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## **NMI Settlement Fund**

Actuarial Valuation as of September 30, 2015

Prepared by:

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December 29, 2015

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**NMI Settlement Fund –  
Actuarial Valuation as of September 30, 2015**

As part of our engagement with the NMI Settlement Fund, we performed an actuarial valuation of the NMI Settlement Fund as of September 30, 2015. The purpose of the actuarial valuation is to project the minimum annual payments to be made by the Commonwealth of the Northern Mariana Islands (CNMI) to pay 75% of the Class Members' Full Benefits.

In preparing this report, I relied, without audit, on information (some oral and some in writing) supplied by the Fund's staff. This information includes, but is not limited to, financial information, member census data, and plan provisions. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete the results may be different and the calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the Fund have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Fund.

This valuation report is only an estimate of the Fund's financial condition as of a single date. It can neither predict the Fund's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Fund benefits, only the timing of Fund contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: 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 these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Fund's funded status); 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 future measurements.

Actuarial computations presented in this report are for the purposes of determining the recommended funding amounts for the Fund. Determinations for other purposes may be significantly different from the results contained in this report. Therefore, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the use and benefit of the NMI Settlement Fund. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

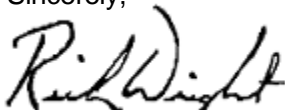
- (a) NMI Settlement Fund may provide a copy of Milliman's work, in its entirety, to its professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the NMI Settlement Fund.
- (b) NMI Settlement Fund may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,



Richard A. Wright, FSA, MAAA  
Consulting Actuary

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**SECTION I. VALUATION SUMMARY****INTRODUCTION**

Milliman, Inc. has been retained by the NMI Settlement Fund to provide an actuarial valuation of the Fund. The NMI Settlement Fund was created to pay pension benefits to members of the Northern Mariana Islands Retirement Fund who opted to become members of the NMI Settlement Fund.

Section 4.0 of the settlement agreement that created the NMI Settlement Fund requires the Commonwealth of the Northern Mariana Islands (CNMI) to make minimum annual payments each year to pay 75% of the Class Members' Full Benefits. The payments for fiscal years 2014 and 2015 were fixed at \$25,000,000 and \$27,000,000, respectively. The payments after fiscal year 2015 are to be determined by an independent actuary.

In our valuation we:

- Summarize the membership data.
- Estimate the future annual benefits to be paid by the NMI Settlement Fund.
- Review the current Fund balance.
- Project the fund balance forward for the expected life of the NMI Settlement Fund.
- Determine the minimum annual payments to be made by CNMI.

The results contained in this report represent our best estimates. However, it is likely that actual experience will vary from these estimates. To the extent that actual experience differs from the anticipated experience, actual plan costs will vary as well.

**HIGHLIGHTS**

- We have determined that the minimum annual payments from CNMI that were shown in the NMI Settlement Agreement should stay in effect for the next three years. This includes minimum payments of \$30,000,000 for fiscal year 2016, \$33,000,000 for fiscal year 2017, and \$45,000,000 for fiscal year 2018. Starting in FY 2019, the Settlement Fund will essentially become a "pay as you go" entity, as the CNMI minimum payments will be approximately equal to the pension payments (at 75%).
- If we assume life expectancies based upon the mortality table used in the 2012 actuarial valuation of the Northern Mariana Islands Retirement Fund, the minimum payment for CNMI is estimated to be \$45,000,000 for FY 2019. The minimum payments are estimated to decline by \$1,000,000 per year to FY 2024, resulting in a minimum payment of \$39,000,000 for FY 2024. Thereafter, the minimum payments are estimated to stay at \$39,000,000 for five years through FY 2028. Minimum payments after FY 2028 are estimated to decline by \$250,000 per year until FY 2031, resulting in a minimum payment of \$38,250,000 for FY 2031. After that point, CNMI payments will equal the benefits and expenses paid by the NMI Settlement Fund. Exhibit 6 shows the projected Fund balance for the next 40 years based upon the current mortality assumption.
- If we assume improved life expectancies, the minimum payment for CNMI is estimated to increase to \$46,000,000 for FY 2019 and to \$47,000,000 for FY 2020. The minimum payments are estimated to stay at \$47,000,000 for each fiscal year through FY 2030. Minimum payments after FY 2030 are estimated to decline by \$250,000 per year until FY 2035, resulting in a minimum payment of \$45,750,000 for FY 2035. After that point, CNMI payments will equal the

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**SECTION I. VALUATION SUMMARY**

benefits and expenses paid by the NMI Settlement Fund. Exhibit 7 shows the projected Fund balance for the next 40 years assuming improved life expectancies.

