

**DISCUSSION OF “CASUALTY ACTUARIAL SOCIETY’S  
STATEMENT OF PRINCIPLES REGARDING PROPERTY AND CASUALTY LOSS  
AND LOSS ADJUSTMENT EXPENSE RESERVES”  
AS THOSE PRINCIPLES PERTAIN TO THE PCRBS APRIL 1, 2002 LOSS COST FILING**

**INTRODUCTION**

The Pennsylvania Compensation Rating Bureau (PCRB) offers the following narrative discussion of the Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves published by the Casualty Actuarial Society (Principles) in partial support of its April 1, 2002 Loss Cost Filing before the Pennsylvania Insurance Department (Department). The Department has requested similar discussions from the PCRB in prior filings in Pennsylvania and continues to require discussion of the Principles by each insurer filing Schedule W in Pennsylvania.

The PCRB believes that the following discussion may only be properly reviewed and understood if careful recognition is given to the nature and context of PCRB filings throughout the reader’s perusal of these comments. In particular, the PCRB would advance the following points with respect to the Principles and PCRB loss cost filings:

- The Principles are most commonly applied in the context of establishing loss and/or loss adjustment expense reserves for a specific insurance carrier or insurer group.
- PCRB loss cost filings are intended to provide benchmark rating values which fairly and accurately reflect the aggregate experience of all insurers (some 300 companies in all) writing workers compensation in the Commonwealth of Pennsylvania.
- Because the PCRB’s loss cost filings are intended to reflect the average of all companies’ experience, there will inevitably be individual companies which differ from the PCRB’s aggregate data in each material respect. Some companies will have better experience, and others will have worse experience than the central tendency reflected in the PCRB’s filings.
- In addition to real differences in experience prevailing between different individual PCRB members or between such individual members and total PCRB data, other perceptual differences may also arise in any comparison of separate carrier responses to the Principles section of Schedule W. While each carrier is presumably making a good faith effort to provide appropriate responses to the many considerations included in the Principles (as is the PCRB), in many cases the issues involved and/or the bases available for formation of opinions by the responding entity are extremely subjective. For example, some companies may not perform loss reserve or other similar analysis using data based exclusively or even predominantly on Pennsylvania workers compensation experience. Clearly, carriers which do not actually perform loss and loss adjustment expense reserve analysis specific to Pennsylvania workers compensation insurance may very well also not be able to render authoritative observations regarding the Principles as applied to Pennsylvania workers compensation insurance.

As a result of the above points, it must be understood that in advancing comments regarding the Principles as applicable to its April 1, 2002 Loss Cost Filing the PCRB is not asserting that all or even most carriers must necessarily have had or would report individual experience either quantitatively or qualitatively consistent with the filing's aggregate indications. The PCRB does believe, however, that the combined experience of all carriers supports or is consistent with the observations set forth below.

## **DATA ORGANIZATION**

The discussion of data organization in the Principles is directed to the use of time units in categorizing claim data.

The PCRB's loss cost filings are based on two primary sources of claim data. The first of these sources is "financial data," collected in a set of annual Calls distributed by the PCRB to all of its member insurers. Financial data is organized by policy period, a practice specifically recognized in the Principles. Further, development of financial data is measured between successive accounting dates, typically falling at each December 31 year-end. Financial data is reported on specified due dates associated with each specific Call form.

The PCRB's second source of claim data is "unit statistical reports," which are filed with the PCRB continuously by its member insurers in accordance with an approved Statistical Plan. Statistical Plan data is also organized by policy period. The Statistical Plan specifies a series of valuation dates and report dates for unit statistical reports applicable to each policy written by any PCRB member.

The PCRB's organization of financial data allows development of such data to be analyzed for each policy period, recognizing changes in reported amounts between successive accounting dates. In deriving estimates of ultimate loss and implied IBNR based on financial data, the PCRB cannot separate "pure IBNR" associated with late reported claims from development on known cases or reopening of previously closed claims.

Statistical Plan data can also be analyzed for development between valuation dates. Subject to the limitation of the number of successive reports required under the Statistical Plan (historically five in Pennsylvania), the PCRB's development of unit statistical reports does identify "pure IBNR" separately from combined changes in values of known cases and reopening of previously closed claims.

One other data source of significant importance in the analysis supporting this filing is claim counts collected and distributed by the Pennsylvania Department of Labor and Industry. That source and updates provided to the PCRB by the Department of Labor and Industry have allowed for a more current examination of claim activity and claim frequency in the Commonwealth than would have been possible using the PCRB's Unit Statistical Plan. The PCRB data, however, allows greater detail of analysis in some respects than do the Department of Labor & Industry reports.

## **HOMOGENEITY**

The PCRB accumulates its claim data from hundreds of different insurers' experience in underwriting workers compensation insurance for hundreds of thousands of Pennsylvania employers. While this database cannot be rendered completely homogeneous, the PCRB does take significant steps intended to improve the homogeneity of data as used for analysis in support of its loss cost filings.

The most significant step toward achieving greater homogeneity is to separately collect and analyze data pertaining to indemnity and medical benefits. These distinct components of workers compensation data are impacted in different ways by different factors in the economic, legal and social environment and consequently display significantly different behaviors in terms of loss development and trend. Separating these parts of the total workers compensation benefit for analytical purposes allows the PCRB to measure and recognize demonstrated differences over time in preparing its loss cost filings.

The PCRB also does not include discretionary reserve elements such as bulk reserves or IBNR in the claim data used in analysis for loss cost filings. The methods and judgments underlying these reserve components are expected to vary significantly from insurer to insurer and over time for any given insurer. Incorporating these differences would introduce an added level of uncertainty and volatility in the PCRB's analysis which is avoided by limiting claim data used in support of the filing to paid and case reserved amounts.

In constructing loss development histories the PCRB consistently uses the maximum available amount of data which passes all required checks and edits. As companies may pass edits for some but not for all reported data, the PCRB matches available data by carrier for each pair of accounting dates used in development of our financial data. The PCRB then limits data used in its filings to the experience reported by common sets of carriers at each successive pair of accounting dates.

Some levels of the PCRB's loss cost filings are susceptible to achieving even greater measures of homogeneity in the data used. In establishing classification loss cost relativities, for example, experience data is used separately by classification, effectively dividing unit statistical data into some 300 categories which are individually much more homogeneous than is the aggregate total of all reported experience. Further, in operation of the Experience Rating Plan data reported for insurance of individual employers is taken as the basis for separate analysis in determining experience modifications.

## **CREDIBILITY**

Credibility pertains to the degree of predictive value a given body of data is deemed to have with respect to a pricing exercise such as the PCRB's loss cost filings. In practice credibility considerations raise two issues: First, how much reliance is to be placed on a specific body of data?, and second, what alternative data is to be assigned any complementary credibility not ascribed to that primary information?

For purposes of determining the overall loss cost level, the database available to the PCRB is quite large and by any measure would have substantial credibility. For example, in their 1995 Examination of the Pennsylvania Compensation Rating Bureau (Volume VI, Pages 36-37), Milliman & Robertson, Inc. (M&R) noted that application of commonly employed credibility standards produced very high trend credibilities for Pennsylvania (0.94 for indemnity and 0.87 for medical).

The PCRB also believes that, in addition to the substantial credibility attributable to Pennsylvania experience as a purely statistical matter, no alternative body of experience or information exists which would effectively serve as a basis for Pennsylvania price indications to the very limited extent that its statistical volume might suggest as appropriate. In this vein M&R noted that difficulties of interpretation and timing might arise in any attempt to utilize countrywide data or data from another group(s) of states as a complement to Pennsylvania experience.

#### **DATA AVAILABILITY**

The financial data collected by the PCRB includes the types of loss data most commonly used in workers compensation loss reserving, namely paid loss and incurred loss data. Premium and loss data collected using the PCRB's annual Calls is reconciled to Schedule W and is checked against prior years' Calls for consistency and reasonableness.

There are two types of data which would be of additional value in estimating and/or testing estimates of ultimate losses. The first of these is claim counts consistent with financial data valuations and separating cases into "open" and "closed" categories. The PCRB has attempted to collect such claim count data beginning with its December 31, 1993 Financial Calls. Beginning with Calendar Year 1996 data, substantially larger numbers of carriers have been able to submit reliable data at least for more recent policy years. A meaningful database will continue to be accumulated over a period of years beginning with relatively recent policy periods which can mature over successive future reports.

The second type of data of particular interest to the PCRB is a separation of incurred loss amounts on open cases in the unit statistical reports into paid and case reserved components. The PCRB filed and the Insurance Department approved revisions to the Statistical Plan extending the period for unit data reporting from five years to ten and requiring separation of incurred amounts into paid and case reserves components. These changes were implemented on a mandatory basis with policies effective on or after January 1, 1996.

The PCRB does not need to report ultimate losses for Pennsylvania workers compensation in any detail not supported by either the financial data or unit statistical data as presently reported and believes that actuarial methods available using current data provide reasonable estimates of ultimate losses for this line of business.

