

Support Services Committee  
Self- Insurance Department

AGENDA

September 27, 2016 9:00am

Committee Members:      Chairman, Supervisor Vanselow  
                                 Supervisor Frasier  
                                 Supervisor McDevitt  
                                 Supervisor Wood  
                                 Supervisor Brock  
                                 Supervisor Seeber  
                                 Supervisor Montesi  
                                 Supervisor Leggett  
                                 Vacant

**I.      Action Agenda/New Business**

**1.      Resolution requested to enter into a new contract with SGRisk LLC for Actuarial Services for Self-Insured Workers' Compensation Program**

Rationale: The County's independent auditor has recommended that the County retain the services of an actuarial firm for the Self-Insurance Plan. The actuarial firm will perform an independent actuarial analysis of the loss reserve (incurred but not reported) for the Plan on an every other year basis related to the Workers' Compensation coverage. A request for proposal was completed resulting in 12 proposers. The Insurance Administrator and the Deputy Treasurer reviewed the proposals and both recommend the lowest proposal from SGRisk LLC. The Insurance Administrator requests a new contract with SGRisk LLC, 1050 Wall Street West, Lyndhurst NJ 07071, for the term of 1/1/17-12/31/20 with the option of a renewal for the period of 1/1/21-12/31/24. The review will be conducted biannually for a period of 4 years. Thus the review will be conducted in year 1 and year 3 with an option to renew for years 5 and 7. The annual fee \$4,150 for 2016 actuarial services; \$4,150 for 2018 actuarial services; \$4,500 for 2020 actuarial services; \$4,750 for 2022 actuarial services to be paid by S1710 437 Self-Insurance Consulting Fees. There is also an option if needed for additional services hourly for Peer Reviewer \$200, Actuary \$150, and Actuarial Assistant \$75. Also to be paid from S1710 437 if needed.

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Attachments

1.      Resolution request form, tabulation sheet, SGRisk proposal

# **RESOLUTION REQUEST FORM NO. 3**

## ***Request for New Contract***

**DEPARTMENT NAME: Self Insurance**

**DATE: 9/27/16**

- (a) Is this a Result of a Bid or Request for Proposal? **Yes WC 42-16**
- (b) Purpose of Contract: **Authorizing the Self-Insurance Plan Administrator to enter into a contract for Actuarial Services for Self-Insured Workers' Compensation Plan.**
- (c) Name of Contractor: **SGRisk LLC**
- (d) Address of Contractor: **1050 Wall Street West, Lyndhurst NJ 07071**
- (e) Contractor's Contact Person and Telephone Number: **Benjamin S Newville, 201-935-3434**
- (f) Has or will the Contract be provided, if so, please attach: **on form from County Attorney**
- (g) Commencement Date of Contract: **1/1/2017**
- (h) Termination Date of Contract: **12/31/2020 with an option to renew for 1/1/2021-12/31/2024**
- (i) Payment Provisions:
  - i) lump sum amount **\$4,150 2016 actuarial services; \$4,150 2018 actuarial services; \$4,500 2020 actuarial services; \$4,750 2022 actuarial services**
  - ii) hourly rate amount **optional services if needed: Peer Reviewer \$200 per hour; Actuary \$150 per hour; Actuarial Assistant \$75 per hour.**
  - iii) total amount not to exceed
  - iv) how will payments be made (i.e. monthly, quarterly, upon completion of the project, etc. **at completion of biannual actuarial report**
- (j) Where are the Funds for this Contract? List Budget Code, Object Code, Full Title\* and Amount: **OR Capital Project OR Capital Reserve Project Number, Title, and Amount: S1710 437 Self-Insurance Consulting Fees**

Sample: A.1010 470 Legislative Board – Contract \$xx.xx  
Capital Project No. H289.9550 480 – Old Jail Renovations \$xx.xx

WARREN COUNTY PURCHASING DEPARTMENT

1340 State Route 9  
Lake George, NY 12845  
Telephone: (518) 761-6538  
Fax: (518) 761-6395



Julie A. Butler, Purchasing Agent  
Jason M. Shpur, Deputy Purchasing Agent  
Danielle M. Parker, Purchasing Assistant

MEMO

**TO:** Amy Clute, Administrator  
Self-Insurance Department

**FROM:** Julie A. Butler, Purchasing Agent

**DATE:** July 29, 2016

**SUBJECT:** WC 42-16 - RFP FOR ACTUARIAL SERVICES FOR SELF-INSURED  
WORKERS' COMPENSATION PROGRAM

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Transmitted herewith are copies of the unofficial tab sheets and proposals submitted in response to the above-referenced specifications. Please provide this office with a recommendation letter at your earliest convenience.

Also, please note that at this time, these proposals are considered confidential. Other than providing to Committee members for review, please do not release to the public or any other individuals that may submit a request.

If you have any questions, please do not hesitate to contact me.

Encs.

WARREN COUNTY TABULATION SHEET

		NAMES AND ADDRESSES OF BIDDERS					
WC 42-16		SGRisk LLC Attn: E. James Stergion 1050 Wall St. W, Suite 610 Lyndhurst, NJ 07071 Ph: 201-935-3434 Fax: 201-935-3618	AMI Risk Consultants Phillippines, Inc. Attn: Aguedo Ingo 1336 SW 146 <sup>th</sup> Ct. Miami, FL 33184 Ph: 305-273-1589 Fax: 702-359-0926	Complete Actuarial Solutions Co. Attn: Mark Burgess 6832 Old Dominion Dr. Suite 302 McLean, VA 22101 Ph: 571-499-4233 Fax: 571-499-4229	By the Numbers Actuarial Consulting, Inc. Attn: 5213 Country Club Dr Suite 100 Brentwood, TN 37027 Ph: 615-369-0753 Fax: 615-369-0754	Select Actuarial Services Attn: Thomas Meyer 28 White Bridge Rd. Suite 205 Nashville, TN 37205 Ph: 615-269-4469 Fax: 615-269-4878	Pinnacle Actuarial Resources, Inc. Attn: Joseph Herbers 3109 Cornelius Drive Bloomington, IL 61704 Ph: 309-807-2300 Fax: 309-807-2301
DESCRIPTION OF ITEM	BID PRICE	BID PRICE	BID PRICE	BID PRICE	BID PRICE	BID PRICE	
Initial Bi-Annual Contract:							
2016 Actuarial Services	\$4,150.00	\$4,500.00	\$5,000.00	\$5,000.00	\$8,750.00	\$9,200.00	
2018 Actuarial Services	\$4,150.00	\$4,500.00	\$5,200.00	\$6,250.00	\$9,250.00	\$9,200.00	
2 <sup>nd</sup> Bi-Annual Contract:							
2020 Actuarial Services	\$4,500.00	\$4,500.00	\$5,400.00	\$6,500.00	\$9,750.00	\$10,000.00	
2022 Actuarial Services	\$4,750.00	\$4,500.00	\$5,600.00	\$6,750.00	\$10,250.00	\$10,000.00	
Hourly Rates for Optional Services:							
Peer Reviewer	\$200.00/hr					\$320.00/hr	
Actuary	\$150.00/hr						
Actuarial Assistant	\$75.00/hr	\$100.00/hr					
Project Director		\$195.00/hr					
Technical Manager		\$195.00/hr				\$390.00/hr (Lead Actuary)	
Actuarial Consultant		\$195.00/hr	\$300.00/hr	\$250.00/hr (President) \$240.00/hr (Sr. VP)	\$325.00/hr (Partners) \$275.00/hr	\$320.00/hr (FCAS) \$290.00/hr (ACAS)	
Clerical Staff/Administrative		\$30.00/hr				\$100.00/hr	
Actuarial Analyst			\$150.00/hr		\$175.00/hr	\$190.00/hr	
Principal Actuary			\$400.00/hr				
Project Consultant						\$390.00/hr	

WARREN COUNTY TABULATION SHEET

NAMES AND ADDRESSES OF BIDDERS		BID PRICE	BID PRICE	BID PRICE	BID PRICE	BID PRICE	BID PRICE
<p>WC 42-16 RFP FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM DATE: JULY 28, 2016 TIME: 3:00 PM.</p>	<p>SGRisk, LLC Attn: E. James Stergiou 1050 Wall St. W, Suite 610 Lyndhurst, NJ 07071 Ph: 201-935-3434 Fax: 201-935-3618</p>	<p>AMI Risk Consultants Phillippines, Inc. Attn: Aguedo Ingco 1336 SW 146<sup>th</sup> Ct Miami, FL 33184 Ph: 305-273-1589 Fax: 702-359-0926</p>	<p>Complete Actuarial Solutions Co. Attn: Mark Burgess 6832 Old Dominion Dr. Suite 302 McLean, VA 22101 Ph: 571-499-4233 Fax: 571-499-4229</p>	<p>By the Numbers Actuarial Consulting, Inc. Attn: 5213 Country Club Dr Suite 100 Brentwood, TN 37027 Ph: 615-369-0753 Fax: 615-369-0754</p>	<p>Select Actuarial Services Attn: Thomas Meyer 28 White Bridge Rd. Suite 205 Nashville, TN 37205 Ph: 615-269-4469 Fax: 615-269-4878</p>	<p>Pinnacle Actuarial Resources, Inc. Attn: Joseph Herbers 3109 Cornelius Drive Bloomington, IL 61704 Ph: 309-807-2300 Fax: 309-807-2301</p>	<p>BID PRICE</p>
DESCRIPTION OF ITEM							
Senior Actuarial Analyst						\$240.00/hr	
BID AWARDED TO:							
✓							
	Resolution No.						
	TERM OF BID:						
JULIE A. BUTLER, PURCHASING AGENT							

WARREN COUNTY TABULATION SHEET

NAMES AND ADDRESSES OF BIDDERS					
DESCRIPTION OF ITEM	BID PRICE	BID PRICE	BID PRICE	BID PRICE	BID PRICE
<p>WC 42-16 RFP FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM DATE: JULY 28, 2016 TIME: 3:00 PM.</p>	<p>Sound Actuarial Consulting, LLC Attn: Gary Osborne 403 East Main St. Port Jefferson Village, NY 11777 Ph: 631-509-5925</p>	<p>Madison Consulting Group Inc. Attn: John Gleba 200 North Second St. Madison, GA 30650 Ph: 706-342-7750 Fax: 706-342-7775</p>	<p>Oliver Wyman Actuarial Consulting, Inc. Attn: Steven McKinnon 48 South Service Road, Suite 310 Melville, NY 11747 Ph: 631-577-0555 Fax: 212-948-1554</p>	<p>Casualty Actuarial Consultants, Inc. Attn: J. Edward Costner 7000 Executive Center Dr. Suite 312 Brentwood, TN 37027 Ph: 615-371-5339 Fax: 615-371-5341</p>	<p>Actuarial &amp; Technical Solutions, Inc. Attn: Steven Lattanzio 3900 Veterans Memorial Highway, Suite 300 Bohemia, NY 11716 Ph: 631-471-8655 Fax: 631-471-9404</p>
Initial Bi-Annual Contract:					
2016 Actuarial Services	\$10,500.00	\$10,000.00	\$11,500.00	\$12,500.00	\$13,296.00
2018 Actuarial Services	\$10,500.00	\$10,000.00	\$11,500.00	\$12,500.00	\$13,920.00
2 <sup>nd</sup> Bi-Annual Contract:					
2020 Actuarial Services	\$10,500.00	\$12,000.00	\$11,500.00	\$13,500.00	\$14,573.00
2022 Actuarial Services	\$10,500.00	\$12,000.00	\$11,500.00	\$13,500.00	\$15,257.00
Hourly Rates for Optional Services:					
Actuarial Assistant/Staff Assistant		\$160.00/hr			\$112.00/hr
Project Director			\$600.00/hr (Partner)	\$275.00/hr (Mgr/Pres)	
Technical Manager					
Actuarial Consultant	\$245-\$385 (Partner)	\$280.00/hr	\$400.00/hr (Sr.) \$300.00/hr	\$225.00/hr	\$280.00/hr
Clerical Staff/Administrative	\$135-\$195 (Staff)	\$75.00/hr			\$50.00/hr
Actuarial Analyst			\$200.00/hr		\$100.00/hr
Principal/Sr. Actuary		\$300.00/hr (Sr.)	\$500.00/hr.		
Assistant Actuary					\$152.00/hr
Senior Staff Assistant		\$185.00/hr			