**RESULTS OF VALUATION**

	September 30, 2015	September 30, 2014
<b>Participant Counts</b>		
Active Employees (Class I)	85	
Active Employees (Class II)	<u>10</u>	
Total Active Employees	95	
Retirees	<u>2,998</u>	
Total Participants	3,093	
<b>Market Value of Assets</b>	\$84,988,584	\$104,236,477
<b>Benefit Payments from NMI Settlement Fund</b>	\$46,549,182	\$48,217,079
<b>CNMI Annual Payments</b>		
FY 2014	\$25,000,000	
FY 2015	27,000,000	
<b>Projected CNMI Payments (current mortality)</b>		
FY 2016	30,000,000	
FY 2017	33,000,000	
FY 2018	45,000,000	
FY 2019	44,000,000	
FY 2020	43,000,000	
(see Exhibit 6 for FY 2021 and later years)		
<b>Projected CNMI Payments (improved mortality)</b>		
FY 2016	30,000,000	
FY 2017	33,000,000	
FY 2018	45,000,000	
FY 2019	46,000,000	
FY 2020	47,000,000	
(see Exhibit 7 for FY 2021 and later years)		

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## SECTION I. VALUATION SUMMARY

## ACTUARIAL ASSUMPTIONS

The following are the major assumptions used in the actuarial valuation. The assumptions are generally the same as those used in the actuarial valuation performed by the prior actuary, as stated in the audited financial statements of the Northern Mariana Islands Retirement Fund for the fiscal year ending September 30, 2012, except where indicated below. To the extent that actual experience differs from the assumptions below, future pension costs will differ.

**Expected Investment Return:** For the next 3 years, we have used the investment return assumptions provided by the investment consultant: 3.78% for fiscal year 2016, 3.25% for fiscal year 2017, and 1.55% for fiscal year 2018. Thereafter, we have assumed an investment return assumption of 1.5% per year, based upon Milliman's 5-year expected returns shown below.

Asset Class	Asset Allocation	Expected Nominal Return
U.S. Short Bonds	100%	1.56%
Expected geometric mean return over 5 years		1.52%

**Mortality.** The mortality table used in the previous actuarial study was the 1971 Group Annuity Mortality table for Males, with ages set forward 3 years for males. We are not able to confirm whether this mortality assumption is appropriate for the projection. Therefore, to show the impact of using a more current mortality table, we are also showing results using the RP 2000 mortality table for healthy lives projected to 2015 using Scale AA.

**Salary Increases.** Salaries were assumed to not increase in future years.

**Retirement Age.** The earlier of age 62, if eligible, or 25 years of vesting service.

**Administrative Expenses.** Administrative expenses and fees are assumed to be \$2,086,400 for fiscal year ending September 30, 2016, and are assumed to remain at that level until the fiscal year ending September 30, 2031 (or 2035 assuming improved mortality), and then decline by 10% per year.

**Rates of Withdrawal and Disability.** The assumed rates of withdrawal and disability are shown in Appendix B.

**Probability of Marriage.** We have assumed that 94% of participants are married and that males are 5 years older than their female spouses.

A complete summary of actuarial assumptions is in Appendix B.

**SECTION I. VALUATION SUMMARY**

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**FUNDING METHOD**

Section 4.0 of the settlement agreement that created the NMI Settlement Fund requires the Commonwealth of the Northern Mariana Islands (CNMI) to make minimum annual payments each year to pay 75% of the Class Members' Full Benefits. The payments for fiscal years 2014 and 2015 were fixed at \$25,000,000 and \$27,000,000, respectively. The payments after fiscal year 2015 are to be determined by an independent actuary.

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## SECTION II. VALUATION EXHIBITS

## EXHIBIT 1. SUMMARY OF FUND ASSETS

Listed below are the assets reported for the NMI Settlement Fund in the Fund's draft financial statements.