## EMERGENCY PATTERNS

The PCRB is able to monitor the reporting of claims through unit statistical reports. The table below presents reported counts of indemnity claims in Pennsylvania for the most recent available history:

Number of Reported Indemnity Claims as of:

Policy Year	First Report	Second Report	Third Report	Fourth Report	Fifth Report
1998	50,411				
1997	48,793	50,997			
1996	48,092	51,170	51,744		
1995	53,076	54,479	54,615	54,454	
1994	57,606	59,797	60,040	59,476	59,407
1993	62,700	63,895	64,317	64,263	63,471
1992	67,542	68,834	69,141	69,372	69,263
1991	72,714	74,019	73,986	74,079	74,037
1990	78,469	80,721	81,131	81,072	80,892
1989	80,832	85,152	85,596	85,600	85,366
1988	77,810	82,415	83,649	83,863	83,954
1987	75,555	78,381	79,678	80,441	80,781
1986	67,990	71,713	72,848	73,341	73,655
1985	65,247	68,816	69,744	70,110	70,083
1984	62,364	67,629	68,102	68,117	68,063

Based on the above reported claim data the following age-to-age development ratios can be computed:

Age-to-Age Development Ratios

Policy Year	1st - 2nd Report	2nd - 3rd Report	3rd - 4th Report	4th - 5th Report
1998				
1997	1.0452			
1996	1.0640	1.0112		
1995	1.0264	1.0025	0.9971	
1994	1.0380	1.0041	0.9906	0.9988
1993	1.0191	1.0066	0.9992	0.9877
1992	1.0191	1.0045	1.0033	0.9984
1991	1.0179	0.9996	1.0013	0.9994
1990	1.0287	1.0051	0.9993	0.9978
1989	1.0534	1.0052	1.0000	0.9973
1988	1.0592	1.0150	1.0026	1.0011
1987	1.0374	1.0165	1.0096	1.0042
1986	1.0548	1.0158	1.0068	1.0043
1985	1.0547	1.0135	1.0052	0.9996
1984	1.0844	1.0070	1.0002	0.9992

The above data suggests that reported claim development had been declining from 1984 through 1991, particularly from first to second report. Beginning in 1994 that development has begun to show an upward trend, with the Policy Year 1996 figure returning to mid-1980's levels. The PCRB has not made any specific adjustments in its ultimate loss estimates supporting the April 1, 2002 Loss Cost Filing to account for any changes in emergence patterns.

**SETTLEMENT PATTERNS**

The Principles relate settlement patterns to the length of time that it takes for reported claims to be "settled" or resolved. The PCRB is able to monitor the portion of reported indemnity claims which are reported as closed at each evaluation through its unit statistical report data. The following history is based on that data:

Portion of Reported Indemnity Claims Closed as of:

Policy Year	First Report	Second Report	Third Report	Fourth Report	Fifth Report
1998	.6729				
1997	.6733	.8135			
1996	.6736	.7973	.8627		
1995	.6609	.7862	.8570	.8971	
1994	.6718	.7923	.8493	.8916	.9213
1993	.6639	.7929	.8488	.8866	.9135
1992	.6718	.7900	.8482	.8831	.9109
1991	.6899	.7961	.8504	.8881	.9140
1990	.7103	.8102	.8515	.8847	.9132
1989	.7229	.8217	.8629	.8908	.9133
1988	.7478	.8391	.8785	.9028	.9196
1987	.7520	.8474	.8833	.9074	.9226
1986	.7537	.8429	.8807	.9018	.9176
1985	.7604	.8539	.8900	.9141	.9294
1984	.7747	.8599	.8926	.9180	.9353
1983	.7932	.8756	.9067	.9260	.9389
1982	.8059	.8868	.9172	.9336	.9469

Based on the above data, the PCRB has concluded that the length of time required for Pennsylvania workers compensation claims to be resolved consistently and significantly increased over time through Policy Year 1991. Since Policy Year 1991 these patterns have been relatively stable.

In the April 1, 2002 Loss Cost Filing the PCRB's selection of the method for estimating ultimate loss ratios gave consideration to possible recent changes in settlement patterns and the probable reasons for such changes.

**DEVELOPMENT PATTERNS**

The PCRB routinely reviews both paid loss and case-incurred loss development patterns separately for indemnity and medical losses. Based on financial data, the PCRB's loss development analysis cannot separate development on known cases from the effects of late-reported claims or reopening of previously closed cases but does include effects of each of these factors in the aggregate experience reported.

The Principles note that "...claims procedures will affect the manner in which the case reserves develop for any group of claims, and changes in claims practice may affect the consistency of historical development." The PCRB would also note that, when the environment in which claims must be managed changes, NOT changing claims procedures or case reserving practices may also affect the manner in which case reserves develop and/or the consistency of historical development. Exhibit I attached presents historical comparisons of average paid

closed claims and average incurred open claims in Pennsylvania for the most recent available unit statistical report data. Exhibit I is presented in three pairs of pages. The first two pages present experience for average indemnity loss per indemnity claim. The third and fourth pages present experience for average medical loss on indemnity claims per indemnity claim. The last two pages present experience based on the average medical loss per claim including both indemnity and medical-only claims.

The first page of each pair in Exhibit I presents average incurred values for open and closed claims separately by policy year and unit statistical report. The second page of each pair computes the year-to-year percentage changes in average open and closed claims, respectively. Over the period of experience provided in Exhibit I average closed indemnity claims have grown substantially faster than have comparable average open claims, suggesting that case reserves established on open claims may have not historically kept pace with ongoing payment experience in Pennsylvania. Interpretation of Exhibit 1 with respect to medical losses is complicated by the effects of Act 44 of 1993, which affected new claims and the outstanding portions of prior claims.

The Principles also note that the length of time to settlement may affect observed development. The PCRB believes that this is clearly the case in Pennsylvania and, in that regard, would refer in principal part to the claims closure rates patterns presented above in discussion of settlement patterns as a consideration under the Principles.

The PCRB believes that both settlement patterns and loss development patterns in Pennsylvania have been affected in recent years by prevailing levels of litigation. Exhibit II attached presents a summary history of petitions filed with the Workers Compensation Bureau by type of action.

The exhibit reflects the numbers of petitions filed as reported by the Bureau of Workers Compensation. The PCRB has been advised that, beginning in early 1992, the Bureau of Workers Compensation changed the way in which petitions being filed were counted by recognizing "multiple pleadings" in which more than one issue was presented on a single petition form. Prior to March 16, 1992 one petition form received by the Bureau of Workers Compensation was counted as a single petition; beginning March 16, 1992 a petition form received containing pleadings on three types of issues was counted as three petitions. There are seven types of petitions involved in these multiple pleadings: termination, suspension, modification, medical review, review, reinstatement and set aside of final receipt.

Petition filings in Pennsylvania generally appear to have risen substantially through 1995 and then showed substantial declines into 2000 with the exception of the twelve months ending June 30, 1999.

The PCRB can observe loss development patterns directly by virtue of the financial data reported to it by its members. Exhibit III presents a history of this loss development experience for indemnity benefits, while Exhibit IV presents a similar history for medical benefits.



Portions of the case reserve data included in the PCRB's financial data is subject to discounting. As a result, loss development experience derived from this financial data will reflect some "unwinding" of these discounts over time. When changes in the pension tables underlying some of the case reserves included in financial data were revised, the PCRB collected data providing concurrent valuations of liabilities on both the previous and revised basis in order to correct ongoing loss development analysis for the effects of those tabular changes.

In the course of preparing the April 1, 2002 Loss Cost Filing and other recent PCRB filings the PCRB has tested a set of loss development methods, including a case incurred loss development approach and a series of alternative methods, which apply a paid loss development approach for a specified number of initial development periods (ranging from 2nd to 20th reports), then convert paid losses to incurred losses and apply an incurred loss development approach for all remaining development to ultimate loss. For the April 1, 2002 filing, this analysis produces a set of some 20 different estimates, each based on a different level of reliance on paid loss development and incurred loss development, respectively.

Because of the enactment of Act 44 in July 1993, the medical financial data reported to the PCRB required adjustment for the effects of statutory changes before loss development analysis could proceed. The details of the adjustments made are set forth under subsequent discussion of "External Factors." In brief, the PCRB estimated the effects of medical cost containment provisions of Act 44 on medical losses and then adjusted paid and incurred loss data for periods prior to the implementation of Act 44 to a "post-Act 44" basis. Under this approach, loss development analysis can proceed with medical experience preceding and following the implementation of Act 44 stated at comparable levels. Absent such adjustment, the PCRB's loss development methods would have inappropriately treated changes in costs attributable to this legislation as integral parts of ongoing loss development patterns.

Because of the enactment of Act 57 in June 1996, an adjustment to indemnity financial data, similar to the adjustment made to medical financial data previously described was also warranted. In brief, the PCRB estimated the effects of the provisions within Act 57 on indemnity losses and then adjusted paid and incurred loss data for periods affected to a "post-Act 57" basis. This process for adjusting indemnity losses to a post-Act 57 basis was first implemented in the Bureau's April 1, 2000 Loss Cost Filing. Thus, loss development analysis can proceed with indemnity experience preceding and following the implementation of Act 57 stated at comparable levels.

Exhibit V attached presents summary results of the PCRB's loss development analysis for the April 1, 2002 Loss Cost Filing.

After consideration of results of all methods tested for estimation of ultimate loss, the PCRB has selected an average of the paid-to-20th report and the incurred loss development methods for both indemnity and medical loss. These selections represent a modification to the practice used last year which relied on a paid-loss-to-5th report method. This change recognizes implications of the most recent available experience incorporated into the April 1, 2002 Loss Cost Filing and the potential impact of recent changes in settlement patterns.

## **FREQUENCY AND SEVERITY**

This consideration is directed primarily toward the statistical theories underlying the predictability of ultimate loss amounts. Historically, workers compensation insurance has been considered a high frequency, low severity form of coverage. Pennsylvania data suggests that increases in claim severity have been occurring (see Exhibit I), although Act 44 has caused changes in both the level and trend in medical loss severities. Claim frequency has been a significant favorable factor in changes of costs of workers compensation insurance in recent years for Pennsylvania. This perspective is supported both by the annual Pennsylvania Work Injuries and Illnesses Reports, published by the Department of Labor and Industry, and by unit statistical data as summarized in Exhibit 20A - Table II supporting this filing.

