## MIAMI VALLEY RISK MANAGEMENT ASSOCIATION MONTGOMERY COUNTY, OHIO

SUPPLEMENTAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 2015

THOMAS L. JUDY, EXECUTIVE DIRECTOR



## Dave Yost • Auditor of State

Board of Trustees Miami Valley Risk Management Association 4625 Presidential Way Kettering, Ohio 45429

We have reviewed the *Independent Auditor's Report* of the Miami Valley Risk Management Association, Montgomery County, prepared by Julian & Grube, Inc., for the audit period January 1, 2015 through December 31, 2015. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Miami Valley Risk Management Association is responsible for compliance with these laws and regulations.

are Yost

Dave Yost Auditor of State

August 9, 2016

88 East Broad Street, Fifth Floor, Columbus, Ohio 43215-3506 Phone: 614-466-4514 or 800-282-0370 Fax: 614-466-4490 www.ohioauditor.gov This page intentionally left blank.

### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION MONTGOMERY COUNTY, OHIO

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Julian & Grube, Inc.

Serving Ohio Local Governments

333 County Line Rd. West, Westerville, OH 43082 Phone: 614.846.1899 Fax: 614.846.2799

### Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Required by *Government Auditing Standards*

Miami Valley Risk Management Association Montgomery County 4625 Presidential Way Kettering, Ohio 45429

To the Board of Trustees:

We have audited, in accordance with auditing standards generally accepted in the United States and the Comptroller General of the United States' *Government Auditing Standards*, the financial statements of the Miami Valley Risk Management Association, Montgomery County, Ohio, as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the Miami Valley Risk Management Association's basic financial statements and have issued our report thereon dated June 8, 2016, wherein we noted as discussed in Note 12, the Miami Valley Risk Management Association adopted Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions - an Amendment of GASB Statement No. 27* and *No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date - an Amendment of GASB Statement No. 68*. Our report refers to other auditors, who audited the financial statements of the Miami Valley Risk Management Association's basic other auditor's testing of internal control over financial statements. This report does not include the results of other auditor's separately reported.

### Internal Control Over Financial Reporting

As part of our financial statement audit, we considered the Miami Valley Risk Management Association's internal control over financial reporting (internal control) to determine the audit procedures appropriate in the circumstances to the extent necessary to support our opinion on the financial statements, but not to the extent necessary to opine on the effectiveness of the Miami Valley Risk Management Association's internal control. Accordingly, we have not opined on it.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, when performing their assigned functions, to prevent, or detect and timely correct misstatements. A *material weakness* is a deficiency, or combination of internal control deficiencies resulting in a reasonable possibility that internal control will not prevent or detect and timely correct a material misstatement of the Miami Valley Risk Management Association's financial statements. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all internal control deficiencies that might be material weaknesses or significant deficiencies. Given these limitations, we did not identify any deficiencies in internal control that we consider material weaknesses. However, unidentified material weaknesses may exist.

Board of Trustees Miami Valley Risk Management Association

#### **Compliance and Other Matters**

As part of reasonably assuring whether the Miami Valley Risk Management Association's financial statements are free of material misstatement, we tested its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could directly and materially affect the determination of financial statement amounts. However, opining on compliance with those provisions was not an objective of our audit and accordingly, we do not express an opinion. The results of our tests disclosed no instances of noncompliance or other matters we must report under *Government Auditing Standards*.

#### Purpose of this Report

This report only describes the scope of our internal control and compliance testing and our testing results, and does not opine on the effectiveness of the Miami Valley Risk Management Association's internal control or on compliance. This report is an integral part of an audit performed under *Government Auditing Standards* in considering the Miami Valley Risk Management Association's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Julian & Sube, the.

Julian & Grube, Inc. June 8, 2016

## **MVRMA**

**Miami Valley Risk Management Association** 

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

## YEAR ENDED DECEMBER 31, 2015

Serving the Cities of Southwest Ohio since 1988

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## **MIAMI VALLEY RISK MANAGEMENT ASSOCIATION**

### COMPREHENSIVE ANNUAL FINANCIAL REPORT

## Year Ended December 31, 2015

Published June 8, 2016 Prepared by: Thomas L. Judy, Executive Director This page intentionally left blank.



June 8, 2016 President John Green & the Board of Trustees Miami Valley Risk Management Association

### Re: MVRMA CAFR for the Period Ended December 31, 2015

Dear MVRMA President and Members of the MVRMA Board of Trustees:

The Comprehensive Annual Financial Report of the Miami Valley Risk Management Association (MVRMA) for the year ended December 31, 2015 is hereby submitted for your review.

The purpose of this report is to provide complete and reliable information as a basis for making management decisions, as a means for determining compliance with legal requirements, as a means for determining funding adequacy including funding for losses and loss adjustment expense reserves and as a means for demonstrating responsible stewardship over the assets contributed by MVRMA's member cities.

MVRMA staff prepared all statements, schedules and other presentations in this report except the actuarial report included in the Required Supplemental Information (RSI) section. Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Julian & Grube, Inc., Certified Public Accountants, have issued an unmodified ("clean") opinion on MVRMA's financial statements for the year ended December 31, 2015. The independent auditors' report is included in the front of the Financial Section, which immediately follows the Introductory Section of this report.

4625 Presidential Way • Kettering, Ohio 45429 (937) 438-8878 • Fax (937) 438-8330 www.mvrma.com Management's discussion and analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

Following the Financial Section are the Actuarial and Statistical sections. The Actuarial Section includes the independent actuary's opinion on the unpaid loss and loss adjustment expense reserves, including incurred but not reported (IBNR) claims and related exhibits. The Statistical Section includes financial trends information, revenue capacity information, demographic and economic information and operating information for the last ten years.

### **Profile of the Reporting Entity**

MVRMA is a consortium of municipalities located in southwest Ohio which formed an Association under Section 2744.081 of the Ohio Revised Code (ORC) to act collectively in addressing its members' risk management and risk financing needs. It was incorporated on December 1, 1988, with six (6) charter members: the City of Beavercreek, City of Kettering, City of Miamisburg, City of Vandalia, City of West Carrollton and City of Wilmington. As of December 31, 2014, MVRMA had grown to twenty (20) members, with the City of Troy joining in 1989, City of Montgomery joining in 1990, City of Springdale joining in 1991, City of Blue Ash and City of Wyoming joining in 1992, City of the Village of Indian Hill and City of Sidney joining in 1993, City of Madeira joining in 1994, City of Tipp City joining in 1996, City of Mason joining in 1997, City of Piqua joining in 2002 and the City of Englewood, City of Bellbrook and City of Centerville joining in 2004. The Association provides a combination of self-insurance, excess insurance and reinsurance for its members' property/casualty exposures; administers a claims/litigation management program; provides extensive safety/loss control consulting and training; and acts as a clearing house for risk-related information and financial reporting services for its members.

MVRMA management, under the direction of the Board of Trustees' Finance Committee, annually prepares a budget to provide for operating expenses and loss funding for the upcoming year. Funds available for the payment of claims are segregated by loss year, and claims are paid from the funds collected for the corresponding year of occurrence. Each year's loss funding contribution is determined by an actuarial study conducted by an independent actuary. Should any year's operating expenses or losses exceed that particular year's contributions, the Board of Trustees may transfer funds from the Association's Shock Loss Fund or call for supplementary payments from members, including withdrawn or expelled members, for the years of their membership.

### **Economic Condition and Outlook**

MVRMA is only indirectly affected by the state of the local economy; however, the Association's members are more directly impacted. Members are situated along or near the "I-75 Corridor" in the southwest quadrant of the state of Ohio and are within, or influenced by, the economies in the Cincinnati and Dayton regions. This region has a first-class transit infrastructure providing access to major markets from the Midwest to the east coast. Trucks have access to not only I-75, but also I-70, I-71 and I-675. Two major airports, Cincinnati/Northern Kentucky International Airport and Dayton International Airport, can provide transport by air to 55% of the country's population in only 90 minutes. Additionally, this

region is served by the CSX rail line which has access to all major cities and ports in the Midwest and along the east coast. Cargo shipping is also possible along the Ohio River, which borders the state to the south. Port Cincinnati sees 11.7 million tons of general and bulk cargo pass through annually.

### Dayton Area

The overall economic outlook for the Dayton region is generally positive according to the Dayton Area Chamber of Commerce's Research Advisory Council (RAC). The Committee's 2016 Dayton Region Economic Outlook included the following:

- The housing and construction industries saw huge growth, especially in the southern communities. The Dayton area is also making great strides in transforming old and derelict industrial properties to meet the basic requirements for new users.
- There continues to be a labor shortage as talent is being drawn away by attractive offers from other states and coupled with an aging workforce, Ohio's pool of qualified workers is shrinking.
- Manufacturing in the Dayton region is the most volatile of all industries as employers expect more specialized skills that require additional training. Despite those challenges, the RAC predicts manufacturing will still be one of the leaders when it comes to new job creating and long-term job stability.
- Dayton reached a new home price peak in 2015. The average sales price hit an all-time high during the summer of 2015, up 7% from 2014.

The unemployment rate for the Dayton MSA was 4.5% for 2015, down from 5.8% in 2014.

### <u>Cincinnati Area</u>

Most of Cincinnati's economic indicators continue to move in a positive direction. A forecast prepared in October 2015 by the Cincinnati Consensus Forecast Committee reflects the expectation that the region would end 2015 with improved conditions and further growth will occur in 2016.

For 2016 the Cincinnati area Gross Regional Product is expected to increase by 2.8%, up from 2.7% in 2015.

As of October 2015, Cincinnati had seen jobs return to pre-recession totals with projected growth of 3.53%. Job growth continues for Healthcare, Professional/Tech, and Administrative positions while construction and government is leveling out. For 2016, employment in the region is forecasted to increase 2.1%. Unemployment in the area is forecast to be about 4.5% in 2016, down from 5.0% in 2015.

Total earnings have decreased by less than the decrease in total jobs, resulting in increased average earnings.

Single family building permits is estimated to increase by 5%, well below the national trend of 11%.

### **Insurance/Reinsurance Market Outlook**

MVRMA's is impacted by the insurance and reinsurance markets due to the Association's purchase of excess insurance and reinsurance. Global natural disaster losses continue to be well below the average for the past ten years. Natural disasters caused insured losses of \$35 billion in 2015 compared with \$40 billion in 2014. The \$35 billion loss figure is 31% below the 15-year average of \$51 billion. As a result, insurance carrier net income rose slightly in 2015, and policyholder surplus remains high. There is, however, some cause for concern. Investment income for the property and casualty industry continues to decline contributing to pricing and underwriting pressures, and insurers continue to be concerned about catastrophic weather events. The outlook for the commercial insurance market is essentially flat for non-catastrophic exposed risks, with underwriters advocating for single digit rate increases where possible. Insureds with good loss history could benefit from rate decreases.

### Long-term Financial Planning

Having found what it considers a successful formula for long-term financial planning, MVRMA continues to expand on previously developed programs while being mindful of any new opportunities:

- MVRMA's Shock Loss Fund, which was established as an internal funding mechanism to replace costly stop loss insurance, has surpassed its moving target of being equivalent to the current year's annual loss funding amount. The loss funding amount contributed in 2015 was \$2,550,000, while the Shock Loss Fund balance as of 12/31/15 was \$3,157,774.
- By participating in the insurance captive Government Entities Mutual (GEM), MVRMA has been able to further distance itself from the commercial market. GEM provides reinsurance for liability claims in excess of the pool's \$500,000 self-insured retention. GEM's limit of coverage increases from \$2.5 million in 2014 and 2015 to \$4.5 million in 2016. Additionally, MVRMA received a rate freeze from GEM for the years 2011 through 2015.
- MVRMA increased its liability limits in 2016 from \$10 million to \$12 million per occurrence. This action further protects its members from catastrophic liability claims. The 20% increase in limits was accomplished with a 6% premium reduction.
- MVRMA modified its investment policy and approach in 2013 to increase its allocation in high-grade corporate bonds and to increase the duration of the portfolio to better match the Association's liabilities. These have created greater investment yield with minimal additional risk exposure. MVRMA continued to contract with SJS Investment Consulting, Inc. for investment advisory services in 2015. The investment portfolios continue to outperform established benchmarks.
- Pursuant to its policy of returning unused loss funds to its members when a loss year is closed, MVRMA refunded more than \$2.2 million when Loss Year 21 (2009) and Loss year 22 (2010) were declared closed in June and September of 2015. This refund brings

the total to over \$15 million returned since MVRMA's formation in 1988.

### **Relevant Financial Policies**

The Amended Agreement and Bylaws of MVRMA establish the basic fiscal requirements of the Association including: requiring Board approval of the preliminary budget by September 30 each year and the final budget by December 31; identifying the underwriting information used to establish each member's pool contribution factor; defining when supplementary payments shall be required and when and how surplus funds may be distributed to the membership.

MVRMA adopted its Cash and Investment Policy in 1991 to indicate a conscious, formal effort to develop, implement and monitor the investment of all MVRMA funds. It was last amended in March 2015 and is reviewed annually.

### **Major MVRMA Initiatives During 2015**

Among the Association's achievements during the fiscal period ending December 31, 2015 were the following:

- About 561 participants attended 21 MVRMA sponsored training courses throughout the year.
- MVRMA closed Loss Year 21 (2009) and returned \$1,152,199 to the membership.
- MVRMA closed Loss Year 22 (2010) and returned \$1,131,993 to the membership.
- The Board commissioned a special actuarial study to determine the sufficiency of the surplus funds carried by the Association for the payment of claims. This actuarial report determined that MVRMA is conservatively capitalized. Currently, there is greater than a 99% confidence level that the funds on hand would be sufficient to handle claims losses. The confidence level remained near 99% even under various scenarios in which the pool's self-insured retention was increased above the current \$500,000.

<u>Awards</u> The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to MVRMA for its comprehensive annual financial report for the fiscal year ended December 31, 2014. This was the 22nd consecutive year MVRMA has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our comprehensive annual financial report for the year ended December 31, 2015 continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

### **Acknowledgements**

Management would like to express appreciation to the Board of Trustees for their dedication to excellence in financial reporting, the principles of risk management, loss control and public entity pooling.

Respectfully submitted,

Thomas L. Judy, CPA Executive Director

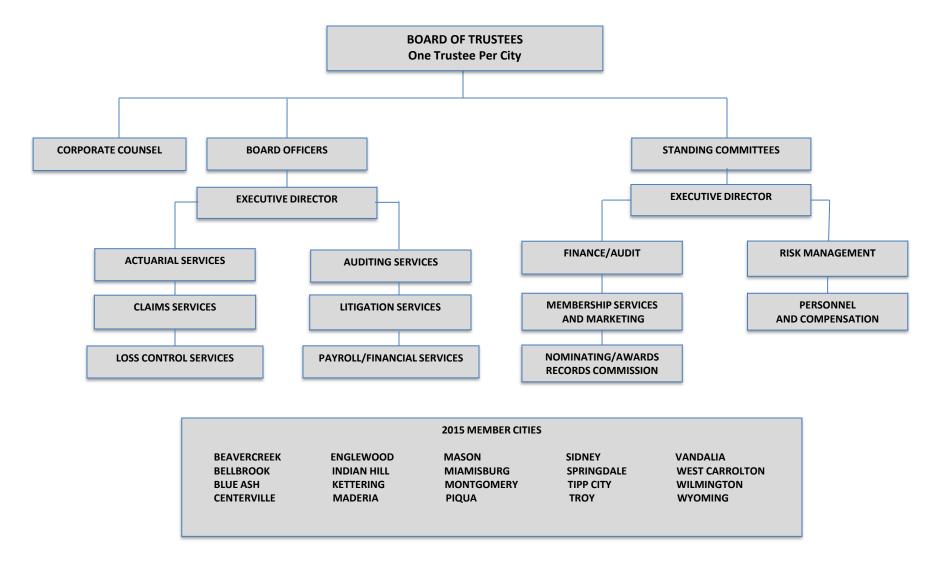
### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION MEMBERS OF THE BOARD OF TRUSTEES As of December 31, 2015

<u>Member City</u>	<u>Trustee</u>	<u>Alternate</u>
Beavercreek	Bill Kucera	Jill Bissinger
Bellbrook	Mark Schlagheck	Don Buczek
Blue Ash	Sherry Poppe	Amy Moore
Centerville	Steve Hinshaw	Gregory Horn
Englewood	Eric A. Smith	Janine Cooper
Indian Hill	Dina Minneci	Scott Gully
Kettering	Nancy Gregory	Estelle Gibson
Madeira	Thomas Moeller	Amanda Zimmerlin
Mason	Jennifer Heft	Mary Mueller
Miamisburg	Keith D. Johnson	Doris Bruck
Montgomery	Michelle Greis	John Crowell
Piqua	Stacy Wall	Cynthia Holtzapple
Sidney	Ginger Adams	Mark Cundiff
Springdale	Jerry Thamann	Derrick Parham
Tipp City	John Green	Timothy Eggleston
Troy	Patrick Titterington	Sue Knight
Vandalia	Julie Trick	Bridgette Leiter
West Carrollton	Thomas Reilly	Teresa Brooks
Wilmington	Virginia Shoemaker	Marian Miller
Wyoming	Lynn Tetley	Jeremiah Caudill

### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION OFFICERS OF THE BOARD OF TRUSTEES As of December 31, 2015

<b>Board Office</b>	<b>Office Holder</b>	<u>Member City</u>
President	Nancy Gregory	Kettering
Vice-President	John Green	Tipp City
Treasurer	Janine Cooper	Englewood
Secretary	Julie Trick	Vandalia

## MIAMI VALLEY RISK MANAGEMENT ASSOCIATION ORGANIZATIONAL CHART





Government Finance Officers Association

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Miami Valley Risk Management Association, Ohio

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2014

Executive Director/CEO



## Julian & Grube, Inc.

Serving Ohio Local Governments

333 County Line Rd. West, Westerville, OH 43082 Phone: 614.846.1899 Fax: 614.846.2799

### **Independent Auditor's Report**

Miami Valley Risk Management Association Montgomery County 4625 Presidential Way Kettering, Ohio 45429

To the Board of Trustees:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of Miami Valley Risk Management Association (MVRMA), Montgomery County, Ohio, as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise MVRMA's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for preparing and fairly presenting these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes designing, implementing, and maintaining internal control relevant to preparing and fairly presenting financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to opine on these financial statements based on our audit. We audited in accordance with auditing standards generally accepted in the United States of America and the financial audit standards in the Comptroller General of the United States' *Government Auditing Standards*. Those standards require us to plan and perform the audit to reasonably assure the financial statements are free from material misstatement.

An audit requires obtaining evidence about financial statement amounts and disclosures. The procedures selected depend on our judgment, including assessing the risks of material financial statement misstatement, whether due to fraud or error. In assessing those risks, we consider internal control relevant to MVRMA's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not to the extent needed to opine on the effectiveness of MVRMA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of management's accounting policies and the reasonableness of their significant accounting estimates, as well as our evaluation of overall financial statement presentation.

We believe the audit evidence we obtained is sufficient and appropriate to support our opinion.

### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of MVRMA, Montgomery County, Ohio, as of December 31, 2015, and the respective changes in financial position and its cash flows for the fiscal year then ended in accordance with the accounting principles generally accepted in the United States of America.

### Independent Auditor's Report Miami Valley Risk Management Association

### **Emphasis of Matter**

As discussed in Note 12 to the financial statements, during the year ended December 31, 2015, MVRMA adopted Governmental Accounting Standards Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27 and also GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No 68. We did not modify our opinion regarding this matter.

### **Other Matters**

### Required Supplementary Information

Accounting principles generally accepted in the United States of America require this presentation to include *Management's discussion and analysis*, claims information, and schedules of net pension liabilities and pension contributions, listed in the table of contents, to supplement the basic financial statements. Although this information is not part of the basic financial statements, the Governmental Accounting Standards Board considers it essential for placing the basic financial statements in an appropriate operational, economic, or historical context. We applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, consisting of inquiries of management's responses to our inquiries to the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not opine or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to opine or provide any other assurance.

### Other Information

Our audit was conducted to opine on MVRMA's basic financial statements taken as a whole.

The introductory section (pages i to x), the actuary report section (pages 37 to 145) and the statistical section (pages 146 to 177) information present additional analysis and are not a required part of the basic financial statements.

We did not subject the introductory section, the actuary report section, and the statistical section information to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion or any other assurance on them.

### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 8, 2016, on our consideration of MVRMA's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. That report describes the scope of our internal control testing over financial reporting and compliance, and the results of that testing, and does not opine on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering MVRMA's internal control over financial reporting and compliance.

Julian & Sube the.

Julian & Grube, Inc. June 8, 2016

### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC. Management's Discussion And Analysis

For The Year Ended December 31, 2015

The management of the Miami Valley Risk Management Association (MVRMA or Association) provides the following introduction, overview and analysis of MVRMA's financial statements for the year ended December 31, 2015. This discussion and analysis is designed to assist the reader in focusing on significant financial issues and activities and to identify any significant changes in financial position. We encourage the reader to consider the information presented here in conjunction with the basic financial statements taken as a whole.

MVRMA is a consortium of municipalities located in southwest Ohio, which formed an Association under Section 2744.081 of the Ohio Revised Code (ORC) to act collectively in addressing its members' risk management and risk financing needs. It became operational in December 1988 with six charter members and now has twenty members.

### **Basic Financial Statements and Presentation**

The financial statements presented by the Association are the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position and the Statement of Cash Flows. As required by Governmental Accounting Standards Board Statement Number 10, the Association is accounted for as one enterprise fund.

During 2015, the Association adopted GASB Statement 68, "Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement 27," which significantly revises accounting for pension costs and liabilities. For reasons discussed below, many end users of this financial statement will gain a clearer understanding of the Association's actual financial condition by adding deferred inflows related to pension and the net pension liability to the reported net position and subtracting deferred outflows related to pension.

Governmental Accounting Standards Board standards are national and apply to all government financial reports prepared in accordance with generally accepted accounting principles. When accounting for pension costs, GASB 27 focused on a funding approach. This approach limited pension costs to contributions annually required by law, which may or may not be sufficient to fully fund each plan's *net pension liability*. GASB 68 takes an earnings approach to pension accounting; however, the nature of Ohio's statewide pension systems and state law governing those systems requires additional explanation in order to properly understand the information presented in these statements.

Under the new standards required by GASB 68, the net pension liability equals the Association's proportionate share of the plan's collective:

- 1. Present value of estimated future pension benefits attributable to active and inactive employees' past service
- 2 Minus plan assets available to pay these benefits

GASB notes that pension obligations, whether funded or unfunded, are part of the "employment exchange" – that is, the employee is trading his or her labor in exchange for wages, benefits, and the promise of a future pension. GASB noted that the unfunded portion of this pension promise is a present obligation of the government, part of a bargained-for benefit to the employee, and should accordingly be reported by the government as a liability since they received the benefit of the

### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.

Management's Discussion And Analysis For The Year Ended December 31, 2015

exchange. However, the Association is not responsible for certain key factors affecting the balance of this liability. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both employer and employee contribution rates are capped by State statute. A change in these caps requires action of both Houses of the General Assembly and approval of the Governor. Benefit provisions are also determined by State statute. The employee enters the employment exchange with the knowledge that the employer's promise is limited not by contract but by law. The employer enters the exchange also knowing that there is a specific, legal limit to its contribution to the pension system. In Ohio, there is no legal means to enforce the unfunded liability of the pension system *as against the public employer*. State law operates to mitigate/lessen the moral obligation of the public employer to the employee, because all parties enter the employment exchange with notice as to the law. The pension system is responsible for the administration of the plan.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e. sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability. As explained above, changes in pension benefits, contribution rates, and return on investments affect the balance of the net pension liability, but are outside the control of the local government. In the event that contributions, investment returns, and other changes are insufficient to keep up with required pension payments, State statute does not assign/identify the responsible party for the unfunded portion. Due to the unique nature of how the net pension liability is satisfied, this liability is separately identified within the long-term liability section of the statement of net position.

In accordance with GASB 68, the Association's statements prepared on an accrual basis of accounting include an annual pension expense for their proportionate share of each plan's *change* in net pension liability not accounted for as deferred inflows/outflows.

As a result of implementing GASB 68, the Association is reporting a net pension liability and deferred inflows/outflows of resources related to pension on the accrual basis of accounting. This implementation also had the effect of restating net position at December 31, 2014, from \$11,287,022 to \$11,045,433.

The tables presented in this Management's Discussion and Analysis provide a summary of the Association's financial position and results of operations for 2015 and 2014, respectively.

### The Statement of Net Position

The statement reports all of the Association's assets and liabilities as of December 31, 2015 categorized as current and non-current assets and liabilities. Assets consist mainly of cash and investments. Liabilities consist mainly of claims reserves and members' refunds payable. Reporting for GASB 68 has created two new categories: deferred outflows of resources and deferred inflows of resources. The balance of total assets and deferred outflows less total liabilities and deferred inflows is reported as "net position."

### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.

### Management's Discussion And Analysis For The Year Ended December 31, 2015

The Association has restated certain balances for 2014 to reflect the implementation of GASB Statement 68 (see Note 8). The table below presents a condensed summary information of the Association's net position as of December 31, 2015 compared to December 31, 2014.

### **Condensed Statement of Net Position**

	2015	2014 - Restated
CURRENT ASSETS	<b>#2 1 42 010</b>	<b>#2 555</b> 0 < <b>2</b>
Cash and cash equivalents	\$3,142,010	\$2,757,863
Accounts receivable	\$169,065	\$265,331
Prepaid Expenses	224,063	217,519
NONCURRENT ASSETS		
Investments	15,310,297	15,954,607
Capital assets less depreciation	8,756	11,747
Total assets	18,854,191	19,207,067
DEFERRED OUTFLOWS OF RESOURCES		
Deferred outflows of resouces related to pension	58,672	42,384
Total deferred outflows of resources	58,672	42,384
CURRENT LIABILITIES		
Claims reserve	2,698,181	3,550,119
Members' refunds	5,237,182	4,261,027
Members' credits	55,000	90,000
Accounts payable and accrued liabilities	43,350	18,899
Total current liabilties	8,033,713	7,920,045
NONCURRENT LIABILITIES		
Net pension liability	289,865	283,973
Total noncurrent liabilities	289,865	283,973
	209,005	203,713
Total Liabilities	8,323,578	8,204,018
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows of resources related to pension	5,392	0
Total deferred inflows of resources	5,392	0
TOTAL NET POSITION	0756	11 747
Invested in capital assets Unrestricted	8,756	11,747
Unrestricted	10,575,137	11,033,686
Total net position	\$10,583,893	\$11,045,433

Claims reserve is a liability for net unpaid losses, including incurred but not reported losses, and loss adjustment expenses. This amount is established annually with the assistance of an outside actuary. In 2015, claims reserves decreased by \$851,938, or 24%, and by \$59,329 in 2014 due to significant favorable claims development in the prior years' ultimate losses.

Management's Discussion And Analysis For The Year Ended December 31, 2015

### % Claims Reserves by Line of Business As of December 31

Line of Business	2015	2014
Auto Liability	6%	4%
General Liability	86%	86%
Property	8%	11%

The liability for members' refunds reflects the funds being held in MVRMA's General Reserve Fund (GRF). The General Reserve Fund accounts for surplus funds returned, but not yet paid, to members from closed loss years. Once surplus funds are returned to the members, these funds are deposited in the GRF to the account of each individual member. Members may withdraw their GRF funds within 30 days after the closure of a loss year, or in January of each year, or for the payment of any MVRMA invoice at any time throughout the year. The members' refunds liability increased as of December 31, 2015 due to the closure of two loss years in 2015.

Net position is divided into two categories, invested in capital assets and unrestricted. The net position invested in capital assets represents the net book value of capital assets, while the remaining net position amount is unrestricted for future use by the Association. Net position invested in capital assets decreased from \$11,747 to \$8,756 during 2015 as there was little capital asset purchase activity during the year. Total net position decreased in 2015 by \$461,540, or 4.2% due to the closure of two loss years and the resulting refunds, or dividends, of nearly \$2.4 million to members. Other than members' dividends, net position increased by over \$1.9 million in 2015. This favorable result was largely attributable to a significant reduction in claims expenses.

### The Statement of Revenues, Expenses and Changes in Net Position

This statement reflects the operating and non-operating revenue and expenses for the fiscal year and how the Association's net position changed during the year. As noted previously, MVRMA's net position decreased by 4.2% from 2014 to 2015.

Operating Revenue	<u>2015</u> 4,462,299	<u>2014</u> 4,461,937
	7 - 7	
Operating Expenses:		
Incurred claims and claims adjustment		
expenses	651,209	1,892,603
Reinsurance premiums	885,468	878,317
Members' dividends	2,389,527	1,325,803
General and administrative expenses	758,871	756,800
Total Operating Expenses	4,685,075	4,853,523
Operating Income (Loss)	-222,776	-391,586
Nonoperating Revenue (Expense):		
Interest income and realized and unrealized		
gains (losses) on investments	-238,930	446,255
Other nonoperating revenue (expense)	166	-919
Changes in Net Position	-\$461,540	\$53,750

### Condensed Statement of Revenues, Expenses, and Changes in Net Position

Operating revenue consists primarily of members' contributions. The major categories of operating expenses are claims and claims adjustment expenses, reinsurance premiums, general and administrative expenses, and dividends to members. Non-operating revenue and expense is primarily related to investment activity.

Member contributions made up 94% of the Association's operating revenue in 2015 and 2014.

Members' contributions are tracked so that each year may be evaluated independently. When preparing its annual budget, MVRMA determines the total amount needed to fund its operations and collects the amount needed from members in proportion to their claims history and risk exposures. Each member's allocation is determined by dividing the sum of the following seven factors by 9:

- 1. The member's population as of the most recent census as a percentage of the total of all members' populations;
- 2. The number of the member's sworn full-time police personnel as a percentage of the total of all members' full-time sworn police;
- 3. The number of the member's other full-time employees as a percentage of the total of all members' other full-time employees;
- 4. The number of the member's titled vehicles as a percentage of the total of all members' titled vehicles:
- 5. The member's insurable property values as a percentage of the total of all members' insurable property values; 7

- 6. The member's net operating expenses as a percentage of the total of all members' net operating expenses; and
- 7. The member's average annual adjusted losses for the last four years as the percentage of the total of all members' average annual adjusted losses for the last four years (weighted three times).

Changes in net position can vary widely from year to year. This variation is chiefly due to fluctuations in incurred claims expense and members' dividends. Although the incurred claims expense is subject to variability, it is moderated somewhat by the insuring of losses above the pool's self-insured retentions of \$500,000 per occurrence for liability claims and \$250,000 for property claims. Members' dividends expense is incurred when the Board of Trustees closes a loss year and refunds the residual assets in the loss year to the members. These amounts can be significant and do not necessarily occur each year.

### **The Statement of Cash Flows**

The Statement of Cash Flows allows readers of the financial statements to assess the Association's ability to generate sufficient cash flow to meet its obligations in a timely manner. Cash and equivalents increased by \$384,147 in 2015 as a result of investment activity – specifically, interest earnings and matured investment securities.

Cash flows from operating activities	<b>2015</b> (\$50,714)	<b>2014</b> (\$393,216)
Cash flows used in capital and related financing activities	(1,631)	(1,094)
Cash flows from (used in) investing activities	436,492	427,394
Net change in cash and cash equivalents	384,147	33,084
Cash and Cash Equivalents - Beginning of year Cash and Cash Equivalents - End of year	2,757,863 \$3,142,010	2,724,779 \$2,757,863

### **2016 Projects and Future Plans**

For 2016, the Association increased its liability limits of coverage from \$10 million to \$12 million per occurrence. The first layer of liability reinsurance coverage, purchased from Government Entities Mutual, a protected cell reinsurance captive domiciled in the District of Columbia, provides limits of \$4.5 million excess of the Association's self-insured retention of \$500,000. The next layer of reinsurance with General Reinsurance Corporation is \$7 million excess of \$5 million. Reinsurance premiums will decrease by about 6% in 2016 despite the 20% increase in limits of coverage.

Property insurance for the period 7/1/15-7/1/16 was again placed with the Alliant Property Insurance Program (APIP). MVRMA's premium rate decreased by 3.2% due to favorable market conditions and improving loss experience. At this time, MVRMA is preparing for its 7/1/16 renewal and is anticipating little to no rate increase.

### **Contacting MVRMA**

This financial report is designed to provide members, creditors and investors with a general overview of MVRMA's finances and to show MVRMA's accountability for the monies it receives. If you have any questions about this report or need additional information, contact the Executive Director by writing 4625 Presidential Way, Kettering, OH 45429 or calling (937) 438-8878.

ASSETS	2015
CURRENT ASSETS: Cash and cash equivalents Accounts receivable:	\$3,142,010
Claims deductibles	50,515
Reinsurance	64,170
Interest and Other	54,380
Prepaid Items	224,063
Total current assets	3,535,138
NONCURRENT ASSETS: Investments	15,310,297
Capital Assets:	- , ,
Audio-visual material	73,758
Equipment	35,913
Leasehold improvements	12,281
Office furniture	18,028
Total capital assets	139,980
Accumulated depreciation Capital assets - net	(131,224) 8,756
Total noncurrent assets	15,319,053
Total Assets	18,854,191
DEFERRED OUTFLOWS OF RESOURCES	
Deferred outflows of resources related to pension	58,672
Total Deferred Outflows	58,672
LIABILITIES	
CURRENT LIABILITIES:	
Claims reserve	2,698,181
Members' refunds	5,237,182
Members' credits	55,000
Accounts payable and accrued liabilities	43,350
Total current liabilities	8,033,713
NONCURRENT LIABILITIES:	
Net Pension Liability	289,865
Total Noncurrent liabilities	289,865
Total Liabilities	8,323,578
DEFERRED INFLOWS OF RESOURCES	
Deferred inflows of resources related to pension	5,392
Total Deferred Inflows	5,392
NET POSITION	
Investment in capital assets	8,756
Unrestricted	10,575,137
Total net position	\$10,583,893

### **MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.** STATEMENT OF NET POSITION DECEMBER 31, 2015

See notes to the basic financial statements

# **MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.** STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE YEAR ENDED DECEMBER 31, 2015

	2015
OPERATING REVENUES:	
Members' contributions	\$4,208,593
Claim deductibles	214,597
Other	39,109
Total operating revenues	4,462,299
OPERATING EXPENSES:	
Claim expenses:	
Incurred claims and claim adjustment expenses	651,209
Reinsurance/insurance premiums	885,468
Members' Dividends	2,389,527
Total claim expenses	3,926,204
General and administrative expenses:	
Professional fees	172,841
Salaries and benefits	440,840
Depreciation	4,788
Rent	36,400
Other	104,002
Total general and administrative fees	758,871
Total operating expenses	4,685,075
OPERATING INCOME (LOSS)	(222,776)
NON-OPERATING REVENUE (EXPENSE):	
Gain/(Loss) on disposal of capital assets	166
Interest income	151,016
Net gain/(loss) on investments	(389,946)
Total Non-operating Revenue (Expense)	(238,764)
CHANGE IN NET POSITION	(461,540)
NET POSITION	
Beginning of year (Restated)	11,045,433
End of year	\$10,583,893
Consider to the basis Consider Interference of	

See notes to the basic financial statements

# **MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.** STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2015

	2015
CASH FLOWS FROM OPERATING ACTIVITIES:	
Cash received for member contributions	\$4,173,593
Cash received for deductible reimbursements	223,178
Cash received from other sources	81,814
Cash payments for claims	(1,417,712)
Cash payments for general reserve fund payouts	(1,459,246)
Cash payments for reinsurance premiums	(888,283)
Cash payments for professional fees	(153,455)
Cash payments for employment expenses	(441,265)
Cash payments for rent	(36,400)
Cash payments for other expenses	(132,938)
Net cash provided by (used in) operating activities	(50,714)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:	
Purchase of capital assets	(1,797)
Sale of capital assets proceeds	166
Net cash provided by (used in) capital and related financing activities	(1,631)
CASH FLOWS FROM INVESTING ACTIVITIES:	
Investment purchases	(11,006,741)
Investment sales/maturities	11,261,105
Interest and dividends on investments	182,128
Net cash provided by (used in) investing activities	436,492
NET CHANGE IN CASH AND CASH EQUIVALENTS	384,147
CASH AND CASH EQUIVALENTS:	
Beginning of Year	2,757,863
End of Year	\$3,142,010

See notes to the basic financial statements

# **MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC.** STATEMENT OF CASH FLOWS (Continued) FOR THE YEAR ENDED DECEMBER 31, 2015

	2015
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH	
PROVIDED BY (USED IN) OPERATING ACTIVITIES	
Operating Income (Loss)	(\$222,776)
Adjustments to reconcile change in net position to net cash provided by (used in) operating activities:	
Depreciation	4,788
Deprediction	4,700
(Increase) / decrease in assets:	
Claims deductibles receivable	8,581
Reinsurance receivable	100,048
Other receivables	2,249
Prepaid items	(6,544)
(Increase) / decrease in deferred outflows:	
Deferred outflows of resources related to pension	(16,288)
Deferred outflows of resources related to pension	(10,200)
Increase / (decrease) in liabilities:	
Claims reserve	(851,938)
Accounts payable, accrued liabilities, members' credits and	
members' refunds	919,882
Net pension liability	5,892
Increase / (decrease) in deferred inflows:	
Deferred inflows of resources related to pension	5,392
Net cash provided by (used in) operating activities	(\$50,714)
NON-CASH INVESTING ACTIVITIES:	

- Miami Valley Risk Management Association, Inc. had a decrease in the fair value of investments in the amount \$389,944 during 2015.

See notes to the basic financial statements

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

# NOTE 1 – ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

Miami Valley Risk Management Association, Inc. (the "Association") is an Ohio not-for-profit Corporation organized for the public purpose of enabling its member political subdivisions to obtain insurance coverage. It provides methods for paying claims, and provides a formalized, jointly administered self-insurance pool. In addition to the self-insurance pool, the Association provides risk management services, loss prevention programs, and other educational programs and materials. The members of the Association include the following cities within the State of Ohio: Beavercreek, Bellbrook, Blue Ash, Centerville, Englewood, Kettering, Madeira, Mason, Miamisburg, Montgomery, Piqua, Sidney, Springdale, Tipp City, Troy, Vandalia, the Village of Indian Hill, West Carrollton, Wilmington and Wyoming.

**Basis of Accounting** – The Association follows the accrual basis of accounting as required for enterprise funds and is not legally required to adopt a budget. All transactions are accounted for in a single enterprise fund in accordance with Governmental Accounting Standards Board (GASB) Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.* 

*Member and Supplemental Contributions* – The Association has classified its revenues as either operating or non-operating. Non-operating revenue primarily is the result of earning investment income. Member and supplemental contributions are recognized on the accrual basis and are recorded as revenue in the period earned. Member contributions are calculated and collected annually to produce a sum of money within the self-insurance pool adequate to fund administrative expenses and claims of the Association and to create adequate reserves for claims and unallocated loss adjustment expenses.

Under the terms of membership, should annual member contributions not be sufficient to fund ultimate losses, establish adequate reserves and cover administrative expenses, the Board of Trustees may require supplemental contributions. Supplemental contributions may be assessed during the entire life of the Association and any later period when claims or expenses, which are attributable to any membership year during which the event or claim occurred, need to be paid. Upon approval of the Board of Trustees, transfers from the Shock Loss Fund ("SLF") (see note 6) may occur, in lieu of supplemental contributions. There were no supplemental contributions in 2015.

*Cash and cash equivalents* consist of deposits with financial institutions, and a State of Ohio depository institution, having an original maturity of 90 days or less.

*Claims deductibles* represent the first \$2,500 of any claim paid by the Association which is reimbursed by Association members.

*Investments* are stated at fair value. Realized gains and losses are determined on the identified cost basis.

The Association's investment policy authorizes the Association to invest in the following:

# NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

- 1.) United States treasury bills, notes, bonds, or any other obligation or security issued by the United States treasury or any other obligation guaranteed as to principal and interest by the United States;
- 2.) Bonds, notes, debentures, or any other obligations or securities issued by any federal agency or instrumentality, including government sponsored enterprises. All federal agency securities shall be direct issuances of federal government agencies or instrumentalities;
- 3.) Deposits in eligible financial institutions;
- 4.) Bonds, notes, or other obligations of the State of Ohio and its political subdivisions;
- 5.) Investment grade corporate bonds (industrial, utility, or financial). Corporate bonds purchased shall be rated not lower than A2 by Moody's or A by S&P;
- 6.) The State Treasury Asset Reserve of Ohio (STAR Ohio) or such successor investment pools operated or managed by the Treasurer of the State of Ohio; and
- 7.) No-load money market mutual funds consisting exclusively of obligations described in 1 or 2 above.

*Capital assets* are carried at cost. Depreciation is provided on the straight-line basis at rates which are expected to amortize the costs of the assets over their estimated useful lives. All major classes of depreciable assets have a useful life of five years, except audio-visual material which is three years.

*Claim Reserves and Unallocated Loss Adjustment Expenses* – Provisions for claims reserves and claims adjustment expenses are based on information reported by members and are calculated by the Association's claims administrator and actuary. These amounts represent an estimate of reported, unpaid claims, plus a provision for claims incurred but not reported. The Association's management believes the estimate of the liability for claims reserves is reasonable and supported by valid actuarial calculations; however, actual incurred losses and loss adjustment expenses may not conform to the assumptions inherent in the determination of the liability. Accordingly, the ultimate settlement of losses and related loss adjustment expenses may vary from the estimated amounts included in the accompanying financial statements. Should the provision for claims reserves not be sufficient, supplemental contributions as discussed above may be assessed subsequent to Board approval.

*Member Credits* – The bylaws of the Association provide that surplus operating funds may be used to credit future annual contributions at the discretion of the Board of Trustees. For the year ended December 31, 2015, member contributions are presented net of a credit of \$55,000.

*Member Refunds* – Closed loss year refunds were \$2,284,192 in 2015. In addition to the closed loss year refunds, amounts relating to refunds of prior years' insurance premiums can be credited to members. Beginning in 2015, each member is eligible for a refund from the Shock Loss Fund

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

(see Note 6) to the extent the member's Shock Loss Fund balance exceeds its required balance by greater than forty percent. Such refunds totaling \$105,335 were made to members in 2015.

*Net Position* represents the excess of revenues over expenses since inception. It is displayed in three components as follows:

Invested in capital assets consists of capital assets, net of accumulated depreciation.

<u>Restricted</u> consists of net position that is legally restricted by outside parties or by law through constitutional provisions or enabling legislation.

<u>Unrestricted</u> consists of net position that does not meet the definition of "restricted" or "invested in capital assets, net of related debt."

As of December 31, 2015, the Association has no "restricted" net position. Under certain conditions, the Association may distribute all or part of the net position to those members who constituted the self-insurance pool during the years when such surplus member funds were earned, provided that such members must also be members of the Association in the year in which said distribution is made.

In the event of termination of the Association, all members of the Association, past and present, are obligated for any necessary supplemental contributions attributable to the years during which they were members. After all claims and related expenses have been properly paid or reserves established for the payment of any such claims, any surplus member funds shall be distributed to members in proportion to their interest in such surplus member funds.

**Pensions** – For purposes of measuring the net pension liability, information about the fiduciary net position of the pension plans and additions to/deductions from their fiduciary net positon have been determined on the same basis as they are reported by the pension systems. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension systems report investments at fair value.

*Income taxes* – The Internal Revenue Service has ruled that premiums and investment income with respect to premium receipts are excluded from taxable income of the Association under Section 115 of the Internal Revenue Code of 1986. Therefore, the Association is not subject to tax.

*Operating Revenues and Expenses* – Operating revenues are those revenues that are generated directly from primary activities. For the Association, these revenues are member contributions and claims deductibles received from members. Operating expenses are the necessary costs incurred to provide the services that are the primary activity. All revenue and expenses not meeting these definitions are reported as non-operating.

*Use of Estimates* – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

# NOTE 2 – DEPOSITS AND INVESTMENTS

# Deposits as of December 31, 2015

*Custodial Credit Risk* – Custodial credit risk with respect to bank deposits is the potential for loss of the Association's deposits in the event of the failure of a depository financial institution. Protection of the Association's cash and deposits is provided by the Federal Deposit Insurance Corporation as well as qualified securities pledged by the institution holding the assets. By law, financial institutions must collateralize all public deposits. The face value of the pooled collateral must equal at least 105% of public funds deposited. Collateral is held by trustees including the Federal Reserve Bank and designated third parties of the financial institution. The Association's investment policy states the amount of collateral provided will not be less than 110% of the fair value of the net amount of the Association's funds secured, except in the case of pooled collateral, where the collateral will not be less than 100% of the fair value of the net amount of the Association's funds secured.

At December 31, 2015, the carrying amount of the Association's deposits was \$3,142,010. The bank balance was \$3,158,915, and of this amount, \$250,000 was insured by federal depository insurance. Based on the criteria described in GASB Statement No. 40, "Deposit and Investment Risk Disclosures", \$2,908,915 of the Association's bank balance was exposed to custodial risk and was collateralized with securities held by the pledging financial institution's trust department or agent but not in the Association's name.

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#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

		Investment Maturities			
Investment	Fair Value	Less than 6 months	6 mo. to 1 year	1 to 3 years	Greater than 3 years
FHLB	\$798,197			\$798,197	
FFCB	793,559			448,449	345,110
FHLMC	1,861,112			1,442,118	418,994
FNMA	780,508	430,126		350,382	
Corporate Bonds	9,950,305	200,005	825,962	5,410,444	3,513,894
Government Entities					
Mutual, Inc. (see Note 6)	1,126,616				1,126,616
Total	\$15,310,297	\$630,131	\$825,962	\$8,449,590	\$5,404,614

#### At December 31, 2015, the Association had the following investments:

Note: For the purposes of disclosing interest rate risk, the maturity date of variable rate bonds is the next interest rate reset date. For other callable securities, the maturity date is the estimated call date.

*Interest Rate Risk* – Interest rate risk is the risk that the value of investments will decrease as a result of an increase in interest rates. To limit interest rate risk, the Association's investment policy limits security purchases to those that mature within five years of the settlement date.

*Credit Risk* – Credit risk for holders of debt securities is the risk that the debtor will not be able to make its scheduled payments. The Association's investments with the Federal Home Loan Mortgage Corporation, Federal Home Loan Bank, Federal National Mortgage Association and Federal Farm Credit Bank are rated AA+ by Standard & Poor's. The Association's investment in GEM is not rated. The Association's investment policy requires corporate bonds, when purchased, to be rated not lower than A2 by Moody's or A by Standard & Poor's. As of 12/31/15, all corporate bonds held by the Association met or exceeded these benchmarks.

*Custodial Credit Risk* – For an investment, custodial credit risk is the risk that an investor might be unable to recover the value of an investment in the possession of an outside third party should the counterparty to the investment transaction fail. The Association's investment in Government Entities Mutual is subject to custodial credit risk. The Association's investments in debt securities of FHLB, FNMA, FHLMC, FFCB and the various corporate issuers are either registered in the Association's name or held in pledge accounts of the custodial financial institutions and the underlying records of the custodial financial institutions support the Association's name and are not subject to custodial credit risk.

