

Report
of the
Examination of
Arch Mortgage Reinsurance Company
Walnut Creek, California
As of December 31, 2015

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State of Wisconsin / OFFICE OF THE COMMISSIONER OF INSURANCE

Scott Walker, Governor
Theodore K. Nickel, Commissioner

Wisconsin.gov

April 7, 2017

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Honorable Theodore K. Nickel
Commissioner of Insurance
State of Wisconsin
125 South Webster Street
Madison, Wisconsin 53703

Commissioner:

In accordance with your instructions, a compliance examination has been made of the affairs and financial condition of:

ARCH MORTGAGE REINSURANCE COMPANY
Walnut Creek, California

and this report is respectfully submitted.

I. INTRODUCTION

The previous examination of Arch Mortgage Reinsurance Company (Arch MI Re or the company), formerly known as CMG Mortgage Reinsurance Company, was conducted in 2011 as of December 31, 2010. The current examination covered the intervening period ending December 31, 2015, and included a review of such 2016 transactions as deemed necessary to complete the examination.

The examination was conducted using a risk-focused approach in accordance with the National Association of Insurance Commissioners (NAIC) Financial Condition Examiners Handbook. This approach sets forth guidance for planning and performing the examination of an insurance company to evaluate the financial condition, assess corporate governance, identify current and prospective risks (including those that might materially affect financial condition, either currently or prospectively), and evaluate system controls and procedures used to mitigate those risks.

All accounts and activities of the company were considered in accordance with the risk-focused examination process. This may include assessing significant estimates made by

management and evaluating management's compliance with statutory accounting principles, annual statement instructions, and Wisconsin laws and regulations. The examination does not attest to the fair presentation of the financial statements included herein. If during the course of the examination an adjustment is identified, the impact of such adjustment will be documented separately at the end of the "Financial Data" section in the area captioned "Reconciliation of Surplus per Examination."

Emphasis was placed on the audit of those areas of the company's operations accorded a high priority by the examiner-in-charge when planning the examination. Special attention was given to the action taken by the company to satisfy the recommendations and comments made in the previous examination report.

The company is annually audited by an independent public accounting firm as prescribed by s. Ins 50.05, Wis. Adm. Code. An integral part of this compliance examination was the review of the independent accountant's work papers. Based on the results of the review of these work papers, alternative or additional examination steps deemed necessary for the completion of this examination were performed. The examination work papers contain documentation with respect to the alternative or additional examination steps performed during the course of the examination.

Independent Actuary's Review

An independent actuarial firm was engaged under a contract with the Office of the Commissioner of Insurance. The actuary reviewed the adequacy of the company's loss and loss adjustment expense reserves. The actuary's results were reported to the examiner-in-charge. As deemed appropriate, reference is made in this report to the actuary's conclusion.

II. HISTORY AND PLAN OF OPERATION

Arch Mortgage Reinsurance Company was incorporated in Wisconsin on May 27, 1999, under the name CMG Mortgage Reinsurance Company (CMG Re) and commenced business on August 26, 1999. The company was formed as a jointly owned subsidiary of CUNA Mutual Investment Corporation (CMIC) and PMI Mortgage Insurance Co. (PMI), as an adjunct corporation in the parent companies' strategic alliance for the joint ownership and operation of CMG Mortgage Insurance Company (CMG MI). Each of the two parent companies contributed initial capital of \$1.5 million to the company in May 1999.

The company was established to provide excess of loss reinsurance for coverage in excess of 25% of the original principal balance of each mortgage loan insured on a direct basis by CMG MI. The company provided coverage of up to 25% of each insured mortgage loan.

CUNA Mutual Insurance Society (CUNA Mutual), the parent company of CMIC, obtained 50% ownership of CMG MI and CMG Mortgage Assurance Company (CMGA) through stock dividends from CMIC on June 30, 2009. Concurrently, CMG Re became a wholly owned subsidiary of CMGA through a stock ownership transfer via capital contributions from CUNA Mutual and PMI.

CUNA Mutual and PMI each owned a 50% interest in the capital stock of CMG MI and CMGA, while CMG Re was a wholly owned subsidiary of CMGA. The objective of the joint venture between CUNA Mutual and PMI was to establish a strategic alliance to offer mortgage guaranty insurance products and services to credit unions that originate residential mortgage loans. The strategic alliance was undertaken to combine and employ the expertise of the two parent organizations, with PMI contributing its specialized knowledge and business systems for mortgage guaranty insurance operations and with CUNA Mutual having a close business association with, and specialized knowledge of, the credit union industry.

On January 30, 2014, CMG MI, CMGA, and the company were acquired by Arch U.S. MI Holdings Inc. (Arch MI Holdings), an indirect wholly owned subsidiary of Arch Capital Group Ltd. (ACGL), a publicly traded Bermuda-domiciled company. Simultaneous with this acquisition, the company's name was changed to Arch Mortgage Reinsurance Company.

Arch MI Re is licensed only in the state of Wisconsin. The company does not have employees and its operating functions are provided by affiliated companies within the parent holding company organization pursuant to several affiliate services agreements. Further discussion of affiliate relationships and affiliated service agreements is included in the section of this report titled "Affiliated Companies."

As a result of the acquisition and the amended affiliated reinsurance agreements discussed under the "Reinsurance" section of this report, the company discontinued all new reinsurance assumptions and continues to insure only policies with existing delinquencies prior to January 30, 2014.

The following table is a summary of the net insurance premiums written by the company in 2015. The growth of the company is discussed in the "Financial Data" section of this report.

Line of Business	Direct Premium	Reinsurance Assumed	Reinsurance Ceded	Net Premium
Mortgage guaranty	<u>\$0</u>	<u>\$237,466</u>	<u>\$0</u>	<u>\$237,466</u>
Total All Lines	<u>\$0</u>	<u>\$237,466</u>	<u>\$0</u>	<u>\$237,466</u>

III. MANAGEMENT AND CONTROL

Board of Directors

The company's board of directors consists of six members. At each annual meeting, the shareholders elect directors to serve until the next annual shareholders meeting. Officers are elected at the board of directors meeting following each annual shareholder meeting. Members of the company's board of directors may also be members of other boards of directors in the holding company group. The board members do not receive any compensation for serving on the board.