The PCRB's estimates of ultimate loss have traditionally not presented separate estimates of claim frequency and severity. Despite the fact that claim frequency was not separately stated or analyzed, changes in frequency and/or severity of claims were manifested in the financial data used for purposes of the PCRB's loss development analysis and were thus reflected in estimates derived from that data source.

In the current filing, however, and as was the case in the last three loss cost filings, the PCRB has examined claim frequencies and recent changes in claim frequency in depth. In effect, the PCRB has separated observed loss ratio trends into frequency and "other" components. Claim severity and benefit utilization are significant elements within the "other" trend component.

The Principles direct that a provision be made for the expectation of claims of a magnitude not present in historical data. While workers compensation insurance presents potential catastrophic exposures not represented in historical data and, while the PCRB believes the likelihood of such claims has increased with the unfolding events of 2001, the PCRB has not supplemented its developed and trended estimates of ultimate loss with a separate provision for such contingencies. This practice is but one element of conservatism adopted in this filing which produces loss cost indications in the middle of the range of reasonable estimates.

## **REOPENED CLAIMS POTENTIAL**

Workers compensation insurance is commonly affected by reopening of claims previously reported as closed. Such reopenings increase the cost of insurance and contribute toward the long-tailed nature of benefits for this line of insurance. While the PCRB's financial data does not specifically identify reopened cases or costs attributable to such reopening, the paid and incurred loss valuations reflected in that financial data include the effects of any reopening which may have occurred.

## **CLAIMS MADE COVERAGES**

Pennsylvania workers compensation insurance policies are uniformly written on an occurrence basis, and claims made coverage are not applicable to the PCRB's April 1, 2002 Loss Cost Filing.

## **AGGREGATE LIMITS**

Statutory benefit levels for indemnity payments and considerations of mortality applicable to workers compensation claimants serve to produce some broad practical limitations of the possible costs of benefits payable to individual claimants. However, no maximum limit on total losses applies to any Pennsylvania workers compensation insurance policy subject to the PCRB's April 1, 2002 Loss Cost Filing or which contributed data to the analysis supporting this filing.

## **SALVAGE, SUBROGATION AND COLLATERAL SOURCES**

For Pennsylvania workers compensation the following conditions or circumstances would give rise to recoveries of loss amounts commonly perceived as "salvage, subrogation and collateral sources":

- ***Third-party Recoveries.*** These recoveries occur as a result of actions in which the claimant pursues and obtains a liability award from someone other than their employer or a fellow employee on the basis that the third party was responsible for the workers' injuries. Effective with the implementation of Act 44 of 1993 on August 31, 1993, workers compensation insurers are empowered to subrogate proceeds of third-party actions involving automobile accidents. Prior to that date third-party claims prosecuted in cases of automobile accidents could not be subrogated by workers compensation insurers in Pennsylvania.
- ***Subsequent Injury Fund.*** This fund makes some payments for total disability arising out of the combined effects of two separate instances (with the most recent occurrence subject to the provisions of the Pennsylvania Workers Compensation Act), each resulting in the loss or loss of use of one hand, one arm, one foot, one leg or one eye. Such payments are made by the Department of Labor & Industry from the Subsequent Injury Fund after the insurer of record for the most recent injury has paid partial disability benefits consistent with the effects of the most recent occurrence alone.
- ***Supersedeas Fund Recoveries.*** Upon approval by the appropriate administrative agency, this Fund reimburses certain benefit payments made by insurers pending determination of certain petitions before the Bureau of Workers Compensation or the Workers Compensation Appeals Board.
- ***Deductible Reimbursements.*** In Pennsylvania employers may elect various levels of deductible coverage. The election of a deductible policy does not change the insurer's primary responsibility for administering all benefit payments on claims incurred under the policy but requires that the employer reimburse the insurer for payments made under the qualifying deductible level. In return for the agreement to reimburse specified payments the employer receives an advance premium credit, the amount of which is a function of the deductible level selected.

Deductible plans in Pennsylvania are separated for purposes of financial data reporting into “large” deductible plans (policies having a deductible amount of \$100,000 or over) and “small” deductible plans (policies with a deductible amount less than \$100,000).

- ***Unemployment Compensation Benefit Offsets.*** Effective with the implementation of Act 44 of 1993, in instances where a workers compensation claimant has received unemployment compensation benefits and workers compensation disability benefits for the same period of disability, the workers compensation insurer is entitled to reduce the amount of workers compensation benefit by the amount of unemployment benefits paid. This procedure became effective on August 31, 1993.
- ***Social Security Old Age Benefit Offsets.*** Act 57 of 1996 provides for offsets to workers compensation benefits by virtue of Social Security Old Age Benefits to the extent funded by employers. This provision of the law applies prospectively for injuries occurring after the effective date of the statute. Thus, no adjustment or reorganization of prior experience data was required in preparing this filing to recognize this amendment. Prospective adjustment to proposed loss cost levels were made as appropriate to reflect effects of this change on future losses.

The financial data reported to the PCRB is net of third-party subrogation and Supersedeas Fund recoveries received and excludes payments made directly from the Subsequent Injury Fund. Thus, the loss development patterns based on that financial data reflect such collateral sources. With respect to both subrogation on automobile injury claims and offsets for unemployment compensation benefits, experience will continue to be reflected in future financial data and will affect ultimate loss estimates as the effects of these provisions are demonstrated in reductions in amounts otherwise paid.

The financial data reported to the PCRB is gross of deductible reimbursements under so-called “small-deductible” plans. This allows overall loss cost levels to be promulgated consistent with first-dollar coverage, with credits attributable to deductible policies then applied for policies written on a deductible basis. Experience for “large deductible” policies is excluded from the determination of overall loss cost levels in PCRB filings, recognizing that employers purchasing such policies are effectively self-insuring major portions of their workers compensation insurance obligations. The behavior and experience of these risks is deemed not to be representative of the losses expected for other employers remaining insured by the PCRB’s members on a first-dollar basis. In order to maximize the amount of experience available by classification, however, both small and large deductible policies are included on a first-dollar basis in the determination of loss costs at the individual classification level.

#### **GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (“GAAP”)**

Loss data used in preparing the PCRB’s loss cost filings is more directly related to statutory accounting procedures than to GAAP. The PCRB’s April 1, 2002 Loss Cost Filing attempts to estimate ultimate loss amounts on an undiscounted basis for purposes of determining the overall loss cost level appropriate for Pennsylvania workers compensation.

## **REINSURANCE**

Financial and Statistical Plan data submitted to the PCRB and used in preparing this filing is reported on a direct basis. As a result, any reinsurance arrangements which may have been in effect between various insurers have properly not been recognized in the PCRB's analysis of loss costs for this filing.

## **PORTFOLIO TRANSFERS, COMMUTATIONS AND STRUCTURED SETTLEMENTS**

Because data is reported to the PCRB on a direct basis, portfolio transfers would not affect the analysis underlying this filing. Commutations and structured settlements (i.e., annuity purchases, etc.) are reflected in reported data and may have some effect on that data and analysis performed based thereon.

As shown on Exhibit II, commutation petitions increased steadily through 1996 and have dropped precipitously since then and show limited usage over the 12 months ending June 30, 2001. As discussed in the Summary of Responses to Survey of 26 Large Carrier Groups, enclosed as part of this filing, the Compromise and Release feature of Act 57 of 1996 appears to be a tool of which the carriers have made considerable use, perhaps in the place of commutation activity which would have otherwise taken place.

In preparing its January 1, 1992 Rate Filing the PCRB attempted to collect specific data pertaining to the timing and amount of commutation awards and the history of claim valuations presented by claims subject to such commutations. The PCRB obtained a detailed listing of claims for each Bureau member on which prior commutation petitions had been filed and provided each member of the Bureau with its own listing as a basis for developing responses to the PCRB's request for data. Despite an extensive effort by the PCRB and its members, most carriers with any significant volume of commuted cases could not reconstruct the requested data for at least some claims, and much of the data reported did not pass various quality control edits imposed by the PCRB upon receipt of the responses. Given the difficulty of preparing and distributing the commutation call and the lack of success in obtaining useful data based on that call, the PCRB has not subsequently reissued that call for information.

Although the PCRB has not made specific adjustments to its loss development data to account for any effects of commutation activity, due consideration was given to development patterns, settlement rates, and the potential effects of commutations and compromise and release settlements on the PCRB's data in the selection of ultimate incurred losses.

## **POOLS AND ASSOCIATIONS**

There are no pools or associations whose operations affect the policies subject to this filing. Intercompany pooling agreements or other similar arrangements which may affect the allocation of business between affiliated companies would also not affect the aggregate data underlying this filing or the indications presented herein.

## **OPERATIONAL CHANGES**

A broad variety of operational changes and adaptations will presumably be at various stages of maturity among different members of the PCRB at any point in time. In performing a loss reserve analysis for a specific carrier or a carrier group, particularly important changes of this nature might be identified and used as a basis for modifying certain assumptions or parameters in the analysis. However, it is not possible for the PCRB to assimilate detailed information regarding operational changes in over 300 separate companies and then to meaningfully translate the complex spectrum of such changes into specific quantitative adjustments applicable to the overall data for all carriers in the aggregate.

The PCRB has endeavored to identify pervasive and important trends in its overall data and to discover possible explanations for and ramifications of those trends for use in its analysis of this filing. That effort has included discussions of company considerations and perspectives on system features with many carrier groups collectively representing a significant portion of the Pennsylvania workers compensation premium. A summary of responses provided to the PCRB in that process is included as part of the support for the April 1, 2002 Loss Cost Filing.

## **CHANGES IN CONTRACTS**

Although most contract provisions of workers compensation insurance policies in Pennsylvania have remained intact for an extended period of time, some changes of note have occurred in recent years as the result either of legislative action or individual carrier initiatives. Changes of which the PCRB is aware are noted below with comments as appropriate in the context of the Principles.

