**Questar Corporation** 

Questar Corporation Postretirement Welfare Plans for Retiree Medical and Life

## Consolidated Actuarial Valuation Report Disclosure for Fiscal Year Ending December 31, 2015 and Preliminary 2016 Benefit Cost under US GAAP

January 26, 2016



This report is confidential and intended solely for the information and benefit of the intended recipient thereof. It may not be distributed to a third party unless expressly allowed under the "Actuarial Certification" section herein.

## **Table of Contents**

Purposes of valuation	1
Section 1 : Summary of key consolidated results	3
Benefit cost, assets & obligations	3
Comments on results	4
Basis for valuation	5
Actuarial certification	7
Section 2 : Consolidated accounting exhibits	.11
2.1 Disclosed benefit cost	11
2.2 Balance sheet asset/(liability)	.13
2.3 Accumulated other comprehensive (income)/loss	15
2.4 Additional disclosure information	.16
2.5 Changes in disclosed liabilities and assets	17
2.6 Summary of net balances	18
2.7 Reconciliation with prior year's disclosure	19
2.8 Development of assets for benefit cost	20
2.9 Preliminary summary and comparison of benefit cost and cash flows	21
Section 3 : Data exhibits	23
3.1 Plan participant data	23
Appendix A – Statement of consolidated actuarial assumptions and methods	25
Appendix B – Summary of principal other postretirement benefit plan provisions	33
Appendix C – Summary of key results by plan	37



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## Purposes of valuation

Questar Corporation (the Company) engaged Towers Watson Delaware Inc. ("Towers Watson") to value the Company's other postretirement benefit plans, including the retiree medical and retiree life plans.

As requested by Questar Corporation, this report provides information for year-end financial reporting purposes required by FASB Accounting Standards Codification Topic 715-20-50 (ASC 715) for your fiscal year ending December 31, 2015 for the Postretirement Welfare Plans.

The exhibits present year-end financial reporting information in accordance with ASC 715-20-50 and 715-60-50, including net balance sheet position of the Plans, cash flow, plan asset information, amortization amounts during the fiscal year, participant information, the provisions on which the valuation is based, and the actuarial assumptions and methods used in the calculations. Additional input is required (as described below) by the Company in relation to the asset disclosures specified in ASC 715-20-50-1(d) (public entities) or ASC 715-20-50-5(c) (nonpublic entities).

In addition, this report presents the Net Periodic Postretirement Benefit Cost/(Income), in accordance with ASC 715, for the fiscal year beginning January 1, 2016. Both year-end financial reporting and benefit cost results are based on a valuation of the Plans as of December 31, 2015.

## Limitations

This valuation has been conducted for the purposes described above and may not be suitable for any other purpose. In particular, please note the following:

- As discussed above, certain year-end financial reporting information in accordance with ASC 715-20-50 and 715-60-50 is not included in this report and must be provided by the Company, as follows:
  - Categorization of assets, actual asset allocation at December 31, 2015 and December 31, 2014, and the target asset allocation for 2016.
  - A description of the Company's investment policy for the assets held by the other postretirement benefit plans.
  - A description of the basis used to determine the expected long-term rate of return on plan assets.
  - The Company's expected contributions to the plans in 2016.
- 2. We are not aware of a formal funding policy. The expected contributions to the other postretirement benefits plans has been set at 0.

Note that any significant change in the amounts contributed or expected to be contributed in 2016 will require disclosure in the interim financial statements.



- There may be certain events that have occurred since the valuation date that are not reflected in the current valuation. See Subsequent Events in the Basis for Valuation section below for more information.
- 4. This report does not provide information for plan reporting under ASC 960 or ASC 965.
- 5. This report does not determine liabilities on a plan termination basis, for which a separate extensive analysis would be required. No funded status measure included in this report is intended to assess, and none may be appropriate for assessing, the sufficiency of plan assets to cover the estimated cost of settling benefit obligations, as all such measures differ in some way from plan termination obligations. In addition, funded status measures shown in this report do not reflect the current costs of settling obligations by offering immediate lump sum payments to participants and/or purchasing annuity contracts for the remaining participants (e.g., insurer profit, insurer pricing of contingent benefits and/or provision for anti-selection in the choice of a lump sum vs. an annuity).
- 6. The comparisons of accounting obligations to assets presented in this report cannot be relied upon to determine the need for nor the amount of required future plan contributions. Nevertheless, such comparisons may be useful to assess the need for future contributions because they reflect current interest rates at the measurement date in determining benefit obligations. However, asset gains and losses, demographic experience different from assumed, changes in interest rates, future benefit accruals, if any, and other factors will all affect the need for and amount of future contributions. In addition, if a plan is not required by law to be funded, benefit payments may also be paid directly as they come due.

# Section 1: Summary of key consolidated results

## Benefit cost, assets & obligations

	All monetary amounts shown in US		
Fiscal Year Begin	ining	01/01/2015	01/01/2014
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	2,090,297	2,080,796
	Immediate Recognition of Benefit Cost/(Income) due to Special Events	0	0
	Total Benefit Cost/(Income)	2,090,297	2,080,796
Measurement Dat	te	12/31/2015	12/31/2014
Plan Assets	Fair Value of Assets (FVA)	44,098,002	47,046,899
	Return on Fair Value Assets during Prior Year	(2.067%)	6.606%
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(86,032,861)	(90,834,854)
Funded Ratios	Fair Value of Assets to APBO	51.2%	51.8%
Accumulated Other	Net Prior Service Cost/(Credit)	197,548	0
Comprehensive (Income)/Loss	Net Loss/(Gain)	14,725,289	17,937,562
	Total Accumulated Other Comprehensive (Income)/Loss	14,922,837	17,937,562
Assumptions	Discount Rate	4.300%	4.000%
	Expected Long-term Rate of Return on Plan Assets	7.000%	7.000%
	Current Health Care Cost Trend Rate	7.000%	7.500%
	Ultimate Health Care Cost Trend Rate	4.500%	4.500%
	Year of Ultimate Trend Rate	2021	2021
Participant Data	Census Date	01/01/2015	01/01/2014



## **Comments on results**

The consolidated actuarial gain/(loss) due to demographic experience, including any assumption changes, and investment return different from assumed during the prior year was \$6,162,676 and \$(4,102,818) respectively.