	September 30, 2015	September 30, 2014
<b>Assets</b>		
Cash and cash equivalents	\$ 4,846,728	\$ 1,920,645
<b>Receivables</b>		
Employer contributions	\$ 19,928	\$ 127,380
Less: Allowance for uncollectible receivables	<u>(79,531)</u>	<u>(145,157)</u>
Net receivables from employers	\$ (59,603)	\$ (17,777)
<b>Other Receivables</b>		
Judicial building fund loan	\$ 4,570,559	\$ 4,843,926
Benefits receivable	312,080	312,080
TAL and professional fees	260,626	608,124
CNMI annual payment	0	0
Due from NMIRF – Transfer of assets	1,234,225	1,117,974
Other receivables	<u>46,073</u>	<u>28,783</u>
Total receivables	\$ 6,423,563	\$ 6,910,887
<b>Property and equipment</b>	\$ 192,151	\$ 159,885
<b>Investments at fair market value</b>		
Cash equivalent	\$ 0	\$ 0
Mutual funds – fixed income	58,747,049	73,671,679
Equity securities	15,066,149	21,363,606
Due to broker	0	487,971
Corporate debt instruments	<u>0</u>	<u>0</u>
Total investments	\$ 73,813,198	\$ 95,523,255
<b>Prepaid Expenses</b>	\$ <u>74,553</u>	\$ <u>56,787</u>
<b>TOTAL ASSETS</b>	\$ 85,290,591	\$ 104,553,683
<b>Liabilities</b>		
Accounts payable	\$ 125,702	\$ 29,336
Deferred revenues	0	27,828
Judicial building trust fund	515	515
Due to broker	112,700	170,721
Other payables	<u>63,090</u>	<u>88,806</u>
Total liabilities	\$ 302,007	\$ 317,206
<b>Net Assets Held in Trust for Pension Benefits</b>	<u>\$ 84,988,584</u>	<u>\$ 104,236,477</u>

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## SECTION II. VALUATION EXHIBITS

## EXHIBIT 2. CHANGES IN FUND ASSETS

Assets increase or decrease each year due to employer contributions, investment income, benefit payments to retiring participants, plan expenses paid by the trust fund, and any realized and unrealized gains and losses from investments.

	FISCAL YEAR ENDING	
	September 30, 2015	September 30, 2014
<b>Beginning Balance</b>	\$ 104,236,477	\$ 0
<b>Contributions</b>		
Employer contributions	1,643,459	1,722,642
Employee contributions	<u>558,285</u>	<u>600,442</u>
Total contributions	2,201,744	2,323,083
<b>Investment Income</b>		
Interest and dividend income	2,786,232	2,901,015
Net realized and unrealized gains and (losses)	<u>(3,575,553)</u>	<u>203,765</u>
Total investment income	(789,321)	3,104,780
Less: Management and custodial fee	<u>0</u>	<u>0</u>
Net investment income / (loss)	(789,321)	3,104,780
<b>Other Additions</b>		
Local investment income	429,827	422,788
Rental and other income	297,209	409,948
Gain from Transfer	0	122,724,456
CNMI Appropriations	<u>27,000,000</u>	<u>25,000,000</u>
Total other additions	27,727,036	148,557,193
<b>TOTAL ADDITIONS</b>	29,139,458	153,985,057
<b>Benefit Payments</b>		
Retirement benefits	39,996,330	41,138,112
Survivors benefits	5,695,383	5,584,989
Refunds	67,647	593,629
Disability benefits	726,342	844,071
Death lump sum distributions	<u>63,480</u>	<u>56,278</u>
Total benefit and refund payments	46,549,182	48,217,079
<b>Administrative Expenses and Fees</b>	1,838,169	1,531,500
<b>Ending Balance</b>	\$ 84,988,584	\$ 104,236,477

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## SECTION II. VALUATION EXHIBITS

## EXHIBIT 3. CENSUS DATA

	September 30, 2015	September 30, 2014
<b>Active Employees</b>		
Class 1	85	
Class 2	<u>10</u>	
Total	95	
Average age	51.6	
Average service	19.7	
Total salary	\$ 3,622,082	
<b>Retirees</b>		
Healthy retiree	2,179	
Disabled retiree	62	
Surviving spouses	624	
Child pensioner	<u>133</u>	
Total	2,998	
Average age	61.2	
Life expectancy (current mortality)	18.0	
Life expectancy (improved mortality)	23.4	
Annual benefit payments at 100%	\$ 62,206,287	
Annual benefit payments at 75%	\$ 46,654,715	

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**SECTION II. VALUATION EXHIBITS**