Currently the board of directors consists of the following persons:

Name and Residence	Principal Occupation	Term Expiry
Andrew T. Rippert Hamilton, Bermuda	Chief Executive Officer, Global Mortgage Group Arch Capital Group Ltd.	2017
Dennis R. Brand Jersey City, New Jersey	Senior Executive Vice President, Chief Administrative Officer Arch Insurance Group, Inc.	2017
Cheryl A. Feltgen Danville, California	Executive Vice President, Chief Risk Officer Arch Mortgage Insurance Company	2017
David E Gansberg Danville, California	President and Chief Executive Officer Arch Mortgage Insurance Company	2017
Thomas H. Jeter Mill Valley, California	Executive Vice President, Chief Financial Officer Arch Mortgage Insurance Company	2017
Mark D. Lyons Hamilton, Bermuda	Executive Vice President, Chief Financial Officer Arch Capital Group Ltd.	2017

Officers of the Company

The officers serving at the time of this examination are as follows:

Officer	Office	2015 Compensation*
David E. Gansberg	President and Chief Executive Officer	\$1,504,230
Thomas H. Jeter	Executive Vice President, Chief Financial Officer and Treasurer	577,663
Christopher A. Hovey	Executive Vice President, Chief Operating Officer	639,196
Andrew D. Cameron	Executive Vice President, General Counsel and Secretary	607,814
Cheryl A. Feltgen	Executive Vice President, Chief Risk Officer	695,229
Kenneth S. Dailey	Vice President, Actuarial Services	320,200
Angela A. Karanas	Senior Vice President, National Underwriting Operations	466,481

* The 2015 compensation does not include employer's paid health insurance premiums, cell phone and car use allowance and moving expenses.

Committees of the Board

The company's bylaws allow for the formation of certain committees by the board of directors. The company's board has not appointed any committees.

Management and Operating Committees

The company has established the following management and operating committees:

Enterprise Risk Management Committee

Cheryl Feltgen, Executive Vice President, Chief Risk Officer, Chair
David Gansberg, President and Chief Executive Officer
Christopher Hovey, Executive Vice President, Chief Operating Officer
Thomas Jeter, Executive Vice President, Chief Financial Officer and Treasurer
Andrew Cameron, Executive Vice President, General Counsel and Secretary
Angela Karanas, Senior Vice President, National Underwriting Operations
Janet Parker, Senior Vice President, Risk Management

Pricing Committee

Cheryl Feltgen, Executive Vice President, Chief Risk Officer, Chair
John Hanken, Vice President, Risk Analytics and Pricing
David Gansberg, President and Chief Executive Officer
Thomas Jeter, Executive Vice President, Chief Financial Officer and Treasurer
Janet Parker, Senior Vice President, Risk Management

IT Governance Committee

Prashant Nema, Senior Vice President, Chief Information Officer, Chair
Christopher Hovey, Executive Vice President, Chief Operating Officer
Brenda Eastham, Vice President, Digital Products Management
Todd Berman, Vice President, Chief Compliance and Information Systems Officer
Scott Kelly, Vice President, Director of Information Technology
Joseph Vaithara, Director of Software Engineering
Cindy Yuan, Vice President, Software Development
Scott Remesburg, Vice President, Program Management Operations

IT Steering Committee

Prashant Nema, Senior Vice President, Chief Information Officer, Chair
David Gansberg, President and Chief Executive Officer
Christopher Hovey, Executive Vice President, Chief Operating Officer
Thomas Jeter, Executive Vice President, Chief Financial Officer and Treasurer

