

Plan participants, less the future employee and employing Federal agency contributions, stated in current dollars.

Future periodic payments include benefits expected to be paid to (1) retired or terminated employees or their beneficiaries; (2) beneficiaries of employees who have died; and (3) present employees or their beneficiaries, including refunds of employee contributions as specified by Plan provisions. Total projected service is used to determine eligibility for retirement benefits. The value of voluntary, involuntary, and deferred retirement benefits is based on projected service and assumed salary increases. The value of benefits for disabled employees or survivors of employees is determined by multiplying the benefit the employee or survivor would receive on the date of disability or death, by a ratio of service at the valuation date to projected service at the time of disability or death.

The Pension Actuarial Liability is calculated by applying actuarial assumptions to adjust the projected plan benefits to reflect the discounted time value of money and the probability of payment (by means of decrements such as death, disability, withdrawal or retirement) between the valuation date and the expected date of payment. The Plan uses the aggregate entry age normal actuarial cost method, whereby the present value of projected benefits for each employee is allocated on a level basis (such as a constant percentage of salary) over the employee's service between entry age and assumed exit age. The portion of the present value allocated to each year is referred to as the normal cost.

The table below presents the normal costs for 2017 and 2016.

Normal Cost:	2017	2016
FSRDS	34.50%	33.20%
FSPS	25.95%	25.97%

Demographic assumptions include the set of rates that predict certain events occurring to a group of employees or annuitants. Events of significance to a retirement system are those that result in a commencement or termination of a benefit payment. The events affecting active employees include reasons for leaving the service such as retirement,

becoming disabled, terminating service, or death. The events affecting annuitants include, first and foremost, mortality.

The demographic assumption changes included revision of assumptions applicable to active employees to predict the likelihood of their future separation from service, including their probability of withdrawal, retirement, or becoming disabled. Also warranted was a change to adopt gender specific mortality rates for active employees as well as disabled, survivor, and child survivor annuitants.

The assumption changes for interest rate, inflation and other items are not from the experience study. These changes arise in connection with the annual valuation and follow the guidelines of SFFAS No. 33. The changes from assumptions for 2017 and 2016 can be seen in the table on the following page.

Actuarial assumptions are based on the presumption that the Plan will continue. If the Plan terminates, different actuarial assumptions and other factors might be applicable for determining the actuarial present value of accumulated plan benefits. The following table presents the calculation of the combined FSRDS and FSPS Pension Actuarial Liability and the assumptions used in computing it for the year ended September 30, 2017 and 2016 (*dollars in millions*).

For the Year Ended September 30,	2017	2016
Pension Actuarial Liability, Beginning of Year	\$ 19,480	\$ 19,501
Pension Expense:		
Normal Cost	474	466
Interest on Pension Liability	729	769
Actuarial (Gains) or Losses:		
From Experience	(67)	(160)
From Assumption Changes		
Interest Rate	513	495
Experience Study	—	—
Other	(187)	(648)
Prior Year Service Costs	—	—
Other	(1)	(2)
Total Pension Expense	1,461	920
Less Payments to Beneficiaries	947	941
Pension Actuarial Liability, End of Year	19,994	19,480
Less: Net Assets Available for Benefits	18,865	18,560
Actuarial Pension Liability – Unfunded	\$ 1,129	\$ 920