

# Western Conference of Teamsters Pension Plan

# **January 1, 2015 Actuarial Valuation**

Prepared by:

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August 31, 2015

Board of Trustees Western Conference of Teamsters Pension Plan

#### Dear Trustees:

As requested, we performed an actuarial valuation of the Western Conference of Teamsters Pension Plan as of January 1, 2015, for the Plan Year ending December 31, 2015. Our findings are set forth in this actuary's report.

In preparing this report, we relied, without audit, on information supplied by the administrative office, the Plan's independent auditor and the Plan's attorney. This information includes, but is not limited to, Plan documents and provisions, employee data, and financial information. The financial information was taken from a draft of the audit report and is, hence, subject to finalization. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

For actuarial requirements under ERISA, all costs, liabilities, rates of interest, and other factors under the Plan (except when mandated directly by the Internal Revenue Code and its regulations) have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience under the Plan. We completed this actuarial valuation in accordance with our understanding of IRS minimum funding requirements as amended by subsequent legislation, including the Pension Protection Act of 2006 (PPA), the Pension Relief Act of 2010 (PRA) and the Multiemployer Pension Reform Act of 2014, and reflecting all proposed regulations and guidance issued to date.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. Actuarial computations under ERISA are to determine the minimum required, and maximum allowable funding amounts, and the unfunded vested benefit liability for purposes of withdrawal liability for an ongoing plan. The calculations in the enclosed report have been made on a basis consistent with our understanding of ERISA.

Trustees Western Conference of Teamsters Pension Plan August 31, 2015 Page 2

For actuarial requirements under FASB ASC Topic 960, all liabilities, rates of interest, and other factors under the Plan have been determined on the basis of actuarial assumptions and methods which are reasonable and consistent with our understanding of FASB ASC Topic 960. Results for other purposes may be significantly different than the results in this report; other calculations may be needed for other purposes, such as judging benefit security at plan termination.

Milliman's work is prepared solely for the internal business use of the Trust and its Trustees and employees (for their use in administering the Trust). Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release; subject to the following exceptions:

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- (b) The Trust may distribute certain work products that Milliman and the Trust mutually agree is appropriate for distribution to participating employers, pension participants and other parties as may be required by the Pension Protection Act of 2006.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Peter R. Sturdivan, FSA, EA, MAAA Principal and Consulting Actuary

PRS:ccg

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Summary of Valuation Results

### **Overview of Results**

# Actuarial Valuation for Plan Year Beginning

(\$ In Thousands)	January 1, 2014	January 1, 2015	
Assets			
Market Value of Assets	\$35,193,014	\$36,739,196	
Actuarial Value of Assets	\$35,478,550	\$36,878,833	
Investment Return (non-dedicated assets)			
Market Value of Assets	15.25%	7.56%	
Actuarial Value of Assets	7.66%	7.46%	
Funded Status			
Actuarial Accrued Liability	\$39,116,028	\$40,167,611	
Market Funded Percentage	90.0%	91.5%	
Actuarial (Pension Protection Act) Funded Percentage	90.7%	91.8%	
Withdrawal Liability			
Present Value of Vested Benefits	\$37,280,381	\$38,337,368	
Assets for Withdrawal Liability	\$32,019,915	\$34,284,858	
Unfunded Vested Benefit Liability (UVBL)	\$5,260,466	\$4,052,510	
Credit Balance and Contribution Requirements			
Actuarial Accrued Liability	\$39,116,028	\$40,167,611	
Actuarial Value of Assets	\$35,478,550	\$36,878,833	
Unfunded Actuarial Accrued Liability	\$3,637,478	\$3,288,778	
Credit Balance at End of Prior Year	\$2,446,164	\$2,714,643	
Normal Cost (including expenses)	\$798,458	\$849,190	
Anticipated Contributions	\$1,401,000	\$1,500,000	
Contribution to Maintain Credit Balance (Middle of Yea	r) \$1,276,363	\$1,324,638	
Actual Contributions	\$1,544,129	To Be Determined	
Amortization Period			
Actuarial Value of Assets	8.3 years	6.7 years	
Market Value of Assets	9.2 years	7.1 years	
Participant Data			
Retirees & Beneficiaries <sup>(1)</sup>	217,924	221,502	
Vested Inactive Participants	167,940	166,440	
Active Participants	<u>195,620</u>	<u>197,120</u>	
Total Participants in Valuation	581,484	585,062	
<sup>(1)</sup> The figures above are estimated counts. The retired records as of January 1, 2014 and January 1, 2015 res		252,493 and 257,987	
Certification Status	Green	Green	

### A. Purpose of this Report

This report has been prepared for the Western Conference of Teamsters Pension Plan as of January 1, 2015 to:

- § Review the Plan's funded status as of January 1, 2015.
- § Review the experience for the plan year ending December 31, 2014, including the Plan's trust fund activity and investment return, and changes in plan participant demographics that impact liabilities.
- § Calculate the Plan's funding requirements under ERISA for the plan year beginning January 1, 2015.
- § Determine the Plan's Amortization Period as of January 1, 2015.
- Setermine the Plan's Unfunded Vested Benefit Liability for withdrawal liability purposes as of December 31, 2014 in accordance with the Multiemployer Pension Plan Amendments Act of 1980.
- § Determine the actuarial present value of accumulated plan benefits as of December 31, 2014 for purposes of disclosing the Plan's liabilities under FASB ASC Topic 960.

#### **B. Plan Provisions**

The valuation reflects the plan provisions in effect on January 1, 2015. The following changes occurred during the plan year ending December 31, 2014:

§ Several bargaining units chose PEER coverage for the first time, or chose more valuable PEER coverage. These actions increased the Plan's actuarial liability by approximately \$15 million. The increases in contributions due to the associated contribution rate increases serve to offset the impact on the unfunded actuarial liability over time.

In addition, the following changes were made to the Plan's provisions:

- § Technical amendment regarding employee and spouse actuarial factors,
- § Windsor resolution same sex marriages; amended date references

This valuation was not impacted by these amendments.

### C. Actuarial Methods and Assumptions

Other than the assumptions mandated by the IRS, the following changes were made to the assumptions for this valuation in order to reflect recent and anticipated plan experience:

§ The discount rate used for the 1982/1984 Annuity Account was changed to 5.87% for 2015 from 6.59% for 2014, and the discount rate used for the SBA Dedication was changed to 4.88% for 2015 from 4.42% for 2014.

The change in discount rates decreased the Plan's actuarial liability by about \$93 million.

- § The assumed annual rates of post-retirement mortality and pre-retirement healthy mortality for females were changed to the RP2014 Female Blue Collar Employee/Annuitant tables, with a 1 year age set forward projected to year 2020 using Scale BB also set forward 1 year. The previous assumption was based on the RP 2000 Mortality Tables for Female Employees adjusted for Blue Collar and projected by Scale AA to 2017.
- Sour method for determining liabilities for participants whose records do not contain valid dates of birth has been revised. Formerly, we accounted for these participants' liabilities by applying adjustment factors to the liabilities calculated for the complete records. Starting with this year's valuation, we are instead adding imputed dates of birth to the incomplete records and including them in the valuation data file.

The change in discount rates decreased the Plan's actuarial accrued liability by about \$93 million. The other changes increased the Plan's actuarial liability by about \$273 million.

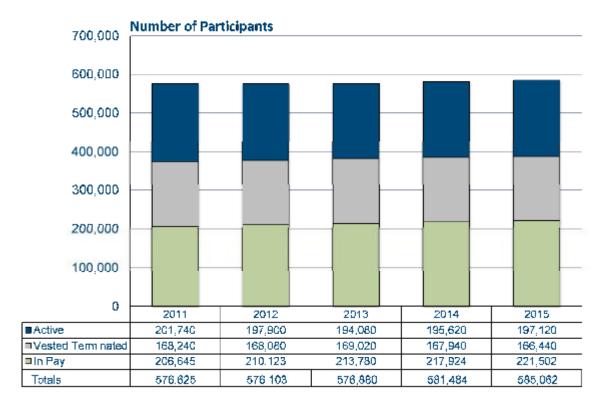
In addition, the following changes were made:

- The annual non-investment expenses assumption was increased from \$87 million to \$97 million primarily due to the increase in PBGC premiums.
- § The anticipated annual employer contributions were increased to \$1.5 billion for purposes of projecting the 2015 Funding Standard Account and determining the Amortization Period.
- § The demographics of the new entrant cohort were updated to better reflect the demographics of the recent new entrants to the Plan. This change increases the new entrant load to the normal cost from approximately \$9.8 to \$13.3 million.

### **D. Participant Information**

#### **Participant Counts**

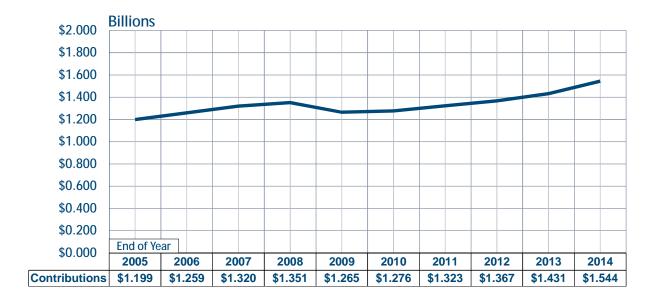
The following chart shows the number of participants included in this valuation, along with comparable information from the last several valuations.



For valuation purposes, an active participant is not retired, terminated or deceased on the valuation date, has satisfied the participation requirements of the Plan, and worked at least 250 hours in the plan year immediately prior to the valuation date, or worked at least one hour in the plan year immediately prior to the valuation date and worked at least 250 hours in the second plan year preceding the valuation date.

#### **Contributions**

Based on the assumptions used for the Plan's zone certification under the Pension Protection Act, contributions for the plan year beginning January 1, 2015 are expected to be \$1,500,000,000. The graph below shows how this level compares with the Plan's historical level of contributions.



#### E. Plan Assets

The Plan's market value of assets is the value of net assets available for benefits as shown on the Plan's financial statements. The Plan's assets are split into dedicated assets and non-dedicated assets.

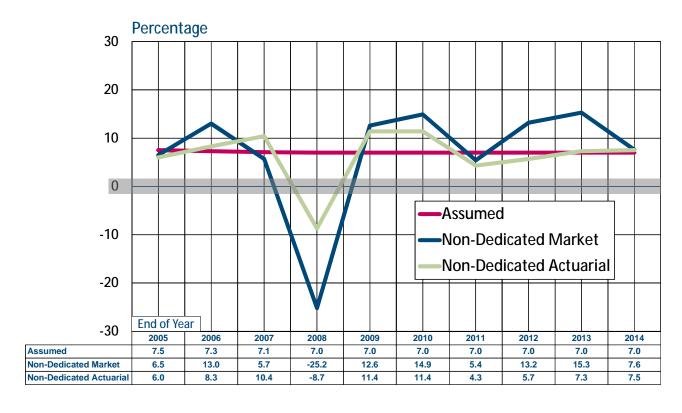
The dedicated assets include the Fixed Dollar Account (FDA), the 1982/84 Annuity Account (82/84 Account), and the Strategic Bond Account (SBA). The FDA is held at book value. The FDA includes the Supplemental Bond Fund, which is an additional amount necessary to maintain cash flow matching and it is held at amortized cost. The two other accounts are also held at amortized cost.

The Plan uses an asset smoothing method on the non-dedicated portion of the assets that recognizes market value investment gains and losses over a period of five years, except that the Trustees elected to recognize the 2008 investment loss over 10 years under the Pension Relief Act of 2010. For purposes of developing the Unfunded Vested Benefit Liability, the Pension Relief Act of 2010 election is ignored.

The sum of the dedicated assets and the smoothed value of non-dedicated assets is called the actuarial value of assets, and is used for determining the PPA funded percentage, the minimum and maximum contributions under ERISA, and computation of the Amortization Period. The table below shows these values along with the Plan's rate of investment return, net of investment expenses, over the past five years.

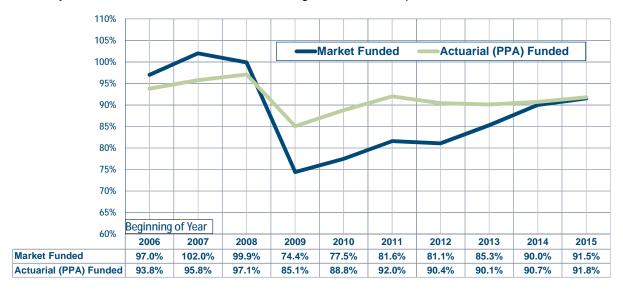
	Prior Year R	ate of Return		(\$ In Thousands	)
January 1,	Market	Actuarial	Market Value of Assets	ERISA Actuarial Value of Assets	UVBL Actuarial Value of Assets
2015	7.56%	7.46%	\$36,739,196	\$36,878,833	\$34,284,858
2014	12.59	7.33	35,193,014	35,478,550	32,019,915
2013	11.93	5.82	32,309,867	34,132,485	29,809,192
2012	6.26	4.62	29,891,186	33,310,140	29,851,506
2011	13.53	10.55	29,164,847	32,880,990	30,287,014

Over the past 20 years, the Plan's total assets have averaged an 8.15% return on a market value basis, net of investment expenses. The Plan's non-dedicated assets have averaged an 8.86% return on a market value basis, net of investment expenses over the same time period. The numerical history can be found on Exhibit 3.3 in this report. The graph below shows the Plan's annual returns on the non-dedicated assets over this time period, compared with the Plan's investment return assumption.



### F. Funded Status

An important indicator of the Plan's funded status is the ratio of the Plan's *market value of assets* to the Plan's liability for all benefits earned to date, called the actuarial accrued liability. For purposes of determining the Plan's zone status under the PPA, the Plan's *actuarial value of assets* is compared with this liability measurement. Below is a chart showing a historical comparison of these measurements



Below is a table that details the relevant information for the past several valuations.

	Actuarial Accrued Liability (\$ In Thousands)					
January 1,	Retirees & Beneficiaries	Vested Inactive	Active	Total	Market Value Funded %	Actuarial Value (PPA) Funded %
2015	\$22,796,728	\$4,494,421	\$12,876,462	\$40,167,611	91.5%	91.8%
2014	22,111,382	4,422,913	12,581,733	39,116,028	90.0	90.7
2013	20,981,370	4,465,074	12,419,003	37,865,447	85.3	90.1
2012	20,394,735	4,247,924	12,204,678	36,847,337	81.1	90.4
2011	19,775,329	4,194,890	11,759,007	35,729,226	81.6	92.0

The **Annual Funding Notice** to participants must be distributed within 120 days of the end of the plan year and will include the actuarial (PPA) funded percentage for 2013, 2014, and 2015, as shown above.

### **G.** Contribution Requirements

### **Actuarial Accrued Liability**

For computing ERISA minimum and maximum funding requirements, the actuarial cost method takes into account benefits that are earned to date. The resulting liability is called the actuarial accrued liability, and is compared with the actuarial value of assets, as shown below.

	(In Thousands)					
January 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability			
2015	\$40,167,611	\$36,878,833	\$3,288,778			
2014	39,116,028	35,478,550	3,637,478			
2013	37,865,447	34,132,485	3,732,962			
2012	36,847,337	33,310,140	3,537,197			

### **Development of Minimum Required Contribution and Credit Balance**

The Plan's minimum required contribution consists of two components:

- § Gross normal cost, which includes the cost of benefits allocated to the next plan year and administrative expenses expected to be paid in the next plan year, and
- § Amortization payments to the unfunded actuarial accrued liability.

