Invitation for Bids Number: 14-22
Addendum 1
Date: April 11, 2014

Acknowledgment of Addenda

The undersigned acknowledges receipt of the following addenda to the bidding document:

THE COMPLETED ACKNOWLEDGEMENT OF ADDENDA FORM SHOULD BE RETURNED WITH BID RESPONSE PACKAGE: NOT SENT TO RIPTA SEPARATELY

NOTE: Failure to acknowledge receipt of all addenda may cause the bid to be considered non-responsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the bid.

____
Name of Bidder

____
Street Address

____
City, State, Zip

____
Signature of Authorized Official

____
Date

An Addenda containing information for Proposers has been issued.

An electronic copy of the Addenda is available on the State of Rhode Island, Department of Administration Division of Purchases Website.
The website address is:
www.purchasing.ri.gov/RIVIP/ExternalBidSearch.asp

Attached please find questions and RIPTA Responses from AMI Risk Consultants

1. Who was the last consulting firm that performed the work?
   RIPTA Response: Glicksman Consulting, LLC of Boca Raton FL

2. How long have the current actuaries been providing their service?
   RIPTA Response: Five Years

3 What were the annual fees charged and the terms of the contract?
   RIPTA Response: The fee is $3,900 per annum. The terms of the contract are the terms of the RFP

3. Has the scope of the work changed since the work was done?
   RIPTA Response: The Scope of work is essentially the same as the previous one.

5. Can we get a copy of the most recent actuarial report?
   RIPTA Response: A copy is attached as Appendix One.

6. Can we get a copy of the proposal of the last successful bidder?
   RIPTA Response: A copy is attached as Appendix Two

7. Will you share the Evaluation Sheet and perform a debriefing if requested at the end of the process?
   RIPTA Response: Yes

8. What weights will be given to each evaluation factors?
   Cost: 30%; Experience of the Firm: 30%, Experience of the firm's Staff to be assigned to handle the RIPTA Account.

Attached please find questions and RIPTA Responses from AMI Risk Consultants

1. Who is the incumbent actuary?
   RIPTA Response: Glicksman Consulting
2. Is the RIPTA satisfied with the incumbent's work product?
   RIPTA Response: Yes
3. Why is the RIPTA going out to bid for actuarial services?
   RIPTA Response: The current Contract has expired.
4. Can we obtain a copy of the prior actuarial report(s)?
   RIPTA Response: Please see Appendix 1
5. What were the fees for the prior actuarial report?
   RIPTA Response: $3,900 per annum
6. The DBE Goal for this solicitation says "Not Applicable. 0%" – do forms still need to be submitted in regard to the DBE?
   RIPTA Response: These forms should be used to document any DBE Participation regardless of a goal

RHODE ISLAND PUBLIC TRANSIT AUTHORITY

**ACTUARIAL STUDY OF THE SELF-FUNDED
AUTOMOBILE LIABILITY AND WORKERS COMPENSATION PROGRAMS
AS OF JUNE 30, 2013**

July 17, 2013

GLICKSMAN CONSULTING, LLC
3124 NW 59 Street, Suite 100
Boca Raton, Florida 33496
(561) 994 4385
SGlicksman@GlicksmanConsulting.Com

July 17, 2013

Rhode Island Public Transit Authority
705 Elmwood Avenue
Providence, Rhode Island 02907

ACTUARIAL STUDY OF THE SELF-FUNDED
AUTOMOBILE LIABILITY AND WORKERS COMPENSATION PROGRAMS
AS OF JUNE 30, 2013

Attn: Ms. Diane Salisbury
Administrative Assistant

This study has been completed for the Rhode Island Public Transit Authority for the specific objectives listed in the study. It contains the conclusions of our work and methodology.

Each section of the study is an integral part of the whole. We recommend a review of the entire study prior to reliance upon this study.

No key personnel have a relationship with Rhode Island Public Transit Authority that may impair our objectivity.

Please call if you have any questions. Thank you for the opportunity to be of service.

Respectfully submitted,

Steven A. Glicksman

Steven A. Glicksman, FCAS, MAAA
Actuary
GLICKSMAN CONSULTING, LLC

TABLE OF CONTENTS

I. SUMMARY OF CONCLUSIONS

The Rhode Island Public Transit Authority (RIPTA) has a self-funded program for automobile liability and workers compensation.

The broad purpose of the work is to estimate the outstanding losses for financial reporting purposes and to provide reasonable guidance for future funding of RIPTA's exposure to loss.

We strongly recommend RIPTA and its financial auditors confirm Exhibit AL-1 and Exhibit WC-1 prior to reliance upon this report. These exhibits are a summary of the most important information used in this actuarial study. Any inconsistencies should be brought to our attention.

Estimated Outstanding Losses as of June 30, 2013

The estimated outstanding losses (including allocated loss adjustment expenses [ALAE]) are the cost of unpaid claims. The estimated outstanding losses include case reserves, the development of known claims and incurred but not reported (IBNR) claims.

The estimated outstanding losses and the present value of the estimated outstanding losses as of June 30, 2013 are in Table I-1. The amounts are actuarial central estimates.

Exhibit SUMMARY-1 (page 1) shows the estimated outstanding losses in current (payable within twelve months of June 30, 2013) and long-term (payable after twelve months of June 30, 2013) components.

Exhibit SUMMARY-1 (page 2) shows the estimated outstanding losses as of June 30, 2013, and confidence levels of the estimated outstanding losses.

Table I-1
Estimated Outstanding Losses
June 30, 2013

Program (1)	Estimated Outstanding Losses (2)	Present Value of Estimated Outstanding Losses (3)
(A) Automobile liability	$3,583,060	$3,372,812
(B) Workers compensation	2,069,179	1,831,635
(C) Total Sum(A)…(B)	$5,652,239	$5,204,447

Notes: (A) and (B) are from Exhibit SUMMARY-1 (page1).

Notes

The present value calculations are based on a 3.5% interest rate as specified by RIPTA.

The estimated outstanding losses do not include unallocated loss adjustment expenses (ULAE). ULAE are primarily the costs of future claims administration for open claims. It is typically 5.0% to 10.0% of the estimated outstanding losses.

Comparison to the Previous Study

The estimated outstanding losses of $5,652,239 (Table I-1, Cell (2C) as of June 30, 2013 compare to $5,527,681 as of June 30, 2012 in the previous study (dated April 1, 2013).

Potential for Material Adverse Deviation

The estimated outstanding losses are the actuarial central estimate. It is based on the probable outcomes, but not all possible outcomes. The risk of materia adverse deviation is a judgment as to actual losses materially exceeding the actuarial central estimate.

The Actuarial Standard of Practice (ASOP 36) requires commentary when the actuary "reasonably believes that there are significant risks and uncertainties that could result in material adverse deviation." ASOP 36 does not specify a materiality standard.

We understand RIPTA has not purchased excess insurance above a self-funded retention (specific) for automobile liability since March 25, 2005 and has never purchased it for workers compensation since. This leaves RIPTA with complete financial responsibility in the event of a large or catastrophic claim. No case reserves are kept for workers compensation.

While we believe the results are reasonable, RIPTA does not have complete data by period of occurrence. The types and breadth of actuarial methods available was somewhat restricted.

We have relied upon insurance industry statistics and actuarial judgment in several key areas of this study.

We have not have set a materiality standard. However, based on the above factors, we believe that the estimated outstanding loss amount is subject to a significant level of risk of adverse deviation as of June 30, 2013.

This disclosure is based on ASOP 36 and is not intended to be exclusive to this situation. Differences in the disclosure from previous studies are not intended to be a material change in our opinion, unless specifically stated otherwise. It is not a qualification of the study.

Projected Ultimate Losses for 2013/14 and 2014/15

The projected ultimate losses (including ALAE) are the accrual value of losses with accident dates in 2013/14 and 2014/15, regardless of report or payment date.

The projected ultimate losses for 2013/14 are in Table I-2A. The projected ultimate losses for 2014/15 are in Table I-2B.

Exhibit SUMMARY-2 (page 1) shows the projected ultimate limited losses for 2013/14 at various confidence levels.

Exhibit SUMMARY-2 (page 2) shows the projected ultimate limited losses for 2014/15 at various confidence levels.

Exhibit SUMMARY-2 (page 3) shows the projected losses paid (claims disbursements in the period, regardless of accident date) for 2013/14 and 2014/15.

Table I-2A
Projected Ultimate Losses
2013/14

Program (1)	Projected Ultimate Losses (2)	Present Value of Projected Ultimate Losses (3)
(A) Automobile liability	$1,687,666	$1,532,400
(B) Workers compensation	1,003,821	911,469
(C) Total Sum(A)…(B)	$2,691,486	$2,443,869

Notes: Notes: (A) and (B) are from Exhibit SUMMARY-2 (page1).

Table I-2B
Projected Ultimate Losses
2014/15

Program (1)	Projected Ultimate Losses (2)	Present Value of Projected Ultimate Losses (3)
(A) Automobile liability	$1,789,769	$1,625,111
(B) Workers compensation	1,044,275	948,201
(C) Total Sum(A)…(B)	$2,834,044	$2,573,312

Notes: Notes: (A) and (B) are from Exhibit SUMMARY-2 (page2).

Notes

The present value calculations are based on a 3.5% interest rate as specified by RIPTA.

The projected ultimate losses do not include ULAE or any expenses other then losses.

Comparison to the Previous Study

The projected ultimate limited losses of $2,691,486 for 2013/14 (Table I-2A, Cell (2C) compare to $2,684,437 for 2013/14 in the previous study (dated April 1, 2013).

II. BACKGROUND AND OBJECTIVES

A. BACKGROUND

RIPTA has a self-funded program for automobile liability and workers compensation. RIPTA has been self-funded for at least twenty-five years.

RIPTA had a $1,000,000 per occurrence retention for automobile liability until March 25, 2005. Since then it has had full responsibility for losses. It has never purchased excess insurance for workers compensation.

We have assumed the current arrangements will continue indefinitely.

B. OBJECTIVES

The specific objectives of this study are:

1. **<u>Estimate Outstanding Losses</u>.** Estimate outstanding losses (including allocated loss adjustment expenses [ALAE]) as of June 30, 2013.

   The estimated outstanding losses are the cost of unpaid claims. The estimated outstanding losses include case reserves, the development of known claims and incurred but not reported (IBNR) claims.

   ALAE are the direct settlement expenses for specific claims, primarily legal expenses.

2. **<u>Project Ultimate Losses</u>.** Project ultimate limited losses (including ALAE) for 2013/14 and 2014/15.

   The projected ultimate limited losses are the accrual value of losses with accident dates in 2013/14 and 2014/15, regardless of report or payment date. The amount is limited to the self-funded retention.

III. METHODOLOGY NOTES

Narrative of Exhibits

We strongly recommend RIPTA and its financial auditors confirm Exhibit AL-1 and Exhibit WC-1 prior to reliance upon this report. These exhibits are a summary of the most important information used in this actuarial study. Any inconsistencies should be brought to our attention.

Automobile Liability

Exhibit AL-1 is a summary of the loss experience and exposure data. RIPTA has paid loss data by claim period of payment. Cumulative payments and reported claims by year of occurrence were not available.

Occasionally the data for older claim periods was revised slightly. This is because it changes a little every year due to a few payments being made and not recorded until a little later.

RIPTA is not aware of any claims in excess of $1,000,000. From our discussions with RIPTA, we understand they believe that reserves are adequate based on current information.

The number of vehicles decreased a few years ago, but we understand that exposure will not be less because of this. The new vehicles probably have not been delivered but the old ones were probably inactive.

RIPTA has not purchased excess insurance since March 25, 2005. This means it has complete financial responsibility for claims. In the event of a catastrophic occurrence, this could be a serious matter. While the exhibits are labeled as "unlimited", there have been no claims over $1,000,000.

Exhibit AL-2 shows the percentage of losses paid. It is based on insurance industry data, other programs with which we are familiar and actuarial judgment. Note that payment pattern is slower than last year based on observed data and our discussions with RIPTA.

Exhibits AL-3 to AL-5 shows our actuarial methodologies to project losses by claim period based upon loss payments. Because RIPTA does not have complete data by period of occurrence, the types of actuarial methods was somewhat restricted. . The algebra of the methodology was essentially to "telescope" payments back to the claims period of occurrence and then to develop the payments to ultimate. It is not an ideal methodology. However, we do believe the conclusions are reasonable, especially given the case reserve information provided.

Exhibit AL-6 is a loss rate analysis used to project losses in future periods. The projections are trended extrapolations of loss and exposure amounts. Note that predictive power tends to diminish rapidly over time. The projections are for long-term budgetary uses and do not substitute future studies

Exhibits AL-7 and AL-8 show the estimated outstanding losses and the present value of the estimated outstanding losses.

Exhibits AL-9 and AL-10 summarizes the projected losses paid for 2013/14 and 2014/15. The projected losses paid are consistent with RIPTA's recent loss experience, lending credence to the methodology. These are estimates. Actual payments will depend upon the settlement of individual claims. If a large claim is settled, payments may be great. The converse is also true.

Workers Compensation

The methodology for workers compensation is similar to automobile liability.

Exhibit WC-1 is a summary of the loss experience and exposure data. RIPTA has paid loss data by claim period of payment. Cumulative payments and reported claims by year of occurrence were not available.

Occasionally the data for older claim periods was revised slightly. This is because it changes a little every year due to a few payments being made and not recorded until a little later.

Case reserves are not available as they have not been updated for more than five years. RIPTA is aware of four open claims with reported incurred losses in excess of $250,000.

RIPTA has never purchased excess insurance. This means it has complete financial responsibility for claims. In the event of a catastrophic occurrence, this could be a serious matter.