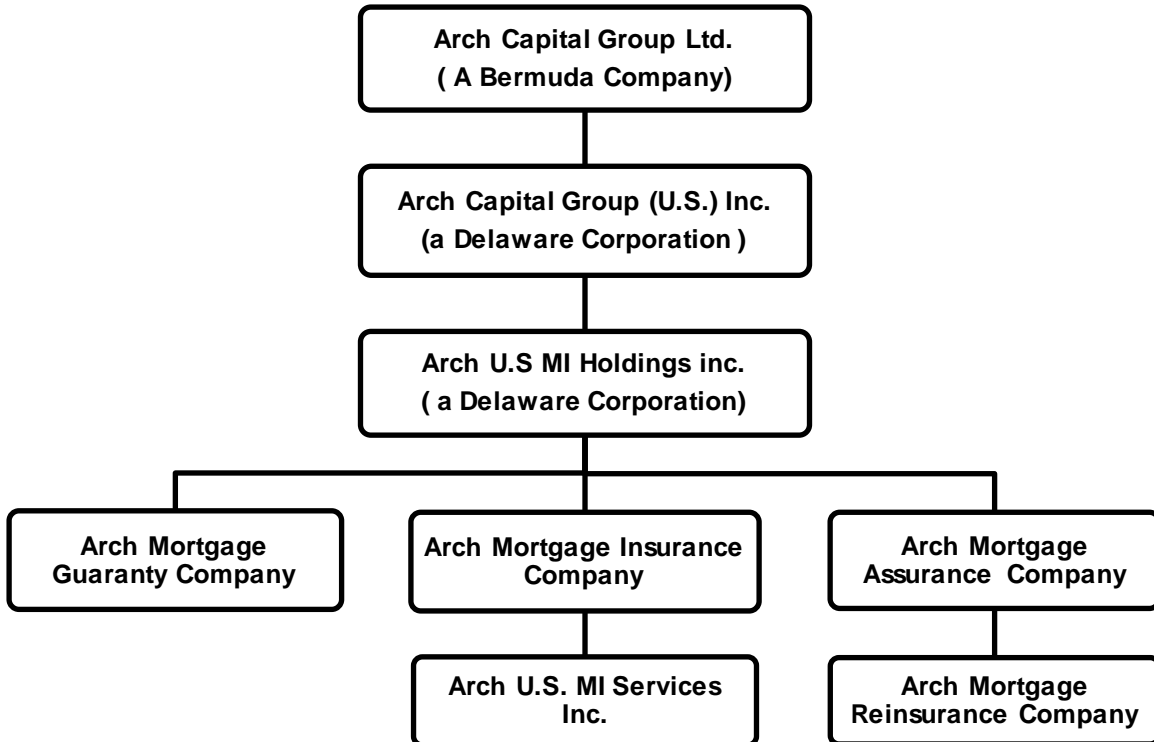
Privacy Committee

Todd Berman, Vice President, Chief Compliance and Information Systems Officer, Chair
Angela Karanas, Senior Vice President, National Underwriting Operations
Kevin Frank, Vice President, Policy Administration and Claims
Prashant Nema, Senior Vice President, Chief Information Officer
Scott Kelly, Vice President, Director of Information Technology
Cindy Yuan, Vice President, Software Development
Scott Remesburg, Vice President, Program Management Operations
Brenda Eastham, Vice President, Digital Products Management
Jerry Brannon, Manager, Administrative Services
Jesse Gantry, Vice President, Assistant Corporate Controller and Chief Accounting Officer
Greg Donovan, Senior Director, Treasury Operations
David Gorbach, Senior Director, Financial Planning and Analysis
Julia Gosnell, Director, Corporate Procurement
William Horning, Vice President, Corporate Communication and Capital Planning
Babusha Goel, Director, Accounting Expense Management and Accounts Payable
William Levinthal, Senior Vice President, Deputy General Counsel and General Legal
Monica Kamio, Vice President, Human Resources
Cheryl Feltgen, Executive Vice President, Chief Risk Officer
Janet Parker, Senior Vice President, Risk Management
Brian Roesch, Vice President, Sales Operations
Kevin Jensen, Vice President, Internal Audit

IV. AFFILIATED COMPANIES

Arch MI Re is a member of a holding company system. The organizational chart below depicts the relationships among the affiliates in the group. A brief description of the significant affiliates follows the organizational chart.

**Organizational Chart
As of December 31, 2015**



Arch Capital Group Ltd.

ACGL, a Bermuda publicly traded company, is a global insurer and reinsurer with operations in Bermuda, the United States, Canada, Europe, Australia and South Africa. ACGL indirectly acquired 100% ownership of the companies now known as Arch Mortgage Insurance Company, Arch Mortgage Assurance Company (Arch MA) (formerly CMGA) and Arch Mortgage Reinsurance Company (Arch MI Re) (formerly CMG Re) on January 30, 2014, from their joint venture owners, PMI and CUNA Mutual. The company now known as Arch Mortgage Guaranty Company (AMG) (formerly PMI Mortgage Assurance Co.) was also acquired from PMI on January 30, 2014. As of December 31, 2015, the audited consolidated financial statements of

ACGL reported assets of \$23.1 billion, liabilities of \$16.0 billion and shareholders' equity attributable to ACGL's direct or indirect controlling financial interests of \$7.1 billion. Operations for 2015 produced net income of \$526.6 million.

Arch Capital Group (U.S.) Inc.

Arch Capital Group (U.S.) Inc. (ACG US) is a wholly owned, indirect subsidiary of ACGL. As of December 31, 2015, the unaudited consolidated statutory financial statements of ACG US reported assets of \$4.7 billion, liabilities of \$3.5 billion and policyholders' surplus of \$1.2 billion. Operations for 2015 produced net income of \$110 million.

Arch U.S. MI Holdings Inc.

Arch MI Holdings is a wholly owned subsidiary of ACG US, which is a wholly owned, indirect subsidiary of ACGL, a Bermuda company. Arch MI Holdings owns 100% of the shares of Arch MI, AMG and Arch MA. As of December 31, 2015, the non-audited financial statements of Arch MI Holdings reported assets of \$374.1 million, liabilities of \$95.1 million and shareholders' equity of \$279 million. Operations for 2015 produced a GAAP net loss of \$41 million.

Arch U.S. MI Services Inc.

Arch U.S. MI Services Inc. (Arch MI Services) is a wholly owned, non-insurer subsidiary of Arch MI and was established to provide operational and technological support to the other companies within the Arch MI Holdings consolidated group. The vast majority of employees that provide operational, financial and legal services to this group are employed by Arch MI Services. Arch MI Services entered into a services agreement with Arch MI Re on January 30, 2014. The subject matter of the agreement is described further in the "Agreements with Affiliates" section of this report. As of December 31, 2015, the non-audited financial statements of Arch MI Services reported assets of \$87 million, liabilities of \$21 million and shareholders' equity of \$66 million. Operations for 2015 produced net income of \$1 million.

Arch Mortgage Insurance Company

Arch Mortgage Insurance Company (Arch MI) was incorporated on December 30, 1980, as an Illinois-domiciled residential mortgage guaranty insurer under the name TIMIC Mortgage Insurance Company. On April 14, 1994, CUNA Mutual Investment Corporation

purchased 100% of the capital stock of Arch MI. Concurrent with CMIC's acquisition, the name of the insurer was changed to CMG Mortgage Insurance Company. On June 23, 1994, PMI Mortgage Insurance Co. purchased from CMIC 45% of the issued and outstanding stock of CMG MI, and on September 8, 1994, CMIC and PMI executed a CMG MI Shareholders Agreement that established a joint venture agreement and joint management of CMG MI under a strategic alliance between CMIC and PMI.

CMG MI resumed writing new business in 1994 and redomiciled to Wisconsin effective November 30, 1994. PMI's ownership interest in CMG MI increased to 50% in 1998 through PMI's purchase of 200,000 additional shares of CMG MI capital stock and, after that transaction, CMIC and PMI each held equal 50% ownership interests in the capital stock of CMG MI. CMIC transferred its 50% ownership in CMG MI to CUNA Mutual through a stock dividend on June 30, 2009.

In June 2011, the board of directors of CUNA Mutual, the company's ultimate parent, approved a plan to convert CUNA Mutual from a mutual insurance company to a mutual insurance holding company. In September 2011, policyholders and the Iowa Insurance Commissioner approved a plan to reorganize CUNA Mutual into a mutual holding company effective January 31, 2012. Under the reorganization plan, CUNA Mutual was renamed CMFG Life Insurance Company.

On August 19, 2011, PMI and its wholly owned subsidiary, PMI Insurance Co. (PIC), were placed under a supervisory order by the Arizona Director of Insurance as a result of the Arizona Department of Insurance's determination of a hazardous financial condition under Arizona insurance laws and regulations relating to PMI's June 30, 2011, operational results. PMI was suspended as an approved mortgage insurer by Fannie Mae and Freddie Mac effective August 22, 2011. However, these actions did not impact the stand-alone operations of the company, CMG MI or CMGA.

On January 30, 2014, Arch MI Holdings, a subsidiary of ACGL, completed the acquisition of CMG MI from its owners, PMI and CMFG Life Insurance Company, and acquired

PMI's mortgage insurance platform and related assets. Following the acquisition, CMG Mortgage Insurance Company's name was changed to Arch Mortgage Insurance Company.