#### Change in net periodic cost and funded position

The net periodic cost increased from \$2,090,297 in fiscal 2015 to an estimated \$2,104,706 in fiscal 2016 and the funded position improved from \$(43,787,955) to \$(41,934,859).

Significant reasons for these changes include the following:

- The return on the fair value of plan assets since the prior measurement date was less than expected, which caused the funded position to deteriorate.
- Contributions to the plans during the prior year reduced the net periodic cost and improved the funded position.
- The discount rate increased 30 basis points compared to the prior year which improved the funded position.
- Actual claims were lower than the expected claims from the prior valuation, which improved the funded position.
- The mortality tables were updated, and the net result of the change was an improvement to the funded position and a decrease to the net periodic cost.
- The 2016 employer subsidy caps for the non-grandfathered pre-65 retirees was increased, which increased the net periodic cost and caused the funded status to deteriorate.

#### Effects of Health Care Reform

In March 2010, the Patient Protection and Affordable Care Act (PPACA) and Health Care and Education Reconciliation Act (HCERA) were enacted. The key aspects of the Acts related to the Company's benefit obligation and cost of providing retiree medical benefits are:

- Availability of coverage through health care exchanges beginning in 2014
- Estimated excise ("Cadillac") tax on high-cost plans beginning in 2020

4

- Patient-Centered Outcomes Research Institute fee on insured and self-insured employer group health plans for 2012 through 2018
- Transitional reinsurance fee on health insurers and self-insured group health plans for 2014 through 2016

There was no impact to obligations or expense from the potential for excise tax payments. The Company has demonstrated a commitment that costs and retiree contributions will be managed in such a way that the Excise tax threshold will not be the obligation of the company.

This valuation reflects our understanding of the relevant provisions of PPACA and HCERA. The IRS has yet to issue final guidance with respect to many aspects of these laws. It is possible that future guidance may conflict with our understanding of these laws based on currently available guidance and could therefore affect the results shown in this report.

## **Basis for valuation**

Appendix A summarizes the assumptions and methods used in the valuation. Appendix B summarizes our understanding of the principal provisions of the plans being valued. The most recent plan change reflected in this valuation was effective on January 1, 2016. Unless otherwise described below under Subsequent Events, assumptions were selected based on information known as of the measurement date.

#### Changes in assumptions

Rates of mortality were changed from separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, using Scale MP-2014 with generational projection) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, using Scale MP-2014 with generational projection) to separate rates for non-annuitants (based on RP-2015 "Employees" table without collar or amount adjustments, using Scale MP-2015 with generational projection) and annuitants (based on RP-2015 or amount adjustments, using Scale MP-2015 with generational projection) and annuitants (based on RP-2015 "Healthy Annuitants" table without collar or amount adjustments, using Scale MP-2015 with generational projection) because recent experience evidenced by the Society of Actuaries' study that produced the MP-2015 projection scale indicates that longevity has not been as aggressive as MP-2014 suggested.

The discount rate was changed from 4.00% to 4.30% to reflect current market conditions.

Per capita claims cost assumptions were revised to better reflect plan sponsor expectations for the future.

## **Changes in methods**

None.

### Changes in benefits valued

The 2016 employer subsidy caps for the non-grandfathered pre-65 retirees was increased.

### Subsequent events

There have been no subsequent events since the last actuarial valuation.



## Actuarial certification

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. However, please note the information discussed below regarding this valuation.

## Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, assets, and sponsor accounting policies and methods provided by the Company and other persons or organizations designated by the Company. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by the Company, may produce materially different results that could require that a revised report be issued.

## Measurement of benefit obligations, plan assets and balance sheet adjustments

#### Census date/measurement date

The measurement date is December 31, 2015. The benefit obligations were measured as of the Company's December 31, 2015 fiscal year end and are based on participant data as of the census date, January 1, 2015. We are not aware of any significant changes in the plan demographics during the year. We have projected forward benefit obligations to the end of the year, adjusting for benefit payments, expected growth in benefit obligations, changes in key assumptions and plan provisions, and any significant changes in plan demographics that occurred during the year.

This is the same data that was used for the calculation of the Net Periodic Postretirement Benefit Cost/(Income) for the fiscal year ending December 31, 2016.

#### Plan assets and balance sheet adjustments

Information about the fair value of plan assets was furnished to us by the Company. The Company also provided information about the general ledger account balances for the other postretirement benefit plans cost at December 31, 2015, which reflect the expected funded status of the plans before adjustment to reflect the funded status based on the year-end measurements. Towers Watson used information supplied by the Company regarding postretirement benefit asset, postretirement benefit liability and amounts recognized in accumulated other comprehensive income as of December 31, 2015. This data was reviewed for reasonableness and consistency, but no audit was performed.



Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for tax effects. Any tax effects in AOCI should be determined in consultation with the Company's tax advisors and auditors.

## Assumptions and methods under U.S. GAAP

As required by U.S. GAAP, the actuarial assumptions and methods employed in the development of the other postretirement benefit cost and other financial reporting have been selected by the Company. Towers Watson has concurred with these assumptions and methods, except for the expected rate of return on plan assets selected as of January 1, 2016. Evaluation of the expected return assumption was outside the scope of Towers Watson's assignment and would have required substantial additional work that we were not engaged to perform. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions and methods used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the December 31, 2015 measurement date will change the results shown in this report.

## Nature of actuarial calculations

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). 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, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), 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 such future measurements. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

See Basis for Valuation in Section 1 above for a discussion of any material events that have occurred after the valuation date that are not reflected in this valuation.

## Limitations on use

This report is provided subject to the terms set out herein and in our engagement letter dated November 12, 2013 and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of the Company and its auditors in connection with our actuarial valuation of the other postretirement benefit plans as described in Purposes of Valuation above. It is not intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. The Company may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require the Company to provide them this report, in which case the Company will use best efforts to notify Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Towers Watson's prior written consent. Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

## **Professional qualifications**

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc.

Jack Roli

Zach Robinson, F.S.A., E.A. Valuation Actuary January 26, 2016

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Trevor Fuhrman, F.S.A., E.A. Valuation Actuary January 26, 2016

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Kristopher Zelkin, F.S.A., M.A.A.A. Pricing Specialist January 26, 2016 Towers Watson

The Pricing Specialist is responsible for developing and/or determining the reasonableness of retiree welfare plan trend and participation assumptions as well as assumed per capita claims costs (including the aging/morbidity assumption if applicable). The Valuation Actuary is responsible for other aspects of the valuation (e.g., developing and/or reviewing the reasonableness of other valuation assumptions and methods, ensuring that the valuation model reasonably reflects the substantive plan and actual plan operation, preparing demographic data, performing the valuation, implementing the correct accounting or funding calculations, etc.).

http://natct.internal.towerswatson.com/clients/608860/2015FundingValuation/Documents/Questar Postretirement Welfare Plan 2015 Year-End Disclosure Report.docx

TOWERS WATSON 7

# Section 2: Consolidated accounting exhibits

## 2.1 Disclosed benefit cost

	All monetary amounts shown		
Fis	cal Year Ending	12/31/2015	12/31/2014
А	Disclosed Benefit Cost		
~	1 Employer service cost	573,076	590,505
	2 Interest cost	3,515,692	3,813,594
	3 Expected return on assets	(3,150,886)	(3,020,083)
	4 Subtotal	937,882	1,384,016
	5 Net prior service cost/(credit) amortization	0	0
	6 Net loss/(gain) amortization	1,152,415	696,780
	7 Subtotal	1,152,415	696,780
	8 Net periodic postretirement benefit cost/(income)	2,090,297	2,080,796
	9 Curtailments	0	0
	10 Settlements	0	0
	11 Special/contractual termination benefits	0	0
	12 Disclosed benefit cost	2,090,297	2,080,796
В	Assumptions Used to Determine Benefit Cost <sup>1</sup>		
	1 Discount rate	4.000%	4.700%
	2 Long-term rate of return on assets	7.000%	7.250%
	3 Current health care cost trend rate	7.500%	8.000%
	4 Ultimate health care cost trend rate	4.500%	4.500%
	5 Year of ultimate trend rate	2021	2021
С	Effect of 1% Increase in Health Care Cost Trend Rates		
	1 Employer service cost	573,076	590,505
	2 Interest cost	3,538,365	3,842,960
	3 Total	4,111,441	4,433,465
	4 Amount change	22,673	29,366
	5 Percentage change	0.555%	0.667%

<sup>&</sup>lt;sup>1</sup> These assumptions were used to calculate Net Periodic Postretirement Benefit Cost/(Income) as of the beginning of the year. Rates are expressed on an annual basis where applicable. See Appendix A for interim measurements, if any.

Fis	cal Year Ending	12/31/2015	12/31/2014
D	Effect of 1% Reduction in Health Care Cost Trend Rates		
	1 Employer service cost	573,076	590,505
	2 Interest cost	3,494,212	3,785,907
	3 Total	4,067,288	4,376,412
	4 Amount change	(21,480)	(27,687)
	5 Percentage change	(0.525%)	(0.629%)



## 2.2 Balance sheet asset/(liability)

Fiscal	Year Ending	12/31/2015	12/31/2014
A De	evelopment of Balance Sheet Asset/(Liability)		
	<ol> <li>Accumulated postretirement benefit obligation (APBO)</li> </ol>	(86,032,861)	(90,834,854)
	2 Fair value of assets (FVA) <sup>1</sup>	44,098,002	47,046,899
-	3 Net balance sheet asset/(liability)	(41,934,859)	(43,787,955)
B Cu	Irrent and Noncurrent Allocation		
	1 Noncurrent asset	0	0
	2 Current liability	(11,897)	0
	3 Noncurrent liability	(41,922,962)	(43,787,955)
	4 Net balance sheet asset/(liability)	(41,934,859)	(43,787,955)
C Re	conciliation of Net Balance Sheet Asset/(Liability)		
	<ol> <li>Net balance sheet asset/(liability) at end of prior fiscal year</li> </ol>	(43,787,955)	(42,457,000)
	2 Employer service cost	(573,076)	(590,505)
	3 Interest cost	(3,515,692)	(3,813,594)
	4 Expected return on assets	3,150,886	3,020,083
	5 Plan amendments	(197,548)	0
	6 Actuarial gain/(loss)	2,059,858	(2,043,342)
	7 Employer contributions	928,668	2,096,403
	8 Benefits paid directly by the Company <sup>2</sup>	0	0
	9 Medicare Part D subsidy on benefits paid during the year	0	0
1	0 Acquisitions/divestitures	0	0
1	1 Curtailments	0	0
1	2 Settlements (if settled using corporate cash)	0	0
1	3 Special/contractual termination benefits	0	0
1	4 Net balance sheet asset /(liability) at end of current fiscal year	(41,934,859)	(43,787,955)
D As	sumptions and Dates Used at Disclosure		
	1 Discount rate	4.300%	4.000%
	2 Current health care cost trend rate	7.000%	7.500%
	3 Ultimate health care cost trend rate	4.500%	4.500%
	4 Year of ultimate trend rate	2021	2021
	5 Census date	01/01/2015	01/01/2014

<sup>1</sup> Excludes receivable contributions.

<sup>2</sup> Net of retiree contributions.

Fiscal Year Ending	12/31/2015	12/31/2014
E Effect of 1% Increase in Health Care Cost Trend Rates		
1 Accumulated postretirement benefit obligation (APBO)	86,582,853	91,598,434
2 Amount change	549,992	763,580
3 Percentage change	0.639%	0.841%
F Effect of 1% Reduction in Health Care Cost Trend Rates		
1 Accumulated postretirement benefit obligation (APBO)	85,511,911	90,115,071
2 Amount change	(520,950)	(719,783)
3 Percentage change	(0.606%)	(0.792%)



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## 2.3 Accumulated other comprehensive (income)/loss

		All monetary amounts s	shown in US Dollars	
Fis	cal \	/ear Ending	12/31/2015	12/31/2014
Α	Ac	cumulated Other Comprehensive (Income)/Los	S	
	1	Net prior service cost/(credit)	197,548	0
	2	Net loss/(gain)	14,725,289	17,937,562
	3	Accumulated other comprehensive (income)/loss <sup>1</sup>	14,922,837	17,937,562
В		velopment of Accumulated Other mprehensive (Income)/Loss (AOCI)		
	1 2	AOCI at prior fiscal year end Amounts amortized during the year	17,937,562	16,591,000
		a Net prior service (cost)/credit	0	0
		b Net (loss)/gain	(1,152,415)	(696,780)
	3	Occurring during the year		
		a Net prior service cost/(credit)	197,548	0
		b Net loss/(gain)	(2,059,858)	2,043,342
	4	AOCI at current fiscal year end	14,922,837	17,937,562

<sup>&</sup>lt;sup>1</sup> Amount shown is pre-tax and should be adjusted by plan sponsor for tax effects.

## 2.4 Additional disclosure information

	All monetary amounts shown in US Dolla	ars	
		12/31/2015	12/31/2014
А	Accumulated Postretirement Benefit Obligation (APBO)		
	1 Fully eligible actives	22,874,323	21,082,034
	2 Other actives	15,783,746	19,451,207
	3 Retirees, dependents and surviving spouses	47,374,792	50,301,613
	4 Accumulated postretirement benefit obligation	86,032,861	90,834,854

		Benefit Payments <sup>1</sup> including Medicare Part D Subsidy	Medicare Part D Subsidy
В	Expected Future Benefit Payments and Medicare Part D Subsidies		
	1 During fiscal year ending 12/31/2016	4,504,750	N/A
	2 During fiscal year ending 12/31/2017	4,467,099	N/A
	3 During fiscal year ending 12/31/2018	4,680,186	N/A
	4 During fiscal year ending 12/31/2019	4,836,643	N/A
	5 During fiscal year ending 12/31/2020	5,015,604	N/A
	6 During fiscal years ending 12/31/2021 through 12/31/2025	25,901,542	N/A
С	Expected Contributions during fiscal year ending December 31, 2016		
	1 Employer		0
	2 Plan participants		0
D	Expected Amortization Amounts during fiscal year ending December 31, 2016 <sup>2</sup>		
	1 Amortization of net prior service cost/(credit)		46,950
	2 Amortization of net loss/(gain)		941,526
	3 Total		988,476

<sup>&</sup>lt;sup>1</sup> Net of retiree contributions.

<sup>&</sup>lt;sup>2</sup> These amounts have been determined assuming there are no special events, plan amendments, assumption changes, or actuarial losses/(gains) during the upcoming fiscal year.

## 2.5 Changes in disclosed liabilities and assets

		All monetary amounts shown	in US Dollars	
Fis	ical Y	/ear Ending	12/31/2015	12/31/2014
Α		ange in Accumulated Postretirement Benefit igation (APBO)		
	1	APBO at prior fiscal year end	90,834,854	86,287,000
	2	Employer service cost	573,076	590,505
	3	Interest cost	3,515,692	3,813,594
	4	Actuarial loss/(gain)	(6,162,676)	1,928,820
	5	Plan participants' contributions	0	0
	6	Benefits paid from plan assets <sup>1</sup>	(2,925,633)	(1,785,065)
	7	Benefits paid from the Company <sup>1</sup>	0	0
	8	Medicare Part D subsidy	0	0
	9	Administrative expenses paid	0	0
	10	Plan change	197,548	0
	11	Acquisitions/(divestitures)	0	0
	12	Curtailments	0	0
	13	Settlements	0	0
	14	Special/contractual termination benefits	0	0
	15	APBO at current fiscal year end	86,032,861	90,834,854
в	Cha	ange in Plan Assets		
	1	Fair value of assets at prior fiscal year end	47,046,899	43,830,000
	2	Actual return on assets	(951,932)	2,905,561
	3	Employer contributions	928,668	2,096,403
	4	Plan participants' contributions	0	0
	5	Benefits paid <sup>1</sup>	(2,925,633)	(1,785,065)
	6	Administrative expenses paid	0	0
	7	Acquisitions/(divestitures)	0	0
	8	Settlements	0	0
	9	Fair value of assets at current fiscal year end	44,098,002	47,046,899

<sup>&</sup>lt;sup>1</sup> Net of retiree contributions.