*Concentration of Credit Risk* – The Association's investment policy states "no more than 25% of the total investment portfolio shall be invested with any one eligible financial institution as a time

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

deposit at the time a deposit is made, exclusive of United States Treasury securities, all Federal Agency securities, and STAR Ohio." Five percent or more of the Association's investments were in the following at December 31, 2015:

Investment	% as of 12/31/15
Federal Home Loan Bank	5.2%
Federal Farm Credit Bank	5.2%
Federal Home Loan Mortgage Corporation	12.2%
Federal National Mortgage Association	5.1%
Government Entities Mutual, Inc.	7.4%

# **NOTE 3 – CAPITAL ASSETS**

Capital assets activity for the year ended December 31, 2015, was as follows:

	Balance		Transfers/	Balance
	01/01/15	Additions	Disposals	12/31/15
<b>Capital Assets Being Depreciated</b>	d:			
Audio-Visual	\$73,758			\$73,758
Equipment	35,594	1,797	(1,478)	\$35,913
Leasehold Improvements	12,281			\$12,281
Office Furniture	20,176		(2,148)	\$18,028
Total Property and Equipment	141,809	1,797	(3,626)	139,980
Less: Accumulated Depreciation	ı			
Audio-Visual	(71,353)	(959)		(\$72,312)
Equipment	(28,341)	(3,720)	1,478	(\$30,583)
Leasehold Improvements	(12,281)			(\$12,281)
Office Furniture	(18,087)	(109)	2,148	(\$16,048)
Total Accumulated Depreciation	(130,062)	(4,788)	3,626	(131,224)
Total Capital Assets Being				
Depreciated, net	\$11,747	(\$2,991)	\$0	\$8,756

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

# **NOTE 4 – NONCURRENT LIABILITIES**

Net pension liability activity, as presented in Note 12, for the year ended December 31, 2015 was as follows:

	Restated			
	Beginning			Ending
	Balance	Additions	Reductions	Balance
Net Pension Liability	\$283,973	\$19,466	-\$13,574	\$289,865

## NOTE 5 - SELF-INSURED RETENTION

The Association retains responsibility for the payment of claims within specified self-insured retention limits prior to the application of coverage provided by excess insurance and reinsurance contracts. The Association's per-occurrence retention limit for all liability matters, excluding property, was \$500,000 in 2015. Property claims had a per occurrence retention limit of \$250,000 for 2015. Boiler and machinery had a per occurrence retention limit from \$10,000 to \$350,000 depending upon boiler size. For every occurrence, the member was charged a deductible equal to the amount of the claim or \$2,500, whichever was less.

# NOTE 6 – INSURANCE AND REINSURANCE CONTRACTS

The Association maintains insurance and reinsurance contracts with insurance carriers who provide various limits of coverage over the Association's self-insured retention limits. Under the Association's bylaws, the Board of Trustees annually determines the types of insurance/reinsurance to purchase as well as appropriate limits. For the loss years ended December 31, 2015, the Association purchased the following types of excess insurance/reinsurance in excess of the Association's self-insured retentions:

Excess Insurance / Reinsurance	Limits of Coverage
General liability (including law enforcement) per occurrence	\$9,500,000
Automobile liability per occurrence	\$9,500,000
Public official liability:	
Per occurrence	\$9,500,000
Per member annual aggregate	\$9,500,000
Employment practices liability:	
Per occurrence	\$9,500,000
Per member annual aggregate	\$9,500,000
Property (excluding flood and earthquake) per occurrence	\$1,000,000,000
Flood and earthquake property coverage – per occurrence and	
annual aggregate	\$25,000,000
20	

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

In 2015, MVRMA reinsured its casualty program with Government Entities Mutual (a protected cell reinsurance captive domiciled in the District of Columbia) for \$2.5 million excess MVRMA's \$500,000 self-insured retention and from General Reinsurance Corporation for \$7 million excess \$3 million.

In 1996, the Association established a Shock Loss Fund (SLF) to replace the aggregate stop-loss policy. The Association's members contribute to the SLF based on a moving target equal to the annual loss fund. The Association's members annually fund approximately 15 percent of the moving target until the balance of the SLF is equivalent to the current year's annual loss fund. Once a member has at least the current year's regular loss fund contribution on account in the Association's SLF, it is not required to contribute additionally to the SLF. Any member whose balance falls below its targeted amount is required to contribute the amount needed to reach its targeted amount, or 15% of the current annual loss year contribution, whichever is less.

In the event that a series of losses or a single loss should exceed the amount of coverage provided by the self-insurance fund and insurance/reinsurance and any amount of supplemental payments for which members are obligated, then the payment of any uncovered loss is the obligation of the individual member or members against which the claims were made. In the unlikely event that all or any of the insurance companies are unable to meet their obligations under the excess insurance and reinsurance contracts, the Association and its members would be responsible for such defaulted amounts in accordance with the applicable policy terms and conditions.

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#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

# NOTE 7 – CLAIMS RESERVE

As discussed in Note 1, the Association establishes a claims reserve liability which includes both reported and unreported insured events and estimates of future payment of losses and related claims adjustment expenses. The changes in the aggregate liabilities for the Association are as follows:

	December 31 2015	December 31 2014
Unpaid claims and claim adjustment expenses -		_011
Beginning of Year	\$3,550,119	\$3,609,448
Incurred claims and claim adjustment expenses:		
Provision for insured events of the current year	1,242,672	2,527,659
Change in provision for insured events of prior years	(833,631)	(830,092)
Change in unallocated expense provision	(24,129)	(2,881)
Total incurred claims and claim adjustment expenses	384,912	1,694,686
Payments:		
Claims and claim adjustment expenses attributable to		
insured events of the current year	240,209	904,570
Claims and claim adjustment expenses attributable to		,
insured events of prior years	996,641	993,573
Aggregate Adjustment	,	(144,128)
Total Payments	1,236,850	1,754,015
Unpaid claims and claim adjustment expenses -		
End of Year	\$2,698,181	\$3,550,119
	φ2,070,101	<i>45,550,117</i>

# NOTE 8 - PUBLIC EMPLOYEES RETIREMENT SYSTEM DEFINED BENEFIT PENSION PLAN

## Net Pension Liability

For 2015, Governmental Accounting Standards Board (GASB) Statement No. 68, "Accounting and Financial Reporting for Pensions" and GASB Statement No. 71, "Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68" were effective.

The net pension liability reported on the statement of net position represents a liability to employees for pensions. Pensions are a component of exchange transactions--between an employer and its employees—of salaries and benefits for employee services. Pensions are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period. The obligation to sacrifice resources for pensions is a present obligation because it was created as a result of employment exchanges that already have occurred.

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

The net pension liability represents the Association's proportionate share of each pension plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of each pension plan's fiduciary net position. The net pension liability calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments and others. While these estimates use the best information available, unknowable future events require adjusting this estimate annually.

Ohio Revised Code limits the Association's obligation for this liability to annually required payments. The Association cannot control benefit terms or the manner in which pensions are financed; however, the Association does receive the benefit of employees' services in exchange for compensation including pension.

GASB 68 assumes the liability is solely the obligation of the employer, because (1) they benefit from employee services; and (2) State statute requires all funding to come from these employers. All contributions to date have come solely from these employers (which also includes costs paid in the form of withholdings from employees). State statute requires the pension plans to amortize unfunded liabilities within 30 years. If the amortization period exceeds 30 years, each pension plan's board must propose corrective action to the State legislature. Any resulting legislative change to benefits or funding could significantly affect the net pension liability. Resulting adjustments to the net pension liability would be effective when the changes are legally enforceable.

## Plan Description – Ohio Public Employees Retirement System (OPERS)

Plan Description – Association employees participate in the Ohio Public Employees Retirement System (OPERS). OPERS administers three separate pension plans. The traditional pension plan is a cost-sharing, multiple-employer defined benefit pension plan. The member-directed plan is a defined contribution plan and the combined plan is a cost-sharing, multiple-employer defined benefit pension plan with defined contribution features. While members (e.g. Association employees) may elect the member-directed plan and the combined plan, substantially all employee members are in OPERS' traditional plan; therefore, the following disclosure focuses on the traditional pension plan.

OPERS provides retirement, disability, survivor and death benefits, and annual cost of living adjustments to members of the traditional plan. Authority to establish and amend benefits is provided by Chapter 145 of the Ohio Revised Code. OPERS issues a stand-alone financial report that includes financial statements, required supplementary information and detailed information fiduciary position that may about **OPERS'** net be obtained by visiting https://www.opers.org/financial/reports.shtml, by writing to the Ohio Public Employees Retirement System, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 800-222-7377.

Senate Bill (SB) 343 was enacted into law with an effective date of January 7, 2013. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. The following table provides age and service requirements for retirement

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

and the retirement formula applied to final average salary (FAS) for the three member groups under the traditional plan as per the reduced benefits adopted by SB 343 (see OPERS' CAFR referenced above for additional information):

Group A	Group B	Group C
Eligible to retire prior to	20 years of service credit prior to	Members not in other Groups
January 7, 2013 or five years	January 7, 2013 or eligible to retire	and members hired on or after
after January 7, 2013	ten years after January 7, 2013	January 7, 2013
State and Local	State and Local	State and Local
Age and Service Requirements:	Age and Service Requirements:	Age and Service Requirements:
Age 60 with 60 months of service credit	Age 60 with 60 months of service credit	Age 57 with 25 years of service credit
or Age 55 with 25 years of service credit	or Age 55 with 25 years of service credit	or Age 62 with 5 years of service credit
Formula:	Formula:	Formula:
2.2% of FAS multiplied by years of	2.2% of FAS multiplied by years of	2.2% of FAS multiplied by years of
service for the first 30 years and 2.5%	service for the first 30 years and 2.5%	service for the first 35 years and 2.5%
for service years in excess of 30	for service years in excess of 30	for service years in excess of 35

Final average Salary (FAS) represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career.

Members who retire before meeting the age and years of service credit requirement for unreduced benefits receive a percentage reduction in the benefit amount.

When a benefit recipient has received benefits for 12 months, an annual cost of living adjustment (COLA) is provided. This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. For those retiring prior to January 7, 2013, the COLA will continue to be a 3 percent simple annual COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, the COLA will be based on the average percentage increase in the Consumer Price Index, capped at 3 percent.

Funding Policy - The Ohio Revised Code (ORC) provides statutory authority for member and employer contributions as follows:

2015 Statutory Maximum Contribution Rates	
Employer	14.0%
Employee	10.0%
2015 Actual Contribution Rates:	
Employer:	
Pension	12.0%
Post-employment health care benefits	2.0%
Total Employer	14.0%
Employee	10.0%

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll.

The Association's contractually required contribution for pension benefits was \$34,302 for year 2015.

# Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The net pension liability for OPERS was measured as of December 31, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. OPF's total pension liability was measured as of December 31, 2014, and was determined by rolling forward the total pension liability as of January 1, 2014, to December 31, 2014. The Association's proportion of the net pension liability was based on the Association's share of contributions to the pension plan relative to the contributions of all participating entities. Following is information related to the proportionate share:

	OPERS
Proportionate Share of the Net	
Pension Liability	\$289,865
Proportion of the Net Pension	
Liability	0.002411%
Pension Expense	\$38,095

At December 31, 2015, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<b>Deferred Outflows of Resources:</b> Net difference between projected and actual earnings on pension plan investments Association contributions subsequent to the measurement date Total Deferred Outflows of Resources	\$15,573 <u>43,099</u> <u>\$58,672</u>
<b>Deferred Inflows of Resources:</b> Differences between expected and actual experience	<u>\$5,392</u>

# NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

The amount of \$43,099 reported as deferred outflows related to pension resulting from the Association's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2016. Other amounts reported as outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ending December 31:	
2016	\$1,503
2017	\$1,502
2018	\$3,465
2019	\$3,711
Total	<u>\$10,181</u>

# Actuarial Assumptions - OPERS

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability in the December 31, 2014, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Wage Inflation	3.75 percent
Future Salary Increases, including inflation	4.25 to 10.05 percent including wage inflation
COLA or Ad Hoc COLA	3 percent, simple
Investment Rate of Return	8 percent
Actuarial Cost Method	Individual Entry Age

Mortality rates were based on the RP-2000 Mortality Table projected 20 years using Projection Scale AA. For males, 105 percent of the combined healthy male mortality rates were used. For females, 100 percent of the combined healthy female mortality rates were used. The mortality rates used in evaluating disability allowances were based on the RP-2000 mortality table with no projections. For males 120 percent of the disabled female mortality rates were used set forward two years. For females, 100 percent of the disabled female mortality rates were used.

The most recent experience study was completed for the five-year period ended December 31, 2010.

The long-term rate of return on defined benefit investment assets was determined using a buildingblock method in which best-estimate ranges of expected future real rates of return are developed

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

OPERS manages investments in four investment portfolios: the Defined Benefits portfolio, the Health Care portfolio, the 115 Health Care Trust portfolio and the Defined Contribution portfolio. The Defined Benefit portfolio includes the investment assets of the Traditional Pension Plan, the defined benefit component of the Combined Plan, the annuitized accounts of the Member-Directed Plan and the VEBA Trust. Within the Defined Benefit portfolio, contributions into the plans are all recorded at the same time, and benefit payments all occur on the first of the month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The money weighted rate of return, net of investments expense, for the Defined Benefit portfolio is 6.95 percent for 2014.

The allocation of investment assets with the Defined Benefit portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The table below displays the Board-approved asset allocation policy for 2014 and the long-term expected real rates of return:

		Weighted Average
		Long-Term Expected
	Target	Real Rate of Return
Asset Class	Allocation	(Arithmetic)
Fixed Income	23.00 %	2.31 %
Domestic Equities	19.90	5.84
Real Estate	10.00	4.25
Private Equity	10.00	9.25
International Equities	19.10	7.40
Other investments	18.00	4.59
Total	100.00 %	5.28 %

**Discount Rate** The discount rate used to measure the total pension liability was 8 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefits payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Association's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate The following table presents the Association's proportionate share of the net pension liability calculated using the current period discount rate assumption of 8 percent, as well as what the Association's proportionate share of the net pension liability would be if it were

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

calculated using a discount rate that is one-percentage-point lower (7 percent) or one-percentagepoint higher (9 percent) than the current rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
	(7.00%)	(8.00%)	(9.00%)
Association's proportionate share			
of the net pension liability	\$534,977	\$289,865	\$85,132

## **NOTE 9 - POSTEMPLOYMENT BENEFITS**

In addition to the pension benefits described in Note 8, the Ohio Public Employees Retirement System (OPERS) provides postretirement health care coverage, commonly referred to as OPEB (other postemployment benefits). OPERS administers three separate pension plans, the Traditional Pension Plan (TP), the Member-Directed Plan (MD) and the Combined Plan (CP), all of which are described in Note 8.

<u>Plan Description -</u> OPERS maintains two cost-sharing multiple employer defined benefit postemployment health care trusts, which fund multiple health care plans including medical coverage, prescription drug coverage, deposits to a Health Reimbursement Arrangement and Medicare Part B premium reimbursements, to qualifying members of both the Traditional Pension and the Combined Plans. Members of the Member-Directed Plan do not qualify for ancillary benefits, including OPERS sponsored post-employment health care coverage.

In order to qualify for post-employment health care coverage, age and service retirees under the Traditional Pension and Combined Plans must have 20 or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS meets the definition of an Other Post Employment Benefit (OPEB) as described in GASB Statement 45.

The Ohio Revised Code permits, but does not require, OPERS to provide health care to its eligible benefit recipients. Authority to establish and amend health care coverage is provided by Chapter 145 of the Ohio Revised Code.

Disclosures for the health care plan are presented separately in the OPERS financial report that may be obtained by writing to OPERS, 277 E. Town St., Columbus, OH 43215-4642 or by calling (614) 222-5601 or (800) 222-7377.

<u>Funding Policy</u> – The Ohio Revised Code provides the statutory authority requiring public employers to fund post-retirement health care coverage through their contributions to OPERS. A portion of each employer's contribution to OPERS is set aside for the funding of post-retirement health care coverage.

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

Employer contribution rates are expressed as a percentage of the covered payroll of active members. In 2015, the Association contributed at a rate of 14.0% of covered payroll. This is the maximum employer contribution permitted by the Ohio Revised Code. Active members do not make contributions to the OPEB Plan.

OPERS maintains three health care trusts. The two cost-sharing, multiple-employer trusts, the 401(h) Health Care Trust and the 115 Health Care Trust, work together to provide health care funding to eligible retirees of the Traditional Pension and Combined plans. The third plan is a Voluntary Employee's Beneficiary Association (VEBA) that provides funding for a Retiree Medical Account for Member-Directed Plan members.

Each year, the OPERS Board of Trustees determines the portion of the employer contribution rate that will be set aside for funding of post-employment health care benefits. In 2015, the portion of employer contributions allocated to health care was 2% for both the Traditional and Combined plans. Effective January 1, 2016, the portion of employer contributions allocated to healthcare remained at 2% for both plans, as recommended by OPERS' actuary. The OPERS Board of Trustees is also authorized to establish rules for the retiree or surviving beneficiaries to pay a portion of the health care benefits provided. Payment amounts vary depending on the number of covered dependents and the coverage selected. The employer contribution as a percentage of covered payroll deposited to the VEBA for participants in the Member-Directed Plan for 2015 was 4.5%.

The Association's contributions allocated to fund post-employment health care benefits for the years ended December 31, 2015, 2014, and 2013 were \$6,157, \$6,116, and \$3,174, respectively. Ninety-seven percent has been contributed for 2015 and 100 percent for 2014 and 2013.

# **NOTE 10 – COMMITMENTS**

*Leases* - The Association leases office space under a lease which was renewed for five years effective July 1, 2014. Rental expense for the lease was \$36,400 in 2015. Future minimum annual lease payments are \$36,400 through June 30, 2019. An option to purchase the building was also included in the agreement. MVRMA may purchase the building for \$320,000 at any time during the lease term.

# NOTE 11 – LITIGATION AND CLAIMS

The Association is party to various legal proceedings, which normally occur in the course of claims processing operations. Management believes that the outcome of such claims has been adequately accrued in the claims reserve liability, and excess will be covered by insurance carriers that provide excess insurance and reinsurance contracts. Nevertheless, due to uncertainties in the settlement process, it is at least reasonably possible that management's view of the outcome could change materially in the near term.

#### NOTES TO THE BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2015

# NOTE 12 – PRIOR YEAR RESTATEMENT

In 2015, the Association adopted GASB Statement No. 67 "Financial Reporting for Pension Plans", GASB Statement No. 68, "Accounting and Financial Reporting for Pensions" and GASB Statement No. 71 "Pension Transition for Contributions Made Subsequent to the Measurement Date." GASB Statement No. 68 established standards for measuring and recognizing pension liabilities, deferred outflows of resources related to pensions, deferred inflows of resources related to pensions and expense. The implementation of these pronouncements had the following effect on net position as of December 31, 2014:

Net Position December 31, 2014	\$11,287,022
Adjustments:	
Net Pension Liability	(283,973)
Deferred Outflows - Payments Subsequent to Measurement Date	42,384
Postated Nat Position December 21, 2014	\$11.045.422
Restated Net Position December 31, 2014	\$11,045,433

The data was not available to restate net position for other deferred inflows and outflows of resources related to pension.

# **REQUIRED SUPPLEMENTARY INFORMATION**

#### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC. REQUIRED SUPPLEMENTARY INFORMATION

#### COMPARATIVE SCHEDULE OF CLAIM DEVELOPMENT, EARNED ASSESSMENTS AND UNALLOCATED EXPENSES FOR THE YEARS ENDED DECEMBER 31, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 AND 2006

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Earned assessments and interest income: Earned Ceded	\$4,223,535 885,468	\$4,908,192 878,317	\$4,316,800 870,249	\$4,433,255 807,647	\$4,388,732 761,789	\$4,259,382 753,793	\$4,642,131 695,576	\$4,947,808 739,537	\$5,163,206 832,277	\$4,668,772 797,977
Net	\$3,338,067	\$4,029,875	\$3,446,551	\$3,625,608	\$3,626,943	\$3,505,589	\$3,946,555	\$4,208,271	\$4,330,929	\$3,870,795
Unallocated loss expenses Original estimates ultimate incurred claims and expenses for the policy year, including	\$758,871	\$757,719	\$751,099	\$733,355	\$691,571	\$677,469	\$668,721	\$653,618	\$658,624	\$610,336
members' deductibles (1)	1,459,000	2,771,000	1,798,849	2,032,756	2,587,500	1,997,755	2,409,147	2,934,106	2,400,000	2,350,000
Cummulative paid claims, net of reinsurance, including members' deductibles, as of:										
End of policy year One year later Two years later Three years later Four years later Five years later Six years later Seven years later Eight years later Nine years later	626,239	1,480,995 1,626,822	729,736 952,440 1,180,592	664,220 810,718 889,541 964,041	2,908,228 2,657,347 2,422,620 2,422,096 2,474,416	519,228 689,893 1,141,553 1,391,993 1,481,047 1,587,679	432,941 581,765 857,095 1,159,198 1,605,343 1,560,680 1,533,450	1,079,122 1,070,393 1,709,126 1,761,917 1,778,973 1,768,118 1,768,118 1,768,118	414,230 733,273 937,377 1,001,350 1,005,084 993,837 993,837 993,837	550,587 859,953 1,051,038 1,280,490 1,327,753 1,603,224 1,578,210 1,578,210 1,558,436 1,558,436
Re-estimated ultimate incurred claims and expenses, including members' deductibles: End of policy year One year later Two years later Three years later Four years later Five years later Six years later Seven years later Eight years later Nine years later	1,459,000	2,771,000 2,334,000	1,798,849 1,621,700 1,431,006	2,032,756 1,587,710 1,167,878 1,137,378	2,587,500 2,136,224 1,326,059 1,339,671 1,312,671	1,997,755 1,742,370 1,394,990 1,544,150 1,554,895 1,523,508	2,409,147 1,764,438 1,221,597 1,288,589 1,724,400 1,634,638 1,533,450	2,934,106 2,166,259 1,967,931 1,948,570 1,766,766 1,698,056 1,647,761 1,647,761	2,400,000 2,198,000 1,152,076 1,075,548 1,068,624 1,011,355 1,006,467 993,837 993,837	2,350,000 2,160,000 1,297,210 1,433,434 1,412,424 1,683,451 1,642,641 1,633,407 1,558,432 1,558,432
Increase (decrease) in estimate incurred claims and expenses from original estimate		(437,000)	(367,843)	(895,378)	(1,274,829)	(474,247)	(875,697)	(1,286,345)	(1,406,163)	(791,568)

(1) Ceded losses are not expected to be significant.

# Reconcililation of Claim Liabilities by Type of Contract For the Year Ended December 31, 2015

	General Liability	Automobile Liability	Property	Total
Unpaid claims and claim adjustment expenses - Beginning of	5	5	1 5	
Year - including Aggregate Adjustment	\$3,040,650	\$126,144	\$383,325	\$3,550,119
Incurred claims and claim adjustment expenses:				
Provision for insured events of the current year	775,543	89,494	377,635	\$1,242,672
Decrease in provision for insured events of prior years	-853,475	90,131	-94,416	-857,760
Total incurred claims and claim adjustment expenses	-77,932	179,625	283,219	384,912
Payments:				
Claims and claim adjustment expenses attributable to insured events of the current year Claims and claim adjustment expenses attributable to insured	41,363	4,862	193,984	\$240,209
events of prior years	597,861	153,667	245,113	996,641
Total Payments	639,224	158,529	439,097	1,236,850
Unpaid claims and claim adjustment expenses - End of Year	\$2,323,494	\$147,240	\$227,447	\$2,698,181

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# MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, INC. REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF PROPORTIONATE SHARE OF NET PENSION LIABILITY OF THE OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM LAST TWO YEARS <sup>(1)</sup>

Association's proportion of net pension liability	<u>2014</u> 0.2411%	<u>2013</u> 0.2411%
Association's proportionate share of net pension liability	\$289,865	\$283,973
Association's covered payroll	\$301,763	\$337,396
Association's proportionate share of net pension liability as a percentage of its covered payroll	96.1%	84.2%
Plan fiduciary net position as a percentage of the total pension liability	86.5%	86.4%

(1) Data prior to 2013 is unavailable

#### MIAMI VALLEY RISK MANAGEMENT ASSOCIATION REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS TO OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM LAST TEN YEARS

Contractually required contribution	<u>2015</u> \$34,302.40	<u>2014</u> \$36,211.56	<u>2013</u> \$43,861.49	<u>2012</u> \$31,306.39	<u>2011</u> \$28,315.76	<u>2010</u> \$29,017.89	<u>2009</u> \$21,892.10	<u>2008</u> \$24,838.81	<u>2007</u> \$20,804.51	<u>2006</u> \$21,273.18
Contributions in relation to the contractually required contribution	-\$34,302.40	-\$36,211.56	-\$43,861.49	-\$31,306.39	-\$28,315.76	-\$29,017.89	-\$21,892.10	-\$24,838.81	-\$20,804.51	-\$21,273.18
Contribution deficiency (excess)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MVRMA's covered-employee payroll	\$285,853.34	\$301,763.00	\$337,396.07	\$313,063.93	\$283,157.57	\$325,312.64	\$269,275.57	\$354,840.14	\$249,155.86	\$231,230.21
Contributions as a percentage of										



# ANALYSIS OF UNPAID LOSS AND LAE AS OF DECEMBER 31, 2015

MARCH 23, 2016



One Glenlake Parkway, Suite 1285 Atlanta, GA 30328 770.587.0351 pinnacleactuaries.com

**Commitment Beyond Numbers** 

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# PURPOSE AND SCOPE

Pinnacle Actuarial Resources, Inc. (Pinnacle) was retained by Miami Valley Risk Management Association (MVRMA) to prepare an actuarial analysis of MVRMA's loss and loss adjustment expense (LAE) experience for the purpose of developing estimates of unpaid loss and LAE as of December 31, 2015.

This report was prepared for the internal use of MVRMA management to present our findings with respect to this analysis. It is our understanding that MVRMA management will consider our findings for the purposes of establishing liability estimates for external financial reporting and internal management reporting.

Our report is not intended or necessarily suitable for any other purpose.

In this report, we develop an actuarial central estimate of MVRMA's unpaid loss and LAE as of December 31, 2015. This actuarial central estimate is intended to represent an expected value over a range of reasonably foreseeable outcomes. The actuarial central estimate was arrived at through evaluation of the results of various actuarial methods and models applied to MVRMA's experience. As such, the derivation of this estimate does not reflect extreme events believed to have a remote possibility of occurring. We consider the actuarial central estimate suitable for use in financial reporting contexts.

The exhibits attached in support of our conclusions are an integral part of this report. This section has been prepared so that our actuarial assumptions and judgments are documented. Judgments about the analysis and findings presented in this report should be made only after considering the report in its entirety. Our projections are predicated on a number of assumptions as to future conditions and events. These assumptions are documented in subsequent sections of this report, and should be understood in order to place the actuarial estimates in their appropriate context. In addition, these projections are subject to a number of reliances and limitations, as described in subsequent sections of this report.

We are available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

The scope does not include quantification of the uncertainty in our estimates. However, our report includes commentary on this uncertainty to assist in understanding the financial implications of our results.

For the purposes of our report, the "accounting date" of December 31, 2015 is the date used to separate paid and unpaid claim amounts in MVRMA's financial statement. Transactions through the "valuation date" of December 31, 2015 are included in the data used in our analysis. No account has been taken in the projections of developments subsequent to the "review date" of February 24, 2016.

Paid losses provided to us are net of salvage and subrogation. Therefore loss reserve estimates derived from this data would implicitly anticipate salvage and subrogation. The other recoverables considered in our reserve estimates are individual member liabilities and excess insurance.

All loss and LAE amounts are stated on an undiscounted basis as regards future investment income.

We have reviewed MVRMA's exposure to asbestos and environmental claims. In our opinion, the chance of material liability related to asbestos and environmental claims is remote, since no such claims have been reported to date, and MVRMA did not write lines of business that are typically exposed to such losses.

MVRMA does not write any business that would require the establishment of reserves for the death, disability, and retirement (DD&R) waiver of premium endorsement. Therefore, MVRMA has not established a provision for the "extended loss and expense reserve."

MVRMA has represented that it has no unearned premium for long duration contracts defined as single or fixed premium policies with coverage periods of thirteen months or greater which are non-cancelable and not subject to premium increase.

MVRMA has represented that it has not entered into any excess insurance transaction that either has been or should have been accounted for as retroactive reinsurance or as financial reinsurance (defined as contractual arrangements that do not include a transfer of both timing and underwriting risk).

We have not reviewed any additional or return premiums or commissions due to or from MVRMA arising from loss sensitive insurance contracts.

Throughout this report, the use of the term *loss* without modification includes loss and allocated loss adjustment expenses (ALAE), but does not include unallocated loss adjustment expenses (ULAE).

This actuarial report is being provided to MVRMA to be retained for a period of seven years in its administrative offices and to be available for examination by its members and for regulatory examination, if appropriate.

Loss adjustment expenses include but are not limited to the costs of administering, determining coverage for, settling, or defending claims even if it is ultimately determined that the claim is invalid.

Funding for MVRMA's loss and LAE is accomplished via annually budgeted contributions. In the event the pool requires additional funds, such amounts can be obtained via a call for special assessments by MVRMA's Board of Trustees for supplementary payments.

# DISTRIBUTION

Our report is delivered under the following terms and conditions:

- This report is provided to MVRMA solely for the intended purpose, and may not be referenced or distributed to any other party without our prior written consent
- This report has been prepared for use by persons technically competent in the areas covered and with the necessary background information
- Draft versions of this report must not be relied upon by any person for any purpose
- This report is available for regulatory examination
- A copy of this report may be shared with MVRMA's independent auditors solely in the context of their performing regular audit activities

We accept no responsibility for any consequences arising from any third party relying on this report. If we agree to provide this report to a third party, you are responsible for ensuring that the report is provided in its entirety, that the third party is made aware of the fact that they are not entitled to rely upon it, and that they may not distribute the report to any other party.

This report contains workpapers, trade secrets, and confidential information of both MVRMA and Pinnacle. Because of the nature of the material contained in the report, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

# BACKGROUND

MVRMA has provided insurance coverage for its members since December 1, 1988. As of December 31, 2015 the pool was comprised of the following 20 entities: Beavercreek, Bellbrook, Blue Ash, Centerville, Englewood, Kettering, Madeira, Mason, Miamisburg, Montgomery, Piqua, Sidney, Springdale, Tipp City, Troy, Vandalia, the Village of Indian Hill, West Carrollton, Wilmington and Wyoming. MVRMA provides coverage for several lines of insurance including commercial property, comprehensive general liability, automobile physical damage, law enforcement liability, public official's liability, crime, ambulance attendants, and boiler and machinery.

This report groups all losses into three categories: automobile liability (AL), general liability (GL), and property which includes auto physical damage (Property). Each line is analyzed for annual periods December 1, 1988 through December 31, 2015. The results of the report are not intended to apply to any other entities, lines of insurance, or periods.

Prior to December 31, 1994, claim adjustment services were provided to MVRMA through Gallagher Bassett Insurance Services, Incorporated. Gallagher Bassett continued to adjust run-off claims for the period December 1, 1988 through December 31, 1994. As of December 31, 2008, there were no outstanding claims from this claim period. Effective January 1, 1995, MVRMA began to employ an inhouse claims staff.

#### Data

We were provided with "gross" paid and incurred loss and ALAE by accident period, by line of business. The term "gross" means before consideration of recoverables from excess carriers and member deductibles. Paid losses are net of salvage and subrogation.

Detailed claims data was provided to us by MVRMA's claims department for accident periods 2007 through 2015. MVRMA also provided such summaries by line of business for accident periods 2007 through 2015. There has been no claim activity for any prior accident periods. Excess insurance limits were provided by MVRMA.

In my review, we have relied on listings and other relevant data, prepared by Tom Judy, Executive Director of MVRMA and Craig Blair, Claims Manager of MVRMA. we evaluated that data for reasonableness and consistency. We are relying on the audit procedures of MVRMA's independent public accountant and claims auditor to verify the accuracy of the data underlying our analysis. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

#### Self-Insured Retention History

The following table details the MVRMA self-insured retention (SIR) per occurrence for casualty and property coverages separately by accident year.

Accident Year	Casualty - SIR	Property - SIR
1993 & Prior	\$250,000	\$250,000
1994	\$250,000	\$100,000
1995	\$250,000	\$150,000
1996	\$250,000	\$250,000
1997-1998	\$500,000	\$250,000
1999-2001	\$500,000	\$150,000
2002	\$500,000	\$250,000
2003-2004	\$1,000,000	\$250,000
2005-2008	\$1,000,000	\$200,000
2009	\$1,000,000	\$200,000/\$250,000
2010-2015	\$500,000	\$250,000

The first \$2,500 of each occurrence is treated as a deductible by the pool member who suffered the loss. MVRMA did not have an aggregate stop loss policy for periods prior to December 31, 1990; however, there is an \$850,000 aggregate "property and casualty combined" stop loss in place for the accident periods 1991 through 1993 and a \$950,000 aggregate "casualty only" stop loss for the 1994 and 1995 accident periods. There is no aggregate stop loss policy for accident periods 1996 and subsequent; rather MVRMA is aggregating premiums previously paid for such coverage into an accumulating "shock loss" fund to be used at the discretion of the MVRMA Board.

#### **Excess Insurance**

The following table is a synopsis of the historical excess liability coverage carried by MVRMA:

Accident Year	Liability Excess Coverage	Provider	
1997-2002	\$10M excess of \$1M	National Public Entity Excess Program (NPX)	
2003	\$11M excess of \$1M	Government Entities Mutual, Inc. (GEM)/ Endurance Specialty Insurance Limited	
2004	\$1M excess of \$1M \$5M excess of \$2M	GEM Insurance Co. of the State of PA (AIG)	
2005	\$1M excess of \$1M \$5M excess of \$2M	GEM Illinois Union Insurance Company (ACE)	
2006-2008	\$1M excess of \$1M	GEM	

	\$8M excess of \$2M	Munich Reinsurance America
2009	\$1M excess of \$1M	GEM
	\$8M excess of \$2M	General Reinsurance
		Corporation
2010-2012	\$1.5M excess of \$500K GEM	
	\$8M excess of \$2M	General Reinsurance
		Corporation
2013-2015	\$2.5M excess of \$500K	GEM
	\$7M excess of \$3M	Genesis

GEM is a protected cell reinsurance captive domiciled in the District of Columbia. GEM is sponsored by the National Association of Government Entity Programs, Inc. (NAGeP), a non-profit association incorporated in the District of Columbia.

#### FINDINGS

Based on our analysis of MVRMA's experience as of December 31, 2015, and subject to the considerations set forth in the *Reliances and Limitations* section, we have reached the conclusions set forth below.

#### Unpaid Loss and LAE as of December 31, 2015

The estimated total undiscounted unpaid loss and LAE as of December 31, 2015 is \$2,698,181. This amount is net of reinsurance and member deductibles. It compares to an estimated unpaid amount of \$3,550,119 from our analysis at December 31, 2014.

#### **Development in Net Loss Estimates from Prior Analysis**

The table below compares our net ultimate loss estimate as of December 31, 2015 to our estimate as of December 31, 2014 for accident years 2014 and prior. Our estimates have decreased by \$0.8 million.

Accident	Evaluation Date			Percent
Year	@12/31/2014	@12/31/2015	Difference	Change
1989-2004	\$12,460	\$12,460	0	0.0%
2005	1,471	1,471	0	0.0%
2006	1,558	1,558	0	0.0%
2007	994	994	0	0.0%
2008	1,648	1,648	0	0.0%
2009	1,635	1,533	(101)	-6.2%
2010	1,555	1,524	(31)	-2.0%
2011	1,340	1,313	(27)	-2.09
2012	1,168	1,137	(31)	-2.69
2013	1,622	1,431	(191)	-11.89
2014	2,771	2,334	(437)	-15.8%
Total	\$28,221	\$27,404	(\$818)	-2.9%

#### ANALYSIS

Our analysis consisted of the steps outlined below.

#### **Development Patterns**

Our projection of future claim reporting and payment is based on MVRMA's historical experience. Using historical loss development experience provided by MVRMA, we select report-to-report (RTR) development factors. In cases for which MVRMA's historical data is not sufficiently credible, stable, or mature, we have supplemented MVRMA's experience with benchmark reporting and payment patterns.

Benchmark patterns are constructed internally by Pinnacle, drawing upon available relevant sources of loss development data. Benchmarks are revised periodically as new information and trends emerge. While each company's own development can be expected to vary from the benchmark based on individual circumstances, we believe the benchmark is an appropriate supplement to the analysis of MVRMA's data, as it represents our current judgment as to the typical emergence of loss that can be expected for that class of business.

The selected development patterns are used for both the development and Bornhuetter-Ferguson (B-F) projection methods.

#### Initial Expected Loss Costs

The selected initial expected loss costs (IELCs or loss per exposure) are based on a review of the paid and incurred loss development methods, the results of prior analyses, insurance industry indications, and observed trends. These IELCs form the basis of the B-F and expected loss projection methods.

#### Selected Ultimate Losses

In general, our selected ultimate losses are based on the results of various projection methods. Our selections are based on judgment reflecting the range of estimates produced by the methods, and the strengths and weaknesses of each method. These methods are described in the *Description of Projection Methods* section of this report.

#### **Unallocated Loss Expense Reserve**

We relied on only one method to develop estimates of indicated unpaid ULAE. We recognize there are other methods used by actuaries for estimating unpaid LAE that rely on projecting future claim counts and assigning a transaction cost to handle such claims. Regardless, the method we rely upon has been in common practice for many years and is widely accepted.

On Summary, Exhibit 4, the industry paid ULAE to paid loss ratio is applied to the estimated IBNR amounts and one-half of this ratio is applied to case reserves. This method is derived from the expectation that half of ULAE is incurred when a claim is opened and the other half at closure.

#### **General Overview of Exhibits**

The Summary exhibits combine all lines of business and compare the indicated reserves and carried reserves in total. Exhibit 4 shows our calculation of the indicated ULAE reserve. Exhibit 3 summarizes member deductible losses by AY, while Exhibit 2 summarizes ultimate losses by AY prior to the application of any member deductibles. Note that the aggregate retention is applied to the appropriate AY's and affects AY 1993. Exhibit 1 summarizes the indicated reserves from Exhibit 2 before and after application of the member deductibles.

#### **Automobile Liability**

Exhibits 1 through 23 contain our loss analysis for AL. The claim summary and ultimate claim projection can be found in Exhibits 13 through 22. Exhibit 21 shows AL's historical reported claim experience and our selected development factors. For the majority of the FYs all claims are reported by 36 months. Exhibit 19 summarizes the claim indications including indicated IBNR claims.

Exhibits 15 and 16 show the incurred and paid loss triangles limited to \$500,000 and our initial selected development factors, respectively. Exhibits 17 and 18 show the average incurred and average paid loss triangles limited to \$500,000 and our initial selected development factors, respectively. On Exhibits 13 and 14, we estimate \$1,000,000 limits development patterns based on the \$500,000 limits development patterns and an assumed 6 month lag.

Exhibits 7 through 12 contain the development method indications using the selected development factors from Exhibits 13 and 14.

Exhibits 6.1 through 6.3 calculates the expected loss cost used in the B-F methods found in Exhibits 4 and 5. First, a limit factor is selected to adjust all AY's to a \$500,000 limit (Exhibit 6.3). Second, an initial ultimate loss is selected based on the development methods (Exhibit 6.2). Next, AY loss costs based on the initial selected ultimate losses are trended to AY 2015 with an initial loss cost selected for AY 2015. Finally, the expected loss cost for all AY's are calculated by detrending the selected AY 2015 loss cost (Exhibit 6.1).

We select ultimate losses at retained limits on Exhibit 3. Exhibit 2 provides a comparison of selected ultimate losses to those selected in our prior analysis. Exhibit 1 summarizes the loss indications including indicated IBNR losses.

The exhibits for GL and Property follow a similar layout as the AL exhibits.

#### **RELIANCES AND LIMITATIONS**

#### **Inherent Uncertainty**

Projections of loss and LAE liabilities are subject to potentially large errors of estimation, since the ultimate disposition of claims incurred prior to the financial statement date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, legislative changes, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. Any estimate of future costs is subject to the inherent limitation on one's ability to predict the aggregate course of future events. It should therefore be expected that the actual emergence of losses and LAE will vary, perhaps materially, from any estimate. Thus, no assurance can be given that MVRMA's actual loss and LAE liabilities will not ultimately exceed the estimates contained herein. In our judgment, we have employed techniques and assumptions that are appropriate, and the estimates presented herein are reasonable, given the information currently available.

Note that a quantification of this uncertainty would likely reflect a range of reasonable, favorable and adverse scenarios, but not necessarily a range of all possible outcomes. Further, the proper application of any range is dependent on the context. MVRMA's financial reports are governed by accounting standards, and such standards vary among jurisdictions. Under current accounting standards, the ends of a range that is illustrative of uncertainty would likely not be suitable for financial reporting purposes.

#### **Sensitivity Analysis**

In performing this analysis, the sensitivity of key variables was considered. A number of assumptions about model variables are made in our analysis. We consider the key variables to include the selection of RTR factors, initial expected loss costs and loss cost trend factors. The overall results are potentially sensitive to any of these, and reasonable alternative selections could change the results significantly (favorably or adversely). Our intent is neither to be overly optimistic nor conservative in making our selections.

#### **Data Reliance**

Throughout this analysis, we have relied on historical data and other quantitative and qualitative information supplied by MVRMA. We have not independently audited or verified this information; however, we have reviewed it for reasonableness and internal consistency. We have assumed that the information is complete and accurate, and that we have been provided with all information relevant to the analysis of MVRMA's ultimate losses and LAE. The accuracy of our results is dependent upon the accuracy and completeness of the underlying data; therefore, any material discrepancies discovered in this data should be reported to us and this report amended accordingly, if warranted.

MVRMA has indicated that it will require that their independent certified public accountant subject the data significant to our loss and LAE projections to testing procedures.

#### **Extraordinary Future Emergence**

We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the cost, frequency, or future reporting of claims. In addition, our estimates make no

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provision for potential future claims arising from loss causes not represented in the historical data (e.g., new types of mass torts or latent injuries, terrorist acts, etc.), except where claims of these types are included but not identified in the reported claims and are implicitly analyzed.

#### **Projections by Accident Year**

Consistent with the purpose of our engagement, the focus of our analysis was on MVRMA's overall reserves for unpaid claims. As such, projections shown in this report for each accident year should be viewed in the context of the entire portfolio of liabilities, not necessarily as best estimates for individual accident years.

#### **Excess Insurance Collectability**

Our estimates are presented net of excess insurance. Based solely on inquiries made of MVRMA management, we understand that none of MVRMA's excess insurance is considered uncollectible. An independent evaluation of the quality of security provided by MVRMA's excess insurers is outside the scope of our engagement. We have assumed that all of MVRMA's excess insurance protection will be valid and collectible. Contingent liability may exist for any excess insurance recoveries that may prove to be uncollectible. Should such liabilities materialize, they would be in addition to the net liability estimates contained herein.

#### **Underlying Assets**

We have not examined the assets underlying MVRMA's loss and LAE reserves, and we have formed no opinion as to the validity or value of these assets. We have assumed throughout the analysis that MVRMA's loss and LAE reserves are backed by valid assets with suitably scheduled maturities and/or adequate liquidity to meet cash flow requirements.

#### DESCRIPTION OF PROJECTION METHODS

The choice of method to estimate ultimate losses should consider, among other things, the line of business, the number of years of experience, and the age of the experience year being developed. In general, these methods can be applied to losses, ALAE, and various measures of claim counts.

#### **Incurred Development Method**

The incurred development method is based upon the assumption that the relative change in a given year's incurred loss estimates from one evaluation point to the next is similar to the relative change in prior years' incurred loss estimates at similar evaluation points. In utilizing this method, actual annual historical incurred loss data is evaluated. Successive years can be arranged to form a triangle of data.

RTR development factors are calculated to measure the change in cumulative incurred costs from one evaluation point to the next. These historical RTR factors and comparable benchmark factors form the basis for selecting the RTR factors used in projecting the current valuation of losses to an ultimate basis.

This method's implicit assumption is that the relative adequacy of case reserves has been consistent over time, and that there have been no material changes in the rate at which claims have been reported.

#### **Paid Development Method**

The paid development method is similar to the incurred development method; however, case reserves are excluded from the analysis. While this method has the disadvantage of not recognizing the information provided by current case reserves, it has the advantage of avoiding potential distortions in the data due to changes in case reserving methodology.

This method's implicit assumption is that the rate of payment of claims has been relatively consistent over time.

#### **Case Reserve Development Method**

The case reserve development technique derives case reserve development factors through an analysis of the historical development of case reserves by period. The changes measured by the case reserve development technique include payments associated with the historical case reserves and subsequent reserve amounts for those claims remaining open.

The case reserve development factors are applied to the current case reserves by period to estimate their ultimate settlement value. Payments to date are then added to determine the ultimate losses for each period.

#### **Expected Loss Method**

In the expected loss method, ultimate loss projections are based upon a prior measure of the anticipated losses, such as number of cars, expenditures, etc. An expected loss cost is applied to the measure of exposure to determine estimated ultimate losses for each year.

Actual losses are not considered in this calculation. This method has the advantage of stability over time because the ultimate loss estimates do not change unless the expected loss costs change. However, this advantage of stability is offset by a lack of responsiveness since this method does not consider actual loss experience as it emerges.

This method is entirely dependent on the assumption that the loss cost per unit of exposure is a good indication of ultimate losses.

#### **Incurred Bornhuetter-Ferguson Method**

The incurred B-F method is essentially a blend of two other methods. The first method is the loss development method whereby actual incurred losses are multiplied by an expected loss development factor. For slow reporting coverages, the loss development method can lead to erratic and unreliable projections because a relatively small swing in early reportings can result in a large swing in ultimate projections. The second method is the expected loss method whereby the IBNR estimate equals the difference between a predetermined estimate of expected losses and actual incurred losses. This has the advantage of stability, but it does not respond to actual results as they emerge.

The incurred B-F method combines these two methods by setting ultimate losses equal to actual incurred losses plus expected unreported losses. As an experience year matures and expected unreported losses become smaller, the initial expected loss assumption becomes gradually less important.

Two parameters are needed to apply the B-F method: the initial expected loss cost (IELC) and the expected reporting pattern. The IELC is selected as described in the *Analysis* section, while the expected reporting pattern is based on the incurred loss development method described above.

This method is often used for long-tail lines and in situations where the incurred loss experience is relatively immature or lacks sufficient credibility for the application of other methods.

