

**WESTERN PENNSYLVANIA TEAMSTERS AND
EMPLOYERS PENSION FUND**

SUSPENSION APPLICATION

EXHIBIT 11

INFORMATION ON ACTUARIAL ASSUMPTIONS AND METHODS



Western Pennsylvania Teamsters and Employers Pension Fund

INFORMATION ON ACTUARIAL ASSUMPTIONS AND METHODS

Part 1 - Actuarial assumptions and methods used for projections

Investment returns

In developing the annual investment returns for the projections, we looked at current market based data including:

- Risk-free rates of returns based on the current Treasury spot rates,
- Forward-looking investment return statistics for various asset classes for both the near term and long term based on survey information collected by Horizon Actuarial Services' 2018 Edition of the Survey of Capital Market Assumptions, and
- The Plan's Investment Policy Statement and current strategic asset allocation

As the basis for our investment assumptions, we used the 2018 Horizon Survey which provides capital market assumptions and statistics (return expectations, standard deviations of returns and correlation coefficients) for each major asset class. Using this Horizon Survey data and the Plan's strategic asset allocation, we are able to determine a "best estimate" return for the near term (i.e. a 10-year time period), as well as for the longer term (20+ year time period). For the Plan's current asset allocation, the estimated geometric returns came out to be 6.44% for the 10-year time horizon and 7.68% for the longer 20+ year time horizon. Survey results for returns and standard deviation are:

Asset Class	Allocation Percentage	10-Year Returns		20-Year Returns		Standard Deviation
		Arith.	Geom.	Arith.	Geom.	
US Equity - Large Cap	26.0%	7.34%	6.07%	8.73%	7.42%	16.39%
US Equity - Small / Mid Cap	3.0%	8.49%	6.57%	10.13%	8.18%	20.20%
Non-US Equity - Developed	19.4%	8.36%	6.71%	9.46%	7.71%	18.67%
Non-US Equity - Emerging	8.0%	10.52%	7.64%	11.94%	8.82%	24.89%
US Corporate Bonds - Core	9.0%	3.54%	3.37%	4.63%	4.46%	5.71%
US Corporate Bonds - Long Duration	0.8%	3.90%	3.32%	5.14%	4.44%	10.83%
US Corporate Bonds - High Yield	7.0%	5.29%	4.78%	6.44%	5.82%	10.24%
Non-US Debt - Developed	2.8%	2.37%	2.18%	3.56%	3.22%	6.86%
Non-US Debt - Emerging	0.0%	5.63%	5.00%	6.85%	6.13%	11.43%
US Treasuries (Cash Equivalents)	0.0%	2.55%	2.48%	3.10%	3.05%	2.74%
TIPS (Inflation-Protected)	0.0%	3.08%	2.88%	4.26%	4.04%	6.25%
Real Estate	10.0%	6.89%	5.90%	7.67%	6.66%	13.86%
Hedge Funds	8.0%	5.29%	4.96%	6.61%	6.19%	7.87%
Commodities	0.0%	5.46%	3.97%	6.47%	4.92%	17.60%
Infrastructure	0.0%	7.61%	6.56%	8.24%	7.14%	14.74%
Private Equity	6.0%	10.72%	8.33%	12.17%	9.52%	22.16%
Estimated Metrics of Portfolio		7.17%	6.44%	8.40%	7.68%	12.54%