**Deductibles:** Since 1990 some Pennsylvania workers compensation business has been written subject to "large deductible" policies. The PCRB has consistently defined "large deductible" plans to be those arrangements in which the insured agrees to reimburse their carrier for losses below selected amounts of \$100,000 or more per claim or accident.

The PCRB excludes large deductible experience from financial data used to determine overall indications for its loss cost filings, as these types of policies are tantamount to self-insurance. The experience of these risks is deemed not to be representative of the losses expected for other employers remaining insured by the PCRB's members on a first-dollar basis.

Act 44 implemented a requirement for carriers to offer "small" deductibles at specified levels of retention to Pennsylvania employers. At present, the statutorily-required deductible choices are \$1,000, \$5,000 and \$10,000. Carriers are also allowed to file and use other deductible levels under provisions of the law, but the PCRB is not aware of significant numbers of such filings having been made to date.

In financial data the PCRB's reporting instructions have for a number of years required small deductible experience to be reported on a gross or first-dollar basis, so that the determination of overall loss cost levels is accomplished using data which does not reflect differences in either premiums or losses attributable to these smaller deductible plans.

Unit statistical reports in Pennsylvania require the reporting of all experience on a “first dollar” basis for large and small deductible policies. This practice allows classification relativities and experience modifications to be promulgated and applied directly in pricing all risks regardless of whether or at what level deductible provisions may attach.

**Workplace Safety Credits:** Act 44 provided that employers could apply on a one-time basis for a policy credit of five percent against premium otherwise due, based on qualification as having a certified Workplace Safety Committee. Act 57 extended the availability of the credit by allowing for renewal for up to four additional years. Applications are processed through the Department of Labor & Industry. “Standard premium” excludes the effects of premium discounts or retrospective rating plans which may also apply to some risks qualifying for workplace safety credits and may be especially significant for certain large employers.

## **EXTERNAL INFLUENCES**

Workers compensation insurance is susceptible to influence by a broad variety of external social, economic and legal factors. The more significant such factors affecting and accounted for in this filing are identified below:

**Act 44 of 1993:** Signed into law in July 1993 this legislation implemented numerous changes in the Pennsylvania workers compensation system. These changes included the following:

**Loss Cost Pricing:** The PCRB now files advisory loss costs only, and individual carriers must file their own independent provisions for expenses, profit and related items. In addition, carriers are authorized to file independently for loss costs and/or to implement subclassifications within existing Bureau classifications. Within the context of the PCRB’s loss cost filings, this change will affect the designated statistical reporting level for “premiums” attributable to policy years beginning with 1993.

**Medical Cost Containment:** Various provisions of Act 44 were designed to reduce current costs and control future cost increases for medical treatment of workers compensation claims. The more notable of these features of the law include implementation of a fee schedule based on the Medicare reimbursement system, authorization for coordinated care organizations, provisions for the establishment of peer review and utilization review procedures, and extension of the duration of employer-directed choice of physician from 14 to 30 days.

**Minimum Indemnity Benefit:** Act 44 eliminated the absolute minimum benefit level for indemnity payments, reducing the likelihood and extent to which claimants could receive workers compensation benefits exceeding their pre-injury take-home pay.

**Other provisions:** Act 44 also included language addressing the following subject areas:

- Authorization for employers and workers compensation insurers to subrogate proceeds of third-party actions in injuries involving automobile accidents

- Provisions to preclude entitlement to workers compensation benefits if injuries were caused by use of illegal drugs or alcohol
- Initiation of certain procedures for the reporting, investigation and prosecution of fraud related to workers compensation insurance
- Authorization for the formation of group self-insurance programs

**Petitions Filed:** Through 1995 the Pennsylvania workers compensation system had become increasingly involved in matters of dispute pertaining to individual claims. The situation has improved somewhat since that time, based on counts of petitions filed with the Bureau of Workers Compensation. This tendency is illustrated in the accompanying Exhibit II, presenting numbers of petitions filed by type of issue for the Calendar Years 1987 through 1996 and fiscal years ending June 30 of 1997 through 2001. Petitions generally invoke administrative proceedings which can be very protracted in nature and which generally require significant periods of time to complete. In Pennsylvania such delays are translated into additional indemnity, medical and expense payments by virtue of prevailing case law precedents (see below).

**Pennsylvania Economy:** The Pennsylvania economy was relatively hard-hit by the general economic downturn in the early 1990s. When economic conditions are difficult, alternative employment may be difficult for injured workers to obtain in new settings or for their former employers to provide within their own operations. This could contribute to extended claims duration and increases in overall costs. Until recently, economic conditions in Pennsylvania have been relatively favorable, potentially contributing to observed favorable loss ratio trends. Economic conditions again point to a slowdown which could have an adverse impact on claim frequency and severity.

**Wage Inflation:** Wage inflation, which drives indemnity benefit levels, has not been particularly high in Pennsylvania in recent years. Changes in the PCRB's pricing procedures invoked by prior orders of the Insurance Commissioner's office have dictated changes in the approved trend procedures. These changes effectively eliminated the on-level adjustments commonly derived in workers compensation pricing for routine revisions in minimum and maximum wage levels based on changes in the Statewide Average Weekly Wage. Instead, the Commissioner's Orders require the PCRB's trend analysis to include the effects of those on-level adjustments. This must be kept in mind when comparing the PCRB's indicated trends to values produced in other jurisdictions based on traditional approaches.

The PCRB would note that, in the course of analysis of claim frequencies for the April 1, 2001 Loss Cost Filing, staff discovered an unusually large amount of payroll reported by the Bureau of Labor Statistics for the First Quarter of 2000. This data appears to be an isolated occurrence and total payrolls and average wages for Fiscal Year 2000 have been adjusted to remove this anomaly in the current and prior loss cost filings.



**Case Law Precedents:** The PCRB is aware of several specific cases having current and/or potential future precedential implications for Pennsylvania workers compensation insurance. These decisions have imposed or may impose additional requirements to be met by employers or insurers attempting to accomplish certain actions on workers compensation claims or invoke new bases for determination of compensability under Pennsylvania law. Collectively, these cases have had the effect of extending the duration and increasing the amounts of benefit payments required for Pennsylvania workers compensation claims. A brief summary of the nature and implications of each of the cases known to the PCRB is set forth below:

**Baksalary:** Decided in 1984, the Baksalary case effectively requires continued payment of both indemnity and medical benefits during the pendency of petitions filed for suspension, modification or termination of benefits. By extending the period during which benefits are paid, this precedent has materially increased the cost of Pennsylvania workers compensation claims.

**Kachinski:** Decided in 1987, the Kachinski case significantly increased the vocational standards to be met by employers or their insurers in order to be able to successfully close Pennsylvania workers compensation claims. In effect, these expanded vocational requirements altered the nature of the workers compensation system from its previous focus on medical improvement and stability to an emphasis on whether suitable work was available to injured workers. In turn, these requirements extended the period of compensable disability on many claims.

**McCray:** Decided in 1994, the McCray decision effectively increased the burden of proof regarding job availability required of insurers or employers in order to suspend or modify disability benefits.

**Jackson Township v. WCAB:** Decided in 1991, the Jackson Township case awarded benefits to a worker not suffering any diagnosed injury or illness but affected by a fear that they had or could contract AIDS in the course of their employment. This case is perceived by at least some insurers as potentially precedential in terms of certain stress or anxiety disorders which may be contended to be work-related.

**Martin v. WCAB:** Decided in 1995, the Martin case allowed a worker to seek treatment from a medical practitioner not on the list of designated practitioners posted by the worker's employer. This case is perceived by some as potentially obviating the employer's ability to direct injured workers to designated medical practitioners during the first 30 days after their injuries. Act 57 further expanded the period during which employers could designate medical providers from 30 to 90 days.

**Act 57 of 1996:** Signed into law in June 1996 this legislation included certain measures which the PCRB has estimated will reduce the level of indemnity benefit payments. Based on responses to the PCRB's survey of large carriers or groups, the PCRB felt that savings under Act 57 of 1996, which would normally have been expected to materialize over an extended period of time, were already substantially evident in the experience of the financial data. This was the result of carriers', employers' and claimants' willingness to reach agreement on the settlement of claims, presumably advanced by the provisions of Act 57 of 1996 which would ultimately

come into play. One of the key elements of this process is the Compromise and Release feature of Act 57. The PCRB's financial data has been adjusted to a post-Act 57 basis to reflect a common indemnity benefit level for all policy years.

## **DISCOUNTING**

Discounting practices vary from carrier to carrier within the financial data reported to the PCRB. Some carriers discount death and permanent total disability cases using mortality and interest assumptions consistent with the Statistical Plan requirements applicable to unit statistical reports. Other carriers discount such cases using independently established assumptions and procedures. Some carriers may discount some or all financial data reserves on a bulk or aggregate basis, either in addition to or instead of application of case-specific discounts such as those described above.

To the extent that reported losses in financial data have been discounted, loss development experience will reflect the "unwinding" of these discounts as losses are paid out over time. The objective of the PCRB's analysis of ultimate losses is to accurately predict final UNDISCOUNTED loss amounts, as the reflection of investment income in carrier prices is part of the statutory requirements for those companies' loss cost multipliers filed with the Pennsylvania Insurance Department.

The PCRB filed and the Insurance Department approved changes in the Statistical Plan pension tables effective in 1992 and again in 2000. For financial data reported in both 1991, 1992 and 2000 the PCRB collected data providing information of the effects (if any) of those pension table changes on valuations of incurred losses for each carrier. This information was used to adjust loss development for the pension table changes so that ultimate loss estimates would be unaffected by the transition to the new tables.

## **PROVISION FOR UNCERTAINTY**

Workers compensation insurance in Pennsylvania has historically demonstrated a very extended payout and settlement "tail" which contributes significantly to the uncertainty inherent in estimates of ultimate incurred losses for this type of insurance.