**EXHIBIT 4. PROJECTED BENEFIT PAYMENTS – CURRENT MORTALITY**

Fiscal Year Ending 9/30	Active Employee Count	Active Employee Salary	Current Retirees	Future Retirees	Total Retirees	Benefit Payments
2016	95.0	\$3,622,082	2,998.0	-	2,998.0	\$46,654,715
2017	61.8	2,345,082	2,970.0	32.8	3,002.8	46,746,637
2018	56.9	2,124,449	2,934.1	37.4	2,971.5	46,764,434
2019	48.7	1,858,817	2,892.3	45.4	2,937.6	46,729,478
2020	38.0	1,454,265	2,820.1	55.7	2,875.8	46,433,111
2021	32.4	1,277,032	2,743.1	61.0	2,804.1	46,026,454
2022	23.7	978,027	2,659.8	69.4	2,729.3	45,546,691
2023	19.0	758,804	2,575.6	73.7	2,649.2	44,961,995
2024	15.1	584,473	2,492.7	77.1	2,569.8	44,249,631
2025	13.1	467,067	2,411.7	78.4	2,490.2	43,449,965
2026	11.2	429,024	2,329.8	79.6	2,409.5	42,567,868
2027	10.3	379,020	2,246.5	79.8	2,326.3	41,599,160
2028	8.3	317,113	2,160.1	80.8	2,241.0	40,517,747
2029	7.5	304,647	2,072.1	80.6	2,152.7	39,387,837
2030	4.7	203,460	1,980.8	82.3	2,063.1	38,149,979
2031	4.1	168,165	1,888.7	81.7	1,970.3	36,849,948
2032	3.0	111,506	1,797.2	81.3	1,878.6	35,477,542
2033	2.0	68,478	1,704.8	80.9	1,785.7	34,049,666
2034	0.3	7,236	1,611.9	80.9	1,692.9	32,553,063
2035	0.3	7,195	1,519.1	79.2	1,598.3	31,013,841
2036	0.3	7,177	1,426.7	77.3	1,504.0	29,442,452
2037	-	-	1,335.2	75.6	1,410.8	27,848,535
2038	-	-	1,245.0	73.5	1,318.5	26,244,749
2039	-	-	1,156.7	71.3	1,228.0	24,629,639
2040	-	-	1,070.6	68.9	1,139.5	23,017,678
2041	-	-	987.0	66.5	1,053.4	21,426,964
2042	-	-	906.3	63.9	970.2	19,863,788
2043	-	-	828.7	61.3	890.0	18,330,074
2044	-	-	754.6	58.6	813.2	16,838,647
2045	-	-	684.1	55.8	739.9	15,396,590
2046	-	-	617.4	52.9	670.3	14,009,099
2047	-	-	554.6	50.1	604.7	12,683,941
2048	-	-	495.8	47.2	542.9	11,425,939
2049	-	-	440.9	44.3	485.2	10,240,289
2050	-	-	390.1	41.4	431.5	9,127,100
2051	-	-	343.2	38.5	381.7	8,089,662
2052	-	-	300.2	35.7	335.9	7,128,931
2053	-	-	261.1	32.9	294.0	6,245,029
2054	-	-	225.6	30.2	255.8	5,437,276
2055	-	-	193.7	27.6	221.3	4,704,220

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**SECTION II. VALUATION EXHIBITS**