The Correlation Matrix is:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 US Equity - Large Cap	1.00															
2 US Equity - Small / Mid Cap	0.89	1.00														
3 Non-US Equity - Developed	0.84	0.76	1.00													
4 Non-US Equity - Emerging	0.72	0.67	0.79	1.00												
5 US Corporate Bonds - Core	0.12	0.07	0.14	0.14	1.00											
6 US Corporate Bonds - Long Duration	0.11	0.05	0.13	0.10	0.83	1.00										
7 US Corporate Bonds - High Yield	0.61	0.60	0.60	0.62	0.36	0.26	1.00									
8 Non-US Debt - Developed	0.17	0.11	0.30	0.24	0.55	0.55	0.24	1.00								
9 Non-US Debt - Emerging	0.54	0.49	0.58	0.66	0.44	0.37	0.59	0.41	1.00							
10 US Treasuries (Cash Equivalents)	(0.10)	(0.12)	(0.09)	(0.07)	0.33	0.28	(0.03)	0.26	0.06	1.00						
11 TIPS (Inflation-Protected)	0.05	0.01	0.10	0.16	0.68	0.57	0.31	0.52	0.40	0.33	1.00					
12 Real Estate	0.44	0.41	0.40	0.33	0.10	0.11	0.30	0.09	0.24	0.03	0.10	1.00				
13 Hedge Funds	0.66	0.64	0.68	0.67	0.14	0.06	0.58	0.15	0.48	(0.07)	0.13	0.35	1.00			
14 Commodities	0.31	0.29	0.39	0.43	0.10	0.03	0.35	0.22	0.34	0.02	0.26	0.24	0.42	1.00		
15 Infrastructure	0.54	0.49	0.53	0.47	0.20	0.21	0.41	0.33	0.43	(0.08)	0.18	0.31	0.41	0.29	1.00	
16 Private Equity	0.73	0.69	0.70	0.61	0.03	0.03	0.48	0.10	0.40	(0.08)	0.04	0.39	0.60	0.30	0.39	1.00

Mortality assumptions

RP-2014 Blue Collar Mortality Table for males and females, adjusted backward to 2006 using MP-2014, then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2017.

RP-2014 Disabled Retiree Mortality Table for males and females, adjusted backward to 2006 using MP-2014, then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2017.

Other demographic assumptions

Retirement:

Active participants are assumed to retire based on the following rate table:

- Tier 1 – Not historically at National Master Freight or UPS contribution rates.
- Tier 2 – Historically at National Master Freight contribution rates.
- Tier 3 - UPS participants.

Age	Tier 1			Tier 2			Tier 3		
	Service years								
	Under 25	25 to 29	30 & Over	Under 25	25 to 29	30 & Over	Under 25	25 to 29	30 & Over
52	0%	0%	0%	0%	5%	10%	0%	0%	0%
53	0%	2%	2%	0%	5%	10%	0%	0%	0%
54	0%	2%	2%	0%	6%	10%	0%	0%	0%
55	2%	2%	2%	2%	10%	15%	2%	5%	5%
56	3%	3%	3%	3%	10%	15%	3%	5%	5%
57	4%	4%	6%	4%	10%	15%	4%	5%	5%
58	5%	5%	6%	5%	10%	15%	5%	5%	5%
59	5%	5%	6%	5%	10%	15%	5%	15%	20%
60	6%	10%	10%	6%	10%	15%	6%	15%	20%
61	7%	10%	10%	7%	10%	15%	7%	10%	10%
62	20%	20%	25%	20%	25%	25%	20%	30%	40%
63	15%	15%	15%	15%	25%	50%	15%	30%	40%
64	10%	25%	35%	10%	25%	50%	10%	30%	40%
65	20%	40%	40%	20%	50%	50%	20%	50%	60%
66	30%	50%	50%	30%	50%	50%	30%	50%	60%
67	30%	50%	50%	30%	50%	50%	30%	50%	60%
68	40%	50%	50%	40%	50%	50%	40%	50%	60%
69	50%	50%	50%	50%	50%	50%	50%	50%	60%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%



Retirement:

Vested inactive participants are assumed to retire based on the following rate table:

<u>Age</u>	<u>Service Years</u>	
	<u>Under 25</u>	<u>25 & Over</u>
50	0%	20%
51	0%	20%
52	0%	20%
53	0%	20%
54	0%	20%
55	10%	10%
56	10%	10%
57	10%	10%
58	10%	10%
59	10%	10%
60	40%	40%
61	20%	20%
62	20%	20%
63	20%	20%
64	20%	20%
65	20%	20%
66	20%	20%
67	30%	30%
68	30%	30%
69	30%	30%
70 & Over	100%	100%

Disability: The 1985 Pensioners Disability Incidence Class 3 Table for males and females.