#### **Paid Bornhuetter-Ferguson Method**

The paid B-F method is analogous to the incurred B-F method using paid losses and development patterns in place of incurred losses and patterns.

#### **Counts and Averages Method**

The counts and averages method calculates ultimate losses by separately projecting ultimate claim counts and ultimate claim severity (cost per claim) for each experience period. Typically, loss development methods are used to project ultimate claims and severity based on historical data. Ultimate losses are calculated as the product of the two items. This method is intended to avoid distortions that may exist with the other methods for the most recent years as the result of changes in case reserve levels, settlement rates, etc. In addition, it may provide insight into the drivers of the loss experience.

### **EXHIBITS**

#### Summary Exhibit 1

#### Miami Valley Risk Management Association Summary December 31, 2015

#### Indicated Reserves

	Gross of Member Deductible	
(1)	Selected Ultimate Loss	\$28,862,626
(2)	Application of Aggregate Retention	\$144,133
(3)	Retained Ultimate Loss	\$28,718,493
(4)	Retained Paid Loss	\$26,052,887
(5)	Indicated Loss Reserves	\$2,665,606
	Member Deductible	
(6)	Indicated Ultimate Loss	\$2,173,415
(7)	Paid Loss	\$2,098,175
(8)	Indicated Loss Reserves	\$75,240
	Net of Member Deductible	
(9)	Indicated Loss Reserves	\$2,590,366
(10)	Indicated Unallocated Loss Expense Reserves	\$107,815
(11)	Indicated Loss and Loss Expense Reserves	\$2,698,181
Notes: (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)	From Exhibit 2, Col (5) = Exhibit 2, Col (5) - Exhibit 2, Col (7) From Exhibit 2, Col (7) From Exhibit 2, Col (11) = (3) - (4) From Exhibit 3, Col (5) From Exhibit 3, Col (9) = (6) - (7) = (5) - (9) From Exhibit 4, Row (11) = (9) + (10)	

## Summary Exhibit 2

# Miami Valley Risk Management Association Summary December 31, 2015

# Summary of Estimated Ultimate Retained Loss Prior to Consideration of Member Deductible Retained Limits

Retained	Losses	(12)	\$443,913	491,280	173,587	242,527	850,000	329,079	399'966	525,924	1,504,063	788,126	1,253,285	376,424	1,558,522	1,884,420	704,095	791,002	1,471,237	1,558,432	993,837	1,647,761	1,533,450	1,523,508	1,220,156	813,966	1,096,355	1,479,185	398,787	\$26,052,887	
	Total	(11)	\$443,913	491,280	173,587	242,527	994,133	329,079	399,966	525,924	1,504,063	788,126	1,253,285	376,424	1,558,522	1,884,420	704,095	791,002	1,471,237	1,558,432	993,837	1,647,761	1,533,450	1,523,508	1,220,156	813,966	1,096,355	1,479,185	398,787	\$26,197,020	
Paid Loss Property	Liability	(10)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,162,693	264,349	\$8,978,753	
General	Liability	(6)	\$207,853	439,863	84,015	139,376	600,979	106,065	156,790	357,926	706,526	554,289	657,094	164,560	497,423	1,347,177	269,762	511,964	857,801	915,795	312,120	856,672	1,177,813	972,613	252,485	216,588	278,864	233,752	85,569	\$12,961,733	
Automobile	Liability	(8)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	82,740	48,868	\$4,256,534	
Retained	Losses	(2)	\$443,913	491,280	173,587	242,527	850,000	329,079	399,966	525,924	1,504,063	788,126	1,253,285	376,424	1,558,522	1,884,420	704,095	791,002	1,471,237	1,558,432	993,837	1,647,761	1,533,450	1,523,508	1,312,671	1,137,378	1,431,006	2,334,000	1,459,000	\$28,718,493	Provided by MVRMA Provided by MVRMA Provided by MVRMA = (8) + (9) + (10) = (81 ) subject to (6)
Aggregate	Retention	(6)			850,000	850,000	850,000	950,000	950,000																						(8) (9) (11) (11) (12)
Loss	Total	(5)	\$443,913	491,280	173,587	242,527	994,133	329,079	399,966	525,924	1,504,063	788,126	1,253,285	376,424	1,558,522	1,884,420	704,095	791,002	1,471,237	1,558,432	993,837	1,647,761	1,533,450	1,523,508	1,312,671	1,137,378	1,431,006	2,334,000	1,459,000	\$28,862,626	
Ultimate Loss Property	Liability	(4)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,/06	1,200,000	486,000	\$9,237,711	it 1, Col (2) è Exhibit 1, Col (2)
General	Liability	(3)	\$207,853	439,863	84,015	139,376	600,979	106,065	156,790	357,926	706,526	554,289	657,094	164,560	497,423	1,347,177	269,762	511,964	857,801	915,795	312,120	856,672	1,177,813	972,613	345,000	540,000	610,000	1,000,000	830,000	\$15,219,475	From Automobile Liability (AB, AD) Exhibit 1, Col (2) From General Liability Exhibit 1, Col (2) From Property and Auto Physical Damage Exhibit 1, Col = (2) + (3) + (4) Provided by MVRMA = (5) subject to (6)
obile	ity	•	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,66U	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	238,300	134,000	143,000	\$4,405,440	From Automobile Lia From General Liabilit From Property and A = (2) + (3) + (4) Provided by MVRMA = (5) subject to (6)
Automobile	Liability	(2)	÷																											1/1	From From From Provid = (5) s

Pinnacle Actuarial Resources, Inc.

MVRMA Summary 2015-12-31 3/9/2016 at 1:04 PM

Summary Exhibit 3

# Miami Valley Risk Management Association Summary December 31, 2015

# Summary of Estimated Member Deductible Ultimate Loss

Total (9)		\$208,766	232,168	252,640	208,732	197,827	237,283	164,902	206,428	230,853	158,577	\$2,098,175	
sss Property Liability (8)		\$103,904	101,827	134,525	119,127	83,877	132,474	92,455	112,692	103,333 	70,365	\$1,054,578	
Paid Loss General Liability (7)		\$55,888	54,069	71,826	58,683	68,617	66,641	48,604	52,985	63,938	44,206	\$585,458	
Automobile Liability (6)		\$48,974	76,272	46,288	30,922	45,333	38,168	23,843	40,751	63,582	44,006	\$458,139	
Total (5)		\$208,766	232,168	252,640	208,732	197,827	238,773	164,902	208,928	244,353	216,327	\$2,173,415	
e Loss Property Liability (4)		\$103,904	101,827	134,525	119,127	83,877	132,474	92,455	112,692	103,833	108,365	\$1,093,078	
Ultimate Loss General Pr Liability Li (3)		\$55,888	54,069	71,826	58,683	68,617	68,131	48,604	55,485	76,938	54,455	\$612,698	
Automobile Liability (2)		\$48,974	76,272	46,288	30,922	45,333	38,168	23,843	40,751	63,582 53 565	905,55	\$467,639	Provided by MVRMA = (2) + (3) + (4) Provided by MVRMA = (6) + (7) + (8)
Accident Year (1)	1989 1990 1991 1995 1996 1999 1999 2000 2003 2003 2003	2006	2007	2008	2009	2010	2011	2012	2013	2014 2015	5102	Total	Notes: (2)-(4) (5) (6)-(8) (9)

Pinnacle Actuarial Resources, Inc.

MVRMA Summary 2015-12-31 3/9/2016 at 1:04 PM

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= (6) + (7) + (8)Based on Pinnacle's analysis of industry data

= (2) + (3) + (4) From Automobile Liability (AB, AD) Exhibit 1, Col (6)

Losses Net of Deductibles Provided by MVRMA

(11)

(10) \$45,130

Total

\$0 0 0 51,131 173,336 259,202 721,344 832,761

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41,384 150,076 75,449 100,311 15,250 \$382,470

\$2,037,774

\$1,875,272

\$103,776

\$627,832

11,647 47,079 \$58,726

51,131 173,336 255,687 665,937 729,180

3,515 43,760 56,502

41,384 150,076 75,449 133,471 227,452

25,660

174,572 \$200,232

7,500 37,630

\$107,815 4.6%

\$6,989

\$92,993 4.5%

\$7,833

ULAE Reserves

6.2%

Selected ULAE Expense to Loss Ratio

4.4%

Summary Exhibit 4

Total (9)

Property

General Liability 6

Automobile Liability

> Total (2)

Property Liability (4)

Liability General 3

Automobile Liability (2)

Accident

Year Ð

Case Reserves

(9)

IBNR

Indicated Unallocated Loss Adjustment Expense Reserves

Miami Valley Risk Management Association

December 31, 2015

Summary

Liability (8)

From General Liability Exhibit 1, Col (6) From Property and Auto Physical Damage Exhibit 1, Col (6)

Automobile Liability (AB, AD) Exhibit 1

# Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

# Summary of Loss Reserve Estimates Retained Limits

Estimated Total Reserves (7)	0\$ U	0	0	0	0	, 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,515	51,260	94,132	\$148,906
Indicated IBNR (6)	0\$ 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,515	43,760	56,502	\$103,776
Case Reserves (5)	\$0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,500	37,630	\$45,130
Paid Loss (4)	\$111,919 18.683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	82,740	48,868	\$4,256,534
Incurred Loss (3)	\$111,919 18.683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	90,240	86,498	\$4,301,664
Selected Ultimate Loss (2)	\$111,919 18.683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	238,300	134,000	143,000	\$4,405,440
Accident Year (1)	1989 1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total

Pinnacle Actuarial Resources, Inc.

From Exhibit 3, Col (13) Provided by MVRMA = (2) - (3) = (5) + (6)

Notes: (2) (3)-(4),(5) (6) (7)

#### Automobile Liability (AB, AD) Exhibit 2

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Comparison of Ultimate Loss to Prior Ultimate Loss Retained Limits

	Selected Ultimate	Selected Ultimate		
Accident	Loss	Loss		Percent
Year	@12/31/2014	@12/31/2015	Difference	Change
(1)	(2)	(3)	(4)	(5)
1989	\$111,919	\$111,919	\$0	0.0%
1990	18,683	18,683	0	0.0%
1991	13,946	13,946	0	0.0%
1992	39,293	39,293	0	0.0%
1992	329,494	329,494	0	0.0%
1994	126,181	126,181	0	0.0%
1995	157,537	157,537	0	0.0%
1996	75,097	75,097	0	0.0%
1997	572,332	572,332	0	0.0%
1998	98,687	98,687	0	0.0%
1999	203,725	203,725	0	0.0%
2000	81,660	81,660	0	0.0%
2001	555,168	555,168	0	0.0%
2002	167,747	167,747	0	0.0%
2003	168,870	168,870	0	0.0%
2004	49,417	49,417	0	0.0%
2005	243,966	243,966	0	0.0%
2006	145,431	145,431	0	0.0%
2007	275,826	275,826	0	0.0%
2008	136,527	136,527	0	0.0%
2009	31,122	31,122	0	0.0%
2010	161,512	161,512	0	0.0%
2011	87,731	87,731	0	0.0%
2012	38,269	38,269	0	0.0%
2013	134,700	238,300	103,600	76.9%
2014	153,000	134,000	(19,000)	-12.4%
Total	\$4,177,840	\$4,262,440	\$84,600	2.0%

#### Notes:

- (2) From Pinnacle's analysis of unpaid loss & LAE at 12/31/2014
- (3) From Exhibit 3, Col (13)
- (4) = (3) (2)
- (5) = (4) / (2)

Automobile Liability (AB, AD) Exhibit 3

Selected Ultimate Loss Retained Limits

	Selected	Ultimate Loss	(13)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	238,300	134,000	143,000	\$4,405,440						
MVRMA	Paid	BF Mathod	(12)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	32,196	163,281	90,596	43,235	251,470	138,395	136,496	\$4,427,175						
MVRMA	Incurred	BF Method	(11)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,869	38,972	236,940	128,850	149,137	\$4,405,909						
MVRMA	Expected	Loss Method	(10)	\$30,921	38,774	47,077	51,903	61,641	70,168	63,371	70,213	81,073	87,330	87,435	92,444	92,782	102,606	104,697	117,306	124,115	124,259	126,333	132,283	136,573	137,439	138,381	141,148	145,280	142,871	142,800	\$2,691,222						
	Average	Paid Method	(6)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,190	162,320	88,699	39,040	259,871	122,147	110,936	\$4,385,709						
nent	Average	Incurred Method	(8)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,390	239,057	119,116	140,225	\$4,388,658						
MVRMA's Loss Development	Case	Reserve Method	(2)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	107,229	180,827	\$4,412,982		Col (7)	Col (7)	ol (4)	ol (8) Ol (8)	
MVRM	Paid	Loss Method	(9)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,369	163,618	89,586	39,665	265,247	135,539	126,483	\$4,423,012		Erom Evhihit 10 Col (7)	From Exhibit 11, Col (7)	From Exhibit 4, Col (4)	From Exhibit 5, Col (8) From Exhibit 5, Col (8)	
	Incurred	Loss Method	(5)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,818	38,461	238,320	123,658	154,090	\$4,406,487		(8)	(a) (6)	(10)	(11)	
/elopment	Paid	Loss Method	(4)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,341	167,851	169,080	49,540	245,183	146,885	279,560	139,067	32,024	169,684	96,686	47,111	357,670	182,766	232,624	\$4,699,626						
Industry Development	Incurred	Loss Method	(3)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,255	167,799	168,975	49,479	244,575	146,158	277,483	137,443	31,394	163,735	90,006	40,636	268,999	120,191	162,442	\$4,453,124		RMA	1, Col (4)	2, Col (4)	col (4) Col (4)	col (8)
		Retention	(2)	\$250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	500,000	500,000	500,000	500,000	500,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000			Provided by MVRMA	From Exhibit 12.1, Col (4)	From Exhibit 12.2, Col (4)	From Exhibit 8, Col (4)	From Exhibit 9, Col (8)
		Accident Year	(1)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total	Note:	(2)	(1)	(4)	(c) (9)	(2)

MVRMA Auto Liability Analysis 2015-12-31 3/9/2016 at 1:02 PM

#### Ultimate Loss Based on Bornhuetter-Ferguson Method Using Incurred Loss Retained Limits

Accident Year (1)	Number of Vehicles (2)	Selected Loss <u>Cost</u> (3)	Expected Loss (4)	Percent Undeveloped (5)	Undeveloped Loss (6)	Cumulative Incurred Loss (7)	Projected Ultimate Loss (8)	Indicated Loss Cost (9)
			4	0.004	<b>60</b>	¢111.010	6111.010	6210
1989	534	\$58	\$30,921	0.0%	\$0	\$111,919	\$111,919	\$210 28
1990	663	58	38,774	0.0%	0	18,683	18,683	17
1991	797	59	47,077	0.0%	0	13,946	13,946	45
1992	870	60	51,903	0.0%	0	39,293	39,293	
1993	1,023	60	61,641	0.0%	0	329,494	329,494	322
1994	1,153	61	70,168	0.0%	0	126,181	126,181	109
1995	1,031	61	63,371	0.0%	0	157,537	157,537	153
1996	1,131	62	70,213	0.0%	0	75,097	75,097	66
1997	1,293	63	81,073	0.0%	0	\$72,332	572,332	443
1998	1,379	63	87,330	0.0%	0	98,687	98,687	72
1999	1,367	64	87,435	0.0%	0	203,725	203,725	149
2000	1,431	65	92,444	0.0%	0	81,660	81,660	57
2001	1,422	65	92,782	0.0%	0	5\$5,168	555,168	390
2002	1,557	66	102,606	0.0%	0	167,747	167,747	108
2003	1,573	67	104,697	0.0%	0	168,870	168,870	107
2004	1,745	67	117,306	0.0%	0	49,417	49,417	28
2005	1,828	68	124,115	0.0%	0	243,966	243,966	133
2006	1,812	69	124,259	0.0%	0	145,431	145,431	80
2007	1,824	69	126,333	0.0%	0	275,826	275,826	151
2008	1,891	70	132,283	0.0%	0	136,527	136,527	72
2009	1,933	71	136,573	0.0%	0	31,122	31,122	16
2010	1,926	71	137,439	0.0%	0	161,512	161,512	84
2011	1,920	72	138,381	0.1%	138	87,731	87,869	46
2012	1,939	73	141,148	0.5%	703	38,269	38,972	20
2013	1,976	74	145,280	1.5%	2,155	234,785	236,940	120
2014	1,924	74	142,871	27.0%	38,610	90,240	128,850	67
2015	1,904	75	142,800	43.9%	62,639	86,498	149,137	78
Total	39,846		\$2,691,222		\$104,245	\$4,301,664	\$4,405,909	\$111

Notes:

(2) Provided by MVRMA(3) From Exhibit 6.1, Col (8)

 $(4) = (2) \times (3)$ 

(5) Based on Exhibit 13

(6) = (4) x (5)

(7) Provided by MVRMA

 $\begin{array}{l} (8) &= (6) + (7) \\ (9) &= (8) / (2) \end{array}$ 

#### Ultimate Loss Based on Bornhuetter-Ferguson Method Using Paid Loss Retained Limits

Accident Year	Number of Vehicles	Selected Loss Cost	Expected Loss	Percent Undeveloped	Undeveloped Loss	Cumulative Paid Loss	Projected Ultimate Loss	Indicated Loss Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(-)	(-)	(-)						
1989	534	\$58	\$30,921	0.0%	\$0	\$111,919	\$111,919	\$210
1990	663	58	38,774	0.0%	0	18,683	18,683	28
1991	797	59	47,077	0.0%	0	13,946	13,946	17
1992	870	60	51,903	0.0%	0	39,293	39,293	45
1993	1,023	60	61,641	0.0%	0	329,494	329,494	322
1994	1,153	61	70,168	0.0%	0	126,181	126,181	109
1995	1,031	61	63,371	0.0%	0	157,537	157,537	153
1996	1,131	62	70,213	0.0%	0	, 75,097	75,097	66
1997	1,293	63	81,073	0.0%	0	572,332	572,332	443
1998	1,379	63	87,330	0.0%	0	98,687	98,687	72
1999	1,367	64	87,435	0.0%	0	203,725	203,725	149
2000	1,431	65	92,444	0.0%	0	81,660	81,660	57
2001	1,422	65	92,782	0.0%	0	555,168	555,168	390
2002	1,557	66	102,606	0.0%	0	167,747	167,747	108
2003	1,573	67	104,697	0.0%	0	168,870	168,870	107
2004	1,745	67	117,306	0.0%	0	49,417	49,417	28
2005	1,828	68	124,115	0.0%	0	243,966	243,966	133
2006	1,812	69	124,259	0.0%	0	145,431	145,431	80
2007	1,824	69	126,333	0.0%	0	275,826	275,826	151
2008	1,891	70	132,283	0.0%	0	136,527	136,527	72
2009	1,933	71	136,573	0.8%	1,074	31,122	32,196	17
2010	1,926	71	137,439	1.3%	1,769	161,512	163,281	85
2011	1,920	72	138,381	2.1%	2,865	87,731	90,596	47
2012	1,939	73	141,148	3.5%	4,965	38,269	43,235	22
2013	1,976	74	145,280	11.5%	16,684	234,785	251,470	127
2014	1,924	74	142,871	39.0%	55,655	82,740	138,395	72
2015	1,904	75	142,800	61.4%	87,627	48,868	136,496	72
Total	39,846		\$2,691,222		\$170,641	\$4,256,534	\$4,427,175	\$111

Notes:

(2) Provided by MVRMA(3) From Exhibit 6.1, Col (8)

(a) From Exhibit 6.1, corr (4) = (2) x (3) (5) Based on Exhibit 13 (6) = (4) x (5) (7) Provided by MVRMA (8) = (6) + (7) (9) = (8) / (2)

#### Initial Expected Loss Cost Retained Limits

Accident Year	Number of Vehicles	Initial Ultimate Loss	Indicated Loss Cost	Limits Factor to \$500K	Trend Factor to 2015	Trended \$500K Limits Loss Cost	Expected Loss Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1989	534	\$111,919	\$210	1.000	1.295	\$271	\$58
1990	663	18,683	28	1.000	1.282	. 36	58
1991	797	13,946	17	1.000	1.270	22	59
1992	870	39,293	45	1.000	1.257	57	60
1993	1,023	329,494	322	1.000	1.245	401	60
1994	1,153	126,181	109	1.000	1.232	135	61
1995	1,031	157,537	153	1.000	1.220	186	61
1996	1,131	75,097	66	1.000	1.208	80	62
1997	1,293	572,332	443	1.000	1.196	529	63
1998	1,379	98,687	72	1.000	1.184	85	63
1999	1,367	203,725	149	1.000	1.173	175	64
2000	1,431	81,660	57	1.000	1.161	66	65
2001	1,422	555,168	390	1.000	1.149	449	65
2002	1,557	167,747	108	1.000	1.138	123	66
2003	1,573	168,870	107	1.000	1.127	121	67
2004	1,745	49,417	28	1.000	1.116	32	67
2005	1,828	243,966	133	1.000	1.105	147	68
2006	1,812	145,431	80	1.000	1.094	88	69
2007	1,824	275,826	151	1.000	1.083	164	69
2008	1,891	136,527	72	1.000	1.072	77	70
2009	1,933	31,122	16	1.000	1.062	17	71
2010	1,926	161,512	84	1.000	1.051	88	71
2011	1,920	87,731	46	1.000	1.041	48	72
2012	1,939	38,461	20	1.000	1.030	20	73
2013	1,976	238,320	121	1.000	1.020	123	74
2014	1,924	123,658	64	1.000	1.010	65	74
2015	1,904	154,090	81	1.000	1.000	81	75
Total	39,846	\$4,406,399	\$111				
					Average Ex. Hi/Lo 10-Year Weighted Avg	\$118 77	

	+
10-Year Weighted Avg	77
10-Year Weighted Avg Ex. Hi/Lo	74
5-Year Weighted Avg	68

Selected 2015 Loss Cost \$75

Notes:

- (2) Provided by MVRMA
- (3) From Exhibit 6.2, Col (5)
- (4) = (3) / (2)
- (5) From Exhibit 6.3, Col (7)
- (6) Based on selected trend of 1.0%
- (7) = (4) x (5) x (6)
- (8) = Selected Loss Cost / [(6) x (5)]

#### Automobile Liability (AB, AD) Exhibit 6.2

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Initial Selected Ultimate Loss Retained Limits

Accident	Drojactor	d Ultimate Loss Base	ad on	Initial Ultimate
Accident Year	Incurred	Paid	Case	Loss
(1)	(2)	(3)	(4)	(5)
1989	\$111,919	\$111,919	\$111,919	\$111,919
1990	18,683	18,683	18,683	18,683
1991	13,946	13,946	13,946	13,946
1992	39,293	39,293	39,293	39,293
1993	329,494	329,494	329,494	329,494
1994	126,181	126,181	126,181	126,181
1995	157,537	157,537	157,537	157,537
1996	75,097	75,097	75,097	75,097
1997	572,332	572,332	572,332	572,332
1998	98,687	98 <i>,</i> 687	98,687	98,687
1999	203,725	203,725	203,725	203,725
2000	81,660	81,660	81,660	81,660
2001	555,168	555,168	555,168	555,168
2002	167,747	167,747	167,747	167,747
2003	168,870	168,870	168,870	168,870
2004	49,417	49,417	49,417	49,417
2005	243,966	243,966	243,966	243,966
2006	145,431	145,431	145,431	145,431
2007	275,826	275,826	275,826	275,826
2008	136,527	136,527	136,527	136,527
2009	31,122	31,369	31,122	31,122
2010	161,512	163,618	161,512	161,512
2011	87,818	89,586	87,731	87,731
2012	38,461	39,665	38,269	38,461
2013	238,320	265,247	234,785	238,320
2014	123,658	135,539	107,229	123,658
2015	154,090	126,483	180,827	154,090
Total	\$4,406,487	\$4,423,012	\$4,412,982	\$4,406,399

Notes:
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(2) Fro	m Exhibit 7, Col (4)
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(3) From Exhibit 8, Col (4)

(4) From Exhibit 9, Col (8)

#### Estimated Limits Factor

Accident		Incurred	Losses at	Incurred Limits	Industry Limits	Selected Limits
Year	Retention	\$500K Limits	Retention Limits	Factors	Factors	Factors
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$111,919	\$111,919	1.000		1.000
1990	250,000	18,683	18,683	1.000		1.000
1991	250,000	13,946	13,946	1.000		1.000
1992	250,000	39,293	39,293	1.000		1.000
1993	250,000	329,494	329,494	1.000		1.000
1994	250,000	126,181	126,181	1.000		1.000
1995	250,000	157,537	157,537	1.000		1.000
1996	250,000	75,097	75,097	1.000		1.000
1997	500,000	572,332	572,332	1.000	1.000	1.000
1998	500,000	98,687	98,687	1.000	1.000	1.000
1999	500,000	203,725	203,725	1.000	1.000	1.000
2000	500,000	81,660	81,660	1.000	1.000	1.000
2001	500,000	555,168	555,168	1.000	1.000	1.000
2002	500,000	167,747	167,747	1.000	1.000	1.000
2003	1,000,000	168,870	168,870	1.000	0.899	1.000
2004	1,000,000	49,417	49,417	1.000	0.896	1.000
2005	1,000,000	243,966	243,966	1.000	0.894	1.000
2006	1,000,000	145,431	145,431	1.000	0.891	1.000
2007	1,000,000	275,826	275,826	1.000	0.889	1.000
2008	1,000,000	136,527	136,527	1.000	0.886	1.000
2009	1,000,000	31,122	31,122	1.000	0.884	1.000
2010	500,000	161,512	161,512	1.000	1.000	1.000
2011	500,000	87,731	87,731	1.000	1.000	1.000
2012	500,000	38,269	38,269	1.000	1.000	1.000
2013	500,000	234,785	234,785	1.000	1.000	1.000
2014	500,000	90,240	90,240	1.000	1.000	1.000
2015	500,000	86,498	86,498	1.000	1.000	1.000
Total		\$4,301,664	\$4,301,664			

Notes:

(2)-(4) Provided by MVRMA

(5) = (3) / (4)

(6) Based on insurance industry development

#### Automobile Liability (AB, AD) Exhibit 7

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Retained Limits

Accident Year	Cumulative Incurred Loss	Loss Development Factors	Projected Ultimate Loss
(1)	(2)	(3)	(4)
		1 000	ć111.010
1989	\$111,919	1.000	\$111,919
1990	18,683	1.000	18,683
1991	13,946	1.000	13,946
1992	39,293	1.000	39,293
1993	329,494	1.000	329,494
1994	126,181	1.000	126,181
1995	157,537	1.000	157,537
1996	75,097	1.000	75,097
1997	572,332	1.000	572,332
1998	98,687	1.000	98,687
1999	203,725	1.000	203,725
2000	81,660	1.000	81,660
2001	555,168	1.000	555,168
2002	167,747	1.000	167,747
2003	168,870	1.000	168,870
2004	49,417	1.000	49,417
2005	243,966	1.000	243,966
2006	145,431	1.000	145,431
2007	275,826	1.000	275,826
2008	136,527	1.000	136,527
2009	31,122	1.000	31,122
2010	161,512	1.000	161,512
2011	87,731	1.001	87,818
2012	38,269	1.005	38,461
2013	234,785	1.015	238,320
2014	90,240	1.370	123,658
2015	86,498	1.781	154,090
Total	\$4,301,664		\$4,406,487

Notes:

(2) Provided by MVRMA

(3) Based on Exhibit 13

(4) = (2) x (3)

#### Automobile Liability (AB, AD) Exhibit 8

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Retained Limits

	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$111,919	1.000	\$111,919
1990	18,683	1.000	18,683
1991	13,946	1.000	13,946
1992	39,293	1.000	39,293
1993	329,494	1.000	329,494
1994	126,181	1.000	126,181
1995	157,537	1.000	157,537
1996	75,097	1.000	75,097
1997	572,332	1.000	572,332
1998	98,687	1.000	98,687
1999	203,725	1.000	203,725
2000	81,660	1.000	81,660
2001	555,168	1.000	555,168
2002	167,747	1.000	167,747
2003	168,870	1.000	168,870
2004	49,417	1.000	49,417
2005	243,966	1.000	243,966
2006	145,431	1.000	145,431
2007	275,826	1.000	275 <i>,</i> 826
2008	136,527	1.000	136,527
2009	31,122	1.008	31,369
2010	161,512	1.013	163,618
2011	87,731	1.021	89,586
2012	38,269	1.036	39,665
2013	234,785	1.130	265,247
2014	82,740	1.638	135,539
2015	48,868	2.588	126,483
Total	\$4,256,534		\$4,423,012

Notes:

(2) Provided by MVRMA

(4)  $= (2) \times (3)$ 

#### Ultimate Loss Based on Case Reserve Development Method **Retained Limits**

		Cumulative					Projected
Accident		Paid	Case .		Development Facto		Ultimate
Year	Retention	Loss	Reserves	Incurred	Paid	Reserve	Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1989	\$250,000	\$111,919	\$0	100.0%	100.0%	100.0%	\$111,919
1990	250,000	18,683	0	100.0%	100.0%	100.0%	18,683
1991	250,000	13,946	0	100.0%	100.0%	100.0%	13,946
1992	250,000	39,293	0	100.0%	100.0%	100.0%	39,293
1993	250,000	329,494	0	100.0%	100.0%	100.0%	329,494
1994	250,000	126,181	0	100.0%	100.0%	100.0%	126,181
1995	250,000	157,537	0	100.0%	100.0%	100.0%	157,537
1996	250,000	75,097	0	100.0%	100.0%	100.0%	75,097
1997	500,000	572,332	0	100.0%	100.0%	100.0%	572,332
1998	500,000	98,687	0	100.0%	100.0%	100.0%	98,687
1999	500,000	203,725	0	100.0%	100.0%	100.0%	203,725
2000	500,000	81,660	0	100.0%	100.0%	100.0%	81,660
2001	500,000	555,168	0	100.0%	100.0%	100.0%	555,168
2002	500,000	167,747	0	100.0%	100.0%	100.0%	167,747
2003	1,000,000	168,870	0	100.0%	100.0%	100.0%	168,870
2004	1,000,000	49,417	0	100.0%	100.0%	100.0%	49,417
2005	1,000,000	243,966	0	100.0%	100.0%	100.0%	243,966
2006	1,000,000	145,431	0	100.0%	100.0%	100.0%	145,431
2007	1,000,000	275,826	0	100.0%	100.0%	100.0%	275,826
2008	1,000,000	136,527	0	100.0%	100.0%	100.0%	136,527
2009	1,000,000	31,122	0	100.0%	99.2%	100.0%	31,122
2010	500,000	161,512	0	100.0%	98.7%	100.0%	161,512
2011	500,000	87,731	0	99.9%	97.9%	95.2%	87,731
2012	500,000	38,269	0	99.5%	96.5%	85.8%	38,269
2013	500,000	234,785	0	98.5%	88.5%	87.1%	234,785
2014	500,000	82,740	7,500	73.0%	61.0%	30.6%	107,229
2015	500,000	48,868	37,630	56.1%	38.6%	28.5%	180,827
Total		\$4,256,534	\$45,130				\$4,412,982

Notes:

(2)-(4) Provided by MVRMA (5)-(6) Based on Exhibit 13 (7) = [(5) -(6)] / [(1.0 - (6)]

(8) = (3) + [(4) / (7)]

#### Ultimate Loss Based on Incurred Loss per Reported Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Incurred Loss per Reported Claim	Loss Development Factors	Projected Average Loss (5)	Selected Ultimate Claims (6)	Projected Ultimate Loss (7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$2,603	1.000	\$2,603	43	\$111,919
1990	250,000	566	1.000	566	33	18,683
1991	250,000	536	1.000	536	26	13,946
1992	250,000	1,034	1.000	1,034	38	39,293
1993	250,000	5,492	1.000	5,492	60	329,494
1994	250,000	1,753	1.000	1,753	72	126,181
1995	250,000	1,853	1.000	1,853	85	157,537
1996	250,000	659	1.000	659	114	75,097
1997	500,000	5,840	1.000	5,840	98	572,332
1998	500,000	1,148	1.000	1,148	86	98,687
1999	500,000	1,684	1.000	1,684	121	203,725
2000	500,000	785	1.000	785	104	81,660
2001	500,000	6,455	1.000	6,455	86	555,168
2002	500,000	2,097	1.000	2,097	80	167,747
2003	1,000,000	1,443	1.000	1,443	117	168,870
2004	1,000,000	575	1.000	575	86	49,417
2005	1,000,000	2,489	1.000	2,489	98	243 <i>,</i> 966
2006	1,000,000	2,078	1.000	2,078	70	145,431
2007	1,000,000	2,815	1.000	2,815	98	275,826
2008	1,000,000	1,796	1.000	1,796	76	136,527
2009	1,000,000	546	1.000	546	57	31,122
2010	500,000	2,071	1.000	2,071	78	161,512
2011	500,000	1,186	1.000	1,186	74	87,731
2012	500,000	736	1.003	738	52	38,390
2013	500,000	5,104	1.018	5,197	46	239,057
2014	500,000	1,157	1.303	1,508	79	119,116
2015	500,000	1,765	1.499	2,646	53	140,225
Total				\$2,162	2,030	\$4,388,658

Notes:

(2) Provided by MVRMA

- (3) Based on data provided by MVRMA
- (4) Based on Exhibit 14
- (5) = (3) x (4)
- (6) From Exhibit 19, Col (6)
- $(7) = (5) \times (6)$

### Ultimate Loss Based on Paid Loss per Closed Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Paid Loss per Closed Claim	Loss Development Factors	Projected Average Loss	Selected Ultimate Claims	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$2,603	1.000	\$2,603	43	\$111,919
1990	250,000	566	1.000	566	33	18,683
1991	250,000	536	1.000	536	26	13,946
1992	250,000	1,034	1.000	1,034	38	39,293
1993	250,000	5,492	1.000	5,492	60	329,494
1994	250,000	1,753	1.000	1,753	72	126,181
1995	250,000	1,853	1.000	1,853	85	157,537
1996	250,000	659	1.000	659	114	75,097
1997	500,000	5,840	1.000	5,840	98	572,332
1998	500,000	1,148	1.000	1,148	86	98,687
1999	500,000	1,684	1.000	1,684	121	203,725
2000	500,000	785	1.000	785	104	81,660
2001	500,000	6,455	1.000	6,455	86	555,168
2002	500,000	2,097	1.000	2,097	80	167,747
2003	1,000,000	1,443	1.000	1,443	117	168,870
2004	1,000,000	575	1.000	575	86	49,417
2005	1,000,000	2,489	1.000	2,489	98	243,966
2006	1,000,000	2,078	1.000	2,078	70	145,431
2007	1,000,000	2,815	1.000	2,815	98	275,826
2008	1,000,000	1,796	1.000	1,796	76	136,527
2009	1,000,000	546	1.002	547	57	31,190
2010	500,000	2,071	1.005	2,081	78	162,320
2011	500,000	1,186	1.011	1,199	74	88,699
2012	500,000	736	1.020	751	52	39,040
2013	500,000	5,104	1.107	5,649	46	259,871
2014	500,000	1,075	1.439	1,546	79	122,147
2015	500,000	1,136	1.842	2,093	53	110,936
Total				\$2,160	2,030	\$4,385,709

Notes:

- (2) Provided by MVRMA
- (3) Based on data provided by MVRMA
- (4) Based on Exhibit 14
- $(5) = (3) \times (4)$
- (6) From Exhibit 19, Col (6)
- $(7) = (5) \times (6)$

#### Automobile Liability (AB, AD) Exhibit 12.1

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Incurred	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$111,919	1.000	\$111,919
1990	18,683	1.000	18,683
1991	13,946	1.000	13,946
1992	39,293	1.000	39,293
1993	329,494	1.000	329,494
1994	126,181	1.000	126,181
1995	157,537	1.000	157,537
1996	75,097	1.000	75,097
1997	572,332	1.000	572,332
1998	98,687	1.000	98,687
1999	203,725	1.000	203,725
2000	81,660	1.000	81,660
2001	555,168	1.000	555,255
2002	167,747	1.000	167,799
2003	168,870	1.001	168,975
2004	49,417	1.001	49,479
2005	243,966	1.002	244,575
2006	145,431	1.005	146,158
2007	275,826	1.006	277,483
2008	136,527	1.007	137,443
2009	31,122	1.009	31,394
2010	161,512	1.014	163,735
2011	87,731	1.026	90,006
2012	38,269	1.062	40,636
2013	234,785	1.146	268,999
2014	90,240	1.332	120,191
2015	86,498	1.878	162,442
Total	\$4,301,664		\$4,453,124

#### Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4)  $= (2) \times (3)$ 

#### Automobile Liability (AB, AD) Exhibit 12.2

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$111,919	1.000	\$111,919
1990	18,683	1.000	18,683
1991	13,946	1.000	13,946
1992	39,293	1.000	39,293
1993	329,494	1.000	329,494
1994	126,181	1.000	126,181
1995	157,537	1.000	157,537
1996	75,097	1.000	75,097
1997	572,332	1.000	572,332
1998	98,687	1.000	98,687
1999	203,725	1.000	203,725
2000	81,660	1.000	81,660
2001	555,168	1.000	555,341
2002	167,747	1.001	167,851
2003	168,870	1.001	169,080
2004	49,417	1.002	49,540
2005	243,966	1.005	245,183
2006	145,431	1.010	146,885
2007	275,826	1.014	279,560
2008	136,527	1.019	139,067
2009	31,122	1.029	32,024
2010	161,512	1.051	169,684
2011	87,731	1.102	96,686
2012	38,269	1.231	47,111
2013	234,785	1.523	357,670
2014	82,740	2.209	182,766
2015	48,868	4.760	232,624
Total	\$4,256,534		\$4,699,626

#### Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4)  $= (2) \times (3)$ 

#### Loss Development Patterns

Month of	of \$500K Limits % Developed		\$1M Limits %	\$1M Limits % Developed		Industry % Developed	
Development	Incurred	Paid	Incurred	Paid	Incurred	Paid	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
324	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
312	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
300	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
288	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
276	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
264	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
252	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
240	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
228	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
216	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
204	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
192	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
180	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
168	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	
156	100.0%	100.0%	100.0%	100.0%	99.9%	99.9%	
144	100.0%	100.0%	100.0%	100.0%	99.9%	99.8%	
132	100.0%	100.0%	100.0%	100.0%	99.8%	99.5%	
120	100.0%	100.0%	100.0%	100.0%	99.5%	99.0%	
108	100.0%	100.0%	100.0%	100.0%	99.4%	98.7%	
96	100.0%	100.0%	100.0%	100.0%	99.3%	98.2%	
84	100.0%	99.5%	100.0%	99.2%	99.1%	97.2%	
72	100.0%	98.7%	100.0%	98.4%	98.6%	95.2%	
60	99.9%	97.9%	99.8%	97.3%	97.5%	90.7%	
48	99.5%	96.5%	99.2%	93.8%	94.2%	81.2%	
36	98.5%	88.5%	94.0%	79.0%	87.3%	65.6%	
24	73.0%	61.0%	66.5%	51.8%	75.1%	45.3%	
12	56.1%	38.6%	37.8%	20.2%	53.2%	21.0%	

Notes:

-

(2) Based on Exhibit 15

(3) Based on Exhibit 16

(4) = Col (2) lagged 6 months

(5) = Col (3) lagged 6 months

(6)-(7) Based on insurance industry development

#### Automobile Liability (AB, AD) Exhibit 14

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Severity Development Patterns

Month of	\$500K Limits %	Developed	\$1M Limits %	Developed
Development	Incurred	Paid	Incurred	Paid
(1)	(2)	(3)	(4)	(5)
324	100.0%	100.0%	100.0%	100.0%
312	100.0%	100.0%	100.0%	100.0%
300	100.0%	100.0%	100.0%	100.0%
288	100.0%	100.0%	100.0%	100.0%
276	100.0%	100.0%	100.0%	100.0%
264	100.0%	100.0%	100.0%	100.0%
252	100.0%	100.0%	100.0%	100.0%
240	100.0%	100.0%	100.0%	100.0%
228	100.0%	100.0%	100.0%	100.0%
216	100.0%	100.0%	100.0%	100.0%
204	100.0%	100.0%	100.0%	100.0%
192	100.0%	100.0%	100.0%	100.0%
180	100.0%	100.0%	100.0%	100.0%
168	100.0%	100.0%	100.0%	100.0%
156	100.0%	100.0%	100.0%	100.0%
144	100.0%	100.0%	100.0%	100.0%
132	100.0%	100.0%	100.0%	100.0%
120	100.0%	100.0%	100.0%	100.0%
108	100.0%	100.0%	100.0%	100.0%
96	100.0%	100.0%	100.0%	100.0%
84	100.0%	99.9%	100.0%	99.8%
72	100.0%	99.5%	100.0%	99.3%
60	100.0%	98.9%	100.0%	98.6%
48	99.7%	98.0%	99.3%	95.8%
36	98.2%	90.3%	93.9%	83.2%
24	76.7%	69.5%	72.8%	63.5%
12	66.7%	54.3%	54.9%	38.2%

#### Notes:

- (2) Based on Exhibit 17
- (3) Based on Exhibit 18
- (4) = Col (2) lagged 6 months
- (5) = Col (3) lagged 6 months

Automobile Liability (AB, AD) Exhibit 15 Page 1

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015 Incurred Loss at \$500K SIR

Accident	40	24	26	40	60		Maturity (Age		100	120	100	144	150	169
Year	12	24	36	48 111,919	60 111,919	72 111,919	84 111,919	96 111,919	108 111,919	120 111,919	132 111,919	144 111,919	156 111,919	168 111,919
1989 1990	8,914 10,151	8,614	111,919 18,683	18,683	18,683	111,919	18,683	18,683	18,683	18,683	18,683	18,683	18,683	111,919
1990		18,683	16,085	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946
1991	8,919 19,584	9,074 19,882	31,332	13,946 36,705	40,205	39,293	39,293	39,293	13,946 39,293	39,293	39,293	39,293	39,293	39,293
	19,584 94,156		31,332	36,705	329,494	39,293 329,494	39,293 329,494	329,494	39,293	39,293	39,293	39,293	39,293	329,494
1993		286,741									329,494 126,181	529,494 126,181	529,494 126,181	126,181
1994	62,084	154,951	125,930	126,992	126,181	126,181	126,181	126,181	126,181	126,181				
1995	145,570	140,533	165,780	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537
1996	69,113	81,178	80,302	74,641	74,641	74,641	74,641	75,097	75,097	75,097	75,097 572,332	75,097 572,332	75,097 572,332	75,097 572,332
1997	227,596	274,452	586,917	572,332	572,332	572,332	572,332	572,332	572,332	572,332		98,687	98,687	98,687
1998	84,207	93,223	95,750	98,687	98,687 203,725	203,725	203,725	203,725						
1999	136,069	138,607	164,173	196,158				205,725 81,660	205,725 81,660	205,725 81,660	81,660	81,660	81,660	81,660
2000	76,221	80,265	82,765	81,660	81,660	81,660	81,660							
2001	93,763	482,169	649,669	939,169	843,409	534,626	534,626	555,168	555,168	555,168	555,168	555,168	555,168	555,168 167,747
2002	73,431	187,369	167,747 190,622	167,747 168,870	167,747 168,870	167,747 168,870	167,747 168,870	167,747 168,870	167,747 168,870	157,747 168,870	167,747 168,870	167,747 168,870	167,747 168,870	167,747
2003	87,086	135,372	49,417			49,417	49,417	49,417	49,417	49,417	49,417	49,417	100,070	
2004	50,836	54,917	49,417 194,307	49,417	49,417	260,833	243,966	243,966	243,966	243,966	49,417 243,966	49,417		
2005	100,944	156,905		219,833	235,833	260,833 145,431	243,966 145,431	243,966 145,431	245,966 145,431	245,966 145,431	243,906			
2006	65,100	83,931	145,431	145,431	145,431			275,826	275,826	145,451				
2007	86,271	181,275	271,519	275,715	275,826	275,826	275,826		2/5,826					
2008	79,819	89,446	131,946	136,527	136,527	136,527	136,527	136,527						
2009	39,122	31,122	31,122	31,122	31,122	31,122	31,122							
2010	105,993	137,233	161,512	161,512	161,512	161,512								
2011	86,062	114,779	87,731	87,731 38,269	87,731									
2012 2013	40,220 106,110	38,269 108,494	38,269 234,785	38,209										
2013	88,724	90,240	234,765											
2014 2015	86,498	90,240												
2015	60,498													
Accident						400	to-Age Facto	rs						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	0.966	12.993	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.841	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.017	1.771	0.868	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
1992	1.015	1.576	1.171	1.095	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	3.045	1.175	1.011	0.967	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
1994	2.496	0.813	1.008	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
1995	0.965	1.180	0.950	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.175	0.989	0.930	1.000	1.000	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.206	2.139	0.975	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.107	1.027	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.019	1.184	1.195	1.039	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.053	1.031	0,987	1.000	1.000	1.000	1.000	1.000	1,000	1,000	1.000	1.000	1.000	1.000
2001	5.142	1.347	1.446	0.898	0.634	1.000	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	2.552	0.895	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.554	1.408	0.886	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004	1.080	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.554	1.238	1.131	1.073	1.106	0.935	1,000	1.000	1.000	1.000				
2006	1.289	1.733	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2007	2.101	1,498	1.015	1.000	1.000	1.000	1.000	1.000						
2008	1.121	1.475	1.035	1.000	1.000	1.000	1.000							
2009	0.796	1,000	1.000	1.000	1.000	1.000								
2010	1.295	1.177	1.000	1.000	1.000									
2011	1.334	0.764	1.000	1.000										
2012	0.951	1.000	1.000	1.000										
2013	1.022	2.164												
2014	1.017	21201												
All Yr Vol	1.563	1.342	1.080	0.981	0.930	0.995	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.403	1.331	1.009	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.292	1.351	1.010	1.011	0.872	0.991	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.217	1.324	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
5 Yr Vol	1.145	1.287	1.010	1.000	1.000	0.980	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
5 Yr Vol Ex. H/L	1.117	1.118	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.008	1.379	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.350	1.221	1.010	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.300	1.350	1.010	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.781	1,370	1.015	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
% Incurred	56.1%	73.0%	98.5%	99.5%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015 Incurred Loss at \$500K SIR

Accident						Maturi	ty (Age in Mo	onths)					
Year	180	192	204	216	228	240	252	254	276	288	300	312	324
1989	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919
1990	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	
1991	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946		
1992	39,293	39,293	39,293	39,293	39,293	39,293	39,293	39,293	39,293	39,293			
1993	329,494	329,494	329,494	329,494	329,494	329,494	329,494	329,494	329,494				
1994	126,181	126,181	126,181	126,181	126,181	126,181	126,181	126,181					
1995	157,537	157,537	157,537	157,537	157,537	157,537	157,537						
1996	75,097	75,097	75,097	75,097	75,097	75,097							
1997	572,332	572,332	572,332	572,332	572,332								
1998	98,687	98,687	98,687	98,687									
1999	203,725	203,725	203,725										
2000	81,660	81,660											
2001	555,168												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
Accident						Age-to-Age							
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
1989	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000				
1993	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1,000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2005													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
	1 000	1 000	1 000	1 000	1 000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol	1.000	1.000	1.000	1.000	1.000						1.000	1.000	
All Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Vol	1.000	1.000	1.000										
10 Yr Vol Ex. H/L	1.000	1.000	1.000	1 000	1 000	1 000	1 000	1.000					
5 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1 000	1 000			
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1 000	1 000	
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
% Incurred	100.0%	100.0%	100.0%	100.0%	100,0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
24 incurred	100.078	100.070	100.078	100.070	100,070	100.070	100.070	200.070	200.0/0		200.0/0	200.070	