If contributions do not meet these costs, the Plan's credit balance, which was created by contributions in excess of minimum required contributions in past years, may be used to offset the costs. The table below summarizes the Plan's contribution requirements, actual contributions, and credit balance over the last several years.

	(In Thousands)						
December 31,	Normal Cost	Net Amortization Payment	Annual Cost, Beginning of Year	Contribution To Maintain Credit Balance	Actual Contribution	Credit Balance, End of Year	
2015	\$849,190	\$609,712	\$1,458,902	\$1,324,638	\$1,500,000 <sup>(1)</sup>	\$2,887,176	
2014	798,458	596,184	1,394,642	1,276,363	1,544,129	2,714,643	
2013	767,700	600,481	1,368,181	1,260,413	1,431,091	2,446,164	
2012	744,736	562,808	1,307,544	1,208,316	1,367,269	2,277,520	
2011	515,637	756,114	1,271,751	1,180,723	1,322,549	2,120,933	

<sup>(1)</sup> Expected based on information from the Administrative Office.

### H. Amortization Period

The Plan's amortization period is a measure of the long-term financial solvency of the Plan. The amortization period is the number of years necessary for a level excess of anticipated employer contributions over the normal cost and administrative expenses to pay off the unfunded actuarial liability or funding shortfall. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets. The funding shortfall is the difference between the actuarial liability and the market value of assets.

PPA requires plans to amortize changes in the unfunded actuarial liability (i.e. annual experience gains and losses, changes in assumptions and plan amendments) over a 15-year period. The average amortization period at any point in time under PPA is about 10 years. Therefore, based on the unfunded actuarial liability, an amortization period of less than 10 years is desired.

Amortization Period				
	January 1, 2014	January 1, 2015		
Unfunded Actuarial Liability (UAL)	\$3,637,478	\$3,288,778		
Expected Employer Contributions	1,401,000	1,500,000		
Normal Cost plus Expenses (payable monthly)	828,106	880,722		
Excess Contributions	572,894	619,278		
Years to Amortize UAL	8.3	6.7		
Funding Shortfall on a Market Value basis	3,923,014	3,428,415		
Years to Amortize Market Funding Shortfall	9.2	7.1		

### I. Unfunded Vested Benefit Liability

Withdrawing employers are assessed a portion of the Plan's unfunded vested benefit liability for withdrawal liability, which is determined by subtracting the Plan's assets for withdrawal liability purposes (calculated in Exhibit 3.5) from the liability for all *vested* benefits earned to date. The assets for withdrawal liability are identical to the actuarial value of assets except that the 2008 investment loss is recognized over five years rather than 10 years. The table below summarizes this information for the past several years.

	(In Thousands)				
December 31,	Present Value of Vested Benefits	Assets For Withdrawal Liability	Unfunded Vested Benefit Liability		
2014	\$38,337,368	\$34,284,858	\$4,052,510		
2013	37,280,381	32,019,915	5,260,466		
2012	36,108,886	29,809,192	6,299,694		
2011	34,993,567	29,851,506	5,142,061		
2010	33,829,110	30,287,014	3,542,096		

### J. Zone Status

#### **Zone Status**

The following chart shows the Plan's Zone Status that has been reported in the Actuarial Certification since PPA became effective beginning in 2008.

Plan Year Beginning January 1,	Zone Status
2015	Green
2014	Green
2013	Green
2012	Green
2011	Green
2010	Green
2009	Green
2008	Green

As shown above, the Plan is neither endangered nor critical for the plan year beginning January 1, 2015.

#### **Benefit Restrictions**

The Plan is subject to certain restrictions on Plan amendments increasing benefits because the Trustees elected funding relief under the Pension Relief Act of 2010. In general, such a plan amendment cannot go into effect unless the plan actuary certifies that the increase is paid for out of additional contributions that were not allocated to the plan at the end of the prior plan year. This restriction will remain in effect through December 31, 2016.

### K. Plan Experience

#### **Initial Observations**

We note the following comparisons from last year's valuation:

- Employer contributions in 2014 (exclusive of withdrawal liability payments) increased by 7.2% to \$1.51 billion from \$1.41 billion in 2013.
- Benefit payments increased by 2.9% to \$2.53 billion in 2014 from \$2.46 billion in 2013.
- Administrative expenses in 2014 amounted to 5.7% of total employer contributions; compared with 6.1% in the previous two years.
- The net assets available for plan benefits on a market value basis increased by \$1.5 billion during 2014, compared with an increase of \$2.9 billion during the previous year.

#### Impact of Plan Experience during Prior Plan Year

Actuarial gains are produced from more favorable experience than assumed in the previous valuation. On the other hand, actuarial losses are produced from experience less favorable than assumed. The most important of these gains and losses are shown below and described in the paragraphs that follow.

#### Investment Return

The estimated investment return on the net market value of assets was approximately 7.6% for 2014. The corresponding returns for 2013 and 2012 were 12.6% and 11.9% respectively.

The estimated market value investment return for 2014 on non-dedicated assets was about 7.6%, resulting in an approximate \$170 million gain over the assumed net investment return of 7.0%. In the same year, the net investment return on the actuarial value of non-dedicated assets was approximately 7.5%, resulting in an approximate \$140 million gain. The investment return on the actuarial value of non-dedicated assets trails the investment return on the market value of non-dedicated assets because of the smoothing of investment gains and losses. Due to the election of PRA 2010 relief, the 2008 investment loss continues to be recognized at about \$865 million annually (over ten years) while other non-dedicated investment gains and losses are recognized over five years. The last portion of the 2008 investment loss will be fully recognized by January 1, 2018.

The investment return on the actuarial value of total assets was estimated to be 7.5%. This resulted in an actuarial gain of about \$120 million, slightly lower than the gain on the non-dedicated assets due to small losses on the dedications which are held at either book value or amortized cost.

#### Demographic Experience

The gains and losses due to all non-investment experience during 2014 increased the Plan's actuarial liability by approximately 0.14%, or \$55 million. The commentary below identifies the major components of the demographic gains and losses experienced during 2014.

#### **Change in Contribution Rates**

Various bargaining parties negotiated increases in contribution rates which, due to the Plan's benefit formula, increased benefits earned during 2014. We estimated that the increase in the Plan's liabilities was about \$26 million. The increase in liability is offset over time by the change in contributions resulting from these rate increases.

The following is a summary of the remaining major demographic gains and losses.

#### **Demographic Losses**

A demographic loss emerged on continuing active participants because they earned larger benefits during 2014 due to higher hours than expected under the current assumptions. Also actual new entrants displayed different demographic characteristics than expected, and likely earned larger benefits than expected under the new entrant assumption. We note that some or all of the loss is offset by an increase in contributions due to these increased hours and the impact on the unfunded actuarial liability is mitigated.

Another continuing source of demographic loss was the Plan's experience for termination from active status. During 2014, individuals covered under PEER were not terminating as quickly as assumed, while individuals who did not have PEER were actually leaving employment in greater numbers than expected.

#### **Demographic Gains**

The largest source of demographic gain was from retirement from active status and inactive status. Individuals chose to work and/or delay retirement when compared with the current assumptions. The gain from retirement is consistent with the Plan's retirement experience in recent years.

#### Comments

The overall loss is not very large indicating that, in the aggregate, the current assumptions produced reasonable results. However, given the experience detailed above and in our mortality study, we will review the following assumptions for possible changes in the 2016 valuation or a future valuation:

- Retirement from active and inactive status
- Termination from active status
- Postretirement and preretirement male mortality
- Postretirement disability mortality

### Sensitivity of Results

The results presented in this report are dependent upon the actuarial assumptions being realized in the future. To the extent that actual Plan experience differs from the assumptions, future actuarial costs will differ from those presented in this report. For example, actuarial gains and losses emerge in plan years where actual contribution amounts differ from those anticipated by our assumptions.

# **SECTION 2**Introduction

The purpose of this actuarial valuation of the Western Conference of Teamsters Pension Plan is to review last year's activity, compute this year's cost, and test the Plan's funded status. Specifically:

- § In Section 3, we summarize the Plan's trust fund activity and measure its investment return.
- In Section 4, we evaluate the Plan's contribution requirements, determine the appropriate charges and credits to the ERISA minimum Funding Standard Account for the plan year ending December 31, 2014, and estimate the credit balance at the end of this year. We also calculate the maximum tax-deductible contribution for the plan year ending December 31, 2014, and the Amortization Period as of January 1, 2015.
- § In Section 5, we test the Plan's funded status by comparing the market value of assets with the actuarial present value of accumulated plan benefits, computed in accordance with FASB ASC Topic 960. We also summarize the Plan's Present Value of Vested Benefits in Exhibit 5.3 and calculate the Plan's Unfunded Vested Benefit Liability for withdrawal liability purposes.
- § In Section 6, we compare the significant results of this valuation with those of the last nine valuations, and provide a 20-year projection of the Plan's expected benefit payments. Exhibit 6.3 includes a summary of contribution rates and benefit improvements since Plan inception.

The appendices present a summary of the Plan, participant statistics (active, retired, inactive vested), a description of the unit credit cost method, and a summary of our actuarial assumptions.

# SECTION 3 Trust Fund Activity

In this section, we show the present status of the Plan's trust fund, trust activity over the past year, and historical investment return.

- Exhibit 3.1 lists the types of assets held and their market value.
- **Exhibit 3.2** summarizes the fund's receipts and disbursements during the past year.

**Exhibit 3.3** summarizes the fund's investment return, net of investment-related expenses. The exhibit displays annual rates of return at market value on all assets and non-dedicated assets for each of the last 20 years. For the plan year ended December 31, 2014, the assets of the fund experienced a 7.56% investment return, net of investment-related expenses, when measured at market value. The non-dedicated assets also experienced a 7.56% investment return, net of investment expenses for the plan year ending December 31, 2014. This should be compared with our assumed rate of 7.00% net of investment expenses.

**Exhibit 3.4** develops the actuarial value of assets as of December 31, 2014 and reflects 10-year smoothing of the 2008 net investment loss, as elected under the Pension Relief Act of 2010.

Operation of the Actuarial Asset Valuation Method for Non-Dedicated Assets presents the recognition of investment gains and losses on a market value basis over actuarial expectation.

**Exhibit 3.5** develops the assets as of December 31, 2014 for the purpose of determining employer liability upon withdrawal from the Plan during 2015. The 2008 net investment loss has been fully recognized.

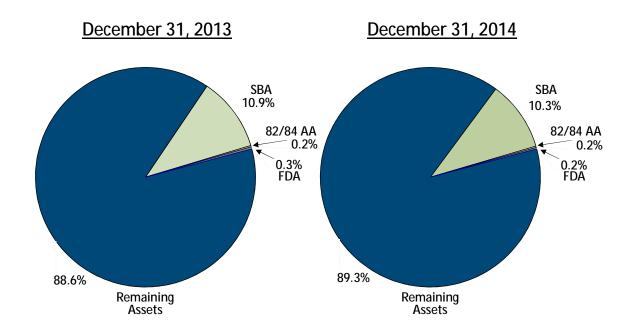
**Exhibit 3.6** presents the progress of the fund balance for the past 20 years in terms of employer contributions, benefit payments, operating expenses, other income and net investment income.

# Market Value of Assets (December 31, 2014)

<u>ASSETS</u>	<u>2014</u>
INVESTMENTS - at fair value 103-12 investment entities Cash and cash equivalents Common/collective trusts Corporate debt securities Equity securities Insurance company contracts Limited partnerships Mutual fund Other private equity Real estate U.S. Government and Government Agency obligations	\$1,091,162,576 1,423,140,396 10,613,315,407 2,427,764,728 3,939,823,295 9,191,446,740 4,152,827,447 326,588,038 881,409,915 1,105,434,794 414,279,692 35,567,193,028
Securities on loan Corporate debt securities Equity securities Insurance company contracts U.S. Government and Government Agency obligations	20,623,449 429,234,225 1,940,497,405 <u>77,630,433</u> 2,467,985,512
Fair value of collateral held for securities on loan Total investments	<u>2,425,210,467</u> 40,460,389,007
RECEIVABLES Due from broker for securities sold Contributions due from employers - net Withdrawal liability receivable - net Accrued investment income Swaps receivable from counterparties Forward foreign currency contracts Total receivables	413,279,923 114,070,392 18,000,000 81,324,737 618,929 354,829 627,648,810
OTHER ASSETS	3,469,201
CASH Total assets	<u>6,493,634</u> <u>41,098,000,652</u>
LIABILITIES AND NET ASSETS	
LIABILITIES Liability to return collateral held for securities on loan Securities sold, not yet purchased Due to broker for securities purchased Accounts payable and accrued expenses Swaps payable to counterparties Forward foreign currency contracts Total liabilities  NET ASSETS AVAILABLE FOR BENEFITS	2,523,494,471 1,334,072,702 477,236,746 22,241,658 1,407,875 350,816 4,358,804,268 \$ 36,739,196,384
MET AGGETG AVAILABLE FOR DENETTIO	ψ 50,7 59,190,364

Exhibit 3.1 (Continued)

	(In Thousands)					
		Year Ending December 31, 2014				
a.	Fixed Dollar Account (Including Supplemental Bond Account)	\$ 121,313	\$ 94,100			
b.	1982/1984 Annuity Account	68,127	60,521			
C.	Strategic Bond Account	3,833,377	3,775,869			
d.	All Remaining Assets	<u>31,170,197</u>	32,808,706			
e.	Net Assets Available for Plan Benefits	\$ 35,193,014	\$ 36,739,196			



# Receipts and Disbursements (Year Ended December 31, 2014)

2014 **ADDITIONS** Investment income Interest, dividends and 807,655,427 other investment income Net appreciation in fair value of investments 1,977,419,262 Net appreciation in fair value of collateral held for securities on loan 5,601,469 2,790,676,158 Less investment expenses (169,863,190)Investment income - net 2,620,812,968 **Employer contributions** 1,508,028,726 Employer withdrawal liability income 36,100,497 Other income 1,980,293 Total additions 4,166,922,484 **DEDUCTIONS** Pension benefits 2,530,265,208 Administrative expenses 88,635,638 Income tax expense 490,737 Total deductions 2,619,391,583 **NET CHANGE** 1,547,530,901 NET ASSETS AVAILABLE FOR BENEFITS Beginning of year 35,193,013,563 Adjustment to Final Assets (1,348,080)End of year \$ 36,739,196,384

### **Investment Return**

		Market Valu	ie of Assets		
	Ann	ual Rate of In	vestment Retu	irn	
	nnual Rate			age Annual Ra	
	ne-Year Peri		for Period En	ding Decembe	
Plan Year Ending	All	Non- Dedicated		All	Non- Dedicated
December 31,	Assets	Assets	Period	Assets	Assets
,			1 onou		
2014	7.56%	7.56%	1	7.56%	7.56%
2013	12.59%	15.25%	2	10.05%	11.34%
2012	11.93%	13.15%	3	10.67%	11.94%
2011	6.26%	5.35%	4	9.55%	10.26%
2010	13.53%	14.87%	5	10.34%	11.16%
2009	10.96%	12.60%	6	10.44%	11.40%
2008	-20.58%	-25.23%	7	5.36%	5.23%
2007	5.41%	5.67%	8	5.36%	5.29%
2006	10.61%	12.98%	9	5.94%	6.12%
2005	6.05%	6.55%	10	5.95%	6.16%
2004	9.49%	10.22%	11	6.26%	6.52%
2003	16.33%	20.76%	12	7.07%	7.64%
2002	-2.29%	-7.56%	13	6.32%	6.39%
2001	2.05%	0.89%	14	6.01%	5.99%
2000	3.35%	0.46%	15	5.83%	5.61%
1999	8.08%	14.06%	16	5.97%	6.12%
1998	14.86%	16.28%	17	6.47%	6.69%
1997	19.22%	23.21%	18	7.14%	7.55%
1996	9.11%	15.69%	19	7.24%	7.96%
1995	26.98%	27.50%	20	8.15%	8.86%

All rates reflect total investment return, net of investment-related expenses.