Exhibit WC-2 shows the percentage of losses paid. It is based on insurance industry data, other programs with which we are familiar and actuarial judgment

Exhibits WC-3 to WC-5 shows our actuarial methodologies to project losses by claim period based upon loss payments. Exhibit WC-6 is a loss rate analysis used to project losses in future periods.

Based on discussions with RIPTA, we understand there are no outstanding catastrophic claims. They noted that of the current open claims there are several that are quite old and lifetime benefits are likely.

Exhibits WC-7 and WC-8 show the estimated outstanding losses and the present value of the estimated outstanding losses. The amounts are averages. If there is a large open claim or claims, actual amounts may be greater.

Exhibits WC-9 and WC-10 summarizes the projected losses paid for 2013/14 and 2014/15. The projected losses paid are consistent with RIPTA's recent loss experience, lending credence to the methodology.

ASOP No. 43 Disclosures

Please note the following disclosures:

- We understand that the intended use of the estimated outstanding losses is for internal management and external financial reporting. We are unaware of conflicts or potential conflicts arising from this dual usage.

- No constraints have been placed upon this analysis in the areas of data or other resources.

- The results of this study, except where otherwise specified, are actuarial central estimates. Actuarial central estimates represent an expected value of a range of reasonably possible outcomes, but may not include all conceivable outcomes. In our opinion, an actuarial central estimate is appropriate for the intended use cited above. Discounted amounts are preceded by the wording "present value."

- The estimated outstanding losses are limited to the specific and aggregate reinsurance. We have not studied the collectibility of reinsurance and assume it has been purchased from solvent sources.

- The estimated outstanding losses include allocated loss adjustment expenses [ALAE]). ALAE are the direct settlement expenses for specific claims, primarily legal expenses. The estimated outstanding losses do not include unallocated loss adjustment expenses (ULAE) or any expenses other than losses. ULAE are primarily the costs of future claims administration for open claims.

- The estimated outstanding losses are for the coverages shown in Chapter II- Background and Objectives for claims occurring through June 30, 2013.

- The estimated outstanding losses reflect models and methodology that we believe are appropriate in consideration of the underlying exposure, loss development characteristics, data availability and intended usage.

- The estimated outstanding losses are based on assumptions (implicit and explicit) that are expected not to result in significant bias.

- We relied upon data without verification or audit, other than checks for reasonableness. In those checks of reasonableness, we have no material concerns with data quality (per ASOP No. 23).

- The estimated outstanding losses are limited to the self-insured retention. Specific and aggregate retentions have been considered on a coordinated basis.

- The estimated outstanding losses are shown only on a basis limited to the self-insured retention. Unlimited estimated outstanding losses are not shown.

- External factors such as economic changes, legislative changes or other actions have been considered in the estimated outstanding losses. We are unaware of any changes or pending changes that are retroactive and material.

- Internal factors such as claims administration and excess insurance have been considered in the estimated outstanding losses. We believe there has been no material change in case reserve philosophy/adequacy other than those detailed in the text.

IV. CONDITIONS AND LIMITATIONS

- *Actuarial Estimates.* Actuarial estimates are subject to materia uncertainty from many different sources, including (but not limited to) the random nature of claims, historical experience not being indicative of future experience, changes in development patterns, catastrophes, legal interpretations, legislation and operations.

- *Changes in Operations and Business Environment.* Based on our discussions we understand that there have been no changes in operations or the business environment (other than those identified in the text) that may material impact the analysis.

- *Data.* We relied upon data without verification or audit, other than checks for reasonableness. Unless otherwise stated, we assumed the data to be correct and complete. If the underlying data is incorrect and/or incomplete, this actuary study will also be incorrect and/or incomplete. Even small differences can have a material impact.

- *Due Diligence.* This study is not a substitute for the due diligence of its users. Every user of this study should place no reliance on this study that would create any duty or liability by Glicksman Consulting, LLC.

- *Economic Environment.* Unless otherwise stated, we assumed the current economic conditions will continue in the foreseeable future. For example, we assumed inflation will remain moderate.

- *Funding Adequacy.* We have not reviewed available assets or other balance sheet items regarding funding adequacy. We have not reviewed contributions, premiums, expenses, investment income or other budget items. We have no opinion regarding the ability of the organization shown on the transmittal page to pay past claims or future claims.

- *Insurance.* Unless otherwise stated, we assumed no insurance coverage changes (including coverage provided by the organization to others) subsequent to the date this study was prepared. This includes coverage language, self-insured retention, limitations and similar issues.

- *Insurance Solvency.* Unless otherwise stated, we assumed all insurance is from solvent sources and payable in accordance with terms of the coverage document. We have not reviewed the collectibility of insurance. We have no opinion regarding the collectibility of insurance.

- *Interest Rate.* The exhibits specify the annual interest rate used. Unless otherwise noted, the interest rate used was specified by the organization shown on the transmittal page. We have no opinion regarding the underlying invested assets or the actual return on investments.

- *Limitation on Damages.* We shall not be liable for any claim or demand by any third party arising out of the services provided except where such claim or demand results from the willful misconduct. In no event shall we be liable to anyone for any amounts representing lost profits, loss of business, or special, indirect, incidental, consequential or punitive damages.

- *Limits in Our Knowledge.* We have not advised on matters of legality, policy language, risk transfer or taxes. We understand that there have been independent experts engaged in each of these areas.

- *Methodology.* In this study, different actuarial methods were applied. In some instances, the methods yield significantly disparate results. The estimates, projections and recommendations in this study reflect our judgments as to the best method or combination of methods that are most reliable and reflective of the exposure to loss.

- *Minimum Knowledge*. We have assumed the organization shown on the transmittal page, and persons and users of this study are familiar with common insurance terms and have an appreciation for the significant financial risks involved in an insurance program.

- *Range of Values.* The conclusions of this study are point estimates, projections and recommendations within a wide range of possible outcomes. Where the conclusions are shown as a range of values, it is possible that actual results will fall outside the range, perhaps by a significant amount.

- *Reproduction.* This study may only be reproduced in its entirety.

- *Risk.* Insurance is an inherently risky enterprise. Actual losses may vary significantly from our estimates, projections and recommendations. They may emerge higher or lower. The amounts can be material.

- *Securities Regulatory Organizations.* This study is not intended and may not be disclosed or filed with the Securities Exchange Commission (SEC) or other securities regulatory organizations.

- *Statutory and Judicial Changes.* Legislatures and judiciaries may change statutes that govern indemnification. This includes benefit levels for workers compensation, immunities and limitations for liability, and other similar issues. Unless otherwise stated, we assumed no statutory changes subsequent to the date this study was prepared.

- *Supplemental Data.* In addition to the data provided by the organization, we supplemented our analysis with data from previous studies, similar organizations and insurance industry statistics, as we deemed appropriate. This includes key assumptions such as (but not limited to) development factors, tail factors, trends, loss elimination ratios, increased limits factors and pure premiums.

  The application of supplemental data may represent an addition source of risk in the analysis.

- *Usage.* This study has been prepared for the exclusive usage of the organization shown on the transmittal page. It was not prepared for and may not be appropriate for use by others, such as insurance or reinsurance companies. We have prepared this analysis in conformity with its intended use by persons technically competent in the areas addressed and for the stated purposes only. Judgments as to the conclusions, indications, methods, and data contained in this analysis should be made only after studying this analysis in its entirety. It is assumed that the user of this analysis will seek explanation of any matter in question. In no event shall we be liable to anyone for any amounts representing lost profits, loss of business, or special, indirect, incidental, consequential or punitive damages.

V. GLOSSARY

<u>Actuarial Methods (Common)</u>

The following actuarial methods are commonly used:

- Developed Paid Losses
- Developed Reported Incurred Losses
- Developed Case Reserves
- Frequency Times Severity Analysis
- Loss Rate Analysis

The following describes each method:

1. *<u>Developed Paid Losses</u>.* Paid losses represent the amounts actually paid to claimants (less excess insurance recoveries). As time goes on, loss payments continue until all claims are closed and there are no remaining payments expected. At this time, the ultimate losses for the claim period are known. This common process is called "paid loss development."

Paid loss development is an extrapolation of actual dollars paid. It does not depend on case reserve estimates. A potential shortcoming of utilizing this method is that only a small fraction of total payments have been made for the most recent claim periods. Extrapolating ultimate losses based on small amounts of actual payments may be speculative. A second potential shortcoming is that payment patterns can change over time.

2. *<u>Developed Reported Incurred Losses</u>.* Reported incurred losses are paid losses plus case reserves. In most programs, total reported incurred losses underestimate the ultimate losses. Over time, as more information about a body of claims becomes known, they are adjusted either up or down until they are closed. Though many individual claims settle for less than what was estimated, these decreases are generally more than offset by increases in the cost of other claims for which new information has emerged.

The net effect is that total estimated costs are often revised upward over time. This normal process is called "reported incurred loss development." Actuaries typically review the development patterns of the recent past to make projections of the expected future loss development and, therefore, estimations of ultimate losses.

3. *<u>Developed Case Reserves</u>.* The developed case reserves method is a hybrid of the paid loss development and reported incurred loss development methods. It relies on the historical adequacy of case reserves to predict ultimate losses.

4. *<u>Frequency Times Severity Analysis</u>.* The frequency times severity analysis is an actuarial method that uses a preliminary projection of ultimate losses to project claims severity. The claims severity times the number of claims is a predictor of ultimate losses. The focus of the frequency times severity analysis is that ultimate losses each period are dependent on the number of claims.

5. *<u>Loss Rate Analysis</u>.* The loss rate analysis is based on the historical loss rates per exposure unit (such as payroll, vehicles or property value). The loss rates (projected ultimate losses divided by exposure units) are trended to reflect the effect of claim cost inflation and retention changes. The trended loss rates represent the rates that one would see if all of the claims had been handled in the claim cost environment that will be present in the upcoming period. The trended loss rate times the projected exposure units is a predictor of losses.

6. *<u>Bornhuetter-Ferguson Method (B-F)</u>.* The B-F method is an actuarial method that weights a preliminary projection of ultimate losses with projections of ultimate losses determined by other actuarial methods (usually the developed paid losses and developed reported incurred losses methods). For less mature claim periods, the B-F method leans more heavily to the preliminary projection. It gradually converges to the projections of ultimate losses determined by the other actuarial methods as the claim periods mature.

<u>Actuary</u>

A specialist trained in mathematics, statistics, and finance who is responsible for rate, reserve, and dividend calculations and other statistical studies.

<u>Allocated Loss Adjustment Expenses</u>

Allocated loss adjustment expenses (ALAE) are the direct expenses to settle specific claims. These expenses are primarily legal expenses.

Benefits

The financial reimbursement and other services provided insureds by insurers under the terms of an insurance contract. An example would be the benefits listed under a life or health insurance policy or benefits as prescribed by a workers compensation law.

Claim

Demand by an individual or entity to recover for a loss.

Claims Made

A policy written on this basis covers only those claims that are made during the policy period. Coverage for prior acts is provided back to what is known as the retroactive date, which is the effective date of the original claims made policy with the same insurer.

Confidence Level

A confidence level is the statistical certainty that an actuary believes funding will be sufficient. For example, an 80% confidence level means that the actuary believes funding will be sufficient in eight years out of ten.

Confidence levels are determined based on mathematical models. Coverages that are low frequency and high severity (such as excess liability) are subject to greater risk than coverages that are high frequency and low severity (such as automobile physical damage). Therefore, they need a greater margin to attain a given confidence level.

Credibility

Credibility is the belief that the sample data is an accurate reflection of the larger population. Credibility is highest when the sample data is large and the standard deviation (discussed later) of the larger population is low.

Dates

There are at least three milestone dates in a claim. They are the date of injury or accident, the date of report and the date of closure. It is best if each of these dates is recorded. Some organizations may also keep the date a claim becomes a lawsuit, as opposed to a demand.

Deductible

The portion of an insured loss to be borne by the insured before he is entitled to recovery from the insurer. Deductibles may be expressed as a dollar amount, percentage or waiting period.

Estimated Outstanding Losses

Estimated outstanding losses are the cost of claims that have occurred but have not yet been paid. They typically include indemnification and allocated loss adjustment expenses (ALAE), but not unallocated loss adjustment expenses (ULAE).

Estimated outstanding losses are calculated as projected ultimate losses less paid losses. Alternatively, they are the sum of case reserves and incurred but not reported (IBNR) claims.

Other common names for estimated outstanding losses are outstanding claims liabilities and unpaid claims.

Experience Rating

A method of adjusting the premium for a risk based on past loss experience for that risk compared to loss experience for an average risk.

Exposure Data

Exposure data refers to the activities of the organization. For example, payroll is the most common exposure measure for workers compensation. Exposure data should ideally have the following characteristics:

- *Readily Available.* The exposure data should be easily obtained. It is best if it is a byproduct of other activities, although this is not always possible. If getting data is arduous, it may discourage collection.

- *Vary With Losses.* The exposure data should correlate directly with losses. The ideal situation is where exposure and expected losses move in tandem. The exposure base needs to be fitting to the coverage. For example, the number of employees may vary with property losses (more employees = more office space = more losses), but property value is a clearly superior exposure base for property losses.

Generally Accepted Accounting Principles (GAAP)

These principles are intended to produce financial results (in the insurance industry) consistent with those of other industries and to assure consistency in financial reporting.

<u>Incurred But Not Reported</u>

IBNR is really comprised of two distinct items. These are the development of known case reserves (incurred but not enough reported [IBNER] and incurred but not yet reported [IBNYR]).

IBNER are the actuary's estimate of the inadequacy of case reserves. Most claims settle at amounts close to what is set by the claims administrator. Some claims close favorably and some emerge as more expensive. On balance, case reserves tend to be too low (especially for recent years). IBNER is the actuary's estimate of the amount total case reserves will rise upon closure.

IBNYR refers to those claims that have occurred, but have not yet been reported. A classic example is medical malpractice claim reported several years after the medical procedure was performed.