#### 2.6 **Summary of net balances**

		Amortization Amount in	Effect of		Net Amount at	Remaining Amortization	Amortization Amount in
	12/31/2014	2015	Curtailments	Other Events <sup>1</sup>	12/31/2015	Period	2016
	0	0	0	197,548	197,548	4.20760	46,950
Total	0	0	0	197,548	197,548		46,950

#### All monetary amounts shown in US Dollars

#### All monetary amounts shown in US Dollars

3 Reconciliation of Net Loss/(Gain) <sup>2</sup> Net Amount at 12/31/2014	Amortization Amount in 2015	Experience Loss/(Gain)	Effect of Curtailments	Effect of Settlements	Net Amount at 12/31/2015	Amortization Amount in 2016
17,937,562	(1,152,415)	(2,059,858)	0	0	14,725,289	(941,526)



The 2016 employer subsidy caps for the non-grandfathered pre-65 retirees was increased. See Appendix A for description of amortization method. 1

<sup>2</sup> 

## 2.7 Reconciliation with prior year's disclosure

		All	nonetary amounts sho	wn in US Dollars			
		Accumulated Postretirement Benefit Obligation (i)	Fair Value of Assets (ii)	Net Balance Sheet Asset / (Liability) (i+ii) (iii)	Net Prior Service Cost / (Credit) (iv)	Net Loss / (Gain) (v)	Accumulated Other Comprehensive (Income)/Loss (iv+v) (vi
1	At December 31, 2014	(90,834,854)	47,046,899	(43,787,955)	0	17,937,562	17,937,562
2	Employer service cost	(573,076)		(573,076)			
3	Interest cost	(3,515,692)		(3,515,692)			
4	Expected asset return		3,150,886	3,150,886			
5	Amortizations				0	(1,152,415)	(1,152,415
6	Experience loss/gain	6,162,676	(4,102,818)	2,059,858		(2,059,858)	(2,059,858
7	Employer contributions		928,668	928,668			
8	Plan participants' contributions	0	0	0			
9	Benefits paid <sup>1</sup>	2,925,633	(2,925,633)	0			
10	Medicare Part D subsidy	0		0			
11	Administrative expenses paid	0	0	0			
12	Plan changes	(197,548)		(197,548)	197,548		197,548
13	Acquisitions/divestitures	0	0	0			
14	Curtailments	0		0	0	0	0
15	Settlements	0	0	0		0	0
16	Special/contractual termination benefits	0		0			
17	Other disbursements	0	0	0			
18	At December 31, 2015	(86,032,861)	44,098,002	(41,934,859)	197,548	14,725,289	14,922,837

<sup>1</sup> Net of retiree contributions.

## 2.8 Development of assets for benefit cost

	All monetary amounts shown in US Dollars		
		Fair Value	Market-Related Value
Α	Reconciliation of Assets		
	1 Plan assets at 12/31/2014	47,046,899	47,046,899
	2 Investment return	(951,932)	(951,932)
	3 Employer contributions	928,668	928,668
	4 Plan participants' contributions	0	0
	5 Benefits paid	(2,925,633)	(2,925,633)
	6 Administrative expenses paid	0	0
	7 Acquisitions/(divestitures)	0	0
	8 Settlements	0	0
	9 Plan assets at 12/31/2015	44,098,002	44,098,002
в	Rate of Return on Invested Assets		
	1 Weighted invested assets	46,048,416	
	2 Rate of return	(2.067%)	
С	Investment Loss/(Gain)		
	1 Actual return	(951,932)	
	2 Expected return	3,150,886	
	3 Loss/(Gain)	4,102,818	



## 2.9 Preliminary summary and comparison of benefit cost and cash flows

Fis	scal Year Ending	12/31/2016	12/31/2015
Δ	Total Benefit Cost		
~	1 Employer service cost	442,863	573,076
	2 Interest cost	3,602,561	3,515,692
	3 Expected return on assets	(2,929,194)	(3,150,886)
	4 Subtotal	1,116,230	937,882
	5 Net prior service cost/(credit) amortization	46,950	0
	6 Net loss/(gain) amortization	941,526	1,152,415
	7 Subtotal	988,476	1,152,415
	8 Net periodic postretirement benefit cost/(income)	2,104,706	2,090,297
	9 Curtailments	0	0
	10 Settlements	0	0
	11 Special/contractual termination benefits	0	0
	12 Total benefit cost	2,104,706	2,090,297
в	Assumptions <sup>1</sup>		
	1 Discount rate	4.300%	4.000%
	2 Rate of return on assets	7.000%	7.000%
	3 Current health care cost trend rate	7.000%	7.500%
	4 Ultimate health care cost trend rate	4.500%	4.500%
	5 Year of ultimate trend rate	2021	2021
	6 Census date	01/01/2015	01/01/2014
С	Fair Market Value of Assets at Beginning of Year	44,098,002	47,046,899
D	Cash Flow <sup>2</sup>	Expected	Actual
	1 Employer contributions	0	928,668
	2 Plan participants' contributions <sup>3</sup>	0	0
	· ·		

3 Benefits paid from the Company

4 Benefits paid from plan assets<sup>3</sup>



0

2,925,633

0

4,504,750

<sup>&</sup>lt;sup>1</sup> These assumptions were used to calculate Net Periodic Postretirement Benefit Cost/(Income) as of the beginning of the year. Rates are expressed on an annual basis where applicable. For assumptions used for interim measurement periods, if any, refer to Appendix A.

Net of Medicare Part D subsidy.

<sup>&</sup>lt;sup>3</sup> Over the fiscal year.

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## Section 3: Data exhibits

## 3.1 Plan participant data

All monetary amounts shown in US Dollars			
Cer	nsus Date	01/01/2015	01/01/2014
А	Participating Employees		
	1 Number		
	a Fully eligible	386	345
	b Other	360	428
	c Total participating employees	746	773
	2 Average age	54.91	54.06
	3 Average future working life		
	a to full retirement age	6.50221	7.00367
	b to full eligibility age	4.20760	4.42602
в	Retirees, Dependents and Surviving Spouses		
	1 Number with life benefits	1,386	1,412
	2 Average age of employees with life benefits	72.32	72.03
	3 Number with medical benefits	913	930
	4 Average age of employees with medical benefits	73.52	73.38



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# Appendix A – Statement of consolidated actuarial assumptions and methods

## **Plan Sponsor**

**Questar Corporation** 

## **Statement of Assumptions**

The assumptions disclosed in this Appendix are for the fiscal year ending December 31, 2015 financial reporting, and the preliminary fiscal year 2016 benefit cost.

