

FALL 2010

EXAM DP-RC

**Design and Pricing
Retirement Benefits
Canada**

CASE STUDY

DP-RC morning

Case Study - Course DP Retirement

National Oil Company - Background

National Oil Company (NOC) is a large well-established company that services oil wells all over Canada. Most of NOC's employees are employed in the province of Ontario. NOC has been in existence for over 30 years and has more than 10,000 full-time salaried and union hourly employees and over 6,000 part-time employees. The full-time workforce is reasonably stable, but turnover in the last 5 years has been greater than desired, due to competitors recruiting NOC's employees.

Normally, an undergraduate degree is a minimum requirement to obtain entry to the salaried workforce and many employees have graduate degrees. About half of NOC's salaried employees are recruited directly from university with the other half coming from competitors.

The company's financial position varies with the price of oil. As oil prices rise, oil companies become increasingly active and in turn require the services of NOC. Conversely, activity slows as oil prices drop. Despite this, the company is usually in a taxable position.

NOC has managed to be successful by staying on the cutting edge of technology. NOC prides itself in being state of the art in processes and software relevant to its industry. This has helped it to stave off competition from both inside and outside of Canada. Although NOC is the largest player in the industry within Canada, there are larger players from outside of the country, with which NOC has to compete. From time to time, there are rumors of a takeover of NOC.

Canadian legislation and social programs will apply to NOC in this case study.

Summary of National Oil's Retirement Benefits

NOC maintains five retirement programs:

1. a final-average pay defined benefit (DB) RPP for its full-time salaried employees;
2. a flat dollar DB RPP for its full-time hourly union staff;
3. a defined contribution (DC) RPP for its part-time workforce; and
4. a non-registered pension plan (referred to as the SERP) for its executives that is supplemental to the salaried RPP. This plan has no assets.
5. a retiree health and welfare plan for the full-time salaried and hourly union retirees. This plan has no assets.

Extracts of Retirement Benefits Provisions and Financial Information

National Oil Full-Time Salaried Pension Plan

Eligibility	Immediate
Vesting	100% after 2 years of plan membership
Normal Retirement Age	65
Early Retirement Age	55 with 2 years of plan membership
Best Average Earnings	Average annual earnings during 60 consecutive months in which earnings were highest
Earnings	Basic pay, excluding overtime and bonuses
Normal Retirement Benefit	2% of best average earnings times years of service, subject to tax system maximum
Accrued Benefit	Benefit calculated as under the normal retirement benefit formula using best average earnings and service as of date of calculation
Early Retirement Benefit	Accrued benefit reduced by 0.25% per month that early retirement precedes age 62 for actives and terminated vested members
Form of Benefit	If with spouse, 60% joint & survivor benefit, without reduction. If without spouse, single life annuity
Optional Forms of Benefit	None
Indexing	None
Termination Benefit	Lump sum equal to actuarial present value of accrued benefit or deferred pension
Pre-Retirement Death Benefit	Lump sum equal to actuarial present value of accrued benefit payable to named beneficiary
Disability Benefit	Accrual of service while on long term disability and immediate pension without a reduction upon permanent and total disability

National Oil Full-Time Salaried Pension Plan
Historical Going Concern Actuarial Valuation Results

2008 2009 2010

Participant Summary - January 1

<i>Active Participants</i>			
(a) count	4,293	4,305	4268
(b) average age	45.6	45.0	45.3
(c) average service	14	13	12.1
(d) average future working lifetime	11	11	11
(e) average plan earnings (prior year)	65,000	65,000	66,300
<i>Deferred Vested Participants</i>			
(a) count	-	-	-
<i>Pensioners (incl beneficiaries)</i>			
(a) count	612	640	665
(b) average age	68.2	67.5	67.0
(c) average annual benefit	30,000	31,000	32,000