<u>Investment Income</u>

The return received by entities from their investment portfolios, including interest, dividends and realized capital gains on stocks. Realized capital gains means the profit realized on assets that have actually been sold for more their purchase price.

<u>Limited</u>

Most programs purchase excess insurance for catastrophic claims. For example, they may purchase coverage for claims above a $500,000 per occurrence self-funded retention. "Limited" refers to an estimate or projection being limited to the self-funded retention. In contrast, "unlimited" means a loss projection not limited to the self-funded retention.

Other common names for limited are net of excess insurance or capped losses.

<u>Loss Development</u>

The difference between the amount of losses initially estimated by the insurer and the amount reported in an evaluation on a later date. Loss development is typically measured for paid losses, reported incurred losses and claim counts.

Net

Many pooling programs assign deductibles to members. For example, each member may have a $5,000 per claim deductible. “Net” refers to a loss estimate or projection that excludes amounts below member deductibles.

Occurrence

An event that results in an insured loss. In some lines of insurance, such as general liability, it is distinguished from accident in that the loss does not have to be sudden and fortuitous and can result from continuous or repeated exposure that results in bodily injury or property damage neither expected nor intended by the insured.

Pool

An organization of entities through which particular types of risks are written with the premiums, losses, and expenses shared in agreed amounts among the members belonging to the organization.

Premium

The price of insurance protection for a specified risk for a specified period of time.

Present Value

The amount of money that future amounts receivable are currently worth. For example, a policy may provide for payments to be made annually for ten years. The present value of that money would be less than the total amount of the regular periodic payments for 10 years because of the amount of interest that a present lump sum could earn during the term than the payments otherwise would have been made.

Probability

The probability is the likelihood of an event. It is a measure of how likely a value or event is to occur. It can be measured from data by calculating the number of occurrences of the value or event divided by the total number of occurrences. This calculation can be converted to a percentage. For example, tossing a coin has a 50% probability of heads or tails.

Projected Losses Paid

Projected losses paid are the projected claims disbursements in a period, regardless of when the claim occurred. They typically include indemnification and ALAE, but not unallocated loss adjustment expenses (ULAE).

“Projected losses paid” is a cash-flow analysis that can be used in making investment decisions.

Projected Ultimate Losses

Projected ultimate losses are the accrual value of claims. They are the total amount that is expected to be paid in a particular claim period after all claims are closed. Projected ultimate losses are the total loss costs for a particular period. They typically include indemnification and ALAE, but not ULAE.

Other common names for projected ultimate losses are expected losses, ultimate losses and total losses.

Rate

The cost of a given unit of insurance. For example, in life insurance, it is the price of $1,000 of the face amount. In property insurance, it is the rate per $100 of value to be insured. The premium is the rate multiplied by the number of units of insurance purchased.

Self-funded Retention (SIR)

That portion of a risk or potential loss assumed by an insured. It is often in the form of a per occurrence deductible.

Unallocated Loss Adjustment Expenses

Unallocated loss adjustment expenses (ULAE) are the indirect expenses to settle claims. These expenses are primarily administration and claims handling expenses.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Exhibit AL-1

Data Summary as of June 30, 2013

Period (1)	Vehicles (2)	Unlimited Paid Losses During Period (3)
2003/04	383	$915,424
2004/05	385	1,364,743
2005/06	393	715,904
2006/07	393	1,314,759
2007/08	393	1,145,668
2008/09	392	952,442
2009/10	371	1,385,539
2010/11	366	1,380,530
2011/12	360	1,884,479
2012/13	381	1,236,672
Total	3,817	$12,296,160

Data was provided by RIPTA.

RHODE ISLAND PUBLIC TRANSIT AUTHORI   Exhibit AL-2
AUTOMOBILE LIABILITY

Summary of Percent Losses Paid

Months of Development (1)	Insurance Industry Percent Losses Paid (2)
360.0	100.0%
348.0	100.0%
336.0	100.0%
324.0	100.0%
312.0	100.0%
300.0	100.0%
288.0	100.0%
276.0	100.0%
264.0	100.0%
252.0	100.0%
240.0	100.0%
228.0	100.0%
216.0	100.0%
204.0	100.0%
192.0	100.0%
180.0	100.0%
168.0	100.0%
156.0	100.0%
144.0	100.0%
132.0	100.0%
120.0	100.0%
108.0	99.5%
96.0	98.5%
84.0	97.5%
72.0	95.0%
60.0	90.0%
48.0	80.0%
36.0	60.0%
24.0	35.0%
12.0	10.0%

(2) is based on insurance industry data, other programs with which we are familiar and

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Ultimate Losses Based on Payments During Payment Period

Months of Development 6/30/13 (1)	Relative Ultimate Losses (2)	Percent Losses Paid (3)	Incremantal Percent Losses Paid (4)	Paid to Ultimate Losses Factor (2)X(4) (5)
360	0.243	100.0%	0.0%	0.000
348	0.255	100.0%	0.0%	0.000
336	0.268	100.0%	0.0%	0.000
324	0.281	100.0%	0.0%	0.000
312	0.295	100.0%	0.0%	0.000
300	0.310	100.0%	0.0%	0.000
288	0.326	100.0%	0.0%	0.000
276	0.342	100.0%	0.0%	0.000
264	0.359	100.0%	0.0%	0.000
252	0.377	100.0%	0.0%	0.000
240	0.396	100.0%	0.0%	0.000
228	0.416	100.0%	0.0%	0.000
216	0.436	100.0%	0.0%	0.000
204	0.458	100.0%	0.0%	0.000
192	0.481	100.0%	0.0%	0.000
180	0.505	100.0%	0.0%	0.000
168	0.530	100.0%	0.0%	0.000
156	0.557	100.0%	0.0%	0.000
144	0.585	100.0%	0.0%	0.000
132	0.614	100.0%	0.0%	0.000
120	0.645	100.0%	0.5%	0.003
108	0.677	99.5%	1.0%	0.007
96	0.711	98.5%	1.0%	0.007
84	0.746	97.5%	2.5%	0.019
72	0.784	95.0%	5.0%	0.039
60	0.823	90.0%	10.0%	0.082
48	0.864	80.0%	20.0%	0.173
36	0.907	60.0%	25.0%	0.227
24	0.952	35.0%	25.0%	0.238
12	1.000	10.0%	10.0%	0.100
Total				0.895

(2) is based on 3.0% wage inflation and 1.0% residual trend.

(3) is from Exhibit AL-2.

(4) is based on (3).

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Ultimate Losses Based on Payments During Payment Period

Payment Period (1)	Losses Paid During Payment Period (2)	Paid to Ultimate Losses Factor (3)	Projected Ultimate Losses Based on Paid During Payment Period (2)/(3) (4)
2003/04	$915,424	0.895	$1,023,025
2004/05	1,364,743	0.895	1,525,159
2005/06	715,904	0.895	800,053
2006/07	1,314,759	0.895	1,469,299
2007/08	1,145,668	0.895	1,280,333
2008/09	952,442	0.895	1,064,395
2009/10	1,385,539	0.895	1,548,399
2010/11	1,380,530	0.895	1,542,801
2011/12	1,884,479	0.895	2,105,986
2012/13	1,236,672	0.895	1,382,034
Total	$12,296,160		$13,741,485

(2) is from Exhibit AL-1.

(3) is from Exhibit AL-3.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Ultimate Unlimited Losses to 2012/13

Claim Period (1)	Projected Ultimate Unlimited Losses Based on 2003/04 Payments (2)	Projected Ultimate Unlimited Losses Based on 2004/05 Payments (3)	Projected Ultimate Unlimited Losses Based on 2005/06 Payments (4)	Projected Ultimate Unlimited Losses Based on 2006/07 Payments (5)	Projected Ultimate Unlimited Losses Based on 2007/08 Payments (6)	Projected Ultimate Unlimited Losses Based on 2008/09 Payments (7)	Projected Ultimate Unlimited Losses Based on 2009/10 Payments (8)	Projected Ultimate Unlimited Losses Based on 2010/11 Payments (9)	Projected Ultimate Unlimited Losses Based on 2011/12 Payments (10)	Projected Ultimate Unlimited Losses Based on 2012/13 Payments (11)	Previous Projected Ultimate Unlimited Losses (12)	Projected Ultimate Unlimited Losses Based on Payments Average ((2)..(11)) (13)
1980/81	$264,936	$374,213	$183,148	$320,334	$265,844	$211,020	$308,906	$297,137	$392,728	$231,923	$290,397	$285,019
1981/82	280,965	396,852	194,228	339,714	281,927	223,787	327,595	315,114	416,488	245,954	307,966	302,262
1982/83	297,963	420,862	205,979	360,267	298,984	237,326	347,414	334,178	441,686	260,834	326,597	320,549
1983/84	315,990	446,324	218,440	382,063	317,072	251,684	368,433	354,396	468,408	276,615	346,357	339,943
1984/85	335,107	473,327	231,656	405,178	336,255	266,911	390,723	375,837	496,746	293,350	367,311	360,509
1985/86	355,381	501,963	245,671	429,691	356,599	283,059	414,362	398,575	526,799	311,098	389,534	382,320
1986/87	376,882	532,332	260,534	455,688	378,173	300,184	439,431	422,689	558,671	329,919	413,100	405,450
1987/88	399,683	564,538	276,297	483,257	401,052	318,345	466,016	448,262	592,470	349,879	438,093	429,980
1988/89	423,864	598,692	293,013	512,494	425,316	337,605	494,210	475,382	628,315	371,047	464,597	455,994
1989/90	449,508	634,913	310,740	543,500	451,048	358,030	524,110	504,142	666,328	393,495	492,706	483,581
1990/91	476,703	673,325	329,540	576,381	478,336	379,691	555,819	534,643	706,641	417,302	522,514	512,838
1991/92	505,543	714,062	349,477	611,252	507,276	402,662	589,446	566,989	749,392	442,548	554,126	543,865
1992/93	536,129	757,262	370,620	648,233	537,966	427,023	625,107	601,292	794,731	469,323	587,651	576,769
1993/94	568,564	803,077	393,043	687,451	570,513	452,858	662,926	637,670	842,812	497,717	623,204	611,663
1994/95	602,963	851,663	416,822	729,042	605,029	480,256	703,033	676,249	893,802	527,828	660,908	648,669
1995/96	639,442	903,189	442,040	773,149	641,633	509,312	745,567	717,162	947,877	559,762	700,893	687,913
1996/97	678,128	957,831	468,783	819,925	680,452	540,125	790,674	760,550	1,005,224	593,628	743,297	729,532
1997/98	719,155	1,015,780	497,144	869,530	721,619	572,802	838,509	806,564	1,066,040	629,542	788,266	773,669
1998/99	762,664	1,077,235	527,222	922,137	765,277	607,457	889,239	855,361	1,130,535	667,629	835,956	820,475
1999/00	808,805	1,142,408	559,119	977,926	811,576	644,208	943,038	907,110	1,198,932	708,021	886,532	870,114
2000/01	857,738	1,211,523	592,945	1,037,090	860,677	683,183	1,000,092	961,990	1,271,468	750,856	940,167	922,756
2001/02	909,631	1,284,820	628,818	1,099,834	912,747	724,515	1,060,598	1,020,190	1,348,391	796,283	997,047	978,583
2002/03	964,663	1,362,552	666,862	1,166,374	967,969	768,348	1,124,764	1,081,912	1,429,969	844,458	1,057,368	1,037,787
2003/04	1,023,025 *	1,444,986	707,207	1,236,940	1,026,531	814,834	1,192,812	1,147,368	1,516,482	895,548	1,121,339	1,100,573
2004/05	1,079,786	1,525,159 *	746,445	1,305,569	1,083,486	860,043	1,258,993	1,211,027	1,600,621	945,236	1,183,554	1,161,636
2005/06	1,157,334	1,634,693	800,053 *	1,399,333	1,161,300	921,810	1,349,411	1,298,001	1,715,575	1,013,121	1,268,555	1,245,063
2006/07	1,215,201	1,716,427	840,056	1,469,299 *	1,219,365	967,900	1,416,882	1,362,901	1,801,354	1,063,777	1,331,983	1,307,316
2007/08	1,275,961	1,802,249	882,059	1,542,764	1,280,333 *	1,016,295	1,487,726	1,431,046	1,891,421	1,116,966	1,398,582	1,372,682
2008/09	1,336,350	1,887,546	923,805	1,615,781	1,340,929	1,064,395 *	1,558,137	1,498,775	1,980,939	1,169,830	1,464,774	1,437,649
2009/10	1,327,998	1,875,749	918,031	1,605,682	1,332,548	1,057,742	1,548,399 *	1,489,407	1,968,558	1,162,518	1,455,620	1,428,663
2010/11	1,375,605	1,942,993	950,942	1,663,244	1,380,319	1,095,661	1,603,908	1,542,801 *	2,039,129	1,204,193	1,507,802	1,479,880
2011/12	1,420,707	2,006,697	982,120	1,717,777	1,425,575	1,131,585	1,656,495	1,593,385	2,105,986 *	1,243,675	1,557,238	1,528,400
2012/13	1,578,761	2,229,943	1,091,381	1,908,880	1,584,170	1,257,473	1,840,780	1,770,649	1,382,034	1,382,034 *	1,593,914	1,602,610
Total	$25,321,134	$35,765,185	$17,504,241	$30,615,781	$25,407,894	$20,168,129	$29,523,557	$28,398,755	$36,576,552	$22,165,906	$27,617,948	$27,144,713

Figures with "*" are from Exhibit AL-4.

Figures for 2002/03 and prior reflect wage inflation and trend.