The PCRB's loss cost filing is based on indications of methods which have been selected as providing the best estimate of ultimate losses for the experience periods used in this analysis. The filing thus makes no explicit or implicit provision for uncertainty in estimates, either by way of adding an incremental margin to the best estimate or by selecting a method which produces results falling closer to the upper end than the lower end of the range of reasonable results achieved by various alternative methods. While the Principles would advocate application of an explicit provision for uncertainty under these circumstances, the PCRB has declined to do so in part because of the difficulty of objectively establishing an appropriate level for such a provision and in part because, in the context of Pennsylvania's current workers compensation pricing system, individual carriers have an opportunity to incorporate their own perspectives of uncertainty in the determination of their individual loss cost multipliers. The PCRB does recognize that recent world events have heightened the potential for catastrophic loss.

## **REASONABLENESS**

The PCRB has applied extensive tests of reasonableness to the estimates produced in a variety of approaches to loss development and trend in the preparation of this filing. Methods selected produce results falling in the middle of the range of all methods tested. On balance, the PCRB firmly believes that its present estimates are reasonable and, in particular, are unlikely to prove excessive given the overall circumstances applicable to these estimates.

## **LOSS-RELATED BALANCE SHEET ITEMS**

Because of the statutory limitation of the PCRB's loss cost filings to the "Provision for Claims Payment," most loss-related balance sheet items are outside the scope of the filing's analysis. Employer assessments and funding for the Office of the Small Business Advocate are exceptions to this limitation. The filing has reviewed recent experience pertaining to the amounts of such assessments as a means of providing an appropriate Employer Assessment Factor to carriers applicable to these employer assessments and for the inclusion in proposed loss costs of provision for funding for the Office of the Small Business Advocate.

## **LOSS RESERVING METHODS**

Consistent with directions provided by the Principles, the PCRB has tested and reviewed the results of well over a dozen variations of methods to estimate ultimate losses in preparing this filing. The methods so tested are those most compatible with and making the best use of all data available for purposes of supporting this filing.

## **STANDARDS OF PRACTICE**

The PCRB is familiar with and mindful of the various standards of practice pertinent to the estimation of property and casualty loss and loss adjustment expense reserves and property and casualty insurance ratemaking. Within the context of the PCRB's loss cost filing responsibilities, as set forth in the Workers Compensation Act, the PCRB has appropriately complied with those applicable standards. In summary form the PCRB offers the following comments with respect to standards of practice:

### **Actuarial Standard of Practice No. 9: Documentation and Disclosure in Property and Casualty Insurance Ratemaking, Loss Reserving and Valuations:**

ASP No. 9 in principal part pertains to the form and content of actuarial work products supporting ratemaking, loss reserving and valuations for property and casualty insurance. The standard requires that such work be documented in a form and to an extent so that another actuary practicing in the same field could evaluate the work. In addition, the standard addresses appropriate measures to be taken in the event that conflicts with the actuary's professional judgment or with interests of persons other than the client or employer are encountered.

The PCRB has fully documented and disclosed the analysis and assumptions underlying its preparation of this filing in the supporting information provided therewith. Further, the PCRB has made itself available to the Insurance Department and other parties for purposes of providing any further explanation or information which may be requested and available with regard to the filing and the analysis underlying it. Conflicts of the type discussed in the standard were not encountered in the course of the PCRB's preparation of this filing.

In addition to the standard itself, ASP No. 9 incorporates reference to three related documents. One of these is the Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves, which the PCRB has discussed at length above. The remaining two documents are noted below.

Statement of Principles Regarding Property and Casualty Insurance Ratemaking: Much of this document is directed at specific components of "rates," such as expenses, profit and contingency provisions, which are excluded from the PCRB's loss cost filings. The PCRB has complied with Principles No. 1 and 4 of this document which respectively require that a "rate" ("loss costs" in the context of this filing) be an estimate of the expected value of future costs, and that "rates" ("loss costs" in the context of this filing) be actuarially sound estimates of the expected value of all future costs associated with risk transfers.

This document sets forth numerous considerations deemed to be applicable generally to the process of ratemaking. Many of these considerations are duplicative of those enumerated in the Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves, and the PCRB's preceding comments regarding those items are generally applicable in the context of this Principle as well. Some considerations not common to the Loss and Loss Adjustment Expense Reserve and Ratemaking Principles are noted briefly below:

- **Exposure Unit:** The exposure unit used almost exclusively in this filing is total payroll. Some limited exceptions have been provided for specific classifications where payroll data does not exist or does not apply. Total payroll meets the criteria generally suggested for an exposure unit as applicable to workers compensation insurance.
- **Data:** The Principles refer to "other relevant data" outside the historical data for the line and state being analyzed. Given the volume of statistical data available specific to Pennsylvania workers compensation insurance and the numerous factors and features either unique to or affecting this line and state in a way not completely common to other situations, the PCRB believes that external information is of greatest use as a means of providing a background and context for analysis of the Pennsylvania data rather than as a surrogate source of indications to be given substantial weight in preference to Pennsylvania experience.
- **Classification Plans:** The PCRB uses a classification plan developed over an extensive period of time and with the benefit of continuing review and evaluation by PCRB staff, employers and the Insurance Department. This classification system was most recently the subject of an extensive study performed by the PCRB in cooperation with the Insurance

Department, intervenors from prior rate proceedings and contractors retained by the Insurance Department, a summary report of which was delivered to the Insurance Department on September 16, 1994.

- **Individual Risk Rating:** The PCRB uses an Experience Rating Plan which has been in effect over an extended period of time. Work is presently in progress to review and evaluate the performance of this plan and of other possible alternative approaches in a study analogous to that recently completed for the classification plan.
- **Risk:** The PCRB's loss cost filings do NOT provide or include specific charges for the transfer of risk. This omission occurs because of the statutory limitations on PCRB filings imposed in Pennsylvania but does NOT preclude recognition of such charges from final RATES promulgated by individual insurers.
- **Investment and Other Income:** The PCRB's loss cost filings do NOT address the effects of investment or other income in Pennsylvania workers compensation insurance. Pennsylvania law requires these matters to be recognized in insurer filings of loss cost multipliers.
- **Actuarial Judgment:** The PCRB has invoked actuarial judgment throughout its testing and evaluation of various alternative methods for loss development and trend and in the process of evaluating the initial effects of Act 44 and Act 57 provisions on Pennsylvania workers compensation experience. This judgment has been applied in the selection of various methods to be considered and in the derivation of certain filing parameters such as trend factors.

Statement of Principles Regarding Property and Casualty Valuations: This statement is largely inapplicable to the PCRB's loss cost filings, as it treats the collective measurement of specific insurers' or other risk bearers' obligations and assets for purposes of assessing their financial condition as of a specific date.

**Actuarial Standard of Practice No. 13: Trending Procedures in Property/Casualty Insurance Ratemaking:**

ASP No. 13 requires in essence that trend analyses be applied and conducted in a way most appropriate to measure and account for future costs not directly measurable in prior experience data due to continuing changes intervening between the end of the available experience and the future period to which rates or loss costs will apply.

In conformance with this standard the PCRB has tested and evaluated the most common trending models in use in the property and casualty insurance industry (linear and exponential models) in preparing this filing. Each model has been tested over various experience periods to measure the historical success of each possible approach in predicting future experience. Final trend indications have been selected after consideration of these test results and prevailing methodologies used in workers compensation pricing in other jurisdictions.

This standard specifically mentions the use of non-insurance data. Such mention is permissive and indicates that such data may be used to indicate general trends in various ratemaking components.

The PCRB has not, as cautioned against in the standard, selected a trend substantially different from one suggested by the range of relevant information.

APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
 AVERAGE OPEN AND CLOSED INDEMNITY LOSS FOR INDEMNITY CLAIMS

AVERAGE OPEN INDEMNITY LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					19,364	18,667	18,598	19,493	20,744	22,207	22,803	24,203	25,602	25,623	25,210	23,634	24,831	22,707	21,399	21,794	22,518
SECOND				40,356	38,154	36,689	38,271	40,367	40,021	45,933	46,713	50,655	53,286	51,149	52,647	49,143	48,149	43,393	41,514	42,422	
THIRD			56,330	57,671	56,107	55,773	56,481	59,906	57,663	67,907	70,333	76,379	76,492	78,389	77,464	71,304	71,246	67,444	57,537		
FOURTH		68,121	71,373	73,183	71,145	71,793	74,889	76,047	72,016	88,672	92,936	98,045	101,285	101,367	97,138	94,025	95,361	85,140			
FIFTH	80,744	78,666	84,895	86,623	86,764	85,328	88,783	91,190	86,214	106,435	111,113	121,852	126,229	120,253	122,054	111,535	113,011				

AVERAGE CLOSED INDEMNITY LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					1,374	1,429	1,468	1,544	1,622	1,708	1,793	1,990	2,153	2,228	2,260	2,330	2,493	2,538	2,614	2,732	2,834
SECOND				1,720	1,787	1,870	1,973	2,103	2,252	2,442	2,577	2,949	3,200	3,480	3,612	3,781	4,196	4,372	4,411	5,087	
THIRD			1,814	2,095	2,155	2,321	2,559	2,780	3,070	3,272	3,650	4,152	4,684	5,184	5,583	5,824	6,257	6,696	6,851		
FOURTH		1,934	2,091	2,453	2,591	2,833	3,310	3,575	3,867	4,155	4,754	5,547	6,345	7,183	7,697	7,788	8,419	8,799			
FIFTH	1,904	2,165	2,399	2,785	3,040	3,353	4,066	4,271	4,632	5,026	5,722	6,884	8,009	9,094	9,417	9,601	10,316				