Plan Assets (numbers in \$000's) *

<i>Change in Plan Assets during Prior Year:</i>			
Market Value of Assets at January 1 of prior year	959,430	922,971	744,096
Employer Contributions during prior year	-	12,000	11,990
Benefit Payments during prior year	(27,000)	(26,000)	(28,000)
Expenses during prior year	-	-	-
Investment return during prior year	(9,459)	(164,875)	(44,165)
Market Value of Assets at January 1 of current year	922,971	744,096	683,921
Rate of return during prior year	-1%	-18%	-6.0%
<i>Average Portfolio Mix During Prior Year:</i>			
(a) Domestic Large Cap Equities	32%	30%	30%
(b) Domestic Small Cap Equities	25%	10%	10%
(c) Domestic Fixed Income	23%	35%	35%
(d) International Equities	15%	20%	20%
(e) Real Estate	3%	0%	0%
(f) Cash	2%	5%	5%
(g) Total	100%	100%	100%
<i>Asset Class Returns during Prior Year:</i>			
(a) Domestic Large Cap Equities	-3%	-30%	-12%
(b) Domestic Small Cap Equities	-2%	-45%	-5%
(c) Domestic Fixed Income	4%	8%	1%
(d) International Equities	-5%	-35%	-10%
(e) Real Estate	5%	5%	3%
(f) Cash	3%	3%	1%

* numbers may not add due to rounding

National Oil Full-Time Salaried Pension Plan
Historical Going Concern Actuarial Valuation Results

2008 2009 2010

Going Concern Valuation - January 1 (numbers in \$000's) *

1. Actuarial Accrued Liability:			
(a) Active participants	712,369	711,832	623,465
(b) Deferred vested participants	-	-	-
(c) Pensioners	144,051	208,320	234,080
(d) Total	856,419	920,152	857,545
2. Actuarial Value of Assets			
	922,971	744,096	683,921
3. Unfunded Actuarial Accrued Liability: (1d)-(2)			
	(66,552)	176,056	173,624
4. Normal Cost (beg. Of year)			
	52,768	54,756	51,526
5. Change in Unfunded AAL during prior year:			
(a) Unfunded AAL at prior valuation date	(171,841)	(66,552)	176,056
(b) Adjustment for interest	(11,170)	(9,868)	12,324
(c) Normal Cost w/interest less contributions	44,516	44,042	45,936
(d) (Gain)/Loss on investment	9,459	228,993	92,011
(e) (Gain)/Loss on termination	(20,000)	(20,000)	(20,000)
(f) (Gain)/Loss on salary increases less than expected	(1,000)	(25,000)	(90,000)
(g) (Gain)/Loss on mortality	19,000	30,000	2,000
(h) (Gain)/Loss on retirement	63,000	50,000	45,000
(i) (Gain)/Loss on assumption changes	-	-	(37,000)
(j) (Gain)/Loss on expenses	-	-	-
(k) (Gain)/Loss on all other factors	1,484	(55,559)	(52,703)
(l) Unfunded AAL at current valuation date	(66,552)	176,056	173,624
6. Actuarial Basis			
(a) Interest	6.50%	6.50%	6.50%
(b) Salary scale	4.50%	4.50%	4.00%
(c) Consumer Price Index	2.00%	2.00%	2.50%
			1994 Uninsured Pensioner Mortality -
(d) Mortality	UP 1994 AA15	UP 1994 AA15	Generational
(e) Turnover	Based on NOC experience for 2006 - 2008		
(f) Retirement age	Age 62		
(g) Proportion married and age difference	80% with spouse, Male spouses are 3 years older		
(h) Expenses	Assume all expenses paid by company		
(i) Asset Valuation Method	Market value of assets		
(j) Actuarial Cost Method	Projected unit credit		

* numbers may not add due to rounding

National Oil Full-Time Salaried Pension Plan
Solvency Valuation Results

2009 2010

Solvency Valuation - January 1 (numbers in \$000's) *

1. Actuarial Accrued Liability:		
(a) Active participants	589,265	648,413
(b) Deferred vested participants	-	-
(c) Pensioners	253,158	269,192
(d) Total	842,423	917,605
2. Market Value of Assets		
	744,096	683,921
3. Solvency Deficiency: (1d)-(2)		
	98,327	233,684
4. Actuarial Basis		
(a) Interest - Benefits paid by lump sum	4% for 10 years 5% thereafter	4% for 10 years 5% thereafter
(a) Interest - Benefits settled by annuity purchase	5%	5%
(b) Mortality	1994 UP AA 15	1994 UP AA 20
(c) Retirement age	The age that produces the largest value	
(d) Proportion married and age difference	80% with spouse, Male spouses are 3 years older	
(e) Asset Valuation Method	Market Value of Assets	Market Value of Assets
(f) Actuarial Cost Method	Unit Credit	Unit Credit