# Actuarial Value of Assets (January 1, 2015)

### Non-Dedicated Asset Reconciliation

(In Thousands)

	(1) Market Value	(2)	(3)	(4)	(5)	(6)	(7)	(8) Market Value
Year	of Assets beginning of year	Contributions	Benefit Payments	Operating Expenses	Other Transactions	Cash Flow (2)-(3)- (4)+(5)	Actual Investment Income	of Assets End of Year (1)+(6)+(7)
2014	\$31,170,197	\$1,544,129	\$2,169,123	\$ 88,635	\$ 20,755	(\$692,874)	\$ 2,331,383	\$32,808,706
2013	27,575,124	1,431,091	2,079,846	87,541	169,439	(566,857)	4,161,930	31,170,197
2012	25,024,396	1,367,269	1,972,420	83,759	(5,047)	(693,957)	3,244,685	27,575,124
2011	24,252,606	1,322,549	1,893,208	83,757	141,717	(512,699)	1,284,489	25,024,396
2010	21,809,742	1,276,476	1,804,405	84,716	(131,516)	(744,166)	3,187,025	24,252,606

### **Development of the Actuarial Value of Assets**

(In Thousands)

Year	Actual Investment Rate of Return*				rence between I and Expected			
2014	7.56%	\$ 2,331,383	\$ 2,157,663		\$173,720			
2013	15.25%	4,161,930	1,904,668		2,257,262			
2012	13.15%	3,244,685	1,727,419		1,517,265			
2011	5.35%	1,284,489	1,679,738		(395,250)			
Market Value of Non-Dedicated Assets on January 1, 2015 Subtract 80% of \$173,120 gain Subtract 60% of \$2,257,262 gain Subtract 40% of \$1,517,265 gain Add back 20% of \$395,250 loss Add back 30% of 2008 investment loss of \$8,646,585**					\$32,808,706 (138,976) (1,354,357) (606,906) 79,050 2,593,975			
Actuarial	Value of Non-Dedicat	ed Assets on January 1,	2015	\$	33,381,492			
Preliminary Actuarial Value as a Percentage of Market Value					102%			
Actuarial Value of Non-dedicated Assets (limited to 80%-120% of Market Value)				\$	33,381,492			
Actuarial Value of Dedicated Funds: FDA, 82/84AA, SBA (see Appendix C)					3,497,341			
Actuarial Value of Assets on January 1, 2015					\$ 36,878,833			

<sup>\*</sup> Based on market values.

<sup>\*\*</sup> Investment loss for 2008 is recognized over 10 years as elected under the Pension Relief Act of 2010.

Exhibit 3.4 (Continued)

# Operation of the Actuarial Asset Valuation Method for Non-Dedicated Assets (In Thousands)

	Investment Gain / (Loss) Recognized as of January 1, 2015										
	Investment Gain / (Loss) Market over Actuarially Expected		Investment G Recognition in			Investment Gain / (Loss) Recognized in Current Year			ent Gain / <mark>(Loss</mark> ed in Future Yea		
Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2008	(\$8,646,585)	(\$864,659)	(\$864,659)	(\$864,659)	(\$864,659)	(\$864,659)	(\$864,659)	(\$864,659)	(\$864,659)		
2009	\$1,098,417	\$219,683	\$219,683	\$219,683	\$219,683						
2010	\$1,686,388	\$337,278	\$337,278	\$337,278	\$337,278	\$337,278					
2011	(\$395,250)		(\$79,050)	(\$79,050)	(\$79,050)	(\$79,050)	(\$79,050)				
2012	\$1,517,265			\$303,453	\$303,453	\$303,453	\$303,453	\$303,453			
2013	\$2,257,262				\$451,452	\$451,452	\$451,452	\$451,452	\$451,452		
2014	\$173,720					\$34,744	\$34,744	\$34,744	\$34,744	\$34,744	
Net Gair	ns / (Losses) R	ecognized by \	⁄ear			\$183,219	(\$154,059)	(\$75,009)	(\$378,462)	\$34,744	\$0
Interest	on Prior Year G	ains / (Losses)				(\$39,430)	(\$40,095)	(\$29,311)	(\$24,060)	\$2,432	\$0
Addition 120% C	al Gains / <mark>(Loss</mark> orridor	es) Recognize	d in Current ye	ear because of	80% -	\$0					
Total Ga	ain / <mark>(Loss)</mark> Reco	ognized by yea	ır			\$143,788	(\$194,154) (\$104,320) (\$402,523) \$37,176 \$0				\$0
Total Ga	ains / <mark>(Losses)</mark> l	Deferred and to	o be Recogniz	ed in Future Y	ears	(\$572,786)	(\$418,727)	(\$343,718)	\$34,744	\$0	\$0

### **Assets for Withdrawal Liability** (January 1, 2015)

### **Non-Dedicated Asset Reconciliation**

(In Thousands)

	(1) Market Value	(2)	(3)	(4)	(5)	(6)	(7)	(8) Market Value
Year	of Assets beginning of year	Contributions	Benefit Payments	Operating Expenses	Other Transactions	Cash Flow (2)-(3)- (4)+(5)	Actual Investment Income	of Assets End of Year (1)+(6)+(7)
2014	\$31,170,197	\$1,544,129	\$2,169,123	\$ 88,635	\$ 20,755	(\$692,874)	\$ 2,331,383	\$32,808,706
2013	27,575,124	1,431,091	2,079,846	87,541	169,439	(566,857)	4,161,930	31,170,197
2012	25,024,396	1,367,269	1,972,420	83,759	(5,047)	(693,957)	3,244,685	27,575,124
2011	24,252,606	1,322,549	1,893,208	83,757	141,717	(512,699)	1,284,489	25,024,396
2010	21,809,742	1,276,476	1,804,405	84,716	(131,516)	(744,166)	3,187,025	24,252,606

# Development of the Actuarial Value of Assets (In Thousands)

Year	Actual Investment Rate of Return*	Actual Investment Return*	Expected Investment Return		ence between and Expected	
2014	7.56%	\$ 2,331,383	\$ 2,157,663		\$ 173,720	
2013	15.25%	4,161,930	1,904,668		2,257,262	
2012	13.15%	3,244,685	1,727,419		1,517,265	
2011	5.35%	1,284,489	1,679,738		(395,250)	
	alue of Non-Dedicated abtract 80% of \$173,7	Assets on January 1, 20	15		\$32,808,706 (138,976)	
	Subtract 60% of \$1,73,7	· ·			(1,354,357)	
	subtract 40% of \$1,517	<del>-</del>		(606,906)		
	dd Back 20% of \$395,	<del>-</del>			79,050	
Actuarial	Value of Non-Dedicate	ed Assets on January 1, 2	2015	\$	30,787,517	
Prelimina	ry Actuarial Value as a	Percentage of Market V	alue		94%	
Actuarial Value of Non-dedicated Assets (limited to 80%-120% of Market Value)					30,787,517	
Actuarial Value of Dedicated Funds: FDA, 82/84AA, SBA (see Appendix C)					3,497,341	
Actuarial	Value of Assets on Jai	nuary 1, 2015		\$	34,284,858	

<sup>\*</sup> Based on market values.

Exhibit 3.6

# Net Cash Flow (In Thousands)

December 31,	Total Contributions	Operating Expenses	Benefit Payments	Net Cash Flow	Total Investment Income	Net Cash Flow + Investment Income
1995	719,932	44,130	981,766	(305,964)	3,364,703	3,058,739
1996	764,490	43,644	1,052,921	(332,075)	1,432,608	1,100,533
1997	800,461	43,259	1,109,959	(352,757)	3,211,930	2,859,173
1998	873,273	48,964	1,174,440	(350,131)	2,892,689	2,542,558
1999	912,445	50,024	1,230,062	(367,641)	1,776,796	1,409,155
2000	981,425	52,791	1,352,093	(423,459)	784,219	360,760
2001	1,008,409	54,737	1,437,374	(483,702)	893,971	410,269
2002	1,030,563	57,454	1,557,808	(584,699)	(550,761)	(1,135,460)
2003	1,068,717	59,761	1,649,918	(640,962)	3,741,095	3,100,133
2004	1,117,378	59,232	1,746,603	(688,457)	2,466,296	1,777,839
2005	1,199,154	64,061	1,838,524	(703,431)	1,679,009	975,578
2006	1,258,898	71,638	1,919,384	(732,124)	3,045,672	2,313,548
2007	1,320,358	73,833	1,996,396	(749,871)	1,677,254	927,383
2008	1,350,530	80,375	2,059,601	(789,446)	(6,570,632)	(7,360,078)
2009	1,264,683	87,502	2,154,335	(977,154)	2,683,399	1,706,245
2010	1,276,476	84,716	2,232,529	(1,040,769)	3,537,349	2,496,580
2011	1,322,549	83,757	2,305,404	(1,066,612)	1,792,951	726,339
2012	1,367,269	83,759	2,367,600	(1,084,090)	3,502,770	2,418,680
2013	1,431,091	87,541	2,458,053	(1,114,503)	3,974,410	2,859,907
2014	1,544,129	88,635	2,530,265	(1,074,771)	2,620,954	1,546,183
Cumulative as of 12/31/14	\$22,612,230	\$1,319,813	\$35,155,035	(\$13,862,618)	\$37,956,682	\$24,094,064

# SECTION 4 Contribution Requirements and Amortization Period

In this section, we calculate the projected ERISA minimum Funding Standard Account and the maximum tax-deductible limit under the Internal Revenue Code. Under the law, an Enrolled Actuary must calculate costs using an approved actuarial cost method and actuarial assumptions which, in combination, are his best estimate of future Plan experience. We also determine the Plan's Amortization Period which provides the Trustees an additional indication of the Plan's ability to pay all benefits expected to be paid for by the Plan. Our actuarial cost method and assumptions are fully explained in Appendices C and D: the following discussion explains only the highlights of our cost method.

The actuarial present value of projected plan benefits is made up of liabilities for benefits being paid to current retirees and their beneficiaries and of liabilities that are projected to be paid to future retirees. The chart below illustrates the allocation of the actuarial present value of projected plan benefits among these categories of participants.

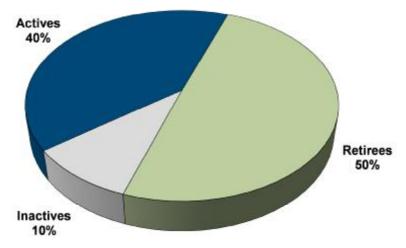


Exhibit 4.1 contains information on the actuarial balance sheet. Plan requirements consist of the actuarial present value of projected plan benefits on January 1, 2015. As illustrated above, 60% of the Plan's liabilities are for benefits to be paid to participants who are no longer contributing to the Plan. Plan resources consist of the actuarial value of assets and expected contributions to pay for projected future normal costs and expected future payments to eliminate the Plan's unfunded actuarial liability.

Exhibit 4.2 details the changes in the value of the Plan's unfunded actuarial liability from January 1, 2014 to January 1, 2015. Unfunded actuarial (accrued) liability changes during the year result from benefit accruals, contributions to the Plan, and actuarial gains and losses, which arise from actual experience different from expected. Changes to Plan provisions, actuarial assumptions, or the Plan's funding method can also impact the unfunded actuarial liability.

This year's normal cost is shown in Exhibit 4.3. The normal cost is the annual cost of benefits allocated to a plan year by the cost method and includes an allowance for operating expenses expected during the plan year.

### **ERISA Minimum Funding Requirements**

Exhibit 4.4 details the entries to the Plan's Funding Standard Account for the plan year ending December 31, 2014.

Exhibit 4.5 projects the Plan's Funding Standard Account through December 31, 2015 and provides detail on the amortization charges and credits. A positive credit balance is produced by cumulative contributions sufficient to pay normal costs and to amortize the unfunded actuarial liability faster than required.

Note that for each exhibit, we have assumed that the IRS will approve the request for change in funding method filed in December, 2012.

### **Maximum Deductible Contribution**

Exhibit 4.6 calculates the maximum deductible contribution for the 2015 plan year. The anticipated contributions are less than the maximum deductible contribution, and are therefore expected to be fully deductible.

#### **Amortization Period**

Exhibit 4.7 displays the calculation of the period to amortize the Plan's unfunded actuarial liability using the actuarial value of assets and the market value of assets.

# Actuarial Balance Sheet (January 1, 2015)

### Requirements

(In Thousands)

Present Value of Projected Benefits			
Retired Participants			\$ 22,796,728
Vested Inactive Participants			4,494,421
Active Participants Retirement Vested Withdrawal Death Disability	\$	16,267,922 1,515,499 307,340 508,095	 18,598,856
Total Present Value of Projected Benefits			\$ 45,890,005
	Resources (In Thousands)		
Actuarial Value of Assets			\$ 36,878,833
Present Value of Future Normal Costs			5,722,394
Unfunded Actuarial Liability			 3,288,778
Total			\$ 45,890,005

### Analysis of Change in the Unfunded Actuarial Liability (January 1, 2015)

Expected Unfunded Actuarial Liability on January 1, 2015	5		(In	Thousands)
Unfunded Actuarial Liability as of January 1, 2014 Normal Cost, Including Expenses Interest on the above items Contributions Interest on Contributions			\$	3,637,478 798,458 310,515 (1,544,129) (45,386)
Expected Unfunded Actuarial Liability as of January 1, 2015			\$	3,156,936
Changes				
Assumption changes Discount rate changes on dedicated funds PEER Level changes Increase in Contribution Rates Demographic (Gain)/Loss Asset (Gain)/Loss Total	\$	272,629 (93,240) 14,602 26,380 28,829 (117,358)	_	131,842
Unfunded Actuarial Liability on January 1, 2015			\$	3,288,778

# Normal Cost (January 1, 2015)

Unit Credit Normal Cost	(In The	ousands)	
Retirement Vested Withdrawal Death Disability	\$ 613,215 22,961 94,801 11,452	\$	742,429
New Entrant Adjustment			13,234
Expenses (\$97,000,000 Payable Mid-Year)			93,527
Total Normal Cost (Beginning of Year)		\$	849,190

# Funding Standard Account (Year Ending December 31, 2014)

Charges to Funding Standard Account	(In	Thousands)
Prior Year Fund Deficiency, if any Normal Cost for Year Amortization Charges Interest on Fund Deficiency, Normal Cost, and	\$	0 798,458 1,108,666
Amortization Charges		133,499
Total Charges	\$	2,040,623
Credits to Funding Standard Account		
Prior Year Credit Balance, if any Employer Contributions Amortization Credits Interest on Credit Balance, Amortization	\$	2,446,164 1,544,129 512,482
Credits, and Contributions		252,491
Total Credits	\$	4,755,266
Balance		
Projected Credit Balance, if any	\$	2,714,643

# Projected Funding Standard Account (Year Ending December 31, 2015)

Charges to Funding Standard Account	(In	Thousands)
Prior Year Fund Deficiency, if any Normal Cost for Year Amortization Charges* Interest on Fund Deficiency, Normal Cost, and	\$	0 849,190 1,128,571
Amortization Charges		138,443
Total Charges	\$	2,116,204
Prior Year Credit Balance, if any Expected Employer Contributions Amortization Credits* Interest on Credit Balance, Amortization Credits, and Contributions Total Credits	\$ \$	2,714,643 1,500,000 518,859 269,878 5,003,380
Balance		
Projected Credit Balance, if any	\$	2,887,176
Minimum Required Contribution	\$	-

<sup>\*</sup> See table on the following page for detail.