As of December 31, 2015, the audited statutory financial statements of Arch MI reported assets of \$436,418,566, liabilities of \$301,933,826 and policyholders' surplus of \$134,484,740. Operations for 2015 produced a statutory net loss of \$34,843,210.

Arch Mortgage Assurance Company

Arch MA was organized in 1969 as a California-domiciled mortgage guaranty insurer under the name Investors Mortgage Insurance Company of California. The name was changed to Investors Equity Insurance Company, Inc. (IEIC), effective September 23, 1980. The company remained a dormant corporation until May 12, 1981, at which time it commenced writing mortgage guaranty insurance on second mortgages. In December 1981, Investors Mortgage Insurance Holding Company (IMIHC) acquired control of 100% of the capital stock of IEIC when IEIC's parent merged into IMIHC. IEIC ceased writing new business in 1986. In 1994, following CUNA Mutual Investment Corporation's acquisition of IMIHC, IMIHC paid CMIC an extraordinary dividend consisting of 100% of the capital stock of IEIC.

On June 23, 1994, PMI purchased from CMIC 45% of the issued and outstanding stock of CMG MI, and on September 8, 1994, CMIC and PMI executed a CMG MI Shareholders Agreement that established a joint venture agreement and joint management of CMG MI under a strategic alliance between CMIC and PMI. In 1999, IEIC changed its name to CMG Mortgage Assurance Company and, on June 1, 2000, CMGA redomiciled from California to Wisconsin. Effective October 1, 2000, PMI purchased from CMIC 50% of the capital stock of CMGA, and CMGA became another jointly owned subsidiary of CMIC and PMI. As mentioned earlier in this section of the report, CMIC transferred its 50% ownership in CMGA to CMIS through a stock dividend on June 30, 2009. Also on June 30, 2009, CMG Re became a wholly owned subsidiary of CMGA.

CMGA is licensed as a mortgage guaranty insurer. The joint venture ownership of CMGA was established to provide insurance coverages on junior lien second-mortgage loans issued by credit unions. CMGA began writing business in the third quarter of 2001. Due to

unfavorable results from this line of business, the company's board of directors agreed to discontinue writing new business effective March 31, 2008.

On January 30, 2014, CMGA was indirectly acquired by ACGL and upon the acquisition the name was changed to Arch MA.

As of December 31, 2015, the audited consolidated financial statements of Arch MA reported assets of \$14,115,666, liabilities of \$238,302 and policyholders' surplus of \$13,877,364. Operations for 2015 produced net loss of \$66,305.

Arch Mortgage Guaranty Company

Arch Mortgage Guaranty Company was organized on December 21, 1966, under the name Commercial Loan Insurance Corporation (CLIC) as a mortgage guaranty insurer domiciled in the state of Wisconsin. CLIC began transacting business on May 1, 1967. Prior to August 2001, CLIC was a wholly owned subsidiary of WMAC Investment Corporation, which was then an affiliate of Leucadia National Corporation.

On August 6, 2001, PMI, an Arizona-domiciled insurance company and wholly owned subsidiary of The PMI Group, Inc. (TPG), a publicly owned holding company incorporated in Delaware, acquired a 100% ownership of CLIC. CLIC's legacy business insured lending institutions and investors against financial loss resulting from the default of mortgage loans for various types of industrial and commercial real estate.

Effective November 11, 2009, CLIC redomiciled from the state of Wisconsin to Arizona and changed its name to PMI Mortgage Assurance Co. (PMAC). During the first quarter of 2010, PMAC received regulatory approvals for its merger with WMAC Credit Insurance Corporation, a former affiliate of PMAC and former subsidiary of PMI.

On August 19, 2011, PMI and its wholly owned subsidiary, PIC, were placed under a supervisory order by the Arizona Director of Insurance as a result of the Arizona Department of Insurance's determination of a hazardous financial condition under Arizona insurance laws and regulations relating to PMI's June 30, 2011, financial condition.

Effective August 22, 2011, Fannie Mae and Freddie Mac each suspended PMI, PIC and PMAC from their respective lists of approved mortgage insurers for new mortgage loans. These suspensions remain in effect.

On January 30, 2014, Arch MI Holdings completed the acquisition of PMAC from its owner, PMI, and acquired PMI's mortgage insurance platform and related assets. Upon the acquisition, PMAC's name was changed to Arch Mortgage Guaranty Company and in 2015 it was reactivated to conduct non-GSE business.

As of December 31, 2015, the audited statutory financial statements of AMG reported assets of \$50,918,255, liabilities of \$1,341,200 and policyholders' surplus of \$49,577,055. Operations for 2015 produced statutory net income of \$28,226.

Agreements with Affiliates

Service Agreement

Effective January 30, 2014, Arch MI Re entered into a service agreement with Arch MI Services, a wholly owned subsidiary of Arch MI. Under this agreement, Arch MI Services provides various services to Arch MI Re, including accounting, data processing, systems work, records information technology, employee administration, legal services, financial reporting, tax returns and other services such as office space, general overhead items, allocation of expenses, arranging of separate insurance coverage and collection and handling of insurance premiums. Arch MI Re is liable to compensate Arch MI Services for the cost of the provided services by remitting a payment for the amount billed. Arch MI Re reimburses Arch MI Services for all reasonable and documented out-of-pocket expenses. The agreement can be terminated by giving at least 90 days' written notice or upon the resolution approved by the boards of directors of the company, Arch MI Services and Arch MI Holdings expressing intent to terminate the agreement.

Investment Manager Agreement

The company has an investment manager agreement with an indirect affiliate, Arch Investment Management Ltd. (AIM), effective January 30, 2014, and amended effective January 20, 2015, for investment management services to be provided to Arch MI Re and

affiliates. Under this agreement, AIM acts as the company's investment manager and assumes the responsibilities and obligations of a fiduciary with respect to the services subject of the agreement including investment advice and oversight, investment market risk monitoring, investment credit risk monitoring, investment compliance monitoring, and asset allocation monitoring. AIM provides appraisals of investment accounts, performance tabulations, compliance certifications, summaries of purchases and sales, and any other reports agreed upon from time to time. The company compensates AIM by payment of a monthly asset management fee at an annual rate based on whether the services provided by AIM for the assets under management in the investment accounts are Investment Consulting and Oversight Services, or Direct Investment Management Services, with such allocation set forth in the investment manager's invoice. The agreement can be terminated by either party at any time upon 45 days' prior written notice.