* numbers may not add due to rounding

**National Oil Full-Time Salaried Pension Plan
Reconciliation of Plan Participants (2007 - 2010)**

	<u>Active</u>	<u>Pensioners/ Beneficiaries</u>	<u>Total</u>
1. Participants as of January 1, 2007	4,243	590	4,833
- New Entrants/Rehires	375	-	375
- Terminated Nonvested	(120)	-	(120)
- Terminated Vested (Lump Sum Cashout)	(175)	-	(175)
- Retirement	(28)	28	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	-	(8)	(8)
- Net change	50	22	72
2. Participants as of January 1, 2008	4,293	612	4,905
- New Entrants/Rehires	400	-	400
- Terminated Nonvested	(150)	-	(150)
- Terminated Vested (Lump Sum Cashout)	(200)	-	(200)
- Retirement	(35)	35	-
- Death w/ Beneficiary	(3)	3	-
- Death w/o Beneficiary	-	(10)	(10)
- Net change	12	28	40
3. Participants as of January 1, 2009	4,305	640	4,945
- New Entrants/Rehires	250	-	250
- Terminated Nonvested	(115)	-	(115)
- Terminated Vested (Lump Sum Cashout)	(140)	-	(140)
- Retirement	(30)	30	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	-	(7)	(7)
- Net change	(37)	25	(12)
4. Participants as of January 1, 2010	4,268	665	4,933

**National Oil Full-Time Salaried Pension Plan
Age/Svc/Earnings as of January 1, 2010**

Age (Years)	# Participants Average Salary	Service (Years)					Totals
		< 5	5-10	10-15	15-20	>20	
< 25	180 35,900	120 46,100	- -	- -	- -	300 40,000	
25-35	235 47,100	143 58,000	90 62,000	55 65,100	- -	523 54,500	
35-45	175 59,400	198 66,300	176 70,200	225 76,300	201 77,800	975 70,400	
45-55	164 62,600	328 65,200	739 72,000	273 75,600	157 77,800	1,661 70,900	
55-65	168 61,200	77 64,100	77 68,100	399 73,900	75 74,200	796 69,700	
> 65	4 47,000	3 52,100	1 47,000	2 57,600	3 53,900	13 51,400	
Totals	926 Average Salary	869 61,500	1,083 70,600	954 74,400	436 77,000	4,268 66,300	
	Avg Age	45.3					
	Avg Svc	12.1					
	Avg Salary	66,300					

National Oil Full-Time Salaried Supplemental Executive Retirement Plan (SERP)

Eligibility	Immediate
Normal Retirement Age	65
Early Retirement Age	55 with 2 years of plan membership
Accrued Benefit	Accrued Benefit calculated under the provisions of the Salaried Pension Plan without regard to tax system maximums <u>less</u> actual Accrued Benefit under the Salaried Pension Plan
Normal Retirement Benefit	Accrued Benefit
Early Retirement Benefit	Accrued Benefit reduced by 0.25% per month that early retirement precedes age 62 for active members
Commencement Date and Form of Benefit	Must be same as under Salaried Pension Plan
Indexing	None
Termination Benefit	None
Pre-Retirement Death Benefit	None
Disability Benefit	None

**Supplemental Executive Retirement Plan
Historical Valuation Results - January 1**

2008 2009 2010

Participant Summary

1. Active Participants			
(a) count	49	52	60
(b) average age	53	53	52
(c) average service	18	18	19
(d) average future working lifetime	6.3	6.3	6
(e) average earnings (prior year)	325,000	325,000	350,000
2. Deferred Vested Participants			
(a) count	-	-	-
3. Pensioners (incl beneficiaries)			
(a) count	20	30	30
(b) average age	69	66	66
(c) average annual benefit	21,100	22,000	22,000

Valuation Results (numbers in \$000's) *

1. Reconciliation of funded status at valuation date:			
(a) Accrued Benefit Obligation	(47,091)	(50,223)	(65,897)
(b) Fair Value of Assets	-	-	-
(c) Funded Status: (a) + (b)	(47,091)	(50,223)	(65,897)
2. Service Cost	1,211	1,236	1,509
3. Benefit Payments	224	660	660
4. Actuarial Basis			
(a) Discount rate	5.25%	7.50%	6.50%
(b) Salary scale	3.50%	3.50%	3.50%
(c) CPI	3.00%	3.00%	2.50%
(d) All other assumptions	Same as the Salaried Plan		

* numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan

Eligibility	Immediate
Vesting	100% after 2 years of plan membership
Normal Retirement Age	65
Early Retirement Age	55 with 2 years of service
Normal Retirement Benefit	\$80 per month times years of service for terminations/ retirements during 2005 and beyond
Accrued Benefit	Benefit calculated as under the normal retirement benefit formula based on service and multiplier as of date of calculation.
Early Retirement Benefit	Unreduced benefit at 62 with 30 years of service, otherwise reduced by 0.25% per month that early retirement precedes Normal Retirement Age for actives and terminated vested members
Form of Benefit	With a spouse, 60% joint & survivor benefit without reduction Without a spouse, single life annuity.
Optional Forms of Benefit	None
Post-Retirement Indexing	Lesser of 1% or CPI each year after pension commencement
Termination Benefit	Lump sum equal to actuarial present value of accrued benefit assuming no indexing or deferred pension
Pre-Retirement Death Benefit	Lump sum equal to actuarial present value of accrued benefit assuming no indexing, payable to named beneficiary
Disability Benefit	None

National Oil Full-Time Hourly Union Pension Plan
Historical Going Concern Actuarial Valuation Results

2008 2009 2010

Participant Summary - January 1

<i>Active Participants</i>			
(a) count	6,321	6,395	6,225
(b) average age	46.3	46.0	46.1
(c) average service	17.2	17.0	17.3
(d) average future working lifetime	10.8	10.8	10.8
(e) average plan earnings (prior year)	49,500	51,000	53,100
<i>Deferred Vested Participants</i>			
(a) count	-	-	-
<i>Pensioners (incl beneficiaries)</i>			
(a) count	1,081	1,120	1,135
(b) average age	71.8	70.0	68.0
(c) average annual benefit	11,200	12,200	13,400

Plan Assets (numbers in \$000's) *

<i>Change in Plan Assets during Prior Year:</i>			
Market Value of Assets at January 1 of prior year	504,928	528,299	428,314
Employer Contributions during prior year	42,000	47,462	65,752
Benefit Payments during prior year	(15,000)	(17,000)	(17,000)
Expenses during prior year	-	-	-
Investment return during prior year	(3,629)	(130,447)	(27,161)
Market Value of Assets at January 1 of current year	528,299	428,314	449,904
Rate of return during prior year	-1%	-24%	-6%
<i>Average Portfolio Mix During Prior Year:</i>			
(a) Domestic Large Cap Equities	30%	32%	30%
(b) Domestic Small Cap Equities	27%	25%	10%
(c) Domestic Fixed Income	27%	23%	35%
(d) International Equities	11%	15%	20%
(e) Real Estate	3%	3%	0%
(f) Cash	2%	2%	5%
(g) Total	100%	100%	100%
<i>Asset Class Returns during Prior Year:</i>			
(a) Domestic Large Cap Equities	-3%	-30%	-12%
(b) Domestic Small Cap Equities	-2%	-45%	-5%
(c) Domestic Fixed Income	4%	8%	1%
(d) International Equities	-5%	-35%	-10%
(e) Real Estate	5%	5%	3%
(f) Cash	3%	3%	1%

* numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan
Historical Going Concern Actuarial Valuation Results

