

**WESTERN PENNSYLVANIA TEAMSTERS AND  
EMPLOYERS PENSION FUND  
SUSPENSION APPLICATION**

**Exhibit 13**

**Demonstration of Sensitivity of Projections**



# Western Pennsylvania Teamsters and Employers Pension Fund

## Exhibit 13

### **Demonstration of Sensitivity of Projections in accordance with Revenue Procedure 2017-43 Section 6.05**

Section 6.05 of the Revenue Procedure requires projections that demonstrate the following sensitivities:

- (1) The assumed rate of return is reduced by 1% (page 1).
- (2) The assumed investment return is reduced by 2% (page 7).
- (3) Future contribution base units increase or decrease at a rate equal to the average annual rate of increase or decrease that the plan experienced over the ten year period immediately preceding the year of application (page 11).
- (4) Future contribution base units increase or decrease at a rate equal to the rate in #3 above reduced by 1% (page 15).

As discussed in this Application and in Exhibit 11 describing the actuarial assumptions, the active contributing population of the Western Pennsylvania Teamsters and Employers Plan is heavily weighted toward United Parcel Service participants who make up 29% of the total active population and who represent 58% of total employer contributions. In addition, the United Parcel Service population has had a much different pattern of population decline than the other active participants. As a result, we have determined the average annual rate of population changes separately for UPS and all other active participants as follows:

<b>UPS</b>		<b>All Others</b>	
<b>Contribution</b>	<b>Base Unit</b>	<b>Contribution</b>	<b>Base Unit</b>
<u><b>Base Units</b></u>	<u><b>Decline</b></u>	<u><b>Base Units</b></u>	<u><b>Decline</b></u>
63,453		277,036	
61,851	2.52%	249,816	9.83%
60,200	2.67%	231,555	7.31%
59,304	1.49%	225,492	2.62%
55,855	5.82%	209,073	7.28%
54,801	1.89%	210,185	-0.53%
55,432	-1.15%	211,282	-0.52%
57,685	-4.06%	208,720	1.21%
59,220	-2.66%	188,560	9.66%
57,637	2.67%	155,660	17.45%
<b>Average -</b>	<b>1.02%</b>	<b>Average -</b>	<b>6.03%</b>



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	7/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
Plan Year Ending	<u>12/31/2018</u>	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$627,595,751	\$606,798,069	\$564,796,987	\$537,453,444	\$509,485,285
2. Actuarial Value at Beginning of Year	N/A	633,727,381	585,919,159	561,158,096	534,042,491
<b><u>Income</u></b>					
3. Employer Contributions	27,257,870	54,886,490	55,881,873	56,925,797	57,995,119
4. Current Withdrawal Income	4,978,114	9,990,755	9,950,755	9,950,755	9,916,843
5. Future Withdrawal Income	0	263,425	539,219	826,970	1,125,946
6. Net Investment Income	19,558,843	28,893,667	27,670,237	26,755,236	25,754,638
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	66,718,612	121,878,535	103,969,874	101,155,116	98,263,485
b. Terminated Vested Participants	2,260,331	5,621,168	7,259,929	8,887,563	10,414,085
c. Current Active Participants	1,491,093	4,870,569	6,951,605	9,139,370	11,404,443
d. Future New Entrants	0	0	0	0	0
8. Administrative Expenses	2,122,474	3,665,148	3,204,219	3,244,868	3,285,453
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	606,798,069	564,796,987	537,453,444	509,485,285	480,910,365
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	677,268,104	697,167,258	655,634,852	628,667,334	600,992,378
<b><u>Solvency Ratio</u></b>	4.81	5.27	5.55	5.27	5.00
<b><u>Accrued Liability</u></b>	N/A	1,410,257,908	1,386,682,460	1,377,848,315	1,367,698,273
<b><u>Funded Percentage</u></b>	N/A	44.94%	42.25%	40.73%	39.05%

# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Plan Year Ending	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$480,910,365	\$451,604,628	\$421,999,476	\$392,214,927	\$362,314,001
2. Actuarial Value at Beginning of Year	503,224,072	471,700,248	440,003,775	408,225,566	376,436,179
<b><u>Income</u></b>					
3. Employer Contributions	59,116,902	60,293,957	61,528,637	62,827,808	64,201,625
4. Current Withdrawal Income	9,663,655	9,663,655	9,663,655	9,663,655	9,663,655
5. Future Withdrawal Income	1,437,514	1,761,907	2,099,309	2,450,266	2,815,212
6. Net Investment Income	24,664,671	23,489,566	22,244,406	20,933,718	19,567,866
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	95,276,712	92,140,090	88,921,342	85,648,648	82,308,723
b. Terminated Vested Participants	11,865,125	13,235,418	14,553,640	15,805,645	16,879,230
c. Current Active Participants	13,720,464	16,043,124	18,384,162	20,783,479	23,132,523
d. Future New Entrants	0	28,889	53,944	90,438	139,492
8. Administrative Expenses	3,326,178	3,366,716	3,407,468	3,448,163	3,489,203
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	451,604,628	421,999,476	392,214,927	362,314,001	332,613,188
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	572,466,929	543,446,997	514,128,015	484,642,211	455,073,156
<b><u>Solvency Ratio</u></b>	4.74	4.47	4.22	3.96	3.72
<b><u>Accrued Liability</u></b>	1,356,085,960	1,343,086,993	1,328,792,211	1,313,080,819	1,295,851,314
<b><u>Funded Percentage</u></b>	37.11%	35.12%	33.11%	31.09%	29.05%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032
Plan Year Ending	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>	<u>12/31/2031</u>	<u>12/31/2032</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$332,613,188	\$305,667,760	\$279,230,255	\$253,456,692	\$228,691,771
2. Actuarial Value at Beginning of Year	344,959,485	314,709,906	285,895,872	258,530,658	232,828,037
<b><u>Income</u></b>					
3. Employer Contributions	65,643,576	67,348,311	69,121,684	70,962,930	72,866,029
4. Current Withdrawal Income	9,659,913	9,632,735	9,474,527	9,362,948	9,362,948
5. Future Withdrawal Income	3,194,384	3,496,592	3,811,825	4,140,527	4,482,581
6. Net Investment Income	20,232,567	18,495,397	16,796,306	15,150,434	13,584,028
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	78,882,545	75,462,760	72,002,422	68,516,095	64,990,679
b. Terminated Vested Participants	17,743,963	18,608,963	19,391,264	20,081,784	20,667,125
c. Current Active Participants	25,313,778	27,472,229	29,563,791	31,584,801	33,510,340
d. Future New Entrants	206,078	295,831	408,300	545,475	709,632
8. Administrative Expenses	3,529,504	3,570,756	3,612,129	3,653,605	3,695,193
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	305,667,760	279,230,255	253,456,692	228,691,771	205,414,388
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	427,814,124	401,070,038	374,822,469	349,419,926	325,292,164
<b><u>Solvency Ratio</u></b>	3.50	3.29	3.09	2.89	2.71
<b><u>Accrued Liability</u></b>	1,277,292,702	1,257,736,188	1,237,148,441	1,215,640,028	1,193,272,716
<b><u>Funded Percentage</u></b>	27.01%	25.02%	23.11%	21.27%	19.51%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	1/1/2033	1/1/2034	1/1/2035	1/1/2036	1/1/2037