Automobile Liability (A8, AD) Exhibit 16 Page 1

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015 Paid Loss at \$500K SIR

Accident Year	12	24	36	48	60	72	Maturity (Age 84	96	108	120	132	144	156	168
1989	8,614	8,614	111,919	40 111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919	111,919
1990	8,126	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683	18,683
1991	8,719	8,874	12,838	13,945	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946	13,946
1992	14,941	16,632	21,357	25,418	25,418	39,293	39,293	39,293	39,293	39,293	39,293	39,293	39,293	39,293
1993	23,877	53,454	78,551	324,172	329,494	329,494	329,494	329,494	329,494	329,494	329,494	329,494	329,494	329,494
1994	27,039	43,451	125,930	126,992	126,181	126,181	126,181	126,181	126,181	126,181	126,181	126,181	126,181	126,181
1995	38,520	60,033	134,606	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537	157,537
1996	44,173	53,678	72,802	74,641	74,641	74,641	74,641	75,097	75,097	75,097	75,097	75,097	75,097	75,097
1997	34,298	68,453	565,604	572,332	572,332	572,332	572,332	572,332	572,332	572,332	572,332	572,332	572,332	572,332
1998	42,307	55,723	68,250	98,687	98,687	98,687	98,687	98,687	98,687	98,687	98,687	98,687	98,687	98,687
1999	40,519	134,607	152,208	176,501	203,725	203,725	203,725	203,725	203,725	203,725	203,725	203,725	203,725	203,725
2000	52,991	72,765	74,962	81,660	81,660	81,660	81,660	81,660	81,660	81,660	81,660	81,660	81,660	81,660
2001	32,751	422,055	466,966	483,944	527,259	534,626	534,626	555,168	555,168	555,168	555,168	555,168	555,168	555,168
2002	34,887	101,869	167,747	167,747	167,747	167,747	167,747	167,747	167,747	167,747	167,747	167,747	167,747	167,747
2003	64,611	82,622	114,099	168,870	168,870	168,870	168,870	168,870	168,870	168,870	168,870	168,870	168,870	
2004	41,711	49,417	49,417	49,417	49,417	49,417	49,417	49,417	49,417	49,417	49,417	49,417		
2005	43,005	143,482	153,587	170,181	186,079	215,596	243,966	243,966	243,966	243,966	243,966			
2006	46,100	75,431	145,431	145,431	145,431	145,431	145,431	145,431	145,431	145,431				
2007	72,271	151,506	250,574	275,7 <b>15</b>	275,826	275,826	275,826	275,826	275,826					
2008	56,070	79,446	96,111	136,527	136,527	136,527	136,527	136,527						
2009	30,372	31,122	31,122	31,122	31,122	31,122	31,122							
2010	67,993	127,233	161,512	161,512	161,512	161,512								
2011	65,650	77,534	87,731	87,731	87,731									
2012	22,340	38,269	38,269	38,269										
2013	71,513	83,494	234,785											
2014	77,184	82,740												
2015	48,868													
Andidant						A	to-Age Facto							
Accident Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	1.000	12.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1990	2.299	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1991	1.018	1.447	1.086	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.113	1.284	1.190	1.000	1.546	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	2.239	1,470	4.127	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
1994	1.607	2.898	1.008	0.994	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.558	2.242	1.170	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.215	1.356	1.025	1.000	1.000	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.996	8.263	1.012	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.317	1.225	1.446	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	3.322	1.131	1.160	1.154	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1,373	1.030	1.089	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
2001	12.887	1.106	1.036	1.090	1.014	1.000	1.038	1.000	1.000	1.000	1.000	1,000	1.000	1.000
2002	2.920	1.647	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	
2003	1.279	1.381	1.480	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004	1.185	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	3.336	1.070	1.108	1.093	1.159	1.132	1.000	1.000	1.000	1.000				
2006	1.636	1.928	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2007	2.096	1.654	1.100	1.000	1.000	1.000	1.000	1.000						
2008	1.417	1.210	1.421	1.000	1.000	1.000	1.000							
2009	1.025	1.000	1.000	1.000	1.000	1.000								
2010	1.871	1.269	1.000	1.000	1.000									
2011	1.181	1.132	1.000	1.000										
2012	1.713	1.000	1.000											
2013	1.168	2.812												
2014	1.072													
All Yr Vol	2,000	1.669	1.156	1.025	1.014	1.008	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.662	1.631	1.083	1.019	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.611	1.457	1.121	1.011	1.020	1,016	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.494	1.324	1.089	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1,000
5 Yr Vol	1.343	1.547	1.097	1.000	1.000	1.035	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.249	1.183	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.196	1.810	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.600	1.300	1.100	1.020	1.010	1.008	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000
110	2.000	2.000												
Selected	1.580	1.450	1.090	1.015	1.008	1.008	1.005	1.000	1,000	1.000	1.000	1.000	1.000	1.000
LDFs	2.588	1.638	1.130	1.036	1.021	1.013	1.005	1.000	1,000	1.000	1.000	1.000	1.000	1.000
% Paid	38.6%	61.0%	88.5%	96.5%	97.9%	98.7%	99.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015 Paid Loss at \$SOOK SIR

Accident Year 1989 1990 1991 1992 1993 1994 1995 1995 1995 1997 1998 1999 2000 2001 2002 2003 2004 2005 2004 2005 2006	180 111,919 18,683 13,946 39,293 329,494 126,181 157,537 75,057 572,332 98,687 203,725 81,660 555,168	192 111,919 18,683 13,946 39,293 329,494 126,181 157,537 75,097 572,332 98,687 203,725 81,660	204 111,919 18,683 13,946 39,293 329,494 126,181 157,537 75,097 572,332 98,687 203,725	216 111,919 18,683 39,929 329,494 126,181 157,537 75,097 572,332 98,687	228 111,919 18,633 13,946 39,293 329,494 126,181 157,537 75,037 572,332	Matur 240 111,919 18,683 13,946 39,293 329,494 126,181 157,537 75,097	ity (Age in Mc 252 111,919 18,633 13,946 39,293 329,494 126,181 157,537	onths) 264 111,919 18,663 13,946 39,293 329,994 126,181	276 111,919 18,683 13,946 39,293 329,494	288 111,919 18,683 13,946 39,293	300 1.11,919 18,683 13,946	312 111,919 18,683	324 111,919
2009 2010 2011 2012 2013 2014 2015 Accident Year 1989 1990 1991 1992 1993 1994 1995 1995 1995 1995 1995 1995 1995	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000	288-300 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Vol All Yr Vol Ex. H/L 10 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L 3 Yr Vol Prior	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1,000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1,000 1.000 1.000 1.000	1.000	1.000	
Selected LDFs % Paid	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100,0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%

### Automobile Liability (AB, AD) Exhibit 17 Page 1

### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

	Incurred Loss per Reported Claim at \$500K SIR													
	Maturity (Age in Months)													
36	48	60	72	84	96	108	120	132	144					
2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603					
566	566	566	566	566	566	566	566	566	566					
618	536	536	536	536	536	536	536	536	536					
825	966	1,058	1,034	1,034	1,034	1,034	1,034	1,034	1,034					
5,615	5,677	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492					
1,749	1,764	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753					
1,950	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853					
730	679	679	672	672	677	659	659	659	659					
£ 0E1	E 000	E 000	E 000	6 840	5 940	5 940	5 840	5.940	5 9/10					

Incurred Loss per Reported Claim at \$500K Sik														
Accident							Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	212	205	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603
1990	317	566	566	566	566	566	566	566	566	566	566	566	566	566
1991	388	363	618	536	536	536	536	536	536	536	536	536	536	536
1992	560	552	825	966	1,058	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034
1993	1,744	4,779	5,615	5,677	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492
1994	913	2,152	1,749	1,764	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753
1995	1,820	1,757	1,950	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853
1996	698	745	730	679	679	672	672	677	659	659	659	659	659	659
1997	2,371	2,859	6,051	5,900	5,900	5,900	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840
1998	1,015	1,084	1,113	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148
1999	1,226	1,227	1,368	1,621	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684
2000	755	772	796	785	785	785	785	785	785	785	785	785	785	785
2001	1,143	5,673	7,554	10,921	9,807	6,217	6,217	6,455	6,455	6,455	6,455	6,455	6,455	6,455
2002	1,080	2,372	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097
2003	806	1,167	1,629	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	
2004 2005	696	646	575 2,003	575 2,266	575 2,431	575 2,662	575 2,489	575 2,489	575 2,489	575 2,489	575 2,489	575		
2005	1,188 1,002	1,634 1,199	2,003	2,200	2,431	2,662	2,489	2,489	2,489	2,489	2,489			
		1,199	2,078	2,078	2,078 2,815	2,078 2,815	2,078	2,078	2,078	2,078				
2007 2008	969	1,869	1,736	1,796	1,796	1,796	1,796	1,796	2,615					
	1,140			546	546	546	546	1,790						
2009 2010	699 1,413	546 1,759	546 2,071	2,071	2,071	2,071	540							
2010	1,413	1,759	1,186	1,186	1,186	2,071								
2011	894	750	736	736	1,100									
2012	2,526	2,359	5,104	1.00										
2013	1,199	1,157	0,204											
2015	1,765	1,137												
2015	1,705													
Accident						Age	to-Age Factor	's						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	0,966	12.691	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.785	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
1991	0.936	1.703	0.868	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1992	0.987	1.493	1.171	1.095	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	2.741	1.175	1.011	0.967	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1994	2.357	0.813	1.008	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	0.965	1.110	0.950	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.067	0.980	0.930	1.000	0.991	1.000	1.006	0,974	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.206	2.116	0.975	1.000	1.000	0.990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.068	1.027	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.001	1.115	1.185	1.039	1.000	1.000	1.000	1.000	1,000	1,000	1.000	1.000	1.000	1.000
2000	1.023	1.031	0.987	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	4.961	1.332	1.446	0.898	0.634	1.000	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	2.196	0.884	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.447	1.396	0.886	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004	0.928	0.889	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.376	1.226	1.131	1.073	1.095	0.935	1.000	1.000	1.000	1.000				
2006	1.197	1.733	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2007	1.928	1.458	1.026	1.000	1.000	1.000	1.000	1.000						
2008	1.032	1.475	1.035	1.000	1.000	1.000	1.000							
2009	0.782	1.000	1.000	1.000	1.000	1.000								
2010	1.245	1.177	1.000	1.000	1.000									
2011	1.316	0.764	1.000	1.000										
2012	0.840	0.981	1.000											
2013	0.934	2.164												
2014	0.965													
All Yr Avg	1.433	1.710	1.027	1.003	0.986	0.996	1.002	0.999	1.000	1.000	1.000	1.000	1.000	1.000
	1.433	1.273	1.027	1.003	0.998	0.996	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg Ex. H/L	1.313	1.273	1.015	1.005	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg	1.161	1.288	1.008	1.007	1.000	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg Ex. H/L 5 Yr Avg	1.060	1.244	1.008	1.000	1.000	0.987	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg Ex. H/L	1.080	1.217	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Avg	0.913	1.303	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.200	1,200	1.020	1.003	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
FIO	1.1.00	A1200	1.010	2.000	2.000	2.000			2.500	2,200	2.300	2.300		
Selected	1.150	1.280	1.015	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
LDFs	1.499	1.303	1.018	1,003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
LDFS	1.435	1.505	1.010	2,000	1,000	11000	1,000							

#### Automobile Liability (AB, AD) Exhibit 17 Page 2

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

Incurrec	l Loss per	Reported	Claim at \$500K !	SIR

Accident						Maturi	ty (Age in Mo	nths)					
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 2000 2001 2002 2003 2004 2005 2004 2005 2006 2007 2008 2009 2008	180 2,603 566 5,36 1,034 5,492 1,753 1,853 659 5,840 1,148 1,684 785 6,455	192 2,603 566 5,36 1,034 5,492 1,753 1,883 659 5,840 1,148 1,684 785	204 2,603 566 536 1,034 5,492 1,753 1,853 659 5,840 1,148 1,684	216 2,603 5,66 5,36 1,034 5,492 1,753 1,853 6,59 5,840 1,148	228 2,603 5,66 5,36 1,034 5,492 1,753 1,853 655 5,840	Maturi 240 566 536 1,034 5,492 1,753 1,853 659	ty (Age in Mo 252 2,603 566 536 1,034 5,492 1,753 1,853	nths) 264 2,603 566 536 1,034 5,492 1,753	276 2,603 566 536 1,034 5,492	288 2,603 566 536 1,034	300 2,603 566 536	312 2,603 566	324 2,603
2011 2012 2013 2014 2015													
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 2000 2001 2002 2003 2004 2005 2005 2005 2005 2005 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Avg All Yr Avg Ex. H/L 10 Yr Avg 10 Yr Avg Ex. H/L 5 Yr Avg 5 Yr Avg Ex. H/L	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000	1.000	1.000	1.000	
3 Yr Avg Prior	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1,000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
Selected LDFs	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000

### Automobile Liability (AB, AD) Exhibit 18 Page 1

# Mlami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015 Paid Loss per Closed Claim at \$500K SIR

Pald	LOSS	per	ciosea	claim	at :	\$500K	SIK

						Paid Lo	ss per Closed	Claim at \$500	DK SIR					
Accident							Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	210	205	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603
1990	301	566	566	566	566	566	566	566	566	566	566	566	566	566
1991	415	370	535	536	536	536	536	536	536	536	536	536	536	536
1992	498	475	610	687	706	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034
1993	645	1,009	1,403	5,494	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492
1994	520	668	1,749	1,764	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753
1995	803	834	1,642	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853
1996	502	502	668	679	679	672	672	677	659	659	659	659	659	659
1997	413	736	6,017	5,900	5,900	5,900	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840
1998	613	688	813	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148	1,148
1999	386	1,202	1,301	1,483	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684	1,684
2000	646	706	728	785	785	785	785	785	785	785	785	785	785	785
2001	512	5,553	5,626	5,761	6,277	6,217	6,217	6,455	6,455	6,455	6,455	6,455	6,455	6,455
2002	634	1,340	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097
2003	646	744	1,010	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	1,443	
2004	662	588	575	575	575	575	575	575	575	575	575	575		
2005	672	1,526	1,651	1,810	1,980	2,269	2,489	2,489	2,489	2,489	2,489			
2006	854	1,109	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078				
2007	881	1,612	2,557	2,813	2,815	2,815	2,815	2,815	2,815					
2008	<del>9</del> 50	1,059	1,281	1,796	1,796	1,796	1,796	1,796						
2009	596	546	546	546	546	546	546							
2010	1,115	1,652	2,071	2,071	2,071	2,071								
2011	995	1,077	1,186	1,186	1,186									
2012	573	750	736	736										
2013	1,933	1,855	5,104											
2014	1,135	1,075												
2015	1,136													
Accident						Age-	to-Age Factor	s						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	0.976	12.691	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.881	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
1991	0.891	1.447	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	0.954	1.284	1.126	1.028	1.465	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
1993	1.563	1.391	3.917	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.286	2.616	1.008	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.039	1.969	1.129	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	0.999	1.331	1.016	1.000	0.991	1.000	1.006	0.974	1.000	1.000	1.000	1.000	1.000	1.000
1 <del>9</del> 97	1.781	8.175	0.981	1.000	1.000	0.990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.122	1.181	1.412	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
1999	3.114	1.082	1.140	1.135	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.093	1,030	1.079	1.000	1,000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
2001	10.852	1.013	1.024	1.090	0.990	1.000	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	2.113	1.564	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.152	1.357	1.429	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004	0.889	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	2.272	1.082	1.096	1.093	1.146	1.097	1.000	1.000	1.000	1.000				
2006	1.299	1,873	1,000	1.000	1.000	1.000	1.000	1.000	1.000					
2007	1.829	1.586	1.100	1.000	1.000	1.000	1.000	1.000						
2008	1.115	1.210	1.402	1.000	1.000	1.000	1.000							
2009	0.917	1,000	1,000	1,000	1.000	1.000								
2010	1.482	1.253	1.000	1.000	1.000									
2011	1.083	1.101	1.000	1.000										
2012	1.310	0.981	1.000											
2013	0.960	2.751												
2014	0.947													
All Yr Avg	1.728	2.118	1.203	1.015	1.027	1.004	1.002	0.999	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg Ex. H/L	1.382	1.708	1.089	1.010	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg	1.321	1.381	1.103	1.009	1.014	1.010	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg Ex. H/L	1.253	1.251	1.075	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg	1.156	1.417	1.080	1.000	1.000	1.019	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg Ex. H/L	1.118	1.118	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Avg	1.072	1.611	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.300	1.250	1.090	1.011	1.006	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.280	1.300	1.085	1.009	1.006	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.842	1.439	1.107	1.020	1.011	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Miami Valley Risk Management Association Autornobile Liability (AB, AD) December 31, 2015 Paid Loss per Closed Claim at \$500K SIR

Accident						Maturi	ity (Age in Mo	enths)					
Year 1989	180 2,603	192 2,603	204 2,603	216 2,603	228 2,603	240 2,603	252 2,603	264 2,603	276 2,603	288 2,603	300 2,603	312 2,603	324 2,603
1990	2,005	2,005	2,005	2,005	565	566	566	566	2,005	566	2,005	566	2,005
1991	536	536	536	536	536	536	536	536	536	536	536		
1992	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034			
1993	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492				
1994	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753					
1995	1,853	1,853	1,853	1,853	1,853	1,853	1,853						
1996	659	659	659	659	659	659							
1997	5,840	5,840	5,840	5,840	5,840								
1998	1,148	1,148	1,148	1,148									
1999 2000	1,684 785	1,684 785	1,684										
2000	6,455	/65											
2002	0,455												
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012 2013													
2013													
2014													
Accident	180-192	192-204	204-216	216-228	228-240	Age-to-Age		264-276	276-288	288-300	300-312	312-324	324-Ult
Year 1989	1.000	1.000	1.000	1.000	1.000	240-252 1.000	252-264 1.000	1.000	1.000	1.000	1.000	1.000	524-0it
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1992	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1,000	1,000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1,000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1,000	1,000	1.000										
1999	1,000	1.000											
2000 2001	1.000												
2001													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012 2013													
2013													
2017													
A 11 3/- A	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	
All Yr Avg	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1,000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
All Yr Avg Ex. H/L 10 Yr Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Avg Ex. H/L	1.000	1.000	1.000										
5 Yr Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Avg Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
3 Yr Avg	1,000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000			
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
C-I	1 000	1 000	1 000	1.000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Selected	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
LDFs	1,000	1,000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Automobile Liability (AB, AD) Exhibit 19

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Summary of Claim Counts

Accident Year	Closed Claims	Open Claims	Reported Claims	Indicated IBNR Claims	Selected Ultimate Claims
(1)	(2)	(3)	(4)	(5)	(6)
1989	43	0	43	0	43
1990	33	0	33	0	33
1991	26	0	26	0	26
1992	38	0	38	0	38
1993	60	0	60	0	60
1994	72	0	72	0	72
1995	85	0	85	0	85
1996	114	0	114	0	114
1997	98	0	98	0	98
1998	86	0	86	0	86
1999	121	0	121	0	121
2000	104	0	104	0	104
2001	86	0	86	0	86
2002	80	0	80	0	80
2003	117	0	117	0	117
2004	86	0	86	0	86
2005	98	0	98	0	98
2006	70	0	70	0	70
2007	98	0	98	0	98
2008	76	0	76	0	76
2009	57	0	57	0	57
2010	78	0	78	0	78
2011	74	0	74	0	74
2012	52	0	52	0	52
2013	46	0	46	0	46
2014	77	1	78	1	79
2015	43	6	49	4	53
Total	2,018	7	2,025	5	2,030

Notes:

(2) Provided by MVRMA

(3) Provided by MVRMA

(4) Provided by MVRMA

(5) = (6) - (4)

(6) From Exhibit 20, Col (4)

#### Automobile Liability (AB, AD) Exhibit 20

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

#### Ultimate Claims Based on Reported Claim Development Method

Accident Year (1)	Cumulative Reported Claims (2)	Claim Development <u>Factors</u> (3)	Projected Ultimate Claims (4)
1989	43	1.000	43
1990	33	1.000	33
1991	26	1.000	26
1992	38	1.000	38
1993	60	1.000	60
1994	72	1.000	72
1995	85	1.000	85
1996	114	1.000	114
1997	98	1.000	98
1998	86	1.000	86
1999	121	1.000	121
2000	104	1.000	104
2001	86	1.000	86
2002	80	1.000	80
2003	117	1.000	117
2004	86	1.000	86
2005	98	1.000	98
2006	70	1.000	70
2007	98	1.000	98
2008	76	1.000	76
2009	57	1.000	57
2010	78	1.000	78
2011	74	1.000	74
2012	52	1.000	52
2013	46	1.000	46
2014	78	1.007	79
2015	49	1.088	53
Total	2,025		2,030

(2)	Provided b	oy MVRMA
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(3) From Exhibit 21

(4) = (2) x (3)

#### Automobile Liability (AB, AD) Exhibit 21 Page 1

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

Reported Claim Counts

Accident							Maturity (Ag	e in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	42	42	43	43	43	43	43	43	43	43	43	43	43	43
1990	32	33	33	33	33	33	33	33	33	33	33	33	33	33
1991	23	25	26	26	26	26	26	26	26	26	26	26	26	26
1992	35	36	38	38	38	38	38	38	38	38	38	38	38	38
1993	54	60	60	60	60	60	60	60	60	60	60	60	€0	60
1994	68	72	72	72	72	72	72	72	72	72	72	72	- 72	72
1995	80	80	85	85	85	85	85	85	85	85	85	85	85	85
1996	99	109	110	110	110	111	111	111	114	114	114	114	114	114
1997	96	96	97	97	97	97	98	98	98	98	98	98	98	98
1998	83	86	86	86	86	86	86	86	86	86	86	86	86	86
1999	111	113	120	121	121	121	121	121	121	121	121	121	121	121
2000	101	104	104	104	104	104	104	104	104	104	104	104	104	104
2001	82	85	86	86	86	86	86	86	86	86	86	86	86	86
2002	68	79	80	80	80	80	80	80	80	80	80	80	80	80
2003	108	116	117	117	117	117	117	117	117	117	117	117	117	
2004	73	85	86	86	86	86	86	86	86	86	86	86		
2005	85	96	97	97	97	98	98	98	98	98	98			
2006	65	70	70	70	70	70	70	70	70	70				
2007	89	97	99	98	98	98	98	98	98					
2008	70	76	76	76	76	76	76	76						
2009	56	57	57	57	57	57	57							
2010	75	78	78	78	78	78								
2011	73	74	74	74	74									
2012	45	51	52	52										
2013	42	46	46											
2014	74	78												
2015	49													
Accident							e-to-Age Facto							
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	1.000	1.024	1.000	1.000	1.000	1,000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1990	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.087	1.040	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.029	1.056	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.111	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.059	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.000	1.063	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.101	1.009	1.000	1.000	1.009	1,000	1.000	1.027	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.000	1.010	1.000	1.000	1.000	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.018	1.062	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.030	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.037	1,012	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
2002	1.162	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.074	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004	1.164	1.012	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.129	1.010	1.000	1.000	1.010	1.000	1.000	1.000	1.000	1.000				
2006	1.077	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000					
2007	1.090	1.021	0.990	1.000	1.000	1.000	1.000	1.000						
2008	1.086	1.000	1.000	1.000	1.000	1.000	1,000							
2009	1.018	1.000	1.000	1.000	1,000	1.000								
2010	1.040	1.000	1.000	1.000	1.000									
2011	1.014	1.000	1.000	1.000										
2012	1,133	1.020	1.000											
2013	1.095	1.000												
2014	1.054													
				4 000	1 001		1 000	1 000	1.000	1.000	1,000	1.000	1.000	1.000
All Yr Vol	1.063	1.014	1.000	1.000	1.001	1.001	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.062	1.012	1.000	1.000	1.001 1.001	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.073	1.007	0.999	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.076	1.005	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	1.058	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.058	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.087	1.006	1.000	1.000	1.000	1.000	1.000				1.000	1.000	1.000	1.000
Prior	1.085	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1 000	1.007	1.000	1.000	1.000	1 000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.080	1.007	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1,000	1.000	1.000	1,000	1.000
LDFs	1.088	1.007	1.000	1.000	1.000	1.000	T.000	1.000	1.000	1,000	1.000	1.000	2,000	2.000

### Automobile Liability (AB, AD) Exhibit 21 Page 2

# Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

Reported	Claim	Counts

	Reported Claim Counts													
Accident	Maturity (Age in Months)													
Year	180	192	204	216	228	240	252	264	276	288	300	312	324	
1989	43	43	43	43	43	43	43	43	43	43	43	43	43	
1990	33	33	33	33	33	33	33	33	33	33	33	33		
1991	26	26	26	26	26	26	26	26	26	26	26			
1992	38	38	38	38	38	38	38	38	38	38				
1993	60	60	60	60	60	60	60	60	60					
1994	72	72	72	72	72	72	72	72						
1995	85	85	85	85	85	85	85							
1996	114	114	114	114	114	114								
1997	98	98	98	98	98									
1998	86	86	86	86	50									
1999	121	121	121											
2000	104	104												
2000	86	104												
2002	00													
2002														
2003														
2004														
2005														
2003														
2008														
2008														
2009														
2010														
2011														
2012														
2013														
2014														
2015														
Accident						Age-to-Ag	e Factors							
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult	
1989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1992	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	21000					
1993	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000						
1995	1.000	1,000	1.000	1.000	1.000	1.000	11000							
1995	1.000	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000	1.000										
1999	1.000	1.000	1.000											
2000	1.000	1.000												
2000	1.000													
2001														
2002														
2003														
2004														
2005														
2007 2008														
2008														
2009														
2011														
2012 2013														
2014														
All Yr Vol	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000		
All Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
All Yr Vol EX. H/L 10 Yr Vol	1.000	1.000	1.000	1.000	1.000		2.000							
		1.000	1.000											
10 Yr Vol Ex. H/L	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
5 Yr Vol		1.000	1.000	1.000	1.000	1.000	1.000	1.000						
5 Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	21000		
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	
LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
LUPS	1.000	1.000	1.000	1.000	1.000	11000								

#### Automobile Liability (AB, AD) Exhibit 22 Page 1

#### Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

Closed Claim Counts

Accident							Maturity (Ag	e in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	41	42	43	43	43	43	43	43	43	43	43	43	43	43
1990	27	33	33	33	33	33	33	33	33	33	33	33	33	33
1991	21	24	24	26	26	26	26	26	26	26	26	26	26	26
1992	30	35	35	37	36	38	38	38	38	38	38	38	38	38
1993	37	53	56	59	60	60	60	60	60	60	60	60	60	60
1994	52	65	72	72	72	72	72	72	72	72	72	72	72	72
1995	48	72	82	85	85	85	85	85	85	85	85	85	85	85
1996	88	107	109	110	110	111	111	111	114	114	114	114	114	114
1997	83	93	94	97	97	97	98	98	98	98	98	98	98	98
1998	69	81	84	86	86	86	86	86	86	86	86	86	86	86
1999	105	112	117	119	121	121	121	121	121	121	121	121	121	121
2000	82	103	103	104	104	104	104	104	104	104	104	104	104	104
2000	64	76	83	84	84	86	86	86	86	86	86	86	86	86
2001	55	76	80	80	80	80	80	80	80	80	80	80	80	80
2002	100	111	113	117	117	117	117	117	117	117	117	117	117	
2003	63	84	86	86	86	86	86	86	86	86	86	86		
2004	64	94	93	94	94	95	98	98	98	98	98			
2005	54	68	70	70	70	70	70	70	70	70				
2008	82	94	98	98	98	98	98	98	98					
2007	59	75	75	76	76	76	76	76						
2008	51	57	57	57	57	57	57	70						
	61	77	78	78	78	78	57							
2010	66	72	74	74	74	78								
2011	39	51	52	52	/4									
2012 2013	35	45	46	52										
	68	43	40											
2014		//												
2015	43													
Accident						٨٩٩	-to-Age Facto							
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
Year 1989	1.024	1.024	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1989	1.024	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1990	1.143	1.000	1.083	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
		1,000	1.085	0.973	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.167 1.432	1.000	1.057	1.017	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993 1994	1.452	1.108	1.004	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.230	1.139	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1995	1.216	1.019	1.009	1.000	1,009	1.000	1.000	1.027	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.120	1.015	1.032	1.000	1.000	1,010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.174	1.011	1.032	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1,000	1.000
1999	1.067	1.037	1.024	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000
2000	1.256	1.000	1.010	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.188	1.092	1.012	1.000	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
2002	1.382	1.053	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	
2002	1.110	1.033	1.035	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2003	1.333	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2004	1.469	0.989	1.011	1,000	1.011	1.032	1.000	1.000	1.000	1.000				
2003	1.259	1.029	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2000	1.146	1.043	1.000	1.000	1.000	1.000	1.000	1.000						
2008	1.271	1,000	1.013	1,000	1.000	1.000	1.000	1						
2008	1.118	1,000	1.015	1.000	1.000	1.000	1.000							
2009	1.262	1.013	1.000	1.000	1.000	1.000								
2010	1.091	1.013	1.000	1.000	1.000									
2012	1.308	1.020	1.000	1.000										
2012	1.216	1.020	1.000											
2013	1.132	1.022												
2014	1.152													
All Yr Vol	1.214	1.032	1.014	1.001	1.004	1.002	1.000	1.002	1.000	1.000	1.000	1,000	1.000	1.000
All Yr Vol Ex. H/L	1.210	1.029	1.014	1.001	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.222	1.017	1.008	1.000	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.206	1.017	1.003	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
5 Yr Vol	1.188	1.017	1.003	1.000	1.000	1.008	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.188	1.017	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
3 Yr Vol	1,201	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 11 401	1,201	1.727	2.000	2.000	2.400									

# Automobile Liability (AB, AD) Exhibit 22 Page 2

# Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

Closed	Claim	Counts

Accident							ity (Age in Mo						
Year	180	192	204	216	228	240	252	264	276	288	300	312	324
1989	43	43	43	43	43	43	43	43	43	43	43	43	43
1990	33	33	33	33	33	33	33	33	33	33	33	33	
1991	26	26	26	26	26	26	26	26	26	26	26		
1992	38	38	38	38	38	38	38	38	38	38			
1993	60	60	60	60	60	60	60	60	60				
1994	72	72	72	72	72	72	72	72					
1995	85	85	85	85	85	85	85						
1996	114	114	114	114	114	114	05						
	98	98	98	98	98	114							
1997					30								
1998	86	86	86	86									
1999	121	121	121										
2000	104	104											
2001	86												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2012													
2013													
2015													
Accident						Age-to-Ag	e Factors						
	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
Year			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	527 811
1989	1.000	1.000				1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000					1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1,000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2005													
2000													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
All Valvel	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol Ex. H/L	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Vol	1.000	1.000	1.000										
10 Yr Vol Ex. H/L	1.000	1.000	1.000				1 000	1 000					
5 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1 000				
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			

		les	Paid	(10)																		\$48,974	76,272	46,288	30,922	45,333	38,168	23,843	40,751	63,582	44,006	\$458,139
		Deductibles	Incurred	(6)																		\$48,974	76,272	46,288	30,922	45,333	38,168	23,843	40,751	63,582	53,506	\$467,639
		mits	Paid	(8)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	82,740	48,868	\$4,256,534
		\$500K Limits	Incurred	(2)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	90,240	86,498	\$4,301,664
<b>11, 201</b>	nmary	Limits	Paid	(9)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	82,740	48,868	\$4,256,534
NECELINEL AT' TATA	Loss Summary	Retention Limits	Incurred	(5)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	572,332	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	90,240	86,498	\$4,301,664
		mits	Paid	(4)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	1,018,826	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	82,740	48,868	\$4,703,028
		Total Limit	Incurred	(3)	\$111,919	18,683	13,946	39,293	329,494	126,181	157,537	75,097	1,018,826	98,687	203,725	81,660	555,168	167,747	168,870	49,417	243,966	145,431	275,826	136,527	31,122	161,512	87,731	38,269	234,785	90,240	86,498	\$4,748,158
			Retention -	(2)	\$250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	500,000	500,000	500,000	500,000	500,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	
		Accident	Year	(1)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total

Miami Valley Risk Management Association Automobile Liability (AB, AD) December 31, 2015

MVRMA Auto Liability Analysis 2015-12-31 3/9/2016 at 1:02 PM

Notes: (2)-(10) Provided by MVRMA

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Pinnacle Actuarial Resources, Inc.

#### Summary of Loss Reserve Estimates Retained Limits

	Selected					Estimated
Accident	Ultimate	Incurred	Paid	Case	Indicated	Total
Year	Loss	Loss	Loss	Reserves	IBNR	Reserves
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$207,853	\$207,853	\$207,853	\$0	\$0	\$0
1990	439,863	439,863	439,863	0	0	0
1991	84,015	84,015	84,015	0	0	0
1992	139,376	139,376	139,376	0	0	0
1993	600,979	600,979	600,979	0	0	0
1994	106,065	106,065	106,065	0	0	0
1995	156,790	156,790	156,790	0	0	0
1996	357,926	357,926	357,926	0	0	0
1997	706,526	706,526	706,526	0	0	0
1998	554,289	554,289	554,289	0	0	0
1999	657,094	657,094	657,094	0	0	0
2000	164,560	164,560	164,560	0	0	0
2001	497,423	497,423	497,423	0	0	0
2002	1,347,177	1,347,177	1,347,177	0	0	0
2003	269,762	269,762	269,762	0	0	0
2004	511,964	511,964	511,964	0	0	0
2005	857,801	857,801	857,801	0	0	0
2006	915,795	915,795	915,795	0	0	0
2007	312,120	312,120	312,120	0	0	0
2008	856,672	856,672	856,672	0	0	0
2009	1,177,813	1,177,813	1,177,813	0	0	0
2010	972,613	972,613	972,613	0	0	0
2011	345,000	293,869	252,485	41,384	51,131	92,515
2012	540,000	366,664	216,588	150,076	173,336	323,412
2013	610,000	354,313	278,864	75,449	255,687	331,136
2014	1,000,000	334,063	233,752	100,311	665,937	766,248
2015	830,000	100,820	85,569	15,250	729,180	744,431
Total	\$15,219,475	\$13,344,203	\$12,961,733	\$382,470	\$1,875,272	\$2,257,742

Notes:

(2) From Exhibit 3, Col (13)

(3)-(4),(5) Provided by MVRMA

(6) = (2) - (3)

(7) = (5) + (6)

#### General Liability Exhibit 2

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Comparison of Ultimate Loss to Prior Ultimate Loss Retained Limits

	Selected Ultimate	Selected Ultimate		Demont
Accident	Loss	Loss	Difference	Percent
Year	@12/31/2014	@12/31/2015	Difference	Change
(1)	(2)	(3)	(4)	(5)
1989	\$207,853	\$207,853	\$0	0.0%
1990	439,863	439,863	0	0.0%
1991	84,015	84,015	0	0.0%
1992	139,376	139,376	0	0.0%
1993	600,979	600,979	0	0.0%
1994	106,065	106,065	0	0.0%
1995	156,790	156,790	0	0.0%
1996	357,926	357,926	0	0.0%
1997	706,526	706,526	0	0.0%
1998	554,289	554,289	0	0.0%
1999	657,094	657,094	0	0.0%
2000	164,560	164,560	0	0.0%
2001	497,423	497,423	0	0.0%
2002	1,347,177	1,347,177	0	0.0%
2003	269,762	269,762	0	0.0%
2004	511,964	511,964	0	0.0%
2005	857,801	857,801	0	0.0%
2006	915,795	915,795	0	0.0%
2007	312,120	312,120	0	0.0%
2008	856,672	856,672	0	0.0%
2009	1,279,000	1,177,813	(101,188)	-7.9%
2010	1,004,000	972,613	(31,387)	-3.1%
2011	372,000	345,000	(27,000)	-7.3%
2012	570,000	540,000	(30,000)	-5.3%
2013	920,000	610,000	(310,000)	-33.7%
2014	1,300,000	1,000,000	(300,000)	-23.1%
Total	\$15,189,050	\$14,389,475	(\$799,575)	-5.3%

#### Notes:

- (2) From Pinnacle's analysis of unpaid loss & LAE at 12/31/2014
- (3) From Exhibit 3, Col (13)
- (4) = (3) (2)
- (5) = (4) / (2)

General Liability Exhibit 3

Selected Ultimate Loss Retained Limits

	Industry Development	/elopment		MVRN	MVRMA's Loss Development	ment		MVRMA	MVRMA	MVRMA	
	Incurred	Paid	Incurred	Paid	Case	Average	Average	Expected	Incurred	Paid	Selected
Retention	Loss Method	Loss Method	Loss Method	Loss Method	Method	Incurred Method	Paid Method	Loss Method	BF Mathod	BF Method	Ultimate
(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)	(12)	(13)
\$250,000	\$207,853	\$207,853	\$207,853	\$207,853	\$207,853	\$207,853	\$207,853	\$93,125	\$207,853	\$207,853	\$207,853
250,000	439,863	439,863	439,863	439,863	439,863	439,863	439,863	121,021	439,863	439,863	439,863
250,000	84,015	84,015	84,015	84,015	84,015	84,015	84,015	140,602	84,015	84,015	84,015
250,000	139,376	139,376	139,376	139,376	139,376	139,376	139,376	172,768	139,376	139,376	139,376
250,000	600,979	600,979	600,979	600,979	600,979	600,979	600,979	153,037	600,979	600,979	600,979
250,000	106,065	106,065	106,065	106,065	106,065	106,065	106,065	246,550	106,065	106,065	106,065
250,000	156,790	156,790	156,790	156,790	156,790	156,790	156,790	260,983	156,790	156,790	156,790
250,000	357,926	357,926	357,926	357,926	357,926	357,926	357,926	270,554	357,926	357,926	357,926
500,000	706,526	706,526	706,526	706,526	706,526	706,526	706,526	342,013	706,526	706,526	706,526
500,000	554,289	554,289	554,289	554,289	554,289	554,289	554,289	365,142	554,289	554,289	554,289
500,000	657,503	657,744	657,094	657,094	657,094	657,094	657,094	396,332	657,094	657,094	657,094
500,000	164,765	164,886	164,560	164,560	164,560	164,560	164,560	420,232	164,560	164,560	164,560
500,000	498,664	499,395	497,423	497,423	497,423	497,423	497,423	469,407	497,423	497,423	497,423
500,000	1,353,907	1,357,882	1,347,177	1,347,177	1,347,177	1,347,177	1,347,177	517,736	1,347,177	1,347,177	1,347,177
1,000,000	272,464	274,066	269,762	269,762	269,762	269,762	269,762	569,598	269,762	269,762	269,762
1,000,000	522,272	528,431	511,964	511,964	511,964	511,964	511,964	613,411	511,964	511,964	511,964
1,000,000	892,690	913,870	857,801	857,801	857,801	857,801	857,801	671,420	857,801	857,801	857,801
1,000,000	991,806	1,039,427	915,795	925,503	915,795	915,795	922,465	705,874	915,795	923,200	915,795
1,000,000	343,096	361,589	312,120	316,695	312,120	312,120	315,487	728,419	312,120	322,643	312,120
1,000,000	960,526	1,019,246	856,672	877,023	856,672	860,811	873,750	792,976	856,672	875,073	856,672
1,000,000	1,354,934	1,462,989	1,212,546	1,224,859	1,177,813	1,211,234	1,220,171	865,261	1,202,598	1,211,047	1,177,813
500,000	1,162,512	1,293,881	1,006,897	1,026,395	972,613	1,002,915	1,022,660	831,171	1,000,914	1,016,165	972,613
500,000	371,267	375,183	314,876	306,414	319,132	315,316	311,972	873,774	352,162	406,269	345,000
500,000	511,874	389,428	451,805	306,219	637,934	457,269	311,936	849,528	526,755	465,248	540,000
500,000	588,612	684,412	545,733	611,114	491,490	555,198	620,059	858,024	655,272	745,354	610,000
500,000	754,759	963,806	1,080,539	1,203,795	936,742	1,064,232	1,217,173	876,326	939,461	939,914	1,000,000
500,000	415,709	882,050	782,653	1,101,682	360,581	764,977	1,079,612	903,353	887,805	918,758	830,000
	\$15,171,043	\$16,221,969	\$15,139,101	\$15,559,162	\$14,640,355	\$15,119,332	\$15,554,748	\$14,108,637	\$15,309,018	\$15,483,132	\$15,219,475
Notes: (2) Provided by MVRNA (3) From Exhibit 12.1, Col (4) (4) From Exhibit 12.2, Col (4) (5) From Exhibit 7, Col (4) (6) From Exhibit 8, Col (4) (7) From Exhibit 9, Col (8)	VRMA 2.1, Col (4) 2.2, Col (4) , Col (4) , Col (4) , Col (8)			(8) (9) (10) (11) (11)	From Exhibit 10, Col (7) From Exhibit 11, Col (7) From Exhibit 4, Col (4) From Exhibit 4, Col (8) From Exhibit 5, Col (8)	. Col (7) . Col (7) . Col (4) Col (8) Col (8)					

# Pinnacle Actuarial Resources, Inc.

WVRMA General Liability Analysis 2015-12-31 3/9/2016 at 1:01 PM

#### Ultimate Loss Based on Bornhuetter-Ferguson Method Using Exposures and Incurred Loss Retained Limits

Accident Year	Net Operating Funds (\$00,000's)	Selected Loss Cost	Expected Loss	Percent Undeveloped	Undeveloped Loss	Cumulative Incurred Loss	Projected Ultimate Loss	Indicated Loss Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1989	561	\$166	\$93,125	0.0%	\$0	\$207,853	\$207,853	\$370
1989	722	168	121,021	0.0%	0	439,863	439,863	609
1990	830	169	140,602	0.0%	0	84,015	84,015	101
1991	1,010	105	172,768	0.0%	0	139,376	139,376	138
1992	1,255	122	153,037	0.0%	0	600,979	600,979	479
1993	1,233	174	246,550	0.0%	0	106,065	106,065	75
1994	1,413	174	260,983	0.0%	Ő	156,790	156,790	106
1995	1,481	178	270,554	0.0%	0	357,926	. 357,926	235
1998	1,903	180	342,013	0.0%	0	706,526	706,526	371
1997	2,011	180	365,142	0.0%	Ő	554,289	5\$4,289	276
1998	2,011	182	396,332	0.0%	0	657,094	657,094	304
2000	2,269	185	420,232	0.0%	0	164,560	164,560	73
2000	2,205	187	469,407	0.0%	0	497,423	497,423	198
2001	2,741	189	517,736	0.0%	0	1,347,177	1,347,177	492
2002	2,985	191	569,598	0.0%	0	269,762	269,762	90
2003	3,183	191	613,411	0.0%	0	511.964	511,964	161
2004	3,450	195	671,420	0.0%	0	857,801	857,801	249
2005	3,591	197	705,874	0.0%	0	915,795	915,795	255
2000	3,669	199	728,419	0.0%	0	312,120	312,120	85
2007	3,954	201	792,976	0.0%	0	856.672	856,672	217
2008	4,058	213	865,261	2.9%	24,786	1,177,813	1,202,598	296
2009	4,053	205	831,171	3.4%	28,301	972,613	1,000,914	246
2010	4,229	203	873,774	6.7%	58,294	293,869	352,162	83
2011	4,071	209	849,528	18.8%	160,092	366,664	526,755	129
2012	4,071	203	858,024	35.1%	300,959	354,313	655,272	161
2013	4,071	211	876,326	69.1%	605,399	334,063	939,461	228
2014	4,202	215	903,353	87.1%	786,985	100,820	887,805	211
⊺otal	72,031		\$14,108,637		\$1,964,815	\$13,344,203	\$15,309,018	\$213

Notes:

(2) Provided by MVRMA

(3) From Exhibit 6.1, Col (8)

 $(4) = (2) \times (3)$ 

(5) Based on Exhibit 13;

\$500K limits for 1989-2002 and 2010-2015; \$1M limits for 2003-2009

(6) = (4) x (5)

(7) Provided by MVRMA

(8) = (6) + (7)

(9) = (8) / (2)

#### Ultimate Loss Based on Bornhuetter-Ferguson Method Using Exposures and Paid Loss Retained Limits

Accident	Net Operating Funds	5elected Loss	Expected	Percent	Undeveloped	Cumulative Paid	Projected Ultimate	Indicated Loss
Year	(\$00,000's)	Cost	Loss	Unpaid	Loss	Loss	Loss	Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1989	561	\$166	\$93,125	0.0%	\$0	\$207,853	\$207,853	\$370
1990	722	168	121,021	0.0%	0	439,863	439,863	609
1991	830	169	140,602	0.0%	0	84,015	84,015	101
1992	1,010	105	172,768	0.0%	0	139,376	139,376	138
1993	1,255	122	153,037	0.0%	0	600,979	600,979	479
1994	1,255	174	246,550	0.0%	0	106,065	106,065	75
1995	1,481	176	260,983	0.0%	0	156,790	156,790	106
1996	1,520	178	270,554	0.0%	0	357,926	357,926	235
1997	1,903	180	342,013	0.0%	0	706,526	706,526	371
1998	2,011	182	365,142	0.0%	0	554,289	554,289	276
1999	2,162	183	396,332	0.0%	0	657,094	657,094	304
2000	2,269	185	420,232	0.0%	0	164,560	164,560	73
2000	2,510	185	469,407	0.0%	0	497,423	497,423	198
2001	2,741	189	517,736	0.0%	0	1,347,177	1,347,177	492
2002	2,985	191	569,598	0.0%	0	269,762	269,762	90
2003	3,183	193	613,411	0.0%	0	511,964	511,964	161
2005	3,450	195	671,420	0.0%	0	857,801	857,801	249
2005	3,591	197	705,874	1.0%	7,405	915,795	923,200	257
2007	3,669	199	728,419	1.4%	10,523	312,120	322,643	88
2007	3,954	201	792,976	2.3%	18,401	856,672	875,073	221
2009	4,058	213	865,261	3.8%	33,234	1,177,813	1,211,047	298
2005	4,063	205	831,171	5.2%	43,553	972,613	1,016,165	250
2010	4,229	207	873,774	17.6%	153,784	252,485	406,269	96
2011	4,071	209	849,528	29.3%	248,660	216,588	465,248	114
2012	4,071	205	858,024	54.4%	466,490	278,864	745,354	183
2013	4,117	213	876,326	80.6%	706,162	233,752	939,914	228
2014	4,202	215	903,353	92.2%	833,188	85,569	918,758	219
Total	72,031		\$14,108,637		\$2,521,398	\$12,961,733	\$15,483,132	\$215