**EXHIBIT 5. PROJECTED BENEFIT PAYMENTS – IMPROVED MORTALITY**

Fiscal Year Ending 9/30	Active Employee Count	Active Employee Salary	Current Retirees	Future Retirees	Total Retirees	Benefit Payments
2016	95.0	\$3,622,082	2,998.0	-	2,998.0	\$46,854,683
2017	62.0	2,356,569	2,983.3	32.6	3,015.9	47,415,521
2018	57.4	2,144,559	2,965.2	37.0	3,002.1	47,956,922
2019	49.3	1,885,473	2,944.8	44.9	2,989.7	48,497,471
2020	38.7	1,482,697	2,897.2	55.4	2,952.6	48,823,820
2021	33.1	1,305,616	2,847.5	60.9	2,908.4	49,084,260
2022	24.2	1,003,183	2,793.6	69.8	2,863.3	49,309,445
2023	19.5	783,806	2,740.5	74.3	2,814.8	49,465,322
2024	15.5	604,753	2,690.1	78.1	2,768.2	49,522,216
2025	13.5	479,993	2,642.5	80.0	2,722.4	49,514,519
2026	11.6	442,764	2,594.5	81.6	2,676.1	49,442,360
2027	10.6	393,290	2,545.3	82.3	2,627.5	49,295,600
2028	8.6	328,535	2,492.7	84.0	2,576.7	49,038,339
2029	7.8	317,362	2,437.9	84.4	2,522.3	48,729,713
2030	4.9	210,825	2,378.8	86.9	2,465.7	48,298,871
2031	4.3	175,781	2,317.5	87.0	2,404.5	47,784,647
2032	3.2	118,210	2,255.2	87.5	2,342.7	47,167,501
2033	2.1	72,825	2,189.8	88.0	2,277.8	46,455,705
2034	0.3	7,407	2,121.5	89.0	2,210.5	45,625,418
2035	0.3	7,395	2,050.5	88.2	2,138.7	44,694,469
2036	0.3	7,409	1,976.9	87.3	2,064.3	43,664,169
2037	-	-	1,901.0	86.7	1,987.7	42,536,884
2038	-	-	1,823.0	85.6	1,908.5	41,318,895
2039	-	-	1,743.1	84.4	1,827.5	40,002,274
2040	-	-	1,661.8	83.1	1,744.9	38,597,849
2041	-	-	1,579.3	81.7	1,660.9	37,121,516
2042	-	-	1,496.0	80.2	1,576.1	35,578,527
2043	-	-	1,412.3	78.5	1,490.8	33,970,795
2044	-	-	1,328.7	76.8	1,405.5	32,313,256
2045	-	-	1,245.6	74.9	1,320.5	30,615,953
2046	-	-	1,163.4	73.0	1,236.4	28,888,421
2047	-	-	1,082.6	70.9	1,153.5	27,144,491
2048	-	-	1,003.5	68.7	1,072.2	25,395,706
2049	-	-	926.5	66.4	992.9	23,655,529
2050	-	-	851.9	64.0	915.9	21,932,401
2051	-	-	780.1	61.5	841.6	20,238,279
2052	-	-	711.2	59.0	770.2	18,583,269
2053	-	-	645.4	56.3	701.8	16,976,481
2054	-	-	583.0	53.6	636.6	15,426,843
2055	-	-	524.0	50.8	574.8	13,941,425

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## SECTION II. VALUATION EXHIBITS

## EXHIBIT 6. PROJECTED FUND BALANCE – CURRENT MORTALITY

FYE 9/30	Beginning Balance	CNMI Payments	Other Contribs	Investment Earnings	Benefit Payments	Expenses & Fees	Ending Balance
2016	84,988,584	30,000,000	1,474,115	2,886,222	(46,654,715)	(2,086,400)	70,607,806
2017	70,607,806	33,000,000	926,604	2,052,524	(46,746,637)	(2,086,400)	57,753,896
2018	57,753,896	45,000,000	814,976	871,657	(46,764,434)	(2,086,400)	55,589,696
2019	55,589,696	44,000,000	692,306	802,919	(46,729,478)	(2,086,400)	52,269,043
2020	52,269,043	43,000,000	525,857	746,583	(46,433,111)	(2,086,400)	48,021,972
2021	48,021,972	42,000,000	448,321	677,846	(46,026,454)	(2,086,400)	43,035,284
2022	43,035,284	41,000,000	333,350	598,281	(45,546,691)	(2,086,400)	37,333,824
2023	37,333,824	40,000,000	251,097	509,028	(44,961,995)	(2,086,400)	31,045,555
2024	31,045,555	39,000,000	187,776	412,071	(44,249,631)	(2,086,400)	24,309,371
2025	24,309,371	39,000,000	145,686	316,710	(43,449,965)	(2,086,400)	18,235,402
2026	18,235,402	39,000,000	129,922	232,098	(42,567,868)	(2,086,400)	12,943,154
2027	12,943,154	39,000,000	111,436	159,841	(41,599,160)	(2,086,400)	8,528,871
2028	8,528,871	39,000,000	90,519	101,581	(40,517,747)	(2,086,400)	5,116,824
2029	5,116,824	38,750,000	84,428	56,954	(39,387,837)	(2,086,400)	2,533,969
2030	2,533,969	38,500,000	54,743	25,397	(38,149,979)	(2,086,400)	877,730
2031	877,730	38,250,000	43,929	8,348	(36,849,948)	(2,086,400)	243,659
2032	243,659	37,111,643	28,280	-	(35,477,542)	(1,877,760)	28,280
2033	28,280	35,711,370	16,861	-	(34,049,666)	(1,689,984)	16,861
2034	16,861	34,057,187	1,730	-	(32,553,063)	(1,520,986)	1,730
2035	1,730	32,380,998	1,670	-	(31,013,841)	(1,368,887)	1,670
2036	1,670	30,672,780	1,617	-	(29,442,452)	(1,231,998)	1,617
2037	1,617	28,955,717	-	-	(27,848,535)	(1,108,799)	-
2038	-	27,242,668	-	-	(26,244,749)	(997,919)	-
2039	-	25,527,766	-	-	(24,629,639)	(898,127)	-
2040	-	23,825,992	-	-	(23,017,678)	(808,314)	-
2041	-	22,154,447	-	-	(21,426,964)	(727,483)	-
2042	-	20,518,522	-	-	(19,863,788)	(654,734)	-
2043	-	18,919,335	-	-	(18,330,074)	(589,261)	-
2044	-	17,368,982	-	-	(16,838,647)	(530,335)	-
2045	-	15,873,891	-	-	(15,396,590)	(477,301)	-
2046	-	14,438,670	-	-	(14,009,099)	(429,571)	-
2047	-	13,070,555	-	-	(12,683,941)	(386,614)	-
2048	-	11,773,892	-	-	(11,425,939)	(347,953)	-
2049	-	10,553,446	-	-	(10,240,289)	(313,157)	-
2050	-	9,408,942	-	-	(9,127,100)	(281,842)	-
2051	-	8,343,320	-	-	(8,089,662)	(253,658)	-
2052	-	7,357,223	-	-	(7,128,931)	(228,292)	-
2053	-	6,450,492	-	-	(6,245,029)	(205,463)	-
2054	-	5,622,192	-	-	(5,437,276)	(184,916)	-
2055	-	4,870,645	-	-	(4,704,220)	(166,425)	-