Going Concern Valuation - January 1 (numbers in \$000's) * 2008 2009 2010

	\$	80	\$	80	\$	80
1. Actuarial Accrued Liability:						
<i>Active Multiplier</i>						
(a) Active participants		548,941		602,109		631,336
(b) Deferred vested participants		-		-		-
(c) Pensioners		124,704		143,472		167,299
(d) Total		<u>673,645</u>		<u>745,581</u>		<u>798,635</u>
2. Actuarial Value of Assets		528,299		428,314		449,904
3. Unfunded Actuarial Accrued Liability: (1d)-(2)		145,346		317,267		348,730
4. Normal Cost (beg. Of year)		31,915		35,418		36,493
5. Change in Unfunded AAL during prior year:						
(a) Unfunded AAL at prior valuation date		120,655		145,346		317,267
(b) Adjustment for Interest		7,843		9,448		20,622
(c) Normal Cost w/interest less contributions		(12,292)		(15,015)		(30,168)
(d) (Gain)/Loss on investment		37,327		165,777		56,586
(e) (Gain)/Loss on termination		(6,000)		(8,000)		(30,000)
(f) (Gain)/Loss on salary increases less than expected		-		-		-
(g) (Gain)/Loss on mortality		(1,900)		(3,900)		(35,000)
(h) (Gain)/Loss on retirement		(400)		(600)		(1,000)
(i) (Gain)/Loss on assumption changes		-		-		50,000
(j) (Gain)/Loss on expenses		-		-		-
(k) (Gain)/Loss on all other factors		114		24,212		424
(l) Change in active benefit multiplier		-		-		-
(m) Unfunded AAL at current valuation date		<u>145,346</u>		<u>317,267</u>		<u>348,730</u>
6. Actuarial Basis						
(a) Interest		6.50%		6.50%		6.50%
(b) Salary scale		N/A		N/A		N/A
(c) Consumer Price Index		3.00%		3.00%		3.00%
(d) Mortality	UP 1994 AA15		UP 1994 AA15		1994 Uninsured Pensioner Mortality - Generational	
(e) Turnover					Based on NOC experience for 1986-1988	
(f) Retirement age					Age 62, with the appropriate early retirement reduction, if any	
(g) Proportion married and age difference					80% married, husbands 3 years older than wives	
(h) Expenses					Assume all expenses paid by company	
(i) Post-retirement indexing					1%	
(j) Asset Valuation Method					Market value of assets	
(k) Actuarial Cost Method					Unit credit	

* numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan
Solvency Valuation Results

2009

Solvency Valuation - January 1 (numbers in \$000's) *

<i>1. Actuarial Accrued Liability:</i>		
(a) Active participants	1,120,478	1,109,939
(b) Deferred vested participants	-	-
(c) Pensioners	184,464	205,322
(d) Total	1,304,942	1,315,261
<i>2. Market Value of Assets</i>		
	428,314	449,904
<i>3. Solvency Deficiency: (1d)-(2)</i>		
	876,628	865,357
<i>4. Actuarial Basis</i>		
(a) Interest - Benefit paid by lump sum	4% for 10 years 5% thereafter	4% for 10 years 5% thereafter
(a) Interest - Benefit settled by annuity purchase		5%
(b) Mortality	1994 UP AA 15	1994 UP AA 20
(c) Retirement age	The age that produces the largest value	
(d) Proportion married and age difference	80% with spouse, Male spouses are 3 years older	
(e) Asset Valuation Method	Market Value of Assets	Market Value of Assets
(f) Actuarial Cost Method	Unit Credit	Unit Credit

**National Oil Full-Time Hourly Union Pension Plan
Reconciliation of Plan Participants (2007 - 2010)**

	<u>Active</u>	<u>Pensioners/ Beneficiaries</u>	<u>Total</u>
1. Participants as of January 1, 2007	6,253	1,060	7,313
- New Entrants/Rehires	170	-	170
- Terminated Nonvested	(30)	-	(30)
- Terminated Vested (Lump Sum Cashout)	(40)	-	(40)
- Retirement	(30)	30	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	-	(11)	(11)
- Net change	68	21	89
2. Participants as of January 1, 2008	6,321	1,081	7,402
- New Entrants/Rehires	220	-	220
- Terminated Nonvested	(50)	-	(50)
- Terminated Vested (Lump Sum Cashout)	(50)	-	(50)
- Retirement	(40)	40	-
- Death w/ Beneficiary	(6)	6	-
- Death w/o Beneficiary	-	(7)	(7)
- Net change	74	39	113
3. Participants as of January 1, 2009	6,395	1,120	7,515
- New Entrants/Rehires	50	-	50
- Terminated Nonvested	(50)	-	(50)
- Terminated Vested (Lump Sum Cashout)	(120)	-	(120)
- Retirement	(50)	50	-
- Death w/ Beneficiary	-	-	-
- Death w/o Beneficiary	-	(35)	(35)
- Net change	(170)	15	(155)
4. Participants as of January 1, 2010	6,225	1,135	7,360