Notes:

(2) Provided by MVRMA

(3) Based on Exhibit 6.1, Col (8)

 $(4) = (2) \times (3)$ 

(5) Based on Exhibit 13;

\$500K limits for 1989-2002 and 2010-2015; \$1M limits for 2003-2009

(6) = (4) x (5)

(7) Provided by MVRMA

(8) = (6) + (7)

(9) = (8) / (2)

#### Initial Expected Loss Cost Retained Limits

Accident	Net Operating Funds	Initial Ultimate	Indicated	Limits Factor to	Trend Factor	Trended \$500K Limits	Expected Loss
Year	(\$00,000's)	Loss	Loss Cost	\$500K	to 2015	Loss Cost	Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>\-i</i>	(-/		· ·				
1989	561	\$207,853	\$370	1.000	1.295	\$480	\$166
1990	722	439,863	609	1.000	1.282	781	168
1991	830	84,015	101	1.000	1.270	128	169
1992	1,010	139,376	138	1.000	1.257	173	171
1993	1,255	600,979	479	1.416	1.245	844	122
1994	1,413	106,065	75	1.000	1.232	92	174
1995	1,481	156,790	106	1.000	1.220	129	176
1996	1,520	357,926	235	1.000	1.208	284	178
1997	1,903	706,526	371	1.000	1.196	444	180
1998	2,011	554,289	276	1.000	1.184	326	182
1999	2,162	657,094	304	1.000	1.173	356	183
2000	2,269	164,560	73	1.000	1.161	84	185
2001	2,510	497,423	198	1.000	1.149	228	187
2002	2,741	1,347,177	492	1.000	1.138	559	189
2003	2,985	269,762	90	1.000	1.127	102	191
2004	3,183	511,964	161	1.000	1.116	179	193
2005	3,450	857,801	249	1.000	1.105	275	195
2006	3,591	915,795	255	1.000	1.094	279	197
2007	3,669	312,120	85	1.000	1.083	92	199
2008	3,954	856,672	217	1.000	1.072	232	201
2009	4,058	1,212,546	299	0.950	1.062	301	213
2010	4,063	1,006,897	248	1.000	1.051	260	205
2011	4,229	314,876	74	1.000	1.041	77	207
2012	4,071	451,805	111	1.000	1.030	114	209
2013	4,071	545,733	134	1.000	1.020	137	211
2013	4,117	1,080,539	262	1.000	1.010	265	213
2015	4,202	782,653	186	1.000	1.000	186	215
Total	72,031	\$15,139,101	\$210				
					Average Ex. Hi/Lo	\$236	
					10-Year Weighted Avg	194	

Average Ex. Hi/Lo	\$236
10-Year Weighted Avg	194
10-Year Weighted Avg Ex. Hi/Lo	196
5-Year Weighted Avg	156

Selected 2015 Loss Cost \$215

Notes:

- (2) Provided by MVRMA
- (3) From Exhibit 6.2, Col (5)
- (4) = (3) / (2)
- (5) From Exhibit 6.3, Col (7)
- (6) Based on selected trend of 1.0%
- (7) = (4)  $\times$  (5)  $\times$  (6)
- (8) = Selected Loss Cost / [(6) x (5)]

#### General Liability Exhibit 6.2

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Initial Selected Ultimate Loss Retained Limits

Andrea	Dusisets	ed Ultimate Loss Bas	and on	Initial Ultimate
Accident Year	Incurred	Paid	Case	Loss
(1)	(2)	(3)	(4)	(5)
(-)	~~/	(-7		( )
1989	\$207,853	\$207,853	\$207,853	\$207,853
1990	439,863	439,863	439,863	439,863
1991	84,015	84,015	84,015	84,015
1992	139,376	139,376	139,376	139,376
1993	600,979	600,979	600,979	600,979
1994	106,065	106,065	106,065	106,065
1995	156,790	156,790	156,790	156,790
1996	357,926	357,926	357,926	357,926
1997	706,526	706,526	706,526	706,526
1998	554,289	554,289	554,289	554,289
1999	657,094	657,094	657,094	657,094
2000	164,560	164,560	164,560	164,560
2001	497,423	497,423	497,423	497,423
2002	1,347,177	1,347,177	1,347,177	1,347,177
2003	269,762	269,762	269,762	269,762
2004	511,964	511,964	511,964	511,964
2005	857,801	857,801	857,801	857,801
2006	915,795	925,503	915,795	915,795
2007	312,120	316,695	312,120	312,120
2008	856,672	877,023	856,672	856,672
2009	1,212,546	1,224,859	1,177,813	1,212,546
2010	1,006,897	1,026,395	972,613	1,006,897
2011	314,876	306,414	319,132	314,876
2012	451,805	306,219	637,934	451,805
2013	545,733	611,114	491,490	545,733
2014	1,080,539	1,203,795	936,742	1,080,539
2015	782,653	1,101,682	360,581	782,653
Total	\$15,139,101	\$15,559,162	\$14,640,355	\$15,139,101

(2)	From	Exhibit	7,	Col (4)
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(3) From Exhibit 8, Col (4)

(4) From Exhibit 9, Col (8)

#### Estimated Limits Factor

				Incurred	Industry	Selected
Accident		Incurred	Losses at	Limits	Limits	Limits
Year	Retention	\$500K Limits	Retention Limits	Factors	Factors	Factors
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$207,853	\$207,853	1.000		1.000
1990	250,000	439,863	439,863	1.000		1.000
1991	250,000	84,015	84,015	1.000		1.000
1992	250,000	139,376	139,376	1.000		1.000
1993	250,000	850,979	600,979	1.416		1.416
1994	250,000	106,065	106,065	1.000		1.000
1995	250,000	156,790	156,790	1.000		1.000
1996	250,000	357,926	357,926	1.000		1.000
1997	500,000	706,526	706,526	1.000	1.000	1.000
1998	500,000	554,289	554,289	1.000	1.000	1.000
1999	500,000	657,094	657,094	1.000	1.000	1.000
2000	500,000	164,560	164,560	1.000	1.000	1.000
2001	500,000	497,423	497,423	1.000	1.000	1.000
2002	500,000	1,347,177	1,347,177	1.000	1.000	1.000
2003	1,000,000	269,762	269,762	1.000	0.914	1.000
2004	1,000,000	511,964	511,964	1.000	0.911	1.000
2005	1,000,000	857,801	857,801	1.000	0.909	1.000
2006	1,000,000	915,795	915,795	1.000	0.906	1.000
2007	1,000,000	312,120	312,120	1.000	0.904	1.000
2008	1,000,000	856,672	856,672	1.000	0.901	1.000
2009	1,000,000	1,137,677	1,177,813	0.966	0.898	0.950
2010	500,000	972,613	972,613	1.000	1.000	1.000
2011	500,000	293,869	293,869	1.000	1.000	1.000
2012	500,000	366,664	366,664	1.000	1.000	1.000
2013	500,000	354,313	354,313	1.000	1.000	1.000
2014	500,000	334,063	334,063	1.000	1.000	1.000
2015	500,000	100,820	100,820	1.000	1.000	1.000
Total		\$13,554,067	\$13,344,203			

Notes:

(2)-(4) Provided by MVRMA

(5) = (3) / (4)

(6) Based on insurance industry development

#### General Liability Exhibit 7

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Retained Limits

	Cumulative	Loss	Projected
Accident	Incurred	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
			4
1989	\$207,853	1.000	\$207,853
1990	439,863	1.000	439,863
1991	84,015	1.000	84,015
1992	139,376	1.000	139,376
1993	600,979	1.000	600,979
1994	106,065	1.000	106,065
1995	156,790	1.000	156,790
1996	357,926	1.000	357,926
1997	706,526	1.000	706,526
1998	554,289	1.000	554,289
1999	657,094	1.000	657,094
2000	164,560	1.000	164,560
2001	497,423	1.000	497,423
2002	1,347,177	1.000	1,347,177
2003	269,762	1.000	269,762
2004	511,964	1.000	511,964
2005	857,801	1.000	857,801
2006	915,795	1.000	915,795
2007	312,120	1.000	312,120
2008	856,672	1.000	856,672
2009	1,177,813	1.029	1,212,546
2010	972,613	1.035	1,006,897
2011	293,869	1.071	314,876
2012	366,664	1.232	451,805
2013	354,313	1.540	545,733
2014	334,063	3.235	1,080,539
2015	100,820	7.763	782,653
			,
Total	\$13,344,203		\$15,139,101

Notes:

(2) Provided by MVRMA

(3) Based on Exhibit 13

(4) = (2) x (3)

#### General Liability Exhibit 8

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Retained Limits

	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$207,853	1.000	\$207,853
1990	439,863	1.000	439,863
1991	84,015	1.000	84,015
1992	139,376	1.000	139,376
1993	600,979	1.000	600,979
1994	106,065	1.000	106,065
1995	156,790	1.000	156,790
1996	357,926	1.000	357,926
1997	706,526	1.000	706,526
1998	554,289	1.000	554,289
1999	657,094	1.000	657,094
2000	164,560	1.000	164,560
2001	497,423	1.000	497,423
2002	1,347,177	1.000	1,347,177
2003	269,762	1.000	269,762
2004	511,964	1.000	511,964
2005	857,801	1.000	857,801
2006	915,795	1.011	925,503
2007	312,120	1.015	316,695
2008	856,672	1.024	877,023
2009	1,177,813	1.040	1,224,859
2010	972,613	1.055	1,026,395
2011	252,485	1.214	306,414
2012	216,588	1.414	306,219
2013	278,864	2.191	611,114
2014	233,752	5.150	1,203,795
2015	85,569	12.875	1,101,682
Total	\$12,961,733		\$15,559,162

Notes:

(2) Provided by MVRMA

(3) Based on Exhibit 13

(4)  $= (2) \times (3)$ 

#### Ultimate Loss Based on Case Reserve Development Method Retained Limits

A		Cumulative	Case	D	ercent Developed		Projected Ultimate
Accident	Retention	Paid Loss	Reserves	Incurred	Paid	Reserve	Loss
<u>Year</u> (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	(2)	(5)	()	(5)	(0)	(*)	(3)
1989	\$250,000	\$207,853	\$0	100.0%	100.0%	100.0%	\$207,853
1990	250,000	439,863	0	100.0%	100.0%	100.0%	439,863
1991	250,000	84,015	0	100.0%	100.0%	100.0%	84,015
1992	250,000	139,376	0	100.0%	100.0%	100.0%	139,376
1993	250,000	600,979	0	100.0%	100.0%	100.0%	600,979
1994	250,000	106,065	0	100.0%	100.0%	100.0%	106,065
1995	250,000	156,790	0	100.0%	100.0%	100.0%	156,790
1996	250,000	357,926	0	100.0%	100.0%	100.0%	357,926
1997	500,000	706,526	0	100.0%	100.0%	100.0%	706,526
1998	500,000	554,289	0	100.0%	100.0%	100.0%	554,289
1999	500,000	657,094	0	100.0%	100.0%	100.0%	657,094
2000	500,000	164,560	0	100.0%	100.0%	100.0%	164,560
2001	500,000	497,423	0	100.0%	100.0%	100.0%	497,423
2002	500,000	1,347,177	0	100.0%	100.0%	100.0%	1,347,177
2003	1,000,000	269,762	0	100.0%	100.0%	100.0%	269,762
2004	1,000,000	511,964	0	100.0%	100.0%	100.0%	511,964
2005	1,000,000	857,801	0	100.0%	100.0%	100.0%	857,801
2006	1,000,000	915,795	0	100.0%	99.0%	100.0%	915,795
2007	1,000,000	312,120	0	100.0%	98.6%	100.0%	312,120
2008	1,000,000	856,672	0	100.0%	97.7%	100.0%	856,672
2009	1,000,000	1,177,813	0	97.1%	96.2%	25.4%	1,177,813
2010	500,000	972,613	0	96.6%	94.8%	35.0%	972,613
2011	500,000	252,485	41,384	93.3%	82.4%	62.1%	319,132
2012	500,000	216,588	150,076	81.2%	70.7%	35.6%	637,934
2013	500,000	278,864	75,449	64.9%	45.6%	35.5%	491,490
2014	500,000	233,752	100,311	30.9%	19.4%	14.3%	936,742
2015	500,000	85,569	15,250	12.9%	7.8%	5.5%	360,581
Total		\$12,961,733	\$382,470				\$14,640,355

Notes:

(2)-(4) Provided by MVRMA

(5)-(6) Based on Exhibit 13

(7) = [(5) - (6)] / [(1.0 - (6)]]

(8) = (3) + [(4) / (7)]

#### Ultimate Loss Based on Incurred Loss per Reported Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Incurred Loss per Reported Claim	Loss Development Factors	Projected Average Loss	Selected Ultimate Claims	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$2,335	1.000	\$2,335	89	\$207,853
1990	250,000	4,443	1.000	4,443	99	439,863
1991	250,000	1,500	1.000	1,500	56	84,015
1992	250,000	1,936	1.000	1,936	72	139,376
1993	250,000	6,462	1.000	6,462	93	600,979
1994	250,000	982	1.000	982	108	106,065
1995	250,000	1,845	1.000	1,845	85	156,790
1996	250,000	2,958	1.000	2,958	121	357,926
1997	500,000	7,137	1.000	7,137	99	706,526
1998	500,000	3,903	1.000	3,903	142	554,289
1999	500,000	4,627	1.000	4,627	142	657,094
2000	500,000	1,127	1.000	1,127	146	164,560
2001	500,000	4,215	1.000	4,215	118	497,423
2002	500,000	8,214	1.000	8,214	164	1,347,177
2003	1,000,000	1,823	1.000	1,823	148	269,762
2004	1,000,000	4,302	1.000	4,302	119	511,964
2005	1,000,000	6,702	1.000	6,702	128	857,801
2006	1,000,000	8,325	1.000	8,325	110	915,795
2007	1,000,000	2,183	1.000	2,183	143	312,120
2008	1,000,000	4,840	1.005	4,863	177	860,811
2009	1,000,000	10,067	1.028	10,352	117	1,211,234
2010	500,000	6,357	1.031	6,555	153	1,002,915
2011	500,000	1,580	1.067	1,686	187	315,316
2012	500,000	2,696	1.238	3,338	137	457,269
2013	500,000	2,228	1.548	3,448	161	555,198
2014	500,000	1,920	3.080	5,912	180	1,064,232
2015	500,000	736	6.621	4,872	157	764,977
Total				\$4,381	3,451	\$15,119,332

Notes:

- (2) Provided by MVRMA
- (3) Based on data provided by MVRMA
- (4) Based on Exhibit 14
- (5) = (3) x (4)
- (6) From Exhibit 19, Col (6)
- $(7) = (5) \times (6)$

#### Ultimate Loss Based on Paid Loss per Closed Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Paid Loss per Closed Claim	Loss Development Factors	Projected Average Loss	Selected Ultimate Claims	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$2,335	1.000	\$2,335	89	\$207,853
1990	250,000	4,443	1.000	4,443	99	439,863
1991	250,000	1,500	1.000	1,500	56	84,015
1992	250,000	1,936	1.000	1,936	72	139,376
1993	250,000	6,462	1.000	6,462	93	600,979
1994	250,000	982	1.000	982	108	106,065
1995	250,000	1,845	1.000	1,845	85	156,790
1996	250,000	2,958	1.000	2,958	121	357,926
1997	500,000	7,137	1.000	7,137	99	706,526
1998	500,000	3,903	1.000	3,903	142	554,289
1999	500,000	4,627	1.000	4,627	142	657,094
2000	500,000	1,127	1.000	1,127	146	164,560
2001	500,000	4,215	1.000	4,215	118	497,423
2002	500,000	8,214	1.000	8,214	164	1,347,177
2003	1,000,000	1,823	1.000	1,823	148	269,762
2004	1,000,000	4,302	1.000	4,302	119	511,964
2005	1,000,000	6,702	1.000	6,702	128	857,801
2006	1,000,000	8,325	1.007	8,386	110	922,465
2007	1,000,000	2,183	1.011	2,206	143	315,487
2008	1,000,000	4,840	1.020	4,936	177	873,750
2009	1,000,000	10,067	1.036	10,429	117	1,220,171
2010	500,000	6,357	1.051	6,684	153	1,022,660
2011	500,000	1,380	1.209	1,668	187	311,972
2012	500,000	1,616	1.409	2,277	137	311,936
2013	500,000	1,823	2.113	3,851	161	620,059
2014	500,000	1,391	4.860	6,762	180	1,217,173
2015	500,000	674	10.206	6,877	157	1,079,612
Total				\$4,507	3,451	\$15,554,748

Notes:

- (2) Provided by MVRMA
- (3) Based on data provided by MVRMA
- (4) Based on Exhibit 14
- $(5) = (3) \times (4)$
- (6) From Exhibit 19, Col (6)
- (7) = (5) x (6)

#### General Liability Exhibit 12.1

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Incurred	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$207,853	1.000	\$207,853
1990	439,863	1.000	439,863
1991	84,015	1.000	84,015
1992	139,376	1.000	139,376
1993	600,979	1.000	600,979
1994	106,065	1.000	106,065
1995	156,790	1.000	156,790
1996	357,926	1.000	357,926
1997	706,526	1.000	706,526
1998	554,289	1.000	554,289
1999	657,094	1.001	657,503
2000	164,560	1.001	164,765
2001	497,423	1.002	498,664
2002	1,347,177	1.005	1,353,907
2003	269,762	1.010	272,464
2004	511,964	1.020	522,272
2005	857,801	1.041	892,690
2006	915,795	1.083	991,806
2007	312,120	1.099	343,096
2008	856,672	1.121	960,526
2009	1,177,813	1.150	1,354,934
2010	972,613	1.195	1,162,512
2011	293,869	1.263	371,267
2012	366,664	1.396	511,874
2013	354,313	1.661	588,612
2014	334,063	2.259	754,759
2015	100,820	4.123	415,709
Total	\$13,344,203		\$15,171,043

Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4) = (2) x (3)

#### General Liability Exhibit 12.2

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
	+	4 000	6207 0F2
1989	\$207,853	1.000	\$207,853
1990	439,863	1.000	439,863
1991	84,015	1.000	84,015
1992	139,376	1.000	139,376
1993	600,979	1.000	600,979
1994	106,065	1.000	106,065
1995	156,790	1.000	156,790
1996	357,926	1.000	357,926
1997	706,526	1.000	706,526
1998	554,289	1.000	554,289
1999	657,094	1.001	657,744
2000	164,560	1.002	164,886
2001	497,423	1.004	499,395
2002	1,347,177	1.008	1,357,882
2003	269,762	1.016	274,066
2004	511,964	1.032	528,431
2005	857,801	1.065	913,870
2006	915,795	1.135	1,039,427
2007	312,120	1.158	361,589
2008	856,672	1.190	1,019,246
2009	1,177,813	1.242	1,462,989
2010	972,613	1.330	1,293,881
2011	252,485	1.486	375,183
2012	216,588	1.798	389,428
2013	278,864	2.454	684,412
2014	233,752	4.123	963,806
2015	85,569	10.308	882,050
	-, -		
Total	\$12,961,733		\$16,221,969

Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4) = (2) x (3)

#### Loss Development Patterns

Month of	\$500K Limits %	Developed	\$1M Limits %	Developed	Industry % Developed			
– Development	Incurred	Paid	Incurred	Paid	Incurred	Paid		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
324	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
312	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
300	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
288	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
276	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
264	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
252	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
240	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
228	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
216	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
204	100.0%	100.0%	100.0%	100.0%	99.9%	99.9%		
192	100.0%	100.0%	100.0%	100.0%	99.9%	99.8%		
180	100.0%	100.0%	100.0%	100.0%	99.8%	99.6%		
168	100.0%	100.0%	100.0%	100.0%	99.5%	99.2%		
156	100.0%	100.0%	100.0%	100.0%	99.0%	98.4%		
144	100.0%	100.0%	100.0%	100.0%	98.0%	96.9%		
132	100.0%	100.0%	100.0%	100.0%	96.1%	93.9%		
120	100.0%	99.0%	100.0%	99.0%	92.3%	88.1%		
108	100.0%	98.9%	100.0%	98.6%	91.0%	86.3%		
96	100.0%	98.1%	100.0%	97.7%	89.2%	84.0%		
84	97.6%	97.1%	97.1%	96.2%	86.9%	80.5%		
72	96.6%	94.8%	95.3%	90.5%	83.7%	75.2%		
60	93.3%	82.4%	88.9%	77.4%	79.2%	67.3%		
48	81.2%	70.7%	74.4%	59.7%	71.6%	55.6%		
36	64.9%	45.6%	49.4%	32.4%	60.2%	40.7%		
24	30.9%	19.4%	22.0%	13.5%	44.3%	24.3%		
12	12.9%	7.8%	4.7%	2.9%	24.3%	9.7%		

Notes:

(2) Based on Exhibit 15

(3) Based on Exhibit 16

(4) = Col (2) lagged 6 months

(5) = Col (3) lagged 6 months

(6)-(7) Based on insurance industry development

#### General Liability Exhibit 14

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Severity Development Patterns

Month of	\$500K Limits %	Developed	\$1M Limits %	Developed
Development	Incurred	Paid	Incurred	Paid
(1)	(2)	(3)	(4)	(5)
324	100.0%	100.0%	100.0%	100.0%
312	100.0%	100.0%	100.0%	100.0%
300	100.0%	100.0%	100.0%	100.0%
288	100.0%	100.0%	100.0%	100.0%
276	100.0%	100.0%	100.0%	100.0%
264	100.0%	100.0%	100.0%	100.0%
252	100.0%	100.0%	100.0%	100.0%
240	100.0%	100.0%	100.0%	100.0%
228	100.0%	100.0%	100.0%	100.0%
216	100.0%	100.0%	100.0%	100.0%
204	100.0%	100.0%	100.0%	100.0%
192	100.0%	100.0%	100.0%	100.0%
180	100.0%	100.0%	100.0%	100.0%
168	100.0%	100.0%	100.0%	100.0%
156	100.0%	100.0%	100.0%	100.0%
144	100.0%	100.0%	100.0%	100.0%
132	100.0%	100.0%	100.0%	100.0%
120	100.0%	99.3%	100.0%	99.3%
108	100.0%	99.2%	100.0%	98.9%
96	99.9%	98.5%	99.5%	98.0%
84	97.5%	97.5%	97.2%	96.5%
72	97.0%	95.1%	95.7%	90.9%
60	93.7%	82.7%	89.1%	77.7%
48	80.8%	71.0%	74.1%	60.6%
36	64.6%	47.3%	50.1%	33.9%
24	32.5%	20.6%	24.1%	15.3%
12	15.1%	9.8%	6.2%	4.4%

Notes:

- (2) Based on Exhibit 17
- (3) Based on Exhibit 18
- (4) = Col (2) lagged 6 months
- (5) = Col (3) lagged 6 months

General Liability Exhibit 15 Page 1

#### Miami Valley Risk Management Association General Liability December 31, 2015

Incurred	Loss at \$500K SIR	

Accident							Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	97,608	277,034	216,667	211,909	210,162	214,162	207,853	207,853	207,853	207,853	207,853	207,853	207,853	207,853
1990	102,048	155,946	209,752	252,657	436,862	436,928	435,782	432,379	439,863	439,863	439,863	439,863	439,863	439,863
1991	12,322	71,071	61,614	53,618	97,558	139,535	84,015	84,015	84,015	84,015	84,015	84,015	84,015	84,015
1992	21,837	28,145	162,765	137,258	123,437	140,033	143,955 865,450	143,955	139,376 850,979	139,376 850,979	139,376 850,979	139,376 850,979	139,376 850,979	139,376 850,979
1993	369,601	528,569	536,313	795,876	860,519 106,375	860,519 106,065	106,065	865,450 106,065	850,979 106,065	106,065	106,065	106,065	106,065	106,065
1994 1995	34,540 89,788	86,003 74,221	222,029 123,230	97,658 134,129	106,575	156,790	156,790	156,790	156,790	156,790	156,790	156,790	156,790	156,790
1995	67,665	186,767	271,412	290,544	373,656	356,656	352,170	357,926	357,926	357,926	357,926	357,926	357,926	357,926
1997	51,105	95,958	683,597	761,629	721,708	706,526	706,526	706,526	706,526	706,526	706,526	706,526	706,526	706,526
1998	36,819	222,626	279,432	552,177	568,186	554,289	554,289	554,289	554,289	554,289	554,289	554,289	554,289	554,289
1999	81,637	187,463	379,072	471,046	674,779	657,094	657,094	657,094	657,094	657,094	657,094	657,094	657,094	657,094
2000	98,597	90,655	192,961	191,743	164,560	164,560	164,560	164,560	164,560	164,560	164,560	164,560	164,560	164,560
2001	89,836	282,253	445,860	522,576	522,589	522,198	522,271	497,423	497,423	497,423	497,423	497,423	497,423	497,423
2002	256,428	309,254	644,254	792,306	1,028,490	1,078,490	1,139,677	1,347,177	1,347,177	1,347,177	1,347,177	1,347,177	1,347,177	1,347,177
2003	S0,550	134,895	273,187	306,344	259,291	276,582	269,762	269,762	269,762	269,762	269,762	269,762	269,762	
2004	46,226	88,740	255,616	385,688	441,920	453,961	511,964	511,964	511,964	511,964	511,964	511,964		
2005	108,411	258,559	529,054	475,826	486,242	536,564	541,563	857,800	857,801	857,801	857,801			
2006	92,218	278,812	408,397	637,848	685,110	960,582	935,568	935,568	915,795	915,795				
2007	70,876	146,108	259,967	319,743	323,367	312,120 819,263	312,120 856,672	312,120 856,672	312,120					
2008 2009	113,771 66,190	206,028 226,128	764,853 501,457	813,062 803,561	830,118 1,207,206	1,164,907	1,137,677	000,072						
2010	59,101	163,276	590,658	841,098	930,152	972,613	1,137,077							
2010	131,480	142,329	212,573	241,549	293,869	572,015								
2012	74,182	200,841	291,664	366,664	,									
2013	95,338	277,389	354,313	/										
2014	164,985	334,063												
2015	100,820													
Accident	40.0.	24.25	20.40	10.00	60.72		-to-Age Facto 84-96	rs 96-108	108-120	120-132	132-144	144-156	156-168	168-180
Year	12-24 2.838	24-36 0.782	36-48 0.978	48-60 0.992	60-72 1,019	72-84 0.971	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1989 1990	2.838	1.345	1.205	1.729	1.000	0.971	0.992	1.017	1,000	1.000	1.000	1.000	1.000	1.000
1990	5.768	0.867	0.870	1.820	1.430	0.602	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.289	5.783	0.843	0.899	1.134	1.028	1.000	0.968	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.430	1.015	1.484	1.081	1.000	1.006	1.000	0.983	1.000	1.000	1.000	1.000	1.000	1.000
1994	2.490	2.582	0.440	1.089	0.997	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	0.827	1,660	1.088	1.412	0.828	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	2.760	1.453	1.070	1.286	0.955	0.987	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.878	7.124	1.114	0.948	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	6.046	1.255	1.976	1.029	0.976	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.296	2.022	1.243	1.433	0.974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	0.919	2.129	0.994	0.858	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	3.142	1.580	1.172	1.000	0.999	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000
2002	1.206	2.083	1.230	1.298 0.846	1.049 1.067	1.057 0.975	1.182 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	
2003	2.669	2.025 2.881	1.121 1.509	1.146	1.087	1.128	1.000	1.000	1.000	1.000	1.000	1.000		
2004 2005	1.920 2.385	2.881	0.899	1.022	1.103	1.009	1.584	1.000	1.000	1.000	1.000			
2005	3.023	1.465	1.562	1.022	1.402	0.974	1.000	0.979	1.000	1.000				
2007	2.061	1.779	1.230	1.011	0.965	1.000	1.000	1.000						
2008	1.811	3.712	1.063	1.021	0.987	1.046	1.000							
2009	3.416	2.218	1.602	1,502	0.965	0.977								
2010	2.763	3.618	1.424	1.106	1.046									
2011	1.083	1.494	1.136	1.217										
2012	2.707	1.452	1.257											
2013	2.910	1.277												
2014	2.025													
All Yr Vol	2.035	1.880	1.228	1.143	1.031	1.004	1.053	0.997	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	2.018	1.834	1.224	1.149	1.031	1.004	1.025	0.996	1.000	1.000	1.000	1.000	1.000	1,000
10 Yr Vol	2.287	2.097	1.270	1.155	1.057	1.016	1.084	0.997	1.000	1.000	1.000	1.000	1.000	1,000
10 Yr Vol Ex. H/L	2.395	2.026	1.280	1.114	1.031	1.014	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	2.129	1.931	1.298	1.187	1.064	0.997	1,100	0.993	1.000	1.000	1.000	1.000	1.000	1,000
5 Yr Vol Ex. H/L	2.341	1.767	1.324	1.084	1.010	0.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	2.428	1.384	1.324	1.289	0.996	1.004	1.000	0.991	1.000	1.000	1.000	1.000	1.000	1.000
Prior	2.450	2.200	1.250	1.133	1.030	1.020	1.029	0.999	1.000	1.000	1.000	1,000	1.000	1.000
Selected	2.400	2.100	1.250	1.150	1.035	1.010	1.025	1.000	1.000	1.000	1.000	1,000	1.000	1.000
LDFs	7.763	3.235	1.540	1.232	1.071	1.035	1.025	1.000	1,000	1.000	1.000	1.000	1.000	1.000
% Incurred	12.9%	30.9%	64.9%	81.2%	93.3%	96.6%	97.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
/v incarred														

General Liability Exhibit 15 Page 2

#### Miami Valley Risk Management Association General Liability December 31, 2015 Incurred Loss at \$500K SIR

Accident						Maturii	ty (Age in Mo	nths)					
Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2006 2007 2006 2007 2006 2007 2008 2009 2011 2011 2013 2014	180 207,853 439,863 84,015 139,376 850,979 106,065 156,790 357,926 706,526 554,289 657,094 164,560 497,423	192 207,853 439,863 84,015 139,976 850,979 106,065 156,709 357,926 706,526 554,289 657,094 164,560	204 207,853 439,863 84,015 139,376 850,879 106,065 156,790 357,926 706,526 706,526 554,289 657,094	216 207,853 439,863 84,015 139,376 850,979 106,065 156,799 357,926 706,526 554,289	228 207,853 439,863 84,015 139,376 850,379 106,065 156,790 357,926 706,526	240 207,853 439,863 84,015 139,376 850,979 106,065 156,790 357,926	252 207,853 439,863 84,015 139,376 850,379 106,065 156,790	264 207,853 439,863 84,015 139,376 850,979 106,065	276 207,853 439,863 84,015 139,376 850,979	288 207,853 439,863 84,015 139,376	300 207,853 439,863 84,015	312 207,853 439,863	324 207,853
2015													
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1997 2000 2001 2000 2001 2002 2003 2004 2005 2006 2005 2006 2007 2008 2009 2000 2001 2008 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000	252-264 252-264 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Vol All Yr Vol Ex. H/L 10 Yr Vol 10 Yr Vol Ex. H/L 5 Yr Vol 5 Yr Vol Ex. H/L 3 Yr Vol 3 Yr Vol	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
Prior Selected LDFs % Incurred	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 1.000 100.0%	1.000 1.000 100.0%

# General Liability Exhibit 16 Page 1

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# Miami Valley Risk Management Association General Liability December 31, 2015 Paid Loss at \$500K SIR

Accident							Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	43,838	169,390	126,482	200,212	201,189	206,198	207,853	207,853	207,853	207,853	207,853	207,853	207,853	207,853
1990	36,218	72,223	101,376	172,281	429,216	429,282	431,947	432,379	439,863	439,863	439,863	439,863	439,863	439,863
1991	8,182	13,655	34,548	52,484	56,233	82,219	84,015	84,015	84,015	84,015	84,015	84,015	84,015	84,015
1992	4,787	16,680	48,844	84,126	96,940	133,151	138,407	138,779	139,376	139,376	139,376	139,376	139,376	139,376
1993	43,219	164,451	289,999	378,014	831,120	838,929	847,999	848,735	850,979	850,979	850,979	850,979	850,979	850,979
1994	6,926	65,029	86,321	97,658	99,653	106,065	106,065	106,065	106,065	106,065	106,065	106,065	106,065	106,065
1995	3,794	31,144	84,188	108,916	128,988	156,790	156,790	156,790	156,790	156,790	156,790	156,790	156,790	156,790
1996	9,115	94,177	201,725	247,114	331,060	336,010	339,152	357,926	357,926	357,926	357,926 706,526	357,926	357,926	357,926 706,526
1997 1998	19,900 15,685	56,485 138,193	170,375 201,920	690,512 252,856	705,609 546,353	706,526 554,289	706,526 554,289	706,526 554,289	706,526 554,289	706,526 554,289	554,289	706,526 554,289	706,526 554,289	554,289
1998	38,571	112,133	261,920	387,683	638,399	657,094	657,094	657,094	657,094	657,094	657,094	657,094	657,094	657,094
2000	42,870	76,054	105,748	162,267	164,560	154,560	164,560	164,560	164,560	164,560	164,560	164,560	164,560	164,560
2001	18,952	123,618	283,857	432,734	470,949	483,429	493,049	497,423	497,423	497,423	497,423	497,423	497,423	497,423
2002	61,435	146,396	268,703	639,459	872,109	897,035	975,645	1,021,028	1,053,852	1,060,070	1,347,177	1,347,177	1,347,177	1,347,177
2003	24,232	49,373	196,632	234,046	243,534	267,728	269,762	269,762	269,762	269,762	269,762	269,762	269,762	
2004	22,372	50,964	124,762	343,096	401,681	444,143	511,964	511,964	511,964	511,964	511,964	511,964		
2005	48,390	139,464	288,461	436,538	464,294	510,368	521,409	857,800	857,801	857,801	857,801			
2006	28,487	78,525	207,322	489,371	564,195	848, <del>9</del> 34	860,568	860,568	915,795	915,795				
2007	31,341	88,851	203,485	233,905	297,482	312,120	312,120	312,120	312,120					
2008	78,741	150,771	677,316	737,628	818,200	819,263	856,672	856,672						
2009	18,347	164,997	414,887	670,003	774,798	1,137,596	1,137,677							
2010	36,625	94,473	335,590	531,550	660,802	972,613								
2011	58,248	132,329	170,021	218,842 216,588	252,485									
2012 2013	41,813 71,626	72,238 172,455	168,777 278,864	210,506										
2014	105,074	233,752	270,004											
2015	85,569	233,732												
2040	00,000													
Accident						Age	to-Age Factor	s						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	3.864	0.747	1.583	1.005	1.025	1.008	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
1990	1.994	1.404	1.699	2.491	1.000	1.006	1.001	1.017	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.669	2.530	1.519	1.071	1.462	1.022	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	3.484	2.928	1.722	1.152	1.374	1.039	1.003	1.004	1.000	1.000	1.000	1.000	1.000	1.000
1993	3,805	1.763	1.304	2.199	1.009	1.011	1.001	1.003	1.000	1.000	1.000	1.000	1.000	1.000
1994	9,389	1.327	1.131	1.020	1.064	1.000	1.000 1.000	1.000 1,000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
1995	8.209	2.703	1,294	1.184	1.216 1.015	1.000 1.009	1.000	1.000	1.000	1,000	1,000	1,000	1,000	1.000
1996 1997	10.332 2.838	2.142 3.016	1.225 4.053	1.340 1.022	1.015	1.009	1.000	1.000	1.000	1.000	1,000	1,000	1,000	1.000
1998	8.811	1.461	1.252	2.161	1,015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.907	2.336	1.480	1.647	1.029	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1,000
2000	1.774	1.390	1.534	1.014	1.000	1,000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	6.523	2,296	1.524	1.088	1.026	1.020	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	2.383	1.835	2.380	1.364	1.029	1.088	1.047	1.032	1.006	1.271	1.000	1.000	1.000	
2003	2.038	3.983	1.190	1.041	1.099	1.008	1.000	1.000	1.000	1,000	1.000	1.000		
2004	2.278	2.448	2.750	1.171	1.106	1.153	1.000	1.000	1.000	1.000	1.000			
2005	2.882	2.068	1.513	1.064	1.099	1.022	1.645	1.000	1.000	1.000				
2006	2.757	2.640	2.360	1.153	1.505	1.014	1.000	1.064	1.000					
2007	2.835	2.290	1.149	1.272	1.049	1.000	1.000	1.000						
2008	1.915	4.492	1.089	1.109	1.001	1,046	1.000							
2009	8,993	2.515	1.615	1.156	1.468	1.000								
2010 2011	2.579 2.272	3.5S2 1.285	1.584 1.287	1.243 1.154	1.472									
2011	1.728	2.336	1,287	1.134										
2012	2.408	1.617	1,205											
2015	2.225	1.017												
2021	LILLO													
All Yr Vol	2.947	2.155	1.587	1.288	1.129	1.024	1.044	1.011	1.001	1.038	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	2.884	2.102	1.567	1.268	1.108	1.019	1.008	1.006	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	2.560	2.506	1.475	1.180	1.202	1.037	1.069	1.015	1.001	1.051	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	2.379	2.346	1.527	1.157	1.201	1.029	1.010	1.007	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	2.250	2.150	1.344	1.172	1.313	1.017	1.110	1.020	1.002	1.090	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	2.292	2.105	1.434	1.188	1.398	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	2.190	1.638	1.434	1.188	1.300	1.017	1.000	1.027	1.000	1.000	1.000	1.000	1.000	1.000
Prior	2.630	2.500	1.600	1.175	1.110	1.030	1.011	1.010	1.001	1.015	1.000	1.000	1.000	1.000
Selected	2.500	2.350	1.550	1.165	1.150	1.025	1.010	1.008	1.001	1.010	1.000	1.000	1.000	1.000
LDFs	12.875	5.150	2.191	1.414	1.214	1.025	1.010	1.008	1.001	1.010	1.000	1.000	1.000	1.000
% Paid	7.8%	19.4%	45.6%	70.7%	82,4%	94.8%	97.1%	98.1%	98.9%	99.0%	100.0%	100.0%	100.0%	100.0%
70 T &LU		2011/0					/9		/ •					

General Liability Exhibit 16 Page 2

#### Miami Valley Risk Management Association General Liability December 31, 2015 Paid Loss at \$500K SIR

Accident						Maturit	y (Age in Mo	nths)					
Year 1989 1990 1991 1992 1993 1994 1995 1995 1996 1997 2000 2001 2002 2003 2004 2005 2004 2005 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	180 207,853 449,863 84,015 139,376 850,979 106,065 156,790 357,926 706,526 706,526 706,526 657,094 164,560 497,423	192 207,853 439,863 84,015 139,376 850,979 106,065 156,790 357,926 706,526 554,289 657,094 164,560	204 207,853 439,863 84,015 139,976 850,979 106,065 156,790 357,926 706,526 706,526 554,289 657,094	216 207,853 439,863 84,015 139,976 850,979 106,065 156,790 357,926 705,526 554,289	228 207,853 439,863 84,015 139,376 850,979 106,065 156,790 357,926 706,526	240, 853 439, 863 84, 015 139, 376 850, 979 106, 065 156, 790 357, 926	252 207,853 439,863 84,015 139,376 850,979 106,065 156,790	264 207,853 439,863 84,015 139,376 850,979 106,065	276 207,853 439,863 84,015 139,376 850,979	288 207,853 439,863 84,015 139,376	300 207,853 439,863 84,015	312 207,853 439,863	324 207,853
2015													
Accident Year 1989 1990 1991 1992 1994 1995 1996 1997 1998 1999 2000 2001 2001 2002 2003 2004 2005 2006 2007 2008 2009 2000 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Vol All Yr Vol Ex. H/L 10 Yr Vol 10 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L 3 Yr Vol 9 Yr Vol Ex. H/L 9 Yr Vol 9 Yr Vol 9 Prior	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000	1.000	
Selected LDFs % Paid	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%

#### General Liability Exhibit 17 Page 1

#### Miami Valley Risk Management Association General Liability December 31, 2015 Incurred Loss per Reported Claim at \$500K SIR

A + +						N	Maturity (Age	in Months)						
Accident Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	1,251	3,184	2,462	2,381	2,361	2,406	2,335	2,335	2,335	2,335	2,335	2,335 4,443	2,335 4,443	2,335 4,443
1990	1,260	1,752	2,231	2,605	4,458	4,458	4,402	4,367	4,443	4,443	4,443	4,443	4,443	1,500
1991	287	1,394	1,141	993	1,807	2,492	1,500	1,500	1,500 1,936	1,500 1,936	1,500 1,936	1,936	1,936	1,936
1992	465	461	2,429	1,933	1,714	1,945	1,999 9,306	1,999 9,306	9,150	9,150	9,150	9,150	9,150	9,150
1993	5,280	6,368	6,026	8,843	9,456 985	9,253 982	9,506	9,300	982	982	982	982	982	982
1994	335	811	2,056	904 1,578	2,228	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845
1995	1,230	952	1,467 2,262	2,382	3,063	2,923	2,910	2,958	2,958	2,958	2,958	2,958	2,958	2,958
1996	663 601	1,638 1,021	6,905	7,693	7,290	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137
1997 1998	315	1,674	2,010	3,916	4,030	3,931	3,903	3,903	3,903	3,903	3,903	3,903	3,903	3,903
1999	669	1,409	2,688	3,341	4,786	4,627	4,627	4,627	4,627	4,627	4,627	4,627	4,627	4,627
2000	789	657	1,349	1,341	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127
2001	856	2,543	3,877	4,355	4,355	4,352	4,352	4,145	4,215	4,215	4,215	4,215	4,215	4,215 8,214
2002	2,155	1,995	4,027	4,861	6,310	6,617	6,949	8,214	8,214	8,214	8,214	8,214 1,823	8,214 1,823	8,214
2003	414	950	1,897	2,113	1,788	1,869	1,823	1,823	1,823	1,823	1,823 4,302	4,302	1,823	
2004	544	845	2,242	3,269	3,714	3,815	4,302	4,302	4,302 6,702	4,302 6,702	6,702	4,502		
2005	977	2,085	4,133	3,689	3,769	4,159	4,198 8,505	6,650 8,505	8,325	8,325	0,702			
2006	1,013	2,733	3,889	5,906	6,344	8,733	2,183	2,183	2,183	0,525				
2007	554	1,029	1,831	2,236 4,594	2,261 4,690	2,183 4,629	4,840	4,840	2,105					
2008	711	1,205	4,371 4,286	4,594 6,868	10,318	9,956	9,724	1,010						
2009	649 444	2,001 1,103	4,280 3,912	5,534	6,079	6,357	37.21							
2010	444 764	786	1,149	1,306	1,580	0,007								
2011 2012	613	1,488	2,145	2,696										
2012	696	1,778	2,228											
2013	1,044	1,920	-,											
2015	736	-												
Accident							-to-Age Facto: 84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
Year	12-24	24-36	36-48	48-60	60-72	72-84 0.971	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1989	2.545	0.773	0.967	0.992	1.019		0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.391	1.273	1.167	1.711	1.000 1.379	0,987 0.602	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
1991	4.863	0.819	0.870 0.796	1.820 0.887	1.134	1.028	1.000	0.968	1.000	1.000	1.000	1.000	1.000	1.000
1992	0.993	5.265	1.467	1.069	0.978	1.006	1.000	0.983	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.206	0.946	0.440	1.089	0.978	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994 1995	2.419 0.774	2.534 1.542	1.076	1.412	0.828	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	2.470	1.381	1.053	1.286	0.955	0.996	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1,698	6.764	1.114	0.948	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	5.319	1.201	1.948	1.029	0,976	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.105	1,907	1.243	1.433	0.967	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
2000	0.833	2.054	0.994	0.841	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000
2001	2.972	1.525	1.123	1.000	0.999	1.000	0.952	1.017	1.000	1.000	1.000	1.000	1.000	1.000
2002	0.926	2.018	1.207	1.298	1.049	1.050	1.182	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
2003	2.293	1.997	1.114	0.846	1.045	0.975	1.000 1.000	1.000 1.000	1.000	1.000	1.000	2.000		
2004	1.554	2.653	1.458	1.136	1.027	1.128 1.009	1.584	1.008	1.000	1.000	2.000			
2005	2.135	1.982	0.892	1.022	1.103 1.377	0.974	1.000	0.979	1.000	1.000				
2006	2.697	1.423	1.518	1.074 1.011	0.965	1.000	1.000	1.000	21000					
2007	1.858	1.779	1.221	1.011	0.983	1.046	1.000	11000						
2008	1.694 3.084	3.628 2.142	1.051 1.602	1.502	0.965	0.977								
2009	2.483	3.546	1.415	1.099	1.046									
2010 2011	2.483 1.029	1.461	1.136	1.210										
2012	2.427	1.442	1.257											
2012	2.555	1.253												
2014	1.839													
					1.075	0.000	1.036	0.999	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg	2.160	2.132	1.172	1.162	1.035	0,988 1.001	1.036	0.999	1,000	1.000	1.000	1.000	1.000	1.000
All Yr Avg Ex. H/L	2.086	1.990	1.170	1.146	1.028 1.056	1.001	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg	2.180	2.131	1.267 1.271	1.122 1.109	1.056	1.018	1.072	1.001	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg Ex. H/L	2.211	2.053 1.969	1.271	1.169	1.028	1.007	1.117	0.997	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg	2.066 2.249	1.969	1.292	1.110	0.999	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg Ex. H/L	2.249	1.385	1.269	1.270	0.999	1.007	1.000	0.996	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Avg Prior	2.273	2.050	1.250	1.145	1.030	1.010	1.035	1.001	1.000	1.000	1.000	1.000	1.000	1,000
FIO	E.100	2.000										4 000	1 000	1 000
Selected	2.150	1.990	1,250	1.160	1.035	1.005	1.025	1.001	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000
LDFs	6.621	3.080	1.548	1.238	1.067	1.031	1.026	1.001	1.000	1.000 100.0%	1.000 100.0%	100.0%	100.0%	100.0%
% Incurred	15.1%	32.5%	64.6%	80.8%	93.7%	97.0%	97 <b>.5</b> %	99.9%	100.0%	100.0%	100.0%	100.0%	100.070	100.070

# Miami Valley Risk Management Association General Liability December 31, 2015 Incurred Loss per Reported Claim at \$500K SIR