WARREN COUNTY TABULATION SHEET

NAMES AND ADDRESSES OF BIDDERS	
<p>WC 42-16                      REP FOR ACTUARIAL SERVICES                      FOR SELF-INSURED WORKERS'                      COMPENSATION PROGRAM                      DATE: JULY 28, 2016                      TIME: 3:00 PM.</p>	<p>Sound Actuarial Consulting, LLC                      Attn: Gary Osborne                      403 East Main St.                      Port Jefferson Village, NY 11777                      Ph: 631-509-5925</p> <p>Madison Consulting Group Inc.                      Attn: John Gleba                      200 North Second St.                      Madison, GA 30650                      Ph: 706-342-7750                      Fax: 706-342-7775</p> <p>Oliver Wyman Actuarial Consulting, Inc.                      Attn: Steven McKinnon                      48 South Service Road,                      Suite 310                      Melville, NY 11747                      Ph: 631-577-0555                      Fax: 212-948-1554</p> <p>Casualty Actuarial Consultants, Inc.                      Attn: J. Edward Costner                      7000 Executive Center Dr.                      Suite 312                      Brentwood, TN 37027                      Ph: 615-371-5339                      Fax: 615-371-5341</p> <p>Actuarial &amp; Technical Solutions, Inc.                      Attn: Steven I. Iannazio                      3900 Veterans Memorial Highway, Suite 300                      Bohemia, NY 11716                      Ph: 631-471-8655                      Fax: 631-471-9404</p> <p>Practical Actuarial Solutions, Inc.                      Attn: Jeffrey Kadison                      920 Farmington Ave.                      Suite 200                      West Hartford, CT 06107                      Ph: 860-313-0001                      Fax: 860-313-0002</p>
DESCRIPTION OF ITEM	BID PRICE
BID AWARDED TO:	BID PRICE
Resolution No.	
TERM OF BID:	
JULIE A. BUTLER, PURCHASING AGENT	



1050 Wall Street West  
Lyndhurst New Jersey 07071  
July 21, 2016

Julie A. Butler  
Purchasing Agent  
Warren County Human Services Building  
1340 State Route 9  
Lake George, NY 12845

Dear Ms. Butler:

Re: 42-16 - Actuarial Services For Workers' Compensation Self-Insured Workers Compensation Program

SGRisk, LLC submits the enclosed proposal for the actuarial analysis of the Warren County's Workers Compensation reserve requirements and funding level estimates, as described in the Request For Proposals For Actuarial Services For Self-Insured Workers Compensation Program.

The legal name of the submitting company is SGRisk, LLC. The contact information for the actuary responsible for performing the analysis is the following:

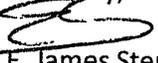
Benjamin S. Newville  
Senior Consultant  
Phone: 201 935-3434 Fax: 201 935-3618 E Mail: [newville@sgrisk.com](mailto:newville@sgrisk.com)

Mr. Newville and peer reviewers all have proper certifications and licenses to legally perform the required duties. We are Fellows of the Casualty Actuarial Society and Members of the American Academy of Actuaries. We are a national company who meet the qualification standards of the American Academy of Actuaries to render actuarial opinions and have fulfilled continuing education requirements. Additionally, Mr. Newville is a Chartered Property and Casualty Underwriter.

We are not aware of any potential conflicts of interest and are fully insured.

The proposal is in effect until November 1, 2016, more than 90 days after submission. At the earliest opportunity, we want to discuss any issue or concern with you or interested parties. I want this proposal to be the beginning of a long term relationship with Warren County, as has been the case with many New York and other state municipalities and agencies for SGRisk. We are proud of our availability, responsiveness to clients and ability to produce quality work within agreed upon time frames. If we can explain or elaborate on any aspect of this proposal, please let me know.

Sincerely,

  
E. James Stergiou  
President and CEO

Enclosures: Original and Two Copies of Proposal

P.S. I recommend annual analyses and am prepared to provide a much lower price proposal if annual reports are accepted.

## Table of Contents

Re: WC 42-16 – Actuarial Services For Self-Insured Workers Compensation Program

Proposal By SGRisk, LLC

Section A - Introduction	Pages 1-2
Section B – Company Profile and History	Pages 3-4
Section C – Vendor Requirements	Pages 5-8
Section D – Required Forms	Pages 9-16
Section E – Pricing Proposal	Pages 17-18
Section F – References	Pages 19-30
Section G – Additional Information Sample Report	Pages 31-44

## Section A – Introduction

SGRisk, LLC is ranked number 11 and number 12 among consulting actuarial firms by size according to AMBest's January 2015 and 2016 magazines, respectively. The professional staff consists of seven actuaries and a support staff of two individuals. Four of the actuaries are Fellows of the Casualty Actuarial Society and members of the American Academy of Actuaries. SGRisk actuaries fulfill continuing education requirements, attend industry meetings and read actuarial journals to participate in new insurance and actuarial science endeavors.

SGRisk, LLC has provided actuarial services since 1980 for all coverages to a wide variety of clients in very diverse jurisdictions and domiciles. Clients include insurers, reinsurers, self-insurers, captives, hospitals, municipalities, agents and others. As an independent alternative and resource for over 700 clients, we work closely with auditors, agents and other insurance professionals. Professional liability and Workers Compensation are significant components of our work, although we have analyzed primary and reinsurance pricing and certified reserves for virtually every class and line of business. We believe that the Company and staff have prepared thousands of reserve, rate filings and profitability analyses. We are prequalified actuaries for the State of Michigan to assist with companies examinations of reserves and reviews of rate filings. We are authorized service providers in Delaware for captive companies.

Our analyses require an understanding of coverage, accounting requirements, compliance to regulatory requirements as well as mathematical expertise. We prefer to keep the mathematics simple to ease understanding and transparency, but produce complex calculations as situations require.

We tailor our work to the specific issue, but SGRisk's typical service is to provide

- A) projections of loss reserve liabilities each client must carry on its books to pay for its past claims, whether reported or not, as of the valuation date,
- B) estimates of the fiscal coming year's losses and payouts and cash flow projections,
- C) ranges of possible outcomes with corresponding probabilities, and
- D) suggested insurance/reinsurance amounts of limits that should be retained and purchased.

All of this is done by analyzing each entity's own specific loss data as much as possible. We do that because each entity has its own unique exposure, and more importantly, its own unique claim profile. That philosophy separates SGRisk from competitors. Most of our competitors rely on countrywide industry information, instead of client-specific data. Industry averages often have a wide range, and may not be very relevant or responsive to entities within New York.

SGRisk, LLC understands and wants to assist the County's efforts to provide entitled workers compensation benefits in compliance with New York State law to all claimants in the most efficient and cost effective way. We wish to participate in efforts to protect the municipalities against overpayments, abuse and fraud.

Closing of old cases through negotiation and Section 32 settlements reduces costs. SGRisk, LLC finds that cases that are not closed in a timely way are subject to increased inflationary costs.

If asked, we will participate in quarterly claims review meetings and conduct audits of claims handling with County participants, as has been the case for many SGRisk, LLC clients. We would be pleased to participate in individual claim review sessions with larger participants, in efforts to reduce their costs.

Review of the method of assessing participants is an important issue. Accuracy and simplicity of implementation are key aspects. Use of exposures, such as payroll into the formula with reflection of emerged experience, increase confidence in accuracy and fairness of workers compensation costs assessments. Fairness and accuracy of assessments create incentives for behavior changes increasing future cost savings.

We are willing to work with you to create statistical support for workers' comp reform legislation to lower costs for municipalities.

We have not been subject to any disciplinary action by federal or state government municipalities. There is a single public reprimand against SGRisk by an actuarial body. E. James Stergiou assigned an account that required a French speaking individual, who was then on staff. Mr. Stergiou signed off on reserves based on input from this employee without thoroughly understanding the French documents. The actuarial society imposed public discipline, due to lack of proper supervision over the employee's work. This incident occurred almost 20 years ago. In the ensuing years, SGRisk has significantly strengthened supervisory and management controls. Staff is more experienced, numerous and capable. We discuss our opinions internally among ourselves, issue draft reports and conduct peer reviews. We adhere to standards of practice promulgated by the professional societies to which we belong.

## Section B – Company Profile and History

The contact information for any questions regarding the proposal and the actuary responsible for performing the analysis is the following:

Benjamin S. Newville  
Senior Consultant  
Phone: 201 935-3434 Fax: 201 935-3618 E Mail: [newville@sgrisk.com](mailto:newville@sgrisk.com)

The contact person for administrative issues is Debbie Santa Lucia ([santalucia@sgrisk.com](mailto:santalucia@sgrisk.com) at 201 935-3434).

The proposal is submitted by:

E. James Stergiou  
President and CEO  
Phone: 201 935-3434 Fax: 201 935-3618 E Mail: [stergiou@sgrisk.com](mailto:stergiou@sgrisk.com)

SGRisk, LLC was founded in 1980. We have over 35 years of consulting experience serving clients in New York State and other states. E. James Stergiou and Charles Gruber are the two principals of the firm. They each have over 40 years of actuarial and insurance experience. They are members of the following professional organizations:

Casualty Actuarial Society  
American Academy of Actuaries  
Conference of Consulting Actuaries  
International Association of Consulting Actuaries  
International Actuarial Association

SGRisk, LLC has provided actuarial services since 1980 for all coverages to a wide variety of clients in very diverse jurisdictions and domiciles including Grand Cayman, Bermuda, and Barbados. Clients include insurers, reinsurers, self-insurers, captives, hospitals (including virtually all the non-public hospitals in the NYC area and many others), municipalities (including the City of Chicago, Cook County, Miami, Westchester County and White Plains), agents and others. As an independent alternative and resource for over 700 clients, we work closely with auditors, agents and other insurance professionals.

Municipalities comprise about 20% of our clients, with the remainder consisting mostly of insurance companies and self-insurers. By line of business, about 40% each consists of workers compensation and medical malpractice.

Our work includes loss reserve analyses and regulatory certifications, profitability projections, financial forecasting, rate development, reinsurance purchase recommendations, auditing of underwriting and

claims activities, catastrophe management and management reports. We produce and evaluate the metrics to assist companies and municipalities' planning using different perspectives. We compare expected outcomes versus emerging results and recommend portfolio changes and risk selection criteria.

We prepare loss reserve analyses, loss reserve second opinions, feasibility studies, funding projections, insurance company solvency analyses and rate filings for all lines of business. Our risk selection, predictive modeling and pricing tools validate premiums for malpractice, workers compensation, surety and liability coverage. Professional liability and Workers Compensation are significant components of our work, although we have analyzed primary and reinsurance pricing and certified reserves for many diverse lines of insurances and coverages. Mr. Gruber is the former Chief Actuary of the New York Compensation Insurance Rating Board and Research Actuary for the National Council on Compensation Insurance (NCCI).

Benjamin S. Newville has been associated with SGRisk, LLC since May, 2011. His actuarial/insurance experience spans more than forty years with considerable focus on workers compensation reserves and pricing. At SGRisk, LLC he has produced reserve certifications, risk transfer and profitability analyzes, built pricing models, conducted underwriting and claims audits, recommended premiums for large accounts and reinsurance structures and served as an expert witness. For the previous ten years, he was a pricing actuary for Zurich North America Insurance Company. He produced premium recommendations and developed/tested rating models for primary and excess workers compensation and other segments of business. Prior to his Zurich tenure, he was Senior Vice President and Chief Actuary at Sorema North America Reinsurance Company from 1994 to 2001. His duties included development of reserving methodology and explanations of carried reserves to the parent, outside auditors, actuarial consultants, rating agencies and others. He directed the production of rate filings, loss cost multipliers and supporting exhibits. He determined prices and formulae for workers compensation and other reinsurance treaties and transactions. He also has had experience at the Insurance Services Office rating bureau and other primary and reinsurance company positions. Ben is a Fellow of the Casualty Actuarial Society, Member of the American Academy of Actuaries and a Chartered Property and Casualty Underwriter. He is a qualified actuary who has met Casualty Actuarial Society continuing education requirements and meets the qualification standards of the Academy to render actuarial opinions. Peer reviewers will be E. James Stergiou and Charles Gruber, principals of SGRisk, LLC, qualified actuaries who have met Casualty Actuarial Society continuing education requirements and meet the qualification standards of the Academy to render actuarial opinions. See attached resumes.