Plan Year Ending	<u>12/31/2033</u>	<u>12/31/2034</u>	<u>12/31/2035</u>	<u>12/31/2036</u>	<u>12/31/2037</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$205,414,388	\$183,894,571	\$164,846,035	\$148,736,759	\$134,716,991
2. Actuarial Value at Beginning of Year	209,149,146	187,247,520	167,843,324	151,412,502	137,109,903
<b><u>Income</u></b>					
3. Employer Contributions	74,848,974	76,918,729	79,073,341	81,307,534	83,621,914
4. Current Withdrawal Income	9,192,149	9,190,205	9,180,596	7,865,885	1,578,866
5. Future Withdrawal Income	4,838,600	5,209,242	5,595,279	5,997,000	6,415,086
6. Net Investment Income	12,122,833	10,796,562	9,644,512	8,662,025	7,691,842
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	61,506,151	58,014,630	54,540,092	51,088,831	47,701,827
b. Terminated Vested Participants	21,123,895	21,467,019	21,742,366	21,895,032	21,963,859
c. Current Active Participants	35,241,194	36,743,308	38,031,046	39,171,509	40,103,221
d. Future New Entrants	914,089	1,159,877	1,469,521	1,834,999	2,249,855
8. Administrative Expenses	3,737,044	3,778,440	3,819,979	3,861,840	3,903,725
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	183,894,571	164,846,035	148,736,759	134,716,991	118,102,211
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	302,679,900	282,230,869	264,519,784	248,707,362	230,120,973
<b><u>Solvency Ratio</u></b>	2.55	2.40	2.28	2.18	2.05
<b><u>Accrued Liability</u></b>	1,170,196,994	1,146,685,727	1,123,115,103	1,099,719,605	1,076,759,131
<b><u>Funded Percentage</u></b>	17.87%	16.33%	14.94%	13.77%	12.73%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	1/1/2038	1/1/2039	1/1/2040	1/1/2041	1/1/2042
Plan Year Ending	<u>12/31/2038</u>	<u>12/31/2039</u>	<u>12/31/2040</u>	<u>12/31/2041</u>	<u>12/31/2042</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$118,102,211	\$103,807,948	\$90,419,859	\$77,807,969	\$66,048,278
2. Actuarial Value at Beginning of Year	120,238,145	105,696,690	92,074,594	79,241,009	67,273,534
<b><u>Income</u></b>					
3. Employer Contributions	86,024,314	85,517,104	85,026,230	84,554,607	84,095,678
4. Current Withdrawal Income	0	0	0	0	0
5. Future Withdrawal Income	6,850,523	7,056,725	6,994,781	6,916,217	6,821,603
6. Net Investment Income	6,684,346	5,790,315	4,952,108	4,166,506	3,437,139
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	44,371,360	41,109,348	37,931,241	34,840,603	31,855,970
b. Terminated Vested Participants	21,982,148	21,912,772	21,754,300	21,526,476	21,214,010
c. Current Active Participants	40,812,089	41,413,693	41,866,134	42,192,762	42,410,484
d. Future New Entrants	2,741,755	3,327,827	4,001,765	4,762,089	5,627,864
8. Administrative Expenses	3,946,094	3,988,593	4,031,569	4,075,091	4,118,973
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	103,807,948	90,419,859	77,807,969	66,048,278	55,175,397
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	213,715,300	198,183,499	183,361,409	169,370,208	156,283,725
<b><u>Solvency Ratio</u></b>	1.94	1.84	1.74	1.64	1.55
<b><u>Accrued Liability</u></b>	1,054,538,232	1,033,307,354	1,012,693,276	992,823,482	973,772,514
<b><u>Funded Percentage</u></b>	11.40%	10.23%	9.09%	7.98%	6.91%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 1% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2048