Assumptions regarding form and commencement age of benefits:

- 15% select a Ten Year Certain and Life Annuity,
- 30% select a Straight Life Annuity,
- 27% select a Joint and 100% Survivor Annuity,
- 12% select a Joint and 75% Survivor Annuity, and
- 16% a Joint and 50% Survivor Annuity.

Assumptions regarding missing or incomplete data:

- Where unknown, participants are assumed to be male.
- Where unknown, participants are assumed to be 31 years old on date of hire.
- Males are assumed to be 3 years older than females.
- 80% of participants are assumed to be married.
- Where missing, the benefit for terminated vested participants is assumed to be equal to the average of all other terminated vested participants.

Contribution rates

For 2018 the current Rehabilitation Plan requires a 6% increase in contribution rates as of the anniversary of the collective bargaining or participation agreement. Commencing for 2019, the required increase in contribution rates is the greater of whatever has already been contractually agreed to or 3.5% per annum. Based on the Trustees considered opinion, we assume that this



3.5%/year increase in contribution rates can be sustained for the 20 year period commencing in 2019.

Contribution base units

For purposes of the projections, we assume that the number of actives other than United Parcel Service actives will decline by 3% per year for the first 10 year period, and then 2% per year for the years after 10. The United Parcel Service active group is assumed to remain level. To accomplish the declining population in the projections, we assume new entrants replace a portion of the actives that terminate (due to retirement, termination, death or due to the employer withdrawing). Actives are assumed to work a consistent number of hours from year to year, so the net change in the contribution base units (CBUs) from year to year where applicable results in the assumed decline.

When allocating the population decline, we assume that 60% of the decline is associated with new employer withdrawals, with a withdrawal liability imposed. Actives from newly withdrawn employers are not assumed to be replaced with new entrants. The other 40% of the decline is generally attributable to the net change in actives for ongoing, contributing employers.

Withdrawal liability payments

We have assumed ongoing withdrawal liability payments will be made by employers that have withdrawn prior to the September 24, 2018 filing date based on the payment schedules in their withdrawal liability assessments. We do not expect payments from these employers to experience any default.

We have made an assumption that 60% of the assumed future decline in hours will trigger withdrawal liability assessments in future years. For the future withdrawal liability assessments, we have reflected an 80% collection rate.

Administrative expenses

Administrative expenses are assumed to be \$3.6 million in 2018 (\$2,1 million from July 1, 2018 through December 31, 2018) and \$3.6 million in 2019 reflecting additional administrative and professional services due to the MPRA Suspension Plan implementation. For the 2020 plan year, administrative expenses are expected to drop by approximately \$500,000 and then for subsequent plan years increase by 1.5% each year thereafter for expected inflation and increases in PBGC premiums offset by any population declines.

Projection methodology

Data was not grouped – an individual record was valued for each participant in the Plan.

New entrant profiles

New entrants were developed for each of the three Tier Classifications of participants and by the renewal date of collective bargaining/participation agreements based on recent data reporting. They are assumed to enter the Plan such that the active headcounts decline by assumed levels during each year of our projections.



Tier 1 – Not historically at National Master Freight or UPS contribution rates with agreements renewing in 2018:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	6	Female	0.43	49.38
20	5	Male	0.31	44.69
20	2	Male	0.66	115.09
25	11	Female	0.60	59.89
27	19	Male	0.34	51.60
24	1	Female	0.16	145.85
27	38	Male	0.61	126.49
23	1	Male	0.49	280.44
36	8	Female	0.42	57.98
37	24	Male	0.34	41.49
33	2	Female	0.24	145.85
35	28	Male	0.54	124.61
32	1	Male	0.58	280.44
45	3	Female	0.27	60.80
47	10	Male	0.44	56.86
47	6	Female	0.33	121.00
46	17	Male	0.51	138.08
56	6	Female	0.59	63.40
59	9	Male	0.57	41.65
59	1	Female	0.50	144.35
58	13	Male	0.27	127.01
56	2	Male	0.70	231.42
57	1	Female	0.66	308.04

Tier 1 – Not historically at National Master Freight or UPS contribution rates with agreements renewing in 2019:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
27	1	Female	0.16	40.00
27	1	Male	0.25	40.00
28	2	Male	0.16	281.04
29	1	Female	0.50	515.07
39	1	Male	0.58	281.04
40	1	Female	0.00	515.07
39	1	Male	0.58	515.12
47	1	Male	0.49	40.00
50	1	Female	0.50	515.12
46	3	Male	0.41	515.12
59	1	Female	0.08	40.00
52	1	Male	0.08	40.00
56	2	Male	0.71	280.45



Tier 1 – Not historically at National Master Freight or UPS contribution rates with agreements renewing in 2020:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	6	Female	0.43	49.38
20	5	Male	0.31	44.69
20	2	Male	0.66	115.09
25	11	Female	0.60	59.89
27	19	Male	0.34	51.60
24	1	Female	0.16	145.85
27	38	Male	0.61	126.49
23	1	Male	0.49	280.44
36	8	Female	0.42	57.98
37	24	Male	0.34	41.49
33	2	Female	0.24	145.85
35	28	Male	0.54	124.61
32	1	Male	0.58	280.44
45	3	Female	0.27	60.80
47	10	Male	0.44	56.86
47	6	Female	0.33	121.00
46	17	Male	0.51	138.08
56	6	Female	0.59	63.40
59	9	Male	0.57	41.65
59	1	Female	0.50	144.35
58	13	Male	0.27	127.01
56	2	Male	0.70	231.42
57	1	Female	0.66	308.04

Tier 1 – Not historically at National Master Freight or UPS contribution rates with agreements renewing in 2021:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	6	Female	0.43	49.38
20	5	Male	0.31	44.69
20	2	Male	0.66	115.09
25	11	Female	0.60	59.89
27	19	Male	0.34	51.60
24	1	Female	0.16	145.85
27	38	Male	0.61	126.49
23	1	Male	0.49	280.44
36	8	Female	0.42	57.98
37	24	Male	0.34	41.49
33	2	Female	0.24	145.85
35	28	Male	0.54	124.61
32	1	Male	0.58	280.44



<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
47	10	Male	0.44	56.86
47	6	Female	0.33	121.00
46	17	Male	0.51	138.08
56	6	Female	0.59	63.40
59	9	Male	0.57	41.65
59	1	Female	0.50	144.35
58	13	Male	0.27	127.01
56	2	Male	0.70	231.42
57	1	Female	0.66	308.04

Tier 1 – Not historically at National Master Freight or UPS contribution rates with agreements renewing in 2022:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	6	Female	0.43	49.38
20	5	Male	0.31	44.69
20	2	Male	0.66	115.09
25	11	Female	0.60	59.89
27	19	Male	0.34	51.60
24	1	Female	0.16	145.85
27	38	Male	0.61	126.49
23	1	Male	0.49	280.44
36	8	Female	0.42	57.98
37	24	Male	0.34	41.49
33	2	Female	0.24	145.85
35	28	Male	0.54	124.61
32	1	Male	0.58	280.44
45	3	Female	0.27	60.80
47	10	Male	0.44	56.86
47	6	Female	0.33	121.00
46	17	Male	0.51	138.08
56	6	Female	0.59	63.40
59	9	Male	0.57	41.65
59	1	Female	0.50	144.35
58	13	Male	0.27	127.01
56	2	Male	0.70	231.42
57	1	Female	0.66	308.04

Tier 2 – At historically at National Master Freight rates with agreements renewing in 2018 or 2019:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
27	1	Female	0.16	40.00
27	1	Male	0.25	40.00
28	2	Male	0.16	281.04



<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
39	1	Male	0.58	281.04
40	1	Female	0.00	515.07
39	1	Male	0.58	515.12
47	1	Male	0.49	40.00
50	1	Female	0.50	515.12
46	3	Male	0.41	515.12
59	1	Female	0.08	40.00
52	1	Male	0.08	40.00
56	2	Male	0.71	280.45