Figures after 2003/04 reflect actual payroll growth and trend.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Ultimate Unlimited Losses for 2013/14 and Subsequent

Claim Period (1)	Projected Ultimate Unlimited Losses Based on Payments (2)	Vehicles (3)	Loss Rate per $100 Payroll (2)/(3)/10 (4)	Loss Rate Trend (2013/14 = 1.000) (5)	Trended Loss Rate per $100 Payroll (4)X(5) (6)
2008/09	$1,372,682	392	$3,501.74	1.276	$4,469
2009/10	1,437,649	371	3,875.06	1.216	4,710
2010/11	1,428,663	366	3,903.45	1.158	4,519
2011/12	1,479,880	360	4,110.78	1.103	4,532
2012/13	1,528,400	381	4,011.55	1.050	4,212
Total	$7,247,274	1,870	$3,875.55		$4,488

Claim Period (1)	Projected Unlimited Loss Rate per Vehicle (7)	Projected Vehicles (8)	Projected Ultimate Unlimited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Unlimited Loss Rate per Vehicle (7)X(10) (11)	Present Value of Projected Ultimate Unlimited Losses (8)X(11) (12)
2013/14	$4,488	376	$1,687,666	0.91	$4,076	$1,532,400
2014/15	4,713	380	1,789,769	0.91	4,279	1,625,111
2015/16	4,949	384	1,898,050	0.91	4,493	1,723,430
2016/17	5,196	387	2,012,882	0.91	4,718	1,827,697
2017/18	5,456	391	2,134,662	0.91	4,954	1,938,273

(2) is from Exhibit AL-5.

(3) is from Exhibit AL-1.

(5) is from Exhibit AL-11.

(7) for 2013/14 is based on (6) and the following weights:

Claim Period	Weight
2008/09	20.0%
2009/10	20.0%
2010/11	20.0%
2011/12	20.0%
2012/13	20.0%

(7) for 2014/15 and subsequent are based on 2013/14 plus the trend in Exhibit AL-11.

(8) to 2013/14 was provided by RIPTA. Other claim periods are based on a 1% trend.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit AL-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Estimated Outstanding Losses as of June 30, 2013

Claim Period (1)	Months of Development 6/30/13 (2)	Insurance Industry Percent Losses Paid (3)	Projected Ultimate Unlimited Losses Based on Payments (4)	Estimated Outstanding Losses 6/30/13 (5)
1980/81	396	100.0%	$285,019	$0
1981/82	384	100.0%	302,262	0
1982/83	372	100.0%	320,549	0
1983/84	360	100.0%	339,943	0
1984/85	348	100.0%	360,509	0
1985/86	336	100.0%	382,320	0
1986/87	324	100.0%	405,450	0
1987/88	312	100.0%	429,980	0
1988/89	300	100.0%	455,994	0
1989/90	288	100.0%	483,581	0
1990/91	276	100.0%	512,838	0
1991/92	264	100.0%	543,865	0
1992/93	252	100.0%	576,769	0
1993/94	240	100.0%	611,663	0
1994/95	228	100.0%	648,669	0
1995/96	216	100.0%	687,913	0
1996/97	204	100.0%	729,532	0
1997/98	192	100.0%	773,669	0
1998/99	180	100.0%	820,475	0
1999/00	168	100.0%	870,114	0
2000/01	156	100.0%	922,756	0
2001/02	144	100.0%	978,583	0
2002/03	132	100.0%	1,037,787	0
2003/04	120	100.0%	1,100,573	0
2004/05	108	99.5%	1,161,636	5,808
2005/06	96	98.5%	1,245,063	18,676
2006/07	84	97.5%	1,307,316	32,683
2007/08	72	95.0%	1,372,682	68,634
2008/09	60	90.0%	1,437,649	143,765
2009/10	48	80.0%	1,428,663	285,733
2010/11	36	60.0%	1,479,880	591,952
2011/12	24	35.0%	1,528,400	993,460
2012/13	12	10.0%	1,602,610	1,442,349
Total			$27,144,713	$3,583,060

(3) is from Exhibit AL-2.

(4) is from Exhibit AL-6.

(5) = (100.0%-(3))X(4).

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Present Value of Estimated Outstanding Losses as of June 30, 2013

Claim Period (1)	Estimated Outstanding Losses 6/30/13 (2)	Present Value Factor (3)	Present Value of Estimated Outstanding Losses 6/30/13 (2)X(3) (4)	Anticipated Future Investment Income (2)-(4) (5)
1980/81	$0	1.00	$0	$0
1981/82	0	1.00	0	0
1982/83	0	1.00	0	0
1983/84	0	1.00	0	0
1984/85	0	1.00	0	0
1985/86	0	1.00	0	0
1986/87	0	1.00	0	0
1987/88	0	1.00	0	0
1988/89	0	1.00	0	0
1989/90	0	1.00	0	0
1990/91	0	1.00	0	0
1991/92	0	1.00	0	0
1992/93	0	1.00	0	0
1993/94	0	1.00	0	0
1994/95	0	1.00	0	0
1995/96	0	1.00	0	0
1996/97	0	1.00	0	0
1997/98	0	1.00	0	0
1998/99	0	1.00	0	0
1999/00	0	1.00	0	0
2000/01	0	1.00	0	0
2001/02	0	1.00	0	0
2002/03	0	1.00	0	0
2003/04	0	1.00	0	0
2004/05	5,808	0.98	5,709	99
2005/06	18,676	0.97	18,153	523
2006/07	32,683	0.96	31,278	1,405
2007/08	68,634	0.95	65,477	3,157
2008/09	143,765	0.95	136,864	6,901
2009/10	285,733	0.95	271,732	14,001
2010/11	591,952	0.95	562,946	29,006
2011/12	993,460	0.94	937,826	55,634
2012/13	1,442,349	0.93	1,342,827	99,522
Total	$3,583,060		$3,372,812	$210,248

(2) is from Exhibit AL-7.

(3) is based on a 3.5% interest rate and the payout pattern in Exhibit AL-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Losses Paid July 1, 2013 to June 30, 2014

Claim Period (1)	Months of Development 6/30/13 (2)	Percent Losses Paid (3)	Months of Development 6/30/13 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/13 to 6/30/14 ((5)-(3))/(100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/13 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/14 (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/14 (11)
1981/82	384.0	100.0%	396.0	100.0%	100.0%	$0	$0	$0	1.00	$0
1982/83	372.0	100.0%	384.0	100.0%	100.0%	0	0	0	1.00	0
1983/84	360.0	100.0%	372.0	100.0%	100.0%	0	0	0	1.00	0
1984/85	348.0	100.0%	360.0	100.0%	100.0%	0	0	0	1.00	0
1985/86	336.0	100.0%	348.0	100.0%	100.0%	0	0	0	1.00	0
1986/87	324.0	100.0%	336.0	100.0%	100.0%	0	0	0	1.00	0
1987/88	312.0	100.0%	324.0	100.0%	100.0%	0	0	0	1.00	0
1988/89	300.0	100.0%	312.0	100.0%	100.0%	0	0	0	1.00	0
1989/90	288.0	100.0%	300.0	100.0%	100.0%	0	0	0	1.00	0
1990/91	276.0	100.0%	288.0	100.0%	100.0%	0	0	0	1.00	0
1991/92	264.0	100.0%	276.0	100.0%	100.0%	0	0	0	1.00	0
1992/93	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
1993/94	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
1994/95	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
1995/96	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
1996/97	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
1997/98	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
1998/99	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
1999/00	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	108.0	99.5%	120.0	100.0%	100.0%	5,808	5,808	0	1.00	0
2005/06	96.0	98.5%	108.0	99.5%	66.7%	18,676	12,451	6,225	0.98	6,119
2006/07	84.0	97.5%	96.0	98.5%	40.0%	32,683	13,073	19,610	0.97	19,061
2007/08	72.0	95.0%	84.0	97.5%	50.0%	68,634	34,317	34,317	0.96	32,841
2008/09	60.0	90.0%	72.0	95.0%	50.0%	143,765	71,882	71,883	0.95	68,576
2009/10	48.0	80.0%	60.0	90.0%	50.0%	285,733	142,866	142,867	0.95	136,009
2010/11	36.0	60.0%	48.0	80.0%	50.0%	591,952	295,976	295,976	0.95	281,473
2011/12	24.0	35.0%	36.0	60.0%	38.5%	993,460	382,100	611,360	0.95	581,403
2012/13	12.0	10.0%	24.0	35.0%	27.8%	1,442,349	400,653	1,041,696	0.94	983,361
2013/14	0.0	0.0%	12.0	10.0%	10.0%	1,687,666	168,767	1,518,899	0.93	1,414,095
Total						$5,270,726	$1,527,893	$3,742,833		$3,522,938

(3) and (5) are from Exhibit AL-2.

(7) to 2012/13 is from Exhibit AL-7. The amount for 2013/14 is from Exhibit AL-6.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit AL-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Projected Losses Paid July 1, 2014 to June 30, 2015

Claim Period (1)	Months of Development 6/30/14 (2)	Percent Losses Paid (3)	Months of Development 6/30/15 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 6/30/14 to 6/30/15 ((5)-(3))/ (100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/14 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/15 (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/15 (11)
1982/83	384.0	100.0%	396.0	100.0%	100.0%	$0	$0	$0	1.00	$0
1983/84	372.0	100.0%	384.0	100.0%	100.0%	0	0	0	1.00	0
1984/85	360.0	100.0%	372.0	100.0%	100.0%	0	0	0	1.00	0
1985/86	348.0	100.0%	360.0	100.0%	100.0%	0	0	0	1.00	0
1986/87	336.0	100.0%	348.0	100.0%	100.0%	0	0	0	1.00	0
1987/88	324.0	100.0%	336.0	100.0%	100.0%	0	0	0	1.00	0
1988/89	312.0	100.0%	324.0	100.0%	100.0%	0	0	0	1.00	0
1989/90	300.0	100.0%	312.0	100.0%	100.0%	0	0	0	1.00	0
1990/91	288.0	100.0%	300.0	100.0%	100.0%	0	0	0	1.00	0
1991/92	276.0	100.0%	288.0	100.0%	100.0%	0	0	0	1.00	0
1992/93	264.0	100.0%	276.0	100.0%	100.0%	0	0	0	1.00	0
1993/94	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
1994/95	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
1995/96	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
1996/97	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
1997/98	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
1998/99	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
1999/00	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	108.0	99.5%	120.0	100.0%	100.0%	6,225	6,225	0	1.00	0
2006/07	96.0	98.5%	108.0	99.5%	66.7%	19,610	13,073	6,537	0.98	6,426
2007/08	84.0	97.5%	96.0	98.5%	40.0%	34,317	13,727	20,590	0.97	20,013
2008/09	72.0	95.0%	84.0	97.5%	50.0%	71,883	35,942	35,941	0.96	34,396
2009/10	60.0	90.0%	72.0	95.0%	50.0%	142,867	71,433	71,434	0.95	68,148
2010/11	48.0	80.0%	60.0	90.0%	50.0%	295,976	147,988	147,988	0.95	140,885
2011/12	36.0	60.0%	48.0	80.0%	50.0%	611,360	305,680	305,680	0.95	290,702
2012/13	24.0	35.0%	36.0	60.0%	38.5%	1,041,696	400,652	641,044	0.95	609,633
2013/14	12.0	10.0%	24.0	35.0%	27.8%	1,518,899	421,916	1,096,983	0.94	1,035,552
2014/15	0.0	0.0%	12.0	10.0%	10.0%	1,789,769	178,977	1,610,792	0.93	1,499,647
Total						$5,532,602	$1,595,613	$3,936,989		$3,705,402

(3) and (5) are from Exhibit AL-2.

(7) to 2013/14 is from Exhibit AL-9. The amount for 2014/15 is from Exhibit AL-6.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit AL-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
AUTOMOBILE LIABILITY

Loss Rate and Severity Trend

Claim Period (1)	Legislative Trend (2013/14 = 1.000) (2)	Residual Trend (2013/14 = 1.000) (3)	Retention Index (2013/14 = 1.000) (4)	Loss Rate Trend (2013/14 = 1.000) (2)X(3)X(4) (5)	Exposure Trend (2013/14 = 1.000) (6)	Severity Trend (2013/14 = 1.000) (5)X(6) (7)
2008/09	1.000	1.276	1.000	1.276	1.000	1.276
2009/10	1.000	1.216	1.000	1.216	1.000	1.216
2010/11	1.000	1.158	1.000	1.158	1.000	1.158
2011/12	1.000	1.103	1.000	1.103	1.000	1.103
2012/13	1.000	1.050	1.000	1.050	1.000	1.050
2013/14	1.000	1.000	1.000	1.000	1.000	1.000
2014/15	1.000	0.952	1.000	0.952	1.000	0.952
2015/16	1.000	0.907	1.000	0.907	1.000	0.907
2016/17	1.000	0.864	1.000	0.864	1.000	0.864
2017/18	1.000	0.823	1.000	0.823	1.000	0.823

(2) is based on industry statistics and actuarial judgment.

(3) is based on 5% trend per actuarial judgment.

(4) is based on industry statistics and actuarial judgment.

(6) is based on 0% trend.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
SUMMARY

Summary of Estimated Outstanding Losses by Current and Long-Term as of June 30, 2013

I. Estimated Outstanding Losses

Coverage (1)	Estimated Outstanding Losses 6/30/13 (2a)	Current Estimated Outstanding Losses 6/30/13 (2b)	Long-Term Estimated Outstanding Losses 6/30/13 (2c)
(A) Automobile liability	$3,583,060	$1,359,126	$2,223,934
(B) Workers compensation	2,069,179	631,713	1,437,466
(C) Total	$5,652,239	$1,990,839	$3,661,400

II. Present Value of Estimated Outstanding Losses

Coverage (1)	Present Value of Estimated Outstanding Losses 6/30/13 (2a)	Current Present Value of Estimated Outstanding Losses 6/30/13 (2b)	Long-Term Present Value of Estimated Outstanding Losses 6/30/13 (2c)
(A) Automobile liability	$3,372,812	$1,332,476	$2,040,336
(B) Workers compensation	1,831,635	620,848	1,210,787
(C) Total	$5,204,447	$1,953,325	$3,251,122

Sections I and II, (2a) are from Exhibit 7 by coverage.