Plan Year Beginning	1/1/2043	1/1/2044	1/1/2045	1/1/2046	1/1/2047	1/1/2048
Plan Year Ending	<u>12/31/2043</u>	<u>12/31/2044</u>	<u>12/31/2045</u>	<u>12/31/2046</u>	<u>12/31/2047</u>	<u>12/31/2048</u>
<b><u>Asset Values</u></b>						
1. Market Value at Beginning of Year	\$55,175,397	\$45,277,027	\$36,375,770	\$28,479,464	\$21,633,351	\$15,837,223
2. Actuarial Value at Beginning of Year	56,207,819	46,130,620	37,065,279	29,020,283	22,041,384	16,128,790
<b><u>Income</u></b>						
3. Employer Contributions	83,650,930	83,219,816	82,806,566	82,405,591	82,016,946	81,643,154
4. Current Withdrawal Income	0	0	0	0	0	0
5. Future Withdrawal Income	6,711,748	6,585,134	6,442,293	6,283,123	6,106,969	5,913,736
6. Net Investment Income	2,767,922	2,162,467	1,621,741	1,147,471	741,140	403,301
<b><u>Disbursements</u></b>						
7. Benefit Payments						
a. Current Retirees & Beneficiaries	28,976,673	26,227,932	23,610,773	21,133,242	18,802,414	16,624,003
b. Terminated Vested Participants	20,819,696	20,349,247	19,835,884	19,259,911	18,632,129	17,956,117
c. Current Active Participants	42,472,647	42,360,181	42,088,495	41,640,193	41,016,130	40,226,271
d. Future New Entrants	6,596,475	7,722,944	8,977,790	10,348,397	11,862,775	13,486,164
8. Administrative Expenses	4,163,479	4,208,370	4,253,964	4,300,555	4,347,735	4,395,825
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	45,277,027	36,375,770	28,479,464	21,633,351	15,837,223	11,109,034
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	144,142,518	133,036,074	122,992,406	114,015,094	106,150,671	99,401,589
<b><u>Solvency Ratio</u></b>	1.46	1.38	1.30	1.23	1.18	1.13
<b><u>Accrued Liability</u></b>	955,585,385	938,366,852	922,133,407	906,890,066	892,701,067	879,573,616
<b><u>Funded Percentage</u></b>	5.88%	4.92%	4.02%	3.20%	2.47%	1.83%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 2% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	7/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
Plan Year Ending	<u>12/31/2018</u>	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$627,595,751	\$606,798,069	\$559,127,995	\$526,222,296	\$492,720,129
2. Actuarial Value at Beginning of Year	N/A	633,727,381	584,785,360	557,437,929	526,380,458
<b><u>Income</u></b>					
3. Employer Contributions	27,257,870	54,556,654	55,228,062	55,955,344	56,713,778
4. Current Withdrawal Income	4,978,114	9,990,755	9,950,755	9,950,755	9,916,843
5. Future Withdrawal Income	0	593,261	1,193,030	1,797,423	2,407,288
6. Net Investment Income	19,558,843	23,224,675	22,108,081	21,221,228	20,244,636
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	66,718,612	121,878,535	103,969,874	101,155,116	98,263,485
b. Terminated Vested Participants	2,260,331	5,621,168	7,259,929	8,887,563	10,414,085
c. Current Active Participants	1,491,093	4,870,569	6,951,605	9,139,370	11,404,443
d. Future New Entrants	0	0	0	0	0
8. Administrative Expenses	2,122,474	3,665,148	3,204,219	3,244,868	3,285,453
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	606,798,069	559,127,995	526,222,296	492,720,129	458,635,207
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	677,268,104	691,498,266	644,403,704	611,902,178	578,717,220
<b><u>Solvency Ratio</u></b>	4.81	5.22	5.45	5.13	4.82
<b><u>Accrued Liability</u></b>	N/A	1,410,257,908	1,386,682,460	1,377,848,315	1,367,698,273
<b><u>Funded Percentage</u></b>	N/A	44.94%	42.17%	40.46%	38.49%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension based on 2% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Plan Year Ending	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$458,635,207	\$423,839,597	\$388,759,664	\$353,507,286	\$318,136,104
2. Actuarial Value at Beginning of Year	490,354,600	452,446,238	414,408,809	376,311,460	338,217,744
<b><u>Income</u></b>					
3. Employer Contributions	57,537,045	58,428,114	59,375,109	60,398,549	61,504,398
4. Current Withdrawal Income	9,663,655	9,663,655	9,663,655	9,663,655	9,663,655
5. Future Withdrawal Income	3,017,371	3,627,750	4,252,837	4,879,525	5,512,439
6. Net Investment Income	19,174,798	18,014,785	16,776,577	15,463,462	14,083,563
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	95,276,712	92,140,090	88,921,342	85,648,648	82,308,723
b. Terminated Vested Participants	11,865,125	13,235,418	14,553,640	15,805,645	16,879,230
