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March 15, 2019

Ms. Cecelia Carter
Executive Director
Omaha School Employees Retirement System
3215 Cuming Street
Omaha, NE 68133

Re: Actuarial Equivalence Basis for Optional Form Factors

Dear Cecelia:

When members retire, they make elections as to the form of payment under which they will receive benefit payments. These payment forms are intended to be the actuarial equivalent of the normal form of payment. State statutes define actuarial equivalent as “the equality in value of the aggregate amounts expected to be received under different forms of annuity payment.” This means that the benefit streams have the same present value when using a given set of actuarial assumptions.

Legislation passed in the 2018 session (LB 1005, as amended by AM 2204) grants the OSERS Board of Trustees (Board) the responsibility for setting the actuarial assumptions to be used to define actuarial equivalence for members hired after June 30, 2018. This letter sets out our recommendation to the Board regarding the actuarial equivalent basis to be used for calculating optional forms of payments for OSERS optional forms of payment and other related calculations (such as QDRO calculations) for members hired after June 30, 2018.

Prior to the legislation passed in the 2018 session, the definition of “actuarial equivalent” was defined in statute as follows:

	Interest Rate	Mortality Table	Male/Female Blend
Other than Joint and Survivor	8.0%	1994 Group Annuity Table with a one-year age setback	25%/75%
Joint and Survivor	8.0%	1994 Group Annuity Table with a one-year age setback	35%/65%



The definition of actuarial equivalence only affects the amount of benefit received if a member elects to receive payment under an optional form of benefit. The benefit formula determines the amount of the benefit (Final Average Salary x Years of Service x 2.0%) payable under the normal form of payment, a five year certain and life annuity. The actuarial equivalent basis that is in statute for members who were hired before July 1, 2018 remains in place. However, the Board now determines the assumptions for actuarial equivalence for optional forms of payment for members hired after June 30, 2018.

There are three primary assumptions that create the actuarial equivalent basis for the actuarial factors:

- (1) interest rate (investment return assumption),
- (2) cost of living adjustment (if the adjustment is variable), and
- (3) mortality table.

Interest Rate: As a result of the last experience study, the investment return assumption was lowered from 8.00% to 7.50%. It is common, although not required, for the actuarial equivalent basis to use the same assumptions as are used for funding purposes. This minimizes the financial impact of gains or losses arising from members electing an optional form of payment. We believe that this practice is appropriate for the Board to use in setting the actuarial assumptions for actuarial equivalence for members hired after June 30, 2018 so we recommend an interest rate of 7.50% be used.

Cost of Living Adjustment (COLA): The plan provisions in statute provide for an automatic 1.0% COLA (not to exceed CPI) and a 1.0% annual COLA is assumed for funding purposes. For the definition of actuarial equivalence, we recommend the assumption for the cost of living adjustment be set at 1.0%.

Mortality Table: The mortality table used for the factors cannot simply be the mortality table used in the valuation for two reasons. First, the valuation uses sex-distinct mortality assumptions, recognizing that females generally live longer than males. However, the use of sex-distinct assumptions for benefit calculations in a qualified plan is not permitted by U.S. Supreme Court case law so the mortality rates must be blended to create a gender-neutral mortality assumption. Second, the mortality tables used in the valuation are “generational” meaning that the probabilities of death decrease slightly in each future year, resulting in different life expectancies each year which would change the actuarial equivalent factors each year. Rather than updating actuarial factors every year, it is common practice to project the mortality rates to a specific year in the future and then use that single set of mortality rates for actuarial equivalent purposes. We recommend that the mortality rates be projected to 2035, based on both the expectation that these factors will be used for the next five to ten years and the duration of life expectancy of the retirees expected to utilize the factors.

To determine the unisex blend of male and female mortality rates, we examined the actual election patterns for optional forms of payment by gender to determine the appropriate mortality blend considering the actual utilization of joint and survivor benefits. Our analysis was based on actual data for retirees over the past five years. Note the opposite gender blend is used for the mortality assumption of the joint annuitant.



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On the basis of our analysis, we recommend the following sets of actuarial assumptions to determine actuarial equivalence for members hired after June 30, 2018:

	Interest Rate	Mortality Table	Male/Female Blend
Other than Joint and Survivor	7.5%	RP 2014 Mortality Table projected to 2035 with MP-2016, set forward one-year for males and setback one-year for females	15%/85%
Joint and Survivor	7.5%	RP 2014 Mortality Table projected to 2035 with MP-2016, set forward one-year for males and setback one-year for females	40%/60%

I, Patrice A. Beckham, am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. I am available to answer any questions on the material in this letter or to provide explanations or further details as appropriate.

Sincerely,

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary