

Questar Corporation

Report on RATE:Link Discount Rate Modeling Analysis for December 31, 2015 Year-End Disclosure

January 7, 2016

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Purpose and Actuarial Statement

This report documents the results of a discount rate modeling analysis for the Questar Corporation Retirement Plan, Supplemental Executive Retirement Plan (SERP), Postretirement Welfare Plans, and the Long-Term Disability Plan (LTD). The primary purpose of this modeling analysis is to support the discount rate selection for year-end disclosure purposes as of December 31, 2015.

The projected benefit payments for the Questar Corporation Retirement Plan are based on annuity cash flows to better reflect the interest sensitivities of the projected lump sum amounts.

Except as noted above, the results presented in this report are based on the data, assumptions, methods and plan provisions outlined in the actuarial valuation report providing information for disclosure purposes in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715) as of December 31, 2015 to be delivered in the next few weeks. Therefore, the descriptions of the data, assumptions, methods, plan provisions and limitations of the valuation and its use described therein should be considered part of this report.

The undersigned consultants with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions communicated in this report. There is no relationship between Questar Corporation and Towers Watson Delaware Inc. that impairs the objectivity of our work.



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Overview

Towers Watson's RATE:Link is a tool designed to assist plan sponsors in the selection of discount rates that reflect the characteristics of their employee benefit plans. The initial U.S. version of RATE:Link was developed in 1990. RATE:Link models have since been deployed in four other geographic regions: U.K., Eurozone, Canada and Japan. This document describes the RATE:Link methodology and specific aspects of its implementation by region.

The various global RATE:Link models incorporate hypothetical yield curves developed from corporate bond yield information within each regional market. Based on guidance provided by the Securities and Exchange Commission for U.S. GAAP filings and generally accepted practice as defined under IAS 19, the construction of these yield curves is based on yields of corporate bonds rated Aa quality.

Target yields are developed from bonds across a range of maturity points, and a curve is fitted to those targets. Spot rates (zero coupon bond yields) are developed from the yield curve and used to discount benefit payment amounts associated with each future year. Since corporate bonds are generally not available for maturities beyond 30 years, an assumption is generally made that spot rates will remain level (equal to the year 30 spot rate) beyond the 30-year point.

The present value of plan benefits is calculated by applying the spot/discount rates to projected benefit cash flows. A single discount rate is then developed to produce that same present value -- this represents the suggested discount rate.

Questar Corporation is responsible for the selection of the discount rate for the plan. However, we believe that the calculations and analysis described in this report support Questar Corporation's discount rate selection and are consistent with FASB Accounting Standards Codification 715-30-35-44.

- The discount rate developed using the RATE:Link model for the Questar Corporation Retirement Plan as of December 31, 2015 is 4.45%.
- The discount rate developed using the RATE:Link model for the Questar Corporation Supplemental Executive Retirement Plan as of December 31, 2015 is 3.09%.
- The discount rate developed using the RATE:Link model for the Questar Corporation Postretirement Welfare Plans as of December 31, 2015 is 4.33%.
- The discount rate developed using the RATE:Link model for the Questar Corporation Long-Term Disability Plan as of December 31, 2015 is 3.03%.

Modeling Methodology

Development of Yield and Spot Rate Curves

General Methodology

Yield curves are developed based on yield information for high quality corporate bonds across the full maturity spectrum. The included bonds are AA-rated corporate issues denominated in the currency of the applicable regional market.

Bonds with the following features are excluded:

- callable (unless the call includes a make whole provision)
- puttable
- convertible
- sinkable
- extendable
- perpetual
- refundable
- structured notes
- trust preferred or other hybrids
- special purpose
- variable coupon
- inflation-linked.

Bonds identified as private placement or Eurodollar are included only if robust pricing information is available, as evidenced by Bloomberg's publication of a Bloomberg Generic (BGN) composite price.

The yield curve development is based on a par bond convention, i.e., bond coupons are assumed equal to market yields. To most appropriately represent the actual bonds within this convention, for model purposes the maturities for bonds selling at premium or discount prices are adjusted so as to align their durations with that of a par bond with the same market yield. (For example, a 25-year bond with a coupon above the bond's market yield might be represented as a 23-year par bond, since the measured durations for these two bonds are equivalent.) This maturity adjustment approach is also applied to zero coupon bonds to the extent those are available in a given market.

The applicable bond universe is then categorized into groups based on the adjusted maturities. Yields are determined reflective of the mid-point of quoted bid and asked prices. We employ a partial market value weighting approach, based on the square root of each bond's market value. The weighted-average yield and maturity are then developed for each maturity group, and a yield curve is generated to best fit these targets. In establishing the target yields, the highest and lowest yielding bonds within each maturity group are not considered in order to avoid concerns about the reliability of the pricing data or credit rating related to each individual bond issue.

Once finalized, the yield curve is converted to spot rates for discounting purposes. In regions where yields are quoted on a semi-annual (coupon payment) basis the rate information is converted to an annualized basis, consistent with the discounting approach typically used in pension valuations. As noted earlier, the spot rate curve is generally assumed to remain level for maturities beyond 30 years.

Grades Considered

A bond is considered to be AA graded if it receives an AA (or equivalent) rating from either or both of the two primary rating agencies in a given geography. For this purpose, we reference the two agencies with the highest ratings coverage for bonds in each region. Those two agencies are Standard and Poor's and Moody's.

Grades are considered only if provided without significant qualification; we thus exclude ratings designated as estimated, provisional or preliminary.

Pricing Sources

The market for fixed income securities differs substantially from that for stocks, in that trading in any particular fixed income issue is likely to take place only sporadically throughout the trading day. In fact, some issues may not be traded at all on a given day. For this reason, quoted bond prices and yields represent estimates based on available market data, and prices quoted at the close of the trading day generally include adjustments to reflect capital market conditions at that particular point in time.

In developing the RATE:Link bond universe, we identify issues and their associated yields based on data from Bloomberg. Bloomberg provides bond prices and yields from a number of external sources as well as their own proprietary pricing models. In developing RATE:Link yields we primarily rely on the yields developed from Bloomberg Generic (BGN) prices. These represent a composite of price quotations from a number of sources. However, there may be insufficient information available for Bloomberg to develop a composite price for a given bond issue on a given trading day. When the primary pricing source is unavailable, we refer to a secondary pricing source.

We have analyzed available pricing data to ensure broad price coverage as well as accurate yield information, e.g., by testing an array of secondary pricing sources to assess their ability to match data from our primary pricing source. Based on this criterion, we have identified Bloomberg Valuation (BVAL) as the best available secondary pricing source. Thus, when a BGN yield is not available for a given issue, we use yield information from BVAL.

BVAL employs a matrix pricing methodology, which facilitates the publication of pricing results even under light trading conditions. Matrix pricing develops an estimate for a given bond based on reference to a broad array of pricing data for similar bonds, e.g., based on issuer, industry, maturity, features, and grade/sub-grade.

For each pricing source, we use the "mid-yield" developed from the mid-point of quoted bid and asked prices.

Minimum Dollar Amounts

- U.S. – A minimum amount outstanding of \$500 million is applied for bonds with less than 10 years to maturity and \$50 million for bonds with 10 or more years to maturity.

Higher dollar limits are applied at shorter maturities where bond data is more numerous in order to avoid analyzing large numbers of bonds with a relatively small weighting that have essentially no influence on discount rate results.

Subset of Bonds Utilized

The yield curves in RATE:Link are typically developed based on yields ranked from the 10th to 90th percentiles within each maturity group. Yield curve variations based on the 40th to 90th and the 60th to 90th percentile bond yields are also developed.

Application of Spot Rate Curve to Benefit Cash Flows

Projected benefit amounts are determined for each current participant based on current plan provisions and service, and (if applicable) projected pay. Valuation assumptions for annual rates of termination, retirement, death, disability, and assumed form of payment are then applied to these projected benefits to determine the expected amounts payable in each future year. These projected benefit payments are generally the same as those used to determine the plan's projected benefit obligation.

RATE:Link matches the plan's projected cash flow to spot rates to calculate an associated present value. A single equivalent discount rate is then determined that produces that same present value. The resulting discount rate is reflective of both the current interest rate environment and the plan's distinct liability characteristics.

Results of Analysis:

This section documents the RATE:Link model application for the Questar Corporation Retirement Plan, the Supplemental Executive Retirement Plan (SERP), the Postretirement Welfare Plans, and the Long-Term Disability Plan (LTD), including the following:

- summary of RATE:Link model results
- illustration of yield curve
- scatter chart indicating supporting bond yield information
- illustration of spot rates as applied to benefit cash flow
- detailed supporting information with regard to year-by-year benefit cash flow, yields and spot rates.

Summary of Results

Questar Corporation Retirement Plan

Measurement date:	31-Dec-2015
Referenced bonds:	Bloomberg Aa ¹
Specified percentiles:	40th-90th
Calculated discount rate	4.45%
Present value	761,321,485
Macaulay duration	15.61
Modified duration	14.95
Sensitivity to 100bp decrease	16.89

Questar Corporation SERP

Measurement date:	31-Dec-2015
Referenced bonds:	Bloomberg Aa ¹
Specified percentiles:	40th-90th
Calculated discount rate	3.09%
Present value	31,133,433
Macaulay duration	4.05
Modified duration	3.93
Sensitivity to 100bp decrease	4.13

Questar Corporation Post Retirement Welfare Plans

Measurement date:	31-Dec-2015
Referenced bonds:	Bloomberg Aa ¹
Specified percentiles:	40th-90th
Calculated discount rate	4.33%
Present value	85,293,902
Macaulay duration	13.30
Modified duration	12.75
Sensitivity to 100bp decrease	14.25

Questar Corporation Long-Term Disability

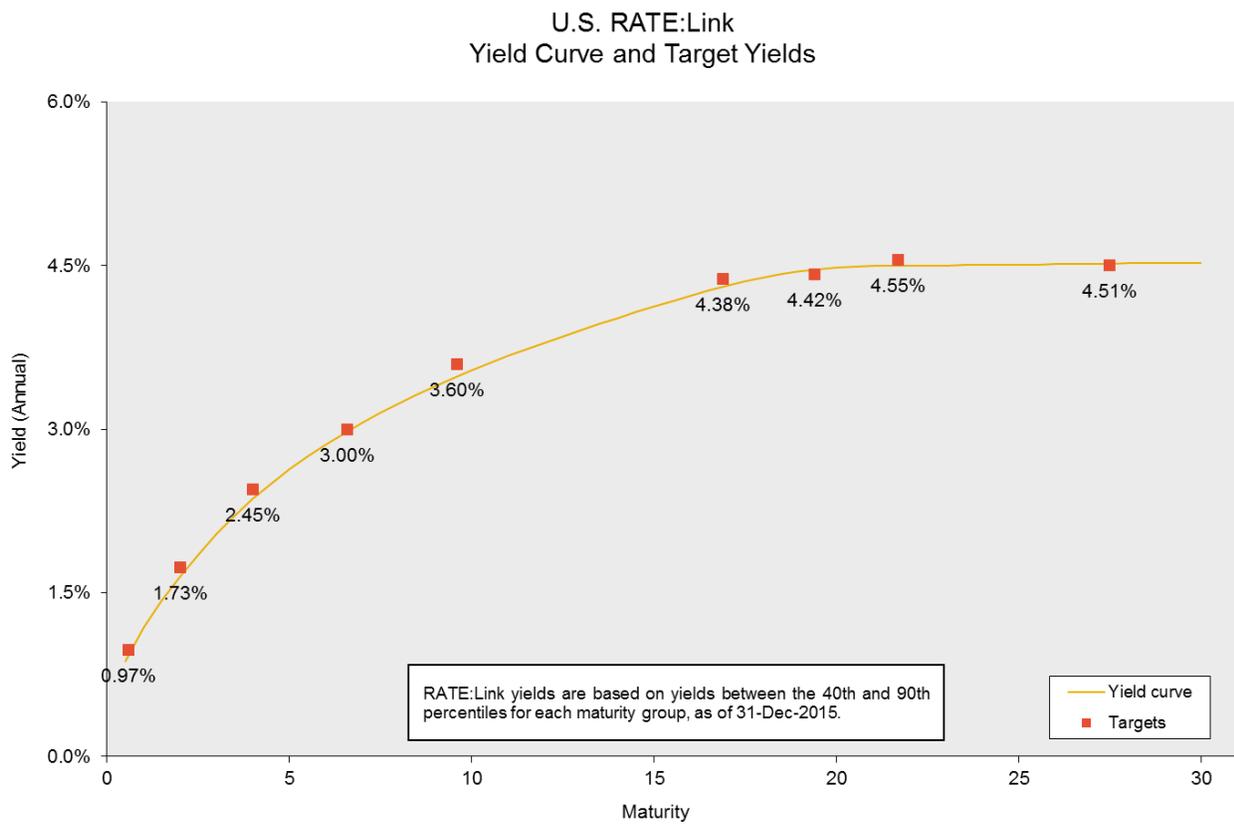
Measurement date:	31-Dec-2015
Referenced bonds:	Bloomberg Aa ¹
Specified percentiles:	40th-90th
Calculated discount rate	3.03%
Present value	582,286
Macaulay duration	3.67
Modified duration	3.56
Sensitivity to 100bp decrease	3.72

1. A portfolio of corporate bonds was selected, based on the following criteria:

- Aa graded bonds
- U.S. currency
- minimum amount outstanding:
 - \$500 million for maturities <10 years,
 - \$50 million all others.
- non-callable/non-puttable (unless there is a make-whole provision)

Development of Yield Curves

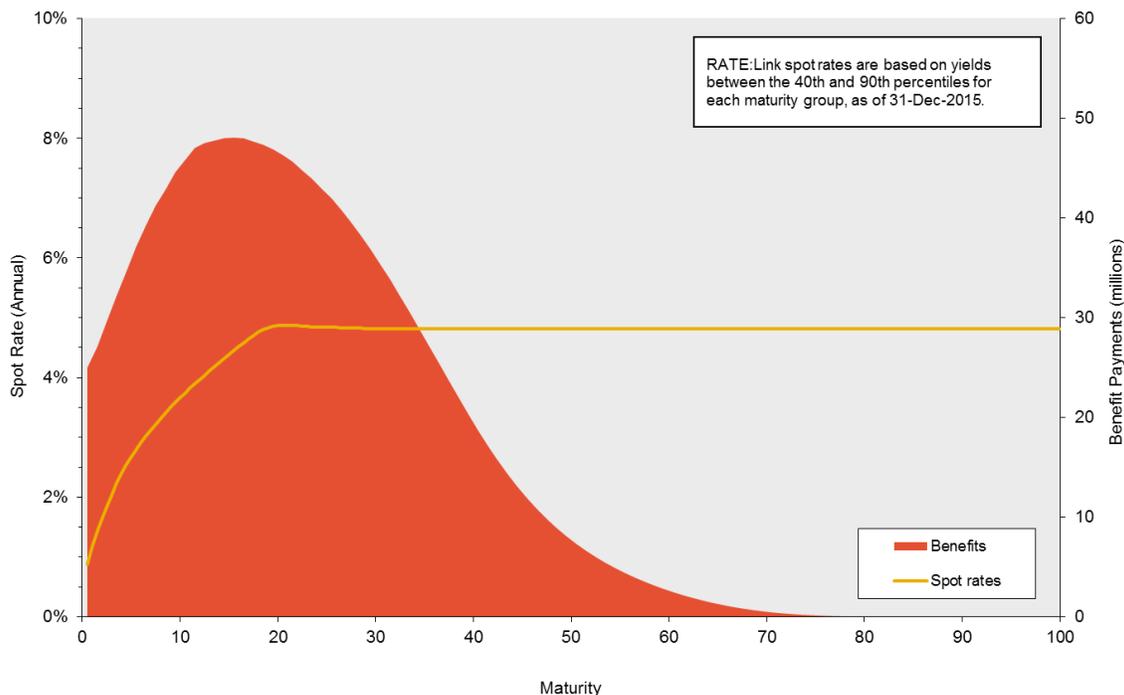
The following graph illustrates the target yields and fitted yield curve developed based on the 40th-90th percentile yields for the U.S. version of RATE:Link as of December 31, 2015:



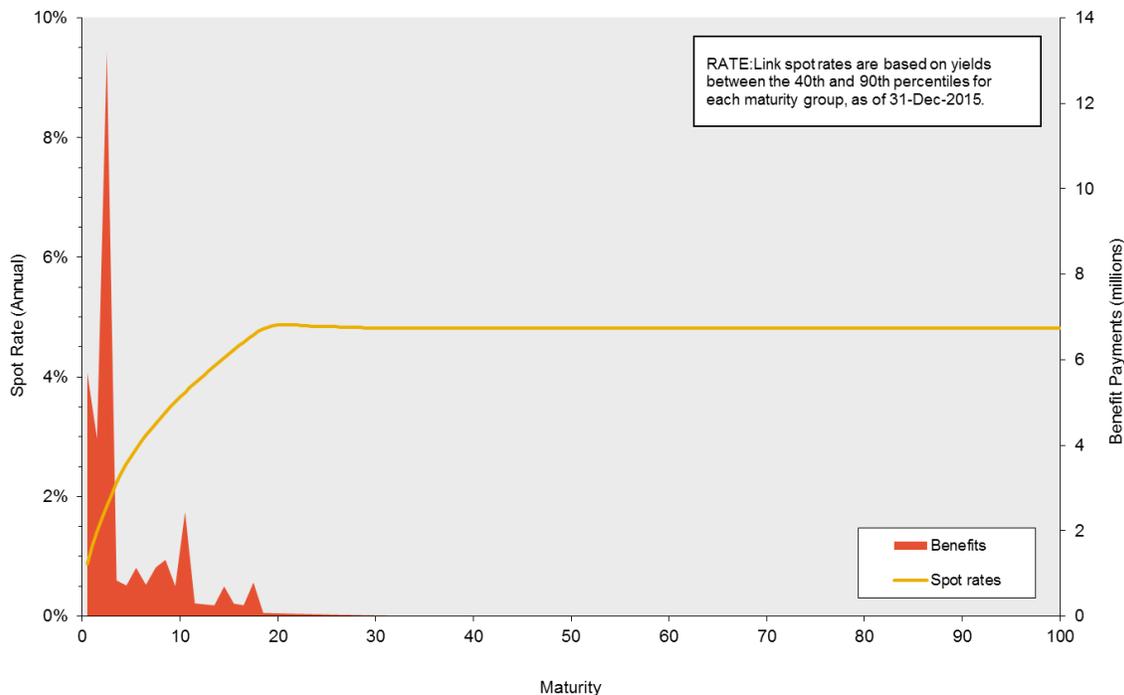
Application of Spot Rates to Projected Cash Flow

