St. Paul Teachers’ Retirement Fund Association – Overview of Actuarial Factors

Annual Meeting - January 16, 2014

Bonnie Wurst, ASA, EA, MAAA
Actuarial Factors

- Actuarially equivalent factors are used to administer the plan
  - Optional forms of payment (joint and survivor benefits, etc.)
  - Early retirement benefits for members hired after June 30, 1989 who retire before their normal retirement age
- Actuarial factors are periodically reviewed and updated
Actuarial Factors

- For example, a member retiring early could choose to receive $1,000 a month beginning at age 66, or $700 a month beginning at age 60. Based on specific assumptions, the two options have equal value.

- Another example: A member could choose to receive $1,000 a month payable for the member’s lifetime only, or $800 a month payable during the member’s lifetime and the surviving spouse’s lifetime. Based on specific assumptions, the two options have equal value.

These examples are hypothetical and are not based on SPTRFA benefits or factors.
“Actuarial Equivalent” means the condition of one annuity or benefit having an equal present value as another annuity or benefit, based on appropriate mortality and interest assumptions – MN Statutes 354A.011 Subdivision 3a

Minnesota Statutes require consistency between the valuation assumptions and the actuarial factor assumptions
Actuarial Factors

- Actuarial factors are based on the following assumptions and plan provisions:
  - Life expectancy (mortality assumption) reflecting combined male and female experience
  - Interest
  - COLA
  - Augmentation
- There have been a number of significant changes in the plan provisions and assumptions that impact actuarial factors
After an extensive review, GRS recommended the following changes to actuarial factors:

- Update the mortality assumption to reflect longer life expectancies
- Update the interest rate to reflect the current COLA of 1%
- Update the actuarial methodology to appropriately recognize the actual augmentation rate

These recommended changes, if they had been implemented, would have significantly reduced early retirement benefits.
Actuarial Factors

- The SPTRFA Board introduced legislation in 2013 to lessen the negative impact of the early retirement factor changes.
- The legislation was passed and new factors were implemented effective July 1, 2013 for new retirees.
- Optional form factors were also updated to reflect changes in assumptions.
  - New optional form factors are slightly higher after changes.
Members retiring at age 62 or later after June 30, 2013 will see little change in early retirement benefits due to the factor change.

Members retiring before age 62 after June 30, 2013 will receive benefits that are greater than what they would have been without the 2013 legislation, but lower than what the previous tables provided.

The new factors offer an incentive to retire after age 62 with 30 years.
# Actuarial Factors

<table>
<thead>
<tr>
<th>Age at Retirement</th>
<th>Normal Retirement Age</th>
<th>Normal Retirement Age</th>
<th>Normal Retirement Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>65</strong></td>
<td><strong>66</strong></td>
<td><strong>65</strong></td>
</tr>
<tr>
<td>55</td>
<td>0.60</td>
<td>0.57</td>
<td>0.54</td>
</tr>
<tr>
<td>56</td>
<td>0.63</td>
<td>0.60</td>
<td>0.57</td>
</tr>
<tr>
<td>57</td>
<td>0.66</td>
<td>0.63</td>
<td>0.61</td>
</tr>
<tr>
<td>58</td>
<td>0.69</td>
<td>0.66</td>
<td>0.64</td>
</tr>
<tr>
<td>59</td>
<td>0.73</td>
<td>0.69</td>
<td>0.67</td>
</tr>
<tr>
<td>60</td>
<td>0.77</td>
<td>0.72</td>
<td>0.74</td>
</tr>
<tr>
<td>61</td>
<td>0.81</td>
<td>0.76</td>
<td>0.79</td>
</tr>
<tr>
<td>62</td>
<td>0.85</td>
<td>0.80</td>
<td>0.85</td>
</tr>
<tr>
<td>63</td>
<td>0.90</td>
<td>0.84</td>
<td>0.90</td>
</tr>
<tr>
<td>64</td>
<td>0.95</td>
<td>0.89</td>
<td>0.95</td>
</tr>
<tr>
<td>65</td>
<td>1.00</td>
<td>0.94</td>
<td>1.00</td>
</tr>
<tr>
<td>66</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>
Disclaimers

- Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this presentation concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual’s circumstances from an independent tax advisor.

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

- Readers are cautioned to examine original source materials and to consult with subject matter experts before making decisions related to the subject matter of this presentation.

- This presentation expresses the views of the author and does not necessarily express the views of Gabriel, Roeder, Smith & Company.