Tier 2 – At historically at National Master Freight rates with agreements renewing in 2020:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	6	Female	0.43	49.38
20	5	Male	0.31	44.69
20	2	Male	0.66	115.09
25	11	Female	0.60	59.89
27	19	Male	0.34	51.60
24	1	Female	0.16	145.85
27	38	Male	0.61	126.49
23	1	Male	0.49	280.44
36	8	Female	0.42	57.98
37	24	Male	0.34	41.49
33	2	Female	0.24	145.85
35	28	Male	0.54	124.61
32	1	Male	0.58	280.44
45	3	Female	0.27	60.80
47	10	Male	0.44	56.86
47	6	Female	0.33	121.00
46	17	Male	0.51	138.08
56	6	Female	0.59	63.40
59	9	Male	0.57	41.65
59	1	Female	0.50	144.35
58	13	Male	0.27	127.01
56	2	Male	0.70	231.42
57	1	Female	0.66	308.04

Tier 2 – Yellow Freight Participants:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
28	2	Male	0.08	40.00
25	6	Male	0.57	91.50
40	1	Male	0.00	40.00
37	2	Male	0.71	91.50
46	2	Male	0.25	40.00



<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
47	6	Male	0.54	91.50
58	4	Male	0.37	91.50

Tier 3 – United Parcel Freight Participants:

<u>Age</u>	<u>Count</u>	<u>Sex</u>	<u>Service</u>	<u>Weekly Rate</u>
21	1	Male	0.08	532.60
28	19	Male	0.40	532.60
38	1	Female	0.25	532.60
37	23	Male	0.53	532.60
46	9	Male	0.91	532.60
53	2	Male	0.25	532.60

Part 2 - Supporting documentation for selection of certain assumptions

Investment Returns

Following analysis of capital market assumptions from the Fund's investment advisor who participates in the Horizon Survey and the Survey itself, we concluded that we would use the Fund's actual target portfolio and the Survey's arithmetic and geometric returns, standard deviations and correlations. Details are shown in Part 1 of this document. Note that the inflation rate inherent in the net investment returns is 2.48%.

Demographic experience

The key demographic assumptions are reviewed with each annual valuation and the associated gain/loss by source is analyzed to determine if any trends warrant a change or modification in assumptions. Given the MPRA application process and the importance of near term cash flows, a more detailed experience review was performed and changes were made to assumptions based on plan experience as follows:

Mortality assumptions

The mortality assumption for healthy lives is based on the blue-collar rates in the RP-2014 Mortality Tables Report issued by the Society of Actuaries (located at <https://www.soa.org/Research/Experience-Study/pension/research-2014-rp.aspx>). The rates were adjusted backward to 2006 using MP-2014 then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2017. We believe that the Fund size is not significant enough to justify the use of other than standard mortality tables.

The mortality assumption for disabled lives is based on the disabled rates in the same RP-2014 Mortality Tables Report issued by the Society of Actuaries. The rates were similarly adjusted backward to 2006 using MP-2014 then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2017. We believe that the Fund size is not significant enough to justify the use of other than standard mortality tables.

Retirement Rates – For actives these rates have been reviewed every plan year since 2005 by participant Tiers as described in Part 1 and changed as needed to match the changing pattern of



retirements as Funding Improvement and Rehabilitation Plan changes have affected the population. For terminated vested participants we have changed from assuming that all would retire at their earliest Normal Retirement Age to rates by service years from age 50 through age 70. These rates were developed by an analysis of experience over the past 4 years.

Termination assumptions – From Scale T-7 with rates adjusted to age 35 for all United Parcel Service participants to Scale T-4 unadjusted. This change was made because review of the United Parcel Service participant group showed significantly different termination patterns than that of all other employers.

Form of Annuity Selection – From assuming that all lives will select a Straight Life Annuity to assuming 15% select a Ten Year Certain and Life Annuity, 30% a Straight Life Annuity, 27% a Joint and 100% Survivor Annuity, 12% a Joint and 75% Survivor Annuity and 16% a Joint and 50% Survivor Annuity. These statistics were developed from our review of the patterns of annuity selection over the past 4 years.

New entrant profile

New entrants are assumed to replace participants who terminated employment during the year from contributing employers in the context of assumptions as to declines in population.