c. Current Active Participants	13,720,464	16,043,124	18,384,162	20,783,479	23,132,523
d. Future New Entrants	0	28,889	53,944	90,438	139,492
8. Administrative Expenses	3,326,178	3,366,716	3,407,468	3,448,163	3,489,203
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	423,839,597	388,759,664	353,507,286	318,136,104	282,950,988
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	544,701,898	510,207,185	475,420,374	440,464,314	405,410,956
<b><u>Solvency Ratio</u></b>	4.51	4.20	3.90	3.60	3.31
<b><u>Accrued Liability</u></b>	1,356,085,960	1,343,086,993	1,328,792,211	1,313,080,819	1,295,851,314
<b><u>Funded Percentage</u></b>	36.16%	33.69%	31.19%	28.66%	26.10%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension based on 2% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032
Plan Year Ending	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>	<u>12/31/2031</u>	<u>12/31/2032</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$282,950,988	\$250,152,603	\$217,789,894	\$186,009,084	\$155,142,266
2. Actuarial Value at Beginning of Year	300,442,782	263,821,801	228,523,560	194,544,877	162,083,011
<b><u>Income</u></b>					
3. Employer Contributions	62,687,096	64,041,470	65,474,659	66,986,428	68,561,519
4. Current Withdrawal Income	9,659,913	9,632,735	9,474,527	9,362,948	9,362,948
5. Future Withdrawal Income	6,150,864	6,803,433	7,458,851	8,117,028	8,787,091
6. Net Investment Income	14,379,610	12,570,193	10,789,059	9,048,537	7,370,235
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	78,882,545	75,462,760	72,002,422	68,516,095	64,990,679
b. Terminated Vested Participants	17,743,963	18,608,963	19,391,264	20,081,784	20,667,125
c. Current Active Participants	25,313,778	27,472,229	29,563,791	31,584,801	33,510,340
d. Future New Entrants	206,078	295,831	408,300	545,475	709,632
8. Administrative Expenses	3,529,504	3,570,756	3,612,129	3,653,605	3,695,193
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	250,152,603	217,789,894	186,009,084	155,142,266	125,651,090
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	372,298,967	339,629,677	307,374,861	275,870,421	245,528,866
<b><u>Solvency Ratio</u></b>	3.05	2.79	2.53	2.29	2.05
<b><u>Accrued Liability</u></b>	1,277,292,702	1,257,736,188	1,237,148,441	1,215,640,028	1,193,272,716
<b><u>Funded Percentage</u></b>	23.52%	20.98%	18.47%	16.00%	13.58%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension based on 2% Lower Investment Return Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning Plan Year Ending	1/1/2033 <u>12/31/2033</u>	1/1/2034 <u>12/31/2034</u>	1/1/2035 <u>12/31/2035</u>	1/1/2036 <u>12/31/2036</u>	1/1/2037 <u>12/31/2037</u>	1/1/2038 <u>12/31/2038</u>
<b><u>Asset Values</u></b>						
1. Market Value at Beginning of Year	\$125,651,090	\$97,783,489	\$72,225,407	\$49,409,574	\$28,449,598	\$4,645,542
2. Actuarial Value at Beginning of Year	131,481,911	102,544,589	75,970,687	52,209,784	30,384,645	5,574,646
<b><u>Income</u></b>						
3. Employer Contributions	70,220,443	71,973,914	73,812,510	75,737,905	77,745,501	86,024,314
4. Current Withdrawal Income	9,192,149	9,190,205	9,180,596	7,865,885	1,578,866	0
5. Future Withdrawal Income	9,467,131	10,154,058	10,856,110	11,566,629	12,291,499	13,025,495
6. Net Investment Income	5,775,049	4,287,016	2,937,955	1,721,817	502,566	0
<b><u>Disbursements</u></b>						
7. Benefit Payments						
a. Current Retirees & Beneficiaries	61,506,151	58,014,630	54,540,092	51,088,831	47,701,827	44,371,360
b. Terminated Vested Participants	21,123,895	21,467,019	21,742,366	21,895,032	21,963,859	21,982,148
c. Current Active Participants	35,241,194	36,743,308	38,031,046	39,171,509	40,103,221	40,812,089
d. Future New Entrants	914,089	1,159,877	1,469,521	1,834,999	2,249,855	2,741,755
8. Administrative Expenses	3,737,044	3,778,440	3,819,979	3,861,840	3,903,725	3,946,094
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	97,783,489	72,225,407	49,409,574	28,449,598	4,645,542	<b>INSOLVENT</b>
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	216,568,818	189,610,241	165,192,599	142,439,969	116,664,304	99,749,257
<b><u>Solvency Ratio</u></b>	1.82	1.62	1.43	1.25	1.04	0.91
<b><u>Accrued Liability</u></b>	1,170,196,994	1,146,685,727	1,123,115,103	1,099,719,605	1,076,759,131	1,054,538,232
<b><u>Funded Percentage</u></b>	11.24%	8.94%	6.76%	4.75%	2.82%	0.53%