Tax Sharing Agreement

Effective upon the close of the acquisition on January 30, 2014, the company became a party to the Amended and Restated Tax Sharing Agreement between ACG US and its subsidiaries. As of that date, Arch MI Re became a member of the "Parent Group" addressed in this agreement, which includes ACG US and its subsidiaries. Effective January 30, 2014, Arch MI Re was made a party to the Amended and Restated Tax Sharing Agreement between ACG US and its subsidiaries. Under the tax sharing agreement, ACG US files a consolidated U.S. Federal Income Tax Return that includes Arch MI Re and other affiliates of the ACG US holding company group, whereby the income taxes are computed as if each subsidiary filed a separate tax return on a stand-alone basis, utilizing the applicable Group consolidated tax rate for the applicable taxable year or part thereof during which such subsidiary was a member of the Group. Tax payments are payable directly to the company's immediate parent, Arch MI Holdings, which will thereafter make any necessary payments of taxes to ACG US. Taxes payable to the parent are due within 90 days of the date the group tax liability is paid. A credit is given to each company for any net operating losses or other items used in the consolidated tax return filed by ACG US, to the extent those losses or items may be utilized by each company on a separate

return basis. The agreement also addresses the filing of consolidated state income tax returns on a state-by-state basis in a manner consistent with the approach provided in respect to the U.S. Federal Income Tax Return.

V. REINSURANCE

Arch MI Re does not presently cede or assume any new insurance risks and is not party to any reinsurance treaties except the Excess Primary Mortgage Reinsurance Agreement with Arch MI. The Excess Primary Mortgage Reinsurance Agreement was effective May 27, 1999, and was restated as of November 2, 2004. Under this agreement, Arch MI Re assumed from Arch MI mortgage loan coverage in excess of 25% of the original principal balance for individual mortgage loans written on a direct basis by Arch MI, covering up to 25% of each insured mortgage loan written by Arch MI. Pursuant to this agreement, Arch MI provided to Arch MI Re general management assistance services, including, but not limited to, the services of Arch MI's management personnel necessary for the operation of the reinsurance business conducted by Arch MI Re. In consideration of the services provided to Arch MI Re under this agreement, Arch MI Re agreed to pay to Arch MI a monthly service fee based on the actual cost of services. Payments were to be made within 30 days of the end of each month. The agreement could be terminated by either party providing 60 days' written notice in the event that Arch MI Re no longer reinsured any of Arch MI's business. This agreement could also be terminated if the other party had materially defaulted under the terms and conditions of the agreement and such default was not cured within 60 days of receipt of written notice.

Effective January 30, 2014, Arch MI amended its reinsurance agreement with Arch MI Re to specify that all cessions under the agreement will be determined net of the quota share reinsurance agreements between Arch MI and an indirect affiliate, Arch Reinsurance Ltd., and between Arch MI and CUMIS Reinsurance Company. This amendment had the effect of discontinuing all reinsurance by Arch MI Re on non-delinquent loans as of January 30, 2014. Currently, Arch MI Re remains effectively in run-off and collects premium solely for reinsuring risk assumed from Arch MI for loans with existing delinquencies as of January 30, 2014.

Upon the acquisition of CMG MI and CMG Re by ACGL effective January 30, 2014, Arch MI entered into each of three independent Quota Share Reinsurance Agreements with PIC, Arch Reinsurance Ltd. (ARL, an indirect affiliate) and CUMIS Mortgage Reinsurance Company (CUMIS), a CUNA Mutual Group member. These agreements allow the company to manage

risk, maintain required capital levels and leverage the financial position of each reinsurance company.

VI. FINANCIAL DATA

The following financial statements reflect the financial condition of the company as reported to the Commissioner of Insurance in the December 31, 2015, annual statement.

Adjustments made as a result of the examination are noted at the end of this section in the area captioned "Reconciliation of Surplus per Examination." Also included in this section are schedules that reflect the growth of the company, NAIC Insurance Regulatory Information System (IRIS) ratio results for the period under examination, and the compulsory and security surplus calculation.

Arch Mortgage Reinsurance Company
Assets
As of December 31, 2015

	Assets	Nonadmitted Assets	Net Admitted Assets
Bonds	\$20,140,701	\$0	\$20,140,701
Cash, cash equivalents, and short-term investments	1,572,496	0	1,572,496
Investment income due and accrued	70,339	0	70,339
Premiums and considerations:			
Uncollected premiums and agents' balances in course of collection	13,299	0	13,299
Receivable from parent, subsidiaries, and affiliates	<u>46,336</u>	<u>0</u>	<u>46,336</u>
Total Assets	<u>\$21,843,171</u>	<u>\$0</u>	<u>\$21,843,171</u>

Arch Mortgage Reinsurance Company
Liabilities, Surplus, and Other Funds
As of December 31, 2015

Losses		\$ 4,651,905
Reinsurance payable on paid loss and loss adjustment expenses		68,199
Other expenses (excluding taxes, licenses, and fees)		19,117
Current federal and foreign income taxes		246,295
Net deferred tax liability		
Unearned premiums		2,497
Payable to parent, subsidiaries, and affiliates		30,635
Write-ins for liabilities:		
Reserves for contingencies		734,921
Premium refund reserve		149,285
Premium deficiency reserve		<u>2,365,758</u>
Total liabilities		8,268,612
Common capital stock	\$ 2,000,000	
Gross paid in and contributed surplus	19,300,000	
Unassigned funds (surplus)	<u>(7,725,441)</u>	
Surplus as regards policyholders		<u>13,574,559</u>
Total Liabilities and Surplus		<u>\$21,843,171</u>

**Arch Mortgage Reinsurance Company
Summary of Operations
For the Year 2015**

Underwriting Income

Premiums earned	\$ 237,941
Deductions:	
Losses incurred	\$ 214,755
Other underwriting expenses incurred	153,797
Write-ins for underwriting deductions:	
Increase in reserve for contingencies	118,971
Approved withdrawal from contingency reserve	(131,476)
Change in premium deficiency reserve	<u>(1,085,120)</u>
Total underwriting deductions	<u>(729,073)</u>
Net underwriting gain	967,014

Investment Income

Net investment income earned	180,777
Net realized capital gains (losses)	<u>(1,301)</u>
Net investment gain (loss)	<u>179,476</u>
Net income (loss) after dividends to policyholders but before federal and foreign income taxes	
	1,146,490
Federal and foreign income taxes incurred	<u>(178,887)</u>
Net Income	<u>\$1,325,377</u>