### Amortization Bases (In Thousands)

The following table depicts the various entries used to establish the year-by-year charges and credits with respect to the Funding Standard Account.

(In Thousands)									
	Year	Original	01/01/2015	Years	Amortization				
	Established	Balance	Balance	Remaining	Payment				
		1							
Charges									
Original Offset Base	2011	\$7,051,080	\$5,650,383	9.9	\$756,126				
Assumption Changes	2012	\$129,823	\$113,215	12.0	\$13,321				
PEER Changes	2012	\$12,996	\$11,332	12.0	\$1,333				
Plan Change - Annuitized Extra Check	2012	\$17,668	\$15,408	12.0	\$1,813				
2008 Net Investment Loss	2012	\$467,560	\$445,672	23.0	\$36,951				
All Other Experience Loss	2012	\$650,006	\$566,849	12.0	\$66,699				
Assumption Changes	2013	\$101,790	\$93,405	13.0	\$10,445				
PEER Changes	2013	\$14,938	\$13,707	13.0	\$1,533				
2008 Net Investment Loss	2013	\$875,912	\$847,246	23.0	\$70,245				
Assumption Changes	2014	\$152,801	\$146,721	14.0	\$15,679				
PEER Changes	2014	\$11,827	\$11,356	14.0	\$1,214				
2008 Net Investment Loss	2014	\$1,635,968	\$1,607,847	23.0	\$133,307				
PEER Changes	2015	\$14,602	\$14,602	15.0	\$1,498				
Assumption Changes	2015	\$179,389	\$179,389	15.0	\$18,407				
Total Charges		\$11,316,360	\$9,717,132		\$1,128,571				
Credits	1	ı		1					
Funding Method Credit	2012	\$2,355,538	\$1,807,437	7.0	\$313,435				
Experience Gain	2013	\$434,151	\$398,388	13.0	\$44,549				
Experience Gain	2014	\$1,505,654	\$1,445,737	14.0	\$154,498				
Experience Gain	2015	\$62,149	\$62,149 15.0		\$6,377				
T + 10 ""									
Total Credits		\$4,357,492	\$3,713,711		\$518,859				

# Maximum Tax-Deductible Contribution (Plan Year Ending December 31, 2015)

1.	Ten Year Amortization Limitation: (IRC Section 404(a)(1)(A)(iii))	(In Thousands)		
	Normal Cost	\$ 849,190		
	Amortization of Unfunded Actuarial Liability	437,615		
	Interest	 90,076	\$	1,376,881
2.	Full Funding Limitation: (IRC Section 412(c)(7)(A)(i))			
	Actuarial Liability at Beginning of Year	\$ 40,167,611		
	Unit Credit Normal Cost, including expenses, at Beginning of Year	849,190		
	Test Value of Assets, at Beginning of Year	36,739,196		
	Interest	 299,432	\$	4,577,037
3.	Unfunded Current Liability			
	90% of RPA Current Liability, at End of Year	\$ 58,459,087		
	Actuarial Value of Assets Projected to End of Year	 36,609,855	\$	21,849,232
4.	Unfunded Current Liability Limitation: (IRC Section 404(a)(1)(D))			
	140% of Current Liability at Year End	\$ 90,936,357		
	Actuarial Value of Assets at Year End	 36,859,661		
	Unfunded Current Liability		\$	54,076,696
5.	Maximum Tax-Deductible Contribution Lesser of (1) or (2), but not less than (3) or (4)		\$	54,076,696

There are alternative calculations of the Maximum Deductible Contribution under IRC Section 404 that may produce a different amount than illustrated above. Please consult your tax advisors regarding the deductibility of cash contributions.

# Exhibit 4.6 (Continued)

The current liability defined under IRC Section 404(a)(1)(D) is developed in the following table. Current liability is determined using a 3.51% interest assumption and mortality as specified by the IRS. The 3.51% interest assumption is within the required corridor of the weighted average of 30-Year Treasury Bond Rates published by the IRS.

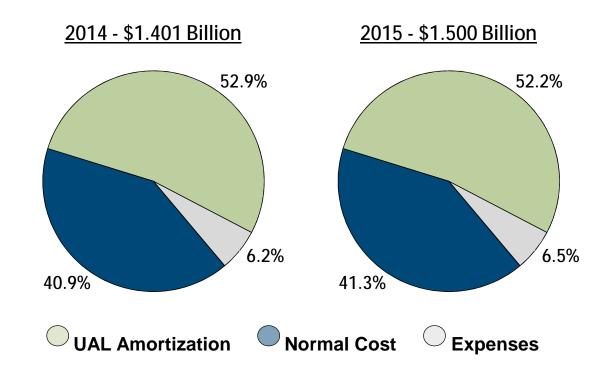
Current Liability, Beginning of Year							
Retirees	\$	31,223,308					
Vested Inactive Participants		8,401,999					
Active Participants		24,145,980					
Total	\$	63,771,287					
Changes Expected During 2015 Plan Year							
Accrual of Benefits	\$	1,546,157					
Expected Benefit Payments		2,609,744					
Interest		2,246,841					
Total	\$	1,183,254					
Current Liability, End of Year	\$	64,954,541					

The amortization limitation required by IRC Section 404(a)(1)(A)(iii) is based on a 10-year level dollar amortization of the Unfunded Actuarial Liability of \$1,376,881.

# **Exhibit 4.7 Amortization Period**

Exhibit 4.7 shows the amortization periods as of January 1, 2015 and January 1, 2014.

	(In Thousands)				
		Unit Credit			
		January 1, 2014	January 1, 2015		
a.	Estimated Employer Contributions	\$1,401,000	\$1,500,000		
b.	Expenses	\$87,000	\$97,000		
c.	Normal Cost (payable monthly)	\$741,106	\$783,722		
d.	Estimated Employer Contribution to Amortize Unfunded Actuarial				
	Liability (abc.)	\$572,894	\$619,278		
e.	Unfunded Actuarial Liability	\$3,637,478	\$3,288,778		
f.	Amortization Period	8.3 years	6.7 years		
g.	Estimated Period to Amortize the Unfunded Actuarial Liability using Market Value of Assets	9.2 years	7.1 years		



## **SECTION 5 Funded Status**

In this section, we provide the Plan's funded status by comparing the Fund's Market Value of Assets with the Actuarial Present Value of Accumulated Plan Benefits and the Plan's Present Value of Vested Benefits under FASB ASC Topic 960. As shown on Exhibit 5.1, the Market Value of the Plan's Assets is less than the Present Value of Accumulated Plan Benefits as of December 31, 2014. Exhibit 5.2 shows the change in the Present Value of Accumulated Plan Benefits from December 31, 2013 to December 31, 2014.

Exhibit 5.3 shows the Plan's Unfunded Vested Benefits Liability for purposes of determining withdrawal liability. As of December 31, 2014, the Assets for Withdrawal Liability are less than the Present Value of Vested Benefits. This determination will impact withdrawal liability calculations for employers withdrawing from the Plan during the 2015 plan year.

## Exhibit 5.1

## Statement of Actuarial Present Value of Accumulated Plan Benefits

(In Thousands)

	FASB ASC Topic 960			
	Dec	ember 31, 2013	Dec	ember 31, 2014
Vested Benefits				
Retirees & Beneficiaries	\$	22,103,238	\$	22,789,078
Vested Inactive Participants		4,422,913		4,494,421
Active Participants		10,754,230		11,053,869
Total	\$	37,280,381	\$	38,337,368
Non-Vested Benefits				
Active and Other Non-Vested Benefits		1,835,647		1,830,243
Total	\$	1,835,647	\$	1,830,243
Actuarial Present Value of				
Accumulated Plan Benefits	\$	39,116,028	\$	40,167,611
Assets				
Market Value of Assets (MV)	\$	35,193,014	\$	36,739,196
Actuarial Value of Assets (AV)		35,478,550	\$	36,878,833
Funding Ratios				
Ratio of MV to Present Value of Vested Benefits		94.4%		95.8%
Ratio of MV to Present Value of Accumulated Plan Benefits		90.0%		91.5%
PPA Funding Ratio				
Ratio of AV to Present Value of Accumulated Plan Benefits		90.7%		91.8%

## Exhibit 5.2

# Statement of Changes in Actuarial Present Value of Accumulated Plan Benefits (In Thousands)

Value as of December 31, 2013	\$39,116,028
Changes Benefits Accumulated Actuarial (Gain)/Loss Plan Amendments Interest Benefit Payments Assumption Changes	714,573 49,852 14,602 2,623,432 (2,530,265) 179,389
Net Change	\$1,051,583
Value as of December 31, 2014	\$40,167,611

### Exhibit 5.3

## Unfunded Vested Benefit Liability (In Thousands)

	Dece	As of ember 31, 2013	As of December 31, 2014
Actuarial Present Value of Vested Benefits			
Active Participants Vested Inactive Participants Retirees & Beneficiaries Total		10,754,230 4,422,913 22,103,238 37,280,381	\$11,053,869 4,494,421 <u>22,789,078</u> \$38,337,368
UVBL Asset Value*		32,019,915	34,284,858
Unfunded Vested Benefit Liability	\$	5,260,466	\$ 4,052,510
Excess of the Actuarial Value of Assets over the Vested Benefit Liability		NA	NA
Percentage Funded		85.9%	89.4%

<sup>\*</sup>The UVBL Asset Values were determined without regard to the Pension Relief Act election previously mentioned – i.e., for this calculation, five-year smoothing was used for all market value gains and losses.

# **SECTION 6 History and Projections**

**Exhibit 6.1** shows five years of the more important Plan statistics.

- § Investment Return. Investment return often represents the largest source of actuarial gain or loss.
- **Participant Statistics.** Changes, if any, in the active and inactive participants' characteristics over time can cause significant changes in costs.

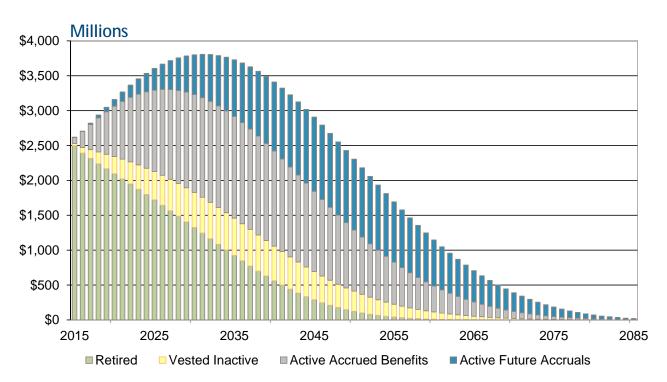
**Exhibit 6.2** provides a projection of benefit payments. This can be useful for the investment manager in planning future liquidity requirements.

Exhibit 6.1

## Historical Statistics (Dollars in Thousands)

	<u>January 1, 2011</u>	January 1, 2012	January 1, 2013	January 1, 2014	January 1, 2015
Actuarial Present Value of Accumulated Plan Be	nefits				
Vested Benefits Retirees Inactives Actives	\$ 19,747,735	\$20,386,683	\$ 20,973,585	\$ 22,103,238	\$ 22,789,078
	4,194,021	4,247,074	4,464,195	4,422,913	4,494,421
	_ 9,887,354	10,359,810	10,671,106	10,754,230	11,053,869
Total Non-Vested Benefits Accumulated Plan Benefits	\$ 33,829,110	\$ 34,993,567	\$ 36,108,886	\$ 37,280,381	\$ 38,337,368
	\$ 4,121,168	\$ 1,853,770	\$ 1,756,561	\$ 1,835,647	\$ 1,830,243
	\$ 37,950,278	\$ 36,847,337	\$ 37,865,447	\$ 39,116,028	\$ 40,167,611
Assets Market Value of Fund Market Value Return in Prior Year Actuarial Value for Funding	\$29,164,847	\$ 29,891,186	\$ 32,309,867	\$ 35,193,014	\$ 36,739,196
	13.53%	6.26 %	11.93%	12.59%	7.56%
	\$32,880,990	\$ 33,310,140	\$ 34,132,485	\$ 35,478,550	\$ 36,878,833
Participant Statistics Retired Participants and Beneficiaries Number of Retirees and Beneficiaries Total Annual Benefits	206,645	210,123	213,780	217,924	221,502
	\$ 2,232,529	\$ 2,305,404	\$ 2,367,600	\$ 2,458,053	\$ 2,530,265
Active Participants Number of Participants Average Age Average Credited Service Vested Inactive Participants	201,740	197,900	194,080	195,620	197,120
	42.9	43.4	43.6	43.7	43.4
	11.8	12.1	12.3	12.4	12.3
Number of Participants <u>Actuarial Assumptions</u> Interest Assumption	168,240	168,080	169,020	167,940	166,440
	7.00%	7.00%	7.00%	7.00%	7.00%
Expected Contributions Actual Contributions	1,270,000	1,320,000	1,375,000	1,401,000	1,500,000
	\$ 1,322,549	\$ 1,367,269	\$ 1,431,091	\$ 1,544,129	TBD

Exhibit 6.2
Projected Benefit Payouts



## Detail of Total Projected Payments for Next 20 Years (In Thousands)

	Estimated Payout of		Estimated Payout of
Plan Year	Retirement Benefits	Plan Year	Retirement Benefits
2015	\$2,619,683	2025	\$3,607,134
2016	2,708,274	2026	3,667,968
2017	2,822,392	2027	3,717,244
2018	2,937,704	2028	3,755,741
2019	3,049,107	2029	3,784,158
2020	3,162,318	2030	3,801,303
2021	3,268,037	2031	3,807,288
2022	3,366,324	2032	3,804,604
2023	3,455,428	2033	3,790,528
2024	3,535,156	2034	3,765,329

## Appendix A

**Summary of the Plan** 

#### 1. Active Participation

Non-Seasonal employees for whom contributions are required to be made to the Trust under the terms of a pension agreement become "Active Participants" on the day on which they first accumulate 750 covered hours in the current and immediately preceding calendar years. Seasonal employees become "Active Participants" if they satisfy one-half of the covered hour requirement of Non-Seasonal employees.

#### 2. <u>Monthly Pension at Normal Retirement</u>

The monthly pension earned for service prior to 1987 is determined based on the 1986 Plan provisions as outlined in the January 1, 1986 Actuarial Report. The final five-year average contribution rate used for this determination recognizes contribution rates applicable to all 500 hour years through 1991.

For service after 1986, monthly pension benefits are earned as follows:

	Contribution Percentage		
Calendar Year	First 20 Years	After 20 Years	
1987-1991	2.00%	2.65%	
1992-1996	2.30%	3.05%	
1997-1999	2.46%	3.26%	
2000-2002	2.70%	3.58%	
1/2003-6/2003	2.20%	2.92%	
7/2003-2006	1.20%	1.20%	
2007	1.65%	1.65%	
2008	2.00%	2.65%	
2009+	1.20%	1.20%	

#### 3. Past Service Credits

A participant is granted credit for the number of years and months of specified types of unbroken employment rendered prior to his or her first covered hour, subject to limits specified in the Plan.

#### 4. Vesting Service

A Plan member earns a vesting service year for each year after 1975 during which he or she is credited with at least 500 covered hours (250 covered hours for Seasonal Plan members). For service before 1976, a Plan member is credited with a vesting service year for each year of continuous coverage under the Plan.