## Assumptions and methods for other postretirement benefit cost purposes

Actuarial Assumptions and Methods — Other Postretirement Benefit Cost		
Economic Assumptions		
Discount rate	4.30%	
Expected rate of return on assets	7.00%	

The return on assets shown above is net of investment expenses assumed to be paid from the trust.

Demographic and Other Assumptions				
Inclusion date	The valuation date coincident with or next following the date on which the employee becomes a participant.			
New or rehired employees	It was assumed there will be no new or rehired employees.			
Participation Assumptions for Plan	Current Retirees	Future Retirees		
	Current Retirees Based on valuation census data	Future Retirees 100% of eligible current actives.		
Plan	Based on valuation			

## **Demographic Assumptions** Mortality: Separate rates for non-annuitants (based on RP-2015 • Healthy mortality rates "Employees" table without collar or amount adjustments, using Scale MP-2015 with generational projection) and annuitants (based on RP-2015 "Healthy Annuitants" table without collar or amount adjustments, using Scale MP-2015 with generational projection).

Disable life mortality rates

## **Disability rates**

None. None.

Termination (not due to disability or retirement) rates Rates varying by age.

Percentage leaving	g during the year
Attained Age	Rate
20	15.00%
25	11.25%
30	8.25%
35	5.75%
40	3.25%
45	2.35%
50	1.85%
55	1.20%
60	0.00%

#### Retirement

Rates varying by age. The average retirement age is 62.

Percentage retiring during the year		
Attained Age	Rate	
<55	0.00%	
55	15.00%	
56	7.00%	
57	7.00%	
58	7.00%	
59	10.00%	
60	10.00%	
61	10.00%	
62	20.00%	
63	20.00%	
64	20.00%	
>=65	100.00%	



## **Trend Rates**

Health care cost trend rate:

7.00% in 2016, reducing 0.50% per year, reaching 4.50% in 2021 and after.

### Per Capita Claims Costs

Basis for per capita claim cost assumptions

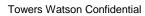
Per capita claims costs were developed using premiums and enrollment information for the 2016 plan year. Average per capita rates were distributed by age in accordance with the Towers Watson AGEDIST model. The average annual per capita health rates for 2016 are shown below.

	Average 2016 per capita claims cost for pre-1993 retirees	
	Age	Medical
Overall average	< 65	8,987
	>=65	2,976
<ul> <li>By age group</li> </ul>	55-59	7,831
	60-64	9,691
	65-69	2,637
	70-74	2,919
	75-79	3,142
	80-84	3,237
	85-89	3,231
	90-94	3,027
	>=95	2,832



Additional Assumptions	
Administrative expenses	Administrative expenses are included in per capita costs.
Excise tax Cash flow	There was no impact to obligations or expense from the potential for excise tax payments. The Company has demonstrated a commitment that costs and retiree contributions will be managed in such a way that the Excise Tax threshold will not be the obligation of the company.
• Timing of benefit payments	Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year.
<ul> <li>Amount and timing of contributions</li> </ul>	Contributions are assumed to be made throughout the year and, on average, at mid-year.
Funding policy	Questar Corporation does not have a formal funding policy.

Methods – Other Postretirement Benefit Cost and Funded Position				
Census date	January 1, 2015			
Measurement date	December 31, 2015			
	The benefit obligations are based on census data collected as of January 1, 2015. We have projected forward the benefit obligations to December 31, 2015, adjusting for benefit payments, expected growth in the benefit obligations, changes in key assumptions, and plan provisions, and any significant changes in the plan population. We are not aware of any significant changes in the plan demographics since the census date.			
Service cost and accumulated postretirement benefit obligation	Costs are determined using the Projected Unit Credit Cost Method. The annual service cost is equal to the present value of the portion of the projected benefit attributable to service during the upcoming year, and the Accumulated Postretirement Benefit Obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the measurement date. Service from hire date through the expected full eligibility date is counted in allocating costs. Costs are allocated pro rata over the service period described above.			
Market-related value of assets	Fair value of assets.			
Amortization of unamortized amounts:				
<ul> <li>Recognition of past service cost/(credit)</li> </ul>	Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Postretirement Benefit Cost/(Income) in the year first recognized and every year thereafter until such time as it is fully amortized. The annual amortization payment is			



	determined in the first year as the increase in Accumulated Postretirement Benefit Obligation due to the plan change divided by the average remaining service period to full eligibility for participating employees expected to receive benefits under the plan.
	However, when the plan change reduces the Accumulated Postretirement Benefit Obligation, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.
<ul> <li>Recognition of gains or losses</li> </ul>	Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of Net Periodic Postretirement Benefit Cost/(Income) for a year.
	If, as of the beginning of the year, that net gain or loss exceeds 10% of the greater of the projected benefit obligation and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period of participating employees expected to receive benefits under the plan.
	Under this methodology, the gain/loss amounts recognized in AOCI are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the average expected remaining service of active participants expected to benefit under the plan over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized.
Benefits not valued	Contributions made by the Company to current retiree's Health Savings Accounts (HSA) in 2012 through 2015 were expensed directly by the Company. No future obligations for this benefit were included in the Accumulated Postretirement Benefit Obligation (APBO) at December 31, 2015.
	All other benefits described in the Plan Provisions section of this report were valued. Towers Watson has reviewed the plan provisions with Questar Corporation and, based on that review, is not aware of any other significant benefits required to be valued that were not.



#### **Data Sources**

Questar Corporation furnished participant data as of January 1, 2015, and claims data as of January 1, 2016. Data were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date. We are not aware of any other errors or omissions in the data that would have a significant effect on the results of our calculations.