**National Oil Full-Time Hourly Union Pension Plan
Age/Svc/Earnings as of January 1, 2010**

Age (Years)			Service (Years)					Totals
	# Participants	Average Salary	< 5	5-10	10-15	15-20	>20	
< 25	200	40,000	139	45,000	-	-	-	339 42,100
25-35	256	44,000	105	46,000	91	62	-	514 46,600
35-45	215	49,000	330	45,400	320	659	441	1,965 52,400
45-55	120	50,000	160	47,000	315	688	895	2,178 55,000
55-65	95	49,000	62	49,600	91	180	779	1,207 56,700
> 65	7	51,000	6	50,000	5	3	1	22 53,200
Totals	893	46,000	802	51,700	822	1,592	2,116	6,225 53,100
	Avg Age	46.1						
	Avg Svc	17.3						
	Avg Salary	53,100						

National Oil Part-Time DC Pension Plan

Eligibility	Immediate
Vesting	Immediate
Employer Contributions	50% match of employee contributions
Employee Contributions	3% of base pay
Plan Fund	The employer invests the contributions in a balanced fund. There are no employee investment choices.
Account Balance	Contributions are accumulated in member's individual account earning investment income at the rate of return earned by the Plan Fund.
Benefit on Termination or Retirement	Account balance is transferred to a LIRA/LIF for the member after one year from date of termination or retirement, unless employee has since returned to employment with NOC.
Benefit on Death	Account balance is payable to named beneficiary

National Oil Part-Time DC Pension Plan
Historical Results - January 1

2008 2009 2010

Participant Summary

(a) number participating during prior year	6,500	7,000	6,800
(b) average age	28.9	29.2	30.8
(c) average base pay	29,000.00	30,000.00	31,000.00

Plan Assets (numbers in \$000's) *

<i>Change in Plan Assets during Prior Year:</i>			
Market Value of Assets at January 1 of prior year	67,779	75,248	63,072
Employee Contributions during prior year	5,655	6,300	6,324
Company Contributions during prior year	2,828	3,150	3,162
Benefit Payments during prior year	(5,850)	(6,300)	(6,120)
Expenses during prior year	-	-	-
Investment return during prior year	4,837	(15,325)	7,124
Market Value of Assets at January 1 of current year	<u>75,248</u>	<u>63,072</u>	<u>73,562</u>
Rate of return during prior year	7%	-20%	11%

** numbers may not add due to rounding*

National Oil Full-Time Salaried and Union Retiree Health Benefit Program

Eligibility	Immediate
Earliest Retirement Age	55 and 10 years of service
Retiree Contributions	30% cost sharing
Retirement benefit	Retirees and their spouses may elect to participate in a self insured health plan
Death benefit	Coverage continues for the life of the spouse after death of an eligible employee
Benefits Covered - Pre 65	\$0 deductible; \$0 copay No lifetime maximum Office visits Hospital visits Surgery Prescription drugs
Benefits Covered - Post 65	\$0 deductible; \$0 copay No lifetime maximum Office visits Hospital visits Surgery Prescription drugs Government Benefits carve out

Retiree Health and Welfare Program
Historical Valuation Results

2008 2009 2010

Valuation Results - January 1 (numbers in \$000's) *

1. Reconciliation of funded status at valuation date:			
(a) Accrued Benefit Obligation			
(i) actives	(835,331)	(846,706)	(1,345,645)
(ii) retirees	(538,528)	(591,077)	(707,121)
(iii) total	(1,373,859)	(1,437,783)	(2,052,766)
(b) Market Value of Assets	0	0	0
2. Service Cost (beg. of year)	52,208	52,919	84,103
3. Benefit Payments	27,000	30,000	32,000
4. Actuarial Basis			
(a) Discount rate	5.25%	7.50%	6.50%
(b) Return on assets	N/A	N/A	N/A
(c) Medical trend			
Initial rate	6.00%	7.00%	10.00%
Annual decrease	0.50%	0.50%	0.50%
Ultimate rate	4.50%	4.50%	5.00%
Year ultimate trend rate reached	2011	2014	2020
(d) CPI	3.00%	3.00%	2.50%
(e) Per capita claims cost - Pre 65	9,500	10,500	12,000
(e) Per capita claims cost - Post 65			
(f) Retirement assumption	Age 62 with 10 years of service		
(g) All other demographic assumptions	Same as those used for pension plans		

* numbers may not add due to rounding