#### 5. Normal Retirement Age

A participant reaches Normal Retirement Age upon the later of age 65 or an Active participant's age on the second anniversary of his or her first covered hour.

#### 6. Normal Pension Form

The normal form of pension for unmarried participants is a Life Only Pension. In general, married participants who do not elect otherwise receive a reduced Employee and Spouse Pension. This reduced amount is an "actuarial equivalent" of the Life Only Pension. Participants who retired under the Employee and Spouse Pension Option will have their pension restored to the amount payable under the Normal Form if the spouse dies first. In the event that the participant dies first, the amount of spouse pension is 66 2/3% of the retiree's pension for those who retired after 1991 with recent coverage; otherwise the amount of spouse pension is 50% of the retiree's pension. In both instances, the actuarial reduction factor for the Employee and Spouse Pension amount is calculated as though the spouse pension benefit would be 50% of the reduced Employee and Spouse Pension.

#### 7. Other Pension Forms

An Optional Employee and Spouse Pension providing a 75% spouse pension is available. Participants retiring under age 65 may elect a Benefit Adjustment Option with or without the regular or Optional Employee and Spouse Pension.

#### 8. Early Retirement Eligibility Date

In general, this date is the first day of the month coincident with or immediately following the later of the participant's 55<sup>th</sup> birthday or the date the individual becomes a vested participant. However, a participant with recent coverage may retire at any age if he or she meets the Rule of 84 (or Rule of 82 or Rule of 80) under the Program for Enhanced Early Retirement (PEER program); that is, the sum of his or her attained age plus years of contributory service is equal to or greater than 84 (or 82 or 80).

#### 9. Monthly Pension at Early Retirement for a Participant with Recent Coverage

If a participant meets the Rule of 84 and has recent coverage, the monthly pension benefit is reduced by the sum of 0.45% for each of the first 60 months that the early retirement date precedes his or her 62<sup>nd</sup> birthday plus 0.33% for each month that the early retirement date precedes his or her 57<sup>th</sup> birthday.

If a participant has recent coverage but does not meet the Rule of 84, his or her monthly pension benefit is reduced by the sum of 0.60% for each of the first 60 months that the early retirement date precedes his or her 62<sup>nd</sup> birthday plus 0.40% for each month that the early retirement date precedes his or her 57<sup>th</sup> birthday.

#### 10. Monthly Pension at Early Retirement for a Participant with Current PEER Coverage

If a participant meets the Rule of 84 (or Rule of 82 or Rule of 80), is a member of a bargaining unit which has negotiated PEER 84 (or PEER 82 or PEER 80) contribution surcharges, and has <u>current PEER coverage</u>, the early retirement benefit equals 100% of the earned pension benefits. A participant has <u>current PEER coverage</u> at his or her retirement effective date if the applicable PEER contributions have been paid for at least 1,000 covered hours in the 24-month period immediately preceding his or her retirement effective date.

Vote: If a participant is in a category of early retirement where benefits are subsidized (as described in paragraph 1 of Item 9 or in Item 10) and accumulates 25 years of service under the Plan while so covered, then his or her subsidized early retirement benefits are "locked-in" and cannot be forfeited.

#### 11. Disability Benefit

Upon a vested participant's total and permanent disability before age 65, the monthly benefit is the greater of (a) 85% of the earned monthly pension benefit or (b) the early retirement pension otherwise payable, provided the vested participant has met the specified recent coverage requirement on the disability onset date.

#### 12. Vested Benefit Upon Termination of Employment

Upon termination of employment, a participant is vested in his or her accrued pension, based on past and future service credits, if he or she has completed at least 5 years of vesting service, one of which was completed during or after 1991.

A terminated vested participant may elect early commencement of the earned retirement benefit at any time on or after the Early Retirement Eligibility Date. If the participant does not have recent coverage and has not "locked-in" rights to unreduced pension benefits by having completed 25 years of Plan service before termination, the benefit is reduced by the sum of 0.60% per month for each of the first 60 months that the early retirement date precedes the participant's 65<sup>th</sup> birthday plus 0.40% per month for each month that such early retirement date precedes the participant's 60<sup>th</sup> birthday.

Vested participants who are not covered by the current Plan provisions may be subject to additional limitations on their benefits.

#### 13. Extra Check

An annual "Extra Check" is payable to: (i.) pre-1985 retirees in the amount of \$540 and to (ii.) their eligible survivors in the amount of \$450.

#### 14. Death Benefits

Upon the death of a participant or pensioner who has met the specified recent coverage requirement, a temporary monthly pension is payable to the surviving children under conditions specified in the Plan.

A pre-retirement benefit to the surviving spouse is payable upon the death of a vested participant. If a married participant had recent coverage at the time of death, the spouse receives an immediate benefit based on the participant's earned benefit. The earned benefit is reduced to reflect early retirement, as specified in the Plan, and the appropriate Employee and Spouse Pension factor. 66 2/3% of the resulting amount is then payable immediately to the spouse. If the participant does not have recent coverage, the benefit is calculated as described above, but a 50% factor is applied in lieu of the 66 2/3% factor, and, if the participant was not eligible to retire on the date of death, commencement of the pension is deferred until the time the participant would have been first eligible to retire.

A single sum death benefit equal to 50% of contributions, subject to a maximum of \$10,000, is payable upon the death of an Active or Terminated participant who has completed at least 5 years of vesting service. In addition, for unmarried vested participants who satisfy the recent coverage requirements and would otherwise be eligible to retire, a death benefit of 48 times the participant's accrued pension, reduced to reflect early retirement as specified in the Plan, is payable as a lump sum amount.

Upon the death of a pensioner with a retirement date before January 1, 1992, a single sum benefit of 12 times the monthly normal form pension (Life Only annuity), subject to a maximum of \$10,000 is payable. Beginning with retirements in 1992, beneficiaries of retirees with recent coverage who elect a Life Only or Benefit Adjustment Option (without the Spouse Pension) receive a 4-Year Certain death benefit payment equal to 48 times the pensioner's Life Only benefit minus the total monthly payments already received by the pensioner.

If a pensioner retires after January 1, 1992, he or she may elect an Optional Lump Sum Death Benefit equal to 12 times the monthly normal form pension (Life Only annuity). The Optional Lump Sum Death Benefit is paid for by reducing the pensioner's monthly payment.

#### 15. <u>Transition Provisions</u>

Certain minimum benefits are provided to participants who were covered by prior versions of the Plan.

The following is a summary of the major Plan changes since 1984.

Effective Date	Description of Change
1/1/2011	Annual "Extra Checks" to pre-1985 retirees and their eligible survivors were made a permanent part of the Plan.
1/1/2009	A 75% Optional Employee and Spouse Pension was added. Also, a \$40 million reserve for extra check payments was established.
1/1/2008	Effective for calendar year 2008 only, the percentages used to calculate Plan participant account benefits have been increased from 1.20% to 2.00% for participants who have not completed 20 years of service, and from 1.20% to 2.65% for participants who have completed at least 20 years of service. The percentages for years 2009 and later remain at 1.20%.
1/1/2007	Effective for calendar year 2007 only, the percentage used to calculate Plan participant account benefits was increased from 1.20% to 1.65%. The percentages for years 2008 and later remain at 1.20%.
7/1/2003	Effective July 1, 2003, the percentage used to calculate Plan participant account benefits has been reduced to 1.20% for the second half of 2003 and all subsequent years.
1/1/2000	Effective for calendar years 2000, 2001 and 2002, the percentage used to calculate Plan participant account benefits has been increased. An Active participant will earn a monthly pension benefit of 2.70% instead of 2.16% for contributions credited in this period if he/she has not completed 20 year of service. If such participant has completed at least 20 years of contributory service, he/she will earn a monthly pension benefit of 3.58% instead of 2.86% during this same period.
	Effective for calendar years 2003, 2004 and 2005, the percentage used to calculate Plan participant contribution account benefits has been increased. An Active participant will earn a monthly pension benefit of 2.20% instead of 2.00% for contributions credited in this period, if he/she has not completed 20 years of service. If such participant has completed at least 20 years of contributory service, he/she will earn a monthly pension benefit of 2.92% instead of 2.65% during this same period.
	Effective with calendar year 2000, all Disability Pensioner benefits have been increased to 85% of his/her Normal Retirement Benefit unless said Disability Pensioner's benefits are already payable in a greater amount. Spouses of certain deceased Disability Pensioners have had their benefits appropriately adjusted, as applicable. The same 85% "floor" monthly pension benefit shall be paid to all Disability Pensioners and, as applicable, to their spouses for Plan participants who become Disabled Pensioners after calendar year 1999.

Effective Date	Description of Change
1/1/2000 (Continued)	Effective with calendar year 2000, the maximum Child Survivor Benefits have been increased to \$1,000 and such increased benefits shall be payable, in general, upon the death of a person who was an Active Participant on 1/1/1987 or thereafter and who otherwise satisfied the applicable recency of employment requirements at the time of death.
	Effective with calendar year 2000, PEER eligible participants with 25 years of contributory service "lock-in" PEER coverage by working at least 1,000 covered hours during any consecutive 24 month period that ends on or after completion of 25 years of contributory service.
1/1/1999	Effective with retirements in calendar year 1999, a vested participant who has not suffered a forfeiture of service after 1975 may quality to have pre-1976 forfeited contributory service credit restored.
1/1/1998	Effective for calendar years 1997, 1998 and 1999, the percentage used to calculate Plan participant contribution account benefits has been increased. An Active participant will earn a monthly pension benefit of 2.46% instead of 2.00% for contributions credited in this period if he/she has not completed 20 years of service. If a participant has completed at least 20 years of contributory service, he/she will earn a monthly pension benefit of 3.26% instead of 2.65% during this same period.
	Effective for calendar years 2000, 2001 and 2002, the percentage used to calculate Plan participant contribution account benefits has been increased. An Active participant will earn a monthly pension benefit of 2.16% instead of 2.00% for contributions credited in this period, if he/she has not completed 20 years of service. If a participant has completed at least 20 years of contributory service, he/she will earn a monthly pension benefit of 2.86% instead of 2.65% of contributions during this same period.
1/1/1994	Effective for calendar years 1994, 1995 and 1996, the percentage used to calculate Plan participant contribution account benefits has been increased. An Active participant will earn a monthly pension benefit of 2.3% instead of 2.00% for contributions credited in 1992 through 1996, inclusive, if he/she has not completed 20 years of contributory service. If a participant has completed at least 20 years of such service, he/she will earn a monthly pension benefit of 3.05% instead of 2.65% during this same period.
	The "Rule of 85" early retirement test was lowered to a "Rule of 84" test for both the PEER program supported by 6.5% surcharge contributions and regular enhanced early retirement features.

Effective Date	Description of Change
1/1/1994 (Continued)	The Program for Enhanced Early Retirement (PEER) was expanded to allow participants who meet the Rule of 82 (or Rule of 80) to retire with no early retirement reduction. To qualify, a participant must have current PEER coverage and must retire from a bargaining unit that has negotiated 11.5% PEER 82 surcharge contributions, effective on or after 8/1/1993, or 16.5% PEER 80 surcharge contributions, effective on or after 8/1/1994.
	The Plan's recent coverage provisions were liberalized to provide protection to participants with at least 25 years of contributory service. Participants who satisfy the latter condition and who leave covered employment under age 55 now have access to the Plan's enhanced early retirement, death and survivor benefits.
	The Plan's minimum disability pension has been increased from 55% to 62%.
1/1/1992	A Plan participant is vested in his or her accrued pension if he/she has completed at least 5 years of vesting service, one of which was earned in 1991 or later. Prior to this date, a participant became vested upon completion of 10 years of vesting service.
	Effective for calendar years 1992 and 1993, Plan participants will receive a 15% increase in the percentage used to calculate his/her Contribution Account Benefit. A participant will earn a monthly pension benefit of 2.3% instead of 2.00% for contributions credited in 1992 and 1993 if he/she has not completed 20 years of service. If a participant has completed at least 20 years of contributory service, he/she will earn a monthly pension benefit of 3.05% instead of 2.65%.
	Pre-Retirement Death Benefits were modified as follows:
	The temporary spouse survivor benefit is eliminated;
	<ul> <li>For married vested participants who die with recent coverage, a 66-2/3% Spouse Lifetime Pension is payable immediately; and</li> </ul>
	<ul> <li>For non-married vested participants who die with recent coverage, a single sum death benefit is payable to their designated beneficiaries. The lump sum amount equals 48 times the participant's monthly accrued benefit.</li> </ul>

Effective Date	Description of Change
1/1/1992 (Continued)	<ul> <li>Post-Retirement Death Benefits were revised as follows:</li> <li>For participants who retire with recent coverage, the After Retirement Spouse Lifetime Pension is increased from 50% to 66-2/3%. If a participant retires without recent coverage, the After Retirement Spouse Lifetime Pension remains at 50%.</li> <li>Non-married vested participants or married vested participants who did not elect the Employee and Spouse Pension, who retired with recent coverage and die before receiving 4 years of benefit payments will have the remainder of 4 years benefits paid to their designated beneficiary.</li> <li>Enhanced early retirement benefits became available for participants with recent coverage if the sum of their attained age and years of contributory service is equal to or greater than 85 (the "Rule of 85"). Reduction for early retirement under this provision is cut by approximately 25%.</li> <li>The Program for Enhanced Early Retirement (PEER) also became available. Under this program, participants who meet the Rule of 85, who retire from a bargaining unit that has negotiated 6.5% surcharge PEER contributions, and who have current PEER coverage can retire with no early retirement reduction, regardless of their age.</li> <li>There is a 9 month period (4/1/1991 to 12/31/1991) where members with pension effective dates or application requests (and recent coverage) within this time frame</li> </ul>
7/1/1988	The Plan was modified to provide an additional optional pension form: The Employee and Spouse Pension with Benefit Adjustment Option.

Effective Date	Description of Change
1/1/1987	Two formulas were used to compute a participant's retirement benefit: An improved version of the Plan's pre-1987 5-Year Average Benefit formula (used to determine the retirement benefit for service before January 1, 1987 and applicable only if a participant first became covered by the Plan before 1987) and the Contribution Account Benefit (used to determine the retirement benefit for a participant's contributory service under the Plan after 1986). Note, participants that are active in the Plan both before and after January 1, 1987 had their retirement benefit based on the sum of their 5-Year Average Benefit and their Contribution Account Benefit. Also, participants who first became covered by the Plan after 1986 might have qualified for a Non-contributory Service benefit based on any past employment either before or after January 1, 1987.
	<ul> <li>5-Year Average Benefit: A participant's monthly retirement benefit was based on his/her total prior Plan past and future service credits earned as of 12/31/1986 multiplied by his/her 5-year average rate benefit factor. The maximum prior Plan credits were increased from 30 credits to 33-1/3 credits. Also, when determining a participant's 5-year average contribution rate, the formula recognized employer contributions after 1986 up to the end of 1991 (or participant's retirement date, if earlier).</li> </ul>
	Contribution Account Benefit: A participant's monthly retirement benefit is based on a percentage of the total Employer Contributions made on his/her behalf for contributory service after 1986. The percentage that applies is:
	2% of all the employer contributions made for a participant's covered employment (after 1986) during the first 20 calendar years of service
	PLUS
	2.65% of all the employer contributions made for a participant's covered employment (after 1986) that comes after the end of his/her 20 <sup>th</sup> calendar year of service.