#### Assumptions Rationale - Significant Economic Assumptions

Discount rate	As required by U.S. GAAP, the discount rate was chosen by the plan sponsor based on market information on the measurement date. Cash flows were matched to the Towers Watson Rate:Link 40:90 yield curve as of December 31, 2015.		
Expected return on plan assets	We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions.		
Rates of increase in compensation, National Average Wages (NAW) and Consumer Price Index (CPI)	Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP, they represent an estimate of future experience.		
Claims cost trend rates	Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP, they represent an estimate of future experience. Trend is only applicable to retirements prior to January 1, 1993.		
Per capita claims costs	Per capita claims cost assumptions were developed using historical claims and enrollment information over the period 2013- 2015. Raw per capitas were developed and adjusted for completion (i.e., conversion from a paid to an incurred basis), plan changes, and trend.		
Assumptions Rationale - Significant Demographic Assumptions			

Healthy Mortality	Assumptions were selected by the plan sponsor and, as required by U.S. GAAP, represents a best estimate of future experience, and reflects the most recent recommendations made by the Society of Actuaries.
Termination	Termination rates were based on an experience study conducted in 2011. Annual consideration is given as to whether any conditions have changed that would be expected to produce different results in the future, or if experience differs significantly from expected.



Retirement	Retirement rates were based on an experience study conducted in 2011. Annual consideration is given as to whether any conditions have changed that would be expected to produce different results in the future, or if experience differs significantly from expected.		
Participation:			
Participants	Assumed participation rates are based on the prior actuary's assumption. We believe that the selected assumption does not significantly conflict with what would be reasonable based on the current plan design and future expectations of plan participation. Given the lack of credible experience for participation in this plan, there is not a different assumption that the plan sponsor believes to be a better estimate. However, annual consideration is given if experience differs significantly from expected.		
Covered spouses	Assumed coverage rates for spouses reflect historical experience.		
Marital Assumptions:			
Percent married	The assumed percentage married is based on an experience study conducted in 2011.		
Spouse age	The assumed age difference for spouses is based on general population statistics of the age difference for married individuals of retirement age.		

Source of Prescribed Methods	
Accounting methods	The methods used for accounting purposes as described in Appendix A are "prescribed methods set by another party," as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.



## **Changes in Assumptions and Methods**

Change in assumptions since prior valuation	Rates of mortality were changed from separate rates for non- annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, using Scale MP-2014 with generational projection) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, using Scale MP-2014 with generational projection) to separate rates for non-annuitants (based on RP-2015 "Employees" table without collar or amount adjustments, using Scale MP-2015 with generational projection) and annuitants (based on RP- 2015 "Healthy Annuitants" table without collar or amount adjustments, using Scale MP-2015 with generational projection) because recent experience evidenced by the Society of Actuaries' study that produced the MP-2015 projection scale indicates that longevity has not been as aggressive as MP- 2014 suggested. The discount rate was changed from 4.00% to 4.30% to reflect current market conditions. Per capita claims cost assumptions were revised to better reflect plan sponsor expectations for the future.
Change in methods since prior valuation	There have been no changes in methods since the prior valuation.



# Appendix B – Summary of principal other postretirement benefit plan provisions

Substantive Plan Provisions						
Covered employees	Former employees who are receiving a normal or early retirement benefit or who received a special lump sum retirement benefit in 1991, 1995, or 1998 are generally eligible for retiree medical benefits upon retirement. Employees hired o last rehired on or after January 1, 1997 are not eligible for retiree medical benefits.					
Participation date	Date of becoming a covered employee.					
Definitions						
Eligibility service	Years and months of service as a covered participant.					
Benefit service	Years and months of service as a covered employee.					
Covered pay	Assumed plan compensation for the year beginning on the valuation date was determined as wages for purposes of income tax withholding, including base salary, overtime, bonuses, commissions and shift differential. Compensation also includes deemed compensation for qualifying periods of military service. Compensation also includes salary reduction contributions to the Questar Corporation Employee Investment Plan, Cafeteria Plan, and IRC Section 132(f)(4) transportation benefits.					
	Compensation does not include reimbursements or other expense allowances, fringe benefits, income from stock options, moving expenses, nonqualified deferred compensation, cash or stock signing/retention bonuses after January 1, 2003, or loan forgiveness. Compensation also does not include welfare benefits such as vacation sales, payment at termination for unused vacation or paid leave, and severance payments.					
Medical Benefits						
Eligibility	Retirement after age 55 with 10 years of service or after age 65 with 5 years of service.					
Survivor eligibility	Eligibility continues beyond death of retiree if the spouse is currently receiving benefits.					



#### **Retiree contributions**

#### **Retired**

After December 31, 1992

The costs of the postretirement benefit plan are shared by the Plan's sponsor and retirees as follows below:

Participants	Surviving Spouses				
20%	25%				

Participants retiring after December 31, 1992 have their benefits limited in two ways. First, the Company contribution for these retirees will not exceed a fixed dollar limit as follows:

Maximum Monthly Company Contribution				
	2016	2017 and Beyond		
Retiree or Surviving Spouse under age 65	\$322	\$283		
Retiree and Surviving Spouse under age 65	\$644	\$566		
Retiree or Surviving Spouse over age 65	\$134	\$134		
Retiree and Surviving Spouse over age 65	\$268	\$268		

Second, the retirees receive a percent of the Company maximum monthly contribution based on their years of service as follows:

Years of Service	Percent of Maximum Monthly Company Contribution
10-14	40%
15-19	60%
20-24	80%
25 or more	100%

Life Insurance Benefits	
Eligibility	Retirement after age 55 with 10 years of service or after age 65 with 5 years of service. Employees hired or last rehired on or after January 1, 1997 are not eligible for retiree life insurance.
Postretirement contributions	None.
Benefits	Retirees receive a life insurance benefit equal to 50% of their final salary up to a maximum amount of \$50,000.

#### **Future Plan Changes**

No future plan changes were recognized in determining postretirement welfare cost. Towers Watson is not aware of any future plan changes which are required to be reflected.