Arch Mortgage Reinsurance Company
Cash Flow
For the Year 2015

Premiums collected net of reinsurance		\$ 129,646
Net investment income		<u>343,797</u>
Total		473,443
Benefit- and loss-related payments	\$3,899,718	
Commissions, expenses paid, and aggregate write-ins for deductions	204,081	
Federal and foreign income taxes paid (recovered)	<u>(671,645)</u>	
Total deductions		<u>3,432,154</u>
Net cash from operations		(2,958,711)
Proceeds from investments sold, matured, or repaid:		
Bonds	<u>\$6,190,425</u>	
Total investment proceeds		6,190,425
Cost of investments acquired (long-term only):		
Bonds	<u>3,324,789</u>	
Total investments acquired		<u>3,324,789</u>
Net cash from investments		2,865,636
Cash from financing and miscellaneous sources:		
Other cash provided (applied)	<u>(62,360)</u>	
Net cash from financing and miscellaneous sources		<u>(62,360)</u>
Reconciliation:		
Net change in cash, cash equivalents, and short-term investments		(155,435)
Cash, cash equivalents, and short-term investments:		
Beginning of year		<u>1,727,931</u>
End of Year		<u>\$1,572,496</u>

**Arch Mortgage Reinsurance Company
Policyholders' Position Calculation
December 31, 2015**

Surplus as regards policyholders	\$13,574,559	
Contingency reserve	<u>734,921</u>	
Total policyholders' position		<u>\$14,309,480</u>
Net minimum policyholders' position:		
Individual loans:		
Loan-to-value more than 75%	<u>\$407,770</u>	
Total individual loans	<u>407,770</u>	
Deduct aggregate minimum policyholder position for certain loans with established reserves	<u>(191,201)</u>	
Total minimum policyholders' position		<u>216,569</u>
Excess of Total Policyholders' Position over Minimum Policyholders' Position		<u>\$14,092,911</u>

**Arch Mortgage Reinsurance Company
Analysis of Surplus
For the Five- Year Period Ending December 31, 2015**

The following schedule details items affecting surplus during the period under examination as reported by the company in its filed annual statements:

	2015	2014	2013	2012	2011
Surplus, beginning of year	\$12,249,182	\$15,466,197	\$14,478,333	\$13,797,270	\$20,657,272
Net income	1,325,377	(3,217,015)	187,864	(1,108,172)	(6,700,964)
Change in net deferred income tax				(4,447,441)	2,043,360
Change in nonadmitted assets				4,236,676	(2,202,398)
Change in surplus notes		(10,000,000)			
Surplus adjustments: Paid in	_____	10,000,000	800,000	2,000,000	_____
Surplus, End of Year	<u>\$13,574,559</u>	<u>\$12,249,182</u>	<u>\$15,466,197</u>	<u>\$14,478,333</u>	<u>\$13,797,270</u>

**Arch Mortgage Reinsurance Company
Insurance Regulatory Information System
For the Five-Year Period Ending December 31, 2015**

The company's NAIC Insurance Regulatory Information System (IRIS) results for the period under examination are summarized below. Unusual IRIS results are denoted with asterisks and discussed below the table.

Ratio	2015	2014	2013	2012	2011
#1 Gross Premium to Surplus	2.0%	3.0%	72.0%	71.0%	71.0%
#2 Net Premium to Surplus	2.0	3.0	72.0	71.0	71.0
#3 Change in Net Premiums Written	-44.0*	-96.0*	9.0	5.0	-10.0
#4 Surplus Aid to Surplus	0.0	0.0	0.0	0.0	0.0
#5 Two-Year Overall Operating Ratio	507.0*	139.0*	114.0*	149.0*	137.0*
#6 Investment Yield	0.8*	0.3*	0.5*	2.1*	2.1*
#7 Gross Change in Surplus	11.0	-21.0*	7.0	5.0	-33.0*
#8 Change in Adjusted Surplus	11.0	-21.0*	1.0	-10.0*	-33.0*
#9 Liabilities to Liquid Assets	38.0	52.0	55.0	65.0	68.0
#10 Agents' Balances to Surplus	0.0	0.0	5.0	4.0	5.0
#11 One-Year Reserve Development to Surplus	-7.0	-6.0	-1.0	16.0	4.0
#12 Two-Year Reserve Development to Surplus	-8.0	0.0	20.0*	8.0	21.0*
#13 Estimated Current Reserve Deficiency to Surplus	0.0	-47.0	58.0*	33.0*	-1.0

Ratio No. 3 measures the change in net premium written from the prior year. Net premium written decreased by 96% in 2014 compared to 2013, and 44% in 2015 compared to

2014, as a result of the changes in the reinsurance program under the new ownership effective January 30, 2014. Arch MI Re is effectively in run-off and no longer assumes any new reinsurance risk from Arch MI. Continuing coverage reinsures only policies with existing delinquencies as of January 30, 2014.

Ratio No. 5 measures the company's profitability over the previous two-year period. The exceptional results during the five-year period were due to the large increase in underwriting expenses and decline in premium earned. The increase in underwriting expenses was driven by changes in contingency and premium deficiency reserves. Contingency and premium deficiency reserves are components of underwriting expenses and are a large liability required for writing mortgage insurance business.

Ratio No. 6 measures the average return on the company's investments. A large portion of the company's portfolio is allocated to U.S. government and tax-exempt municipal bonds which typically earn lower investment yields compared to equity securities. The nationwide low interest rate environment also contributed to the exceptional results.

Ratio No.7 represents the change in policyholders' surplus from prior year. The decreases in policyholders' surplus in 2011 and 2014 were mostly due to unfavorable operating results.

Ratio No. 8 measures the improvement or deterioration in the insurer's financial condition during the year and concentrates on the effect of operational results. The exceptional results in 2011, 2012 and 2014 were due to the net operating losses reported for these years.

Ratio No.12 measures the development of unpaid losses and loss adjustment expenses based on loss and loss adjustment expenses reported two years prior. In 2011 and 2013, the company's two-year loss reserve development to surplus was adverse by \$ 2.4 million and \$2.8 million, respectively.

Ratio No.13 provides an estimate of the adequacy of current reserves based on the reserve-to-premium ratios of the preceding two years. The exceptional results were mainly due to adverse loss development resulting in loss reserve deficiencies over the prior two years. The one-year loss development analysis showed loss reserve deficiencies in years 2012 and 2013.