Effective Date	Description of Change
1/1/1987 (Continued)	Non-contributory Service Benefit: If a participant first started working in covered employment after 1986, the value of this benefit is based on 2% of the participant's average annual contribution in his/her first five 500 covered hour years multiplied by the participant's years of non-contributory service (to a maximum of 10).
1/1/1985	A 25% increase in retirement and survivor benefits calculated under the Plan's 5-year average contribution rate benefit schedule was adopted. To be eligible, a participant must have had a pension effective date on or after January 1, 1985 and have earned 250 or more covered hours in a single calendar year beginning on or after January 1, 1983.
8/1/1984	Pre-retirement spouse benefits were extended to the surviving spouses of all vested participants who die before the effective date of their retirement benefit. Under the old rules, a pre-retirement spouse benefit was only payable if the vested participant attained age 55 and was in active service under the Plan for at least one calendar month ending after his 55 <sup>th</sup> birthday.  The rule requiring reduction of the spouse survivor benefit by the amount of any pre-retirement spouse benefit was eliminated.

## Appendix B

**Participant Statistics** 

The sources of WCT Plan participant data for our actuarial calculations are: (a) extracts from Prudential Investments' Annuitant Benefit Consolidation (ABC) System file, (b) extracts from the T2 Participant Data File (PDF) maintained by Northwest Administrators and Prudential Investments, and (c) extracts from the Western States Food data base.

The following paragraphs describe how the data were prepared for valuation purposes and present statistical characteristics of the data base.

#### 1. <u>Data Base for Active and Vested Inactive Participants</u>

Northwest Administrators sent us a December 31, 2014 valuation data file that included T2 extract records for all vested participants, a 5% sub-file of non-vested participants (Social Security numbers ending in 00, 05, 10, 15, or 20), and all claims and deaths for the last five years.

From this file containing 390,593 records, we selected the 5% sample valuation file for all active participants, (both vested and non vested), and for all vested inactive participants. A participant was considered Active as of January 1, 2015 if he or she was not included on the ABC file as retired as of the valuation date, and if he/she earned at least 250 covered hours during 2014, or earned at least 1 covered hour in 2014 and at least 250 covered hours in 2013.

9,331 Non-Seasonal Active 5% sample records representing 186,620 participants were included in the valuation. For this purpose, Active participant records with non-seasonal industry codes or with 1,000 or more covered hours in each of the last two years were considered Non-Seasonal.

525 Seasonal Active 5% sample records representing 10,500 participants were included in the valuation. Active participants with a seasonal industry code and less than 1,000 covered hours in one or both of the last two years were considered Seasonal.

8,322 Vested Inactive 5% sample records representing 166,440 participants were included in the valuation.

372,415 T2 extract records were not used for the valuation. These records primarily represent non-5% sample participant records, pre-valuation date claims, and non-vested inactives.

### 2. Statistical Information

Highlights of the data characteristics for Active Plan participants on January 1, 2015 are shown below, together with corresponding information from the January 1, 2014 and January 1, 2013 Actuarial Reports.

For actuarial valuation purposes, the Active participant population was 194,080 as of January 1, 2013, 195,620 as of January 1, 2014, and 197,120 as of January 1, 2015. The aggregate proportion of Active participants covered under PEER is 84.9% (including Non-Seasonal and Seasonal employees) on January 1, 2015. All information summarized below was based on 5% sample data.

NUMBER OF ACTIVE PLAN PARTICIPANTS				
		,		
Industry	As of 1/1/2013	As of 1/1/2014	As of 1/1/2015	
All Actives				
Non-Seasonal	181,720	184,040	186,620	
Seasonal	12,360	11,580	10,500	
Total	194,080	195,620	197,120	
PEER Units				
Non-Seasonal PEER 80	58,020	58,020	59,740	
Non-Seasonal PEER 82	5,100	4,980	4,920	
Non-Seasonal PEER 84	90,620	91,760	92,920	
Seasonal PEER 80	8,280	7,740	7,580	
Seasonal PEER 82	440	460	400	
Seasonal PEER 84	2,580	2,420	1,880	
Total PEER Participants	165,040	165,380	167,440	
Non-PEER Units				
Non-Seasonal	27,980	29,280	29,040	
Seasonal	1,060	960	640	
Total Non-PEER Participants	29,040	30,240	29,680	

 The average attained age of Active Plan participants included in the valuation is 43.2 years for Non-Seasonal participants and 47.5 years for Seasonal participants. The corresponding ages as of January 1, 2014 were 43.4 years for Non-Seasonal employees and 48.2 years for Seasonal employees. The average attained ages for all Active participants for the last three years, including the separate PEER units, are summarized below.

AVERAGE ATTAINED AGES FOR				
A	CTIVE PLAN PARTICIPA	NTS		
Industry	As of 1/1/2013	As of 1/1/2014	As of 1/1/2015	
All Actives				
Non-Seasonal	43.3	43.4	43.2	
Seasonal	47.4	48.2	47.5	
PEER Units				
Non-Seasonal PEER 80	44.9	44.9	44.7	
Non-Seasonal PEER 82	45.4	45.4	45.1	
Non-Seasonal PEER 84	41.1	41.3	41.3	
Seasonal PEER 80	49.2	49.9	49.0	
Seasonal PEER 82	43.3	44.2	46.3	
Seasonal PEER 84	44.4	44.7	43.7	
Non-PEER Units				
Non-Seasonal	46.4	46.6	46.0	
Seasonal	42.9	46.0	42.4	

 The average number of years of contributory service for Active Plan participants is 12.3 years for Non-Seasonal participants and 12.0 years for Seasonal participants. As of January 1, 2014 the corresponding average number of years of contributory service was 12.4 years for Non-Seasonal employees and 11.9 years for Seasonal employees. The average number of years of contributory service for Active participants during the last three years is compared below.

AVERAGE CONTRIBUTORY SERVICE YEARS  FOR ACTIVE PLAN PARTICIPANTS				
TORAGI	VET EART ARTISI	AITIO		
Industry	As of 1/1/2013	As of 1/1/2014	As of 1/1/2015	
	1			
All Actives				
Non-Seasonal	12.4	12.4	12.3	
Seasonal	11.5	11.9	12.0	
	1			
PEER Units				
Non-Seasonal PEER 80	16.5	16.5	16.2	
Non-Seasonal PEER 82	13.1	13.3	13.4	
Non-Seasonal PEER 84	10.9	11.1	11.1	
Seasonal PEER 80	13.6	14.1	13.9	
Seasonal PEER 82	7.6	8.0	8.2	
Seasonal PEER 84	7.0	6.6	7.1	
Non-PEER Units				
Non-Seasonal	8.4	8.4	8.0	
Seasonal	8.2	9.7	5.8	

• The end of year average basic hourly contribution rate for Non-Seasonal Actives included in the valuation was \$3.91 as of December 31, 2013 and \$4.05 as of December 31, 2014. The average basic hourly contribution rate for Seasonal Actives included in this valuation was \$0.95 as of December 31, 2013 and \$1.00 as of December 31, 2014. This information is displayed for Active participants, including separate data for PEER units, in the following table.

AVERAGE BASIC HOURLY CONTRIBUTIONS FOR ACTIVE PLAN PARTICIPANTS					
		ı	ı		
Industry	As of 12/31/2012	As of 12/31/2013	As of 12/31/2014		
All Actives					
Non-Seasonal	\$3.83	\$3.91	\$4.05		
Seasonal	\$0.90	\$0.95	\$1.00		
PEER Units					
Non-Seasonal PEER 80	\$5.11	\$5.20	\$5.43		
Non-Seasonal PEER 82	\$3.76	\$4.01	\$4.13		
Non-Seasonal PEER 84	\$3.78	\$3.90	\$3.99		
Seasonal PEER 80	\$1.10	\$1.17	\$1.22		
Seasonal PEER 82	\$0.11	\$0.11	\$0.11		
Seasonal PEER 84	\$0.33	\$0.31	\$0.27		
Non-PEER Units					
Non-Seasonal	\$1.37	\$1.39	\$1.43		
Seasonal	\$1.09	\$1.13	\$1.11		

• Based on the data for <u>continuing</u> non-seasonal Active participants in the sample who worked 500 or more hours in each of the last two years, the Plan's hourly contribution rates for "continuing" Non-Seasonal employees increased an average of 8.3%. When the data are analyzed by broad contribution rate groupings, the average increase for groups with hourly rates \$2.00 and below was also 8.3% while the average increase was 10.9% for rate groups between \$2.00 and \$4.00, and 6.6% for rate groups over \$4.00. The higher contribution rate groups generally have longer service and older age characteristics than the lower rate groups, and they are becoming a larger portion of the total population. Table 2015-2 presents substantial statistical data on rate increases during the most recent four plan years.

### 3. Comparison of Sample Data Characteristics with Full Population Data Characteristics

Each year, we receive three Employee Census Reports from the Administrative Office based on the T2 Participant Data File (PDF). The first report contains information for the full population of Plan participants and the second and third reports contain corresponding information for the 2% and 5% samples of the full population. A comparison of key information from the full population and 5% reports is used to corroborate our assumption that the sample records adequately represent the total population (see Table 2015-1).

#### 4. Procedures to Account for Data with Missing or Invalid Birthdates or Sex Codes

Records with missing or invalid birthdates were accounted for by creating valuation input records with imputed dates of birth. Since the average entry age has been approximately 31 in recent years, we assigned dates of birth 31 years prior to the first covered hour date. All remaining fields were taken from the T2 records provided by the administrative office.

Records with missing sex codes were assumed to represent males in the Non-Seasonal group and females in the Seasonal group. We have concluded that this assumption is reasonable based on the population characteristics illustrated in this section.

There were 138 non-retired valuation records, representing 2,760 participants with missing dates of birth. There were 1,550 Non-Seasonal non-retired sample valuation records with missing or invalid sex codes that are assumed to be males and 106 Seasonal non-retired sample valuation records with missing or invalid sex codes that are assumed to be female.

#### 5. Age Retirees, Disability Retirees, and Surviving Beneficiaries

We based our actuarial calculations for retired lives on extracts from the ABC retired file provided by Prudential Investments. This file contains records for all Pensioners and Beneficiaries.

We received 268,945 records from Prudential. Of these, 10,958 were disregarded (10,006 deaths, 273 expirations, and 679 other rejects such as cancellations, post-valuation date retirements, etc.). This resulted in the inclusion of 257,987 records representing all benefits for 221,502 pensioners and beneficiaries. Approximately 78.0% of these records are for Age Retirees, 8.2% are for Disability Retirees, and 13.8% are for Beneficiaries. There were no missing birthdates in these records.

#### TABLES OF STATISTICAL DATA

In the process of completing the actuarial valuation, we have compiled a considerable amount of statistical information that may prove useful in understanding the operation of the Plan. This information is illustrated in the following tables:

#### TABLE 2015-1 Comparison of Sample Data with Total Population Data for Active Vested Participants

This table demonstrates that the 5% sample reasonably represents the entire population. Sample and full file participant counts, average hours and average contribution rates are compared for Active Vested participants. The table provides breakdowns of the data by forty-cent rate bands through \$5.20, and for rates over \$5.20. The correlation between sample and total population also was tested for non-vested and new participants and, in our opinion, actuarial results based on the sample population adequately represent values for the total population.

#### • TABLE 2015-2 Basic Rate Increases for Continuing Non-Seasonal Active Participants

This table shows the year-to-year increases in contribution rates for continuing Active Non-Seasonal participants, analyzed by end of year basic contribution rates. The percentage increases are shown for four experience years.

 <u>TABLES 2015-3N and 3S</u> Distribution of Non-Seasonal and Seasonal Active Participants in PEER and Non-PEER Units by Contribution Rate

These tables show the distribution of Non-Seasonal and Seasonal Actives in PEER and Non-PEER units by their basic hourly contribution rates.

• <u>TABLE 2015-4</u> Age at First Participation Distributions – Comparison of Experience with Actuarial Assumptions

This table compares the entry age distributions of new participants during the most recent three years with the assumed distributions used in calculating the entry age normal cost used in the calculation of the Funding Policy actuarial liability. The relationship of actual versus assumed percentages indicates that the assumptions are suitable for entry age normal cost calculation purposes.

#### TABLES OF STATISTICAL DATA

• <u>TABLES 2015-5N, 5S and 5VI</u> Distributions of Non-Seasonal and Seasonal Active Participants by Attained Age and Contributory Service, and of Vested Inactive Participants by Attained Age.

The first two tables show how Non-Seasonal and Seasonal active life participants are distributed by attained age and length of service. The third table shows how PEER and Non-PEER vested inactive participants are distributed by attained age, and shows average monthly accrued benefits by age band.

• TABLE 2015-6 Data Build-Through Report/Participant Reconciliation

This table exhibits data reconciliation by status for Active and Vested Terminated participants.

 <u>TABLE 2015-7 and 2015-8</u> New 2014 Pensioners and Beneficiaries; Recent History of New Pensioners

Table 2015-7 shows the counts and average monthly pensions for Age Pensioners, Disabled Pensioners and Beneficiaries who were new to the December 31, 2014 retiree data file. The data for Age Pensioners is shown by option election.

Table 2015-8 compares the counts and average monthly pensions of new Pensioners during the most recent three-year period.

• TABLE 2015-9 Historical Statistics by Year of Retirement

For this table, all records representing Age Pensioners were analyzed by year of retirement.

• <u>TABLE 2015-10 through 2015-12</u> Age/Longevity of Age Pensioners, Beneficiaries and Disabled Pensioners

These tables show the distribution of Pensioners and Beneficiaries by attained age group and number of years since retirement or pension commencement, as applicable.

The count for Disabled Pensioners is somewhat inflated by the existence of <u>record pairs</u> for many of the Disabled Retirees receiving an increase because of the increase in the floor percentage from 62% to 85%, effective January 1, 2000.