Section I, (2b) are from Exhibit 9 by coverage (excludes 2013/14).

Section I, (2c) is (2a) less (2b).

Section II, (2b) and (2c) are based on Section I, (2b)/1.0175.

Section II, (2c) is (2a) less (2b).

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
SUMMARY

Summary of Estimated Outstanding Losses by Confidence Level as of June 30, 2013

I. Estimated Outstanding Losses

Coverage (1)	Estimated Outstanding Losses 6/30/13 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$3,583,060	0.25	$3,699,729	$3,821,777	$3,954,902	$4,103,800	$4,276,467	$4,486,346	$4,765,413
(B) Workers compensation	2,069,179	0.25	2,136,554	2,207,035	2,283,914	2,369,901	2,469,614	2,590,817	2,751,976
(C) Total	$5,652,239		$5,836,284	$6,028,812	$6,238,815	$6,473,701	$6,746,081	$7,077,162	$7,517,389

II. Present Value of Estimated Outstanding Losses

Coverage (1)	Present Value of Estimated Outstanding Losses 6/30/13 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$3,372,812	0.25	$3,482,635	$3,597,521	$3,722,834	$3,862,996	$4,025,531	$4,223,094	$4,485,786
(B) Workers compensation	1,831,635	0.25	1,891,275	1,953,665	2,021,718	2,097,834	2,186,100	2,293,388	2,436,045
(C) Total	$5,204,447		$5,373,911	$5,551,186	$5,744,552	$5,960,829	$6,211,630	$6,516,482	$6,921,832

Section I , (2a), (2b) and (2c) are from Exhibit 7 by coverage.

Section II, (2a) and (2b) are based on Section I and Section II, (2c).

Section II, (2c) is from Exhibit 8 by coverage.

Confidence levels are based on a lognormal distribution and the CVs shown. (3) is based on observed data and actuaria judgment.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
SUMMARY

Summary of Projected Ultimate Unlimited Losses for 2013/14

I. Projected Ultimate Unlimited Losses

Coverage (1)	Projected Ultimate Unlimited Losses 2013/14 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$1,687,666	0.40	$1,727,483	$1,817,597	$1,917,720	$2,031,867	$2,166,819	$2,335,914	$2,567,122
(B) Workers compensation	1,003,821	0.40	1,027,504	1,081,104	1,140,657	1,208,551	1,288,820	1,389,398	1,526,920
(C) Total	$2,691,486		$2,754,987	$2,898,701	$3,058,377	$3,240,418	$3,455,640	$3,725,312	$4,094,042

II. Present Value of Projected Ultimate Unlimited Losses

Coverage (1)	Present Value of Projected Ultimate Unlimited Losses 2013/14 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$1,532,400	0.40	$1,568,555	$1,650,379	$1,741,290	$1,844,935	$1,967,472	$2,121,010	$2,330,947
(B) Workers compensation	911,469	0.40	932,974	981,642	1,035,716	1,097,364	1,170,249	1,261,573	1,386,443
(C) Total	$2,443,869		$2,501,528	$2,632,021	$2,777,006	$2,942,299	$3,137,721	$3,382,583	$3,717,390

Sections I and II, (2) are from Exhibit 6 by coverage.

Confidence levels are based on a lognormal distribution and the CVs shown. (3) is based on observed data and actuaria judgment.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
SUMMARY

Summary of Projected Ultimate Unlimited Losses for 2014/15

I. Projected Ultimate Unlimited Losses

Coverage (1)	Projected Ultimate Unlimited Losses 2014/15 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$1,789,769	0.40	$1,800,508	$1,977,695	$2,185,308	$2,432,297	$2,750,876	$3,146,415	$3,751,357
(B) Workers compensation	1,044,275	0.40	1,050,540	1,153,923	1,275,059	1,419,169	1,605,050	1,835,835	2,188,800
(C) Total	$2,834,044		$2,851,048	$3,131,619	$3,460,368	$3,851,466	$4,355,926	$4,982,249	$5,940,156

II. Present Value of Projected Ultimate Unlimited Losses

Coverage (1)	Present Value of Projected Ultimate Unlimited Losses 2014/15 (2)	Assumed Coefficient of Variation (CV) (3)	60% Confidence Level (4)	65% Confidence Level (5)	70% Confidence Level (6)	75% Confidence Level (7)	80% Confidence Level (8)	85% Confidence Level (9)	90% Confidence Level (10)
(A) Automobile liability	$1,625,111	0.40	$1,634,861	$1,795,747	$1,984,260	$2,208,525	$2,497,795	$2,856,944	$3,406,232
(B) Workers compensation	948,201	0.40	953,891	1,047,762	1,157,754	1,288,606	1,457,385	1,666,938	1,987,430
(C) Total	$2,573,312		$2,588,752	$2,843,510	$3,142,014	$3,497,131	$3,955,180	$4,523,882	$5,393,662

Sections I and II, (2) are from Exhibit 6 by coverage.

Confidence levels are based on a lognormal distribution and the CVs shown. (3) is based on observed data and actuaria judgment.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
SUMMARY

Exhibit SUMMARY-3

Summary of Projected Losses Paid for 2013/14 and 2014/15

Coverage (1)	Projected Losses Paid 2013/14 (2)	Projected Losses Paid 2014/15 (3)
(A) Automobile liability	$1,527,893	$1,595,613
(B) Workers compensation	899,398	941,030
(C) Total	$2,427,291	$2,536,643

(2) is from Exhibit 9 by coverage.

(3) is from Exhibit 10 by coverage.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Exhibit WC-1

Data Summary as of June 30, 2013

Period (1)	Payroll (000) (2)	Unlimited Paid Losses During Period (3)
2003/04	$29,791	$346,588
2004/05	30,202	623,379
2005/06	37,158	805,868
2006/07	39,034	557,610
2007/08	42,814	697,968
2008/09	43,165	766,241
2009/10	42,870	733,971
2010/11	45,331	786,883
2011/12	48,684	943,190
2012/13	51,282	676,827
Total	$410,331	$6,938,525

Data was provided by RIPTA.

RHODE ISLAND PUBLIC TRANSIT AUTHORI Exhibit WC-2
WORKERS COMPENSATION

Summary of Percent Losses Paid

Months of Development (1)	Insurance Industry Percent Losses Paid (2)
360.0	100.0%
348.0	99.9%
336.0	99.9%
324.0	99.9%
312.0	99.8%
300.0	99.8%
288.0	99.7%
276.0	99.6%
264.0	99.6%
252.0	99.5%
240.0	99.3%
228.0	99.2%
216.0	98.9%
204.0	98.7%
192.0	98.4%
180.0	98.0%
168.0	97.5%
156.0	96.9%
144.0	96.1%
132.0	95.2%
120.0	94.0%
108.0	92.6%
96.0	90.9%
84.0	89.3%
72.0	87.0%
60.0	84.4%
48.0	80.0%
36.0	71.2%
24.0	56.0%
12.0	26.7%

(2) is based on insurance industry data, other programs with which we are familiar and

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Projected Ultimate Losses Based on Payments During Payment Period

Months of Development 6/30/13 (1)	Relative Ultimate Losses (2)	Percent Losses Paid (3)	Incremantal Percent Losses Paid (4)	Paid to Ultimate Losses Factor (2)X(4) (5)
360	0.318	100.0%	0.1%	0.000
348	0.331	99.9%	0.0%	0.000
336	0.344	99.9%	0.0%	0.000
324	0.358	99.9%	0.0%	0.000
312	0.372	99.8%	0.0%	0.000
300	0.387	99.8%	0.1%	0.000
288	0.403	99.7%	0.1%	0.000
276	0.419	99.6%	0.1%	0.000
264	0.436	99.6%	0.1%	0.000
252	0.454	99.5%	0.1%	0.001
240	0.472	99.3%	0.2%	0.001
228	0.491	99.2%	0.2%	0.001
216	0.511	98.9%	0.3%	0.001
204	0.531	98.7%	0.3%	0.002
192	0.553	98.4%	0.4%	0.002
180	0.575	98.0%	0.5%	0.003
168	0.598	97.5%	0.6%	0.004
156	0.622	96.9%	0.8%	0.005
144	0.648	96.1%	0.9%	0.006
132	0.674	95.2%	1.1%	0.008
120	0.701	94.0%	1.4%	0.010
108	0.729	92.6%	1.7%	0.013
96	0.758	90.9%	1.6%	0.012
84	0.789	89.3%	2.3%	0.018
72	0.821	87.0%	2.6%	0.021
60	0.854	84.4%	4.4%	0.037
48	0.888	80.0%	8.8%	0.078
36	0.924	71.2%	15.2%	0.140
24	0.961	56.0%	29.4%	0.282
12	1.000	26.7%	26.7%	0.267
Total				0.914

(2) is based on 3.0% wage inflation and 1.0% residual trend.

(3) is from Exhibit WC-2.

(4) is based on (3).

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Projected Ultimate Losses Based on Payments During Payment Period

Payment Period (1)	Losses Paid During Payment Period (2)	Paid to Ultimate Losses Factor (3)	Projected Ultimate Losses Based on Paid During Payment Period (2)/(3) (4)
2003/04	$346,588	0.914	$379,385
2004/05	623,379	0.914	682,369
2005/06	805,868	0.914	882,127
2006/07	557,610	0.914	610,376
2007/08	697,968	0.914	764,016
2008/09	766,241	0.914	838,750
2009/10	733,971	0.914	803,426
2010/11	786,883	0.914	861,345
2011/12	943,190	0.914	1,032,444
2012/13	676,827	0.914	740,875
Total	$6,938,525		$7,595,115

(2) is from Exhibit WC-1.

(3) is from Exhibit WC-3.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Exhibit WC-5

Projected Ultimate Unlimited Losses to 2012/13

Claim Period (1)	Projected Ultimate Unlimited Losses Based on 2003/04 Payments (2)	Projected Ultimate Unlimited Losses Based on 2004/05 Payments (3)	Projected Ultimate Unlimited Losses Based on 2005/06 Payments (4)	Projected Ultimate Unlimited Losses Based on 2006/07 Payments (5)	Projected Ultimate Unlimited Losses Based on 2007/08 Payments (6)	Projected Ultimate Unlimited Losses Based on 2008/09 Payments (7)	Projected Ultimate Unlimited Losses Based on 2009/10 Payments (8)	Projected Ultimate Unlimited Losses Based on 2010/11 Payments (9)	Projected Ultimate Unlimited Losses Based on 2011/12 Payments (10)	Projected Ultimate Unlimited Losses Based on 2012/13 Payments (11)	Previous Projected Ultimate Unlimited Losses (12)	Projected Ultimate Unlimited Losses Based on Payments Average ((2)..(11)) (13)
1980/81	$152,909	$268,596	$279,430	$182,233	$205,906	$221,991	$211,985	$212,797	$235,150	$158,609	$217,409	$212,961
1981/82	159,071	279,420	290,691	189,577	214,204	230,937	220,528	221,373	244,627	165,001	226,171	221,543
1982/83	165,482	290,681	302,406	197,217	222,836	240,244	229,415	230,294	254,486	171,650	235,285	230,471
1983/84	172,151	302,396	314,593	205,165	231,817	249,926	238,660	239,575	264,741	178,568	244,767	239,759
1984/85	179,088	314,582	327,271	213,433	241,159	259,998	248,278	249,230	275,410	185,764	254,631	249,421
1985/86	186,306	327,260	340,460	222,035	250,877	270,476	258,284	259,274	286,509	193,251	264,893	259,473
1986/87	193,814	340,448	354,181	230,983	260,988	281,376	268,693	269,722	298,056	201,039	275,568	269,930
1987/88	201,624	354,168	368,454	240,291	271,506	292,715	279,521	280,592	310,067	209,140	286,674	280,808
1988/89	209,750	368,441	383,303	249,975	282,447	304,512	290,786	291,900	322,563	217,569	298,227	292,125
1989/90	218,203	383,290	398,750	260,049	293,830	316,784	302,505	303,663	335,562	226,337	310,245	303,897
1990/91	226,996	398,736	414,820	270,529	305,671	329,550	314,695	315,901	349,086	235,458	322,748	316,144
1991/92	236,144	414,805	431,537	281,431	317,990	342,831	327,378	328,632	363,154	244,947	335,755	328,885
1992/93	245,661	431,522	448,928	292,773	330,805	356,647	340,571	341,876	377,789	254,819	349,286	342,139
1993/94	255,561	448,912	467,020	304,572	344,136	371,020	354,296	355,653	393,014	265,088	363,362	355,927
1994/95	265,860	467,003	485,841	316,846	358,005	385,972	368,574	369,986	408,852	275,771	378,005	370,271
1995/96	276,574	485,824	505,420	329,615	372,433	401,527	383,428	384,897	425,329	286,884	393,239	385,193
1996/97	287,720	505,402	525,788	342,898	387,442	417,708	398,880	400,408	442,470	298,446	409,087	400,716
1997/98	299,315	525,770	546,978	356,717	403,056	434,542	414,955	416,544	460,301	310,473	425,573	416,865
1998/99	311,378	546,958	569,021	371,093	419,299	452,054	431,677	433,331	478,851	322,985	442,723	433,665
1999/00	323,926	569,001	591,952	386,048	436,196	470,271	449,074	450,794	498,149	336,001	460,565	451,141
2000/01	336,981	591,932	615,808	401,606	453,775	489,223	467,172	468,961	518,224	349,542	479,126	469,322
2001/02	350,561	615,787	640,625	417,790	472,062	508,939	485,999	487,861	539,109	363,629	498,435	488,236
2002/03	364,689	640,603	666,442	434,627	491,086	529,449	505,584	507,521	560,835	378,283	518,522	507,912
2003/04	379,385 *	666,419	693,300	452,143	510,877	550,786	525,959	527,975	583,437	393,528	539,418	528,381
2004/05	388,466	682,369 *	709,893	462,964	523,105	563,969	538,548	540,611	597,401	402,947	552,328	541,027
2005/06	482,715	847,925	882,127 *	575,288	650,020	700,798	669,210	671,774	742,341	500,709	686,334	672,291
2006/07	512,157	899,641	935,930	610,376 *	689,666	743,541	710,026	712,746	787,618	531,248	728,195	713,295
2007/08	567,371	996,629	1,036,829	676,179	764,016 *	823,700	786,572	789,586	872,529	588,521	806,699	790,193
2008/09	577,737	1,014,838	1,055,773	688,534	777,976	838,750 *	800,943	804,012	888,471	599,274	821,438	804,631
2009/10	579,528	1,017,985	1,059,046	690,668	780,388	841,350	803,426 *	806,505	891,225	601,131	823,985	807,125
2010/11	618,935	1,087,206	1,131,060	737,632	833,453	898,561	858,058	861,345 *	951,827	642,007	880,014	862,008
2011/12	671,357	1,179,289	1,226,857	800,108	904,043	974,666	930,733	934,299	1,032,444 *	696,383	954,549	935,018
2012/13	714,250	1,254,633	1,305,240	851,226	961,802	1,036,937	990,197	993,991	740,875	740,875 *	955,582	959,002
Total	$11,111,665	$19,518,471	$20,305,773	$13,242,625	$14,962,870	$16,131,748	$15,404,609	$15,463,628	$16,730,502	$11,525,878	$15,738,837	$15,439,777

Figures with "*" are from Exhibit WC-4.