The following graph indicates the spot rates developed from the yield curve based on the 40th-90th percentile yields as of December 31, 2015, and their application to the plan's projected cash flow:

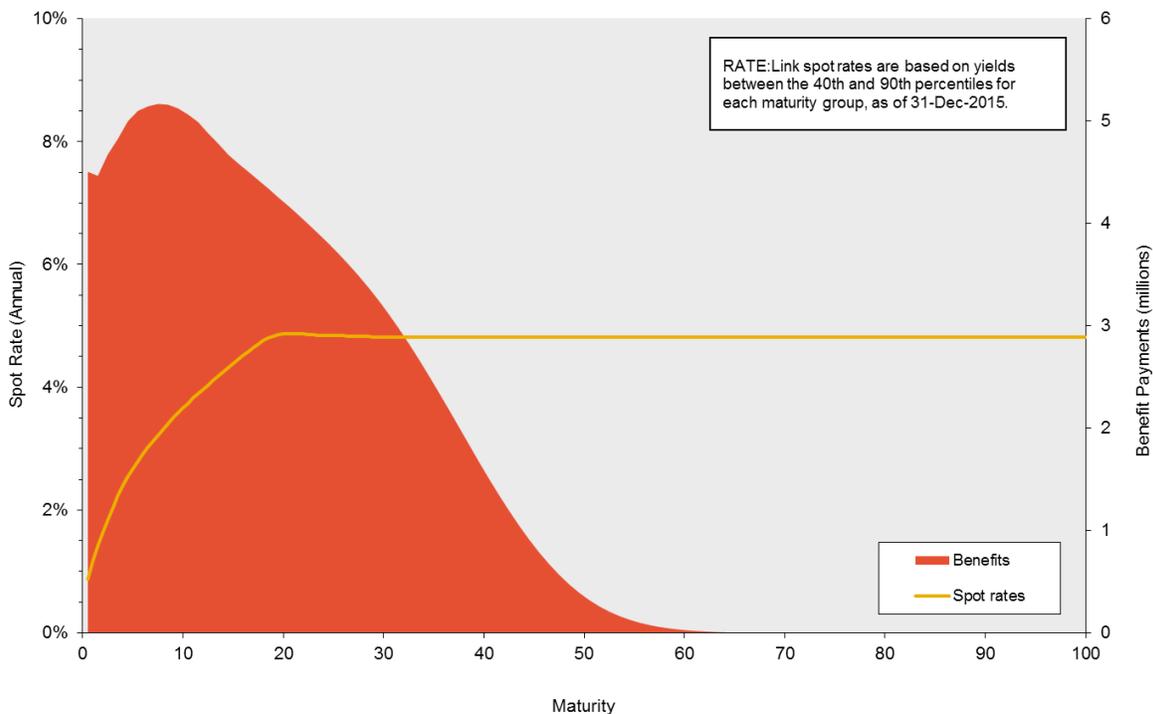
U.S. RATE:Link for Questar Corporation Retirement Plan
 Spot Rates and Benefit Payments



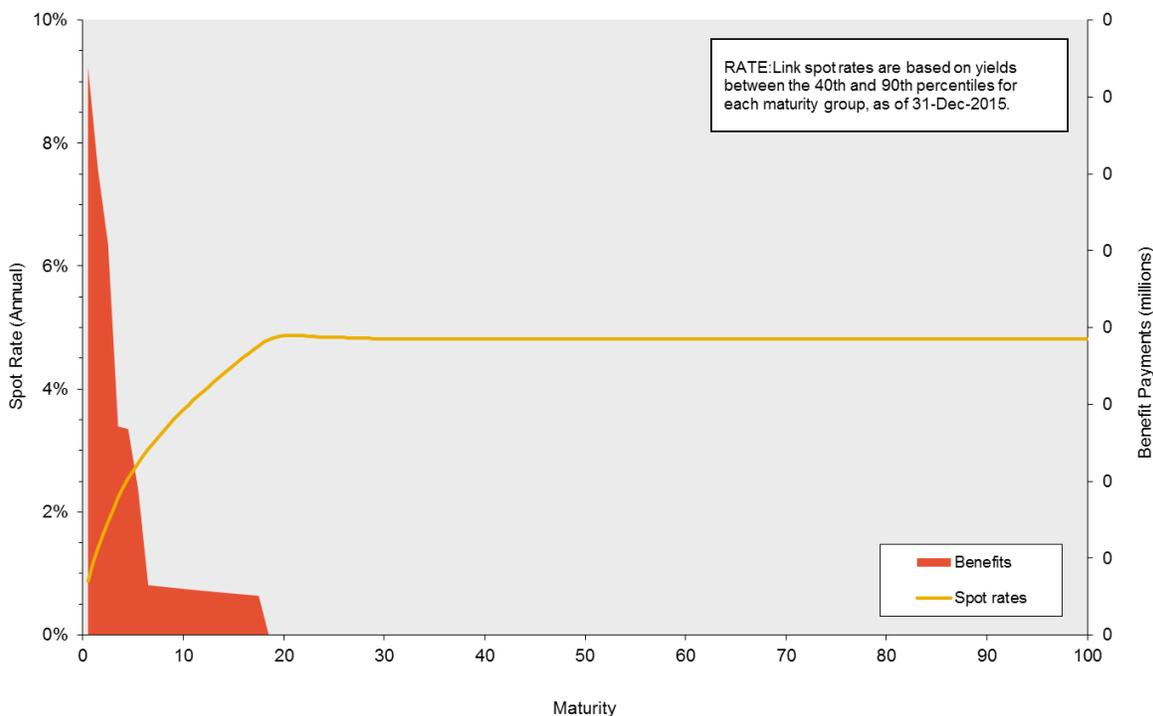
U.S. RATE:Link for Questar Corporation SERP
 Spot Rates and Benefit Payments