TABLE 2015-1						
Comparison of Sample Data with Total Population Data for Active Vested Participants						
5% Sample					Total Population	1
Contribution Rates	No. of Participants (Times 20)	Avg. 2014 Hrs. per Participant	Avg. 2014 Contrib. Rate	No. of Participants	Avg. 2014 Hrs. per Participant	Avg. 2014 Contrib. Rate
Seasonals - Food Processing	g					
All Contribution Rates	7,640	653	\$1.01	8,204	659	\$0.97
Regulars - Food Processing	l					
All Contribution Rates	6,700	1,940	\$1.88	6,233	1,954	\$1.85
Non-Seasonals - Non-Food F	Processing					
\$0.40 and under	2,520	1,871	\$0.24	2,453	1,878	\$0.24
Over \$0.40 but not more than \$0.80	3,880	1,831	\$0.61	3,637	1,776	\$0.62
Over \$0.80 but not more than \$1.20	12,920	1,795	\$1.09	12,596	1,820	\$1.09
Over \$1.20 but not more than \$1.60	6,700	1,907	\$1.42	6,510	1,934	\$1.42
Over \$1.60 but not more than \$2.00	6,080	1,892	\$1.80	5,925	1,922	\$1.81
Over \$2.00 but not more than \$2.40	6,100	1,951	\$2.17	6,291	1,947	\$2.18
Over \$2.40 but not more than \$2.80	4,680	1,971	\$2.58	5,413	1,950	\$2.58
Over \$2.80 but not more than \$3.20	7,640	1,994	\$3.02	7,386	2,004	\$3.02
Over \$3.20 but not more than \$3.60	11,720	1,973	\$3.43	10,766	1,951	\$3.42
Over \$3.60 but not more than \$4.00	7,720	1,963	\$3.81	7,625	1,962	\$3.81
Over \$4.00 but not more than \$4.40	7,600	1,986	\$4.20	7,399	1,993	\$4.21
Over \$4.40 but not more than \$4.80	5,800	1,931	\$4.56	5,506	1,924	\$4.58
Over \$4.80 but not more than \$5.20	4,760	1,997	\$4.95	4,604	1,990	\$4.95
Over \$5.20	42,240	1,801	\$7.58	42,677	1,784	\$7.57
Total Non-Seasonals - Non- Food Processing	130,360	1,886	\$4.23	128,788	1,880	\$4.24

TABLE 2015-2 Basic Rate Increases for Continuing Non-Seasonal Active Participants					
2014 Average Increase					
End of Year Contribution Rate	Number of Lives	2014	2013	2012	2011
\$0.40 and under	3,580	-0.5%	-1.6%	0.6%	1.5%
Over \$0.40 but not more than \$0.80	4,600	8.3%	11.3%	3.4%	18.3%
Over \$0.80 but not more than \$1.20	17,180	3.1%	9.8%	3.3%	3.5%
Over \$1.20 but not more than \$1.60	10,920	18.6%	6.5%	3.1%	7.3%
Over \$1.60 but not more than \$2.00	9,520	8.9%	1.7%	1.8%	9.5%
Weighted Average: \$2.00 and under	45,800	8.3%	6.7%	2.7%	7.3%
Over \$2.00 but not more than \$2.40	10,460	3.1%	5.5%	7.7%	11.9%
Over \$2.40 but not more than \$2.80	6,820	11.4%	9.6%	4.0%	18.7%
Over \$2.80 but not more than \$3.20	9,080	17.7%	9.4%	8.1%	2.2%
Over \$3.20 but not more than \$3.60	13,520	11.1%	9.1%	3.7%	2.9%
Over \$3.60 but not more than \$4.00	9,720	12.5%	11.2%	11.2%	10.0%
Weighted Average: Over \$2.00 but not more than \$4.00	49,600	10.9%	8.8%	7.1%	8.1%
Weighted Average: Over \$4.00	70,520	6.6%	5.5%	6.1%	11.2%
Weighted Average: All Rates	165,920	8.3%	6.9%	5.4%	9.0%

TABLE 2015-3N					
Distribution of Non-Seasonal Active Participants in PEER and Non-PEER Units by Contribution Rate					
End of Year Contribution Rate	Number of PEER Actives	Number of Non-PEER Actives	Total Number of Actives		
\$0.40 and under	1,680	3,720	5,400		
Over \$0.40 but not more than \$0.80	1,220	4,760	5,980		
Over \$0.80 but not more than \$1.20	13,840	5,500	19,340		
Over \$1.20 but not more than \$1.60	6,160	5,840	12,000		
Over \$1.60 but not more than \$2.00	7,460	3,400	10,860		
Total for Rates \$2.00 and under	30,360	23,220	53,580		
Over \$2.00 but not more than \$2.40	9,920	1,640	11,560		
Over \$2.40 but not more than \$2.80	6,240	1,540	7,780		
Over \$2.80 but not more than \$3.20	8,660	1,280	9,940		
Over \$3.20 but not more than \$3.60	14,160	400	14,560		
Over \$3.60 but not more than \$4.00	10,400	180	10,580		
Total for Rates over \$2.00 but not more than \$4.00	49,380	5,040	54,420		
Total for Rates over \$4.00	77,840	780	78,620		
Total for All Rates	157,580	29,040	186,620		

PEER Eligibility Statistics (Non-Seasonal Actives)					
PEER Unit	Number of Actives	Percentage of Non-Seasonal Actives by PEER Unit	Prior Year's Percentage of Non-Seasonal Actives by PEER Unit		
Non-PEER	29,040	15.6%	15.9%		
PEER 84	92,920	49.8%	49.9%		
PEER 82	4,920	2.6%	2.7%		
PEER 80	59,740	32.0%	31.5%		

TABLE 2015-3S  Distribution of Seasonal Active Participants in PEER and Non-PEER Units by Contribution Rate				
End of Year Contribution Rate	Number of PEER Actives	Number of Non-PEER Actives	Total Number of Actives	
\$0.40 and under	2,420	180	2,600	
Over \$0.40 but not more than \$0.80	0	0	0	
Over \$0.80 but not more than \$1.20	80	20	100	
Over \$1.20 but not more than \$1.60	7,200	380	7,580	
Over \$1.60 but not more than \$2.00	160	40	200	
Total for Rates \$2.00 and under	9,860	620	10,480	
Over \$2.00 but not more than \$2.40	0	0	0	
Over \$2.40 but not more than \$2.80	0	20	20	
Over \$2.80 but not more than \$3.20	0	0	0	
Over \$3.20 but not more than \$3.60	0	0	0	
Over \$3.60 but not more than \$4.00	0	0	0	
Total for Rates over \$2.00 but not more than \$4.00	0	20	20	
Total for Rates over \$4.00	0	0	0	
Total for All Rates	9,860	640	10,500	

PEER Eligibility Statistics (Seasonal Actives)						
	Number of	Percentage of Seasonal Actives by	Prior Year's Percentage of Seasonal Actives by			
PEER Unit	Actives	PEER Unit	PEER Unit			
Non-PEER	640	6.1%	8.3%			
PEER 84	1,880	17.9%	20.9%			
PEER 82	400	3.8%	4.0%			
PEER 80	7,580	72.2%	66.8%			

#### **TABLE 2015-4** Age at First Participation Distributions Comparison of Experience with Actuarial Assumptions **Non-Seasonal Employees** Seasonal Employees Percentages Percentages Assumed for Assumed for Actual Actual Percentages Actuarial Percentages Actuarial for 2012 thru 2014 Calculation for 2012 thru 2014 Calculation Ages **New Participants Purposes New Participants Purposes** Through 24 28.0% 28.0% 26.4% 25.0% 25 - 29 18.8% 20.0% 12.0% 13.0% 30 - 34 12.4% 12.5% 13.6% 13.0% 10.7% 35 - 39 10.0% 8.8% 9.0% 40 - 44 9.7% 10.0% 8.0% 9.0% 45 - 49 7.5% 7.5% 8.8% 9.0% 50 - 54 5.6% 5.0% 8.8% 9.0% 55 and Over 7.3% 7.0% 13.6% 13.0%

#### **TABLE 2015-5N Distribution of Non-Seasonal Active Participants with** Good Birthdates by Attained Age and Contributory Service Years of Contributory Service 30 and Age Last Less **Birthday** than 5 5 - 910 - 14 15 - 19 20 - 2425 - 29Over Total Under 20 480 0 0 0 0 0 0 480 680 0 0 0 0 0 20 - 24 9,800 10,480 0 0 0 25 - 29 9,120 7,240 920 0 17,280 30 - 34 8,260 7,060 6,060 780 0 0 0 22,160 500 0 0 35 - 39 5,380 5,640 6,140 4,320 21,980 40 - 44 4,660 5,140 5,140 4,900 3,660 660 0 24,160 3,520 4,100 3,920 320 45 - 49 4,580 5,160 4,400 26,000 2,900 3,860 4,920 4,360 3,860 2,480 27,200 50 - 54 4,820 2,500 4,160 55 - 59 3,220 2,820 2,220 3,080 4,640 22,640 60 - 64 1,180 1,540 2,340 1,360 1,240 1,380 3,280 12,320 380 40 65 - 69 240 400 200 100 300 1,660 80 80 40 40 0 0 20 70 and Over 260 Total 48,260 39,280 35,280 23,180 15,620 13,960 11,040 186,620

#### **TABLE 2015-5S Distribution of Seasonal Active Participants with** Good Birthdates by Attained Age and Contributory Service Years of Contributory Service **Age Last** Less 30 and **Birthday** than 5 5 - 9 10 - 14 15 - 19 20 - 2425 - 29 Over Total Under 20 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 1,380 50 - 54 1,940 55 - 59 1,720 60 - 64 1,340 65 - 69 70 and Over 1,900 1,700 1,280 1,100 Total 3,220 10,500

TABLE 2015-5VI							
	Distribution of Vested Inactive Participants						
		by Attained A	ge				
				1			
Ages	Number PEER	Average Monthly Benefit	Number Non PEER	Average Monthly Benefit			
20 - 24	0	\$0.00	40	\$198.19			
25 - 29	0	\$0.00	2,400	\$295.35			
30 - 34	0	\$0.00	7,900	\$349.05			
35 - 39	0	\$0.00	11,520	\$439.25			
40 - 44	0	\$0.00	20,480	\$494.19			
45 - 49	40	\$3,241.16	29,960	\$518.58			
50 - 54	500	\$1,771.14	34,660	\$551.16			
55 - 59	620	\$1,747.40	30,180	\$528.05			
60 - 64	460	\$1,754.36	20,020	\$436.01			
65 - 69	80	\$1,505.86	5,100	\$309.75			
70 and over	20	\$1,835.22	2,460	\$128.14			
Total	1,720	\$1,780.69	164,720	\$484.80			

	TABLE 2015-6 Data Build-Through Report Participant Reconciliation	
Active Particip	ants 1/1/2014	195,620
New Participant	S	
	Non-Vested	19,060
	Vested	840
	Rehires	1,720
Terminations		
	Non-Vested	(7,920)
	Vested	(6,840)
Retirements		(4,880)
Deaths		(100)
Data Adjustmen	ats	(340)
Active Particip	ants 1/1/2015	197,120
Vested Termina	ations 1/1/2014	167,940
	New Vested Terminations	7,380
	Rehires	(1,720)
	Retirements	(4,560)
	Deaths	(200)
	Data Adjustments	(2,400)
Vested Termina	ations 1/1/2015	166,440

# TABLE 2015-7 New 2014 Pensioners and Beneficiaries Option Elections, Average Pensions and Average Ages

(Based on Number of Participants)

			_
		Average	Average Age
		Monthly	as of
Option	Count	Pension	January 1 2015
Life	2,627	\$907.57	64.1
Employee and Spouse 50%	334	\$332.81	64.0
Employee and Spouse 67%	734	\$1,441.98	63.7
		<b>4</b> 1,11100	
Employee and Spouse 75%	931	\$1,065.36	64.4
Employee and opedee 70%	001	ψ1,000.00	01.1
Benefit Adjustment	2,464	\$1,404.66	59.5
	2,404	ψ1,404.00	33.3
Employee and Spouse 50% with Benefit Adjustment	187	\$464.09	60.1
•	107	ψ404.09	00.1
Employee and Spouse 67%	610	Φ4 00C 4E	59.8
with Benefit Adjustment	610	\$1,886.15	39.6
Employee and Spouse 75%		<b>A</b>	
with Benefit Adjustment	795	\$1,556.82	60.1
		• • • • • • •	
All Age Pensioners	8,682	\$1,208.21	62.0
Disabled Desciones	700	Φ4 074 F4	50.4
Disabled Pensioners	722	\$1,071.51	56.1
	440	0540.04	50.4
Surviving Beneficiaries	442	\$518.01	53.1
Total	9,846	¢1 167 20	61.2
i Otal	9,040	\$1,167.20	01.2
Total Loot Voor	40.454	Φ4.405.44	00.0
Total Last Year	10,454	\$1,165.44	60.9

Notes: This exhibit includes all pensions associated with participants new to the December 31, 2014 ABC file.

The average monthly pension amount shown for the Benefit Adjustment Option and the Employee and Spouse with Benefit Adjustment Option is the sum of the lifetime portion of the benefit, plus any temporary benefit remaining as of December 31, 2014.

TABLE 2015-8								
Recent History of New Pensioners Option Elections and Average Monthly Pensions (Based on Number of Participants)								
	20	)14	20	)13	20	012		
Option	Count	Average Monthly Pension	Count	Average Monthly Pension	Count	Average Monthly Pension		
Ориоп	Count	r <del>c</del> iisioii	Count	r ension	Count	r ension		
Life Only	2,627	\$907.57	2,668	\$874.31	2,483	\$839.93		
Benefit Adjustment	2.464	\$1,404.66	2,654	\$1,360.70	2,540	\$1,320.29		
Employee and Spouse	1,999	\$1,081.25	2,046	\$1,057.52	1,861	\$1,015.98		
Employee and Spouse with Benefit Adjustment	1,592	\$1,559.65	1,783	\$1,668.15	1,680	\$1,519.60		
All Age Pensioners	8,682	\$1,208.21	9,151	\$1,211.01	8,564	\$1,153.99		
Disabled Pensioners	722	\$1,071.51	825	\$1,044.70	850	\$1,051.25		
Surviving Beneficiaries	442	\$518.01	478	\$501.45	340	\$572.13		
Total	9,846	\$1,167.20	10,454	\$1,165.44	9,754	\$1,124.75		

Notes: This exhibit includes all pensions associated with participants new to the ABC file as of December 31, 2012, 2013, and 2014.

The average monthly pension amount shown for the Benefit Adjustment Option and the Employee and Souse with Benefit Adjustment Option is the sum of the lifetime portion of the benefit, plus any temporary benefit remaining as of December 31, 2014.

TABLE 2015-9							
Historical Statistics by Year of Retirement (Based on Number of Records)							
	ı		ı				
Year of Retirement	Number of Surviving Retirees	Average Age at Retirement	Average Age as of 1/1/2015	Average Monthly Pension Normal Form			
1989 and prior	18,080	58.8	87.9	\$445.99			
1990 - 1994	19,869	59.4	81.5	\$783.33			
1995 - 1999	28,557	59.7	76.9	\$909.98			
2000 - 2004	42,034	60.2	72.5	\$1,074.29			
2005 - 2009	47,489	60.9	68.3	\$975.59			
2010 - 2014	45,136	61.1	63.7	\$1,096.43			
	1						
Total	201,165	60.3	72.4	\$947.43			
Total Last Year	196,275	60.2	72.3	\$940.80			

	TABLE 2015-10							
	Age / Longevity of Age Pensioners  (Based on Number of Records)							
		(Based (	on Number of F	Records)				
		Ye	ears Since Pen	sion Commen	cement			
Attained	Less					Greater		
Age Group	than 1	1 – 4	5 - 9	10 - 14	15 - 19	than 19	Total	
Under 50	16	63	25	6	3	2	115	
Officer 60	10	- 00	20		0		110	
50 - 54	408	847	154	26	11	1	1,447	
55 - 59	1,519	6,914	2,132	125	20	3	10,713	
60 - 64	2,361	10,078	9,686	2,096	92	23	24,336	
00 04	2,301	10,070	3,000	2,030	52		24,000	
65 - 69	2,111	17,577	12,265	10,512	1,077	57	43,599	
70 - 74	63	3,106	19,714	12,626	8,824	401	44,734	
75 - 79	1	58	3,366	13,639	9,838	7,072	33,974	
70 70	1		0,000	10,000	3,000	7,072	00,074	
80 - 84	0	9	118	2,912	6,523	11,495	21,057	
85 - 89	0	2	20	71	2,092	11,631	13,816	
90 and Over	0	3	9	21	77	7,264	7,374	
33 3.13		J	Ţ.	=:		- ,	.,	
Total	6,479	38,657	47,489	42,034	28,557	37,949	201,165	

	TABLE 2015-11								
	Age / Longevity of Beneficiaries								
		(Ba	sed on Nu	mber of Re	cords)				
			Years S	ince Pensio	n Commen	cement			
Attained Age Group	Deferred	Less than 1	1 - 4	5 - 9	10 - 14	15 - 19	Greater than 19	Total	
39 and Under	8	78	738	646	336	62	23	1,891	
40 - 44	20	12	77	82	40	18	24	273	
45 - 49	60	25	121	117	86	57	59	525	
50 - 54	78	43	284	281	218	139	111	1,154	
55 - 59	33	56	475	570	473	287	261	2,155	
60 - 64	12	44	433	866	873	513	491	3,232	
65 - 69	2	11	319	873	1,426	1,052	964	4,647	
70 - 74	0	6	81	537	1,342	1,735	2,141	5,842	
75 - 79	0	0	12	145	659	1,490	3,372	5,678	
80 - 84	0	0	4	44	153	587	3,915	4,703	
85 - 89	0	0	1	8	38	162	3,176	3,385	
90 and Over	0	0	1	1	10	40	2,139	2,191	
Total	213	275	2,546	4,170	5,654	6,142	16,676	35,676	

TABLE 2015-12								
Age / Longevity of Disabled Pensioners								
		(Based	on Number o	of Records)				
			Years Since	Pension Con	nmencement			
Attained Age Group	Less than 1	1 - 4	5 - 9	10 - 14	15 - 19	Greater than 19	Total	
	l I							
39 and Under	2	27	26	5	0	0	60	
40 - 44	4	60	80	36	7	0	187	
45 - 49	4	124	172	104	47	17	468	
50 - 54	30	418	344	254	113	57	1,216	
55 - 59	66	923	784	519	233	200	2,725	
60 - 64	45	867	1,150	864	369	499	3,794	
65 - 69	4	209	868	1,207	662	860	3,810	
70 - 74	0	0	134	832	892	1,411	3,269	
75 - 79	0	0	0	109	568	1,921	2,598	
80 - 84	0	0	0	0	72	1,755	1,827	
85 - 89	0	0	0	0	2	831	833	
90 and Over	0	0	0	2	0	357	359	
	1		I			ı		
Total	155	2,628	3,558	3,932	2,965	7,908	21,146	

# Appendix C

**Actuarial Assumptions and Cost Methods** 

# **Actuarial Assumptions**

# **Investment Earnings Assumptions**

#### Fixed Dollar Account

The assumed rate of return for these assets, which is used to value the pension benefits<sup>1</sup> for Pensioners and Beneficiaries whose benefits commenced on or before August 1, 1982 (as identified by Prudential Investments), is 6.50%.