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**SECTION II. VALUATION EXHIBITS**

**EXHIBIT 7. PROJECTED FUND BALANCE – IMPROVED MORTALITY**

FYE 9/30	Beginning Balance	CNMI Payments	Other Contribs	Investment Earnings	Benefit Payments	Expenses & Fees	Ending Balance
2016	84,988,584	30,000,000	1,474,115	2,882,443	(46,854,683)	(2,086,400)	70,404,059
2017	70,404,059	33,000,000	931,142	2,035,107	(47,415,521)	(2,086,400)	56,868,387
2018	56,868,387	45,000,000	822,691	848,750	(47,956,922)	(2,086,400)	53,496,506
2019	53,496,506	46,000,000	702,233	773,335	(48,497,471)	(2,086,400)	50,388,203
2020	50,388,203	47,000,000	536,138	730,517	(48,823,820)	(2,086,400)	47,744,638
2021	47,744,638	47,000,000	458,356	688,327	(49,084,260)	(2,086,400)	44,720,661
2022	44,720,661	47,000,000	341,924	640,406	(49,309,445)	(2,086,400)	41,307,146
2023	41,307,146	47,000,000	259,371	587,415	(49,465,322)	(2,086,400)	37,602,210
2024	37,602,210	47,000,000	194,291	530,926	(49,522,216)	(2,086,400)	33,718,811
2025	33,718,811	47,000,000	149,718	472,398	(49,514,519)	(2,086,400)	29,740,008
2026	29,740,008	47,000,000	134,083	413,140	(49,442,360)	(2,086,400)	25,758,471
2027	25,758,471	47,000,000	115,632	354,379	(49,295,600)	(2,086,400)	21,846,482
2028	21,846,482	47,000,000	93,780	297,465	(49,038,339)	(2,086,400)	18,112,988
2029	18,112,988	47,000,000	87,952	243,734	(48,729,713)	(2,086,400)	14,628,561
2030	14,628,561	47,000,000	56,725	194,464	(48,298,871)	(2,086,400)	11,494,479
2031	11,494,479	46,750,000	45,918	149,354	(47,784,647)	(2,086,400)	8,568,704
2032	8,568,704	46,500,000	29,980	108,101	(47,167,501)	(2,086,400)	5,952,884
2033	5,952,884	46,250,000	17,932	72,237	(46,455,705)	(2,086,400)	3,750,948
2034	3,750,948	46,000,000	1,771	43,439	(45,625,418)	(2,086,400)	2,084,340
2035	2,084,340	45,750,000	1,716	23,546	(44,694,469)	(2,086,400)	1,078,733
2036	1,078,733	44,463,196	1,669	-	(43,664,169)	(1,877,760)	1,669
2037	1,669	44,225,199	-	-	(42,536,884)	(1,689,984)	-
2038	-	42,839,881	-	-	(41,318,895)	(1,520,986)	-
2039	-	41,371,161	-	-	(40,002,274)	(1,368,887)	-
2040	-	39,829,847	-	-	(38,597,849)	(1,231,998)	-
2041	-	38,230,315	-	-	(37,121,516)	(1,108,799)	-
2042	-	36,576,446	-	-	(35,578,527)	(997,919)	-
2043	-	34,868,922	-	-	(33,970,795)	(898,127)	-
2044	-	33,121,570	-	-	(32,313,256)	(808,314)	-
2045	-	31,343,436	-	-	(30,615,953)	(727,483)	-
2046	-	29,543,155	-	-	(28,888,421)	(654,734)	-
2047	-	27,733,752	-	-	(27,144,491)	(589,261)	-
2048	-	25,926,041	-	-	(25,395,706)	(530,335)	-
2049	-	24,132,830	-	-	(23,655,529)	(477,301)	-
2050	-	22,361,972	-	-	(21,932,401)	(429,571)	-
2051	-	20,624,893	-	-	(20,238,279)	(386,614)	-
2052	-	18,931,222	-	-	(18,583,269)	(347,953)	-
2053	-	17,289,638	-	-	(16,976,481)	(313,157)	-
2054	-	15,708,685	-	-	(15,426,843)	(281,842)	-
2055	-	14,195,083	-	-	(13,941,425)	(253,658)	-