Accident						Maturi	ty (Age in Mo	nths)					
Year	180	192	204	216	228	240	252	264	276	288	300	312	324
1989	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335
1990	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	4,443	
1991	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500		
1992	1,936	1,936	1,936	1,936	1,936	1,936	1,936	1,936	1,936	1,936			
1993	9,150	9,150	9,150	9,150	9,150	9,150	9,150	9,150	9,150				
1994	982	982	982	982	982	982	982	982					
1995	1,845	1,845	1,845	1,845	1,845	1,845	1,845						
1996	2,958	2,958	2,958	2,958	2,958	2,958							
1997	7,137	7,137	7,137	7,137	7,137								
1998	3,903	3,903	3,903	3,903									
1999	4,627	4,627	4,627										
2000	1,127	1,127											
2001	4,215												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
Accident						Age-to-Age							
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
1989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1,000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
										1 000			
All Yr Avg	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Avg Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Avg	1.000	1.000	1.000										
10 Yr Avg Ex. H/L	1.000	1.000	1.000										
5 Yr Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Avg Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
3 Yr Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
								1.000	1 000	1 000	1 000	1 000	1 000
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000 100.0%	1.000 100.0%	1.000 100.0%	1.000 100.0%	1.000 100.0%	1.000 100.0%	100.0%
% Incurred	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### General Liability Exhibit 18 Page 1

#### Miami Valley Risk Management Association General Liability December 31, 2015

Paid	Loss per	Closed	Claim	at \$500K SIR	

Accident						,	Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	719	2,200	1,562	2,275	2,286	2,343	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335
1990	541	881	1,179	1,893	4,425	4,426	4,408	4,367	4,443	4,443	4,443	4,443	4,443	4,443
1991	215	303	705	1,009	1,061	1,523	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
1992	117	293	814	1,275	1,405	1,902	1,949	1,955	1,936	1,936	1,936	1,936 9,150	1,936 9,150	1,936 9,150
1993	786	2,284	3,537	4,345	9,445	9,533	9,422	9,225	9,150	9,150 982	9,150 982	9,150	9,150	982
1994	75	638	807 1,066	904 1,345	931 1,554	991 1,845	982 1,845	982 1,845	982 1,845	1,845	1,845	1,845	1,845	1,845
1995	67 104	421 880	1,066	2,112	2,759	2,800	2,826	2,958	2,958	2,958	2,958	2,958	2,958	2,958
1996	258	880 649	1,770	7,269	7,274	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137
1997 1998	149	1,124	1,541	1,859	3,931	3,931	3,903	3,903	3,903	3,903	3,903	3,903	3,903	3,903
1999	344	897	2,015	2,872	4,660	4,627	4,627	4,627	4,627	4,627	4,627	4,627	4,627	4,627
2000	390	576	778	1,159	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127
2001	220	1,261	2,678	3,796	4,025	4,097	4,178	4,215	4,215	4,215	4,215	4,215	4,215	4,215
2002	544	996	1,816	4,179	5,451	5,606	5,986	6,264	6,465	6,503	8,214	8,214	8,214	8,214
2003	216	374	1,425	1,696	1,703	1,834	1,823	1,823	1,823	1,823	1,823	1,823	1,823	
2004	291	525	1,248	3,063	3,433	3,764	4,302	4,302	4,302	4,302	4,302	4,302		
2005	526	1,245	2,445	3,520	3,656	4,019	4,106	6,650	6,702	6,702	6,702			
2006	352	844	2,116	4,798	5,425	8,009	7,895	7,895	8,325	8,325				
2007	277	684	1,485	1,707	2,110	2,183	2,183	2,183	2,183					
2008	532	919	4,056	4,339	4,675	4,629	4,840	4,840						
2009	197	1,557	3,806	5,982	6,918	9,807	9,724							
2010	293	665	2,314	3,592	4,435	6,357								
2011	371	735	945	1,202	1,380									
2012	394	543	1,260	1,616										
2013 2014	582 705	1,142 1,391	1,823											
2014	674	1,591												
2013	074													
Accident							-to-Age Factor		108-120	120-132	132-144	144-156	156-168	168-180
Year	12-24	24-36	36-48	48-60	60-72 1.025	72-84 0.997	84-96 1.000	96-108 1.000	1,000	1.000	1.000	1.000	1.000	1.000
1989	3.061	0.710	1.457	1.005 2.337	1.025	0.996	0.991	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.629	1.338 2.324	1.606 1.432	1,051	1.435	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991 1992	1.409 2.506	2.524	1.452	1.102	1.354	1.025	1.003	0.990	1.000	1.000	1.000	1.000	1.000	1.000
1993	2.907	1.548	1.229	2.174	1.009	0.988	0.979	0.992	1.000	1.000	1.000	1.000	1.000	1.000
1993	8.469	1,265	1.121	1.030	1.064	0.991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	6.323	2.532	1.262	1.156	1.187	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1996	8.497	2.010	1.194	1.306	1,015	1.009	1.047	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	2.512	2.916	3,840	1.001	0.981	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	7.521	1.372	1.206	2.114	1.000	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.605	2.246	1.425	1.623	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.478	1.350	1.491	0.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	5.724	2.123	1.417	1.060	1.018	1.020	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.832	1.823	2.302	1.304	1.029	1.068	1.047	1.032	1.006	1.263	1.000	1.000	1.000	
2003	1.729	3.809	1.190	1.004	1.077	0.994	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000		
2004	1.808	2.375	2.455	1.121	1.096	1.143 1.022	1.000 1.620	1.000 1.008	1.000	1,000	1.000			
2005	2.367	1.963	1.440	1.038	1.099 1.476	0.986	1.000	1,055	1.000	1,000				
2005	2.401	2.505	2.268 1.149	1.131 1.236	1.476	1.000	1.000	1.000	1.000					
2007 2008	2.465 1.728	2.173 4.412	1.149	1.238	0.990	1.000	1.000	1,000						
2008	7.890	2.445	1.572	1,156	1.418	0.992								
2009	2.271	3.479	1.552	1.235	1.433									
2011	1.982	1.285	1.273	1.147										
2012	1.377	2.319	1.283											
2013	1.961	1.596												
2014	1.973													
All Yr Avg	3.324	2.188	1.575	1.277	1.124	1.012	1.035	1.005	1.000	1.015	1.000	1.000	1.000	1.000
All Yr Avg Ex. H/L	3.190	2.156	1.495	1.242	1.114	1.007	1.005	1.003	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg	2.641	2.455	1.525	1.145	1.167	1.027	1.068	1.009	1.001	1.026	1.000	1.000	1.000	1.000
10 Yr Avg Ex. H/L	2.143	2.357	1.466	1.143	1.151	1.018	1.007	1.005	1.000	1.000	1,000	1.000	1.000	1.000
5 Yr Avg	1.913	2.225	1.350	1.170	1.270	1.009	1.124	1.012	1.001	1.053	1.000	1.000	1.000	1.000 1.000
5 Yr Avg Ex. H/L	1.972	2.120	1.369	1.180	1.295	1.004	1.000	1.003	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000
3 Yr Avg	1.770	1.733	1.369	1.180	1.280 1.125	1.012 1.030	1.000 1.013	1.021 1.010	1.000 1.001	1.000 1.010	1.000	1.000	1.000	1.000
Prior	2.300	2.403	1.550	1.175	1,125	1.030	1.012	1.010	1.001	1.010	1.000	1.000		
Selected	2.100	2.300	1.500	1.165	1,150	1.025	1.010	1.008	1.001	1.007	1.000	1.000	1.000	1.000
LDFs	10.206	4.860	2.113	1.409	1.209	1.051	1.026	1.016	1.008	1.007	1.000	1.000	1.000	1.000
% Paid	9.8%	20.6%	47.3%	71.0%	82.7%	95.1%	97.5%	98.5%	99.2%	99.3%	100.0%	100.0%	100.0%	100.0%

Paid Loss per Closed Claim at \$500K SIR
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A 1 4						Maturi	y (Age in Mor	aths)					
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1997 2000 2001 2000 2000 2000 2000 2000 200	180 2,335 4,443 1,500 9,812 2,958 7,137 3,903 4,627 1,127 4,215	192 2,335 4,443 1,500 9,9150 9,9150 9,92 1,845 2,958 7,137 3,903 4,627 1,127	204 2,335 4,443 1,500 9,920 9,82 1,845 2,958 7,137 3,903 4,627	216 2,335 4,443 1,500 9,915 9,92 1,845 2,958 7,137 3,903	228 2,335 4,443 1,500 1,936 9,150 9,82 1,845 2,958 7,137	240 2,335 4,443 1,500 9,150 9,150 9,82 1,845 2,958	252 2,335 4,443 1,500 1,936 9,150 9,82 1,845	264 2,335 4,443 1,500 1,936 9,150 982	276 2,335 4,433 1,500 1,936 9,150	288 2,335 4,433 1,500 1,936	300 2,335 4,443 1,500	312 2,335 4,443	324 2,335
2015													
Accident Year 1989 1990 1991 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.011 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Uit
All Yr Avg Ali Yr Avg Ex. H/L 10 Yr Avg Ex. H/L 5 Yr Avg Ex. H/L 5 Yr Avg Ex. H/L 3 Yr Avg 7 Yr Avg 9 Yr Avg 9 Yr Avg	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.001 1.000 1.001 1.000 1.000 1.000 1.000 1.000	0.999 1.000 0.999 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000	1.000	
Selected LDFs % Paid	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%	1.000 1.000 100.0%

#### General Liability Exhibit 19

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Summary of Claim Counts

				Indicated	Selected
Accident	Closed	Open	Reported	IBNR	Ultimate
Year	Claims	Claims	Claims	Claims	Claims
(1)	(2)	(3)	(4)	(5)	(6)
1989	89	0	89	0	89
1989	99	0	99	0	99
1990	56	0	56	0	56
1991	72	0	72	0	72
1993	93	0	93	0	93
1993	108	0	108	0	108
1995	85	0	85	0	85
1995	121	0	121	0	121
1997	99	0	99	0	99
1998	142	0	142	0	142
1999	142	0	142	0	142
2000	146	0	146	0	146
2000	118	0	118	0	118
2001	164	0	164	0	164
2002	148	0	148	0	148
2003	119	0	119	0	119
2004	128	0	128	0	128
2005	110	0	110	0	110
2007	143	0	143	0	143
2008	177	0	177	0	177
2009	117	0	117	0	117
2010	153	0	153	0	153
2011	183	3	186	1	187
2012	134	2	136	1	137
2013	153	6	159	2	161
2014	168	6	174	6	180
2015	127	10	137	20	157
Total	3,394	27	3,421	30	3,451

#### Notes:

(2) Provided by MVRMA

(3) Provided by MVRMA

(4) Provided by MVRMA

(5) = (6) - (4)

(6) From Exhibit 20, Col (4)

#### General Liability Exhibit 20

#### Miami Valley Risk Management Association General Liability December 31, 2015

#### Ultimate Claims Based on Reported Claim Development Method

Accident Year (1)	Cumulative Reported Claims (2)	Claim Development <u>Factors</u> (3)	Projected Ultimate <u>Claims</u> (4)
1989	89	1.000	89
1990	99	1.000	99
1991	56	1.000	56
1992	72	1.000	72
1993	93	1.000	93
1994	108	1.000	108
1995	85	1.000	85
1996	121	1.000	121
1997	99	1.000	99
1998	142	1.000	142
1999	142	1.000	142
2000	146	1.000	146
2001	118	1.000	118
2002	164	1.000	164
2003	148	1.000	148
2004	119	1.000	119
2005	128	1.000	128
2006	110	1.000	110
2007	143	1.000	143
2008	177	1.000	177
2009	117	1.000	117
2010	153	1.001	153
2011	186	1.003	187
2012	136	1.006	137
2013	159	1.014	161
2014	174	1.034	180
2015	137	1.148	157
Total	3,421		3,451

- 1	N	of	• ~	<u> </u>	•
	IN	U	LC	:5	

(2) Provided by IVIVRIVI	(2)	Provided by M	/RMA
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(3) From Exhibit 21

(4)  $= (2) \times (3)$ 

#### General Liability Exhibit 21 Page 1

#### Miami Valley Risk Management Association General Liability December 31, 2015

Reported Claim Counts

							Reported C	Jaim Counts						
Accident							Maturity (Ag	ge in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	78	87	88	89	89	89	89	89	89	89	89	89	89	89
1990	81	89	94	97	98	98	99	99	99	99	99	99	99 5 -	99
1991	43 47	51	54	54 71	54	56 72	56 72	56 72	56 72	56 72	56 72	56 72	56 72	56 72
1992 1993	47	61 83	67 89	71 90	72 91	93	72 93	93	72 93	93	72 93	72 93	72 93	72 93
1993	103	106	108	108	108	108	108	108	108	108	108	108	108	108
1995	73	78	84	85	85	85	85	85	85	85	85	85	85	85
1996	102	114	120	122	122	122	121	121	121	121	121	121	121	121
1997	85	94	99	99	99	99	99	99	99	99	99	99	99	99
1998	117	133	139	141	141	141	142	142	142	142	142	142	142	142
1999	122	133	141	141	141	142	142	142	142	142	142	142	142	142
2000	125	138	143	143	146	146	146	146	146	146	146	146	146	146
2001	105	111	115	120	120	120	120	120	118	118	118	118	118	118
2002	119	155	160	163	163	163	164	164	164	164	164	164	164	164
2003	122	142	144	145	145	148	148	148	148	148	148	148	148	
2004	85	105	114	118	119	119	119	119	119	119	119	119		
2005	111	124	128	129	129	129	129	129	128	128	128			
2006	91 128	102 142	105 142	108 143	108 143	110 143	110 143	110 143	110 143	110				
2007 2008	128	142	142	145	143	145	143	143	143					
2009	102	113	117	117	117	117	117	1//						
2005	133	148	151	152	153	153								
2011	172	181	185	185	186	100								
2012	121	135	136	136										
2013	137	156	159											
2014	158	174												
2015	137													
Accident	12-24	24-36	36-48	48-60	60-72	Ag 72-84	e-to-Age Fact 84-96	ors 96-108	108-120	120-132	132-144	144-156	156-168	168-180
Year 1989	1.115	1.011	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1989	1.099	1.011	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1991	1.186	1.059	1.000	1.000	1.037	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.298	1.098	1.060	1.014	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.186	1.072	1.011	1.011	1.022	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1994	1.029	1.019	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.068	1.077	1.012	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1996	1.118	1.053	1.017	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.106	1.053	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.137	1.045	1.014	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.090	1.060	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.104	1.036	1.000	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.057	1.036	1.043	1.000	1.000	1,000	1.000	0.983	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.303 1.164	1.032 1.014	1.019 1.007	1.000 1.000	1.000 1.021	1.006 1.000	1.000 1,000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	
2003 2004	1.235	1.014	1.007	1.008	1.021	1.000	1,000	1.000	1.000	1.000	1.000	1.000		
2004	1.117	1.032	1.008	1.000	1.000	1.000	1.000	0.992	1.000	1.000	1.000			
2005	1.121	1.029	1.029	1.000	1.019	1.000	1.000	1.000	1.000	2.000				
2007	1.109	1.000	1.007	1,000	1.000	1.000	1.000	1.000						
2008	1.069	1.023	1,011	1.000	1.000	1.000	1.000							
2009	1.108	1.035	1.000	1.000	1.000	1.000								
2010	1.113	1.020	1.007	1.007	1.000									
2011	1.052	1.022	1.000	1.005										
2012	1.116	1.007	1.000											
2013	1,139	1.019												
2014	1.101													
All Yr Vol	1.120	1.036	1.012	1.003	1.004	1.001	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.120	1.036	1.012	1.005	1.004	1.001	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.101	1.036	1.002	1.002	1.003	1.001	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.101	1.023	1.005	1.002	1.004	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	1.101	1.020	1.004	1.003	1.003	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.109	1.021	1.002	1.002	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.118	1.017	1.002	1.004	1.000	1.000	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.120	1.025	1.012	1.002	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1.110	1.020	1.008	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.148	1.034	1.014	1.005	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

# General Liability Exhibit 21 Page 2

## Miami Valley Risk Management Association General Liability December 31, 2015

Reported Claim Counts

						керо	rted Claim Co	unts					
Accident						Matur	ity (Age in Mo	nths)					
Year	180	192	204	216	228	240	252	264	276	288	300	312	324
1989	89	89	89	89	89	89	89	89	89	89	89	89	89
1990	99	99	99	99	99	99	99	99	99	99	99	99	
1991	56	56	56	56	56	56	56	56	56	56	56		
1992	72	72	72	72	72	72	72	72	72	72			
1993	93	93	93	93	93	93	93	93	93				
1993	108	108	108	108	108	108	108	108					
1995	85	85	85	85	85	85	85						
1995	121	121	121	121	121	121							
1998	99	99	99	99	99								
1997	142	142	142	142	55								
1998	142	142	142	1.1									
2000	146	146											
2001	118	110											
2002	110												
2002													
2003													
2004													
2005													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
LOID													
Accident						Age-to-Ag							224.111
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
1989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1,000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	/•		
All Yr Vol Ex. H/L	1.000	1.000	1.000	T.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Vol	1.000	1.000	1.000										
10 Yr Vol Ex. H/L	1.000	1.000	1.000	1 000	1.000	1.000	1.000	1.000					
5 Yr Vol	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol Ex. H/L	1.000	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000			
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000					
Coloret - J	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
LUFS	1.000	1.000	1.000	21000	1,000								

#### General Liability Exhibit 22 Page 1

#### Miami Valley Risk Management Association General Liability December 31, 2015

Closed	Claim	Counts

Accident	10	24	36	48	60	72	Maturity (Ag 84	e in Months) 96	108	120	132	144	156	168
Year 1989	12 61	24 77	81	40 88	88	88	89	89	89	89	89	89	89	89
1990	67	82	86	91	97	97	98	99	99	99	99	99	99	99
1991	38	45	49	52	53	54	56	56	56	56	56	56	56	56
1992	41	57	60	65	69	70	71	71	72	72	72	72	72	72
1993	55	72	82	87	88	88	90	92	93	93	93	93	93	93
1994	92	102	107	108	107	107	108	108	108	108	108	108	108	108
1995	57	74	79	81	83	85	85	85	85	85	85	85	85	85
1996	88	107	114	117	120	120	120	121	121	121	121	121	121	121
1997	77	87	90	95	97	99	99	99	99	99	99	99	99	99
1998	105	123	131	136	139	141	142	142	142	142	142	142	142	142
1999	112	125	130	135	137	142	142	142	142	142	142	142	142	142
2000	110	132	136	140	146	146	146	146	146	146	146	146	146	146
2001	86	98	106	114	117	118	118	118	118	118	118	118	118	118
2002	113	147	148	153	160	160	163	163	163	163	164	164	164	164
2003	112	132	138	138	143	146	148	148	148	148	148	148	148	
2004	77	97	100	112	117	118	119	119	119	119	119	119		
2005	92	112	118	124	127	127	127	129	128	128	128			
2006	81	93	98	102	104	106	109	109	110	110				
2007	113	130	137	137	141	143	143	143	143					
2008	148	164	167	170	175	177	177	177						
2009	93	105	109	112	112	116	117							
2010	125	142	145	148	149	153								
2011	157	180	180	182	183									
2012	106	133	134	134										
2013	123	151	153											
2014 2015	149 127	168												
2015	127													
Accident						Age	-to-Age Facto	ors						
Year	12-24	24-36	36-48	48-50	<b>60-7</b> 2	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	1.262	1.052	1.086	1.000	1.000	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.224	1.049	1.058	1.066	1.000	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.184	1.089	1.061	1.019	1.019	1.037	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.390	1.053	1.100	1.045	1.014	1.014	1.000	1.014	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.309	1.139	1.061	1.011	1.000	1.023	1.022	1.011	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.109	1,049	1.009	0.991	1.000	1.009	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.298	1.068	1.025	1.025	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.216	1,065	1.026	1.026	1,000	1.000	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.130	1.034	1.056	1.021	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.171	1.065	1.038	1.022	1.014	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.116	1.040	1.038	1.015	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.200	1.030	1.029	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
2001	1.140	1.082	1.075	1.026	1.009	1.000	1.000	1.000	1.000	1.000 1.005	1.000 1.000	1.000 1.000	1.000 1.000	1,000
2002	1.301	1,007	1.034	1.046	1.000	1.019	1.000 1.000	1.000 1.000	1.000 1.000	1.005	1.000	1.000	1.000	
2003	1.179	1.045 1.031	1.000 1.120	1.036 1.045	1.021 1.009	1.014 1.008	1.000	1,000	1.000	1.000	1.000	1.000		
2004	1.260 1.217	1.031	1.051	1.045	1.009	1.000	1.000	0.992	1.000	1.000	1.000			
2005 2006	1.148	1.054	1.031	1.024	1.019	1.028	1.010	1.009	1.000	1.000				
2008	1.148	1.054	1.000	1.029	1.014	1.000	1,000	1.000	2.000					
2008	1.108	1.018	1.018	1.029	1.011	1.000	1.000	1.000						
2009	1.140	1.028	1.028	1.000	1.036	1.009								
2010	1.136	1.021	1.021	1.007	1,027									
2011	1.146	1.000	1.011	1.005										
2012	1.255	1.008	1.000											
2013	1.228	1.013												
2014	1.128													
All Yr Vol	1.185	1.040	1.036	1.024	1.012	1.008	1.003	1.001	1.000	1.001	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.186	1.040	1.034	1.024	1.012	1.008	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.162	1.025	1.025	1.024	1.014	1.007	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.160	1.026	1.019	1.023	1.014	1.007	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
5 Yr Vol	1.173	1.013	1.015	1.015	1.021	1.006	1.003	1,000	1.000	1.001	1,000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.168	1.014	1.016	1.013	1.020	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000
3 Yr Vol	1.196	1.006	1.011	1.005	1.023	1,002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

General Liability Exhibit 22 Page 2

## Miami Valley Risk Management Association General Liability December 31, 2015

Decembers	31, 2013
Closed Clain	n Counts

						Clos	ed Claim Cou	ints					
Accident						Matur	ity (Age in Mo	onths)					
Year	180	192	204	216	228	240	252	264	276	288	300	312	324
				89	89	89	89	89	89	89	89	89	89
1989	89	89	89							99	99	99	05
1990	99	99	99	99	99	99	99	99	99			35	
1991	56	56	56	56	56	56	56	56	56	56	56		
1992	72	72	72	72	72	72	72	72	72	72			
1993	93	93	92	93	93	93	93	93	93				
1994	108	108	108	108	108	108	108	108					
				85	85	85	85	200					
1995	85	85	85				63						
1996	121	121	121	121	121	121							
1997	99	99	99	99	99								
1998	142	142	142	142									
1999	142	142	142										
2000	146	146											
		140											
2001	118												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
Accident						Age-to-Ag	e Factors						
	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
Year							1.000	1.000	1.000	1.000	1.000	1.000	
1989	1.000	1.000	1.000	1.000	1.000	1.000						1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	0.989	1.011	1.000	1.000	1.000	1.000	1.000					
	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1994							1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
		2.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2010													
2012													
2013													
2014													
Ail Yr Vol	1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	-	_	
All Yr Vol Ex. H/L				1.000	1.000	1.000	1.000	1.000	2.000	21000			
10 Yr Vol	1.000	0.999	1.001										
10 Yr Vol Ex. H/L	1.000	1.000	1.000										
5 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000			
5 11 401	1.000	1.000	2.000	1.000									

Paid Incurred Paid
(6)
(6)
(8) \$207,853 439,863 84,015 139.376
(7) \$207,853 439,863 84,015 139,376
(6) \$207,853 439,863 84,015 139,376 600,979
52 52 5 7 7 7 7 7 7
<ul> <li>(5)</li> <li>\$207,853</li> <li>439,863</li> <li>84,015</li> <li>139,376</li> <li>600,979</li> <li>106,065</li> </ul>
(4)         (5)           \$207,853         \$207           \$207,853         \$207           \$39,863         \$39           \$4,015         \$4           \$139,376         \$139           \$1,207,079         \$600           \$106,065         \$106
(3) (4) \$207,853 \$20 439,863 43 84,015 8 139,376 13 1,207,079 1,22 106,065 10
(2)

General Liability Exhibit 23

> Miami Valley Risk Management Association General Liability December 31, 2015

Loss Summary

MVRMA General Liability Analysis 2015-12-31 3/9/2016 at 1:01 PM

Notes: (2)-(10) Provided by MVRMA Pinnacle Actuarial Resources, Inc.

# Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

Summary of Loss Reserve Estimates Retained Limits

Estimated Total Reserves (7)	¢	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37,307	221,651	\$258,958
Indicated IBNR (6)	\$0	0	0	0	0	0	0	0	0	٥	0	0	0	0	0	o	0	0	o	0	0	0	0	0	0	11,647	47,079	\$58,726
Case Reserves (5)	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	25,660	174,572	\$200,232
Paid Loss (4)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,162,693	264,349	\$8,978,753
Incurred Loss	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,188,353	438,921	\$9,178,985
Selected Ultimate Loss (2)	\$124.141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,200,000	486,000	\$9,237,711
Accident Year (1)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total

Pinnacle Actuarial Resources, Inc.

Notes: (2) From Exhibit 3, Col (10) (3)-(4),(5) Provided by MVRMA (6) = (2) - (3) (7) = (5) + (6)

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Comparison of Ultimate Loss to Prior Ultimate Loss Retained Limits

	Selected	Selected		
Assidant	Ultimate Loss	Ultimate Loss		Percent
Accident	@12/31/2014	@12/31/2015	Difference	Change
Year				(5)
(1)	(2)	(3)	(4)	(5)
1989	\$124,141	\$124,141	\$0	0.0%
1990	32,734	32,734	0	0.0%
1991	75,626	75,626	0	0.0%
1992	63,858	63,858	0	0.0%
1993	63,660	63,660	0	0.0%
1994	96,833	96,833	0	0.0%
1995	85,639	85,639	0	0.0%
1996	92,901	92,901	0	0.0%
1997	225,205	225,205	0	0.0%
1998	135,150	135,150	0	0.0%
1999	392,466	392,466	0	0.0%
2000	130,204	130,204	0	0.0%
2001	505,931	505,931	0	0.0%
2002	369,496	369,496	0	0.0%
2003	265,463	265,463	0	0.0%
2004	229,621	229,621	0	0.0%
2005	369,470	369,470	0	0.0%
2006	497,206	497,206	0	0.0%
2007	405,891	405,891	0	0.0%
2008	654,562	654,562	0	0.0%
2009	324,515	324,515	0	0.0%
2010	389,384	389,384	0	0.0%
2011	879,940	879,940	0	0.0%
2012	559 <i>,</i> 608	559,108	(500)	-0.1%
2013	567,000	582,706	15,706	2.8%
2014	1,318,000	1,200,000	(118,000)	-9.0%
Total	\$8,854,504	\$8,751,711	(\$102,794)	-1.2%

#### Notes:

- (2) From Pinnacle's analysis of unpaid loss & LAE at 12/31/2014
- (3) From Exhibit 3, Col (10)
- (4) = (3) (2)
- (5) = (4) / (2)

## Miarni Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

Selected Ultimate Loss Retained Limits

	Selected	Ultimate	Loss	(10)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,200,000	486,000	\$9,237,711	
	Average	Paid	Method	(6)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	580,958	1,177,766	405,249	\$9,132,977	
ıt	Average	Incurred	Method	(8)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,194,295	481,262	\$9,227,268	
MVRMA's Loss Development	Case	Reserve	Method	(2)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,240,443	497,748	\$9,289,902	
MVRM	Paid	Loss	Method	(9)	\$124 <b>,</b> 141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,180,134	375,640	\$9,107,484	
	Incurred	Loss	Method	(5)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,891	654,562	324,515	389,384	879,940	559,108	582,706	1,200,237	474,342	\$9,226,289	
lopment	Paid	Loss	Method	(4)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	406,200	655,558	325,504	391,760	890,714	572,883	611,772	1,281,578	434,491	\$9,326,064	
Industry Development	Incurred	Loss	Method	(3)	\$124,141	32,734	75,626	63,858	63,660	96,833	85,639	92,901	225,205	135,150	392,466	130,204	505,931	369,496	265,463	229,621	369,470	497,206	405,983	654,858	324,809	390,089	883,131	563,170	591,203	1,223,264	519,026	\$9,311,137	
	I		Retention	(2)	\$250.000	250,000	250,000	250,000	250,000	100,000	150,000	250,000	250,000	250,000	150,000	150,000	150,000	250,000	250,000	250,000	200,000	200,000	200,000	200,000	200,000	250,000	250,000	250.000	250.000	250,000	250,000		
		Accident	Year	(1)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total	

Pinnacle Actuarial Resources, Inc.

MVRMA Property Liability Analysis 2015-12-31 3/9/2016 at 1:03 PM

Provided by MVRMA From Exhibit 9.1, Col (4) From Exhibit 9.2, Col (4) From Exhibit 9.2, Col (4) From Exhibit 6, Col (8) From Exhibit 6, Col (8) From Exhibit 7, Col (7) From Exhibit 8, Col (7)

Notes: (2) (3) (4) (5) (7) (8) (9)

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Retained Limits

	Cumulative	Loss	Projected
Accident	Incurred	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$124,141	1.000	\$124,141
1990	32,734	1.000	32,734
1991	75,626	1.000	75,626
1992	63,858	1.000	63,858
1993	63,660	1.000	63,660
1994	96,833	1.000	96,833
1995	85,639	1.000	85,639
1996	92,901	1.000	92,901
1997	225,205	1.000	225,205
1998	135,150	1.000	135,150
1999	392,466	1.000	392,466
2000	130,204	1.000	130,204
2001	505,931	1.000	505,931
2002	369,496	1.000	369,496
2003	265,463	1.000	265,463
2004	229,621	1.000	229,621
2005	369,470	1.000	369,470
2006	497,206	1.000	497,206
2007	405,891	1.000	405,891
2008	654,562	1.000	654,562
2009	324,515	1.000	324,515
2010	389,384	1.000	389,384
2011	879,940	1.000	879,940
2012	559,108	1.000	559,108
2013	582,706	1.000	582,706
2014	1,188,353	1.010	1,200,237
2015	438,921	1.081	474,342
Total	\$9,178,985		\$9,226,289

#### Notes:

.

(2) Provided by MVRMA

(3) From Exhibit 10

(4)  $= (2) \times (3)$ 

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Retained Limits

	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$124,141	1.000	\$124,141
	32,734	1.000	32,734
1990		1.000	75,626
1991	75,626		
1992	63,858	1.000	63,858
1993	63,660	1.000	63,660
1994	96,833	1.000	96,833
1995	85,639	1.000	85,639
1996	92,901	1.000	92,901
1997	225,205	1.000	225,205
1998	135,150	1.000	135,150
1999	392,466	1.000	392,466
2000	130,204	1.000	130,204
2001	505,931	1.000	505,931
2002	369,496	1.000	369,496
2003	265,463	1.000	265,463
2004	229,621	1.000	229,621
2005	369,470	1.000	369,470
2006	497,206	1.000	497,206
2007	405,891	1.000	405,891
2008	654,562	1.000	654,562
2009	324,515	1.000	324,515
2010	389,384	1.000	389,384
2011	879,940	1.000	879,940
2012	559,108	1.000	559,108
2012	582,706	1.000	582,706
2013	1,162,693	1.015	1,180,134
2014	264,349	1.421	375,640
2015	204,343	1,721	373,040
Total	\$8,978,753		\$9,107,484

Notes:

(2) Provided by MVRMA

(3) From Exhibit 11

(4)  $= (2) \times (3)$ 

#### Ultimate Loss Based on Case Reserve Development Method **Retained Limits**

		Cumulative	6	D	arcant Doveloped		Projected Ultimate
Accident	<b>D</b> + - + -	Paid	Case .		ercent Developed Paid	Reserve	Loss
Year	Retention	Loss .	Reserves	Incurred			(8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1989	\$250,000	\$124,141	\$0	100.0%	100.0%	100.0%	\$124,141
1990	250,000	32,734	0	100.0%	100.0%	100.0%	32,734
1991	250,000	75,626	0	100.0%	100.0%	100.0%	75,626
1992	250,000	63,858	0	100.0%	100.0%	100.0%	63,858
1993	250,000	63,660	0	100.0%	100.0%	100.0%	63,660
1994	100,000	96,833	0	100.0%	100.0%	100.0%	96,833
1995	150,000	85,639	0	100.0%	100.0%	100.0%	85,639
1996	250,000	92,901	0	100.0%	100.0%	100.0%	92,901
1997	250,000	225,205	0	100.0%	100.0%	100.0%	225,205
1998	250,000	135,150	0	100.0%	100.0%	100.0%	135,150
1999	150,000	392,466	0	100.0%	100.0%	100.0%	392,466
2000	150,000	130,204	0	100.0%	100.0%	100.0%	130,204
2001	150,000	505,931	0	100.0%	100.0%	100.0%	505,931
2002	250,000	369,496	0	100.0%	100.0%	100.0%	369,496
2003	250,000	265,463	0	100.0%	100.0%	100.0%	265,463
2004	250,000	229,621	0	100.0%	100.0%	100.0%	229,621
2005	200,000	369,470	0	100.0%	100.0%	100.0%	369,470
2006	200,000	497,206	0	100.0%	100.0%	100.0%	497,206
2007	200,000	405,891	0	100.0%	100.0%	100.0%	405,891
2008	200,000	654,562	0	100.0%	100.0%	100.0%	654,562
2009	200,000	324,515	0	100.0%	100.0%	100.0%	324,515
2010	250,000	389,384	0	100.0%	100.0%	100.0%	389,384
2011	250,000	879,940	0	100.0%	100.0%	100.0%	879,940
2012	250,000	559,108	0	100.0%	100.0%	100.0%	559,108
2013	250,000	582,706	0	100.0%	100.0%	100.0%	582,706
2014	250,000	1,162,693	25,660	99.0%	98.5%	33.0%	1,240,443
2015	250,000	264,349	174,572	92.5%	70.4%	74.8%	497,748
Total		\$8,978,753	\$200,232				\$9,289,902

Notes:

(2)-(4) Provided by MVRMA

(5) Based on Exhibit 4, Col (3)

(6) Based on Exhibit 5, Col (3)

 $\begin{array}{l} (7) &= [(5) - (6)] / [(1.0 - (6)] \\ (8) &= (3) + [(4) / (7)] \end{array}$ 

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Loss Based on Incurred Loss per Reported Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Incurred Loss per Reported Claim	Loss Development Factors	Projected Average Loss	Selected Ultimate Claims	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$7,302	1.000	\$7,302	17	\$124,141
1990	250,000	1,488	1.000	1,488	22	32,734
1991	250,000	2,801	1.000	2,801	27	75,626
1992	250,000	2,661	1.000	2,661	24	63,858
1993	250,000	2,274	1.000	2,274	28	63,660
1994	100,000	2,201	1.000	2,201	44	96,833
1995	150,000	1,259	1.000	1,259	68	85,639
1996	250,000	1,010	1.000	1,010	92	92,901
1997	250,000	2,559	1.000	2,559	88	225,205
1998	250,000	1,186	1.000	1,186	114	135,150
1999	150,000	2,548	1.000	2,548	154	392,466
2000	150,000	819	1.000	819	159	130,204
2001	150,000	3,862	1.000	3,862	131	505,931
2002	250,000	2,463	1.000	2,463	150	369,496
2003	250,000	1,435	1.000	1,435	185	265,463
2004	250,000	1,290	1.000	1,290	178	229,621
2005	200,000	2,186	1.000	2,186	169	369,470
2006	200,000	2,874	1.000	2,874	173	497,206
2007	200,000	2,490	1.000	2,490	163	405,891
2008	200,000	3,719	1.000	3,719	176	654,562
2009	200,000	1,876	1.000	1,876	173	324,515
2010	250,000	2,842	1.000	2,842	137	389,384
2011	250,000	4,782	1.000	4,782	184	879,940
2012	250,000	3,106	1.000	3,106	180	559,108
2013	250,000	3,448	1.000	3,448	169	582,706
2014	250,000	7,032	1.005	7,067	169	1,194,295
2015	250,000	2,778	1.025	2,848	169	481,262
Total				\$2,760	3,343	\$9,227,268

Notes:

- (2) Provided by MVRMA
- (3) Based on data provided by MVRMA
- (4) From Exhibit 12
- (5) = (3) x (4)
- (6) From Exhibit 14
- $(7) = (5) \times (6)$

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

### Ultimate Loss Based on Paid Loss per Closed Claim Development Method Retained Limits

Accident Year	Retention	Cumulative Paid Loss per Closed Claim	Loss Development Factors	Projected Average Loss	Selected Ultimate Claims	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	\$250,000	\$7,302	1.000	\$7,302	17	\$124,141
1990	250,000	1,488	1.000	1,488	22	32,734
1991	250,000	2,801	1.000	2,801	27	75,626
1992	250,000	2,661	1.000	2,661	24	63,858
1993	250,000	2,274	1.000	2,274	28	63,660
1994	100,000	2,201	1.000	2,201	44	96,833
1995	150,000	1,259	1.000	1,259	68	85,639
1996	250,000	1,010	1.000	1,010	92	92,901
1997	250,000	2,559	1.000	2,559	88	225,205
1998	250,000	1,186	1.000	1,186	114	135,150
1999	150,000	2,548	1.000	2,548	154	392,466
2000	150,000	819	1.000	819	159	130,204
2001	150,000	3,862	1.000	3,862	131	505,931
2002	250,000	2,463	1.000	2,463	150	369,496
2003	250,000	1,435	1.000	1,435	185	265,463
2004	250,000	1,290	1.000	1,290	178	229,621
2005	200,000	2,186	1.000	2,186	169	369,470
2006	200,000	2,874	1.000	2,874	173	497,206
2007	200,000	2,490	1.000	2,490	163	405,891
2008	200,000	3,719	1.000	3,719	176	654,562
2009	200,000	1,876	1.000	1,876	173	324,515
2010	250,000	2,842	1.000	2,842	137	389,384
2011	250,000	4,782	1.000	4,782	184	879,940
2012	250,000	3,106	1.000	3,106	180	559,108
2013	250,000	3,448	0.997	3,438	169	580,958
2014	250,000	6,921	1.007	6,969	169	1,177,766
2015	250,000	2,185	1.098	2,398	169	405,249
Total				\$2,732	3,343	\$9,132,977

Notes:

- (2) Provided by MVRMA
- (3) Based on data provided by MVRMA
- (4) From Exhibit 13
- (5) = (3) x (4)
- (6) From Exhibit 14
- (7) = (5) x (6)

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Loss Based on Incurred Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Incurred	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$124,141	1.000	\$124,141
1990	32,734	1.000	32,734
1991	75,626	1.000	75,626
1992	63,858	1.000	63,858
1993	63,660	1.000	63,660
1994	96,833	1.000	96,833
1995	85,639	1.000	85,639
1996	92,901	1.000	92,901
1997	225,205	1.000	225,205
1998	135,150	1.000	135,150
1999	392,466	1.000	392,466
2000	130,204	1.000	130,204
2001	505,931	1.000	505,931
2002	369,496	1.000	369,496
2003	265,463	1.000	265,463
2004	229,621	1.000	229,621
2005	369,470	1.000	369,470
2006	497,206	1.000	497,206
2007	405,891	1.000	405,983
2008	654,562	1.000	654,858
2009	324,515	1.001	324,809
2010	389,384	1.002	390,089
2011	879 <i>,</i> 940	1.004	883,131
2012	559,108	1.007	563,170
2013	582,706	1.015	591,203
2014	1,188,353	1.029	1,223,264
2015	438,921	1.183	519,026
Total	\$9,178,985		\$9,311,137

Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4) = (2) x (3)

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Loss Based on Paid Loss Development Method Using Industry Factors Retained Limits

		Industry	
	Cumulative	Loss	Projected
Accident	Paid	Development	Ultimate
Year	Loss	Factors	Loss
(1)	(2)	(3)	(4)
1989	\$124,141	1.000	\$124,141
1990	32,734	1.000	32,734
1991	75,626	1.000	75,626
1992	63,858	1.000	63,858
1993	63,660	1.000	63,660
1994	96,833	1.000	96,833
1995	85,639	1.000	85,639
1996	92,901	1.000	92,901
1997	225,205	1.000	225,205
1998	135,150	1.000	135,150
1999	392,466	1.000	392,466
2000	130,204	1.000	130,204
2001	505,931	1.000	505,931
2002	369,496	1.000	369,496
2003	265,463	1.000	265,463
2004	229,621	1.000	229,621
2005	369,470	1.000	369,470
2006	497,206	1.000	497,206
2007	405,891	1.001	406,200
2008	654,562	1.002	655 <i>,</i> 558
2009	324,515	1.003	325,504
2010	389,384	1.006	391,760
2011	879,940	1.012	890,714
2012	559,108	1.025	572,883
2013	582,706	1.050	611,772
2014	1,162,693	1.102	1,281,578
2015	264,349	1.644	434,491
Total	\$8,978,753		\$9,326,064

Notes:

(2) Provided by MVRMA

(3) Based on insurance industry development

(4)  $= (2) \times (3)$ 

#### Incurred Loss at \$250K SIR

						I	icurred Loss a	ar 22204 214						
Accident						1	Aaturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	129,614	124,280	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141
1990	35,099	36,757	36,757	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734
1991	48,696	68,976	68,021	68,232	68,232	75,626	75,626	75,626	75,626	75,626	75,626	75,626	75,626	75,626 63,858
1992	92,696	65,630	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858 63,660	63,858 63,660	63,858 63,660	63,858 63,660	63,660
1993	77,321	70,484	63,871	63,660 96,023	63,660 96,833	63,660 96,833	63,660 96,833	63,660 96,833	63,660 96,833	96,833	96,833	96,833	96,833	96,833
1994	97,749 94,348	91,568 130,765	96,834 85,639	96,023 85,639	96,635 85,639	96,833 85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639
1995 1996	94,348 108,016	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901
1997	230,682	225,205	224,935	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205
1998	132,322	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150
1999	489,714	495,092	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466
2000	144,984	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204	130,204
2001	372,970	505,710	505,931	505,931	505,931	505,931	505,931	505,931	505,931	505,931	505,931	505,931	505,931	505,931
2002	337,524	364,735	369,940	369,496	369,496	369,496	369,496	369,496	369,496	369,496	369,496	369,496	369,496	369,496
2003	274,711	265,711	265,463	265,463	265,463	265,463	265,463	265,463	265,463	265,463	265,463	265,463	265,463	
2004	236,522	229,621	229,621	229,621	229,621	229,621	229,621	229,621	229,621	229,621	229,621	229,621		
2005	410,159	369,470	369,470	369,470	369,470	369,470	369,470	369,470	369,470	369,470	369,470			
2006	393,270	497,210	497,210	497,210	497,210	497,210	497,210	497,210	497,206	497,206				
2007	257,082	405,890	405,890	405,890	405,890	405,890	405,890	405,891 704,562	405,891					
2008	708,253	704,562	704,562	704,562	704,562 324,516	704,562 324,515	704,562 324,515	704,562						
2009	327,630	324,516	324,516 389,384	324,516 389,384	389,384	389,384	524,515							
2010 2011	354,134 888,222	389,384 879,940	879,940	879,940	879,940	565,564								
2012	549,819	560,758	559,608	559,108	07 5,5 10									
2012	433,542	566,557	582,706	,										
2014	1,223,786	1,202,519												
2015	438,921													
Accident							to-Age Facto						45.0 4.00	160 100
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180 1.000
1989	0.959	0,999	1.000	1,000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1,000 1.000	1.000
1990	1.047	1.000	0.891	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000
1991	1.416	0.986	1.003	1.000	1.108 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	0.708 0.912	0.973 0.906	1.000 0.997	1.000 1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993 1994	0.912	1.058	0.997	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
1995	1.386	0.655	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	0.860	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	0.976	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1999	1.011	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
2000	0.898	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
2001	1,356	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.081	1.014	0.999	1.000	1.000	1.000	1.000	1,000	1.000	1,000	1.000	1.000	1.000	
2003	0.967	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000		
2004	0.971	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000 1.000	1.000			
2005	0.901	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000				
2006	1.264	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000					
2007	1.579 0.995	1.000 1.000	1.000	1.000 1.000	1,000	1.000	1.000	1.000						
2008	0.995	1.000	1.000	1.000	1,000	1.000	1.000							
2009 2010	1.100	1.000	1.000	1.000	1.000	1.000								
2010	0.991	1.000	1.000	1.000	1.000									
2012	1.020	0,998	0.999	1.000										
2012	1.307	1.029	0.555											
2014	0.983													
All Yr Vol	1.057	0.996	0.999	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
All Yr Vol Ex. H/L	1.045	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.064	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.051	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	1.043	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
5 Yr Vol Ex. H/L	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.056	1.007	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
Prior	1.080	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
Selected														1.000
	1 070	1 010	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1.000	
LDFs	1.070 1.081	1.010 1.010	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1,000 1.000	1.000 1.000	1.000 1.000	1.000

#### Incurred Loss at \$250K SIR

						incurrec	1 LOSS at 5250	N 911					
Accident Year 1989 1990 1991 1992 1994 1995 1996 1997 1998 1999 2000 2001 2001 2001 2002 2003 2004 2005	180 124,141 32,734 75,626 63,958 63,660 96,833 85,639 92,901 225,205 135,150 492,466 130,204 505,931	192 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205 135,150 492,466 130,204	204 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205 135,150 492,466	216 124,141 32,734 75,626 63,658 63,660 96,833 85,639 92,901 225,205 135,150	228 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205		y (Age in Mor 252 124,141 32,734 75,626 63,858 63,660 96,833 85,639		276 124,141 32,734 75,626 63,658 63,650	288 124,141 32,734 75,626 63,858	300 124,141 32,734 75,626	312 124,141 32,734	324 124,141
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015													
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Age+to-Agr 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Vol All Yr Vol Ex. H/L 10 Yr Vol 10 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
3 Yr Vol Prior Selected	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000
LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Paid Loss at \$250K SIR