## Section C – Vendor Requirements

SGRisk, LLC believes that the Company and staff have prepared thousands of reserve analyses, including many Workers Compensation estimates with projected funding requirements for municipalities. For example, SGRisk, LLC produced public opinion research projects for Westchester County, New York; Orange County, New York; City of Fort Wayne, Indiana; CompSource, Oklahoma (CSO) and South Bergen, New Jersey. Benjamin Neville will be the Warren County project manager. He has produced Workers Compensation funding estimates for Orange County, for example, starting from the compilation of data, analysis of data using various methodologies, to meetings with the client. Contact information for each client follows.

SGRisk provides New York workers compensation actuarial services for the City of Peekskill, City of White Plains, City of Yonkers, Orange County, Putnam County, Genesee County, Town of Ramapo, Village of Ossining and Westchester County, similar to that as described in this RFP. Of these eight other municipality clients, in terms of population, Warren County ranks higher than three of the municipalities and lower than six. The population of Warren County is slightly higher than that of Genesee County.

Larger actuarial service clients in New York include Academic Health Professionals Insurance Association, Hospital Insurance Company, Federation of Jewish Philanthropies, Westchester Medical Center, AmTrust Insurance Company and Kensington Insurance Company. Larger actuarial service clients outside of New York include CompSource, City of Chicago and City of Miami. We have been providing services to Orange County, Westchester County, City of White Plains and others listed for more than ten years.

It is our common practice to model expected losses, based on frequency and severity fits of distributions of past events. We will present alternatives and confidence levels of results, so that we and Warren County can judge probabilities of favorable and unfavorable scenarios, in addition to the expected case. Very often, the expected value does not occur or only occurs after many years elapse.

To reiterate, SGRisk's philosophy is as follows:

- a) We will assess and utilize Warren County own claims and reserves to the maximum extent possible. Every municipality is different and it behooves us to key our analyses to performance of your facilities and incorporate industry patterns to the extent appropriate.
- b) We will consider changes in laws and regulations over time.
- c) We want to meet regularly with you to discuss and obtain agreement and understanding of reserve levels and methodology. We recommend reviews and meetings as conditions warrant. No reserve or pricing analysis will be published in final form unless the numbers are understood and agreed upon by all parties.

d) Our practice is to issue "draft" reports for discussion purposes, and then revise them as needed after the client has a chance to review and comment on our observations and assumptions. That way, as stated above, everyone will understand and hopefully agree with the numbers and conclusions.

Loss reserves are a significant liability for Warren County. Small improvements in methodology produce large benefits in accuracy. Standard actuarial methodology utilizes relationships of loss between different evaluation dates. Losses that change by a given amount often are extrapolated to change by that same amount in the future. However, changes occur which distort this simplistic approach. Laws, regulatory changes, medical improvements and external influences alter past changes. They need to be recognized to produce an accurate reserve evaluation. The skillful actuary compares changes in loss to industry sources and adjusts for mix of business changes as well as anomalous individual claims. It is vital to know the lags between dates that claims occur and are reported and lags between occurrence and settlement date.

Adequacy of case reserves needs to be monitored. To the extent that case reserves change from being stronger or weaker, reserves must adjust to comprise an adequate whole. Closed claims studies are part of the way that claim adequacy can be assessed. Claims closed within a calendar year period are compared to the reserve as of a year earlier and years earlier. The numbers of claims with savings and deficiencies are calculated along with their dollar amounts. Comparisons of paid loss expense to paid claims, paid loss expense on open claims, paid loss expense to loss reserves would provide insight into Warren County future costs.

Claims, even for the same type of injury, vary from place to place, time to time, company to company or municipality. Independent checks on claims may yield large dividends due to large sums involved both to the loss amount and the claims settlement costs.

We assess the adequacy of the individual case reserve in view of the severity of injury, location and other variables. Amount of litigation and complexity of cases are ingredients in the judgment on the loss expense reserve. We believe that examination of the details of individual cases provide insight into estimates for the aggregate of all claims.

We want to meet with you, as well as with others who are familiar with reserving processes and the computer transactions at Warren County, prior to each yearly review. We want to understand your data, optimum ways to segment your experience, changes in your systems and reserving and any other issue. We want to know how the profile of claimants changed. Changes in demographics and in types of work performed can have a significant effect on loss experience. Improvements in medical care increase longevity and may increase claim costs as well. We want to obtain historic cost of living adjustments to claim costs. We want to determine if utilization of attorneys, adjustors or medical facilities changed over time. We have found such meetings to be beneficial to all parties. An added benefit to Warren County is the possibility that our discussion will spur improvements based on the ideas that we may present.

We believe that you may want to discuss details of our calculations and presentation. Additionally, we are available for other meetings with you and other interested parties. We welcome questions and are responsive to clients' needs and desires.

Current Client List:

SGRisk, LLC clients number over 700. SGRisk, LLC clients include the following:

New York State Municipalities

City of Peekskill  
City of White Plains  
City of Yonkers  
Orange County  
Genesee County  
Putnam County  
Town of Ramapo  
Village of Ossining  
Westchester County

Other Clients

Academic Health Professionals Insurance Association  
Hospital Insurance Company  
Federation of Jewish Philanthropies,  
Westchester Medical Center,  
AmTrust Insurance Company  
Kensington Insurance Company  
CompSource  
City of Chicago  
City of Miami  
City of Fort Wayne  
Others to Be Discussed Upon Request

Work Plan:

The Consultant proposes to approach the project and schedule as follows:

Review of Warren County operations and demographics – project manager and peer reviewers

Review of previous actuarial studies and related materials – project manager

Discussion with Warren County staff – project manager and peer reviewers

Compilation of incurred and paid loss development data; review of large losses with descriptions as available; comparison of case reserves and paid losses on open and closed claims; calculation of changes in reporting and claims settlement dates; comparison to industry benchmarks, review of rates – project manager and actuarial assistant

Calculations and derivation of alternative results, including assessment of adequacy of outstanding workers compensation claims/liabilities - project manager and actuarial assistant

Selection of appropriate funding level recommendations for the next 2-year fiscal cycle, review of paid and reported loss histories, confidence levels of estimated program assets, future annual cash flow requirements, cost allocation and recommended contributions from each County department - project manager

Written Report Draft - project manager and peer reviewers

Discussion with Warren County Staff – project manager and peer reviewers

Written Final Report - project manager and peer reviewers

Discussion with Warren County City Officials and external auditor – project manager and peer reviewers

The report will include an estimate of the expected losses for the upcoming fiscal year, by participant; estimate of future loss payments; calculation of discounted and undiscounted unpaid liabilities with a range around the point estimate of reserves for current plan participants and in total with allocations to each and anticipated and unanticipated contingencies. We are available to consult on other actuarial services.

## Section D – Required Forms

Signed Proposal

Non Collusion Certification

Corporate Resolution

Iran Divestment Act Certificate

Addenda

Insurance and Workers Compensation/Disability Certification

WC 42-16 - REQUEST FOR PROPOSALS FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM

DATE: JULY 28, 2016

TIME: 3:00 PM

PLACE: HUMAN SERVICES BUILDING

CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (the "Act"), Chapter 1 of the 2012 Laws of New York, a new provision has been added to State Finance Law (SFL) § 165-a and New York General Municipal Law § 103-g, both effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law) (the "Prohibited Entities List"). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, each Bidder/Contractor, any person signing on behalf of any Bidder/Contractor and any assignee or subcontractor and, in the case of a joint bid, each party thereto, certifies, under penalty of perjury, that once the Prohibited Entities List is posted on the OGS website, that to the best of its knowledge and belief, that each Bidder/Contractor and any subcontractor or assignee is not identified on the Prohibited Entities List created pursuant to SFL § 165-a(3)(b).

Additionally, Bidder/Contractor is advised that once the Prohibited Entities List is posted on the OGS Website, any Bidder/Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to this solicitation must certify at the time the Contract is renewed, extended or assigned that it is not included on the Prohibited Entities List.

During the term of the Contract, should the County receive information that a Bidder/Contractor is in violation of the above-referenced certification, the County will offer the person or entity an opportunity to respond. If the person or entity fails to demonstrate that he/she/it has ceased engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the County shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor in default.

The County reserves the right to reject any bid or request for assignment for a Bidder/Contractor that appears on the Prohibited Entities List prior to the award of a contract and to pursue a responsibility review with respect to any Bidder/Contractor that is awarded a contract and subsequently appears on the Prohibited Entities List.

I, Benjamin S. Neville, being duly sworn, deposes and says that he/she is the Senior Consultant of the SERISK, LLC

Corporation and that neither the Bidder/Contractor nor any proposed subcontractor is identified on the Prohibited Entities List.

Benjamin S. Neville  
SIGNED

SWORN to before me this

15<sup>th</sup> day of July

2016

Notary Public:

Ruth Kruter



WC 42-16 - REQUEST FOR PROPOSALS FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM

DATE: JULY 28, 2016

TIME: 3:00 PM

PLACE: HUMAN SERVICES BUILDING

PROPOSAL

PROPOSAL OF: SG Risk, LLC  
COMPANY NAME

TO: Julie A. Butler, Purchasing Agent  
Warren County Human Services Building, 3<sup>rd</sup> Floor  
1340 State Route 9  
Lake George, NY 12845

The undersigned having carefully examined the specifications and having to their satisfaction ascertained all the facts concerning these specifications, herewith submits the following proposal.

Cost to perform all Services as per the requirements of the attached specifications for any and all costs associated with this project for all professional services to be performed as outlined in the proposal.

INITIAL BI-ANNUAL CONTRACT 2016 - 2019:

2016 Actuarial Services: \$ 4,150

2018 Actuarial Services: \$ 4,150

2<sup>ND</sup> BI-ANNUAL CONTRACT 2020 - 2023:

2020 Actuarial Services: \$ 4,500

2022 Actuarial Services: \$ 4,750

HOURLY RATES FOR OPTIONAL SERVICES:

TITLE:	RATE:
<u>Peer Reviewer</u>	<u>\$200</u>
<u>Actuary</u>	<u>150</u>
<u>Actuarial Assistant</u>	<u>75</u>
_____	_____
_____	_____

There shall be no other amounts due and payable by the County regardless of costs or expenses of the Consultant except for additional services requested by the County which are beyond the Scope of Services or those services customarily performed as part of the scope of services.

WARREN COUNTY PURCHASING DEPARTMENT

1340 State Route 9  
Lake George, NY 12845  
Telephone: (518) 761-6538  
Fax: (518) 761-6395



Julie A. Butler, Purchasing Agent  
Jason M. Shpur, Deputy Purchasing Agent  
Danielle M. Parker, Purchasing Assistant

MEMO

TO: All Prospective Proposers  
FROM: Julie A. Butler, Purchasing Agent  
DATE: June 29, 2016  
SUBJECT: **ADDENDUM #1: WC 42-16 - REQUEST FOR PROPOSALS FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM**

---

Please sign and return the following to our office with your proposal:

I, Benjamin S. Newville, of  
SG Risk, LLC (Company) have received the following  
addendum and will include it with the above bid.

Addendum:

The following questions have been submitted relative to the above-referenced RFP. Answers are herein provided.

- Q1. When was the last actuarial review produced?
- A. The County has not previously contracted for actuarial services relative to the Self-Insured Workers' Compensation Program.
- Q2. Who was the incumbent?
- A. See Q1.
- Q3. What was the cost?
- A. See Q1.
- Q4. Was the County satisfied with the work product?
- A. See Q1.
- Q5. Is the latest review available to the bidder?
- A. See Q1.