Figures for 2002/03 and prior reflect wage inflation and trend.

Figures after 2003/04 reflect actual payroll growth and trend.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Projected Ultimate Unlimited Losses for 2013/14 and Subsequent

Claim Period (1)	Projected Ultimate Unlimited Losses Based on Payments (2)	Payroll (000) (3)	Loss Rate per $100 Payroll (2)/(3)/10 (4)	Loss Rate Trend (2013/14 = 1.000) (5)	Trended Loss Rate per $100 Payroll (4)X(5) (6)
2008/09	$790,193	$43,165	$1.83	1.078	$1.97
2009/10	804,631	42,870	1.88	1.062	1.99
2010/11	807,125	45,331	1.78	1.046	1.86
2011/12	862,008	48,684	1.77	1.030	1.82
2012/13	935,018	51,282	1.82	1.015	1.85
Total	$4,198,975	$231,332	$1.82		$1.90

Claim Period (1)	Projected Unlimited Loss Rate per $100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Unlimited Losses (7)X(8)X10 (9)	Present Value Factor (10)	Present Value of Projected Unlimited Loss Rate per $100 of Payroll (7)X(10) (11)	Present Value of Projected Ultimate Unlimited Losses (8)X(11)X10 (12)
2013/14	$1.90	$52,820	$1,003,821	0.91	$1.73	$911,469
2014/15	1.92	54,405	1,044,275	0.91	1.74	948,201
2015/16	1.94	56,037	1,086,359	0.91	1.76	986,414
2016/17	1.96	57,718	1,130,139	0.91	1.78	1,026,166
2017/18	1.98	59,449	1,175,684	0.91	1.80	1,067,521

(2) is from Exhibit WC-5.

(3) is from Exhibit WC-1.

(5) is from Exhibit WC-11.

(7) for 2013/14 is based on (6) and the following weights:

Claim Period	Weight
2008/09	20.0%
2009/10	20.0%
2010/11	20.0%
2011/12	20.0%
2012/13	20.0%

(7) for 2014/15 and subsequent are based on 2013/14 plus the trend in Exhibit WC-11.

(8) to 2013/14 was provided by RIPTA. Other claim periods are based on a 3% trend.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit WC-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Exhibit WC-7

Estimated Outstanding Losses as of June 30, 2013

Claim Period (1)	Months of Development 6/30/13 (2)	Insurance Industry Percent Losses Paid (3)	Projected Ultimate Unlimited Losses Based on Payments (4)	Estimated Outstanding Losses 6/30/13 (5)
1980/81	396	100.0%	$212,961	$0
1981/82	384	100.0%	221,543	0
1982/83	372	100.0%	230,471	0
1983/84	360	100.0%	239,759	0
1984/85	348	99.9%	249,421	235
1985/86	336	99.9%	259,473	305
1986/87	324	99.9%	269,930	395
1987/88	312	99.8%	280,808	512
1988/89	300	99.8%	292,125	664
1989/90	288	99.7%	303,897	860
1990/91	276	99.6%	316,144	1,114
1991/92	264	99.6%	328,885	1,443
1992/93	252	99.5%	342,139	1,869
1993/94	240	99.3%	355,927	2,420
1994/95	228	99.2%	370,271	3,134
1995/96	216	98.9%	385,193	4,057
1996/97	204	98.7%	400,716	5,251
1997/98	192	98.4%	416,865	6,794
1998/99	180	98.0%	433,665	8,787
1999/00	168	97.5%	451,141	11,360
2000/01	156	96.9%	469,322	14,676
2001/02	144	96.1%	488,236	18,945
2002/03	132	95.2%	507,912	24,433
2003/04	120	94.0%	528,381	31,475
2004/05	108	92.6%	541,027	39,850
2005/06	96	90.9%	672,291	61,117
2006/07	84	89.3%	713,295	76,424
2007/08	72	87.0%	790,193	103,069
2008/09	60	84.4%	804,631	125,617
2009/10	48	80.0%	807,125	161,425
2010/11	36	71.2%	862,008	248,479
2011/12	24	56.0%	935,018	411,198
2012/13	12	26.7%	959,002	703,268
Total			$15,439,777	$2,069,179

(3) is from Exhibit WC-2.

(4) is from Exhibit WC-6.

(5) = (100.0%-(3))X(4).

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Present Value of Estimated Outstanding Losses as of June 30, 2013

Claim Period (1)	Estimated Outstanding Losses 6/30/13 (2)	Present Value Factor (3)	Present Value of Estimated Outstanding Losses 6/30/13 (2)X(3) (4)	Anticipated Future Investment Income (2)-(4) (5)
1980/81	$0	1.00	$0	$0
1981/82	0	1.00	0	0
1982/83	0	1.00	0	0
1983/84	0	1.00	0	0
1984/85	235	0.98	231	4
1985/86	305	0.96	292	13
1986/87	395	0.94	370	25
1987/88	512	0.92	471	41
1988/89	664	0.91	602	62
1989/90	860	0.90	771	89
1990/91	1,114	0.89	991	123
1991/92	1,443	0.88	1,276	167
1992/93	1,869	0.88	1,643	226
1993/94	2,420	0.88	2,120	300
1994/95	3,134	0.87	2,736	398
1995/96	4,057	0.87	3,534	523
1996/97	5,251	0.87	4,563	688
1997/98	6,794	0.87	5,898	896
1998/99	8,787	0.87	7,619	1,168
1999/00	11,360	0.87	9,837	1,523
2000/01	14,676	0.87	12,694	1,982
2001/02	18,945	0.86	16,368	2,577
2002/03	24,433	0.86	21,110	3,323
2003/04	31,475	0.86	27,163	4,312
2004/05	39,850	0.86	34,350	5,500
2005/06	61,117	0.86	52,683	8,434
2006/07	76,424	0.86	65,343	11,081
2007/08	103,069	0.85	88,021	15,048
2008/09	125,617	0.85	106,900	18,717
2009/10	161,425	0.86	138,503	22,922
2010/11	248,479	0.88	217,668	30,811
2011/12	411,198	0.89	367,200	43,998
2012/13	703,268	0.91	640,678	62,590
Total	$2,069,179		$1,831,635	$237,541

(2) is from Exhibit WC-7.

(3) is based on a 3.5% interest rate and the payout pattern in Exhibit WC-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Exhibit WC-9

Projected Losses Paid July 1, 2013 to June 30, 2014

Claim Period (1)	Months of Development 6/30/13 (2)	Percent Losses Paid (3)	Months of Development 6/30/13 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/13 to 6/30/14 ((5)-(3))/ (100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/13 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/14 (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/14 (11)
1981/82	384.0	100.0%	396.0	100.0%	100.0%	$0	$0	$0	1.00	$0
1982/83	372.0	100.0%	384.0	100.0%	100.0%	0	0	0	1.00	0
1983/84	360.0	100.0%	372.0	100.0%	100.0%	0	0	0	1.00	0
1984/85	348.0	99.9%	360.0	100.0%	100.0%	235	235	0	1.00	0
1985/86	336.0	99.9%	348.0	99.9%	19.7%	305	60	245	0.98	241
1986/87	324.0	99.9%	336.0	99.9%	19.7%	395	78	317	0.96	303
1987/88	312.0	99.8%	324.0	99.9%	19.7%	512	101	411	0.94	385
1988/89	300.0	99.8%	312.0	99.8%	19.7%	664	131	533	0.92	490
1989/90	288.0	99.7%	300.0	99.8%	19.7%	860	169	691	0.91	627
1990/91	276.0	99.6%	288.0	99.7%	19.7%	1,114	219	895	0.90	803
1991/92	264.0	99.6%	276.0	99.6%	19.7%	1,443	284	1,159	0.89	1,032
1992/93	252.0	99.5%	264.0	99.6%	19.7%	1,869	368	1,501	0.88	1,327
1993/94	240.0	99.3%	252.0	99.5%	19.7%	2,420	476	1,944	0.88	1,709
1994/95	228.0	99.2%	240.0	99.3%	19.7%	3,134	616	2,518	0.88	2,206
1995/96	216.0	98.9%	228.0	99.2%	19.6%	4,057	797	3,260	0.87	2,846
1996/97	204.0	98.7%	216.0	98.9%	19.6%	5,251	1,030	4,221	0.87	3,676
1997/98	192.0	98.4%	204.0	98.7%	19.6%	6,794	1,331	5,463	0.87	4,747
1998/99	180.0	98.0%	192.0	98.4%	19.6%	8,787	1,719	7,068	0.87	6,135
1999/00	168.0	97.5%	180.0	98.0%	19.5%	11,360	2,218	9,142	0.87	7,926
2000/01	156.0	96.9%	168.0	97.5%	19.5%	14,676	2,858	11,818	0.87	10,234
2001/02	144.0	96.1%	156.0	96.9%	19.4%	18,945	3,678	15,267	0.87	13,206
2002/03	132.0	95.2%	144.0	96.1%	19.3%	24,433	4,725	19,708	0.86	17,028
2003/04	120.0	94.0%	132.0	95.2%	19.2%	31,475	6,057	25,418	0.86	21,961
2004/05	108.0	92.6%	120.0	94.0%	19.1%	39,850	7,621	32,229	0.86	27,814
2005/06	96.0	90.9%	108.0	92.6%	19.0%	61,117	11,600	49,517	0.86	42,684
2006/07	84.0	89.3%	96.0	90.9%	15.2%	76,424	11,579	64,845	0.86	55,896
2007/08	72.0	87.0%	84.0	89.3%	17.9%	103,069	18,405	84,664	0.86	72,388
2008/09	60.0	84.4%	72.0	87.0%	16.5%	125,617	20,666	104,951	0.85	89,628
2009/10	48.0	80.0%	60.0	84.4%	21.9%	161,425	35,418	126,007	0.85	107,232
2010/11	36.0	71.2%	48.0	80.0%	30.6%	248,479	76,078	172,401	0.86	147,920
2011/12	24.0	56.0%	36.0	71.2%	34.5%	411,198	141,674	269,524	0.88	236,103
2012/13	12.0	26.7%	24.0	56.0%	40.0%	703,268	281,522	421,746	0.89	376,619
2013/14	0.0	0.0%	12.0	26.7%	26.7%	1,003,821	267,685	736,136	0.91	670,620
Total						$3,073,000	$899,398	$2,173,599		$1,923,786

(3) and (5) are from Exhibit WC-2.