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB

APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
ANNUAL PERCENTAGE CHANGE IN AVERAGE OPEN AND CLOSED INDEMNITY LOSS FOR INDEMNITY CLAIMS

PERCENTAGE CHANGE IN AVERAGE OPEN INDEMNITY LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						(3.60)	(0.37)	4.81	6.42	7.05	2.68	6.14	5.78	0.08	(1.61)	(6.25)	5.06	(8.55)	(5.76)	1.85	3.32
SECOND					(5.46)	(3.84)	4.31	5.48	(0.86)	14.77	1.70	8.44	5.19	(4.01)	2.93	(6.66)	(2.02)	(9.88)	(4.33)	2.19	
THIRD				2.38	(2.71)	(0.60)	1.27	6.06	(3.74)	17.77	3.57	8.60	0.15	2.48	(1.18)	(7.95)	(0.08)	(5.34)	(14.69)		
FOURTH			4.77	2.54	(2.78)	0.91	4.31	1.55	(5.30)	23.13	4.81	5.50	3.30	0.08	(4.17)	(3.20)	1.42	(10.72)			
FIFTH	(2.57)	7.92	2.04	0.16	(1.66)	4.05	2.71	(5.46)	23.45	4.40	9.66	3.59	(4.73)	1.50	(8.62)	1.32					

PERCENTAGE CHANGE IN AVERAGE CLOSED INDEMNITY LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						4.00	2.73	5.18	5.05	5.30	4.98	10.99	8.19	3.48	1.44	3.10	7.00	1.81	2.99	4.51	3.73
SECOND					3.90	4.64	5.51	6.59	7.09	8.44	5.53	14.44	8.51	8.75	3.79	4.68	10.98	4.19	0.89	15.33	
THIRD				15.49	2.86	7.70	10.25	8.64	10.43	6.58	11.55	13.75	12.81	10.67	7.70	4.32	7.43	7.02	2.31		
FOURTH			8.12	17.31	5.63	9.34	16.84	8.01	8.17	7.45	14.42	16.68	14.39	13.21	7.16	1.18	8.10	4.51			
FIFTH	13.71	10.81	16.09	9.16	10.30	21.26	5.04	8.45	8.51	13.85	20.31	16.34	13.55	3.55	1.95	7.45					

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB



APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
 AVERAGE OPEN AND CLOSED MEDICAL LOSS FOR INDEMNITY CLAIMS

AVERAGE OPEN MEDICAL LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					9,012	8,925	9,859	9,937	10,822	11,816	13,944	15,685	17,163	18,111	17,846	15,810	15,322	15,348	17,458	17,361	18,798
SECOND				13,324	14,164	14,350	15,725	16,351	16,832	20,263	23,539	26,418	28,303	28,479	26,455	24,216	22,237	23,221	25,933	28,460	
THIRD			16,467	16,924	18,982	18,452	19,805	21,514	22,109	27,982	31,934	34,566	36,309	35,554	32,256	29,749	28,618	31,585	33,101		
FOURTH		15,895	19,444	20,360	22,740	23,125	24,611	27,841	26,414	34,320	39,495	41,133	42,053	40,735	36,934	35,768	33,977	37,888			
FIFTH	15,249	17,704	22,083	23,291	26,179	25,569	29,514	33,331	31,212	39,749	45,914	46,776	49,359	45,224	43,128	42,264	40,806				

AVERAGE CLOSED MEDICAL LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					1,117	1,224	1,296	1,385	1,562	1,734	1,985	2,327	2,676	3,126	3,350	2,716	2,674	2,799	2,977	3,141	3,234
SECOND				1,213	1,409	1,560	1,660	1,821	2,047	2,308	2,638	3,135	3,614	4,176	4,376	3,595	3,527	3,723	4,003	4,376	
THIRD			1,152	1,376	1,585	1,789	1,938	2,110	2,398	2,665	3,152	3,752	4,309	4,977	5,156	4,352	4,186	4,555	4,974		
FOURTH		1,045	1,257	1,510	1,738	1,980	2,191	2,353	2,666	3,019	3,579	4,297	4,991	5,741	5,786	4,905	4,885	5,240			
FIFTH	970	1,119	1,354	1,623	1,892	2,138	2,424	2,558	2,900	3,326	3,923	4,808	5,569	6,357	6,313	5,404	5,438				

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB

APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
ANNUAL PERCENTAGE CHANGE IN AVERAGE OPEN AND CLOSED MEDICAL LOSS FOR INDEMNITY CLAIMS

PERCENTAGE CHANGE IN AVERAGE OPEN MEDICAL LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						(0.97)	10.46	0.79	8.91	9.18	18.01	12.49	9.42	5.52	(1.46)	(11.41)	(3.09)	0.17	13.75	(0.56)	8.28
SECOND					6.30	1.31	9.58	3.98	2.94	20.38	16.17	12.23	7.14	0.62	(7.11)	(8.46)	(8.17)	4.43	11.68	9.74	
THIRD				2.78	12.16	(2.79)	7.33	8.63	2.77	26.56	14.12	8.24	5.04	(2.08)	(9.28)	(7.77)	(3.80)	10.37	4.80		
FOURTH			22.33	4.71	11.69	1.69	6.43	13.12	(5.13)	29.93	15.08	4.15	2.24	(3.13)	(9.33)	(3.16)	(5.01)	11.51			
FIFTH	16.10	24.73	5.47	12.40	(2.33)	15.43	12.93	(6.36)	27.35	15.51	1.88	5.52	(8.38)	(4.63)	(2.00)	(3.45)					

PERCENTAGE CHANGE IN AVERAGE CLOSED MEDICAL LOSS FOR INDEMNITY CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						9.58	5.88	6.87	12.78	11.01	14.48	17.23	15.00	16.82	7.17	(18.93)	(1.55)	4.67	6.36	5.51	2.96
SECOND					16.16	10.72	6.41	9.70	12.41	12.75	14.30	18.84	15.28	15.55	4.79	(17.85)	(1.89)	5.56	7.52	9.32	
THIRD				19.44	15.19	12.87	8.33	8.88	13.65	11.13	18.27	19.04	14.85	15.50	3.60	(15.59)	(3.81)	8.82	9.20		
FOURTH			20.29	20.13	15.10	13.92	10.66	7.39	13.30	13.24	18.55	20.06	16.15	15.03	0.78	(15.23)	(0.41)	7.27			
FIFTH	15.36	21.00	19.87	16.57	13.00	13.38	5.53	13.37	14.69	17.95	22.56	15.83	14.15	(0.69)	(14.40)	0.63					

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB

APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
 AVERAGE OPEN AND CLOSED MEDICAL LOSS FOR ALL CLAIMS

AVERAGE OPEN MEDICAL LOSS FOR ALL CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					7,431	7,235	8,124	7,714	9,140	9,529	12,142	12,838	14,304	15,769	15,186	13,442	13,145	12,329	13,029	13,242	14,764
SECOND				11,299	13,089	13,338	13,015	14,297	14,875	17,199	19,544	22,854	25,834	25,938	24,162	22,522	20,343	19,733	21,474	25,046	
THIRD			13,978	15,457	15,543	16,243	15,310	18,877	19,801	23,313	29,175	32,254	33,610	32,607	30,106	28,008	26,627	29,186	29,827		
FOURTH		12,771	18,036	19,585	18,177	20,341	19,351	23,753	23,683	31,214	35,679	33,690	38,443	37,701	35,656	33,792	31,654	35,272			
FIFTH	11,687	13,763	20,281	18,437	21,906	22,087	22,627	28,360	28,704	35,148	41,440	43,937	45,698	42,179	41,678	40,139	38,517				

AVERAGE CLOSED MEDICAL LOSS FOR ALL CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST					297	334	342	384	433	486	557	652	753	855	902	729	687	711	757	776	810
SECOND				320	381	435	442	489	552	630	724	865	1,003	1,131	1,174	959	902	930	996	1,059	
THIRD			307	364	426	481	504	556	635	716	847	1,017	1,174	1,332	1,374	1,140	1,054	1,115	1,189		
FOURTH		277	331	397	454	521	560	612	695	799	951	1,151	1,345	1,524	1,533	1,272	1,203	1,262			
FIFTH	250	295	355	419	487	558	612	657	751	872	1,034	1,271	1,489	1,679	1,667	1,384	1,327				

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB

APRIL 1, 2002 LOSS COST FILING

PENNSYLVANIA COMPENSATION RATING BUREAU  
ANNUAL PERCENTAGE CHANGE IN AVERAGE OPEN AND CLOSED MEDICAL LOSS FOR ALL CLAIMS

PERCENTAGE CHANGE IN AVERAGE OPEN MEDICAL LOSS FOR ALL CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						(2.64)	12.29	(5.05)	18.49	4.26	27.42	5.73	11.42	10.24	(3.70)	(11.48)	(2.21)	(6.21)	5.68	1.63	11.49
SECOND					15.84	1.90	(2.42)	9.85	4.04	15.62	13.63	16.94	13.04	0.40	(6.85)	(6.79)	(9.67)	(3.00)	8.82	16.63	
THIRD				10.58	0.56	4.50	(5.74)	23.30	4.89	17.74	25.14	10.55	4.20	(2.98)	(7.67)	(6.97)	(4.93)	9.61	2.20		
FOURTH			41.23	8.59	(7.19)	11.91	(4.87)	22.75	(0.29)	31.80	14.30	(5.57)	14.11	(1.93)	(5.42)	(5.23)	(6.33)	11.43			
FIFTH	17.76	47.36	(9.09)	18.82	0.83	2.44	25.34	1.21	22.45	17.90	6.03	4.01	(7.70)	(1.19)	(3.69)	(4.04)					