- Q15. Can we get a copy of the recent report by the plan administrator as to how he/she estimates the future liabilities on the Plan's open and active claims, the amount of liabilities, etc.?**
- A. The current plan liabilities are estimated by the Plan Administrator based on historical medical and future expectations based upon the Administrator's experience in claims handling. The most current estimated liabilities report is attached hereto as Attachment "A".**
- Q16. What is the County's estimated budget for the services?**
- A. The County does not release this information as part of the RFP process.**
- Q17. What will be the basis in awarding the bid?**
- A. See Section VI(A) on page 7 of the Specifications.**
- Q18. Will you share the Evaluation Sheet and perform a debriefing if requested at the end of the process?**
- A. The Plan Administrator will address questions and concerns about the selection process at the end of the process as the County feels it is fit to do so.**
- Q19. Why is the County going out to bid for actuarial services?**
- A. Recommendation of the County's Independent Auditor.**
- Q20. Is loss data available in Excel format?**
- A. Loss data is currently only available as a PDF report. However, there is a possibility that the County's Information Technology Department will be able to build a report with the data that the selected consultant needs in Excel format.**
- Q21. Is an on-site presentation of finding required or desired? If so, is it acceptable for there to be a separate fee for the travel expenses once the on-site meeting is requested?**
- A. On-site presentation may be required or desired and is expected to be part of the quoted fee. The County is not responsible for travel or other related fees as part of the interview process (if requested).**
- Q22. What has been the history of retentions for the 10 years prior to 2016?**
- A. The County has purchased Excess Workers' Compensation Insurance for more than 10 years. The current retention is \$1,000,000 per occurrence with statutory limits. The limits of this policy have been somewhat similar for the time period.**
- Q23. Loss data is segmented into indemnity, medical and other expense. What is included in other expense?**
- A. Other expenses include legal, nurse case management, investigation, IME's, etc. (Medical includes only medical requested by the claimant. All Plan requested services are tallied in "other".)**

WARREN COUNTY PURCHASING DEPARTMENT

1340 State Route 9  
Lake George, NY 12845  
Telephone: (518) 761-6538  
Fax: (518) 761-6395



Julie A. Butler, Purchasing Agent  
Jason M. Shpur, Deputy Purchasing Agent  
Danielle M. Parker, Purchasing Assistant

MEMO

TO: All Prospective Proposers  
FROM: Julie A. Butler, Purchasing Agent  
DATE: July 18, 2016  
SUBJECT: ADDENDUM #2: WC 42-16 - REQUEST FOR PROPOSALS FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM

Please sign and return the following to our office with your proposal:

I, E. James Stegman of  
SG Risk, LLC (Company) have received the following  
addendum and will include it with the above bid.

Addendum:

The following questions have been submitted relative to the above-referenced RFP. Answers are herein provided.

- Q1. How many in person meetings per year are required for the actuarial consultant to attend?
  - A. We don't anticipate requiring any in-person meetings once the contract is awarded, however, if the Committee elects to exercise their option for interviews prior to making their decision, an on-site presentation will be required at no cost to the County.
- Q2. Will you accept NY MBE subcontractor participation?
  - A. Yes, however, please include that information in your proposal.
- Q3. What is the name of the current insurance Administrator?
  - A. The Warren County Self-Insurance Administrator is Amy Clute.

All other terms and conditions of the bid shall remain the same. If you have any questions, please contact me at (518) 761-6538.

Signature: [Handwritten Signature]

Date: 7/18/16

WC 42-16 - REQUEST FOR PROPOSALS FOR ACTUARIAL SERVICES FOR SELF-INSURED WORKERS' COMPENSATION PROGRAM

DATE: JULY 28, 2016

TIME: 3:00 PM

PLACE: HUMAN SERVICES BUILDING

CORPORATE RESOLUTION

RESOLVED that SG Risk, LLC.  
(Name of Corporation)

be authorized to sign and submit the Bid, or Proposal, of this Corporation for the following project:

H-16 Actuarial Services for Workers Compensation Self Insured WC Program  
(Title of Project)

and to include in such Bid Proposal the Certificate as to non-collusion required by Section 103-d of the General Municipal Law as the act and deed of such corporation, and for any inaccuracies of misstatements in such certifies this Corporate Bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the Resolution adopted by SG Risk, LLC.

Corporation at a meeting of its Board of Directors held on  
the 20<sup>th</sup> Day of July, 20 16, and  
is still in force and effective on this 20<sup>th</sup> Day of July,  
20 16.

  
\_\_\_\_\_  
SECRETARY  
(Signature)

(SEAL OF CORPORATION)



# CERTIFICATE OF LIABILITY INSURANCE

SGRISKL-01

VPE

DATE (MM/DD/YY)

2/4/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICY BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # **OC36861**  
New York-Alliant Ins Svc Inc  
320 West 57th St  
New York, NY 10019

CONTACT NAME:  
PHONE (A/C, No, Ext): **(212) 603-0200** FAX (A/C, No):  
E-MAIL:  
ADDRESS:

INSURED  
**SG Risk LLC**  
Stergiou, Emanuel James  
1050 Wall Street West, Suite 610  
Lyndhurst, NJ 07071

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	<b>Sentinel Insurance Company Ltd</b>	<b>11000</b>
INSURER B:	<b>Hartford Underwriters Insurance Company</b>	<b>30104</b>
INSURER C:	<b>Indian Harbor Insurance Company</b>	<b>36940</b>
INSURER D:		
INSURER E:		
INSURER F:		

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			10SBAPF3249	11/25/2015	11/25/2016	EACH OCCURRENCE \$ <b>2,000,000</b> DAMAGE TO RENTED PREMISES (Ea occurrence) \$ <b>1,000,000</b> MED EXP (Any one person) \$ <b>10,000</b> PERSONAL & ADV INJURY \$ <b>2,000,000</b> GENERAL AGGREGATE \$ <b>4,000,000</b> PRODUCTS - COMP/OP AGG \$ <b>4,000,000</b>
A	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			10SBAPF3249	11/25/2015	11/25/2016	COMBINED SINGLE LIMIT (Ea accident) \$ <b>2,000,000</b> BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> <b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <input type="checkbox"/> <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N	10WECAG9430	12/11/2015	12/11/2016	PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ <b>500,000</b> E.L. DISEASE - EA EMPLOYEE \$ <b>500,000</b> E.L. DISEASE - POLICY LIMIT \$ <b>500,000</b>
C	<b>Professional Liab.</b>			MPP001720711	10/14/2015	10/14/2016	Ded. \$75,000 <b>2,000,000</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
This certificate serves as Evidence of Insurance

**CERTIFICATE HOLDER**

**SG Risk LLC**  
1050 Wall Street West, Suite 610  
Lyndhurst, NJ 07071

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Christine Perry*

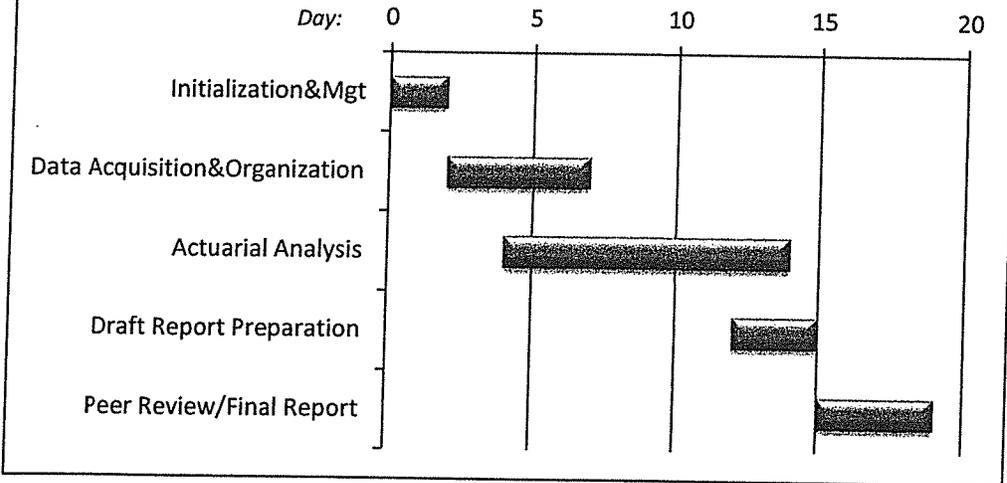
## Section E – Pricing Section

We propose a maximum cost of \$4,150 for 2016 and 2018 actuarial services. We propose a maximum cost of \$4,500 for 2020 and \$4,750 for 2022 actuarial services. See detail below with hourly rates:

	<u>Peer Reviewer</u>	<u>Actuary</u>	<u>Actuarial Assistant</u>	<u>Total</u>
Hours				
Initialization&Mgt		2	1	3
Data Acquisition&Organization		2	2	4
Actuarial Analysis	1	10	2	13
Draft Report Preparation		2	2	4
Peer Review/Final Report	1	5	1	7
Total	2	21	8	31
 <b>Hourly Rate</b>				
	<b>200</b>	<b>150</b>	<b>75</b>	
 Cost *				
		\$	\$	\$
Initialization&Mgt	\$ -	300	75	375
Data Acquisition&Organization		300	150	450
Actuarial Analysis	200	1,500	150	1,850
Draft Report Preparation		- 300	150	450
Peer Review/Final Report	200	750	75	1,025
Total	\$ 400	\$ 3,150	\$ 600	\$ 4,150

\* Cost includes administrative support and expense

# Warren County Work Plan



## Section F: References:

### Benjamin S. Newville References

#### Business:

John Scanlan, CPCU  
President  
Kensington Insurance Company  
6 West 18th Street, 11TH Floor  
New York New York, 10011  
(212) 629-8838 ext. 202  
jscanlan@kensington-ins.com

Ram R.P. Singh  
Chairman /CEO  
Maya Assurance Company  
45-18 Court Square  
Long Island City, New York 11101  
(718) 937-2010  
rsingh@mayaassurance.com

Martin Kern, Esq., RPLU  
Executive Director  
Academic Health Professionals Insurance Association  
99 Park Ave, New York, NY 10016  
(646) 808-0600  
martin.kern@academicgroup.com

Terry Cummings, Esquire  
Hitchcock & Cummings LLP  
120 West 45th Street  
Suite 405  
New York, New York 10036  
(212) 688 3025, ext. 102

Mark Purcell  
President  
Rampart Insurance Company  
90 Broad St  
New York, NY 10004  
(212) 480-0570

#### Personal:

Judge Fred Hirsh  
Fire Commissioner Carey Welt

## SGRisk, LLC Municipal References

Charles Emberger, City Controller  
City of Peekskill  
914 734-4118  
[cemberger@cityofpeekskill.com](mailto:cemberger@cityofpeekskill.com)

Michael Genito  
City of White Plains  
914 422-1233  
[finance@whiteplainsny.gov](mailto:finance@whiteplainsny.gov)

John Delaney, Finance Commissioner  
City of Yonkers  
914 377-6166  
[John.Delaney@yonkersny.gov](mailto:John.Delaney@yonkersny.gov)

Andrienne Lotto Spadaccini  
Putnam County  
845 808-1150 ext.  
[finance@putnamcounty.gov](mailto:finance@putnamcounty.gov)

Christopher St. Lawrence, Supervisor  
Town of Ramapo  
New City, New York  
845 357-5100 ext. 212

Trich Lepre, Deputy Village Treasurer  
Village of Ossining  
914 941 2581  
[tlepre@villageofossining.org](mailto:tlepre@villageofossining.org)

Ann Marie Berg, Finance Commissioner  
Westchester County, New York  
914 995-2857  
[dept-of-finance@westchestergov.com](mailto:dept-of-finance@westchestergov.com)

Michael Morris, Risk Manager  
Orange County, New York  
845 615-3605  
[mmorris@orangecountygov.com](mailto:mmorris@orangecountygov.com)

Nancy NcAfee  
City of Fort Wayne  
260 427-1176

Jason Clark  
CompSource Oklahoma (CSO)  
405 962-3334  
[jclark@compsourcemutual.com](mailto:jclark@compsourcemutual.com)

David Grubb  
South Bergen Municipal Joint Insurance Fund (Northern New Jersey Municipalities)  
201 587-0555



*E. James Stergiou*

**EDUCATION:** New York University - Ph.D, program in Mathematics  
City College of New York - B.S., 1971 cum laude, Mathematics major

**SCHOLASTIC HONORS:** Dean's List (every year at CCNY)  
Winner: Tremaine Scholarship at CCNY  
Winner: NY State Regent's Scholarship & Scholarship for Children of Disabled Veterans

**PROFESSIONAL CREDENTIALS:** Fellow, Casualty Actuarial Society  
Member, American Academy of Actuaries  
Member, International Actuarial Association  
Member, International Association of Consulting Actuaries

**EXPERIENCE:**  
Present **SGRISK, LLC (Stergiou & Gruber Risk Consultants, Inc.)**  
**Chairman & Chief Executive Officer**  
Work on actuarial calculations of reserves of insurance companies and rate reviews and filings for ALL lines of insurance. Advice to captive and self-insurance clients (over 600 clients); to insurance companies writing in casualty business in the US and Canada; and to several insurance departments and public advocate agencies. Development of experience rating plans and new products, reinsurance advice and other similar actuarial work.