Accident							Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	10,609	114,275	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141	124,141
1990	30,499	36,756	36,756	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734	32,734
1991	33,797	68,021	68,021	68,232	68,232	75,626	75,626	75,626	75,626	75,626	75,626	75,626	75,626	75,626
1992	23,506	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858	63,858
1993	56,571	56,571	56,571	63,660	63,660	63,660	63,660	63,660	63,660	63,660	63,660	63,660	63,660	63,660
1994	85,569	91,568	96,834	96,023	96,833	96,833	96,833	96,833	96,833	96,833	96,833	96,833	96,833	96,833
1995	67,455	85,765	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639	85,639
1996	82,416	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901	92,901
1997	1\$9,932	225,205	224,935	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205	225,205
1998	121,352	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150	135,150 492,466	135,150 492,466	135,150 492,466	135,150 492,466
1999	232,722	492,466	492,466	492,466	492,466	492,466	492,466	492,466	492,466 130,204	492,466 130,204	492,466 130,204	130,204	130,204	130,204
2000	89,084	130,204	130,204	130,204	130,204	130,204	130,204 505,931	130,204 505,931	505,931	505,931	505,931	505,931	505,931	505,931
2001	250,862	483,069	505,931	505,931	505,931	505,931	369,496	369,496	369,496	369,496	369,496	369,496	369,496	369,496
2002	197,648	364,735	367,177	369,496 265,463	369,496 265,463	369,496 265,463	265,463	265,463	265,463	265,463	265,463	265,463	265,463	303,430
2003	243,339	265,711 229,621	265,463 229,621	265,463	265,463	205,405	203,403	229,621	229,621	229,621	229,621	229,621	205,105	
2004	209,790		369,470	369,470	369,470	369,470	369,470	369,470	369,470	369,470	369,470	110,011		
2005	301,573 282,983	369,470 497,210	497,210	497,210	497,210	497,210	497,210	497,210	497,206	497,206	505,110			
2006	282,985	400,890	405,890	405,890	405,890	405,890	405,890	405,891	405,891	101,200				
2007 2008	478,667	704,562	704,562	704,562	704,562	704,562	704,562	704,562	100,011					
2008	316,051	324,516	324,516	324,516	324,516	324,515	324,515	101,502						
2009	306,514	389,384	324,318 389,384	389,384	389,384	389,384	024,010							
2010	801,509	874,790	879,940	879,940	879,940	555,564								
2012	369,587	551,608	559,108	559,108	0/0/0/0									
2013	356,625	562,244	582,706	555,100										
2013	909,279	1,176,859	552,700											
2015	264,349	2,270,0000												
2013	20 1,0 10													
Accident						Age	to-Age Facto	rs						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	10,772	1.086	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.205	1.000	0.891	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	2.013	1.000	1.003	1.000	1.108	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	2.717	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.000	1.000	1.125	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.070	1.058	0.992	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.271	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.127	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.408	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.114	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.116	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.462	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.926	1.047	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000
2002	1.845	1.007	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	
2003	1.092	0.999	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000 1.000	1.000		
2004	1.095	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.225	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2006	1.757	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1,000					
2007	1.801	1.012	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000						
2008	1.472	1.000	1.000 1.000	1.000	1.000	1,000	1.000							
2009	1.027 1.270	1.000 1.000	1.000	1.000	1.000	1.000								
2010 2011	1,091	1.000	1.000	1.000	1.000									
2011 2012	1.492	1.006	1.000	1.000										
2012	1.432	1.014	1.000											
2013	1.294	1.050												
2014	1.2.54													
All Yr Vol	1.408	1.010	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.396	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.347	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.347	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
5 Yr Vol	1.296	1.012	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.336	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.401	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.425	1.008	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.400	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.421	1.015	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000

#### Paid Loss at \$250K SIR

Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2001 2002 2003 2004 2005 2006 2007 2006 2007 2006 2009 2010 2011 2012 2011 2012 2013 2014 2015	180 124,141 32,734 75,626 63,658 96,833 85,639 92,901 225,205 135,150 135,150 130,204 505,931	192 124,141 32,734 75,626 63,858 63,650 96,833 85,639 92,901 225,050 135,150 492,466 130,204	204 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205 135,150 492,466	216 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205 135,150	228 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901 225,205	Maturi 240 124,141 32,734 75,626 63,858 63,660 96,833 85,639 92,901	ty (Age in Mor 252 124,141 32,734 75,626 63,858 63,858 63,660 96,833 85,639	nths) 264 124,141 32,734 75,626 63,858 63,660 96,833	276 124,141 32,734 75,626 63,658 63,650	288 124,141 32,734 75,626 63,858	300 124,141 32,734 75,626	312 124,141 32,734	324 124,141
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1995 1996 2001 2002 2003 2004 2005 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000	8 Factors 252-264 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Vol All Yr Vol Ex. H/L 10 Yr Vol 10 Yr Vol Ex. H/L 5 Yr Vol Ex. H/L 3 Yr Vol 9 Yr Vol Prior Selected	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000	1.000
LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Incurred Loss per Reported Claim at \$250K SIR

Accident						,	Maturity (Age	in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	8,641	7,311	7,302	7,302	7,302	7,302	7,302	7,302	7,302	7,302	7,302	7,302	7,302	7,302
1990	1,671	1,671	1,671	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488
1991	2,117	2,653	2,616	2,527	2,527	2,801	2,801	2,801	2,801	2,801	2,801	2,801 2,661	2,801 2,661	2,801 2,661
1992	4,414	2,735	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,651 2,274	2,661	2,001	2,001
1993	2,974	2,517	2,281	2,274	2,274	2,274	2,274	2,274	2,274 2,201	2,274 2,201	2,274	2,274	2,201	2,201
1994	2,327	2,129	2,201	2,182	2,201	2,201	2,201	2,201 1,259	1,259	1,259	1,259	1,259	1,259	1,259
1995	1,474	1,923	1,259	1,259	1,259 1,010	1,259 1,010	1,259 1,010	1,239	1,239	1,010	1,010	1,010	1.010	1,010
1996	1,301	1,010	1,010	1,010 2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559
1997	2,621	2,559 1,186	2,556 1,186	2,559	1,186	1,186	1.186	1,186	1,186	1,186	1,186	1,186	1,186	1,186
1998	1,214 3,309	3,215	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198
1999 2000	923	819	819	819	819	819	819	819	819	819	819	819	819	819
2000	3,008	3,860	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862
2002	2,482	2,432	2,466	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463
2003	1,570	1,436	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	
2004	1,516	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290		
2005	2,753	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186			
2006	2,428	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874				
2007	1,714	2,490	2,490	2,490	2,490	2,490	2,490	2,490	2,490					
2008	4,267	4,003	4,003	4,003	4,003	4,003	4,003	4,003						
2009	1,998	1,876	1,876	1,876	1,876	1,876	1,876							
2010	2,879	2,842	2,842	2,842	2,842	2,842								
2011	5,194	4,782	4,782	4,782	4,782									
2012	3,215	3,115	3,109	3,106										
2013	2,744	3,352	3,448											
2014	7,508	7,115												
2015	2,778													
Accident						Age	-to-Age Facto	rs						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	0.846	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.000	1.000	0.891	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.253	0.986	0.966	1.000	1.108	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1992	0.620	0.973	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	0.846	0.906	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	0.915	1.033	0.992	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.304	0.655	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
1996	0.776	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000
1997	0.976	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000
1998	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000
1999	0.972	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000
2000	0.887	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.283	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002	0.980	1.014	0.999	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000		
2003	0.915	0,999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2004	0.851	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000				
2005	0.794	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2006 2007	1.184 1.453	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2007	0.938	1.000	1,000	1.000	1.000	1.000	1.000							
2008	0.938	1.000	1,000	1.000	1.000	1.000								
2009	0.987	1.000	1.000	1.000	1.000									
2010	0.921	1.000	1.000	1.000										
2012	0.969	0.998	0.999											
2013	1.222	1.029												
2014	0.948													
AU 14- A	0.001	0.983	0,993	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg	0.991 0.987	0.983	0,993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
All Yr Avg Ex. H/L 10 Yr Avg	1.035	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg 10 Yr Avg Ex. H/L	1.035	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000
10 YFAVg EX. H/L 5 Yr Avg	1.015	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg Ex. H/L	0.968	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Avg	1.046	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.040	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.020	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
LDFs	1.025	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Incurred Loss per Reported Claim at \$250K SIR

						Maturit	y (Age in Mor	nths)					
Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2006 2007 2008 2009 2011 2012 2011 2012 2014 2015	180 7,302 1,488 2,801 2,661 2,274 2,201 1,259 1,010 2,559 1,186 3,198 819 3,862	192 7,302 1,488 2,801 2,661 2,274 2,201 1,225 1,010 2,559 1,186 3,198 819	204 7,302 1,488 2,801 2,661 2,274 2,201 1,255 1,010 2,559 1,186 3,198	216 7,302 1,488 2,801 2,661 2,274 1,259 1,010 2,559 1,186	228 7,302 1,488 2,801 2,661 2,274 2,201 1,259 1,010 2,559	240 7,302 1,488 2,801 2,661 2,274 2,201 1,259 1,010	252 7,302 1,488 2,601 2,661 2,274 2,201 1,259	264 7,302 1,488 2,801 2,661 2,274 2,201	276 7,302 1,488 2,801 2,661 2,274	288 7,302 1,488 2,801 2,661	300 7,302 1,488 2,801	312 7,302 1,488	324 7,302
Accident Year 1989 1990 1991 1992 1993 1994 1995 1995 1995 1997 2000 2001 2002 2003 2004 2005 2004 2005 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000	Age+to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-Ult
All Yr Avg All Yr Avg Ex. H/L 10 Yr Avg Ex. H/L 10 Yr Avg Ex. H/L 5 Yr Avg 5 Yr Avg Ex. H/L 3 Yr Avg	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000	1.000	
Prior Selected LDFs	1.000	1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000

#### Paid Loss per Closed Claim at \$250K SIR

Accident							∕laturity (Age				100	***	150	168
Year	12	24	36	48	60	72	84	96	108	120	132 7,302	144 7,302	156 7,302	7,302
1989	1,061	7,618	7,302	7,302	7,302	7,302	7,302	7,302	7,302 1,488	7,302 1,488	1,488	1,488	1,488	1,488
1990	1,794	1,750	1,750	1,488	1,488	1,488 2,801	1,488 2,801	1,488 2,801	2,801	2,801	2,801	2,801	2,801	2,801
1991	1,988	2,834	2,616	2,527	2,527	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661
1992	1,959	2,776	2,661	2,661 2,274	2,561 2,274	2,001	2,001	2,274	2,274	2,274	2,274	2,274	2,274	2,274
1993	2,571	2,263 2,129	2,020 2,201	2,274 2,182	2,274	2,201	2,201	2,201	2,201	2,201	2,201	2,201	2,201	2,201
1994	2,377 1,297	1,261	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259
1995	1,297	1,201	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010
1996 1997	2,104	2,559	2,556	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559
1998	1,226	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186	1,186
1999	1,790	3,219	3,198	3,198	3.198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198	3,198
2000	718	819	819	819	819	819	819	819	819	819	819	819	819	819
2001	2,345	3,716	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862	3,862
2002	1,647	2,432	2,464	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463	2,463	Z,463	2,463
2003	1,644	1,436	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	1,435	
2004	1,601	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290		
2005	2,338	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186			
2006	2,211	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874				
2007	1,810	2,475	2,490	2,490	2,490	2,490	2,490	2,490	2,490					
2008	2,884	4,003	4,003	4,003	4,003	4,003	4,003	4,003						
2009	2,150	1,876	1,876	1,876	1,876	1,876	1,876							
2010	3,226	2,842	2,842	2,842	2,842	2,842								
2011	5,644	4,780	4,808	4,782	4,782									
2012	2,738	3,082	3,124	3,106										
2013	2,702	3,347	3,448											
2014	7,160	7,005												
2015	2,185													
a						Age	to-Age Facto	rs						
Accident Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	7.181	0.959	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	0.976	1.000	0.850	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.426	0.923	0.966	1.000	1.108	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1992	1.417	0.958	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
1993	0.880	0.893	1.125	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	0.896	1.033	0.992	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	0.972	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	0.858	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
1997	1.216	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000
1998	0.967	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000 1.000	1.000 1.000	1.000	1.000
1999	1.798	0.994	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000 1.000	1.000	1.000	1.000	1.000
2000	1.140	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.585	1.039	1.000	1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000
2002	1.476	1.013	1.000	1.000	1.000 1,000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	0.874	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2004	0.806	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2005	0.935 1.300	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2006	1.300	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2007 2008	1.387	1.000	1.000	1.000	1.000	1.000	1.000							
2008	0.872	1.000	1.000	1.000	1.000	1.000								
2010	0.881	1,000	1,000	1,000	1.000									
2011	0.847	1.006	0.995	1.000										
2012	1.126	1.014	0.994											
2013	1,239	1.030												
2014	0.978													
							1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg	1.362	0.995	0.997	1.000	1.005	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Avg Ex. H/L	1.142	0.997	0.998	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Avg	1.093	1.006	0.999	1.000	1,000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
10 Yr Avg Ex. H/L	1.087	1.003	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg	1.014	1,010	0.998 0.998	1.000 1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Avg Ex. H/L	0.995	1.006 1.017	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Avg	1.114	1.017	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.100	1.005	0.353	1.000	1.000	1.000	1.000							
Selected	1.090	1.010	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.098	1.007	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CDF3	1.030													

## Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Paid Loss per Closed Claim at \$250K SIR

Accident Year 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2004 2005 2006 2007 2008 2007 2008 2009 2010 2011 2012 2013	180 7,302 1,488 2,801 2,274 2,201 1,259 1,010 2,559 1,186 3,198 819 3,862	192 7,302 1,488 2,801 2,261 2,274 4,2201 1,259 1,010 2,559 1,186 3,198 819	204 7,302 1,488 2,801 2,261 2,274 2,201 1,259 1,010 2,559 1,186 3,198	216 7,302 1,488 2,801 2,274 2,201 1,259 1,010 2,559 1,186	228 7,302 1,488 2,801 2,661 2,274 2,201 1,259 1,010 2,559	Maturi 240 7,302 1,488 2,801 2,661 2,274 2,201 1,259 1,010	ty (Age in Mo 252 7,302 1,488 2,801 2,661 2,274 2,201 1,259	nths) 264 7,302 1,488 2,801 2,661 2,274 2,201	276 7,302 1,488 2,801 2,651 2,274	288 7,302 1,488 2,801 2,661	300 7,302 1,488 2,801	312 7,302 1,488	324 7,302
2014 2015													
						Ade-to-Ade	Factors						
Accident Year 1989 1990 1991 1992 1993 1994 1995 1995 1995 1997 1998 2000 2001 2000 2001 2000 2003 2004 2005 2006 2007 2006 2007 2008 2009 2000 2011 2012 2013 2014	180-192 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	192-204 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	216-228 1.000 1.000 1.000 1.000 1.000 1.000 1.000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Age-to-Age 240-252 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors 252-264 1.000 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000	276-288 1.000 1.000 1.000 1.000	288-300 1.000 1.000 1.000	300-312 1.000 1.000	312-324 1.000	324-UK
All Yr Avg All Yr Avg Ex. H/L 10 Yr Avg 10 Yr Avg Ex. H/L 5 Yr Avg 5 Yr Avg Ex. H/L	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
3 Yr Avg Prior	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	
Selected LDFs	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Summary of Claim Counts

Accident	Closed	Open	Reported	Indicated IBNR	Selected Ultimate
Year	Claims	Claims	Claims	Claims	Claims
(1)	(2)	(3)	(4)	(5)	(6)
1000	17	0	17	0	17
1989	17 22	0	22	0	22
1990	22	0	27	0	27
1991	27	0	24	0	24
1992	24 28	0	28	0	28
1993	44	0	44	0	44
1994 1995	68	0	68	0	68
	92	0	92	0	92
1996	88	0	88	0	88
1997 1998	114	0	114	0	114
1998	154	0	154	0	154
2000	159	0	159	0	159
2000	135	0	131	0	131
2001	150	0	150	0	150
2002	185	0	185	0	185
2003	178	0	178	0	178
2004	169	0	169	0	169
2005	105	0	173	0	173
2008	163	0	163	0	163
2007	176	0 0	176	0	176
2008	173	0	173	0	173
2009	137	ů 0	137	0	137
2010	184	0	184	0	184
2011	184	0	180	0	180
2012	169	0	169	0	169
2013	165	1	169	0	169
	100	37	158	11	169
2015	141	5,			
Total	3,294	38	3,332	11	3,343

#### Notes:

- (2) Provided by MVRMA
- (3) Provided by MVRMA
- (4) Provided by MVRMA
- (5) = (6) (4)
- (6) From Exhibit 15

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Ultimate Claims Based on Reported Claim Development Method

Accident Year (1)	Cumulative Reported Claims (2)	Claim Development <u>Factors</u> (3)	Projected Ultimate <u>Claims</u> (4)
1989	17	1.000	17
1990	22	1.000	22
1991	27	1.000	27
1992	24	1.000	24
1993	28	1.000	28
1994	44	1.000	44
1995	68	1.000	68
1996	92	1.000	92
1997	88	1.000	88
1998	114	1.000	114
1999	154	1.000	154
2000	159	1.000	159
2001	131	1.000	131
2002	150	1.000	150
2003	185	1.000	185
2004	178	1.000	178
2005	169	1.000	169
2006	173	1.000	173
2007	163	1.000	163
2008	176	1.000	176
2009	173	1.000	173
2010	137	1.000	137
2011	184	1.000	184
2012	180	1.000	180
2013	169	1.000	169
2014	169	1.000	169
2015	158	1.070	169
Total	3,332		3,343

#### Notes:

- (2) Provided by MVRMA
- (3) From Exhibit 16

(4) = (2) x (3)

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

Reported	Claim	Counts

							noperior e							
Accident							Maturity (Ag	e in Months)						
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	15	17	17	17	17	17	17	17	17	17	17	17	17	17
1990	21	22	22	22	22	22	22	22	22	22	22	22	22	22
1991	23	26	26	27	27	27	27	27	27	27	27	27	27	27
1992	21	24	24	24	24	24	24	24	24	24	24	24	24	24
1993	26	28	28	28	28	28	28	28	28	28	28	28	28	28
1994	42	43	44	44	44	44	44	44	44	44	44	44	44	44
1995	64	68	68	68	68	68	68	68	68	68	68	68	68	68
1996	83	92	92	92	92	92	92	92	92	92	92	92	92	92
1997	88	88	88	88	88	88	88	88	88	88	88	88	88	88
1998	109	114	114	114	114	114	114	114	114	114	114	114	114	114
1999	148	154	154	154	154	154	154	154	154	154	154	154	154	154 159
2000	157	159	159	159	159	159	159	159	159	159	159	159 131	159 131	139
2001	124	131	131	131	131	131	131	131	131	131	131 150	151	150	151
2002	136	150	150	150	150	150	150	150	150	150		185	185	150
2003	175	185	185	185	185	185	185	185	185	185	185	185	100	
2004	156	178	178	178	178	178	178	178	178	178	178 169	1/0		
2005	149	169	169	169	169	169	169	169 173	169 173	169 173	105			
2006	162	173	173	173	173	173	173	173	1/3	1/3				
2007	150	163	163	163	163	163	163		103					
2008	166	176	176	176	176	176	176	176						
2009	164	173	173	173	173	173	173							
2010	123	137	137	137	137 184	137								
2011	171	184	184	184	184									
2012	171	180	180	180										
2013	158	169	169											
2014	163	169												
2015	158													
						٨	e-to-Age Facto	ore						
Accident	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132- <b>1</b> 44	144-156	156-168	168-180
Year		1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1989	1.133 1.048	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1990		1.000	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.130	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
1992 1993	1.143 1.077	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1,000	1.000
1995	1.024	1.023	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1996	1.108	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.046	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000
1999	1.041	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.013	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.103	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.057	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000		
2004	1.141	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.134	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2006	1.068	1.000	1.000	1.000	1,000	1.000	1,000	1.000	1.000					
2007	1.087	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2008	1.060	1.000	1.000	1.000	1.000	1.000	1.000							
2009	1.055	1.000	1.000	1.000	1.000	1,000								
2010	1.114	1.000	1.000	1.000	1.000									
2011	1.076	1.000	1.000	1.000										
2012	1.053	1.000	1.000											
2013	1.070	1.000												
2014	1.037													
											1.002	1.000	1.000	1.000
Ali Yr Vol	1.070	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.071	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
10 Yr Vol	1.074	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000
10 Yr Vol Ex. H/L	1.071	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	1.067	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.066	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.053	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Prior	1.075	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
								1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.070	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000
LDFs	1.070	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1,000	1.000	1.000	1.000	1.000

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

Reported Claim Counts

						Repo	orted Claim Co	ounts					
Accident Year	. 180	192	204	216	228	Matu 240	rity (Age in M 252	onths) 264	276	288	300	312	324
1989	100	17	17	17	17	17	17	17	17	17	17	17	17
1989	22	22	22	22	22	22	22	22	22	22	22	22	17
	27	27	27	27	27	27	27	27	27	27	27		
1991											27		
1992	24	24	24	24	24	24	24	24	24	24			
1993	28	28	28	28	28	28	28	28	28				
1994	44	44	44	44	44	44	44	44					
1995	68	68	68	68	68	68	68						
1996	92	92	92	92	92	92							
1997	88	88	88	88	88	51							
					00								
1998	114	114	114	114									
1999	154	154	154										
2000	15 <del>9</del>	159											
2001	131												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
A 11 4						A A. A.							
Accident						Age-to-Ag		254 275	276 200	200.200			224.144
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
1989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
							1.000						
1995	1.000	1,000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
All Ve Vel	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol											1.000	1.000	
All Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Vol	1.000	1.000	1.000										
10 Yr Vol Ex. H/L	1.000	1.000	1.000										
5 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
3 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Prior	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
PTIOF	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
	4 000	1 007	1 005	1 000	1 000	1.000	1.000	1.000	1.000	1.000	1 000	1.000	1 000
Selected		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LDFs	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

#### Closed Claim Counts

A14							Maturity (Ag	e in Months)						
Accident Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1989	10	15	17	17	17	17	17	17	17	17	17	17	17	17
1990	10	21	21	22	22	22	22	22	22	22	22	22	22	22
1991	17	24	26	27	27	27	27	27	27	27	27	27	27	27
1992	12	23	24	24	24	24	24	24	24	24	24	24	24	24
1993	22	25	28	28	28	28	28	28	28	28	28	28	28	28
1994	36	43	44	44	44	44	44	44	44	44	44	44	44	44
1995	52	68	68	68	68	68	68	68	68	68	68	68	68	68
1996	70	92	92	92	92	92	92	92	92	92	92	92	92	92
1997	76	88	88	88	88	88	88	88	88	88	88	88	88	88
1998	99	114	114	114	114	114	114	114	114	114	114	114	114	114
1999	130	153	154	154	154	154	154	154	154	154	154	154	154	154
2000	124	159	159	159	159	159	159	159	159	159	159	159	159	159
2001	107	130	131	131	131	131	131	131	131	131	131	131	131	131
2002	120	150	149	150	150	150	150	150	150	150	150	150	150	150
2003	148	185	185	185	185	185	185	185	185	185	185	185	185	
2004	131	178	178	178	178	178	178	178	178	178	178	178		
2005	129	169	169	169	169	169	169	169	169	169	169			
2006	128	173	173	173	173	173	173	173	173	173				
2007	123	162	163	163	163	163	163	163	163					
2008	166	176	176	176	176	176	176	176						
2009	147	173	173	173	173	173	173							
2010	95	137	137	137	137	137								
2011	142	183	183	184	184									
2012	135	179	179	180										
2013	132	168	169											
2014	127	168												
2015	121													
Accident						٨٥٥	-to-Age Facto	ors						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989	1.500	1.133	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.235	1.000	1.048	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1991	1.412	1.083	1.038	1.000	1,000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
1992	1.917	1.043	1,000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1993	1.136	1.120	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1994	1.194	1.023	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
1995	1.308	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.314	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.158	1,000	1.000	1.000	1,000	1.000	1,000	1.000	1.000	1,000	1.000	1.000	1.000	1.000
1998	1.152	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.177	1.007	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.282	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000
2001	1.215	1.008	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.250	0.993	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	
2003	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000		
2004	1.359	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2005	1.310	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2006	1.352	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000					
2007	1.317	1.006	1.000	1.000	1.000	1.000	1.000	1.000						
2008	1.060	1.000	1.000	1.000	1.000	1,000	1.000							
2009	1.177	1.000	1.000	1.000	1.000	1.000								
2010	1.442	1.000	1.000	1.000	1.000									
2011	1.289	1.000	1.005	1,000										
2012	1.326	1.000	1.006											
2013	1.273	1.006												
2014	1.323													
All Yr Vol	1.265	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000
All Yr Vol Ex. H/L	1.276	1.004	1,001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol	1.275	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10 Yr Vol Ex. H/L	1.294	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol	1.323	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5 Yr Vol Ex. H/L	1.312	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr Vol	1.307	1.002	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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## Miami Valley Risk Management Association Property and Auto Physical Damage December 31, 2015

						Clos	sed Claim Cou	nts					
Accident						Matur	rity (Age in Mo	onths)					
Year	180	192	204	216	228	240	252	264	276	288	300	312	324
1989	17	17	17	17	17	17	17	17	17	17	17	17 22	17
1990	22	22	22	22	22	22 27	22 27	22 27	22 27	22 27	22 27	22	
1991	27	27	27	27	27 24	27	27	27	27	27	21		
1992	24	24 28	24 28	24 28	24	24	24	24	24	47			
1993	28 44	28 44	28 44	28 44	28 44	44 44	28 44	44	20				
1994	44 68	44 68	68	-++ 58	68	68	68						
1995 1995	92	92	92	92	92	92	00						
1997	88	88	88	88	88								
1998	114	114	114	114	00								
1999	154	154	154	~~ ·									
2000	159	159											
2001	131												
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
Accident						Age-to-Ag	ge Factors						
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-Ult
1989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1,000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000										
1999	1.000	1.000											
2000	1.000												
2001 2002													
2002													
2003													
2004													
2005													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
All Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
All Yr Vol Ex. H/L	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
10 Yr Vol	1.000	1.000	1.000										
10 Yr Vol Ex. H/L	1.000	1.000	1.000										
5 Yr Vol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Vol 5 Yr Vol Ex. H/L	1.000 1.000	1.000											
	1.000								1.000	1.000			

## Miami Vailey Risk Management Association Property and Auto Physical Damage December 31, 2015

Loss Summary

Accident		Total Limits	nits	Retention Limits	Limits	Deductibles	oles
Year	Retention	Incurred	Paid	Incurred	Paid	Incurred	Paid
(1)	(2)	(3)	(4)	(2)	(9)	(2)	(8)
1989	\$250,000	\$124,141	\$124,141	\$124 <b>,</b> 141	\$124,141		
1990	250,000	32,734	32,734	32,734	32,734		
1991	250,000	75,626	75,626	75,626	75,626		
1992	250,000	63,858	63,858	63,858	63,858		
1993	250,000	63,660	63,660	63,660	63,660		
1994	100,000	96,833	96,833	96,833	96,833		
1995	150,000	85,639	85,639	85,639	85,639		
1996	250,000	92,901	92,901	92,901	92,901		
1997	250,000	225,205	225,205	225,205	225,205		
1998	250,000	135,150	135,150	135,150	135,150		
1999	150,000	541,763	541,763	392,466	392,466		
2000	150,000	130,204	130,204	130,204	130,204		
2001	150,000	505,931	505,931	505,931	505,931		
2002	250,000	369,496	369,496	369,496	369,496		
2003	250,000	265,463	265,463	265,463	265,463		
2004	250,000	229,621	229,621	229,621	229,621		
2005	200,000	369,470	369,470	369,470	369,470		
2006	200,000	497,206	497,206	497,206	497,206	\$103,904	\$103,904
2007	200,000	405,891	405,891	405,891	405,891	101,827	101,827
2008 *	200,000	774,978	774,978	654,562	654,562	134,525	134,525
2009	200,000	324,515	324,515	324,515	324,515	119,127	119,127
2010	250,000	389,384	389,384	389,384	389,384	83,877	83,877
2011 *	250,000	2,092,816	2,092,816	879,940	879,940	132,474	132,474
2012	250,000	559,108	559,108	559,108	559,108	92,455	92,455
2013	250,000	582,706	582,706	582,706	582,706	112,692	112,692
2014	250,000	1,202,519	1,176,859	1,188,353	1,162,693	103,833	103,333
2015	250,000	438,921	264,349	438,921	264,349	108,365	70,365
Total		\$10,675,740	\$10,475,508	\$9,178,985	\$8,978,753	\$1,093,078	\$1,054,578
	-		-				
Notes:	Retentions apply to It Provided by MM/PMAA	Actentions apply to indemnity and ALAE; the deductible is \$2,500 per occurrence อะณ์ส่งส่ ๖ งงบทพง	c; the deductible is	sz,suu per occurrer	lce		
(*) (*)	2008 retained los	2008 retained losses reflect capping a wind storm totaling \$320,356	a wind storm tot	aling \$320,356			
	2011 retained los	2011 retained losses reflect capping a hail storm totaling \$628,004	a hail storm tota	ling \$628,004			
				I			

Pinnacle Actuarial Resources, Inc.

Miami Valley Risk Management Association Statistical Section December 31, 2015

This section of Miami Valley Risk Management's comprehensive annual financial report provides users with additional historical perspective, context, and detail to assist in using the information in the financial statements, notes to financial statements and required supplementary information to understand and assess the Association's overall financial health.

<u>Contents</u>	<u>Page</u>
Financial Trends Information (Schedules 1, 2 & 3)	147-149
These schedules contain trend information to help the reader	
understand and assess how the Association's financial position has	
changed over time.	
Revenue Capacity Information (Schedule 4)	150
This schedule contains information to help the reader understand	
the sources of the Association's revenues.	
Demographic and Economic Information (Schedules 5-27)	151-176
These schedules contain information related to the demographics	
of the region as well as the Association's members'	
exposures, which determine each member's annual contribution.	
These schedules are intended to assist the reader in understanding	
the changing environment of the Association and to provide	
comparisons among its members.	
Operating Information (Schedule 28)	177
This schedule contains information about the Association's	
operations and resources to help the reader understand how the	
information in the financial report relates to the services the	
Association provides and the activities it performs.	
Note: The Association has no debt, and therefore, provides no schedules relate	d to debt.

Sources: Unless otherwise noted, the information in these schedules is derived from the audited annual financial statements for the relevant year.

#### Miami Valley Risk Management Association Net Position by Component Last Ten Years

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Invested in capital assets	\$ 15,420	\$ 12,060 \$	5 11,136 \$	10,400	\$ 10,299 \$	9,621 \$	19,641 \$	5 17,192 \$	5 11,747 5	8,756
Unrestricted	7,188,167	9,204,897	10,869,421	11,774,165	11,504,656	12,359,793	12,783,463 \$	\$ 11,216,080 \$	5 11,275,275 5	6 10,575,137
Total Net Position	\$ 7,203,587	\$ 9,216,957 \$	6 10,880,557 \$	11,784,565	\$ 11,514,955 \$	12,369,414 \$	12,803,104 \$	\$ 11,233,272 \$	5 11,287,022 5	5 10,583,893

Note: Accounting standards require that net position be reported in three components in the financial statements: invested in capital assets net of related debt, restricted and unrestricted. The Association does not have any assets "restricted" by outside parties or by law through constitutional provisions or enabling legislation. The "unrestricted" assets are assets that do not meet the definition of "restricted" or "invested in capital assets net of related debt."

Source: Audited Financial Statements for the years 2006-2015

Year Ended December 31

#### Miami Valley Risk Management Association Annual Contributions by Member and Year Last Ten Years

#### Schedule 4

Member	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beavercreek	\$197,790	\$192,914	\$210,804	\$221,747	\$221,919	\$235,484	\$247,239	\$243,516	\$272,287	\$156,317
Bellbrook	\$74,986	\$55,108	\$54,062	\$46,591	\$42,485	\$43,061	\$54,946	\$74,118	\$77,140	\$43,360
Blue Ash	\$251,714	\$324,304	\$286,612	\$276,742	\$262,775	\$227,704	\$240,172	\$256,961	\$274,384	\$150,605
Centerville	\$202,847	\$181,220	\$186,677	\$219,474	\$239,595	\$247,794	\$192,074	\$198,140	\$182,291	\$113,826
Englewood	\$120,851	\$139,682	\$162,794	\$171,505	\$231,831	\$205,979	\$145,508	\$157,223	\$142,257	\$88,834
Indian Hill	\$146,420	\$156,700	\$162,540	\$103,124	\$84,708	\$98,718	\$116,972	\$114,673	\$135,918	\$77,513
Kettering	\$443,180	\$476,047	\$471,654	\$463,568	\$513,606	\$480,720	\$488,029	\$527,445	\$569,468	\$313,473
Madeira	\$126,795	\$113,523	\$79,197	\$34,126	\$47,158	\$47,529	\$50,156	\$51,720	\$37,293	\$23,348
Mason	\$369,765	\$267,167	\$266,403	\$260,169	\$284,894	\$314,081	\$316,748	\$358,149	\$346,946	\$189,093
Miamisburg	\$296,582	\$322,594	\$284,384	\$218,096	\$188,032	\$174,104	\$204,148	\$232,959	\$214,458	\$140,682
Montgomery	\$119,815	\$133,538	\$90,392	\$83,948	\$105,152	\$116,047	\$123,881	\$131,749	\$114,304	\$74,658
NAWA <sup>1</sup>		\$6,506	\$8,283	\$25,089	\$23,071	\$24,422	\$26,426	\$7,939	\$12,481	\$7,336
Piqua	\$257,870	\$305,486	\$280,378	\$266,853	\$315,950	\$276,213	\$321,935	\$308,575	\$370,336	\$212,202
Sidney	\$256,588	\$279,257	\$257,875	\$242,884	\$262,532	\$276,769	\$274,799	\$297,323	\$275,604	\$180,146
Springdale	\$139,075	\$153,388	\$157,826	\$134,413	\$144,575	\$141,082	\$133,556	\$150,283	\$142,950	\$97,446
Tipp City	\$100,761	\$134,170	\$139,507	\$110,289	\$114,577	\$94,419	\$113,611	\$132,256	\$148,587	\$109,754
Troy	\$274,884	\$307,797	\$267,486	\$231,814	\$233,605	\$248,487	\$253,633	\$271,031	\$272,050	\$171,148
Vandalia	\$184,599	\$167,535	\$205,064	\$179,998	\$182,625	\$185,520	\$210,005	\$213,809	\$208,679	\$115,965
West Carrollton	\$101,317	\$110,773	\$118,681	\$127,426	\$117,440	\$99,912	\$87,456	\$104,785	\$104,806	\$91,745
Wilmington	\$179,191	\$173,597	\$209,851	\$254,970	\$303,332	\$265,297	\$229,142	\$230,042	\$237,165	\$159,475
Wyoming	\$100,069	\$73,405	\$97,240	\$98,285	\$107,990	\$144,226	\$144,962	\$137,163	\$123,930	\$58,074
Total	\$3,945,099	\$4,074,711	\$3,997,710	\$3,771,111	\$4,027,852	\$3,947,568	\$3,975,398	\$4,199,859	\$4,263,334	\$2,575,000

Note 1: Beginning in 2007, NAWA, a joint venture water authority shared by Tipp City and Vandalia, was included as a separate entity for the purpose of calculating premiums. Source: Association's internal records

#### Miami Valley Risk Management Association Changes in Net Position Last Ten Years

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EXPENSES:										
Claim expenses										
Incurred claims and claim adjustment expense		\$1,658,674	\$ 1,876,350	\$ 2,004,526	\$ 1,195,748	\$ 2,080,913	\$ 1,182,409	\$ 1,010,964	\$ 1,892,603	\$ 651,209
Reinsurance/insurance premiums	797,977	832,277	739,537	695,576	753,793	761,789	807,647	870,249	878,317	885,468
Members' dividends	-	-	14,680	369,300	1,901,982	-	1,276,154	3,254,320	1,325,803	2,389,527
Total claim expense	1,330,664	2,490,951	2,630,567	3,069,402	3,851,523	2,842,702	3,266,210	5,135,533	4,096,723	3,926,204
Total general and administrative expenses	610,366	658,624	653,618	668,721	677,469	691,571	733,355	751,099	757,719	758,871
Total operating expenses	1,941,030	3,149,575	3,284,185	3,738,123	4,528,992	3,534,273	3,999,565	5,886,632	4,854,442	4,685,075
REVENUES:										
Operating revenues										
Members' contributions	3,970,351	4,074,713	4,001,211	3,837,608	3,947,859	4,027,567	3,965,398	4,139,860	4,173,334	4,208,593
Claims deductibles	194,154	221,280	249,892	225,728	176,920	229,751	169,168	195,194	251,166	214,597
Other Tatal an anting an annual	10,682	31,063	1,654	131,146	18,700	26,620	36,482	24,862	37,437	39,109
Total operating revenues	4,175,187	4,327,056	4,252,757	4,194,482	4,143,479	4,283,938	4,171,048	4,359,916	4,461,937	4,462,299
Non-operating revenues										
Gain/Loss on disposal of capital assets		(261)	(23)			(151)	(580)	(265)	-	166
Interest income	493,585	574,338	564,578	225,581	41,066	104,281	75,136	55,996	119,888	151,016
Unrealized gain/loss on investment	-	261,812	130,473	222,068	74,837	664	187,651	(98,847)	326,367	(389,946)
Total non-operating revenues	493,585	835,889	695,028	447,649	115,903	104,794	262,207	(43,116)	446,255	(238,764)
Total revenues	4,668,772	5,162,945	4,947,785	4,642,131	4,259,382	4,388,732	4,433,255	4,316,800	4,908,192	4,223,535
CHANGES IN NET POSITION:										
Increase (decrease) in net position	2,727,742	2,013,370	1,663,600	904,008	(269,610)	854,459	433,690	(1,569,832)	53,750	(461,540)

Source: Audited Financial Statements for the years 2006-2015

#### Miami Valley Risk Management Association

Loss Development Report-Comparison of Dollar Losses and Claims Counts by Loss Year - As of December 31, 2015 Last 10 Years

Loss Experience After:	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months	- <b>N</b> 1	
Loss Year/Members' Loss Fund Contribution			Total a	mount incurre	ed followed by	y number of c	laims/open cl	aims (1)			Balance in Loss Fund 12/31/15	Paid to Date 12/31/15
Loss Year 18 12/31/05-12/31/06 20 Member Cities	\$550,587 (318/49)	\$859,953 (345/11)	\$1,051,038 (348/7)	\$1,280,490 (351/6)	\$1,327,753 (351/4)	\$1,603,224 (353/4)	\$1,578,210 (353/1)	\$1,578,210 (353/1)	\$1,558,436 (353/0)	\$1,558,436 (353/0)	LY 18 Closed	
Loss Year 19 12/31/06-12/31/07 20 Member Cities	\$414,230 (338/49)	\$733,273 (402/16)	\$937,377 (404/5)	\$1,001,350 (404/5)	\$1,005,084 (404/2)	\$993,837 (404/0)	\$993,837 (404/0)	\$993,837 (404/0)	\$993,837 (404/0)		LY 19 Closed	
Loss Year 20 12/31/07-12/31/08 20 Member Cities	\$1,079,122 (396/66)	\$1,070,393 (423/8)	\$1,709,126 (427/9)	\$1,761,917 (429/7)	\$1,778,973 (429/2)	\$1,768,118 (429/0)	\$1,768,118 (429/0)	\$1,768,118 (429/0)			LY 20 Closed	
Loss Y ear 21 12/31/08-12/31/09 20 Member Cities	\$432,941 (320/36)	\$581,765 (343/6)	\$857,095 (347/8)	\$1,159,198 (347/5)	\$1,605,343 (347/5)	\$1,560,680 (347/1)	\$1,533,450 (347/0)				LY 21 Closed	
Loss Year 22 12/31/09-12/31/10 20 Member Cities	\$519,228 (331/40)	\$689,893 (363/7)	\$1,141,553 (366/6)	\$1,391,993 (367/4)	\$1,481,047 (368/4)	\$1,587,679 (368/0)					LY 22 Closed	
Loss Y ear 23 12/31/10-12/31/11 20 Member Cities	\$2,908,228 (416/51)	\$2,657,347 (439/4)	\$2,422,620 (443/6)	\$2,422,096 (443/3)	\$2,474,416 (444/3)						\$ 1,559,622	\$2,433,032
Loss Year 24 12/31/11-12/31/12 20 Member Cities	\$664,220 (337/57)	\$810,718 (366/3)	\$889,541 (368/3)	\$964,041 (368/2)							\$ 1,822,207	\$ 813,966
Loss Y ear 25 12/31/12-12/31/13 20 Member Cities	\$729,736 (360/43)	\$952,440 (371/9)	\$1,180,592 (374/6)								\$ 1,659,593	\$1,105,143
Loss Year 26 12/31/13-12/31/14 20 Member Cities	\$1,480,995 (395/46)	\$1,626,822 (421/8)									\$ 1,498,960	\$1,493,351
Loss Year 27 12/31/14-12/31/15 20 Member Cities	\$626,239 (344/53)										\$2,296,361	\$ 407,182

(1) Incurred losses include both paid claims (including loss adjustment expenses) and all claims reserves against open claims.

MVRMA is a consortium of municipalities located in southwest Ohio. Core cities for the region are Dayton and Cincinnati. Information for the Dayton MSA and the Cincinnati MSA provides an indication of the demographic and economic condition of the region.

DAYTON MSA	2015	<u>2014</u>
Population:	*	800,836
Total Personal Income (thousands \$):	*	33,143,730
Per Capita Personal Income:	*	41,386
GDP (thousands \$):	*	38,178,000
Wage and Salary Jobs:	*	383,380
Unemployment Rate:	4.5%	5.8%

Ten Largest Employers (employee count and %):					
	Count	%		Count	%
Wright Patterson Air Force Base	26,270	*	Wright Patterson Air Force Base	27,500	7.17%
Premier Health Partners	13,500	*	Premier Health Partners	13,500	3.52%
Kettering Health Network	8,259	*	Kettering Health Network	7,115	1.86%
Montgomery County	4,343	*	Kroger Company	5,582	1.46%
Kroger Co.	4,335	*	Montgomery County	4,328	1.13%
Miami University	3,655	*	Miami University	3,564	0.93%
LexisNexis	3,000	*	Wright State University	3,303	0.86%
Honda of America	2,800	*	LexisNexis	3,200	0.83%
Wright State University	2,469	*	Sinclair Community College	2,601	0.68%
University of Dayton	2,453	*	Honda of America	2,600	0.68%

CINCINNATI MSA	<u>2015</u>	<u>2014</u>
Population:	*	2,149,449
Total Personal Income (thousands \$):	*	\$98,613,244
Per Capita Personal Income:	*	\$45,878
GDP (thousands \$):	*	121,407,000
Wage and Salary Jobs:	*	\$1,507,998
Unemployment Rate:	4.3%	5.4%

Ten Largest Employers (employee count and %):					
	Count	%		Count	<u>%</u>
Kroger Co.	21,646	*	Kroger Company	17,000	1.13%
University of Cincinnati	16,016	*	University of Cincinnati	15,162	1.01%
Cincinnati Children's Hospital	14,944	*	Procter & Gamble Co.	14,000	0.93%
TriHealth Inc	11,800	*	Cincinnati Children's Hospital	12,057	0.80%
Proctor & Gambe	11,000	*	TriHealth Inc.	8,898	0.59%
UC Health	10,000	*	Mercy Health Partners	8,550	0.57%
GE Aviation	7,800	*	Archdiocese of Cincinnati	8,000	0.53%
Mercy Health - Cincinnati	7,500	*	GE Aviation	7,300	0.48%
St. Elizabeth Healthcare	7,479	*	Wal-Mart Stores	6,932	0.46%
Fifth Third Bancorp	6,882	*	St. Elizabeth Healthcare	6,839	0.45%

\* This information is not yet available

DAYTON MSA	<u>2013</u>	<u>2012</u>
Population:	802,489	803,185
Total Personal Income (thousands \$):	\$32,382,822	\$31,933,183
Per Capita Personal Income:	\$40,353	\$39,758
GDP (thousands \$):	\$37,534,000	\$37,211,000
Wage and Salary Jobs:	378,185	378,169
Unemployment Rate:	7.8%	7.8%

Ten Largest Employers (employee count and %):					
	Count	%		Count	%
Wright Patterson Air Force Base	29,000	7.67%	Wright Patterson Air Force Base	27,400	7.25%
Premier Health Partners	14,765	3.90%	Premier Health Partners	14,548	3.85%
Kettering Health Network	7,000	1.85%	Kettering Health Network	5,496	1.45%
Kroger Company	4,950	1.31%	Kroger Co.	4,950	1.31%
Montgomery County	3,884	1.03%	Montgomery County	4,363	1.15%
LexisNexis	3,600	0.95%	LexisNexis	3,400	0.90%
Miami University	3,313	0.88%	Sinclair Community College	2,726	0.72%
Sinclair College	2,613	0.69%	Dayton City Schools	2,574	0.68%
Honda of America	2,500	0.66%	AK Steel Holding Corp.	2,400	0.63%
Wright State University	2,403	0.64%	Honda of America Manufacturing	2,400	0.63%

CINCINNATI MSA	<u>2013</u>	<u>2012</u>
Population:	2,150,524	2,128,603
Total Personal Income (thousands \$):	\$93,882,332	92,431,519
Per Capita Personal Income:	\$43,923	\$43,454
GDP (thousands \$):	\$119,090,000	\$115,124,000
Wage and Salary Jobs:	\$1,040,070	1,027,637
Unemployment Rate:	7.2%	7.4%

Ten Largest Employers (employee count and %):					
	Count	%		Count	%
Kroger Company	17,000	1.63%	Kroger Company	20,646	2.01%
University of Cincinnati	15,162	1.46%	University of Cincinnati	15,329	1.49%
Procter & Gamble Co.	14,000	1.35%	Cincinnati Children's Hospital	12,564	1.22%
Cincinnati Children's Hospital	12,057	1.16%	Procter & Gamble Co.	12,000	1.17%
TriHealth Inc.	8,898	0.86%	TriHealth Inc.	10,400	1.01%
Mercy Health Partners	8,550	0.82%	Mercy Heath Partners	8,940	0.87%
Archdiocese of Cincinnati	8,000	0.77%	UC Health	8,670	0.84%
GE Aviation	7,300	0.70%	GE Aviation	7,500	0.73%
Wal-Mart Stores	6,932	0.67%	St. Elizabeth Healthcare	7,251	0.71%
St. Elizabeth Healthcare	6,839	0.66%	Fifth Third Bancorp	7,180	0.70%

DAYTON MSA	<u>2011</u>	<u>2010</u>
Population:	802,970	801,899
Total Personal Income (thousands \$):	\$31,082,885	\$29,319,944
Per Capita Personal Income:	\$38,710	\$36,563
GDP (thousands \$):	\$35,776,000	\$34,271,000
Wage and Salary Jobs:	374,633	369,829
Unemployment Rate:	9.4%	11.0%

	Ten Largest Employers (employee count and %):					
		Count	%		Count	%
	Wright Patterson Air Force Base	27,400	7.31%	Wright Patterson Air Force Base	25,000	6.76%
	Premier Health Partners	14,135	3.77%	Premier Health Partners	14,070	3.80%
	Kettering Health Network	5,029	1.34%	Kettering Health Network	5,452	1.47%
	Montgomery County	4,559	1.22%	Kroger Co.	4,800	1.30%
	Kroger Co.	4,100	1.09%	Montgomery County	4,595	1.24%
	LexisNexis	3,100	0.83%	LexisNexis	3,000	0.81%
	Sinclair Community College	2,726	0.73%	Sinclair Community College	2,720	0.74%
	Dayton Public Schools	2,574	0.69%	Honda of America Manufacturing	2,710	0.73%
	Wright State University	2,417	0.65%	Dayton Public Schools	2,574	0.70%
	AK Steel Holding Corp.	2,400	0.64%	AK Steel Corp.	2,400	0.65%
	Honda of America Manufacturing	2,400	0.64%			
CINCINNATI MSA	2011			2010		
Population:	2,138,038			2,132,415		
Total Personal Income (thousands \$)	· · · ·	82,796,790				
Per Capita Personal Income:	\$40,918	\$39,105				
GDP (thousands \$):	\$108,509,000	\$104,538,000				
Wage and Salary Jobs:	1,013,214	1,005,942				
Unemployment Rate:	8.9%			9.9%		

Ten Largest Emloyers (employee count and %):					
	Count	%		Count	%
Kroger Co.	19,000	1.88%	Kroger Co.	17,000	1.69%
University of Cincinnati	15,374	1.52%	University of Cincinnati	15,162	1.51%
Procter & Gamble Co.	12,500	1.23%	Procter & Gamble	14,000	1.39%
Cincinnati Children's Hospital	12,332	1.22%	Cincinnati Children's Hospital	12,057	1.20%
TriHealth Inc.	10,197	1.01%	TriHealth Inc.	9,898	0.98%
Mercy Health	8,817	0.87%	Mercy Health Partners	8,550	0.85%
Archdiocese of Cincinnati	7,500	0.74%	Archdiocese of Cincinnati	8,000	0.80%
GE Aviation	7,400	0.73%	GE Aviation	7,300	0.73%
St. Elizabeth Healthcare	7,300	0.72%	Walmart Stores	6,932	0.69%
Fifth Third Bankcorp	7,063	0.70%	St. Elizabeth Healthcare	6,839	0.68%

Wage and Salary Jobs: Unemployment Rate:

DAYTON MSA	<u>2009</u>	<u>2008</u>
Population:	798,895	800,209
Total Personal Income (thousands \$):	\$28,659,908	\$29,164,392
Per Capita Personal Income:	\$35,874	\$36,446
GDP (thousands \$):	\$33,234,000	\$34,828,000
Wage and Salary Jobs:	373,351	394,968
Unemployment Rate:	11.3%	7.1%

	Ter	Ten Largest Employers (employee count and %):				
		Count	%		Count	%
	Wright Patterson Air Force Base	25,000	6.70%	Wright Patterson Air Force Base	24,000	6.08%
	Premier Health Partners	14,334	3.84%	Premier Health Partners	11,300	2.86%
	Kettering Health Network	5,630	1.51%	Kettering Health Network	5,425	1.37%
	Montgomery County	4,635	1.24%	Montgomery County	4,497	1.14%
	Honda of America Manufacturing	3,000	0.80%	Community Mercy Health Partners	3,075	0.78%
	Kroger Co.	3,000	0.80%	Kroger Co.	3,000	0.76%
	LexisNexis	3,000	0.80%	LexisNexis	3,000	0.76%
	Dayton Public Schools	2,674	0.72%	Honda of America Manufacturing	2,750	0.70%
	Sinclair Community College	2,650	0.71%	GM Corp. Moraine Assembly	2,500	0.63%
	Wright State University	2,279	0.61%	Dayton Public Schools	2,453	0.62%
CINCINNATI MSA	2009			2008		
Population:	2,123,378		2,110,942			
Total Personal Income (thousands \$)	· · · ·	\$83,839,629				
Per Capita Personal Income:	\$38,332	\$40,187				
GDP (thousands \$):	\$100,626,000	\$102,405,000				

1,020,410 9.5%	1,068,342 5.8%						
Te	17		mployee count and %):				
	Count	%		Count	0		
Kroger Co.	17,000	1.67%	Kroger Co.	15,600	1.4		
University of Cincinnati	15,340	1.50%	University of Cincinnati	15,542	1.4		
Procter & Gamble	13,000	1.27%	Proctor & Gamble	12,900	1.2		
Cincinnati Children's Hospital	11,385	1.12%	Children's Hospital	10,347	0.9		
Hlth Alliance of Greater Cinn.	10,000	0.98%	Tri-Health	9,850	0.9		
TriHealth	9,875	0.97%	Health Alliance	9,475	0.8		
Archdiocese of Cincinnati	8,000	0.78%	Wal-Mart Stores	7,787	0.7		
Walmart Stores	7,375	0.72%	Fifth Third Bank	7,633	0.7		
Mercy Health Partners SW Ohio	7,316	0.72%	Archdiocese of Cincinnati	7,500	0.7		

0.71% GE Aviation

Note: This report was added to the CAFR in 2007. Information for previous years was not available.