File 13 Ex 13 Sensitivity 0012



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	7/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
Plan Year Ending	<u>12/31/2018</u>	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$627,595,751	\$606,798,069	\$569,836,245	\$546,852,680	\$522,589,250
2. Actuarial Value at Beginning of Year	N/A	633,727,381	586,419,106	562,939,760	537,758,038
<b><u>Income</u></b>					
3. Employer Contributions	27,257,870	54,025,871	54,147,801	54,306,078	54,477,996
4. Current Withdrawal Income	4,978,114	9,990,755	9,950,755	9,950,755	9,916,843
5. Future Withdrawal Income	0	505,452	1,022,087	1,548,157	2,084,501
6. Net Investment Income	19,558,843	34,548,975	33,276,448	32,351,055	31,300,273
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	66,718,612	121,878,535	103,969,874	101,155,116	98,263,485
b. Terminated Vested Participants	2,260,331	5,621,168	7,259,929	8,887,563	10,414,085
c. Current Active Participants	1,491,093	4,870,546	6,951,477	9,138,956	11,402,868
d. Future New Entrants	0	0	0	0	0
8. Administrative Expenses	2,122,474	3,662,628	3,199,375	3,237,840	3,276,381
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	606,798,069	569,836,245	546,852,680	522,589,250	497,012,044
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	677,268,104	702,206,494	665,033,960	641,770,885	617,092,482
<b><u>Solvency Ratio</u></b>	4.81	5.30	5.63	5.38	5.14
<b><u>Accrued Liability</u></b>	N/A	1,410,231,239	1,386,557,676	1,377,538,035	1,367,097,947
<b><u>Funded Percentage</u></b>	N/A	44.94%	42.29%	40.87%	39.34%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Plan Year Ending	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$497,012,044	\$469,930,546	\$441,704,287	\$412,391,699	\$381,973,263
2. Actuarial Value at Beginning of Year	509,402,593	480,736,445	451,019,712	420,297,914	388,559,905
<b><u>Income</u></b>					
3. Employer Contributions	54,687,864	54,937,981	55,229,791	55,568,588	55,963,237
4. Current Withdrawal Income	9,663,655	9,663,655	9,663,655	9,663,655	9,663,655
5. Future Withdrawal Income	2,625,407	3,170,887	3,735,219	4,305,062	4,884,871
6. Net Investment Income	30,114,398	28,792,175	27,344,856	25,770,726	24,073,604
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	95,276,712	92,140,090	88,921,342	85,648,648	82,308,723
b. Terminated Vested Participants	11,865,125	13,235,418	14,553,640	15,805,645	16,879,230
c. Current Active Participants	13,715,811	16,043,124	18,384,162	20,783,479	23,132,523
d. Future New Entrants	0	18,545	34,449	57,528	88,412
8. Administrative Expenses	3,315,174	3,353,780	3,392,516	3,431,167	3,470,107
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	469,930,546	441,704,287	412,391,699	381,973,263	350,679,635
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	590,788,194	563,141,464	534,285,292	504,268,563	473,088,523
<b><u>Solvency Ratio</u></b>	4.89	4.64	4.38	4.12	3.86
<b><u>Accrued Liability</u></b>	1,355,074,959	1,341,529,788	1,326,538,666	1,309,966,940	1,291,698,442
<b><u>Funded Percentage</u></b>	37.59%	35.83%	34.00%	32.08%	30.08%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032
Plan Year Ending	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>	<u>12/31/2031</u>	<u>12/31/2032</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$350,679,635	\$321,079,302	\$290,623,328	\$259,342,329	\$227,446,473
2. Actuarial Value at Beginning of Year	356,044,445	323,594,600	291,231,820	258,845,094	226,512,318
<b><u>Income</u></b>					
3. Employer Contributions	56,406,353	56,899,988	57,435,759	58,011,726	58,621,208
4. Current Withdrawal Income	9,659,913	9,632,735	9,474,527	9,362,948	9,362,948
5. Future Withdrawal Income	5,473,847	6,080,426	6,693,224	7,312,021	7,945,996
6. Net Investment Income	24,439,119	22,210,708	19,920,590	17,576,476	15,198,490
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	78,882,545	75,462,760	72,002,422	68,516,095	64,990,679
b. Terminated Vested Participants	17,743,963	18,608,963	19,391,264	20,081,784	20,667,125
c. Current Active Participants	25,313,778	27,472,229	29,563,791	31,584,801	33,510,340
d. Future New Entrants	130,999	189,119	262,261	352,254	460,813
8. Administrative Expenses	3,508,280	3,546,760	3,585,361	3,624,093	3,662,937
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	321,079,302	290,623,328	259,342,329	227,446,473	195,283,221
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	443,150,587	412,356,399	380,562,067	347,981,407	314,912,178
<b><u>Solvency Ratio</u></b>	3.63	3.39	3.14	2.89	2.63
<b><u>Accrued Liability</u></b>	1,271,906,090	1,250,901,712	1,228,623,759	1,205,162,528	1,180,557,224
<b><u>Funded Percentage</u></b>	27.99%	25.87%	23.70%	21.48%	19.19%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline Projection for Plan Years beginning July 1, 2018 through December 31, 2038