1974 to 1985 **CASUALTY WOODWARD AND FONDILLER, INC.**  
**Vice President**  
Actuarial consulting for all lines. Specialized in working with State Insurance Funds on reserving and ratemaking.

1972 to 1974 **NORTH AMERICAN REINSURANCE CORPORATION**  
**Associate Actuary**  
Worked on pricing and reserving all types of reinsurance treaties for all lines of insurance.

1970 to 1972 **INSURANCE SERVICES OFFICE**  
**Assistant Actuary**  
Ratemaking for Homeowners and Auto Losses (personal and commercial); special studies on expenses and taxes and investment income.

Guest Panelist on numerous presentations before Risk & Insurance Management Society (RIMS), Public Risk Management Association (PRIMA), Insurance Society of New York, Casualty Actuarial Society, Practicing Law Institute, American Manufacturers Association, and others.

**SAMPLE  
PAPERS:**

**"Actuarial Issues to Be Addressed in Ratemaking," (1980)**  
Paper presented to Casualty Actuarial Society.

**"The Medical Malpractice Crisis in Canada," (1983)**  
Paper published in Canadian Underwriter.

**Other Papers: "Principles of Reserving," Ratemaking Principles," "The Layman's Guide to Actuarial Reserving" – Published in various trade journals.**



*Charles Gruber*

**EDUCATION:** B.S. Mathematics, City College of New York  
M.A. Mathematics, Hunter College  
M.S. Journalism, Columbia University

**PROFESSIONAL CREDENTIALS:** Fellow, Casualty Actuarial Society  
Member, American Academy of Actuaries  
Fellow, Conference of Consulting Actuaries  
Member, International Actuarial Association  
Member, International Association of Consulting Actuaries

**EXPERIENCE:** **SGRISK, LLC (Stergiou & Gruber Risk Consultants)**  
**Present** **President & Chief Operating Officer**  
I work as an actuarial and insurance consultant for self-insureds, captives, legal firms, insurance brokers and insurance companies. My work includes ratemaking, reserving, reinsurance analysis, expert witness testimony, development of new products and individual risk rating plans.

**1979 to 1985** **NATIONAL COUNCIL ON COMPENSATION INSURANCE**  
**Actuary**  
I was an officer of the NCCI and head of the Actuarial Research Department. Research highlights are: development of an occupational disease pricing model; a proposal for the formation of a country-wide occupational disease reinsurance pool; exposure base research; implementation of a modified experience rating plan; and simulation of severe workers' compensation claims. I also produced a dozen half-hour videotapes, used by the NCCI as training material. A story on the production appeared in the Journal of Commerce.

**1974 to 1978** **NEW YORK COMPENSATION INSURANCE RATING BOARD**  
**Actuary**  
I was manager of both the actuarial and data processing departments, with a staff of 40 people. My responsibilities were to prepare rate revisions, file them for insurance department approval, promulgate classification rates, price legislative benefits and analyze data.

**1969 to 1974** **INSURANCE SERVICES OFFICE**  
**Actuarial Supervisor**  
I was involved with long term actuarial and research projects in private passenger automobile, commercial automobile and general liability.



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*Charles Gruber*

**OTHER:**

I am also a published writer. My articles, both on actuarial and non-actuarial topics, have appeared in many newspapers, magazines, and trade journals. I won a New York Times Award for financial writers. I have made many speeches and presentations at industry events.



---

*Benjamin S. Neville*

**5/11- Present SGRisk, LLC**  
**Senior Consultant**

- \* Produce loss reserve certifications, reserve and profitability studies and rate filing materials for medical malpractice, workers compensation and other lines of insurance
- \* Build pricing models
- \* Expert witness
- \* Advise managements on reinsurance purchases, claims and underwriting practices
- \* Produce underwriting and claim audits

**10/01 –**  
**5/11**      **Zurich North America Insurance Company**  
**Vice President – Pricing Actuary**

- \* Produced premium recommendations and produce/test rating models for primary and excess insurance, including automobile, general liability, products liability, accident and health, directors and officers, errors and omissions, medical malpractice and other professional liability for specific accounts and programs.
- \* Met with clients to discuss prices and insurance structures.
- \* Participated in field audits and management/underwriter discussions.
- \* Presented analyses to reinsurers and senior management
- \* Analyzed and discussed actuarial consultant account reserve/pricing reviews
- \* Instructed underwriters both individually and in groups on use of models and application of general actuarial principles.
- \* Managed staff of three actuaries.

**9/01 –**  
**10/01**      **Rampart Insurance Company**  
**Consultant - Temporary Assignment**

- \* Determined loss reserves and set up reserving methodology for client
- \* Planned and advised client

- 3/94 –  
9/01                    Sorema North America Reinsurance Company  
**Senior Vice President and Chief Actuary**
- \* Developed reserving methodology and explained reserves carried to parent, outside auditors, actuarial consultants, rating agencies and others.
  - \* Wrote reserve opinions for member companies of group
  - \* Produced rate filings, loss cost multipliers and supporting exhibits.
  - \* Determined prices and formulae for automobile, general liability, products liability, workers compensation, surety, aviation, marine and property insurance.
  - \* Evaluated actions for specific large treaties and reinsurance transactions.
  - \* Led senior management planning conferences and instructed underwriters.
  - \* Managed staff of three actuaries.
- 12/90 -  
3/94                    SCOR US Reinsurance Company  
**Vice President and Actuary**
- \* Calculated reserves for particular departments of company.
  - \* Determined prices for specific large treaties and reinsurance transactions.
  - \* Derived pricing formulae for use in Facultative and Treaty Departments.
  - \* Provided consulting services and prices for new products.
  - \* Produced rate filings, loss cost multipliers and supporting exhibits.
  - \* Evaluated merger and acquisition candidates.
- 4/87 -  
12/90                    US International Reinsurance Company  
**Senior Vice President and Chief Actuary**
- \* Developed and explained reserve levels carried to parent, outside auditors, actuarial consultants, rating agencies and others.
  - \* Determined prices and pricing structures for treaty and facultative reinsurance.
  - \* Directed profitability and rate monitoring studies.
  - \* Produced, priced and underwrote limited risk reinsurance business.
  - \* Researched new products and associated pricing.
  - \* Managed staff of three actuaries.
- 10/81 -  
4/87                    American Reinsurance Company  
**Vice President and Actuary**
- \* Calculated reserves for Facultative Department to assist chief actuary.
  - \* Derived pricing formulae, profitability, rate monitoring and statistical reports for automobile, general liability, property and other lines of insurance.
  - \* Forecasted premiums and losses for planning.
- 4/79 -  
10/81                    American International Group  
**Assistant Actuary**
- \* Calculated reserves and presented results to various divisions.
  - \* Produced profitability and rate monitoring studies.
  - \* Researched new products and associated pricing.

6/71 - Insurance Services Office  
4/79 **Assistant Actuary**

- \* Produced rate filing exhibits for presentation to state insurance departments and industry committees.
- \* Testified and answered queries from state insurance departments and member companies regarding methodology.
- \* Developed statistical instructions for bureau reporting and ratemaking reports.
- \* Managed staff of three to five actuaries.
- \* Produced consulting studies

**Education:**

City College of New York  
B. A., 1971 Mathematics and Economics

**Professional Designations:**

Fellow, Casualty Actuarial Society, May 1983  
Member, American Academy of Actuaries  
Chartered Property and Casualty Underwriter, September 2004



**Scott Brown**  
Actuary Assistant

**Education**

Bachelor of Science in Accounting, Minor in Actuarial Studies May 2012  
The College of New Jersey, Ewing, NJ

**Actuarial Status**

Sat for final ACAS Exam (awaiting results) – May 2016

**Experience**

**SGRISK, LLC (June 2012 - Present)**

**Actuary Assistant**

- Complete various analyses for our clients ranging from monthly and quarterly loss reserve estimates, to yearly funding reports for municipalities and group insurers/reinsurers.
- Work with the lead actuaries, to offer our professional opinion based on industry, market, and historical data.
- On a client to client basis this includes anything from building an actuarial model to represent data obtained from clients, to making preliminary judgment on reserve amounts and funding figures for the property and casualty lines of insurance of our clients.

# JONATHAN GRIGLACK

Permanent Address: 812 Grand St. Hoboken, NJ 07030  
JGriglack@SGRisk.com · 973-557-8378

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## EDUCATION

The College of New Jersey School of Sciences Ewing, NJ

May 2013

- Bachelor of Arts in Mathematics
- Core Courses: Probability, Mathematical Logic, Topology, Real and Complex Analysis
- Completed a semester long, independent research project that was a culmination of my four years as a Mathematics major where the final project was presented to the Dean and faculty of the department

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## EXPERIENCE

SG Risk, LLC; Lyndhurst, New Jersey

March 2014-Present

*Actuary Assistant*

- Work for a variety of clients who write homeowners, personal auto, commercial auto, trucker's liability, medical mal practice, worker's compensation, etc.
- Assist lead actuaries with determining loss reserves, producing rate filings, calculate pricing, and perform profitability studies
- Build data specific models for corresponding clients
- Produce quarterly reports when applicable
- Performed both underwriting and claims audits for clients

Section G: Additional Information

Samples of work are enclosed

## Warren County Self Insurance Plan – Workers' Compensation

November 29, 2016

County of Warren

*Re: Warren County Self-Insurance Plan – Workers'  
Compensation:  
Actuarial Loss and DCC Reserves of Analysis as of  
9/30/2016*

Dear :

Enclosed is our actuarial analysis of the September 30, 2016 loss and defense and cost containment reserves for Warren County.

Including loss based assessments, the reserve range is \$xx.x to \$xx.x million, not discounted, with a central estimate of \$xx.x million, shown on exhibit 1. Also shown on exhibit 1 are reserve ranges at various interest rates.

This estimate is higher than last year's estimate due to development of claims, particularly in the 1999 year, as well as current year losses. We believe that we recognized this development without overreacting to relatively small numbers of losses.

Sincerely,

Charles Gruber  
FCAS, MAAA, FCA  
President

Benjamin S. Newville  
FCAS, MAAA, CPCU  
Senior Consultant

# Warren County Self Insurance Plan – Workers’ Compensation

## *Explanatory Memorandum*

### BACKGROUND

The Plan self-insures the Workers’ Compensation exposures of Warren County plus individual towns and villages in the County.

SGRisk, LLC was asked to evaluate the Warren County Plan’s loss and DCC experience from 1980 to the end of 2016 and to calculate loss and DCC reserves at 12/31/2016 for Warren County.

### DATA

SGRisk, LLC obtained reported loss data from xxx Group, the County’s claims adjusters. Payroll and premium data was obtained from the County’s risk management department. Data provided was relied upon without audit or verification other than to inspect it for reasonableness.

### METHODOLOGY

For Warren County, SGRisk, LLC used four methods to project ultimate losses by accident year.

*Method 1:* The County’s historical incurred loss and DCC experience was used to construct an incurred loss triangle, as shown on *Exhibit 8*. Incurred loss development factors were calculated and applied to incurred losses by accident year in order to project ultimate losses by year. Paid losses were then subtracted from ultimate losses to produce reserves by year. This process is shown on *Exhibit 4*.

## Warren County Self Insurance Plan – Workers' Compensation

method as shown in the footnote. The selection process is shown on *Exhibit 2*.

### RESULTS

*Exhibit 1* summarizes SGRisk, LLC's results for the Plan. The Plan's case reserves are \$xx.x million at 12/31/2016. After development, SGRisk, LLC calculated the Plan's indicated reserves in a range of \$xx.x to \$xx.x million.

SGRisk, LLC also calculated discounted reserves, using various interest rates. The reserve ranges at these interest rates are shown on *Exhibit 1*.

Our estimates are higher than last year's estimate due to development of claims, particularly in the 1999 year, as well as current year losses. We believe that we recognized this development without overreacting to relatively small numbers of losses.