Growth of Arch Mortgage Reinsurance Company

Year	Admitted Assets	Liabilities	Surplus as Regards Policyholders	Net Income
2015	\$21,843,171	\$ 8,268,612	\$13,574,559	\$ 1,325,377
2014	25,222,932	12,973,751	12,249,181	(3,217,015)
2013	33,371,023	17,904,826	15,466,197	187,864
2012	36,683,056	22,204,723	14,478,333	(1,108,172)
2011	41,008,684	27,211,414	13,797,270	(6,700,964)
2010	48,671,945	28,014,673	20,657,272	303,553

Year	Gross Premium Written	Net Premium Written	Premium Earned	Loss and LAE Ratio	Expense Ratio	Combined Ratio
2015	\$ 237,466	\$ 237,466	\$ 237,941	90.3%	-397.5%	-307.2%
2014	427,704	427,704	1,292,554	67.9	924.9	992.7
2013	11,202,203	11,202,203	11,048,764	80.2	28.7	108.9
2012	10,291,324	10,291,324	10,267,080	133.9	-5.7	128.3
2011	9,778,591	9,778,591	9,927,617	137.3	48.1	185.7
2010	10,813,773	10,813,773	11,090,380	168.8	-60.1	108.7

The period under examination was transitional for the company. Following the acquisition by ACGI, effective January 30, 2014, the company entered run-off due to management's decision to change the reinsurance program for Arch MI. Arch MI Re's business was limited to only reinsuring those loans insured by Arch MI that had existing delinquencies as of the date of the acquisition. The number of loans reinsured by the company substantially decreased, resulting in a large decline in gross and net premiums written. The company's loss ratio remained relatively high in 2011 and 2012, which can be attributed to the poor housing market and slow economic recovery following the mortgage crisis. Since 2013, the loss ratio has gradually decreased, reaching 90.3% in 2015. The company's expense ratio increased significantly in 2014, primarily due to significant reduction in net premium written, although there was a slight increase in underwriting expenses due to the need for additional premium deficiency reserves. The large decline in the expense ratio in 2015 was due to the significant decrease in other underwriting expenses driven by the decrease of \$1 million in the premium deficiency reserve from 2014 to \$2.4 million. The company has recorded statutory net losses in three out of the last five years as a result of negative underwriting results. In 2015, the company reported net

income from operations due to a significant decrease in premium deficiency reserves as a result of the reduced reinsurance activity for risk assumed from Arch MI.

Reconciliation of Surplus per Examination

No adjustments were made to surplus as a result of the examination. The amount of surplus reported by the company as of December 31, 2015, is accepted.

VII. SUMMARY OF EXAMINATION RESULTS

Compliance with Prior Examination Report Recommendations

There was one recommendation in the previous examination report. The recommendation contained in the last examination report and actions taken by the company are as follows:

1. Invested Assets—It is again recommended that the custodial/safekeeping agreement entered into by the company include the requirements as established by the NAIC Financial Condition Examiners Handbook, Part 1, Section IV, which include the following:
 - a) The custodian is obligated to indemnify the company for any loss of securities of the insurance company in the bank or banking and trust company's custody occasioned by the negligence or dishonesty of the bank or banking and trust company's officers or employees, or burglary, robbery, holdup, theft, or mysterious disappearance, including loss by damage or destruction; and
 - b) In the event that there is a loss of the securities for which the bank or banking and trust company is obligated to indemnify the company, the securities shall be promptly replaced or the value of the securities and the value of any loss of rights or privileges resulting from said loss of securities shall be promptly replaced.

Action—Compliance.

Summary of Current Examination Results

This section contains comments and elaboration on those areas where adverse findings were noted or where unusual situations existed. Comment on the remaining areas of the company's operations is contained in the examination work papers.

Executive Compensation

The state of Wisconsin requires each Wisconsin-domiciled insurer to file a supplement to the annual statement entitled "Report of Executive Compensation" pursuant to ss. 601.42 and 611.63 (4), Wis. Stat. This report includes the total annual compensation paid to each director, the chief executive officer, and the four most highly compensated officers or employees other than the chief executive officer. In addition, the report requires disclosure of the compensation of all executive officers whose compensation exceeds specified amounts. The company completed this form disclosing employees with compensation over \$150,000. All remuneration paid or accrued for services on behalf of each reportable employee should be included in the Report on Executive Compensation.

The examiners' review of the executive compensation revealed that the company did not include in the Report on Executive Compensation the employer-paid portion of health insurance benefits, moving expenses, and cell phone and corporate car use allowances. According to the company's management, Arch MI Re included the employer-paid portion of health insurance benefits in the 2016 Report of Executive Compensation; however, the remaining items were still not included in the Report on Executive Compensation. It is recommended that the company properly complete the Report on Executive Compensation as required by s.611.63 (4), Wis. Stat.

Actuarial Report

The NAIC 2015 Annual Statement Instructions require the following concerning the appointed actuary's Actuarial Report: "The Actuarial Report should be consistent with the documentation and disclosure requirement of Actuarial Standard of Practice No.41. The Actuarial Report must contain both narrative and technical components. The narrative component should provide sufficient detail to clearly explain to company management, the board of directors, the

regulator, or other authority the findings, recommendations and conclusions, as well as their significance. The technical component should provide sufficient documentation and disclosure for another actuary practicing in the same field to evaluate the work. The technical component must show the analysis from the basic data, e.g., loss triangles, to the conclusions.”

The examination team reviewed the content and presentations of documentation in the company’s Actuarial Report and found that they are not complete and are not in compliance with the NAIC requirements. Many of the figures presented in the Actuarial Report are supported by work done outside of the report. Correspondence with the company’s appointed actuary confirms that, while an effort was made to include the most important factors in the Actuarial Report, other support was omitted due to concerns about the number of pages in the reports. There is no prescribed limit to the size of the reports, so the number of pages should not be a concern. Although the underlying methodology executed by the appointed actuary is very familiar to all actuaries (i.e., frequency/severity techniques), the use of an unpublished and unfamiliar methodology for determining factors and assumptions made it difficult to evaluate the work absent a detailed methodology discussion in the report. It is recommended that future actuarial reports contain sufficient documentation for another actuary practicing in the same field to evaluate the entirety of the work by providing a thorough description of the methodology used including how it works and why it is appropriate for the dataset.