Contribution base units and employer withdrawals

We have done an in-depth analysis of the population declines by Participant Tier group as described above in Part 1 since 1995 and have relied on the conclusions from the Fund economist's report that is attached as an Exhibit to this application. Attached as Exhibit 14 is a table showing base, supplemental and surcharge contributions, CBUs (weeks) and average contribution rate for each employer. These statistics have been grouped by major employer United Parcel Service versus all other contributing employers.

The assumption that CBU levels will decline at a lower rate than recent history would indicate is supported by the following rationale:

1. The Board of Trustees believes that the factors that resulted in a decline in CBUs in the past have abated.
2. Past fluctuations in CBUs were primarily the result of employer withdrawals due to:
 - a) the Plan being in critical status;
 - b) employers reacting to the additional costs of the employer contribution rate increases as high as 6%/year under the Rehabilitation Plan; and
 - c) the Great Recession (2007–2012), which limited employer financial resources. The Pension Protection Act shifted the economic burden of funding critical status plans onto employers (increased employer contributions) and participants (wage concessions), which was particularly painful during a recession.

Many employers elected to withdraw rather than agree to the Rehabilitation Plan for some or all of the following reasons:

- a) Did not want to be obligated to pay the higher Rehabilitation Plan contributions on an ongoing basis;



b) Did not want to increase their future Withdrawal Liability payment schedule by agreeing to the higher contributions while still an active employer if they were considering withdrawal or concerned about mass withdrawal in the future; and

c) Did not expect the plan would recover given the pre-MPRA tools available.

3. At this time, the Board believes that the economic burden imposed by the Pension Protection Act has now been absorbed by the ongoing employers and their associated participants as of January 1, 2018. This should reduce the rate of decline in CBU levels (and for the participating employers, stable costs) going forward. Specifically:

a) as of 1/1/2018, all employers have adopted the Rehabilitation Plan;

b) as of 1/1/2018 all employers are paying at the maximum rate under the Rehabilitation Plan; and

c) the economy is in the second longest bull market in history.

4. The financial strength of the remaining contributing employers leads us to believe these employers will continue to participate, and not incur a meaningful drop in future hours. The largest contributing employer, United Parcel Service is actually expected to increase it's participation in the Plan over the next few years giving the Plan even more stability.

5. The Board has administrative policies that support the assumption that actives terminating for reasons other than employer withdrawal will generally be replaced with new entrants.

- The Board requires that employer contribution rates cannot be reduced,
- The Board enforces an "all or nothing" rule. This means that employers must make contributions to the Plan for all new hires covered by the CBA. Employers cannot, for example, contribute to a 401(k) plan for new hires.

6. Many of the arguments above would possibly lead to a level future contribution base units assumption for the future, however, we do fully expect there to be some level of ongoing withdrawals. That said, we do not anticipate the rate of future withdrawals will approach the levels we have seen during the 2008-2017 period.

Backup Support for Withdrawal Liability Payment Assumptions

The actuary's projections reflect all known withdrawals as of the application date and incorporate expected withdrawal liability payments for each of the withdrawn employers based on their payment schedule, most of which are capped at 20 years. All employers that have withdrawn prior to January 1, 2018 have been assessed withdrawal liability. Some withdrawn employers have paid a lump sum settlement of their withdrawal liability assessment, and that payment is reflected accordingly as a replacement for their scheduled quarterly payments.

Since 2008 the Plan has experienced only minor defaults of withdrawal liability assessments and had those assessments deemed uncollectible. As a result, we have assumed no further defaults from any existing withdrawn employer. Additionally, we have assumed that 60% of the future decline in the active population will come from future employer withdrawals and that 80% of those will be collectible.



Projection methodology

We did not use any approximation techniques in our projections such as grouping participants. The benefit payment cash flow items in our projections are taken directly from the ProVal output. We did not make any changes to the programming that would affect the results generated by the software nor did we modify the results generated by the software.

Part 3 – Additional disclosures relating to use of different assumptions

The same actuarial assumptions were used for all illustrations and deterministic projections under Revenue Procedure 2017-43.