Projecting ultimate losses and allocated loss adjustment expenses (DCC) and resultant liabilities is an inexact process – a broad range exists around any estimate. While selected ultimate losses and DCC and estimated liabilities promulgated in this report fall within what are believed to be reasonable ranges, and we attempt to avoid unwarranted fluctuations, there is no guarantee they will prove accurate.

Warren County Self Insurance Plan – Workers' Compensation

APPENDIX

*New York Industry  
Workers' Compensation Loss Development Factors*

**Warren County Self-Insurance Plan-Workers' Compensation**

**Warren County Only \***

**Summary of Indicated Loss and DCC Reserves Including IBNR as of 12/31/2016**

(000's omitted)

**Indicated Total Loss and DCC Reserves**

	<u>Undiscounted</u>	<u>4%</u>	<u>3%</u>	<u>Discounted at</u> <u>2%</u>	<u>1%</u>
Loss & DCC Case Reserves (Exh. 4; col (3) - col (2))	1,000,000	950,000	959,500	969,095	978,786
IBNR (Exhibit 2) **	5,000,000	4,750,000	4,797,500	4,845,475	4,893,930
Loss Based Assessments (Exhibit 11, Row (6))	1,200,000	1,140,000	1,151,400	1,162,914	1,174,543
<b>Total Loss &amp; Expense, Excluding Loss Based Assessment Reserves</b>	<b>6,000,000</b>	<b>5,700,000</b>	<b>5,757,000</b>	<b>5,814,570</b>	<b>5,872,716</b>
Range of Reserves	5,400,000 to 6,600,000	5,130,000 to 6,270,000	5,181,300 to 6,332,700	5,233,113 to 6,396,027	5,285,444 to 6,459,987

(+/- 10%)

Warren County Self-Insurance Plan-Workers' Compensation  
Warren County Only \*

Summary of Indicated Loss and DCC Reserves Including IBNR as of 12/31/2016

(1) Accident Year	(2) Method 1: Warren County Incurred Loss Development Factors		(3) Method 2: Warren County Paid Loss Development Factors		(4) Method 3: Industry Incurred Loss Development Factors		(5) Method 4: Industry Paid Loss Development Factors		(6) Indicated Reserves		(7) Indicated Reserves		(8) Indicated Reserves		(9) Indicated Reserves		(10) Indicated Reserves		(11) Indicated Reserves		(12) Indicated Reserves		(13) Indicated Reserves		(14) Indicated Reserves		(15) Indicated Reserves						
	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves	IBNR	Indicated Reserves				
1990-1994	1,000,000	50	790,358	790,358	1,000,000	100	1,000,000	100	1,000,000	100	1,000,000	100	1,000,000	100	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	1,000,000	63	
1995	831,786	31,968	809,035	9,217	806,189	6,371	799,818	0	799,818	0	799,818	0	799,818	0	799,818	25,569	825,387	25,569	825,387	25,569	825,387	25,569	825,387	25,569	825,387	25,569	825,387	25,569	825,387	25,569	825,387	25,569	
1996	1,411,340	40,000	1,371,340	0	1,379,306	7,966	1,371,340	0	1,371,340	0	1,371,340	0	1,371,340	0	1,371,340	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	1,403,332	31,991	
1997	1,933,725	711,738	1,221,987	0	1,231,948	9,960	1,221,987	0	1,221,987	0	1,221,987	0	1,221,987	0	1,221,987	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	1,756,281	536,293	
1998	1,874,970	996,393	1,356,869	478,291	898,498	19,921	878,578	0	878,578	0	878,578	0	878,578	0	878,578	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	1,630,852	752,275	
1999	1,565,810	1,183,243	1,650,967	1,268,400	419,088	36,522	944,586	562,020	944,586	562,020	944,586	562,020	944,586	562,020	944,586	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	1,609,988	1,225,622	
2000	1,287,667	1,222,081	1,920,857	1,855,271	141,950	76,364	1,088,314	1,022,728	1,088,314	1,022,728	1,088,314	1,022,728	1,088,314	1,022,728	1,088,314	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	1,228,344	1,162,758	
2001	2,498,100	1,393,763	1,512,277	407,940	1,267,025	162,688	1,104,337	0	1,104,337	0	1,104,337	0	1,104,337	0	1,104,337	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	2,190,331	1,085,994	
2002	3,203,930	1,557,961	1,645,969	0	1,901,621	255,652	1,645,969	0	1,645,969	0	1,645,969	0	1,645,969	0	1,645,969	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353	2,878,353
2003	2,917,221	1,828,159	1,705,126	616,064	1,437,679	348,617	1,089,062	0	1,089,062	0	1,089,062	0	1,089,062	0	1,089,062	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335	2,547,335
2004	3,603,209	2,002,141	1,601,068	0	2,045,969	444,901	1,601,068	0	1,601,068	0	1,601,068	0	1,601,068	0	1,601,068	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749	3,139,749
2005	3,508,545	2,346,494	1,885,106	723,055	1,703,237	541,186	1,162,051	0	1,162,051	0	1,162,051	0	1,162,051	0	1,162,051	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275	3,027,275
2006	4,472,212	2,536,389	1,935,823	0	2,579,934	644,111	1,935,823	0	1,935,823	0	1,935,823	0	1,935,823	0	1,935,823	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790	3,891,790
2007	4,779,620	2,765,032	2,014,588	0	2,778,224	763,636	2,014,588	0	2,014,588	0	2,014,588	0	2,014,588	0	2,014,588	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810	3,190,810
2008	5,658,776	3,437,225	2,221,551	0	3,057,551	836,000	2,221,551	0	2,221,551	0	2,221,551	0	2,221,551	0	2,221,551	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857	3,289,857
2009	6,059,339	4,123,122	2,183,357	247,140	2,916,217	980,000	1,936,217	0	1,936,217	0	1,936,217	0	1,936,217	0	1,936,217	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783	3,273,783
2010	6,265,842	4,911,001	3,277,791	1,922,950	2,530,841	1,176,000	1,354,841	0	1,354,841	0	1,354,841	0	1,354,841	0	1,354,841	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825	4,024,825
2011	7,020,131	5,733,565	4,102,463	2,815,897	2,722,566	1,436,000	2,292,852	380,383	2,292,852	380,383	2,292,852	380,383	2,292,852	380,383	2,292,852	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053	4,615,053
2012	8,077,984	6,186,474	4,059,117	2,167,606	3,751,511	1,860,000	2,439,522	548,012	2,439,522	548,012	2,439,522	548,012	2,439,522	548,012	2,439,522	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487	3,328,487
2013	10,085,201	7,503,134	3,836,195	1,254,128	5,286,067	2,704,000	2,582,067	0	2,582,067	0	2,582,067	0	2,582,067	0	2,582,067	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488	6,402,488
2014	13,418,888	10,074,730	5,423,368	2,079,210	7,912,158	4,568,000	3,344,158	0	3,344,158	0	3,344,158	0	3,344,158	0	3,344,158	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138	8,918,138
2015	14,695,013	11,003,489	5,525,173	1,833,648	6,436,745	2,745,221	3,691,524	182,671	3,691,524	182,671	3,691,524	182,671	3,691,524	182,671	3,691,524	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879	10,565,879
<b>Grand Total</b>	<b>106,169,309</b>	<b>71,588,151</b>	<b>52,050,386</b>	<b>18,469,178</b>	<b>54,204,324</b>	<b>19,623,216</b>	<b>38,283,307</b>	<b>3,702,139</b>	<b>38,283,307</b>	<b>3,702,139</b>	<b>38,283,307</b>	<b>3,702,139</b>	<b>38,283,307</b>	<b>3,702,139</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	<b>76,706,454</b>	<b>42,123,308</b>	
Total 1995-2015	105,169,309	71,588,101	51,260,028	17,678,820	53,204,324	19,623,116	37,283,307	3,702,099	37,283,307	3,702,099	37,283,307	3,702,099	37,283,307	3,702,099	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	75,706,454	42,123,246	
<b>Grand Total</b>	<b>28,072,768</b>	<b>13,353,220</b>	<b>31,258,127</b>	<b>16,538,579</b>	<b>30,580,027</b>	<b>15,860,479</b>	<b>27,989,350</b>	<b>13,269,802</b>																									

Warren County Self-Insurance Plan-Workers' Compensation

Warren County Only \*

Summary of Discounted Loss and DCC Reserves Including IBNR as of 12/31/2015

(1) Accident Year	(2) Interest Rate = 1% Indicated		(3) IBNR		(4) Interest Rate = 2% Indicated		(5) IBNR		(6) Interest Rate = 3% Indicated		(7) IBNR		(8) Interest Rate = 4% Indicated		(9) IBNR	
	Reserves	IBNR	Reserves	IBNR												
1980-1994	999,960	62	999,921	62	999,882	62	999,844	62	999,806	62	999,768	62	999,730	62	999,692	62
1995	825,322	25,567	825,257	25,565	825,193	25,563	825,129	25,561	825,065	25,559	825,001	25,557	824,937	25,555	824,873	25,553
1996	1,403,109	31,986	1,402,889	31,981	1,402,671	31,976	1,402,455	31,972	1,402,239	31,967	1,402,023	31,963	1,401,807	31,959	1,401,591	31,955
1997	1,757,723	536,123	1,757,171	535,955	1,756,620	535,788	1,756,068	535,624	1,755,516	535,462	1,754,964	535,300	1,754,412	535,138	1,753,860	534,976
1998	1,629,818	751,798	1,628,795	751,326	1,627,783	750,859	1,626,781	750,397	1,625,779	750,425	1,624,777	750,453	1,623,775	750,481	1,622,773	750,509
1999	1,606,349	1,224,268	1,604,333	1,222,731	1,602,340	1,221,212	1,600,368	1,219,709	1,598,375	1,219,191	1,596,403	1,218,677	1,594,431	1,217,164	1,592,458	1,215,651
2000	1,225,231	1,159,811	1,222,158	1,156,902	1,219,122	1,154,029	1,216,124	1,151,191	1,213,126	1,151,191	1,210,128	1,148,193	1,207,130	1,145,195	1,204,132	1,142,197
2001	2,179,245	1,080,497	2,168,326	1,075,083	2,157,569	1,069,750	2,146,970	1,064,495	2,136,212	1,059,486	2,125,655	1,054,231	2,114,997	1,048,976	2,104,338	1,043,725
2002	2,862,936	1,225,783	2,847,769	1,219,289	2,832,845	1,212,899	2,818,157	1,206,610	2,803,273	1,206,610	2,788,387	1,200,420	2,773,501	1,194,230	2,758,615	1,188,039
2003	2,532,322	1,449,679	2,517,588	1,441,244	2,503,125	1,432,964	2,488,924	1,424,835	2,474,661	1,424,835	2,460,400	1,416,716	2,446,139	1,408,671	2,431,878	1,400,642
2004	3,118,489	1,528,262	3,097,710	1,518,079	3,077,393	1,508,122	3,057,520	1,498,383	3,037,606	1,498,383	3,017,819	1,488,596	3,003,047	1,478,809	2,988,290	1,469,022
2005	3,002,853	1,850,238	2,979,311	1,835,671	2,956,315	1,821,503	2,933,938	1,807,715	2,911,561	1,807,715	2,889,184	1,793,823	2,866,787	1,780,031	2,844,390	1,766,289
2006	3,853,740	1,936,844	3,816,986	1,918,371	3,781,457	1,900,515	3,747,087	1,883,241	3,712,664	1,883,241	3,678,271	1,865,025	3,643,868	1,846,809	3,609,465	1,827,601
2007	3,152,221	1,161,998	3,115,198	1,148,350	3,079,644	1,135,244	3,045,469	1,122,646	3,011,291	1,122,646	2,977,138	1,104,000	2,942,985	1,083,709	2,908,732	1,062,460
2008	3,240,255	1,052,199	3,192,991	1,036,851	3,147,904	1,022,210	3,104,847	1,008,228	3,061,791	1,008,228	3,018,734	994,161	2,975,671	979,094	2,932,614	964,027
2009	3,212,333	1,312,459	3,154,176	1,288,698	3,099,066	1,266,182	3,046,776	1,244,818	3,003,663	1,244,818	2,961,310	1,222,452	2,918,857	1,200,046	2,883,391	1,177,680
2010	3,931,390	2,608,001	3,843,550	2,549,730	3,760,851	2,494,869	3,682,884	2,443,147	3,601,000	2,443,147	3,521,139	2,388,401	3,441,288	2,375,952	3,361,437	2,363,495
2011	4,483,744	3,233,784	4,361,099	3,145,330	4,246,367	3,062,582	4,138,871	2,985,053	4,021,350	2,985,053	3,903,839	2,902,541	3,786,328	2,827,022	3,668,807	2,752,303
2012	5,113,353	3,287,146	4,943,652	3,178,053	4,785,885	3,076,632	4,638,966	2,982,184	4,471,414	2,982,184	4,326,953	2,897,695	4,171,402	2,812,706	4,021,391	2,727,717
2013	6,136,955	3,661,975	5,892,052	3,515,839	5,665,753	3,380,804	5,456,262	3,255,800	5,249,701	3,255,800	5,034,600	3,130,651	4,828,499	3,005,500	4,617,198	2,880,600
2014	8,478,133	5,298,970	8,074,787	5,046,872	7,704,295	4,815,309	7,363,308	4,602,186	7,147,814	4,602,186	6,932,320	4,487,011	6,716,831	4,371,522	6,501,342	4,256,033
2015	9,952,934	6,475,561	9,394,511	6,112,241	8,884,648	5,780,515	8,418,131	5,476,991	8,202,166	5,476,991	7,923,695	5,362,500	7,648,200	5,248,000	7,373,705	5,133,500
<b>Grand Total</b>	<b>74,698,516</b>	<b>40,893,013</b>	<b>72,840,230</b>	<b>39,754,226</b>	<b>71,116,732</b>	<b>38,699,591</b>	<b>69,514,898</b>	<b>37,720,850</b>	<b>67,871,407</b>	<b>37,720,850</b>	<b>66,143,016</b>	<b>36,777,001</b>	<b>64,818,131</b>	<b>35,823,152</b>	<b>63,573,281</b>	<b>34,878,303</b>
Total 1995-2015	73,698,556	40,892,951	71,840,309	39,754,163	70,116,850	38,699,528	68,515,054	37,720,787	67,143,466	37,720,787	65,643,066	36,776,914	64,368,131	35,822,014	63,128,303	34,877,230
<b>Grand Total</b>	<b>29,580,014</b>	<b>15,174,307</b>	<b>28,855,052</b>	<b>14,740,182</b>	<b>28,183,237</b>	<b>14,338,469</b>	<b>27,559,341</b>	<b>13,965,946</b>	<b>26,917,400</b>	<b>13,965,946</b>	<b>26,246,455</b>	<b>13,552,021</b>	<b>25,573,500</b>	<b>13,137,096</b>	<b>24,844,555</b>	<b>12,722,171</b>
Total 1995-2014	26,567,672	14,660,547	25,842,947	14,226,462	25,171,366	13,824,789	24,547,702	13,452,306	23,923,761	13,452,306	23,204,816	13,037,911	22,579,866	12,613,011	21,934,916	12,208,011
<b>Grand Total</b>	<b>28,503,474</b>	<b>14,363,819</b>	<b>26,965,382</b>	<b>13,495,141</b>	<b>25,591,206</b>	<b>12,722,132</b>	<b>24,331,100</b>	<b>12,011,452</b>	<b>23,845,567</b>	<b>12,011,452</b>	<b>23,112,645</b>	<b>11,722,132</b>	<b>21,434,576</b>	<b>11,434,576</b>	<b>20,733,578</b>	<b>11,143,452</b>
Total 1995-2013	24,828,956	13,774,596	23,317,261	12,910,151	21,969,093	12,141,312	20,733,578	11,434,576	20,519,600	11,434,576	19,799,093	11,143,452	18,574,576	10,949,093	17,333,578	10,654,576