PERCENTAGE CHANGE IN AVERAGE CLOSED MEDICAL LOSS FOR ALL CLAIMS

REPORT LEVEL	POLICY YEAR																				
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
FIRST						12.46	2.40	12.28	12.76	12.24	14.61	17.06	15.49	13.55	5.50	(19.18)	(5.76)	3.49	6.47	2.51	4.38
SECOND					19.06	14.17	1.61	10.63	12.88	14.13	14.92	19.48	15.95	12.76	3.80	(18.31)	(5.94)	3.10	7.10	6.33	
THIRD				18.57	17.03	12.91	4.78	10.32	14.21	12.76	18.30	20.07	15.44	13.46	3.15	(17.03)	(7.54)	5.79	6.64		
FOURTH			19.49	19.94	14.36	14.76	7.49	9.29	13.56	14.96	19.02	21.03	16.85	13.31	0.59	(17.03)	(5.42)	3.90			
FIFTH	18.00	20.34	18.03	16.23	14.58	9.68	7.35	14.31	16.11	18.58	22.92	17.15	12.76	(0.71)	(16.98)	(4.12)					

SOURCE: UNIT STATISTICAL DATA AS REPORTED TO PCRB

Pennsylvania Compensation Rating Bureau

EXHIBIT II

Petitions Filed with Bureau of Workers Compensation (As Reported)\*

Type	1988	1989	1990	1991	1992 **	1993	1994	12 months	12 months	12 months	12 months	12 months	12 months	12 months	
								ending	ending	ending	ending	ending	ending		
								6/30/95	1995	6/30/96	1996	6/30/97	6/30/98	6/30/99	6/30/00
Claim	10,009	9,970	11,422	11,542	13,409	12,293	13,308	14,282	13,839	12,772	11,621	10,569	9,988	11,578	11,482
Commutation	1,886	2,091	2,216	2,629	3,100	3,434	3,793	3,972	4,147	4,278	4,285	4,008	1,577	130	29
Fatal	379	297	308	293	232	245	251	173	199	242	229	203	171	179	147
Modification	1,098	1,200	1,375	1,451	4,126	5,013	5,539	5,943	6,005	5,883	5,332	4,599	3,852	4,400	4,198
Penalty	570	887	1,186	1,829	2,678	2,961	3,261	3,578	3,810	3,841	3,836	4,108	4,484	5,386	5,618
Review	1,353	1,936	2,797	3,494	3,489	1,913	1,906	2,179	2,350	2,331	2,237	2,281	2,576	2,615	3,182
Medical Review	---	---	---	---	2,099	3,941	1,438	1,335	1,285	1,224	1,065	1,091	1,290	1,617	1,232
Reinstatement	1,288	1,542	1,936	2,197	2,672	2,805	2,908	2,985	3,030	3,045	2,901	2,902	2,907	3,170	2,914
Set Aside Final	547	467	466	468	431	458	322	278	253	240	216	192	138	126	97
Supersedeas	796	919	818	1,240	1,437	2,153	2,173	2,659	2,852	2,764	2,731	2,900	2,537	1,839	214
Suspension	2,267	2,829	2,965	3,437	7,345	9,147	10,483	11,528	11,728	11,102	9,734	8,485	6,437	7,083	6,147
Termination	7,408	8,575	10,863	10,687	10,899	9,992	10,396	11,332	11,378	10,511	9,192	7,516	5,360	6,323	4,564
301 I	161	132	135	81	130	139	180	137	132	156	153	145	86	187	87
O.D. Fatal	93	86	85	65	69	48	46	66	21	12	17	27	15	22	13
O. D. Fatal Special	14	8	11	10	0	1	2	2	2	2	2	2	3	5	5
301 G	4	9	8	1	5	1	0	2	5	4	2	2	0	0	0
Subsequent Injury	1	1	1	1	1	0	2	2	21	26	16	19	21	0	0
Utilization Review	---	---	---	---	---	---	992	2,279	2,310	1,680	1,712	2,363	2,210	1,526	2,185
Remands	---	---	616	---	---	---	---	---	---	---	---	---	---	---	---
Joinder	---	---	---	198	944	889	906	1,040	928	791	815	858	687	610	644
Physical Exam	---	---	---	61	248	1,413	2,634	2,246	3,020	3,090	2,971	2,635	2,237	2,165	1,938
Challenge	---	---	---	---	---	---	---	---	---	---	---	694	1,131	1,155	1,231
Comp/Release	---	---	---	---	---	---	---	---	---	---	---	1,311	6,714	7,906	6,175
Special Term	---	---	---	---	---	---	---	---	---	---	---	1,640	2,393	1,578	2,017
Expert Interview	---	---	---	---	---	---	---	---	---	---	---	---	24	121	168
Grand Total	27,874	30,949	37,208	39,684	53,314	56,846	60,540	66,018	67,315	63,994	59,067	58,550	56,838	59,721	54,287

\* The categories "Counsel Fees" and "Miscellaneous" have been removed consistent with the reporting practices of the Department of Labor & Industry.

\*\* Prior to March, 1992 multiple petition filings were counted only once and within a single petition category. Multiple petition filings are now counted once within each relevant petition category.

## PENNSYLVANIA COMPENSATION RATING BUREAU

APRIL 1, 2002 LOSS COST FILING

## FINANCIAL DATA LOSS DEVELOPMENT - INDEMNITY LOSS

Development Periods	Incurring Loss Development Ratio CY 1994	Incurring Loss Development Ratio CY 1995	Incurring Loss Development Ratio CY 1996	Incurring Loss Development Ratio CY 1997	Incurring Loss Development Ratio CY 1998	Incurring Loss Development Ratio CY 1999	Incurring Loss Development Ratio CY 2000
19-20	NA	NA	NA	NA	0.9965	1.0027	1.0022
18-19	NA	NA	NA	1.0006	1.0026	1.0022	0.9982
17-18	NA	NA	0.9995	0.9944	1.0009	1.0043	0.9978
16-17	NA	1.0000	1.0012	0.9963	0.9975	0.9997	1.0011
15-16	1.0033	0.9971	1.0011	0.9974	1.0018	1.0014	1.0008
14-15	1.0038	0.9994	0.9990	0.9967	1.0050	0.9990	0.9955
13-14	0.9989	1.0045	0.9991	0.9939	1.0021	0.9967	0.9968
12-13	0.9904	1.0049	0.9940	0.9982	1.0037	0.9997	0.9979
11-12	1.0100	1.0020	0.9972	1.0053	1.0053	1.0001	1.0018
10-11	1.0013	0.9984	1.0007	0.9996	0.9994	0.9984	1.0003
9-10	1.0023	1.0000	1.0065	0.9985	1.0010	0.9997	0.9975
8-9	1.0145	1.0097	0.9997	1.0062	0.9991	0.9986	0.9998
7-8	1.0098	1.0079	1.0073	1.0125	1.0033	0.9974	0.9967
6-7	1.0207	1.0244	1.0025	1.0190	1.0055	0.9911	0.9939
5-6	1.0340	1.0298	1.0048	1.0489	1.0087	1.0012	1.0051
4-5	1.0615	1.0750	1.0481	1.1117	1.0556	1.0394	1.0269
3-4	1.1114	1.1188	1.0854	1.1470	1.1389	1.0719	1.0661
2-3	1.1926	1.2042	1.1983	1.2180	1.2210	1.1575	1.0128
1-2	1.3819	1.3872	1.3962	1.4048	1.4435	1.3865	1.3444

  

Development Periods	Paid Loss Development Ratio CY 1994	Paid Loss Development Ratio CY 1995	Paid Loss Development Ratio CY 1996	Paid Loss Development Ratio CY 1997	Paid Loss Development Ratio CY 1998	Paid Loss Development Ratio CY 1999	Paid Loss Development Ratio CY 2000
19-20	NA	NA	NA	NA	1.0157	1.0127	1.0113
18-19	NA	NA	NA	1.0163	1.0180	1.0114	1.0087
17-18	NA	NA	1.0156	1.0169	1.0155	1.0117	1.0069
16-17	NA	1.0179	1.0165	1.0185	1.0160	1.0142	1.0111
15-16	1.0234	1.0175	1.0159	1.0215	1.0153	1.0138	1.0119
14-15	1.0205	1.0173	1.0169	1.0229	1.0194	1.0167	1.0116
13-14	1.0200	1.0255	1.0227	1.0258	1.0176	1.0165	1.0139
12-13	1.0221	1.0205	1.0223	1.0241	1.0230	1.0170	1.0130
11-12	1.0231	1.0263	1.0263	1.0321	1.0258	1.0170	1.0146
10-11	1.0276	1.0304	1.0344	1.0373	1.0274	1.0198	1.0173
9-10	1.0330	1.0373	1.0431	1.0452	1.0325	1.0277	1.0201
8-9	1.0469	1.0548	1.0548	1.0508	1.0357	1.0300	1.0242
7-8	1.0554	1.0615	1.0685	1.0613	1.0466	1.0395	1.0368
6-7	1.0778	1.0821	1.0886	1.0769	1.0616	1.0623	1.0423
5-6	1.1025	1.0974	1.1091	1.1022	1.0919	1.0835	1.0610
4-5	1.1468	1.1581	1.1633	1.1422	1.1344	1.1271	1.0952
3-4	1.2277	1.2396	1.2550	1.2363	1.2490	1.1838	1.1639
2-3	1.3703	1.3762	1.3909	1.4116	1.4157	1.3740	1.3446
1-2	1.6920	1.6733	1.7516	1.7696	1.7801	1.7745	1.7841