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## APPENDIX A. SUMMARY OF PLAN PROVISIONS

The following description is a brief summary of the provisions of the Northern Marinas Islands Retirement Plan, as shown in the audited financial statements for the NMI Retirement Fund for the fiscal year ending September 30, 2012.

**Membership:** Class II members are all persons who were Fund members prior to the effective date of Public Law 6-17 and who did not choose to become Class I members.

**Membership Service:** Service is earned for actual compensated government employment after becoming a Fund member. 1/12 year of service is earned for each month of employment.

### **Benefit Formulas:**

**Class I Formula:** The sum of (i) and (ii) below, but not less than \$6,000 nor greater than 85% of average annual salary.

- (i) The sum of 2.5% of average annual salary for each of the first 25 years of service with a maximum of 50% of average annual salary, plus
- (ii) 2.5% of average annual salary for each year of service in excess of 25 years.

The minimum amount of service retirement annuity payable by the Fund is \$6,000 per year. The maximum retirement annuity is 85% of “average annual salary.”

**Class II Formula:** The sum of (i) and (ii) below, but not less than \$6,000 nor greater than 85% of average annual salary.

- (i) The sum of 2% of average annual salary for each of the first 10 years of service and 2.5% of average annual salary for each year of service in excess of 10 years, plus
- (ii) Twenty dollars (\$20) for each year of service reduced by 1/100<sup>th</sup> of 1% for each dollar that average annual salary exceeds \$6,000.

The minimum amount of service retirement annuity payable by the Fund is \$6,000 per year. The maximum retirement annuity is 85% of “average annual salary.”

Class II members receive the greater of the benefit determined using the Class II formula or the benefit determined using the Class I formula as if all service had been rendered as a Class I member.

**Average Annual Salary:** Average of three highest annual salaries, or \$6,000, whichever is greater.

### **Normal Retirement:**

**Eligibility:** Eligibility for Class I benefit is age 62 and 10 years of contributing membership after May 7, 1989. Eligibility for Class II benefit is age 60 or 25 years of membership service.

**Form of Benefit:** Payment is in the form of a life annuity with a cost of living increase each year for the first \$30,000 of benefits equal to that which is used by the United States of America Social



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Security System commencing on January 1 of each year subsequent to the anniversary of retirement after attainment of age 55.

**Early Retirement:**

*Eligibility:* Eligibility for Class I early retirement is age 52 and 10 years of membership service or 25 years of membership service. At least 10 years of membership service must be earned after May 7, 1989. Class II members are not eligible for early retirement.

*Amount of Benefit:* Same as normal retirement benefit, except reduced by an actuarially determined amount (3%) for each month the member is under 62 years of age.

*Form of Benefit:* Same as normal retirement benefit.

**Termination:**

*Eligibility:* Eligibility for Class I termination benefit is 10 years of contributing membership service. Eligibility for Class II termination benefit is 3 years of vesting service.