Fifth Third Bancorp

Sources: US Census Bureau, Bureau of Economic Analysis, Ohio Dept. of Jobs and Family Services, REDI Cincinnati and The Dayton Business Journal

#### Schedule 5

7,400

0.69%

7,219

#### Miami Valley Risk Management Association

#### MVRMA POOL CONTRIBUTION FACTORS -- Loss Year 27 (2015) 2015 Final MVRMA Budget

Schedul e 6

Member City	2010 Population	# Sworn FT Police	# Other Full-Time	# Titled Vehicles	Insurable Property Values	NOE	Avg. Annual Adjusted Losses	Pool Contribution Factors
Beavercreek	45,193	47	85	108	\$29,769,414	\$18,828,507	\$42,018	6.07056%
Bellbrook	6,943	12	22	30	\$14,271,119	\$5,003,578	\$14,727	1.68387%
Blue Ash	12,114	32	100	109	\$96,040,638	\$30,980,532	\$41,104	5.84873%
Centerville	23,999	40	81	83	\$35,644,958	\$17,250,599	\$26,014	4.42042%
Englewood	13,465	20	50	63	\$32,153,474	\$11,290,786	\$30,371	3.44987%
Indian Hill	5,785	19	53	63	\$26,085,169	\$12,659,360	\$26,341	3.01022%
Kettering	56,163	80	284	245	\$175,472,336	\$59,574,560	\$55,970	12.17368%
Madeira	8,726	12	10	20	\$5,155,887	\$3,625,419	\$2,300	0.90674%
Mason	30,712	49	134	123	\$127,892,985	\$36,913,947	\$38,276	7.34343%
Miamisburg	20,181	38	91	103	\$41,870,338	\$21,050,388	\$44,553	5.46339%
Montgomery	10,251	23	42	72	\$18,628,129	\$12,298,636	\$21,607	2.89935%
NAWA	-	0	4	1	\$13,010,810	\$952,964	\$2,166	0.28490%
Piqua	20,522	30	158	147	\$75,400,976	\$42,740,087	\$73,617	8.24083%
Sidney	21,229	36	149	133	\$77,683,418	\$24,203,862	\$56,895	6.99595%
Springdale	11,223	32	76	73	\$39,769,584	\$16,941,758	\$24,833	3.78432%
Tipp City	9,689	19	48	80	\$30,983,069	\$20,849,710	\$43,746	4.26230%
Troy	25,058	43	141	124	\$83,607,476	\$28,426,635	\$42,575	6.64652%
Vandalia	15,246	31	107	102	\$57,965,235	\$20,335,739	\$24,552	4.50348%
West Carrollton	13,143	22	45	63	\$29,414,833	\$10,888,826	\$33,748	3.56291%
Wilmington	12,520	21	114	123	\$74,328,087	\$17,262,613	\$61,564	6.19321%
Wyoming	8,428	16	31	39	\$28,099,422	\$8,085,768	\$17,522	2.25528%
MVRMA Totals	370,590	622	1825	1904	\$1,113,247,357	\$420,164,274	\$724,499	100.00000%

Notes: 1. The data is as of 8/31/14 unless otherwise noted.

"Avg. Annual Adjusted Losses" are calculated by averaging each member's losses for the years 2010, 2011, 2012 & 2013. Losses are adjusted in accordance with MVRMA's Loss Capping Policy and include both paid claims and open claim reserves. Loss data is as of August 31, 2014.

3. Annually, all buildings valued in excess of \$50K, that were constructed or acquired since the previous year's on-site appraisal, are appraised. A Marshall and Swift index provided by Alliant Insurance Services is then used to update the value of existing appraised properties. For the 2015 Budget, real property (appraised structures) was increased 4.12% and personal property (contents of appraised structures) was decreased 0.08%. Values for contractors equipment, vehicles and any other property not appraised were updated and added to this total.

4. "NOE" are calculated based upon the financial statements for the fiscal year most recently concluded by each member and include Governmental Funds (including Special Revenue Funds), and Proprietary Funds. The figures have been adjusted for debt service, capital improvements, and service contracts where risk has been effectively transferred to a third-party.

(3 X %AAAL) + (%Population + %FT Police + % Other FT + %Titled Vehicles + % IRPRV + %NOE) = PCF

# Miami Valley Risk Management Association Risk Exposure Worksheet: MVRMA (Summary) Last Ten Years

				Risk Exposu	e			
			(Non-Police)					Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Employees	Sworn Police	Vehicles	Values	Expenditures	Factors
2006	\$773,257	348,100	2,078	636	1,812	\$829,733,661	\$350,433,689	100.00%
2007	\$722,898	348,100	2,074	638	1,824	\$890,798,964	\$358,045,532	100.00%
2008	\$657,329	348,100	2,070	649	1,891	\$847,418,767	\$385,918,674	100.00%
2009	\$708,014	348,100	2,032	645	1,933	\$914,069,611	\$396,081,790	100.00%
2010	\$847,609	348,100	2,020	642	1,926	\$959,970,282	\$396,536,755	100.00%
2011	\$768,322	348,100	1,954	632	1,920	\$1,018,755,061	\$412,734,256	100.00%
2012	\$696,716	370,590	1,888	612	1,939	\$1,047,889,231	\$407,102,311	100.00%
2013	\$763,825	370,590	1,825	611	1,976	\$1,077,777,731	\$420,844,315	100.00%
2014	\$672,451	370,590	1,822	605	1,924	\$1,107,428,574	\$411,669,530	100.00%
2015	\$724,499	370,590	1,825	622	1,904	\$1,113,247,357	\$420,164,274	100.00%

Note: In 2007, NAWA, a joint venture water authority shared by the cities of Tipp City and Vandalia, was included as a separate entity when contrib factors were calculated for each member of the pool. Calculating a separate contribution factor for NAWA was simply a means of separating its pre from the cities of Tipp City and Vandalia. The 2007-2010 totals above include the following information submitted for NAWA:

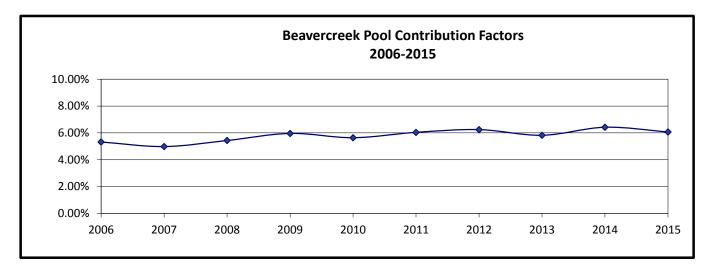
NAWA - 2007	\$0	0	3	0	0	\$11,598,837	\$84,130	0.16%
NAWA - 2008	\$0	0	3	0	1	\$11,946,350	\$537,839	0.19%
NAWA - 2009	\$8,750	0	3	0	1	\$12,300,907	\$819,802	0.61%
NAWA - 2010	\$8,750	0	3	0	1	\$12,601,281	\$862,624	0.54%
NAWA - 2011	\$8,750	0	4	0	1	\$12,384,113	\$1,060,718	0.57%
NAWA - 2012	\$8,750	0	4	0	1	\$13,103,413	\$897,199	0.61%
NAWA - 2013	\$0	0	4	0	1	\$13,512,950	\$922,993	0.19%
NAWA - 2014	\$2,166	0	4	0	1	13,010,810	952,964	0.28%

Source: Association's internal records

Miami Valley Risk Management Association Risk Exposure Worksheet: City of Beavercreek Last Ten Years

			Ris	k Exposure							
	(Non-Police)										
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution			
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors			
2006	\$30,149	37,984	48	89	101	\$25,309,795	\$16,797,793	5.32%			
2007	\$21,107	37,984	47	89	102	\$26,809,530	\$17,420,563	4.98%			
2008	\$27,841	37,984	46	90	109	\$26,334,539	\$19,135,485	5.43%			
2009	\$44,102	37,984	48	84	104	\$26,337,822	\$16,759,148	5.96%			
2010	\$45,982	37,984	46	82	96	\$26,848,883	\$18,056,350	5.64%			
2011	\$50,220	37,984	46	88	96	\$26,944,472	\$18,189,385	6.04%			
2012	\$45,434	45,193	46	88	95	\$28,306,520	\$18,979,561	6.24%			
2013	\$40,172	45,193	47	86	97	\$28,996,673	\$18,579,197	5.82%			
2014	\$45,937	45,193	46	86	99	\$29,362,096	\$20,582,065	6.42%			
2015	\$42,018	45,193	47	85	108	\$29,769,414	\$18,828,507	6.07%			

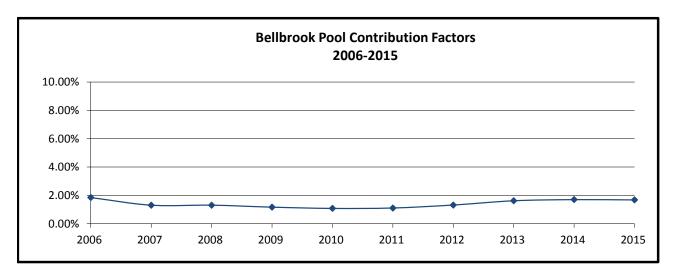
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Bellbrook Last Ten Years

#### Schedule 9

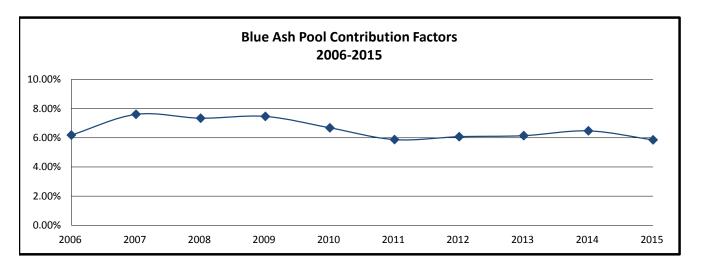
				Risk Exposure	9			
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$18,949	7,009	12	25	32	\$11,065,068	\$3,698,659	1.85%
2007	\$5,155	7,009	14	25	33	\$12,076,724	\$3,815,994	1.31%
2008	\$4,514	7,009	12	26	35	\$11,366,041	\$4,172,942	1.27%
2009	\$3,425	7,009	12	25	33	\$11,359,892	\$4,086,026	1.17%
2010	\$1,517	7,009	12	26	33	\$11,598,240	\$4,316,695	1.08%
2011	\$1,380	7,009	12	26	34	\$13,620,523	\$4,383,111	1.11%
2012	\$5,533	6,943	12	26	34	\$13,671,866	\$5,016,924	1.32%
2013	\$13,621	6,943	12	25	32	\$14,013,239	\$4,731,637	1.62%
2014	\$14,085	6,943	12	21	31	\$14,346,736	\$4,562,205	1.70%
2015	\$14,727	6,943	12	22	30	\$14,271,119	\$5,003,578	1.68%



Miami Valley Risk Management Association Risk Exposure Worksheet: City of Blue Ash Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$55,936	12,513	37	109	107	\$58,351,432	\$22,146,450	6.18%
2007	\$83,352	12,513	38	108	108	\$61,585,076	\$22,163,631	7.60%
2008	\$70,585	12,513	38	110	108	\$60,555,427	\$23,993,866	7.34%
2009	\$77,204	12,513	38	110	109	\$70,756,876	\$24,211,958	7.46%
2010	\$71,848	12,513	37	106	115	\$76,921,838	\$24,173,860	6.68%
2011	\$45,746	12,513	37	104	108	\$87,598,219	\$24,786,830	5.87%
2012	\$45,820	12,114	35	96	108	\$89,042,698	\$27,369,113	6.07%
2013	\$47,171	12,114	35	97	109	\$90,720,934	\$35,631,783	6.14%
2014	\$50,436	12,114	32	93	111	\$94,664,444	\$31,999,635	6.47%
2015	\$41,104	12,114	32	100	109	\$96,040,638	\$30,980,532	5.85%

Source: Association's internal records

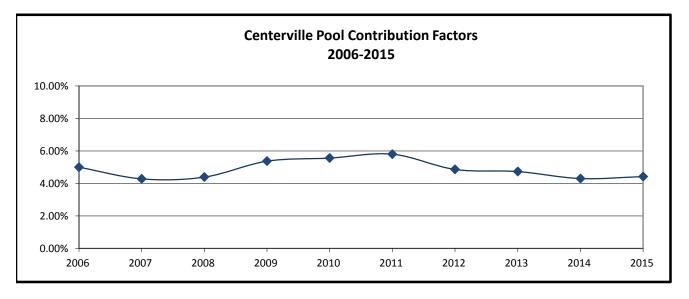


# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Centerville Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$35,684	23,024	42	96	93	\$26,330,174	\$17,580,120	5.00%
2007	\$19,523	23,024	42	92	93	\$27,454,829	\$16,510,031	4.28%
2008	\$23,317	23,024	39	84	86	\$27,436,846	\$16,927,984	4.39%
2009	\$45,062	23,024	41	79	90	\$29,783,636	\$17,647,206	5.37%
2010	\$59,427	23,024	43	80	88	\$36,455,615	\$13,498,803	5.56%
2011	\$58,028	23,024	42	78	88	\$34,958,605	\$17,809,067	5.80%
2012	\$32,719	23,999	41	78	92	\$34,472,337	\$17,525,689	4.86%
2013	\$32,731	23,999	40	79	96	\$35,377,779	\$17,939,284	4.73%
2014	\$20,305	23,999	40	80	91	\$35,803,979	\$17,299,367	4.30%
2015	\$26,014	23,999	40	81	83	\$35,644,958	\$17,250,599	4.42%

Schedule 11

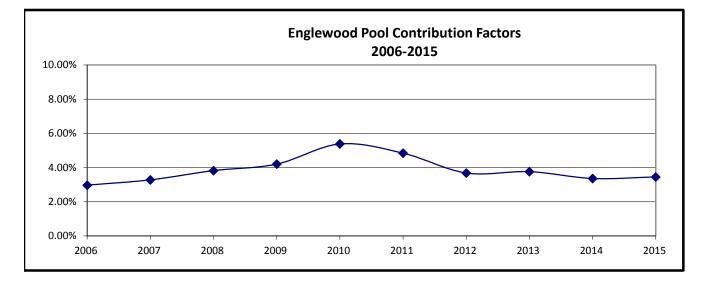
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Englewood Last Ten Fiscal Years

				Risk Exposure							
		(Non-Police)									
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution			
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors			
2006	\$21,704	12,235	20	46	64	\$24,312,190	\$10,361,080	2.97%			
2007	\$27,602	12,235	16	50	64	\$25,487,087	\$11,653,011	3.28%			
2008	\$35,942	12,235	20	45	64	\$24,937,732	\$10,986,906	3.82%			
2009	\$46,536	12,235	20	45	68	\$28,179,154	\$10,664,007	4.20%			
2010	\$85,660	12,235	20	44	66	\$29,955,893	\$10,779,062	5.38%			
2011	\$65,485	12,235	20	45	66	\$29,697,266	\$11,102,203	4.84%			
2012	\$35,031	13,465	20	46	63	\$30,371,950	\$10,553,408	3.68%			
2013	\$40,326	13,465	20	45	63	\$31,084,042	\$10,576,634	3.76%			
2014	\$26,466	13,465	20	49	63	\$31,999,694	\$10,713,519	3.36%			
2015	\$30,371	\$13,465	20	50	63	\$32,153,474	\$11,290,786	3.45%			

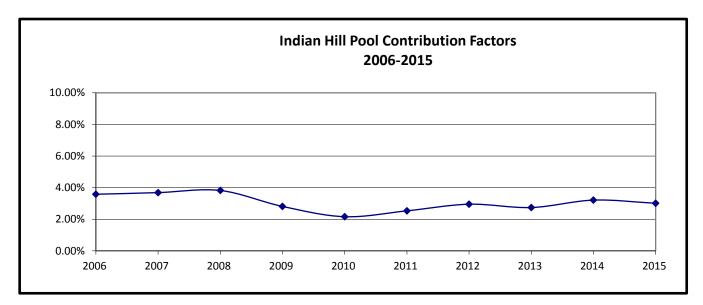
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of The Village of Indian Hill Last Ten Years

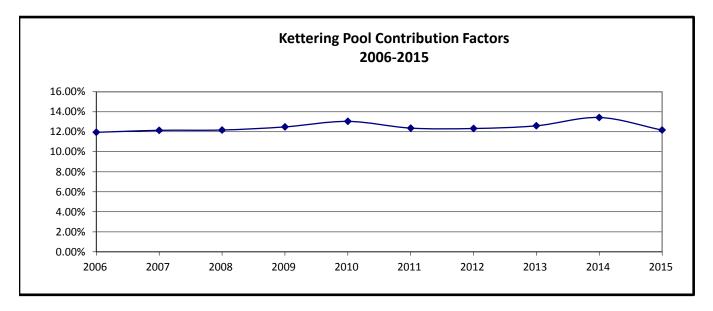
				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$43,592	5,907	20	60	62	\$14,814,892	\$8,352,458	3.58%
2007	\$41,465	5,907	20	59	67	\$18,191,591	\$9,168,888	3.68%
2008	\$40,443	5,907	20	60	71	\$17,223,591	\$9,484,132	3.82%
2009	\$22,065	5,907	20	63	67	\$17,217,305	\$10,520,453	2.81%
2010	\$11,308	5,907	19	59	65	\$23,536,511	\$7,930,463	2.16%
2011	\$17,119	5,907	20	59	58	\$24,018,096	\$11,520,812	2.53%
2012	\$24,043	5,785	19	56	58	\$24,510,843	\$13,235,566	2.95%
2013	\$22,890	5,785	19	53	59	\$25,089,755	\$11,757,158	2.74%
2014	\$28,111	5,785	19	53	64	\$25,936,887	\$12,499,416	3.21%
2015	\$26,341	5,785	19	53	63	\$26,085,169	\$12,659,360	3.01%

Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Kettering Last Ten Years

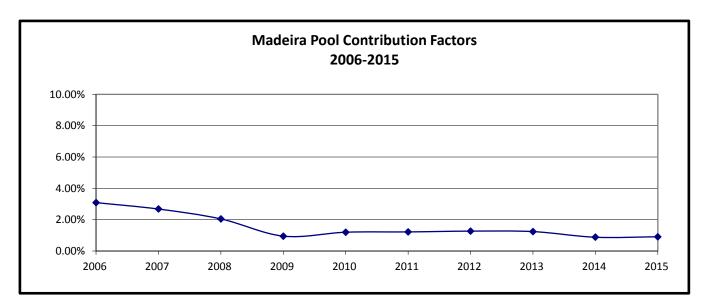
				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$51,461	57,502	81	307	249	\$126,037,978	\$51,363,719	11.95%
2007	\$57,704	57,502	81	305	235	\$131,107,666	\$49,602,044	12.15%
2008	\$55,849	57,502	83	296	254	\$114,335,569	\$52,414,872	12.18%
2009	\$59,798	57,502	82	303	267	\$142,973,189	\$53,256,573	12.49%
2010	\$81,829	57,502	83	312	260	\$146,813,009	\$58,321,082	13.04%
2011	\$62,797	57,502	81	298	254	\$157,357,696	\$55,958,354	12.37%
2012	\$56,891	56,163	81	285	261	\$165,013,544	\$56,061,531	12.33%
2013	\$69,189	56,163	81	280	260	\$168,588,121	\$57,431,798	12.60%
2014	\$74,944	56,163	80	282	260	\$174,741,061	\$58,950,292	13.43%
2015	\$55,970	56,163	80	284	245	\$175,472,336	\$59,574,560	12.17%



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Madeira Last Ten Years

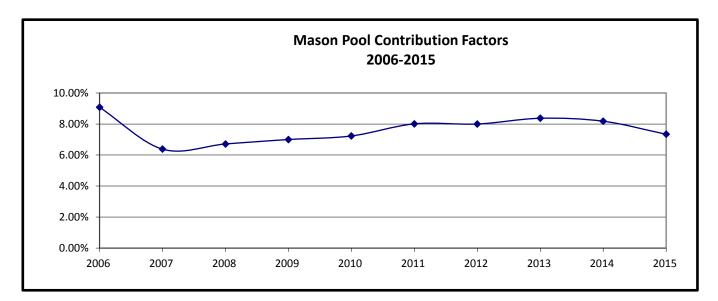
				Risk Exposure							
		(Non-Police)									
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution			
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors			
2006	\$53,175	8,923	12	11	17	\$4,839,239	\$2,467,720	3.09%			
2007	\$40,457	8,923	12	12	18	\$4,938,711	\$2,767,967	2.68%			
2008	\$24,383	8,923	13	11	18	\$4,663,035	\$2,791,986	2.05%			
2009	\$2,627	8,923	13	11	18	\$4,679,431	\$3,405,316	0.95%			
2010	\$9 <i>,</i> 568	8,923	12	12	18	\$4,763,287	\$3,641,039	1.20%			
2011	\$9 <i>,</i> 568	8,923	13	12	20	\$4,750,274	\$2,090,829	1.22%			
2012	\$9,953	8,726	11	12	19	\$4,882,962	\$3,587,538	1.27%			
2013	\$9 <i>,</i> 953	8,726	12	11	19	\$4,997,826	\$3,647,254	1.24%			
2014	\$1,435	8,726	12	11	20	\$5,155,887	\$3,419,147	0.88%			
2015	\$2,300	8,726	12	10	20	\$5,155,887	\$3,625,419	0.91%			

Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Mason Last Ten Years

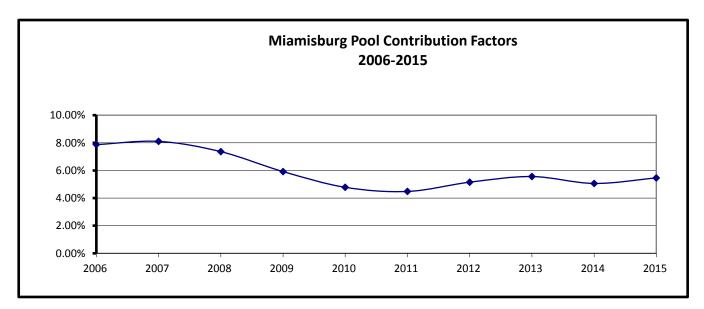
				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$97,445	22,016	36	146	99	\$90,289,005	\$30,025,113	9.08%
2007	\$37,341	22,016	42	150	88	\$84,689,213	\$26,686,653	6.38%
2008	\$36,280	22,016	41	158	114	\$85,357,251	\$28,887,906	6.71%
2009	\$44,785	22,016	43	142	120	\$96,742,995	\$28,900,206	7.00%
2010	\$59,237	22,016	43	149	128	\$99,265,213	\$26,767,913	7.23%
2011	\$64,269	22,016	43	148	131	\$116,229,359	\$33,361,055	8.01%
2012	\$55,606	30,712	38	144	126	\$118,786,784	\$33,039,076	8.00%
2013	\$68,019	30,712	40	136	135	\$122,739,440	\$34,084,947	8.37%
2014	\$53,392	30,712	43	144	124	\$128,276,254	\$35,045,902	8.18%
2015	\$38,276	30,712	49	134	123	\$127,892,985	\$36,913,947	7.34%



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Miamisburg Last Ten Years

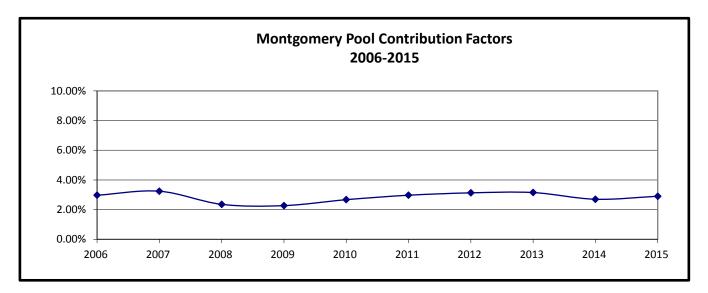
				Risk Exposure	2			
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$89,408	19,489	41	143	118	\$41,786,631	\$19,977,161	7.87%
2007	\$89,397	19,489	39	144	120	\$43,682,241	\$20,428,324	8.10%
2008	\$67,249	19,489	41	147	120	\$41,904,971	\$20,304,421	7.36%
2009	\$41,982	19,489	41	144	124	\$42,746,457	\$21,082,751	5.92%
2010	\$22,345	19,489	40	138	122	\$44,344,585	\$21,937,415	4.78%
2011	\$14,910	19,489	36	135	121	\$43,557,340	\$23,674,531	4.48%
2012	\$27,876	20,181	37	127	121	\$43,926,521	\$23,270,400	5.15%
2013	\$43,839	20,181	35	100	121	\$44,033,325	\$25,122,699	5.56%
2014	\$32,924	20,181	35	90	99	\$41,886,009	\$23,648,250	5.06%
2015	\$44,553	20,181	38	91	103	\$41,870,338	\$21,050,388	5.46%

Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Montgomery Last Ten Years

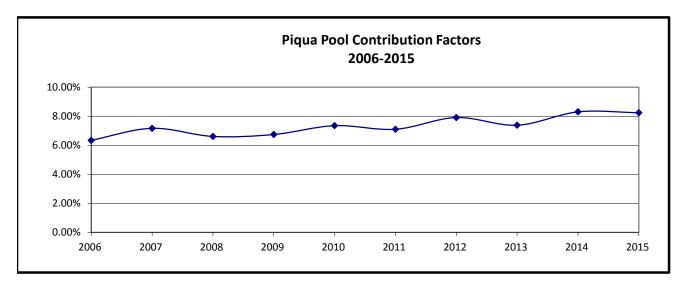
				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$32,698	10,163	21	38	41	\$13,729,947	\$7,324,088	2.97%
2007	\$35,250	10,163	21	37	47	\$14,878,874	\$8,231,945	3.24%
2008	\$14,018	10,163	21	42	47	\$15,769,510	\$8,812,990	2.36%
2009	\$12,643	10,163	21	43	47	\$16,251,860	\$10,011,595	2.27%
2010	\$23,895	10,163	21	44	53	\$17,180,169	\$10,465,396	2.67%
2011	\$27,561	10,163	21	43	56	\$17,560,789	\$12,026,355	2.97%
2012	\$27,847	10,251	21	44	60	\$17,936,640	\$11,522,015	3.13%
2013	\$30,102	10,251	21	43	66	\$18,641,658	\$12,087,079	3.15%
2014	\$16,280	10,251	21	43	72	\$18,958,734	\$12,157,433	2.70%
2015	\$21,607	10,251	23	42	72	\$18,628,129	\$12,298,636	2.90%



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Piqua Last Ten Years

#### **Risk Exposure** (Non-Police) Pool PP/RP Contribution Average Full-Time Full-Time Titled Net Operating **Membership Year** Annual Losses Population Sworn Police Employees Vehicles Values Expenditures Factors 2006 \$38,096 20,738 34 184 135 \$45,125,669 \$32,227,661 6.34% 2007 \$51,735 20,738 33 181 129 \$60,017,522 \$33,569,792 7.17% 2008 \$38,063 20,738 34 175 136 \$56,595,892 \$33,109,112 6.61% 2009 \$42,118 20,738 170 \$57,301,594 \$40,094,414 6.74% 31 141 2010 \$60,917 20,738 33 168 142 \$62,544,120 \$44,851,674 7.35% 2011 \$54,193 20,738 31 160 140 \$62,925,749 \$42,344,214 7.10% 2012 \$67,371 20,522 156 \$64,525,119 \$39,559,501 7.91% 31 145 2013 \$59,718 20,522 30 149 152 \$72,017,789 \$41,864,785 7.38% 8.30% 2014 \$71,322 20,522 30 154 147 \$74,654,276 \$39,353,735 2015 \$73,617 20,522 30 158 147 \$75,400,976 \$42,740,087 8.24%

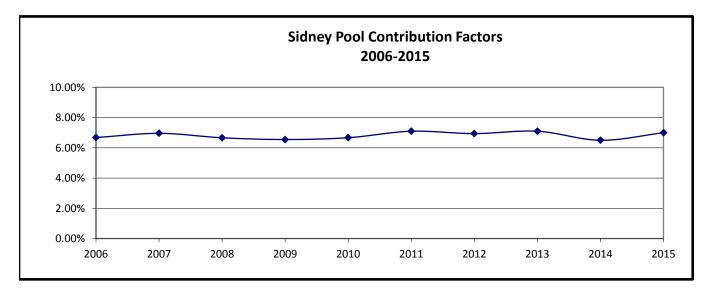
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Sidney Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$46,388	20,211	40	162	153	\$65,531,414	\$20,510,151	6.68%
2007	\$48,008	20,211	40	164	158	\$69,140,327	\$22,601,163	6.96%
2008	\$38,537	20,211	40	170	164	\$64,339,420	\$23,008,043	6.67%
2009	\$39,636	20,211	40	170	158	\$67,197,507	\$24,766,441	6.55%
2010	\$49,652	20,211	40	160	152	\$72,897,123	\$27,683,855	6.67%
2011	\$58,830	20,211	40	153	154	\$71,697,298	\$24,349,332	7.10%
2012	\$50,576	21,229	37	151	154	\$73,442,513	\$24,379,417	6.94%
2013	\$60,577	21,229	36	148	154	\$75,033,010	\$23,703,290	7.10%
2014	\$41,798	21,229	36	149	142	\$76,513,173	\$23,545,356	6.50%
2015	\$56,895	21,229	36	149	133	\$77,683,418	\$24,203,862	7.00%

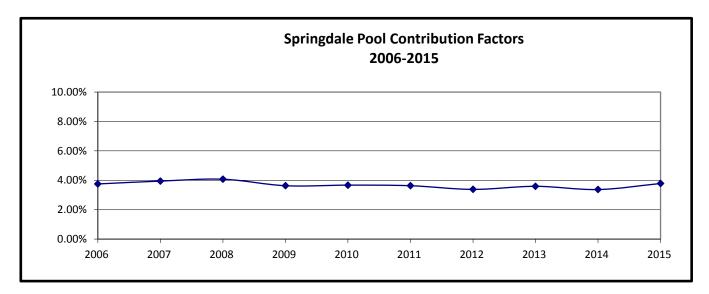
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Springdale Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$25,102	10,563	37	84	65	\$30,988,399	\$13,202,679	3.75%
2007	\$26,461	10,563	38	85	68	\$32,509,932	\$14,542,467	3.95%
2008	\$24,987	10,563	38	87	71	\$31,648,857	\$17,994,753	4.07%
2009	\$17,448	10,563	39	88	74	\$35,005,878	\$16,818,005	3.63%
2010	\$22,180	10,563	38	83	74	\$35,784,392	\$18,081,809	3.67%
2011	\$20,750	10,563	36	82	73	\$37,207,591	\$17,144,932	3.63%
2012	\$14,988	11,223	33	74	74	\$37,960,645	\$16,893,700	3.38%
2013	\$20,889	11,223	36	74	80	\$38,805,997	\$14,575,302	3.59%
2014	\$14,364	11,223	34	76	71	\$39,495,622	\$15,911,155	3.37%
2015	\$24,833	11,223	32	76	73	\$39,769,584	\$16,941,758	3.78%

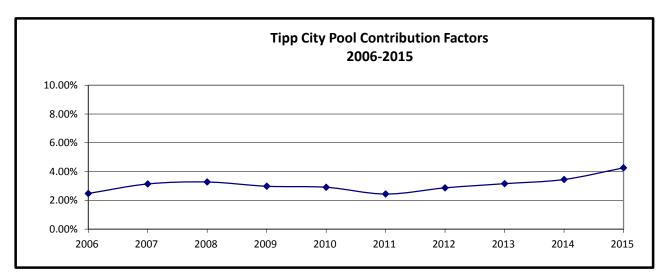
Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Tipp City Last Ten Years

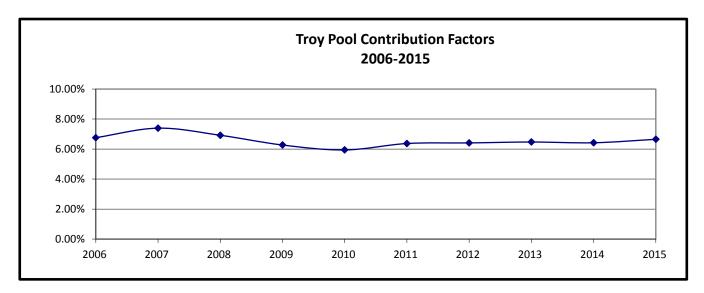
#### **Risk Exposure** (Non-Police) Pool PP/RP Contribution Average Full-Time Full-Time Titled Net Operating Factors **Membership Year** Annual Losses Population Sworn Police Employees Vehicles Values Expenditures 2006 \$9,262 9,221 18 47 72 \$24,385,696 \$14,211,700 2.48% 2007 \$21,495 9,221 19 48 76 \$26,021,606 \$15,472,844 3.14% 2008 49 3.28% \$23,783 9,221 19 73 \$24,959,109 \$15,048,997 2009 \$18,922 9,221 49 76 \$24,987,692 \$16,376,219 2.98% 19 2010 \$20,083 9,221 19 48 77 \$25,772,171 \$17,518,594 2.91% 2011 \$6,357 9,221 19 52 78 \$25,554,338 \$18,924,381 2.44% 2012 \$14,726 9,689 48 84 \$26,431,509 \$18,352,038 2.87% 18 2013 \$23,571 9,689 18 48 84 \$26,577,876 \$17,862,591 3.16% 2014 \$24,948 9,689 19 47 86 \$30,389,846 \$19,237,669 3.45% 2015 \$43,746 9,689 19 48 80 \$30,983,069 \$20,849,710 4.26%

Source: Association's internal records



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Troy Last Ten Years

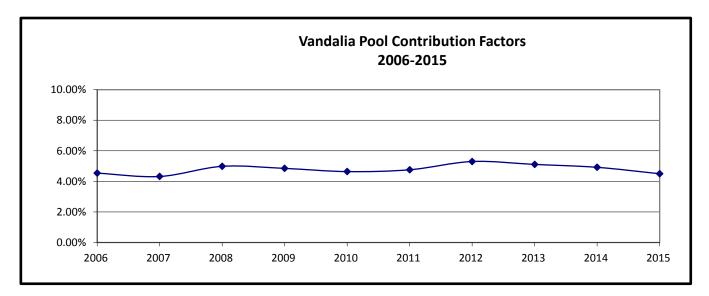
				Risk E	xposure			
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$37,702	21,999	43	177	118	\$84,397,086	\$27,858,532	6.76%
2007	\$49,901	21,999	44	176	119	\$88,867,873	\$27,363,186	7.39%
2008	\$39,410	21,999	43	174	121	\$80,039,525	\$27,367,586	6.92%
2009	\$33,829	21,999	41	161	117	\$80,322,304	\$26,193,873	6.27%
2010	\$33,879	21,999	41	165	116	\$77,486,302	\$25,605,656	5.94%
2011	\$43,029	21,999	40	149	118	\$77,867,665	\$26,778,965	6.37%
2012	\$38,515	25,058	38	142	120	\$80,019,303	\$27,530,777	6.41%
2013	\$43,715	25,058	39	138	117	\$81,722,588	\$28,978,679	6.47%
2014	\$37,119	25,058	39	140	118	\$82,989,425	\$27,498,899	6.42%
2015	\$42,575	25,058	43	141	124	\$83,607,476	\$28,426,635	6.65%



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Vandalia Last Ten Years

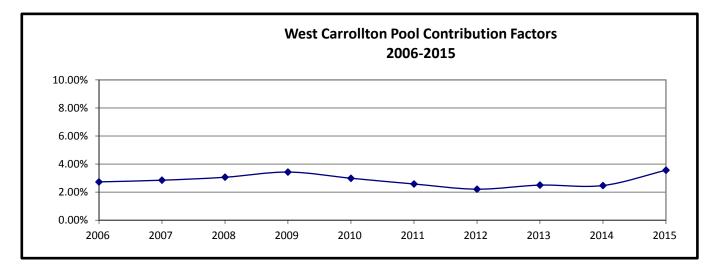
				Risk Exposure				
			(Non-Police)					Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Employees	Sworn Police	Vehicles	Values	Expenditures	Factors
2006	\$23,566	14,603	123	30	93	\$50,428,087	\$19,824,621	4.54%
2007	\$18,468	14,603	118	28	95	\$53,098,177	\$20,690,249	4.32%
2008	\$24,989	14,603	117	30	93	\$47,556,010	\$32,656,673	4.99%
2009	\$27,000	14,603	117	27	98	\$46,902,604	\$31,347,819	4.85%
2010	\$33,159	14,603	111	30	99	\$47,826,976	\$21,950,659	4.64%
2011	\$30,926	14,603	105	31	102	\$51,524,679	\$24,564,802	4.76%
2012	\$40,729	15,246	108	31	101	\$54,897,952	\$19,643,180	5.30%
2013	\$40,474	15,246	102	30	104	\$56,289,545	\$20,996,497	5.11%
2014	\$33,126	15,246	105	31	101	\$57,688,226	\$16,739,616	4.92%
2015	\$24,552	15,246	31	107	102	\$57,965,235	\$20,335,739	4.50%

Source: Association's internal records



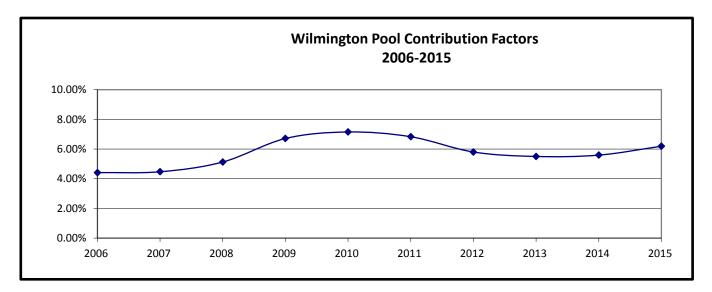
# Miami Valley Risk Management Association Risk Exposure Worksheet: City of West Carrollton Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$12,940	13,818	24	60	61	\$24,680,746	\$9,002,248	2.73%
2007	\$13,984	13,818	25	59	63	\$25,803,945	\$9,891,079	2.85%
2008	\$17,078	13,818	24	59	66	\$25,723,805	\$10,397,925	3.06%
2009	\$27,640	13,818	24	58	62	\$26,000,157	\$9,970,084	3.43%
2010	\$22,032	13,818	23	59	62	\$26,531,747	\$10,387,085	2.99%
2011	\$11,150	13,818	23	54	62	\$27,224,795	\$10,652,767	2.58%
2012	\$3,556	13,143	22	50	62	\$27,768,872	\$11,157,776	2.21%
2013	\$10,618	13,143	22	49	62	\$28,340,006	\$11,506,423	2.50%
2014	\$8,931	13,143	22	46	63	\$28,876,147	\$11,021,168	2.47%
2015	\$33,748	13,143	22	45	63	\$29,414,833	\$10,888,826	3.56%



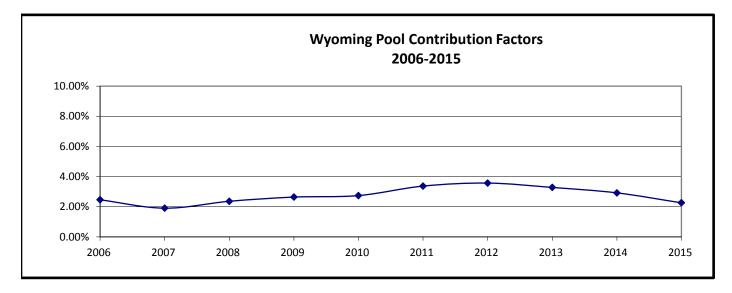
# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Wilmington Last Ten Years

				Risk Exposure				
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$26,100	11,921	25	136	98	\$47,099,720	\$15,892,082	4.41%
2007	\$23,775	11,921	25	133	108	\$51,630,834	\$17,491,855	4.47%
2008	\$35,067	11,921	28	132	103	\$50,083,349	\$17,984,470	5.13%
2009	\$69,919	11,921	26	134	120	\$50,923,011	\$19,574,067	6.71%
2010	\$94,831	11,921	23	137	124	\$53,447,136	\$19,616,027	7.15%
2011	\$76,912	11,921	22	124	124	\$69,015,342	\$20,294,238	6.83%
2012	\$48,948	12,520	22	121	124	\$71,065,287	\$18,452,322	5.80%
2013	\$46,544	12,520	21	122	126	\$72,608,144	\$19,315,329	5.50%
2014	\$45,623	12,520	18	117	122	\$74,109,343	\$17,250,306	5.59%
2015	\$61,564	12,520	21	114	123	\$74,328,087	\$17,262,613	6.19%



# Miami Valley Risk Management Association Risk Exposure Worksheet: City of Wyoming Last Ten Years

				Risk Exposure	9			
				(Non-Police)				Pool
	Average		Full-Time	Full-Time	Titled	PP/RP	Net Operating	Contribution
Membership Year	Annual Losses	Population	Sworn Police	Employees	Vehicles	Values	Expenditures	Factors
2006	\$23,900	8,261	15	35	34	\$20,230,493	\$7,609,654	2.46%
2007	\$10,718	8,261	14	36	33	\$21,208,369	\$7,889,716	1.90%
2008	\$14,994	8,261	19	35	37	\$24,641,938	\$9,899,786	2.36%
2009	\$22,523	8,261	19	33	39	\$26,099,340	\$9,575,827	2.64%
2010	\$29,510	8,261	19	34	35	\$27,395,791	\$10,090,694	2.74%
2011	\$40,342	8,261	19	35	36	\$27,060,852	\$11,717,375	3.37%
2012	\$41,804	8,428	19	32	37	\$27,751,953	\$10,075,580	3.57%
2013	\$39,706	8,428	17	36	39	\$28,587,034	\$9,528,956	3.28%
2014	\$28,739	8,428	16	32	39	\$28,119,925	\$9,256,904	2.92%
2015	\$17,522	8,428	16	31	39	\$28,099,422	\$8,085,768	2.26%



# Miami Valley Risk Management Association Operating Information by Component Last Ten Years

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Members	20	20	20	20	20	20	20	20	20	20
Number of Staff	4	4	4	4	4	4	4	4	4	4
Number of Claims	317	371	414	314	334	406	348	344	400	334
Number of Training Programs	29	37	25	41	31	23	31	24	22	24

Year Ended December 31

Note: The MVRMA staff addresses its members' risk management and risk financing needs, acts as a clearing house for risk related information, administers a claims/litigation management program, and provides extensive safety/loss control consulting and training.

Source: Employment Records, Association's internal records

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# Dave Yost • Auditor of State

# MIAMI VALLEY RISK MANAGEMENT ASSOCIATION OF KETTERING OHIO

MONTGOMERY COUNTY

**CLERK'S CERTIFICATION** 

This is a true and correct copy of the report which is required to be filed in the Office of the Auditor of State pursuant to Section 117.26, Revised Code, and which is filed in Columbus, Ohio.

Susan Babbett

**CLERK OF THE BUREAU** 

CERTIFIED AUGUST 23, 2016

> 88 East Broad Street, Fourth Floor, Columbus, Ohio 43215-3506 Phone: 614-466-4514 or 800-282-0370 Fax: 614-466-4490 www.ohioauditor.gov