(7) to 2012/13 is from Exhibit WC-7. The amount for 2013/14 is from Exhibit WC-6.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit WC-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Exhibit WC-10

Projected Losses Paid July 1, 2014 to June 30, 2015

Claim Period (1)	Months of Development 6/30/14 (2)	Percent Losses Paid (3)	Months of Development 6/30/15 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 6/30/14 to 6/30/15 ((5)-(3))/ (100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/14 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/15 (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/15 (11)
1982/83	384.0	100.0%	396.0	100.0%	100.0%	$0	$0	$0	1.00	$0
1983/84	372.0	100.0%	384.0	100.0%	100.0%	0	0	0	1.00	0
1984/85	360.0	100.0%	372.0	100.0%	100.0%	0	0	0	1.00	0
1985/86	348.0	99.9%	360.0	100.0%	100.0%	245	245	0	1.00	0
1986/87	336.0	99.9%	348.0	99.9%	19.7%	317	63	254	0.98	250
1987/88	324.0	99.9%	336.0	99.9%	19.7%	411	81	330	0.96	315
1988/89	312.0	99.8%	324.0	99.9%	19.7%	533	105	428	0.94	401
1989/90	300.0	99.8%	312.0	99.8%	19.7%	691	136	555	0.92	510
1990/91	288.0	99.7%	300.0	99.8%	19.7%	895	176	719	0.91	652
1991/92	276.0	99.6%	288.0	99.7%	19.7%	1,159	228	931	0.90	835
1992/93	264.0	99.6%	276.0	99.6%	19.7%	1,501	296	1,205	0.89	1,072
1993/94	252.0	99.5%	264.0	99.6%	19.7%	1,944	383	1,561	0.88	1,380
1994/95	240.0	99.3%	252.0	99.5%	19.7%	2,518	495	2,023	0.88	1,778
1995/96	228.0	99.2%	240.0	99.3%	19.7%	3,260	641	2,619	0.88	2,294
1996/97	216.0	98.9%	228.0	99.2%	19.6%	4,221	829	3,392	0.87	2,961
1997/98	204.0	98.7%	216.0	98.9%	19.6%	5,463	1,072	4,391	0.87	3,825
1998/99	192.0	98.4%	204.0	98.7%	19.6%	7,068	1,385	5,683	0.87	4,939
1999/00	180.0	98.0%	192.0	98.4%	19.6%	9,142	1,789	7,353	0.87	6,382
2000/01	168.0	97.5%	180.0	98.0%	19.5%	11,818	2,307	9,511	0.87	8,246
2001/02	156.0	96.9%	168.0	97.5%	19.5%	15,267	2,973	12,294	0.87	10,647
2002/03	144.0	96.1%	156.0	96.9%	19.4%	19,708	3,826	15,882	0.87	13,738
2003/04	132.0	95.2%	144.0	96.1%	19.3%	25,418	4,915	20,503	0.86	17,715
2004/05	120.0	94.0%	132.0	95.2%	19.2%	32,229	6,202	26,027	0.86	22,487
2005/06	108.0	92.6%	120.0	94.0%	19.1%	49,517	9,470	40,047	0.86	34,561
2006/07	96.0	90.9%	108.0	92.6%	19.0%	64,845	12,307	52,538	0.86	45,288
2007/08	84.0	89.3%	96.0	90.9%	15.2%	84,664	12,828	71,836	0.86	61,923
2008/09	72.0	87.0%	84.0	89.3%	17.9%	104,951	18,741	86,210	0.86	73,710
2009/10	60.0	84.4%	72.0	87.0%	16.5%	126,007	20,730	105,277	0.85	89,907
2010/11	48.0	80.0%	60.0	84.4%	21.9%	172,401	37,826	134,575	0.85	114,523
2011/12	36.0	71.2%	48.0	80.0%	30.6%	269,524	82,521	187,003	0.86	160,449
2012/13	24.0	56.0%	36.0	71.2%	34.5%	421,746	145,308	276,438	0.88	242,160
2013/14	12.0	26.7%	24.0	56.0%	40.0%	736,136	294,679	441,457	0.89	394,221
2014/15	0.0	0.0%	12.0	26.7%	26.7%	1,044,275	278,473	765,802	0.91	697,646
Total						$3,217,874	$941,030	$2,276,844		$2,014,815

(3) and (5) are from Exhibit WC-2.

(7) to 2013/14 is from Exhibit WC-9. The amount for 2014/15 is from Exhibit WC-6.

(10) is based on a 3.5% interest rate and the payout pattern in Exhibit WC-2.

RHODE ISLAND PUBLIC TRANSIT AUTHORITY
WORKERS COMPENSATION

Loss Rate and Severity Trend

Claim Period (1)	Legislative Trend (2013/14 = 1.000) (2)	Residual Trend (2013/14 = 1.000) (3)	Retention Index (2013/14 = 1.000) (4)	Loss Rate Trend (2013/14 = 1.000) (2)X(3)X(4) (5)	Exposure Trend (2013/14 = 1.000) (6)	Severity Trend (2013/14 = 1.000) (5)X(6) (7)
2008/09	1.025	1.051	1.000	1.078	1.159	1.249
2009/10	1.020	1.041	1.000	1.062	1.126	1.195
2010/11	1.015	1.030	1.000	1.046	1.093	1.143
2011/12	1.010	1.020	1.000	1.030	1.061	1.093
2012/13	1.005	1.010	1.000	1.015	1.030	1.046
2013/14	1.000	1.000	1.000	1.000	1.000	1.000
2014/15	1.000	0.990	1.000	0.990	0.971	0.961
2015/16	1.000	0.980	1.000	0.980	0.943	0.924
2016/17	1.000	0.971	1.000	0.971	0.915	0.888
2017/18	1.000	0.961	1.000	0.961	0.888	0.854

(2) is based on industry statistics and actuarial judgment.

(3) is based on 1% trend per actuarial judgment.

(4) is based on industry statistics and actuarial judgment.

(6) is based on 3% trend.

GLICKSMAN CONSULTING, LLC
3124 NW 59 Street, Suite 100
Boca Raton, Florida 33496
(561) 994 4385

June 5, 2009

Rhode Island Public Transit Authority
Purchasing Department
265 Melrose Street, Room 213
Providence, RI 02907

BID NUMBER: **09-25**
BID FOR: **Actuarial Review of RIPTA's Accident and Casualty Reserve**

OPENING – JUNE 12, 2009

We appreciate this opportunity to submit this proposal for actuarial services to the Rhode Island Public Transit Authority.

This proposal is from Glicksman Consulting, LLC. We assure the Rhode Island Public Transit Authority that we have a complete understanding of the services required, and the ability and willingness to provide the services within the time schedule specified in the proposal. We have no exceptions.

We are looking forward to working with you on this project. Please feel free to contact us if you have any questions concerning this proposal.

Respectfully submitted,

GLICKSMAN CONSULTING, LLC

Steven Glicksman, FCAS, MAAA
Actuary

ORIGINAL

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ORIGINAL

I. SCOPE OF WORK, APPROACH AND TIMING

A. SCOPE OF WORK

The coverages included in the actuarial studies are workers compensation and liability.

The broad goals of the work are to actuarially determine the loss reserves required to meet the self insured liabilities (estimate outstanding losses or unpaid losses) for use in the annual financial statements and other disclosure documents required by GASB Statement No. 10, and to project future losses and recommend funding.

Rhode Island Public Transit Authority (RIPTA) will receive a written report as a deliverable. The report will have the same format as previous studies provided to RIPTA. It will include the equivalent of an executive summary and conclusions, background, objectives, methodology/analyses and glossary sections. The executive summary and conclusions section will be designed to readily communicate key findings to non-actuaries. We will affirm that the reports are in compliance with relevant GASB statements, including GASB Statement No. 10. The reports will lay the groundwork to facilitate future studies.

A separate analysis will be performed for each coverage (workers compensation general liability and automobile liability) consistent with previous actuarial studies.

RIPTA requires the following key work products. Dates shown are for the first actuarial study. Subsequent studies will be conducted at one-year intervals.

1. We will perform an actuarial analysis to determine the estimated outstanding losses (including allocated loss adjustment expenses (ALAE)) as of June 30, 2009. This includes an analysis of the loss experience trends and development patterns for each coverage.

   The estimates will be net of excess insurance for automobile liability (currently there is no excess insurance for workers compensation.

   As RIPTA is a well established program, we expect to rely primarily on internal data for loss development, trending and most other judgmental factors. We will supplement RIPTA data with the data from similar public entity programs (especially Virginia) with which we are familiar.

   We will provide the actuarial conclusions on a non-discounted (without anticipated future investment income) and discounted (with anticipated future investment income) basis.

We will provide the result in confidence level format (expected, 60%, 65%, 70%, 75%, 80%, 85% and 90%) or a range of estimates consistent with the requirements of RIPTA.

If requested, we will identify short-term liabilities (payable in one year) and long-term (payable after one year) liabilities.

If requested, we will opine on adequacy of RIPTA's current funding levels.

2. We will project losses in the upcoming year (July 1, 2009 to June 30, 2010 plus four more years (five years total). This includes projected retained future ultimate losses using a variety of various actuarial methods. The methods will be selected based upon actuarial judgment as to the most appropriate for RIPTA.

   We will confer with RIPTA to understand issues or recent changes in risk management and reserving philosophies

   The projections will be net of excess insurance for automobile liability (currently there is no excess insurance for workers compensation.

   Again, we will provide the actuarial conclusions on a non-discounted and discounted basis. We will provide the result in confidence level format (expected, 60%, 65%, 70%, 75%, 80%, 85% and 90%) or a range of estimates consist with the requirements of RIPTA.

   We will reflect RIPTA's approach to including investment income and confidence levels. We will also consider RIPTA's current funding and desire for stability.

3. We will project losses paid the upcoming year (July 1, 2009 to June 30, 2010 plus four more years (five years total). This is a cash flow analysis.

We will prepare a draft report of our conclusions and recommendations for review by RIPTA. Our text will document all of our analysis and conclusions. All of our exhibits will be fully footnoted to identify source inputs and calculations. The report will be consistent with relevant actuarial principles, GASB statements and other applicable standards.

We will discuss the draft report by telephone with RIPTA. We will revise the draft report, if necessary and issue a final report. RIPTA will receive a report (bound copies plus an electronic version). We will be available to review the report with RIPTA's financial auditors and as an ongoing resource.

In addition to the services requested in the Request for Proposal, Glicksman Consulting, LLC can offer RIPTA other services in which it may have an interest.

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- We can study alternative retention levels. We are able to assist RIPTA in selecting the optimal retention from a cost/benefit perspective.

- Our knowledge of the public sector makes Glicksman Consulting, LLC a valuable resource to assist in long-term funding strategies. This may be useful for RIPTA to accumulate equity or weather underwriting cycles.

- We are experts in developing rating plans and cost allocation plans.

There may be other services requested on occasion. These may be on loss development issues, surplus, rating, retention, new or expanded coverage and other concerns.

B. APPROACH

Our approach will ensure quality and provide a solid foundation for future studies. We are fastidious with regard to documenting all key assumptions and adjustments within the text of the actuarial report.

The analysis will adhere to generally accepted actuarial practices.

The approach to work has three major phases:

- Phase One – Data Collection
- Phase Two – Analysis
- Phase Three – Preparation and Delivery of Report

Each phase is detailed below:

1. Phase One – Data Collection

We will conduct an initial discussion with RIPTA to develop an understanding of the current issues. We will learn about data availability and management information systems, and discuss specific concerns RIPTA would like us to address during the review.

We will submit a written data request to RIPTA. The data request will be designed not to be a burden, yet consistent with a thoughtful analysis.

In general, the following items are requested:

- Copy of the previous actuarial study as a source of background and historical data.
- Current loss experience data including date of loss, claim number, paid amount and reserves. We prefer raw data in an electronic format.
- Exposure information such as payroll and number of automobiles.
- History of self-insured retentions.

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- Guidance as to an appropriate interest rate.

We reviewed the data used in the previous study and anticipate we can use the same type of data. In fact, Mr. Glicksman designed most of the previous report and is totally familiar with the data and format.

We will gather and compile data provided by RIPTA. We will review the data for reasonableness. We will test the data for proper recognition of tort limits and insurance. We will compare the data to previous data. Anomalies (if any) will be identified.

We will discuss large individual claims with RIPTA. Large claims can have a disproportionate impact upon the actuarial analysis. We want to be certain that we fully understand the large claims.

Though not specifically in the Request For Proposals, we can offer our insights on the data collection. We can identify areas of potential improvement (if any) and discuss them with RIPTA's designated professional staff.

2. Phase Two - Analysis

We will perform a comprehensive actuarial study of the programs to project ultimate losses for all previous fiscal years, the upcoming year plus long-term for two subsequent year's losses (separate by coverage) based on generally accepted actuarial principles. Our work will be in compliance with relevant State requirements, GASB statements (including GASB Statement No. 10), and other applicable accounting standards.

The analysis will be based on RIPTA's own data to the greatest extent it is a credible predictor of future losses. As RIPTA is a well established program, we expect to rely primarily on internal data for loss development, trending and most other judgmental factors. We will supplement RIPTA's data with the data from similar public entity programs with which we are familiar.

We will consider at least the following actuarial methodologies:

- Paid loss development (average paid severity)
- Reported incurred loss development (average reported severity)
- Case reserve development analysis (average case severity)
- Bornhuetter-Ferguson analysis
- Frequency and severity analysis
- Loss rate analysis

We will also review claims reporting/closure patterns and paid to reported ratios.

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We will estimate outstanding losses separate by fiscal year based on projected losses less paid loss amounts.

We will project future investment income on funds help to pay losses based on expected claims disbursement patterns and RIPTA's assumptions of investment performance.

We will project future losses on an accrual basis for five future years.

We will recommend funding during the upcoming two years based on projected losses plus operating expenses and on a cash flow basis. We will also consider RIPTA's policies regarding investment income and confidence levels. Recent underwriting results will be reviewed.

We will include the impact of insurance for automobile liability (currently there is no excess insurance for workers compensation.

We will provide cash-flow projections during the upcoming five years

We will make every effort to include stability in our funding recommendations. Year-to year swings will be managed, if possible, to assist in the budgeting processes of RIPTA. Of course, there are instances in which loss changes in loss experience necessitates funding departures. Our goal is to identify loss trends well in advance.

Again, we will work for balance and stability in our recommendations. The long term financial success of RIPTA will be our utmost goal.

3. Phase Three – Preparation and Delivery of Report

We will prepare a draft report of our conclusions and recommendations. Our text will be in "plain English" fully understandable by readers with minimal familiarity with insurance procedures. Our text will document all of our analysis and conclusions, and will include visual aids (charts, graphs, etc.) as appropriate. All of our exhibits will be fully footnoted to identify source inputs and calculations.

The report will be consistent with relevant actuarial principles, GASB statements and other applicable standards. We will issue an opinion to the financial auditors, if requested.

Discuss the draft report by telephone with RIPTA. Revise the draft report, if necessary and issue a final report. RIPTA will receive a report (four bound copies plus an electronic version). We will attend a meeting to explain the report. We will be available to review the report with RIPTA's financial auditors and as an ongoing resource.

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We will be available meet with RIPTA to present the study. The report presentation will be designed to interesting and informative. We will highlight key financial data and add our insights as to loss experience trends.

