f. Upon completing these reviews, Hay Group would begin work to replicate 2008 valuations, adding data to its systems and doing necessary programming.
 - g. When it is able to replicate the 2008 valuations, it feels comfortable addressing the 2009 valuations with full replication.
2. Organization of Assigned Staff. Project manager, Adam Reese (FSA), will direct three teams led by three team leaders. One team will do the various correctional and police and fire plans. A second team will do teacher plans. A third team will do the various remaining MSRS and PERA plans. Two of the teams are headed by Fellows of the Society of Actuaries (FSAs), the third by an Associate of the Society of Actuaries (ASA).
3. Plan for Coordinating Services with Commission Staff. Not specifically covered.
4. Primary Contact Person and Replacement Personnel. Not specifically covered. Primary contact is presumably the project manager, Mr. Reese. Replacement personnel not specifically covered beyond a statement that other Hay Group consultants can be called upon as needed.

D. Actuarial Services Compensation

1. Proposed Costs:

<u>Fixed Fees</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Review/replication of annual actuarial valuation reports for 13 plans	\$45,128	\$141,728	\$146,756	\$151,848
Review/replication of quadrennial experience studies for MSRS-General, PERA-General, and TRA		\$21,840		

The above fees are maximums if the task is required in a given year. The Year 1 fee of \$45,128 is for review of actuarial valuations for 13 plans. The Year 2, 3, and 4 amounts shown above assume that the firm would do full replication of three or four plans in a given year while performing actuarial reviews of the remaining nine or ten plans.

2. Additional Fee-Related Items:

- a. Current hourly rates for other clients for firm personnel assigned to account:

	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>
<i>Project manager</i>	\$440	\$455	\$471	\$487	\$504	\$522
Alternative project manager, senior actuary	\$440	\$455	\$471	\$487	\$504	\$522
Senior actuary	\$367	\$380	\$393	\$407	\$421	\$436
Consulting actuary	\$302	\$313	\$324	\$335	\$347	\$359
Actuarial analyst	\$244	\$253	\$262	\$271	\$280	\$290
Technical analyst	\$153	\$158	\$164	\$170	\$176	\$182
Others	\$65	\$67	\$69	\$71	\$73	\$76

3. Charging of out-of-pocket expenses:

Billed at cost. Airfare travel will be capped at \$600 for duration of contract.

4. Charging computer expenses:

None.

5. Charging development costs:

- i. Any necessary changes to the firm's current computer systems:
 - None.
- ii. Any necessary changes for data entry:
 - None.
- iii. Gaining familiarization with the Minnesota pension plans and systems:
 - None.
- iv. Obtaining other data and information necessary to perform actuarial services tasks:
 - None.

6. Billing practices, timing, and procedures:

Invoices payable within ten days. Interest of 1.5% per month charged for late payments.

E. Human Rights Affirmative Action Certificate

Hay Group has an affirmative action plan in place, but does not need certificate because it has no Minnesota employees. Includes notarized statement.

F. Workers Compensation Coverage Compliance

Not applicable.

G. Additional Proposal Content Requirements

1. Copies of examples of best work product for a prior or current client: actuarial valuation, experience study, and benefit cost estimate results.

Examples are included with proposal.

2. Other Minnesota relationships:

None.

H. Comments

1. Strength:

- a. Proposal was clearly written and well organized.

2. Concerns:

- a. The individual identified as the project manager, Mr. Reese, leads the Arlington, Virginia, office actuarial practice and is in charge of all Hay Group governmental actuarial and benefits consulting. He acts as a spokesperson for the company. For purposes of the actual project work, the identified project manager may be more of a figurehead than an actual project manager.
- b. Proposal indicates that team members may be located in different cities across the country.
- c. Contractual liability limits not addressed in proposal.
- d. Some topics not well addressed, such as coordinating service with Pension Commission staff and replacement personnel. Proposal suggests reliance on conference calls rather than much face-to-face contact.