Plan Year Beginning	1/1/2033	1/1/2034	1/1/2035	1/1/2036	1/1/2037	1/1/2038
Plan Year Ending	<u>12/31/2033</u>	<u>12/31/2034</u>	<u>12/31/2035</u>	<u>12/31/2036</u>	<u>12/31/2037</u>	<u>12/31/2038</u>
<b><u>Asset Values</u></b>						
1. Market Value at Beginning of Year	\$195,283,221	\$162,983,420	\$131,111,151	\$99,989,942	\$68,604,366	\$32,071,376
2. Actuarial Value at Beginning of Year	194,458,589	162,269,859	130,509,278	99,499,127	68,223,488	31,802,679
<b><u>Income</u></b>						
3. Employer Contributions	59,279,333	59,992,004	60,755,246	61,562,317	62,411,712	62,411,712
4. Current Withdrawal Income	9,192,149	9,190,205	9,180,596	7,865,885	1,578,866	0
5. Future Withdrawal Income	8,592,927	9,249,631	9,924,144	10,609,773	11,312,235	12,026,096
6. Net Investment Income	12,806,137	10,422,734	8,082,349	5,768,355	3,287,641	716,868
<b><u>Disbursements</u></b>						
7. Benefit Payments						
a. Current Retirees & Beneficiaries	61,506,151	58,014,630	54,540,092	51,088,831	47,701,827	44,371,360
b. Terminated Vested Participants	21,123,895	21,467,019	21,742,366	21,895,032	21,963,859	21,982,148
c. Current Active Participants	35,241,194	36,743,308	38,031,046	39,171,509	40,103,221	40,812,089
d. Future New Entrants	597,064	761,133	970,521	1,217,982	1,496,928	1,830,369
8. Administrative Expenses	3,702,044	3,740,752	3,779,519	3,818,552	3,857,609	3,897,150
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	162,983,420	131,111,151	99,989,942	68,604,366	32,071,376	<b>INSOLVENT</b>
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	281,451,724	248,097,241	215,273,967	181,977,720	143,337,211	103,328,901
<b><u>Solvency Ratio</u></b>	2.38	2.12	1.87	1.61	1.29	0.95
<b><u>Accrued Liability</u></b>	1,154,932,744	1,128,535,623	1,101,718,696	1,074,702,569	1,047,726,339	1,021,071,369
<b><u>Funded Percentage</u></b>	16.84%	14.38%	11.85%	9.26%	6.51%	3.11%

File 13 Ex 13 Sensitivity 0016





## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline +1% Projection for Plan Years beginning July 1, 2018 through December 31, 2035

Plan Year Beginning	7/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
Plan Year Ending	<u>12/31/2018</u>	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$627,595,751	\$606,798,069	\$569,398,753	\$545,504,720	\$519,818,606
2. Actuarial Value at Beginning of Year	N/A	633,727,381	585,979,699	561,582,225	534,962,376
<b><u>Income</u></b>					
3. Employer Contributions	27,257,870	53,839,964	53,767,037	53,719,944	53,677,150
4. Current Withdrawal Income	4,978,114	9,990,755	9,950,755	9,950,755	9,916,843
5. Future Withdrawal Income	0	263,425	539,219	826,970	1,125,946
6. Net Investment Income	19,558,843	34,538,318	33,227,469	32,232,525	31,077,021
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	66,718,612	121,878,535	103,969,874	101,155,116	98,263,485
b. Terminated Vested Participants	2,260,331	5,621,168	7,259,929	8,887,563	10,414,085
c. Current Active Participants	1,491,093	4,870,539	6,951,435	9,138,813	11,402,315
d. Future New Entrants	0	0	0	0	0
8. Administrative Expenses	2,122,474	3,661,536	3,197,275	3,234,816	3,272,517
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	606,798,069	569,398,753	545,504,720	519,818,606	492,263,164
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	677,268,104	701,768,995	663,685,958	639,000,098	612,343,049
<b><u>Solvency Ratio</u></b>	4.81	5.30	5.62	5.36	5.10
<b><u>Accrued Liability</u></b>	N/A	1,410,216,218	1,386,490,356	1,377,373,582	1,366,783,334
<b><u>Funded Percentage</u></b>	N/A	44.94%	42.26%	40.77%	39.14%



# Western Pennsylvania Teamsters and Employers Pension Fund

## Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline +1% Projection for Plan Years beginning July 1, 2018 through December 31, 2035

Plan Year Beginning	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Plan Year Ending	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$492,263,164	\$462,599,718	\$431,134,530	\$397,867,084	\$362,712,610
2. Actuarial Value at Beginning of Year	504,605,134	473,326,600	440,335,859	405,621,997	369,111,422
<b><u>Income</u></b>					
3. Employer Contributions	53,654,987	53,655,049	53,692,309	53,757,486	53,862,839
4. Current Withdrawal Income	9,663,655	9,663,655	9,663,655	9,663,655	9,663,655
5. Future Withdrawal Income	1,437,514	1,761,907	2,099,309	2,450,266	2,815,212
6. Net Investment Income	29,746,880	28,235,988	26,550,199	24,681,802	22,627,942
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	95,276,712	92,140,090	88,921,342	85,648,648	82,308,723
b. Terminated Vested Participants	11,865,125	13,235,418	14,553,640	15,805,645	16,879,230
c. Current Active Participants	13,714,175	16,043,124	18,384,162	20,783,479	23,132,523
d. Future New Entrants	0	14,891	27,558	45,884	70,348
8. Administrative Expenses	3,310,470	3,348,264	3,386,216	3,424,027	3,462,127
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	462,599,718	431,134,530	397,867,084	362,712,610	325,829,307
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	583,455,730	552,568,053	519,753,786	484,996,266	448,220,131
<b><u>Solvency Ratio</u></b>	4.83	4.55	4.26	3.97	3.66
<b><u>Accrued Liability</u></b>	1,354,549,085	1,340,723,556	1,325,374,830	1,308,359,908	1,289,553,463
<b><u>Funded Percentage</u></b>	37.25%	35.30%	33.22%	31.00%	28.62%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline +1% Projection for Plan Years beginning July 1, 2018 through December 31, 2035