U.S. RATE:Link for Questar Corporation Post Retirement Welfare Plans
 Spot Rates and Benefit Payments



U.S. RATE:Link for Questar Corporation Long-Term Disability
 Spot Rates and Benefit Payments



Detail of Cash Flows, Yields and Spot Rates

Projected Cash Flows as of December 31, 2015 - Questar Corporation Retirement Plan

Year	Benefit Payments	PV of Benefit Payments*	Year	Benefit Payments	PV of Benefit Payments*
2016	24,983,611	24,490,429	2061	11,885,303	1,645,176
2017	27,006,709	25,346,667	2062	10,810,486	1,432,700
2018	29,610,006	26,606,988	2063	9,822,905	1,246,402
2019	32,189,375	27,693,496	2064	8,917,795	1,083,387
2020	34,612,267	28,510,400	2065	8,089,408	940,916
2021	37,113,642	29,269,470	2066	7,331,786	816,492
2022	39,241,470	29,630,199	2067	6,638,802	707,848
2023	41,240,165	29,813,826	2068	6,004,053	612,919
2024	42,825,659	29,642,129	2069	5,422,143	529,953
2025	44,580,892	29,543,512	2070	4,887,530	457,366
2026	45,800,314	29,059,614	2071	4,395,602	393,823
2027	47,018,863	28,562,849	2072	3,942,609	338,200
2028	47,514,606	27,635,324	2073	3,524,443	289,460
2029	47,760,212	26,595,716	2074	3,138,770	246,812
2030	48,002,386	25,592,711	2075	2,782,653	209,495
2031	48,056,204	24,530,757	2076	2,454,295	176,909
2032	47,996,081	23,457,152	2077	2,152,497	148,550
2033	47,662,479	22,302,531	2078	1,875,352	123,914
2034	47,338,671	21,208,093	2079	1,622,622	102,651
2035	46,883,181	20,109,934	2080	1,392,720	84,356
2036	46,311,706	19,019,206	2081	1,185,445	68,745
2037	45,651,158	17,949,874	2082	999,632	55,502
2038	44,755,464	16,848,595	2083	834,471	44,360
2039	43,918,414	15,829,686	2084	688,815	35,058
2040	42,906,511	14,806,652	2085	561,775	27,375
2041	41,965,007	13,865,291	2086	452,243	21,100
2042	40,793,850	12,904,596	2087	358,691	16,023
2043	39,540,949	11,975,808	2088	280,130	11,981
2044	38,217,380	11,082,218	2089	215,372	8,819
2045	36,815,570	10,221,281	2090	162,586	6,374
2046	35,303,261	9,384,186	2091	120,351	4,517
2047	33,816,567	8,606,357	2092	86,990	3,126
2048	32,136,436	7,830,609	2093	61,651	2,121
2049	30,516,213	7,119,287	2094	42,420	1,397
2050	28,799,885	6,432,868	2095	-	-
2051	27,091,888	5,793,769	2096	-	-
2052	25,396,694	5,200,045	2097	-	-
2053	23,662,654	4,638,755	2098	-	-
2054	21,967,422	4,123,111	2099	-	-
2055	20,284,905	3,645,247	2100	-	-
2056	18,656,789	3,209,955	2101	-	-
2057	17,115,917	2,819,488	2102	-	-
2058	15,666,771	2,470,914	2103	-	-
2059	14,311,663	2,161,107	2104	-	-
2060	13,051,707	1,886,954	2105	-	-
			Total	761,321,485	

* Discounted based on RATE:Link calculated discount rate.

Projected Cash Flows as of December 31, 2015 - Questar Corporation SERP

Year	Benefit Payments	PV of Benefit Payments*	Year	Benefit Payments	PV of Benefit Payments*
2016	5,692,604	5,613,647	2061	97	24
2017	4,157,460	3,976,744	2062	58	14
2018	13,193,403	12,241,136	2063	32	8
2019	836,952	753,236	2064	17	4
2020	719,269	627,895	2065	8	2
2021	1,132,686	959,115	2066	4	1
2022	734,459	603,245	2067	2	0
2023	1,139,371	907,730	2068	1	0
2024	1,318,624	1,019,009	2069	1	0
2025	702,597	526,658	2070	-	-
2026	2,436,456	1,771,522	2071	-	-
2027	300,699	212,073	2072	-	-
2028	276,462	189,127	2073	-	-
2029	254,653	168,979	2074	-	-
2030	697,571	448,991	2075	-	-
2031	293,029	182,947	2076	-	-
2032	256,962	155,614	2077	-	-
2033	787,500	462,590	2078	-	-
2034	78,005	44,446	2079	-	-
2035	71,684	39,619	2080	-	-
2036	65,621	35,179	2081	-	-
2037	59,725	31,057	2082	-	-
2038	54,003	27,239	2083	-	-
2039	48,462	23,710	2084	-	-
2040	43,126	20,466	2085	-	-
2041	38,026	17,504	2086	-	-
2042	33,201	14,825	2087	-	-
2043	28,680	12,422	2088	-	-
2044	24,495	10,291	2089	-	-
2045	20,653	8,416	2090	-	-
2046	17,176	6,789	2091	-	-
2047	14,068	5,394	2092	-	-
2048	11,347	4,220	2093	-	-
2049	8,991	3,243	2094	-	-
2050	6,995	2,448	2095	-	-
2051	5,337	1,811	2096	-	-
2052	3,989	1,313	2097	-	-
2053	2,920	932	2098	-	-
2054	2,089	647	2099	-	-
2055	1,460	439	2100	-	-
2056	997	291	2101	-	-
2057	663	187	2102	-	-
2058	430	118	2103	-	-
2059	273	73	2104	-	-
2060	166	43	2105	-	-
			Total		31,133,433

* Discounted based on RATE:Link calculated discount rate.

Projected Cash Flows as of December 31, 2015 - Questar Corporation Post Retirement Welfare Plans

Year	Benefit Payments	PV of Benefit Payments*	Year	Benefit Payments	PV of Benefit Payments*
2016	4,504,750	4,418,031	2061	786,989	114,468
2017	4,465,309	4,197,501	2062	671,525	93,618
2018	4,674,951	4,212,090	2063	567,216	75,792
2019	4,826,831	4,168,347	2064	473,899	60,694
2020	4,999,870	4,138,488	2065	391,562	48,066
2021	5,100,323	4,046,336	2066	320,316	37,688
2022	5,144,290	3,911,749	2067	259,152	29,225
2023	5,168,189	3,766,735	2068	207,253	22,402
2024	5,160,454	3,604,922	2069	164,148	17,006
2025	5,123,859	3,430,729	2070	128,554	12,765
2026	5,063,549	3,249,567	2071	99,436	9,464
2027	4,990,510	3,069,705	2072	76,117	6,944
2028	4,880,444	2,877,347	2073	57,613	5,037
2029	4,779,923	2,701,065	2074	43,001	3,604
2030	4,672,266	2,530,597	2075	31,664	2,543
2031	4,585,819	2,380,639	2076	23,056	1,775
2032	4,506,279	2,242,208	2077	16,516	1,219
2033	4,423,537	2,109,642	2078	11,645	824
2034	4,341,295	1,984,447	2079	8,068	547
2035	4,253,655	1,863,648	2080	5,498	357
2036	4,171,207	1,751,639	2081	3,675	229
2037	4,082,943	1,643,378	2082	2,413	144
2038	3,992,278	1,540,161	2083	1,542	88
2039	3,899,401	1,441,864	2084	946	52
2040	3,804,556	1,348,378	2085	578	30
2041	3,705,233	1,258,649	2086	339	17
2042	3,599,619	1,171,998	2087	193	9
2043	3,489,502	1,088,967	2088	102	5
2044	3,371,721	1,008,520	2089	53	2
2045	3,247,756	931,102	2090	28	1
2046	3,115,625	856,131	2091	10	0
2047	2,975,521	783,681	2092	6	0
2048	2,828,253	713,963	2093	1	0
2049	2,674,017	646,998	2094	-	-
2050	2,514,316	583,096	2095	-	-
2051	2,349,734	522,300	2096	-	-
2052	2,181,931	464,861	2097	-	-
2053	2,011,958	410,849	2098	-	-
2054	1,841,345	360,396	2099	-	-
2055	1,672,001	313,663	2100	-	-
2056	1,506,687	270,913	2101	-	-
2057	1,346,662	232,085	2102	-	-
2058	1,194,068	197,242	2103	-	-
2059	1,049,028	166,088	2104	-	-
2060	913,160	138,573	2105	-	-
			Total		85,293,902

* Discounted based on RATE:Link calculated discount rate.

Projected Cash Flows as of December 31, 2015 - Questar Corporation Long-Term Disability

Year	Benefit Payments	PV of Benefit Payments*	Year	Benefit Payments	PV of Benefit Payments*
2016	147,874	145,867	2061	-	-
2017	120,995	115,847	2062	-	-
2018	101,736	94,547	2063	-	-
2019	54,259	48,944	2064	-	-
2020	53,583	46,914	2065	-	-
2021	37,738	32,071	2066	-	-
2022	12,957	10,688	2067	-	-
2023	12,675	10,148	2068	-	-
2024	12,399	9,636	2069	-	-
2025	12,131	9,150	2070	-	-
2026	11,869	8,690	2071	-	-
2027	11,615	8,254	2072	-	-
2028	11,366	7,840	2073	-	-
2029	11,124	7,448	2074	-	-
2030	10,887	7,075	2075	-	-
2031	10,655	6,721	2076	-	-
2032	10,428	6,384	2077	-	-
2033	10,204	6,064	2078	-	-
2034	-	-	2079	-	-
2035	-	-	2080	-	-
2036	-	-	2081	-	-
2037	-	-	2082	-	-
2038	-	-	2083	-	-
2039	-	-	2084	-	-
2040	-	-	2085	-	-
2041	-	-	2086	-	-
2042	-	-	2087	-	-
2043	-	-	2088	-	-
2044	-	-	2089	-	-
2045	-	-	2090	-	-
2046	-	-	2091	-	-
2047	-	-	2092	-	-
2048	-	-	2093	-	-
2049	-	-	2094	-	-
2050	-	-	2095	-	-
2051	-	-	2096	-	-
2052	-	-	2097	-	-
2053	-	-	2098	-	-
2054	-	-	2099	-	-
2055	-	-	2100	-	-
2056	-	-	2101	-	-
2057	-	-	2102	-	-
2058	-	-	2103	-	-
2059	-	-	2104	-	-
2060	-	-	2105	-	-
			Total		582,286

* Discounted based on RATE:Link calculated discount rate.

Underlying Yields

U.S. RATE:Link Results

Measurement date: 31-Dec-2015

Specified percentiles: 40th-90th

Maturity	Bond Yields (annual)	Spot Rates (annual)	Maturity	Bond Yields (annual)	Spot Rates (annual)
0.5	0.87%	0.87%	15.5	4.18%	4.46%
1.0	1.18%	1.18%	16.0	4.23%	4.52%
1.5	1.43%	1.43%	16.5	4.28%	4.59%
2.0	1.65%	1.65%	17.0	4.32%	4.65%
2.5	1.85%	1.86%	17.5	4.36%	4.70%
3.0	2.03%	2.05%	18.0	4.39%	4.75%
3.5	2.21%	2.22%	18.5	4.42%	4.79%
4.0	2.36%	2.39%	19.0	4.45%	4.83%
4.5	2.51%	2.53%	19.5	4.47%	4.85%
5.0	2.63%	2.67%	20.0	4.48%	4.86%
5.5	2.75%	2.79%	20.5	4.49%	4.87%
6.0	2.86%	2.91%	21.0	4.50%	4.87%
6.5	2.96%	3.02%	21.5	4.50%	4.87%
7.0	3.06%	3.12%	22.0	4.50%	4.86%
7.5	3.15%	3.22%	22.5	4.50%	4.86%
8.0	3.24%	3.32%	23.0	4.50%	4.85%
8.5	3.32%	3.41%	23.5	4.50%	4.85%
9.0	3.40%	3.50%	24.0	4.51%	4.84%
9.5	3.47%	3.58%	24.5	4.51%	4.84%
10.0	3.54%	3.66%	25.0	4.51%	4.84%
10.5	3.61%	3.74%	25.5	4.51%	4.84%
11.0	3.67%	3.82%	26.0	4.51%	4.84%
11.5	3.73%	3.89%	26.5	4.52%	4.83%
12.0	3.79%	3.96%	27.0	4.52%	4.83%
12.5	3.85%	4.03%	27.5	4.52%	4.83%
13.0	3.91%	4.11%	28.0	4.52%	4.83%
13.5	3.97%	4.18%	28.5	4.52%	4.82%
14.0	4.02%	4.25%	29.0	4.52%	4.82%
14.5	4.07%	4.32%	29.5	4.52%	4.81%
15.0	4.13%	4.39%	30.0	4.52%	4.81%