\* Includes Warren County Community College

## Warren County Self-Insurance Plan-Workers' Compensation

## Warren County Only \*

Derivation of IBNR As Of 12/31/2015

## Method 1: Warren County Incurred Loss Development Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Accident Year	Paid Losses & DCC	Incurred Loss & DCC	Incurred Development Factor **	(3) X (4) Ultimate Losses &DCC	(5) - (2) Indicated Reserves	(5) - (3) Indicated IBNR
1980-1994	1,000,000	1,000,000	1.006	1,006,389	6,389	6,389
1995	3,200,182	4,000,000	1.008	4,031,968	831,786	31,968
1996	2,628,660	4,000,000	1.010	4,040,000	1,411,340	40,000
1997	2,778,013	4,000,000	1.178	4,711,738	1,933,725	711,738
1998	3,121,422	4,000,000	1.249	4,996,393	1,874,970	996,393
1999	3,617,433	4,000,000	1.296	5,183,243	1,565,810	1,183,243
2000	3,934,414	4,000,000	1.306	5,222,081	1,287,667	1,222,081
2001	2,895,663	4,000,000	1.348	5,393,763	2,498,100	1,393,763
2002	2,354,031	4,000,000	1.389	5,557,961	3,203,930	1,557,961
2003	2,910,938	4,000,000	1.457	5,828,159	2,917,221	1,828,159
2004	2,398,932	4,000,000	1.501	6,002,141	3,603,209	2,002,141
2005	2,837,949	4,000,000	1.587	6,346,494	3,508,545	2,346,494
2006	2,064,177	4,000,000	1.634	6,536,389	4,472,212	2,536,389
2007	1,985,412	4,000,000	1.691	6,765,032	4,779,620	2,765,032
2008	1,778,449	4,000,000	1.859	7,437,225	5,658,776	3,437,225
2009	2,063,783	4,000,000	2.031	8,123,122	6,059,339	4,123,122
2010	2,645,159	4,000,000	2.228	8,911,001	6,265,842	4,911,001
2011	2,713,434	4,000,000	2.433	9,733,565	7,020,131	5,733,565
2012	2,108,489	4,000,000	2.547	10,186,474	8,077,984	6,186,474
2013	1,417,933	4,000,000	2.876	11,503,134	10,085,201	7,503,134
2014	655,842	4,000,000	3.519	14,074,730	13,418,888	10,074,730
2015 <sup>1</sup>	308,476	4,000,000	5.352	15,003,489	14,695,013	11,003,489
<b>Grand Total</b>	<b>51,418,792</b>	<b>85,000,000</b>		<b>156,594,490</b>	<b>105,175,698</b>	<b>71,594,490</b>
Total 1995-2015 <sup>1</sup>	50,418,792	84,000,000		155,588,101	105,169,309	71,588,101
<i>As Of 12/31/2014:</i>						
Grand Total	71,325,690	86,045,238		99,398,458	28,072,768	13,353,220
Total 1995-2014	47,243,774	59,464,542		72,140,083	24,896,309	12,675,541
<i>As Of 12/31/2013:</i>						
Grand Total	67,346,085	82,214,751		96,164,607	28,818,522	13,949,856
Total 1995-2013	43,584,856	55,356,548		68,528,533	24,943,677	13,171,985

<sup>1</sup> Col (5) : Col (4) Factor applied to Col (3) less Teskera claim, G1219864, date of loss of 4/1/2015, amount of \$885,000 and further reduced by 10% to not exceed highest previous ultimate loss by more than 20%

\* Includes Warren County Community College

\*\* LDFs from Exhibit 8.

## Warren County Self-Insurance Plan-Workers' Compensation

## Warren County Only \*

Derivation of IBNR As Of 9/30/2016

## Method 2: Warren County Paid Loss Development Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Accident Year	Paid Losses & DCC	Incurred Loss & DCC	Paid Development Factor **	(2) X (4) Ultimate Losses & DCC	(5) - (2) Indicated Reserves	(5) - (3) Indicated IBNR
1980-1994	4,000,000	4,000,000	1.198	4,790,358	790,358	790,358
1995	3,200,182	4,000,000	1.253	4,009,217	809,035	9,217
1996	2,628,660	4,000,000	1.325	4,000,000	1,371,340	0
1997	2,778,013	4,000,000	1.412	4,000,000	1,221,987	0
1998	3,121,422	4,000,000	1.435	4,478,291	1,356,869	478,291
1999	3,617,433	4,000,000	1.456	5,268,400	1,650,967	1,268,400
2000	3,934,414	4,000,000	1.488	5,855,271	1,920,857	1,855,271
2001	2,895,663	4,000,000	1.522	4,407,940	1,512,277	407,940
2002	2,354,031	4,000,000	1.558	4,000,000	1,645,969	0
2003	2,910,938	4,000,000	1.586	4,616,064	1,705,126	616,064
2004	2,398,932	4,000,000	1.617	4,000,000	1,601,068	0
2005	2,837,949	4,000,000	1.664	4,723,055	1,885,106	723,055
2006	2,064,177	4,000,000	1.730	4,000,000	1,935,823	0
2007	1,985,412	4,000,000	1.806	4,000,000	2,014,588	0
2008	1,778,449	4,000,000	1.920	4,000,000	2,221,551	0
2009	2,063,783	4,000,000	2.058	4,247,140	2,183,357	247,140
2010	2,645,159	4,000,000	2.239	5,922,950	3,277,791	1,922,950
2011	2,713,434	4,000,000	2.512	6,815,897	4,102,463	2,815,897
2012	2,108,489	4,000,000	2.925	6,167,606	4,059,117	2,167,606
2013	1,417,933	4,000,000	3.705	5,254,128	3,836,195	1,254,128
2014	655,842	4,000,000	5.342	6,079,210	5,423,368	2,079,210
2015 +	308,476	4,000,000	13.892	5,833,648	5,525,173	1,833,648
<b>Grand Total</b>	<b>54,418,792</b>	<b>88,000,000</b>		<b>106,469,178</b>	<b>52,050,386</b>	<b>18,469,178</b>
Total 1995-2015	50,418,792	84,000,000		101,678,820	51,260,028	17,678,820
<i>As Of 12/31/2014:</i>						
Grand Total	71,325,690	86,045,238		102,583,817	31,258,127	16,538,579
Total 1995-2014	47,243,774	59,464,542		76,003,121	28,759,347	16,538,579
<i>As Of 12/31/2013:</i>						
Grand Total	67,346,085	82,214,751		102,722,707	35,376,622	21,119,541
Total 1995-2013 +	43,584,856	55,356,548		76,476,089	32,891,233	21,119,541

\* Includes Warren County Community College

+ Maximum of loss multiplied by LDF and average of preceding three years

\*\* LDFs from Exhibit 9.