Plan Year Beginning	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032
Plan Year Ending	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>	<u>12/31/2031</u>	<u>12/31/2032</u>
<b><u>Asset Values</u></b>					
1. Market Value at Beginning of Year	\$325,829,307	\$289,524,381	\$251,316,266	\$211,144,486	\$169,120,859
2. Actuarial Value at Beginning of Year	330,973,597	291,939,150	251,929,430	210,737,552	168,338,402
<b><u>Income</u></b>					
3. Employer Contributions	53,999,399	54,268,158	54,558,784	54,868,041	55,198,088
4. Current Withdrawal Income	9,659,913	9,632,735	9,474,527	9,362,948	9,362,948
5. Future Withdrawal Income	3,194,384	3,496,592	3,811,825	4,140,527	4,482,581
6. Net Investment Income	22,385,224	19,625,808	16,723,930	13,680,298	10,507,478
<b><u>Disbursements</u></b>					
7. Benefit Payments					
a. Current Retirees & Beneficiaries	78,882,545	75,462,760	72,002,422	68,516,095	64,990,679
b. Terminated Vested Participants	17,743,963	18,608,963	19,391,264	20,081,784	20,667,125
c. Current Active Participants	25,313,778	27,472,229	29,563,791	31,584,801	33,510,340
d. Future New Entrants	104,128	150,355	208,509	280,036	366,394
8. Administrative Expenses	3,499,432	3,537,100	3,574,861	3,612,725	3,650,729
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	289,524,381	251,316,266	211,144,486	169,120,859	125,486,687
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	411,568,795	373,010,573	332,310,472	289,583,575	245,021,225
<b><u>Solvency Ratio</u></b>	3.37	3.07	2.74	2.40	2.05
<b><u>Accrued Liability</u></b>	1,269,118,292	1,247,356,808	1,224,197,674	1,199,720,415	1,173,952,890
<b><u>Funded Percentage</u></b>	26.08%	23.40%	20.58%	17.57%	14.34%



## Western Pennsylvania Teamsters and Employers Pension Fund

### Demonstration of Cash Flow with Proposed Suspension - 10 Year Avg Population Decline +1% Projection for Plan Years beginning July 1, 2018 through December 31, 2035

Plan Year Beginning	1/1/2033	1/1/2034	1/1/2035
Plan Year Ending	<u>12/31/2033</u>	<u>12/31/2034</u>	<u>12/31/2035</u>
<b><u>Asset Values</u></b>			
1. Market Value at Beginning of Year	\$125,486,687	\$80,259,423	\$33,880,605
2. Actuarial Value at Beginning of Year	124,846,700	79,767,934	33,543,094
<b><u>Income</u></b>			
3. Employer Contributions	55,560,363	55,956,285	51,011,470
4. Current Withdrawal Income	9,192,149	9,190,205	9,180,596
5. Future Withdrawal Income	4,838,600	5,209,242	5,595,279
6. Net Investment Income	7,216,860	3,823,040	759,849
<b><u>Disbursements</u></b>			
7. Benefit Payments			
a. Current Retirees & Beneficiaries	61,506,151	58,014,630	54,540,092
b. Terminated Vested Participants	21,123,895	21,467,019	21,742,366
c. Current Active Participants	35,241,194	36,743,308	38,031,046
d. Future New Entrants	475,000	605,769	772,834
8. Administrative Expenses	3,688,996	3,726,864	3,764,791
<b><u>Market Value at End of Year</u></b> (1+3+4+5+6-7d-8)	80,259,423	33,880,605	<b>INSOLVENT</b>
<b><u>Available Resources</u></b> (1+3+4+5+6-8)	198,605,663	150,711,331	96,663,008
<b><u>Solvency Ratio</u></b>	1.68	1.29	0.84
<b><u>Accrued Liability</u></b>	1,147,007,078	1,119,115,621	1,090,617,827
<b><u>Funded Percentage</u></b>	10.88%	7.13%	3.08%