Actuarial Opinion Summary

The Actuarial Opinion Summary requires the appointed actuary to disclose, on a gross and net basis, the appointed actuary’s point estimate, when calculated, and the appointed actuary’s range, when calculated, and compare these to the carried reserves. Items 5 (A) through 5 (D) in the NAIC Actuarial Opinion Summary Instructions clarify that there is no requirement to produce both a range and a point estimate. However, the reserve estimates presented in the Actuarial Opinion Summary must follow the appointed actuary’s analysis (that is, if the appointed actuary prepares both a point estimate and a range in the analysis, then both the point estimate and the range must be disclosed in the Actuarial Opinion Summary). The appointed actuary provided only a range in the Actuarial Opinion Summary and filled in “NA” for

the point estimate. The company's carried reserves, however, are based solely on the appointed actuary's point estimate. The examination team finds that the company's Actuarial Opinion Summary is not in compliance with NAIC requirements. It is recommended that future Actuarial Opinion Summaries include all elements for which the appointed actuary provides an estimate, including both a range and point estimate if both are calculated in the appointed actuary's analysis.

VIII. CONCLUSION

Arch Mortgage Reinsurance Company is a direct wholly owned subsidiary of Arch U.S. MI Holdings Inc., and an indirect wholly owned subsidiary of Arch Capital Group Ltd., its ultimate controlling person. The company reinsured the portion of risk in excess of 25% of the borrower's total indebtedness to the insured on loans insured by Arch Mortgage Insurance Company between July 1, 1999, and January 30, 2014. Currently, the company is in run-off and continues to insure only policies with existing delinquencies prior to January 30, 2014.

Policyholders' surplus has decreased from \$20,657,272 as of year-end 2010, to \$13,574,559 as of year-end 2015. This represents a decrease of 34.3% during the period under examination. The following schedule summarizes the cumulative increases and decreases to surplus from December 31, 2010, when policyholders' surplus was last verified by examination, to December 31, 2015:

Policyholders' surplus, December 31, 2010	\$ 20,657,272
Surplus paid-in	12,800,000
Change in surplus notes	(10,000,000)
Net income/(loss)	(9,512,910)
Change in net deferred income tax	(2,404,081)
Change in nonadmitted assets	<u>2,034,278</u>
Policyholders' Surplus, December 31, 2015	<u>\$ 13,574,559</u>

The period under examination was transitional for the company. Following the acquisition by ACGL, effective January 30, 2014, the company entered run-off due to management's decision to change the reinsurance program for Arch MI. Arch MI Re's business was limited to only reinsuring those loans insured by Arch MI that had existing delinquencies as of the date of the acquisition. The number of loans reinsured by the company substantially decreased, resulting in a large decline in gross and net premiums written. The company's loss ratio remained relatively high in 2011 and 2012, which can be attributed to the poor housing market and slow economic recovery following the mortgage crisis. Since 2013, the loss ratio has gradually decreased, reaching 90.3% in 2015. The company's expense ratio increased significantly in 2014, primarily due to significant reduction in net premium written, although there was a slight increase in underwriting expenses due to the need for additional premium deficiency

reserves. The large decline in the expense ratio in 2015 was due to the significant decrease in other underwriting expenses driven by the change in the premium deficiency reserve. The company has recorded statutory net losses in three out of the last five years as a result of negative underwriting results. In 2015, the company reported net income from operations due to a significant decrease in premium deficiency reserves as a result of the reduced reinsurance activity for risk assumed from Arch MI.

The company was in compliance with the one prior examination recommendation, which related to custody of invested assets. The current examination made three recommendations. Areas of improvement recommended by this examination included actuarial documentation and proper completion of the Wisconsin state-specific supplement to the annual statement entitled "Report of Executive Compensation." The examination determined that there were no material misstatements of account balances as reported by the company in its 2015 statutory financial statements and did not make any adjustments or reclassifications of reported account balances. The examination determined that, as of December 31, 2015, the company had admitted assets of \$21,843,171, liabilities of \$8,268,612, and policyholders' surplus of \$13,574,559.

IX. SUMMARY OF COMMENTS AND RECOMMENDATIONS

1. Page 28 - Executive Compensation—It is recommended that the company properly complete the Report on Executive Compensation as required by s.611.63 (4), Wis. Stat.
2. Page 29 - Actuarial Report—It is recommended that future actuarial reports contain sufficient documentation for another actuary practicing in the same field to evaluate the entirety of the work by providing a thorough description of the methodology used including how it works and why it is appropriate for the dataset.
3. Page 30 - Actuarial Opinion Summary—It is recommended that future Actuarial Opinion Summaries include all elements for which the appointed actuary provides an estimate, including both a range and point estimate if both are calculated in the appointed actuary's analysis.

X. SUBSEQUENT EVENTS

On December 31, 2016, Arch MI Re's ultimate parent company, ACGL, completed the acquisition of United Guaranty Corporation (UGC, which includes ten insurance companies, including eight U.S. mortgage insurers and two U.S. credit insurers) (the UGC Acquisition) from American International Group, Inc. (AIG). The UGC Acquisition closed following the satisfaction of closing conditions as stipulated in the Stock Purchase Agreement, the receipt of regulatory approval from the North Carolina Department of Insurance, non-objection by this office, and federal approvals from the Government-Sponsored Enterprises including the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. The UGC Acquisition expanded the scale of ACGL's mortgage insurance business by combining UGC's position as market leader in the U.S. private mortgage insurance industry with ACGL's financial strength, technology platform, and market position. While the UGC Acquisition further diversified ACGL's business profile and customer base, it did not include any current plan to change the company's name, state of domicile, or basic insurance operations. The company will be headquartered in Greensboro, North Carolina, but will retain significant operations in California.

XI. ACKNOWLEDGMENT

The courtesy and cooperation extended during the course of the examination by the officers and employees of the company are acknowledged.

In addition to the undersigned, the following representatives of the Office of the Commissioner of Insurance, State of Wisconsin, participated in the examination:

Name	Title
Yi Xu	Insurance Financial Examiner
John Pollock	Insurance Financial Examiner-Journey
Junji Nartatez	Insurance Financial Examiner
John Litweiler	Insurance Financial Examiner-Advanced, Exam Planning & Quality Control Specialist
David Jensen	Insurance Financial Examiner-Advanced, Information Systems Audit Specialist
Jerry DeArmond	Insurance Financial Examiner-Advanced, Loss Reserve Specialist

Respectfully submitted,

Ana Careaga
Examiner-in-Charge