C. TIMING

This work for the study is based on a fiscal year ending June 30. We did not notice a specified due date in the RFP. However, from our review of the previous study, the work was completed by early August. We anticipate no difficulties in meeting this schedule.

It typically requires us ten business days from the date we get loss experience data to complete work. So, if RIPTA can provide data by July 15, we will a complete a report by July 31. We are able, willing and committed to meeting this deadline. RIPTA will have a final report before July 31, assuming data is provided by July 15.

RIPTA will receive a written report as a deliverable. The report will have the same or better format as previous studies provided to RIPTA.

We propose the following work schedule:

TABLE I-C-1
TIMING

Program	Description of Work	Timing
Data Collection	Conduct an initial discussion with RIPTA. Learn about data availability. Submit a written data request. Gather and compile data. Review the data for reasonableness.	July 1 to July 15
Analysis	Perform a comprehensive actuarial study of the program.	July 16 to July 23
Preparation and Delivery of Report	Prepare a draft report of our conclusions and recommendations. Discuss the draft report by telephone with RIPTA. Issue a final report.	July 24 to July 31

We assure RIPTA that we have a complete understanding of the services required, and the ability and willingness to provide the services within the time schedule specified in this proposal.

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II. QUALIFICATIONS AND REFERENCES

A. QUALIFICATIONS

Glicksman Consulting, LLC was established in 2004 as a Florida corporation.

Our specialty is public entities. Many of our accounts are similar to RIPTA of Roanoke (RIPTA in that they require thoughtful actuarial solutions on an ongoing basis. We will devote the time to become thoroughly familiar with RIPTA's concerns. RIPTA will receive prompt responses to all service requests.

In our view, success is providing objective actuarial advice on a timely basis. We will make every effort to include stability in our funding recommendations. Year-to year swings will be managed, if possible, to assist in the budgeting processes of RIPTA. Of course, there are instances in which loss changes in loss experience necessitates funding departures. Our goal is to identify loss trends well in advance.

We have many success stories. For example, we have been worked successfully with the New Mexico Association of Counties Insurance Authority to stabilize contributions and reduce a shortfall. We have worked to level rates in most of our clients, including the Texas Council Risk Management Fund (TCRMF) and Texas Water Conservation Association Risk Management Fund (TWCARMF). Please contact theses references.

We can work with virtually all types of data. We are able to explain complex actuarial concepts into information easily understood by other professional. Please contact Mr. Guy Hine at RIPTA of Fort Lauderdale and Ms. Leslie Faust at RIPTA of Louisville.

We provide actuarial services to public entities throughout the United States. All professional work will be performed by accredited personnel (Mr. Glicksman and Mr. Kudera are Fellows of the Casualty Actuarial Society and the American Academy of Actuaries). This provides a much higher level of quality as even subtle nuances in the data and analysis will be identified by our experienced professionals. It is one of the significant advantages of working with us.

Our firm has several key strengths relevant to RIPTA.

First, only accredited personnel with many years of experience with similar programs will work on this project. Mr. Glicksman and Mr. Kudera are actually the professionals performing the work (from data entry to a signed final). RIPTA will not need to reeducate a staff of rotating consultants. Mr. Glicksman and Mr. Kudera are truly senior level consultants with the requisite experience to do the work.

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Second, we are experts in helping public entities to manage their finances. We have been working with self-insured public entities for over twenty years. During that time we have learned that insurance tends to be a cyclical exposure. We have the sense (it is almost an art) of keeping contributions on a slow steady trajectory through the cycles. We will perform the analysis in a manner to temper year-to-year swings in funding instead of reacting (or really, over-reacting) to cycles.

The third reason is how we interact with the professional staff of our clients. We make it a priority to establish confidence with the Risk Management, and Finance and Accounting personnel. Whenever possible we work with data that has been provided in the past or is readily available. We take the time to understand how the actuarial study is used by the financial personnel and provide the exact schedules required. Senior management will appreciate the combination of our candor and discretion.

Finally, we are service oriented. Please contact our references regarding the promptness of our returning phone calls or emails, and performing work. Ask the references about how we respond to special requests throughout the year. We make regular presentations that are extremely well received.

Mr. Steven Glicksman, FCAS, MAAA is the primary contact person for RIPTA. The contact information is:

Mr. Steven A. Glicksman, FCAS, MAAA
Glicksman Consulting, LLC
3124 NW 59 Street, Suite 100
Boca Raton, Florida 33496
Telephone (561) 994 4385
Cell (561) 866 9371
EFax (760) 462 3820
SGlicksman@aol.com

Mr. Andrew Kudera, FCAS, MAAA will provide peer review and serve as the back-up actuary.

All professional work will be performed by accredited personnel (Mr. Glicksman and Mr. Kudera are Fellows of the Casualty Actuarial Society and the American Academy of Actuaries). This provides a much higher level of quality as even subtle nuances in the data and analysis will be identified by our professionals. It is one of the significant advantages of working with us. Work will not be delegated to a rotating staff of junior personnel.

Mr. Glicksman FCAS, MAAA has performed hundreds of actuarial studies for cities and other political subdivisions. He is a Fellow of the Casualty Actuarial Society (FCAS) and a Member of the American Academy of Actuaries (MAAA).

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Mr. Andrew E. Kudera, FCAS, MAAA, CPCU, ARM is the back-up contact person and will provide peer review. Mr. Kudera is also a Fellow of the Casualty Actuarial Society (FCAS) and a Member of the American Academy of Actuaries (MAAA). He also holds the Associate in Risk Management (ARM) and Chartered Property and Casualty Underwriter (CPCU) designations.

The following is a brief description of their relevant experience.

Mr. Steven Glicksman, FCAS, MAAA

Mr. Glicksman a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He has over twenty-five years of experience. He is an expert in GASB Statement No. 10 issues as he served as the actuary on issuing the GASB Statement No. 10 Implementation Guide. He has performed many studies for other similar public entities.

Mr. Glicksman's most recent position was (as national actuarial practice leader for actuarial services) Managing Director, Aon Risk Consulting, Inc. (Aon). Prior to Aon, Mr. Glicksman was Principal and Director of Actuarial Services at ARM Tech. His technical work included pricing and reserving of clients across commercial and property lines. His specialty is public entities.

Before ARC and ARM Tech, Mr. Glicksman managed Southern California office of the Actuarial and Benefits Consulting division of Coopers & Lybrand (now PricewaterhouseCoopers). He also was employed by the National Council on Compensation Insurance, Inc. (NCCI) where he worked in the Detailed Claim Information database and Legislative Evaluation units. Mr. Glicksman authored a publication on workers compensation claims characteristics.

Mr. Glicksman began his actuarial career with the Hartford Insurance Group (HIG) over twenty years ago. Before (HIG), he taught mathematics at a community college in New York City.

Mr. Andrew E. Kudera, FCAS, MAAA, CPCU, ARM

Mr. Kudera is a Fellow of the Casualty Actuarial Society, a Member of the American Academy of Actuaries, a Chartered Property and Casualty Underwriter, and an Associate in Risk Management. Mr. Kudera has over twenty five years of actuarial and financial management experience in the insurance industry, primarily in a consulting capacity.

Mr. Kudera has provided actuarial and risk management consulting services to insurance companies, self-insured corporations, governmental entities, and captive insurers. Over his career he has assisted numerous

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city, state, and federal entities with various aspects of their risk management insurance programs.

Mr. Kudera graduated from St. John's University's Peter J. Tobin College of Business (formerly The College of Insurance in New York City) with a Bachelor of Science degree in actuarial science. He is a Fellow of the Casualty Actuarial Society, a member of the American Academy of Actuaries, an Associate in Risk Management, and a Chartered Property and Casualty Underwriter. His other insurance related designations include Fellow of the Canadian Institute of Actuaries, Associate of the Society of Actuaries, Fellow of the Life Management Institute, Chartered Life Underwriter and Chartered Financial Consultant.

Mr. Kudera has served and led a number of committees and affiliates of the Casualty Actuarial Society and the American Academy of Actuaries. He has also been a frequent speaker and facilitator at professional society meetings. He has served a three year term as an elected Board Member of the Casualty Actuarial Society and is currently Vice President of Professional Education..

Glicksman Consulting, LLC has no lawsuits. No member of our firm has been subject to licensure disciplinary action, been convicted or plead guilty to a state or federal offense, or paid any civil judgment, settlement or any other fine in connection with professional activities.

No member of our firm has any connection to RIPTA. We are unaware of any conflicts or the appearance of potential conflicts.

B. REFERENCES

We assure RIPTA that we have a complete understanding of the services required, and the ability and willingness to provide the services within the time schedule specified in the proposal.

We encourage RIPTA to contact our references with regard to our quality and timeliness.

Glicksman Consulting, LLC strictly adheres to the professional guidelines of the Casualty Actuarial Society and American Academy of Actuaries. We have never been subject to litigation or disciplinary actions.

Mr. Glicksman performed the RIPTA work from 2000 to 2003. He designed most of the previous report and is totally familiar with the data and format.

Please contact the following references:

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TABLE II-B-1
REFERENCES

Contact	Entity – Description of Work	Telephone and Email
Ms. Leisa Hutcheson	City of Lubbock, Texas – Actuarial study of workers compensation, general liability, automobile liability and property programs.	(806) 775 2277 LHutcheson@mail.ci.lubbock.tx.us
Mr. Steven Kopelman	New Mexico Association of Counties Insurance Authority (NMCIA) - Annual actuarial reserves and funding studies for workers compensation and multi-line liability.	(505) 983 2101 SKopelman@nmcounties.org
Ms. Leslie Faust	Louisville and Jefferson County, Kentucky – Actuarial study of workers compensation, general liability, automobile liability and property programs.	(502) 5742724 Leslie.Faust@louisvilleky.gov
Mr. Parker Chambers	Texas Council Risk Management Fund (TCRMF) and Texas Water Conservation Association Risk Management Fund (TWCARMF). Annual actuarial studies of workers compensation and liability.	(512) 346 6921 Parker.Chambers@JICompanies.com)
Ms. Susan Shawver	City and School District of Baltimore, Maryland - Actuarial cost allocation studies of workers compensation, general liability, automobile liability and property.	(410) 396 9517 Susan.Shawver@baltimorecity.gov
Mr. Guy Hine	City of Fort Lauderdale, Florida - Actuarial study of the self funded general liability and automobile liability programs.	(954) 828 5439 GHine@fortlauderdale.gov
Mr. Richard Strouse	City of Chesapeake, Virginia - Actuarial study of the self funded workers compensation, general liability and automobile liability programs.	(757) 382 6377 RStrouse@cityofchesapeake.net
Mr. Pam Marrs	City of Tulsa, Oklahoma - Actuarial study of the self funded workers compensation program.	(918) 596 7417 PMarrs@ci.tulsa.ok.us

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TABLE II-B-1
REFERENCES (Continued)

Contact	Entity – Description of Work	Telephone and Email
Mr. Bruce Birdwell	Port of Houston, Texas – Actuarial study of workers compensation.	(713) 670 2821 bbirdwell@poha.com
Mr. Bill Hardy	Arizona Counties Insurance Pool (ACIP) - Annual actuarial reserves and funding studies for workers compensation and multi-line liability.	(602) 452 4521 bill@aciponline.org
Mr. Earle Beyer	Local Government Insurance Trust (LGIT), Maryland – Actuarial study of general liability, automobile liability and property programs.	(443) 561 1723 Earle@Lgit.com
Mr. Edward Karass	State of Maine. Annual actuarial studies of workers compensation and employee benefits.	(207) 626 8421 edward.a.karass@maine.gov
Mr. Bill Swigger	Gwinnett County, Georgia - Actuarial studies of workers compensation, general liability, automobile liability and property.	(770) 822 8000 bill.swiger@gwinnettcounty.com
Ms. Jennifer Howell	Arizona Schools Workers Compensation Alliance. Annual actuarial studies for financial audits and future funding.	(602) 222 2103 Jennifer.Howell@ashtontiffany.com).
Ms. Karen Barrett	Broward County, Florida - Actuarial study of the self funded workers compensation, general liability and automobile liability programs.	(954) 357 7724 kbarrett@broward.org
Mr. James Bartholomew	City of Simi Valley, California - Actuarial study of the self funded workers compensation and liability programs.	(805) 583 6739 JBarthol@simivalley.org
Mr. Roy Staton	City of Norfolk and Norfolk Public Schools, Virginia - Actuarial study of the self funded workers compensation, general liability and automobile liability programs.	(757) 664 4056 Roy.Staton@norfolk.gov
Mr. Allen Iampaglia	City of Avondale, Arizona - Actuarial study of the self funded liability program.	(623) 478 3021 aiampaglia@avondale.org).

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III. PROPOSED FEES

The proposed fixed fee for the work is $3,900 per year (and $19,500 for five years). The fixed fees are effective for the duration of the expected contract period (up to five years). Expenses for copying, postage and telephone are included.

We will participate in as many teleconferences as reasonably required performing the work and explaining the report. We do not anticipate onsite visits.

We expect to provide approximately 18-20 hours of professional time per year on this work.

Again, we are able, willing and committed to meeting the work deadline specified by RIPTA. RIPTA will have a final report well before July 31 assuming data is provided by July 15. RIPTA will receive a written report as a deliverable. The report will have the same or better format as previous studies provided to RIPTA.

Our fees are reasonable because we do not need to support a corporate administration or overly compensate executives. The fees will be used to directly perform the analysis.

In addition, we view RIPTA as a likely long-term client. So, we have priced in the economies to scale of repeat work.

Our lengthy reference list is evidence of our ability to provide quality services. RIPTA will benefit from our many years of varied actuarial experience.

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IV. REQUIRED FORMS

Please see the required forms on the following pages.

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