*Amount of Benefit:* Same as normal retirement benefit.

*Form of Benefit:* Same as normal retirement benefit, except the annuity commences at age 62 for Class I members and age 60 for Class II members.

**Disability Retirement:**

*Eligibility:* Members who are less than age 62, who are totally and permanently disabled and, in the case of non-occupational causes, who accumulate at least 5 years of membership service.

*Amount of Benefit:* 50% of the member's salary in effect as of the date of disability or 66 2/3% of member's salary in effect if individual became a member prior to December 5, 2003. At age 62, the member will receive a normal retirement benefit calculated assuming service had continued to age 62 at the same salary received at the time of disability and the Class I formula is used. Disability benefits will be reduced by the U.S. Social Security System, Workers' Compensation or other disability insurance payments.

*Form of Benefit:* Same as normal retirement benefit.

**Survivor's Benefits:**

*Eligibility:* Members who were active employees with at least 18 months of service for Class I and at least 3 years of service for Class II, or members who were receiving retirement or disability benefits.

*Amount of Benefit:* A surviving spouse will receive 50% of the member's normal retirement benefit, or benefit being paid at death, but not less than \$6,000 per year. Each surviving minor child (with a maximum of three children) will receive the greater of \$1,080 and 16 2/3% of the member's normal retirement benefit or the benefit being paid at death.

**SECTION III. APPENDICES**

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***Form of Benefit:*** The surviving spouse benefit will commence immediately if there are minor children, otherwise at the spouse's attainment of age 35, and continues until remarriage or death. Payment will be in the form of a life annuity with a cost of living increase each year equal to that which is used by the U.S. Social Security System, commencing January 1 subsequent to the anniversary of the spouse's annuity date after attainment of age 55.

The children's benefit commences immediately and continues until the respective child's attainment of age 18 (age 22 if a full-time student) unless the child is disabled.

**Lump Sum Death Benefit:**

***Eligibility:*** Members who were active employees or members who were receiving retirement or disability benefits.

***Amount of Benefit:*** A lump sum of \$1,000 plus, if there is no surviving spouse or children, a refund, reduced by pension payments already received, of 1/3<sup>rd</sup> of the accumulated employee contributions with interest.

**Contributions:** Class I members who are active employees contribute 10.5% per year. Class II members who are active employees contribute 11% per year.

**APPENDIX B. ACTUARIAL COST METHOD AND ASSUMPTIONS**

	September 30, 2015	September 30, 2014
<b>Actuarial Cost Method</b>	Entry Age Normal	
<b>Investment Return</b>	3.78% for FY 2016, 3.25% for FY 2017, 1.55% for FY 2018, then 1.5% for each FY thereafter	
<b>Salary Increases</b>	No future salary increases	
<b>Cost of Living Adjustment</b>	Specified in Plan	
<b>Mortality (current)</b>	1971 Group Annuity Mortality Table for Males with ages set forward 3 years for Males	
<b>Mortality (improved)</b>	RP-2000 Combined Healthy table for Males and Females, projected to 2015 using Mortality Improvement Scale AA	
<b>Retirement Age</b>	Earlier of age 62, if eligible, or 25 years of vesting service.	
<b>Marital Status</b>	94% of participants are assumed to be married and males are assumed to be 5 years older than female spouses. Married participants are assumed to have two minor children aged 13 on benefit commencement date.	
<b>Survivor Benefit – Minor Children</b>	Married participants are assumed to have two minor children aged 13 on benefit commencement date.	
<b>Turnover</b>	<u>Age</u>	<u>Rate</u>
	20	.1303
	25	.1078
	30	.0858
	35	.0683
	40	.0508
	45	.0333
	50	.0158
	55 & up	.0000

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	September 30, 2015	September 30, 2014
<b>Disability</b>	<u>Age</u>	<u>Male</u>
	<u>Female</u>	
	25	.00020
	30	.00023
	35	.00035
	40	.00060
	45	.00112
	50	.00310
	55	.00334
	60	.00441
<b>Cost of Living Adjustment</b>	2% per year	
<b>Administrative Expenses</b>	<u>Current Mortality</u>	
	\$2,086,400 per year from FY 2016 to FY 2031, then decreasing 10% per year.	
	<u>Improved Mortality</u>	
	\$2,086,400 per year from FY 2016 to FY 2035, then decreasing 10% per year.	

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