Summary of Actuarial Assumptions and Methods

as of January 1, 2014

a) The actuarial valuation was prepared using the entry age actuarial cost method. As described in the certification letter, the contribution rates are set based on the board's funding policy, which states the contribution rate will not be less than the amount needed to amortize the unfunded actuarial accrued liability of each System over a 20-year period from the valuation date (January 1, 2014).

In calculating this minimum, amortization payments are designed to remain level as a percent of payroll, and payroll is assumed to increase 3.25% per year. Under this method, actuarial gains and losses are identified and amortized as part of the unfunded actuarial accrued liability over a 20-year period.

b) The future investment earnings of the assets of the Systems are assumed to accrue at an annual rate of 7.50%, compounded annually. This rate is made up of a 2.75% assumed inflation rate and a 4.75% assumed real rate of return. This assumption was adopted January 1, 2011.

c) The total rates of assumed annual salary increase are shown on the actuarial schedule on page 135. The rates include increases due to promotion and longevity and a 3.50% per annum rate of increase in the general wage level of the membership. Salaries of judges are assumed to increase at 3.50%. All of these assumptions were adopted January 1, 2014.

d) Post-retirement benefit increases are based on the Consumer Price Index (CPI), limited by the provisions of each System. For members of the Public Safety Retirement System, annual increases are assumed to be 2.5% or 2.75%. All other Systems' annual increases are assumed to be 2.75%. Increases are based on the member's original retirement allowance except in the Judges Retirement System where increases are compounded. For current retirees who have received cumulative COLAs less than the total of annual CPI increases since retirement, higher COLAs are assumed, subject to the annual maximum (2.5% or 4% for Public Safety and 4% for all other Systems), as long as the member has "banked" CPI increases left.

e) Tables of mortality rates for male members retired for service and beneficiaries (except educators) were developed from a standard mortality table. Mortality rates for male retired educators were developed from actual experience of that group. Mortality rates for

Summary of Actuarial Assumptions and Methods *(Continued)*

as of January 1, 2014

Retired Member Mortality

Class of Member	
Educators	
Men	EDUM (90%)
Women	EDUF (100%)
Public Safety and Firefighters	
Men	RP 2000mWC (100%)
Women	EDUF (120%)
Local Government, Public Employees	
Men	RP 2000mWC (100%)
Women	EDUF (120%)

EDUM = Constructed mortality table based on actual experience of male educators multiplied by given percentage

EDUF = Constructed mortality table based on actual experience of female educators multiplied by given percentage

RP 2000mWC = RP 2000 Combined mortality table for males with white collar adjustments multiplied by given percentage

female members retired for service and beneficiaries were developed from actual experience of the female educators. The mortality basis is dependent upon the member's class and gender as shown above. These base rates are adjusted for future improvement in mortality using published Scale AA projected from the year 2000. With the exception of the female educators, these rates were adopted January 1, 2011, the female educators assumptions was adopted January 1, 2014. Mortality rates for active members use the RP 2000 employees mortality tables as the underlying assumption with scaling factors applied based on employee group and gender. The assumptions were adopted effective January 1, 2014.

f) Mortality among disabled members is based on a special 1981 Disability Table developed from the Systems' experience. The rates for males and females are also adjusted for future improvement in mortality using published Scale AA projected from the year 2000.

g) Other demographic assumptions regarding retirement, mortality, disablement, and termination from employment are illustrated in the following actuarial schedules.

The retirement assumptions illustrated are for members of the Systems who are eligible to retire with 30 years of service (35 years of service for Tier 2). For public employees the rates vary by age and eligibility for reduced or unreduced retirement. For Public Safety, Firefighters, and Judges the rates vary by age and service groupings.

Rates of assumed termination from employment are assumed to vary by years of service. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately. Vested members are assumed to withdraw their contributions and forfeit the right to further benefits at the rates illustrated.

h) The Retirement Board uses the expected rate of return method for calculating the actuarial value of assets. This method is based on the total earnings of the commingled investments and spreads the excess/shortfall of actual investment returns over or under the expected return over five years. One-fifth of the excess/shortfall is recognized each year. The actuarial values of assets under this method were calculated and reported to us by the Systems' staff.

i) All of the actuarial assumptions were renewed or adopted by the Retirement Board in 2014, as recommended by the actuary. The assumptions for Tier 2 members are the same as the Tier 1 members, except for retirement rates.