### 1982/1984 Annuity Account

The assumed rate of return for these assets, which is used to value the pension benefits<sup>1</sup> for Pensioners and Beneficiaries whose benefits commenced from September, 1982 through December, 1984 (as identified by Prudential Investments), is 5.87%.

# Strategic Bond Account (SBA)

The assumed rate of return for these assets is 4.88%. This assumption is used to value 85.20% of the pension benefits<sup>1</sup> related to service through December 31, 1985, based on December 31, 1984 Plan provisions and not covered by the prior asset dedications.

# Remaining Assets

The assumed rate of investment return which is used to value all benefits expected to be paid out of remaining assets and future contributions is 7.00%, net of investment expenses.

# **Post-retirement Mortality Rates**

#### For males

- Rates based on RP 2000 mortality tables
- Ages up through 29, male employee table,
- Ages 30-49, male employee table with blue collar adjustment
- Ages 50-70, custom blend of the healthy male annuitant and the employee tables, starting at 50%/50% at age 50, to 98%/2% at age 70. The blended table is adjusted by male blue collar adjustments
- Ages 70 and above, healthy male annuitant, adjusted by blue collar adjustments
- All projected to 2015 using male Scale AA

## For females

- Rates based on RP 2014 mortality tables
- Ages up through 49, female employee table set forward one year, with blue collar adjustment
- Ages 50-78, healthy female annuitant table set forward one year, with blue collar adjustment
- Ages 79-119, 95% of healthy female annuitant table, set forward one year, with blue collar adjustment
- All projected to 2020 using Scale BB, set forward one year

<sup>&</sup>lt;sup>1</sup>Single sum death benefits are not valued using the investment earnings assumptions described above. Instead, the "Remaining Assets" assumption is used.

Special mortality tables, reflecting Plan experience, are used for disabled pensioners. Examples of mortality rates used are shown in the table below:

Annual Probability of Death							
Age Last	Non-Retired Participants		3		Disabled Retirees		
Birthday	Male	Female	Male	Male Female		Female	
				,			
25	0.0003	0.0002	0.0002	0.0002	0.0244	0.0176	
40	0.0012	0.0005	0.0005	0.0007	0.0244	0.0176	
55	0.0027	0.0020	0.0043	0.0040	0.0252	0.0182	
70	0.0156	0.0076	0.0151	0.0199	0.0336	0.0242	
85	0.1086	0.0677	0.0677	0.0797	0.1362	0.0981	

# **Pre-retirement Mortality Rates**

The assumed annual rates of healthy mortality for males is based on the RP 2000 Mortality Tables for Male Employees adjusted for Blue Collar and projected by Scale AA to 2015.

The assumed annual rates of healthy mortality for females is based on the RP 2014 Mortality Tables for Female Employees, set forward one year, adjusted for Blue Collar and projected by Scale BB, set forward one year, to 2020.

# **Provision for Non-investment Expenses**

Administrative expenses are assumed to be \$97 million per year, payable mid-year.

# **Age Retirement Rates**

Age retirement rates apply only to retirement eligible participants.

We use five retirement rate tables. Their values are displayed in the three columns of table (1), and the fourth and fifth columns of table (2), below. (Note that the first two columns of table (1), and the first two columns of table (2), represent the same two tables).

In general, for a given participant in a PEER unit, two or more of these tables may be accessed during a single run, with the under 25 years of service rates applying until the participant is projected to attain the required number of age plus service points, (80, 82, or 84) at which time the 25 or more years of service rates apply.

# Participants with fewer than 25 Years of Service

Age Last Birthday	Non-PEER Eligible Actives	PEER Eligible Actives	Non-PEER Eligible Vested Terminated
49	0.030	0.150	NA
50	0.030	0.150	NA
51	0.030	0.150	NA
52	0.030	0.150	NA
53	0.030	0.150	NA
54	0.080	0.160	0.160
55	0.060	0.120	0.120
56	0.060	0.120	0.060
57	0.060	0.120	0.060
58	0.060	0.120	0.060
59	0.100	0.200	0.100
60	0.100	0.200	0.100
61	0.350	0.350	0.300
62	0.350	0.350	0.200
63	0.150	0.150	0.150
64	0.300	0.300	0.300
65	0.300	0.300	0.200
66	0.200	0.200	0.060
67	0.200	0.200	0.060
68	0.200	0.200	0.060
69	1.000	1.000	1.000

# Participants with 25 or more Years of Service

Age Last Birthday	Non-PEER Eligible Actives	PEER Eligible Actives	Non-PEER Eligible Vested Terminated	PEER Eligible Vested Terminated
49	0.030	0.150	0.150	0.230
50	0.030	0.150	0.150	0.230
51	0.030	0.150	0.150	0.230
52	0.030	0.150	0.150	0.230
53	0.030	0.150	0.150	0.230
54	0.080	0.160	0.160	0.350
55	0.060	0.120	0.120	0.250
56	0.060	0.120	0.090	0.200
57	0.060	0.120	0.090	0.180
58	0.060	0.120	0.090	0.180
59	0.100	0.200	0.150	0.300
60	0.100	0.200	0.150	0.300
61	0.350	0.350	0.350	0.350
62	0.350	0.350	0.350	0.350
63	0.150	0.150	0.150	0.150
64	0.300	0.300	0.300	0.300
65	0.300	0.300	0.300	0.300
66	0.200	0.200	0.200	0.200
67	0.200	0.200	0.200	0.200
68	0.200	0.200	0.200	0.200
69	1.000	1.000	1.000	1.000

# **Disability Retirement**

Disability rates apply only to employees with 4 or more years of vesting service.

Age Last Birthday	Examples of Annual Probability of Disability Retirement
32	0.0006
37	0.0008
42	0.0011
47	0.0017
52	0.0030
57	0.0052

# **Employee Termination Rates**

The termination rates shown below exclude death, disability and retirement rates. Termination rates are not applied when an individual is eligible for age retirement. Below are examples of annual probabilities of employment termination for active employees with less than 9 years of coverage.

Non-Seasonal Employees						
Age Last Birthday	Year	Years Since First Covered Hour				
At First Covered Hour	0	1	2	8		
22	0.0945	0.1795	0.2272	0.1120		
32	0.0844	0.1478	0.1914	0.0896		
42	0.0776	0.1214	0.1674	0.0784		
52	0.0641	0.0898	0.1435	0.0784		
62	0.0574	0.0686				
S	easonal En	nployees				
Age Last Birthday	Year	s Since Fire	st Covered	Hour		
At First Covered Hour	0	1	2	8		
22	0.7004	0.5443	0.3039	0.1600		
32	0.6254	0.4482	0.2559	0.1280		
42	0.5754	0.3682	0.2240	0.1120		
52	0.4753	0.2721	0.1920	0.1120		
62	0.4253	0.2081				

Examples of annual probabilities for termination are listed below for Non-Seasonal and Seasonal Active employees with 9 or more years of coverage.

Non-Seasonal and Seasonal Employees					
	After 9 or more Years Since First Covered Hour				
Age Last Birthday	Non-Seasonal	Seasonal			
32	0.0734	0.0978			
42	0.0435	0.0790			
52	0.0422	0.0562			
62	0.0077	0.0102			

#### **Future Annual Hours and Contributions**

Projected benefit amounts for 2015 were calculated assuming that: (a) Active Non-Seasonal employees work an average of 1800 hours per year; (b) Active Seasonal employees work an average of 600 hours per year; and (c) contribution rates would continue at the December 31, 2014 levels.

A non-retired participant was considered Active as of January 1, 2015 if he or she earned at least 250 covered hours during 2014, or at least 1 covered hour in 2014 and at least 250 covered hours in 2013.

# **Expected Annual Employer Contributions**

The annual employer contributions expected during 2015 have been assumed to be \$1.500 billion. This amount is used to determine the projected Funding Standard Account and the expected amortization period of the UAL.

# **Sample Valuation Data**

We have relied on data supplied by Prudential Investments and Northwest Administrators. The actuarial values for non-retired participants are based on a sample of the employees covered under the Plan, as described in Appendix B. The actuarial values for records with valid data are adjusted for sampling and incomplete data, and the results are assumed to represent the values of the entire covered group.

# **Form of Payment**

Participants without recent coverage are assumed to elect the single life annuity. Participants with recent coverage are assumed to elect a four year certain and life annuity. A factor of 1.0039 is applied in order to account for the availability of a subsidized joint and survivor benefit.

# **Probability of Marriage**

Non-retired participants are assumed to be married at various percentages. Below is a brief summary of these percentages.

Age	Probability of Marriage	
32	69.8%	
42	75.5%	
52	82.0%	
62	82.0%	

# **Spouse Age Difference**

Where applicable, husbands are assumed to be two years older than their wives.

# **Past Employment**

Total past employment (continuous past employment plus special past employment) for each employee was calculated as the number of years from year of union membership until year of coverage, but not less than the known continuous past employment for the employee.

#### **Survivor Benefit Costs**

The family composition of covered employees was assumed to be similar to that tabulated in the 15<sup>th</sup> Actuarial Valuation published by the Railroad Retirement Board. This assumption was used to estimate the probability that an employee will be survived by a beneficiary eligible for a survivor benefit and to establish the probable duration of the benefit.

# **Inactive Participants**

Vested inactive participants who are older than 74 as of the valuation date are assumed to be deceased and excluded from this valuation. Inactive participants who are coded as a claim for more than one year are expected to be either deceased or not eligible for a benefit from the Plan. We assume that any such participants do not have and will not create any liability for the Plan.

### Assumption Changes Incorporated in the January 1, 2015 Valuation

- The current liability interest rate was decreased from 3.64% to 3.51% to remain within the IRS prescribed corridor.
- The current liability mortality tables were changed from annuitant / non-annuitant projected version of the RP-2000 Mortality Tables for 2014 to the annuitant / non-annuitant projected version of the RP-2000 Mortality Tables for 2015 as prescribed by the IRS.
- The discount rate used for the 1982/1984 Annuity Account was changed to 5.87% for 2015 from 6.59% for 2014, and the discount rate used for the SBA Dedication was changed to 4.88% for 2015 from 4.42% for 2014.

The following assumptions were changed to better reflect recent and expected future experience:

- The anticipated annual employer contributions were increased to \$1.500 billion for purposes of projecting the 2015 Funding Standard Account and determining the Amortization Period.
- The subsidized joint and survivor factor was changed from 1.0045 to 1.0039 to update to current assumptions.
- The future annual administrative expenses were increased to \$97 million from \$87 million.
- The assumed annual rates of pre-retirement healthy mortality for females were changed to the RP 2014 Mortality Tables for Female Employees, set forward one year, adjusted for Blue Collar and projected by Scale BB, set forward one year, to 2020.
- The assumed annual rates of post-retirement healthy mortality for females were changed to the RP 2014 Mortality Tables for Employees and Annuitants, set forward one year, adjusted for Blue Collar and projected by Scale BB, set forward one year, to 2020.

#### **Actuarial Value of Assets**

The Prudential Investments Fixed Dollar Account (FDA), in general, was valued at book value. However, to the extent that cash flows from the FDA are not sufficient to provide the projected FDA benefits, certain bonds valued at amortized cost were assigned to the FDA so that all projected FDA benefits were supported by dedicated assets. The 1982/1984 Annuity Account and the SBA were valued on an amortized cost basis. Below is a summary of the actuarial value of the dedicated asset as of the valuation date:

Dedicated Account	(In Thousands)
FDA	\$ 94,100
1982/1984 Annuity Account	57,629
SBA	<u>3,345,612</u>
Total Actuarial Value of Dedicated Assets	\$ 3.497.341

The remaining assets were valued using a smoothing procedure under which the 2008 market value loss is recognized at the rate of 10% per year for ten years. All other market value gains and losses are recognized at the rate of 20% per year over five years. The actuarial value of the remaining assets may not be greater than 120% or less than 80% of the market value.

The actuarial value of assets for purposes of determining the unfunded vested benefit liability is the same method used for ERISA funding purposes, except the Pension Relief Act of 2010 election to smooth the 2008 investment loss is not used.

#### **Actuarial Cost Method**

The Unit Credit actuarial cost method was used for this valuation. Under this method, the Actuarial Liability is the Accrued Benefit Liability for all participants included on the valuation date. The Normal Cost is: (i.) the expected increase in Accrued Benefit Liability for these participants resulting from benefits earned during the current year, plus (ii.) the expected increase in Accrued Benefit Liabilities resulting from new participants who are covered employees on the valuation date.

This table shows the number of years of life expectancy for retirees according to the mortality tables (see Appendix C for description of tables) used to value liabilities under the Plan. The long periods over which age retirees are expected to receive payments indicate the significant assets required to fund benefits for participants who are already retired. The shorter life expectancies for Disabled Pensioners imply a lower level of assets required for males and females who retire under the Plan's disability provisions.

Years of Life Expectancy							
	Age Pensioner		Disabled Pensioner				
Age	Male	Female	Male	Female			
45	35.2	38.7	24.5	28.3			
50	30.5	33.9	22.4	25.7			
55	26.0	29.5	20.1	22.9			
60	21.7	25.2	17.5	20.0			
62	20.0	23.5	16.5	18.7			
65	17.7	21.0	14.8	16.9			
70	14.0	17.1	11.8	13.6			
75	10.7	13.5	9.0	10.5			
80	7.8	10.3	6.7	8.1			
85	5.6	7.5	5.0	6.2			
90	3.9	5.3	3.7	4.7			

Note: Life expectancies change only when retired life mortality rates are revised.