## Changes in Benefits Valued Since Prior Year

The 2016 employer subsidy caps for the non-grandfathered pre-65 retirees was increased.

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# Appendix C – Summary of key results by plan

## ASC 715 2015 OPEB Disclosure Information

Change in Benefit Obligation		<u>Medical</u>		<u>Life</u>		<u>Total</u>
Benefit obligation at the beginning of the year	\$	61,645,871	\$	29,188,983	\$	90,834,854
Service cost	Ψ	451,940	ψ	121,136	ψ	573,076
Interest cost		2,367,994		1,147,698		3,515,692
Assumption change		(3,524,006)		(993,478)		(4,517,484)
Plan Change		(3,324,000) 197,548		(993,478)		(4,317,404) 197,548
Experience loss (gain)		(1,900,365)		255,173		(1,645,192)
Benefits paid		(1,877,797)		(1,047,836)		(2,925,633)
Benefit obligation at the end of the year	\$	57,361,185	\$	28,671,676	\$	86,032,861
Benefit obligation at the end of the year	Ψ	57,501,105	ψ	20,071,070	ψ	00,032,001
Change in Plan Assets						
Fair value of plan assets at the beginning of period	\$	45,130,660	\$	1,916,239	\$	47,046,899
Return on assets		(977,215)		25,283		(951,932)
Employer contributions		928,668		0		928,668
Plan participants' contributions		0		0		0
Benefits paid		(1,877,797)		(1,047,836)		(2,925,633)
Fair value of plan assets at the end of period	\$	43,204,316	\$	893,686	\$	44,098,002
Funded Status and Prepaid (Accrued) Benefit Cost						
Funded status	\$	(14,156,869)	\$	(27,777,990)	\$	(41,934,859)
Unrecognized transition obligation/(asset)		0		0		0
Unrecognized prior service cost		197,548		0		197,548
Unrecognized net actuarial loss		9,826,967		4,898,322		14,725,289
(Accrued)/Prepaid pension cost	\$	(4,132,354)	\$	(22,879,668)	\$	(27,012,022)
Amounts Recognized in the Statement of Financial Position:						
Non-current assets	\$	0	\$	0	\$	0
Current liabilities		0		(11,897)		(11,897)
Non-current liabilities		(14,156,869)		(27,766,093)		(41,922,962)
Net amount recognized	\$	(14,156,869)	\$	(27,777,990)	\$	(41,934,859)
Amounts Recognized in Accumulated Other Comprehensive Income						
Unrecognized net initial obligation (asset)	\$	0	\$	0	\$	0
Prior service cost (credit)		197,548		0		197,548
Net actuarial loss (gain)		9,826,967		4,898,322		14,725,289
Total (before tax effects)	\$	10,024,515	\$	4,898,322	\$	14,922,837

Net Periodic Benefit Cost					
Service cost	\$	451,940	\$	121,136	\$ 573,076
Interest cost		2,367,994		1,147,698	3,515,692
Expected return on plan assets		(3,046,397)		(104,489)	(3,150,886)
Amortization of transition obligation		0		0	0
Amortization of prior service cost		0		0	0
Recognized net actuarial (gain)/loss		721,722		430,693	1,152,415
Total NPPBC	_	495,259		1,595,038	2,090,297
Amounts Expected to be Recognized in Net Periodic	: Cosi	t in the Coming	g Year		
Net initial obligation (asset) recognition	\$	0	\$	0	\$ 0
Prior service cost recognition		46,950		0	46,950
(Gain)/loss recognition		629,147		312,379	941,526
Total	\$	676,097	\$	312,379	\$ 988,476
Assumptions					
Discount rate		4.30%		4.30%	4.30%
Expected return on plan assets		7.00%		7.00%	7.00%
Rate of compensation increase		N/A		4.00%	4.00%
Health care trend rates:					
Current year's rate		7.00%		N/A	7.00%
Ultimate rate medical		4.50%		N/A	4.50%
Year ultimate is reached		2021		N/A	2021
Expected Benefit Payments					
2016	\$	3,579,902		924,848	4,504,750
2017	•	3,499,387		967,712	4,467,099
2018		3,665,956		1,014,230	4,680,186
2019		3,772,494		1,064,149	4,836,643
2020		3,902,126		1,113,478	5,015,604
2021 - 2025		19,616,951		6,284,591	25,901,542
Effect of a 1% Change in Health Care Trend Rate					
-		Minus 1%		Plus 1%	
Service cost		0		0	
Interest cost		(21,480)		22,673	
Total Change		(21,480)		22,673	
Accumulated postretirement benefit obligation		(520,950)		549,992	



### Estimated 2016 Net Periodic Benefit cost

Discount Rate: 4.30% Expected Return on Assets: 7.00%	Medical	<u>Life</u>	Total
Service Cost at BOY	334,638	89,967	424,605
Interest at 4.30%	14,389	3,869	18,258
Service Cost at EOY	349,027	93,836	442,863
APBO at BOY	57,361,185	28,671,676	86,032,861
Expected Benefit Payments for 2016	3,579,902	924,848	4,504,750
Interest Cost at 4.30%	2,389,563	1,212,998	3,602,561
Market Value of Plan Assets at BOY	(43,204,316)	(893,686)	(44,098,002)
Expected Benefit Payments for 2016	3,579,902	924,848	4,504,750
Expected Contributions for 2016	0	0	0
Expected Return at 7.00%	(2,899,006)	(30,188)	(2,929,194)
Amortizations			
Prior Service Cost	46,950	0	46,950
(Gain)/Loss	629,147	312,379	941,526
Net Amortization Amount	676,097	312,379	988,476
Estimated 2016 Net Pension Cost	515,681	1,589,025	2,104,706

## <u>Notes</u>

1. Contributions for the 2016 fiscal year are assumed to be \$0.

2. Results based on January 1, 2015 valuation data, projected to December 31, 2015.