## Warren County Self-Insurance Plan-Workers' Compensation

## Warren County Only \*

## Derivation of IBNR As Of 12/31/2014

## Method 3: Industry Incurred Loss Development Factors

(1) Accident Year	(2) Paid Losses & DCC	(3) Incurred Loss & DCC	(4) Incurred Development Factor * *	(5) (3) X (4) Ultimate Losses &DCC	(6) (5) - (2) Indicated Reserves	(7) (5) - (3) Indicated IBNR
1980-1994	4,000,000	1,000,000	1.001	1,000,796	796	796
1995	3,200,182	4,000,000	1.002	4,006,371	806,189	6,371
1996	2,628,660	4,000,000	1.002	4,007,966	1,379,306	7,966
1997	2,778,013	4,000,000	1.002	4,009,960	1,231,948	9,960
1998	3,121,422	4,000,000	1.005	4,019,921	898,498	19,921
1999	3,617,433	4,000,000	1.009	4,036,522	419,088	36,522
2000	3,934,414	4,000,000	1.019	4,076,364	141,950	76,364
2001	2,895,663	4,000,000	1.041	4,162,688	1,267,025	162,688
2002	2,354,031	4,000,000	1.064	4,255,652	1,901,621	255,652
2003	2,910,938	4,000,000	1.087	4,348,617	1,437,679	348,617
2004	2,398,932	4,000,000	1.111	4,444,901	2,045,969	444,901
2005	2,837,949	4,000,000	1.135	4,541,186	1,703,237	541,186
2006	2,064,177	4,000,000	1.161	4,644,111	2,579,934	644,111
2007	1,985,412	4,000,000	1.191	4,763,636	2,778,224	763,636
2008	1,778,449	4,000,000	1.209	4,836,000	3,057,551	836,000
2009	2,063,783	4,000,000	1.245	4,980,000	2,916,217	980,000
2010	2,645,159	4,000,000	1.294	5,176,000	2,530,841	1,176,000
2011	2,713,434	4,000,000	1.359	5,436,000	2,722,566	1,436,000
2012	2,108,489	4,000,000	1.465	5,860,000	3,751,511	1,860,000
2013	1,417,933	4,000,000	1.676	6,704,000	5,286,067	2,704,000
2014	655,842	4,000,000	2.142	8,568,000	7,912,158	4,568,000
2015 <sup>1</sup>	308,476	4,000,000	3.609	6,745,221	6,436,745	2,745,221
<b>Grand Total</b>	<b>54,418,792</b>	<b>85,000,000</b>		<b>104,623,912</b>	<b>53,205,120</b>	<b>19,623,912</b>
Total 1995-2015 <sup>1</sup>	50,418,792	84,000,000		103,623,116	53,204,324	19,623,116
<i>As Of 12/31/2014:</i>						
Grand Total	71,325,690	86,045,238		101,905,717	30,580,027	15,860,479
Total 1995-2014	47,243,774	59,464,542		75,302,855	28,059,081	15,838,313
<i>As Of 12/31/2013:</i>						
Grand Total	67,346,085	82,214,751		98,231,094	30,885,009	16,016,342
Total 1995-2013	43,584,856	55,356,548		71,340,690	27,755,833	15,984,142

<sup>1</sup> Col (5) : Col (4) Factor applied to Col (3) less xxx claim, G1219864, date of loss of xx/x/2015, amount of \$xxx,000 and further reduced by 40% to not exceed highest previous ultimate loss by more than 20%

\* Includes Warren County Community College

\*\* LDFs from 5 Year factors, as shown in the 2015 NCCI Annual Statistical Bulletin Bulletin (See Appendix)

## Warren County Self-Insurance Plan-Workers' Compensation

## Warren County Only \*

Derivation of IBNR As Of 12/31/2014

## Method 4: Industry Paid Loss Development Factors

(1) Accident Year	(2) Paid Losses & DCC	(3) Incurred Loss & DCC	(4) Paid Development Factor **	(5) (2) X (4) Ultimate Losses &DCC	(6) (5) - (2) Indicated Reserves	(7) (5) - (3) Indicated IBNR
1980-1994	1,000,000	1,000,000	1.197	1,196,640	196,640	196,640
1995	3,200,182	4,000,000	1.208	4,000,000	799,818	0
1996	2,628,660	4,000,000	1.220	4,000,000	1,371,340	0
1997	2,778,013	4,000,000	1.233	4,000,000	1,221,987	0
1998	3,121,422	4,000,000	1.247	4,000,000	878,578	0
1999	3,617,433	4,000,000	1.261	4,562,020	944,586	562,020
2000	3,934,414	4,000,000	1.277	5,022,728	1,088,314	1,022,728
2001	2,895,663	4,000,000	1.293	4,000,000	1,104,337	0
2002	2,354,031	4,000,000	1.311	4,000,000	1,645,969	0
2003	2,910,938	4,000,000	1.330	4,000,000	1,089,062	0
2004	2,398,932	4,000,000	1.350	4,000,000	1,601,068	0
2005	2,837,949	4,000,000	1.371	4,000,000	1,162,051	0
2006	2,064,177	4,000,000	1.394	4,000,000	1,935,823	0
2007	1,985,412	4,000,000	1.419	4,000,000	2,014,588	0
2008	1,778,449	4,000,000	1.445	4,000,000	2,221,551	0
2009	2,063,783	4,000,000	1.529	4,000,000	1,936,217	0
2010	2,645,159	4,000,000	1.656	4,380,383	1,735,224	380,383
2011	2,713,434	4,000,000	1.845	5,006,286	2,292,852	1,006,286
2012	2,108,489	4,000,000	2.157	4,548,012	2,439,522	548,012
2013	1,417,933	4,000,000	2.720	4,000,000	2,582,067	0
2014	655,842	4,000,000	4.175	4,000,000	3,344,158	0
2015 +	308,476	4,000,000	10.859	4,182,671	3,874,195	182,671
<b>Grand Total</b>	<b>51,418,792</b>	<b>85,000,000</b>		<b>88,898,739</b>	<b>37,479,947</b>	<b>3,898,739</b>
Total 1995-2015 +	50,418,792	84,000,000		87,702,099	37,283,307	3,702,099
<i>As Of 12/31/2014:</i>						
Grand Total	71,325,690	86,045,238		99,315,040	27,989,350	13,269,802
Total 1995-2014 +	47,243,774	59,464,542		72,734,345	25,490,571	13,269,802
<i>As Of 12/31/2013:</i>						
Grand Total	67,346,085	82,214,751		93,046,972	25,700,887	10,832,221
Total 1995-2013	43,584,856	55,356,548		66,188,769	22,603,913	10,832,221

\* Includes Warren County Community College

+ Maximum of loss multiplied by LDF and average of preceding three years

\*\* LDFs from 5 Year factors, as shown in the 2015 NCCI Annual Statistical Bulletin  
Bulletin (See Appendix)

Orange County Self-Insurance Plan - Workers' Compensation

Warren COUNTY ONLY \*

Derivation of Paid Loss Development Factors As Of December 31, 2015

Policy Year	Total Paid Losses																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
1995								2,004,348	2,053,103	2,112,116	2,191,500	2,424,472	2,492,171	2,776,334	2,831,827	2,971,352	3,001,832	3,060,885	3,084,191		
1996							1,847,299	1,734,317	1,835,112	1,902,296	2,010,021	2,098,845	2,276,011	2,245,570	2,113,090	2,402,933	2,453,431	2,533,887	2,576,673		
1997							1,921,667	1,845,110	1,985,754	2,162,658	2,377,171	2,718,557	2,486,013	2,551,548	2,614,311	2,664,402	2,701,875	2,741,062	2,778,013		
1998							2,068,494	1,707,670	1,834,918	2,433,832	2,832,386	2,933,052	2,947,653	2,949,156	3,038,525	3,087,028	3,140,728	3,121,422			
1999							2,968,382	2,167,511	2,307,415	2,654,411	3,027,309	3,102,608	3,249,491	3,322,849	3,387,789	3,452,733	3,617,453				
2000							2,668,385	1,801,789	1,981,789	2,317,420	2,660,385	3,217,446	3,307,288	3,440,566	3,572,983	3,694,144	3,816,098	3,934,414			
2001							2,977,224	1,871,539	1,871,539	2,077,224	2,488,003	2,611,743	2,639,816	2,710,700	2,763,689	2,854,141	2,888,023	2,965,683			
2002							1,784,819	1,020,743	1,161,646	1,261,646	1,493,003	1,611,743	1,639,816	1,710,700	1,763,689	1,854,141	1,888,023	1,965,683			
2003							2,303,603	2,432,667	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347	2,658,347
2004							1,713,000	1,521,007	1,684,461	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007	1,521,007
2005							1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895	1,800,895
2006							1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384	1,383,384
2007							1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778	1,607,778
2008							1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184	1,585,184
2009							1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107	1,975,107
2010							2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159	2,845,159
2011																					
2012																					
2013																					
2014																					
2015																					

Link Ratios

Policy Year	Link Ratios																			
	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	180-192	192-204	204-216	216-228	228-240	240-252
1995								1.024	1.029	1.038	1.106	1.444	1.528	1.614	1.659	1.713	1.728	1.743	1.758	1.773
1996							1.053	1.058	1.063	1.068	1.073	1.078	1.083	1.088	1.093	1.098	1.103	1.108	1.113	1.118
1997							1.136	1.076	1.069	1.062	1.055	1.048	1.041	1.034	1.027	1.020	1.013	1.006	1.000	1.014
1998							1.095	1.076	1.058	1.040	1.022	1.004	0.986	0.968	0.950	0.932	0.914	0.896	0.878	0.860
1999							1.043	1.024	1.006	0.988	0.970	0.952	0.934	0.916	0.898	0.880	0.862	0.844	0.826	0.808
2000							1.192	1.113	1.034	0.955	0.876	0.797	0.718	0.639	0.560	0.481	0.402	0.323	0.244	0.165
2001							1.142	1.113	1.084	1.055	1.026	0.997	0.968	0.939	0.910	0.881	0.852	0.823	0.794	0.765
2002							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2003							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2004							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2005							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2006							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2007							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2008							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2009							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2010							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2011							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2012							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2013							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890
2014							1.327	1.291	1.255	1.219	1.183	1.147	1.111	1.075	1.039	1.003	0.967	0.931	0.895	0.859
2015							1.475	1.430	1.385	1.340	1.295	1.250	1.205	1.160	1.115	1.070	1.025	0.980	0.935	0.890

Selected 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240 240-252

Wtd Average 2.420 1.433 1.274 1.162 1.142 1.065 1.060 1.070 1.047 1.046 1.042 1.017 1.023 1.021 1.028 1.024 1.024 1.014 1.022 1.014

3 Yr. Vol. Avg 2.759 1.484 1.268 1.163 1.098 1.075 1.057 1.048 1.041 1.041 1.041 1.019 1.013 1.026 1.013 1.029 1.010 1.014 1.017 1.014

5 Yr Avg Excl 2.737 1.449 1.248 1.162 1.106 1.068 1.060 1.059 1.037 1.027 1.027 1.025 1.012 1.025 1.018 1.018 1.017 1.014 1.017 1.014

Least Year 2.487 1.402 1.277 1.151 1.141 1.098 1.077 1.069 1.042 1.044 1.039 1.019 1.024 1.024 1.023 1.033 1.021 1.024 1.021 1.024 1.021

Selected 2.001 1.442 1.267 1.165 1.122 1.086 1.072 1.064 1.044 1.039 1.029 1.020 1.020 1.024 1.018 1.022 1.015 1.016 1.016 1.016 1.016 1.016

LDF To Ultimate 13.882 5.342 3.765 2.925 2.512 2.239 2.058 1.920 1.806 1.730 1.604 1.617 1.588 1.558 1.522 1.488 1.456 1.435 1.412 1.385 1.325

% Reported 7% 18% 27% 34% 40% 45% 49% 52% 55% 58% 60% 62% 63% 64% 66% 67% 68% 70% 71% 75%

\* Includes Orange County Community College

\*\* Source: SGRisk 12/31/2014 Analysis

\*\*\* Average of weighted average, three year volume average, five year average excluding high and low values and last year's selected average; minimum factor of 1.000 is selected

Warren County Self-Insurance Plan - Workers' Compensation  
Warren COUNTY ONLY \*

Derivation of Incurred Loss Development Factors As Of December 31, 2015

Policy Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	
	Incurred Losses As Of Months:																			
1995																				
1996																				
1997																				
1998																				
1999																				
2000																				
2001																				
2002																				
2003																				
2004																				
2005																				
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2007																				
2008																				
2009																				
2010																				
2011																				
2012																				
2013																				
2014																				
2015																				

Link Ratios

Policy 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	180-192	192-204	204-216	216-228	228-240		
1995																					
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2014																					
2015																					
Selected	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	180-192	192-204	204-216	216-228	228-240		
Wtd Average	1.866	1.183	1.113	1.069	1.078	1.076	1.062	1.084	1.010	1.021	1.053	1.010	1.059	1.038	1.034	1.017	1.010	1.056	1.086	1.313	
3 Yr. Vol. Avg	1.816	1.404	1.225	1.040	1.128	1.244	1.280	1.250	1.128	1.063	1.158	1.105	1.151	1.065	1.002	1.017	1.074	1.074	1.086	1.086	1.313
5 Yr Avg Ex-Hilo	1.627	1.187	1.097	1.012	1.085	1.037	1.018	1.030	1.004	1.028	1.000	0.985	0.984	1.001	1.044	1.004	1.013	1.004	1.013	1.004	1.004
Last Year**	1.353	1.121	1.083	1.086	1.078	1.031	1.011	1.0286	1.0000	1.0090	1.0118	1.0000	1.0000	1.0000	1.0516	1.0000	1.0082	1.037	1.060	1.020	1.166
Selected ***	1.521	1.224	1.129	1.047	1.062	1.087	1.092	1.090	1.035	1.030	1.057	1.030	1.049	1.033	1.033	1.007	1.037	1.060	1.060	1.060	1.060