## PENNSYLVANIA COMPENSATION RATING BUREAU

APRIL 1, 2002 LOSS COST FILING

## FINANCIAL DATA LOSS DEVELOPMENT - MEDICAL LOSS

Development Periods	Incurred Loss Development Ratio CY 1994	Incurred Loss Development Ratio CY 1995	Incurred Loss Development Ratio CY 1996	Incurred Loss Development Ratio CY 1997	Incurred Loss Development Ratio CY 1998	Incurred Loss Development Ratio CY 1999	Incurred Loss Development Ratio CY 2000
19-20	NA	NA	NA	NA	1.0193	1.0157	1.0331
18-19	NA	NA	NA	1.0102	1.0152	1.0123	0.9999
17-18	NA	NA	0.9724	1.0461	1.0155	1.0045	1.0149
16-17	NA	1.0180	1.0223	1.0105	1.0001	1.0356	1.0152
15-16	1.0682	1.0241	1.0101	1.0150	1.0113	1.0078	1.0175
14-15	1.0528	1.0199	1.0223	1.0226	1.0077	1.0002	1.0056
13-14	1.0271	1.0500	1.0222	1.0121	1.0002	1.0114	0.9996
12-13	1.0275	1.0110	1.0277	1.0076	1.0044	1.0221	1.0087
11-12	1.0325	1.0193	1.0171	1.0087	1.0050	1.0017	1.0074
10-11	1.0298	1.0185	1.0364	0.9949	1.0179	1.0054	1.0138
9-10	1.0361	1.0286	1.0336	0.9999	1.0067	1.0109	1.0056
8-9	1.0470	1.0244	1.0383	1.0065	1.0131	1.0041	1.0125
7-8	1.0376	1.0109	1.0170	1.0115	1.0121	1.0103	1.0141
6-7	1.0452	1.0209	1.0184	1.0000	1.0171	0.9998	0.9993
5-6	1.0383	1.0202	1.0229	1.0065	1.0173	1.0041	1.0112
4-5	1.0452	1.0284	1.0151	1.0202	0.9990	1.0079	1.0132
3-4	1.0622	1.0333	1.0142	1.0173	1.0154	1.0106	1.0199
2-3	1.1045	1.0744	1.0461	1.0380	1.0476	1.0289	1.0473
1-2	1.2008	1.2098	1.1393	1.1010	1.1145	1.1133	1.1000

  

Development Periods	Paid Loss Development Ratio CY 1994	Paid Loss Development Ratio CY 1995	Paid Loss Development Ratio CY 1996	Paid Loss Development Ratio CY 1997	Paid Loss Development Ratio CY 1998	Paid Loss Development Ratio CY 1999	Paid Loss Development Ratio CY 2000
19-20	NA	NA	NA	NA	1.0169	1.0191	1.0207
18-19	NA	NA	NA	1.0100	1.0207	1.0166	1.0173
17-18	NA	NA	1.0132	1.0195	1.0142	1.0159	1.0112
16-17	NA	1.0226	1.0235	1.0137	1.0163	1.0187	1.0144
15-16	1.0214	1.0459	1.0158	1.0221	1.0163	1.0145	1.0132
14-15	1.0398	1.0161	1.0164	1.0173	1.0154	1.0175	1.0154
13-14	1.0254	1.0345	1.0176	1.0180	1.0145	1.0181	1.0123
12-13	1.0242	1.0193	1.0171	1.0165	1.0179	1.0143	1.0135
11-12	1.0220	1.0203	1.0147	1.0183	1.0147	1.0155	1.0144
10-11	1.0193	1.0217	1.0217	1.0150	1.0125	1.0155	1.0163
9-10	1.0247	1.0243	1.0217	1.0144	1.0167	1.0172	1.0179
8-9	1.0344	1.0280	1.0201	1.0155	1.0173	1.0200	1.0147
7-8	1.0296	1.0263	1.0197	1.0198	1.0189	1.0184	1.0190
6-7	1.0396	1.0278	1.0245	1.0215	1.0214	1.0249	1.0194
5-6	1.0439	1.0307	1.0298	1.0259	1.0275	1.0285	1.0260
4-5	1.0568	1.0410	1.0342	1.0361	1.0368	1.0334	1.0325
3-4	1.0766	1.0704	1.0584	1.0501	1.0583	1.0570	1.0459
2-3	1.1263	1.0996	1.0906	1.0927	1.1087	1.0898	1.0905
1-2	1.3075	1.2968	1.2764	1.2628	1.2804	1.2691	1.2997

PENNSYLVANIA COMPENSATION RATING BUREAU  
APRIL 1, 2002 LOSS COST FILING  
RATIOS OF LOSS TO EXPECTED LOSS - ON APRIL 1, 2002 LEVEL  
DERIVED BY INDICATED LOSS DEVELOPMENT METHODS

Policy Year	Incurred	Paid -to- 2nd	Paid -to- 3rd	Paid -to- 4th	Paid -to- 5th	Paid -to- 6th	Paid -to- 7th	Paid -to- 8th	Paid -to- 9th	Paid -to- 10th	Paid -to- 11th	Paid -to- 12th	Paid -to- 13th	Paid -to- 14th	Paid -to- 15th	Paid -to- 16th	Paid -to- 17th	Paid -to- 18th	Paid -to- 19th	Paid -to- 20th
<b>INDEMNITY LOSS</b>																				
82	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3931	0.3973	0.4018
83	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4241	0.4310	0.4404
84	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4874	0.4933	0.4969	0.5077
85	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5252	0.5287	0.5350	0.5389	0.5446
86	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5715	0.5787	0.5857	0.5899	0.5962
87	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	0.6305	0.6344	0.6368	0.6445	0.6492	0.6561
88	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6283	0.6398	0.6512	0.6552	0.6578	0.6657	0.6705	0.6776
89	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7281	0.7388	0.7511	0.7645	0.7693	0.7723	0.7816	0.7872	0.7955
90	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7260	0.7327	0.7450	0.7583	0.7630	0.7659	0.7751	0.7808
91	0.7038	0.7038	0.7038	0.7038	0.7038	0.7038	0.7038	0.7038	0.7038	0.7072	0.7136	0.7202	0.7322	0.7453	0.7499	0.7528	0.7619	0.7674	0.7755	0.7842
92	0.6447	0.6447	0.6447	0.6447	0.6447	0.6447	0.6447	0.6447	0.6447	0.6375	0.6404	0.6462	0.6522	0.6631	0.6749	0.6791	0.6817	0.6899	0.6949	0.7022
93	0.6275	0.6275	0.6275	0.6275	0.6275	0.6275	0.6275	0.6382	0.6365	0.6394	0.6452	0.6511	0.6620	0.6738	0.6780	0.6806	0.6888	0.6938	0.7012	0.709
94	0.6019	0.6019	0.6019	0.6019	0.6019	0.6019	0.6252	0.6284	0.6267	0.6296	0.6353	0.6412	0.6519	0.6635	0.6676	0.6702	0.6783	0.6832	0.6904	0.6981
95	0.5386	0.5386	0.5386	0.5386	0.5386	0.5711	0.5892	0.5922	0.5906	0.5933	0.5987	0.6042	0.6144	0.6253	0.6292	0.6316	0.6392	0.6438	0.6506	0.6579
96	0.4275	0.4275	0.4275	0.4275	0.4594	0.4774	0.4926	0.4951	0.4938	0.4960	0.5005	0.5051	0.5136	0.5227	0.5260	0.5280	0.5343	0.5382	0.5439	0.55
97	0.4494	0.4494	0.4494	0.4679	0.4921	0.5114	0.5276	0.5303	0.5289	0.5313	0.5361	0.5411	0.5501	0.5599	0.5634	0.5656	0.5724	0.5765	0.5826	0.5891
98	0.4229	0.4229	0.4256	0.4402	0.4631	0.4812	0.4964	0.4990	0.4976	0.4999	0.5044	0.5091	0.5176	0.5268	0.5301	0.5322	0.5385	0.5424	0.5482	0.5543
99	0.4249	0.4421	0.4442	0.4595	0.4833	0.5023	0.5182	0.5208	0.5194	0.5218	0.5265	0.5314	0.5403	0.5499	0.5533	0.5555	0.5621	0.5662	0.5722	0.5786
<b>MEDICAL LOSS</b>																				
82	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1529	0.1522	0.1567
83	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1687	0.1741	0.1783
84	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2049	0.2046	0.2084	0.2134
85	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2508	0.2386	0.2390	0.2435	0.2493
86	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2674	0.2798	0.2731	0.2737	0.2788
87	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3166	0.3273	0.3310	0.3231	0.3237	0.3297	0.3278
88	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3489	0.3568	0.3685	0.3727	0.3637	0.3644	0.3713
89	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4306	0.4349	0.4386	0.4529	0.4580	0.4471	0.4479	0.4563	0.4672
90	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4461	0.4508	0.4567	0.4606	0.4757	0.4810	0.4695	0.4704	0.4792	0.4764
91	0.4662	0.4662	0.4662	0.4662	0.4662	0.4662	0.4662	0.4662	0.4662	0.4698	0.4727	0.4788	0.4829	0.4987	0.5043	0.4922	0.4932	0.5024	0.4995	0.5144
92	0.4493	0.4493	0.4493	0.4493	0.4493	0.4493	0.4493	0.4493	0.4525	0.4547	0.4575	0.4634	0.4674	0.4827	0.4881	0.4764	0.4773	0.4863	0.4834	0.4979
93	0.4370	0.4370	0.4370	0.4370	0.4370	0.4370	0.4370	0.4421	0.4460	0.4482	0.4509	0.4567	0.4606	0.4757	0.4810	0.4695	0.4705	0.4793	0.4764	0.4907
94	0.4186	0.4186	0.4186	0.4186	0.4186	0.4186	0.4260	0.4284	0.4321	0.4343	0.4369	0.4425	0.4463	0.4610	0.4661	0.4550	0.4558	0.4644	0.4616	0.4755
95	0.4172	0.4172	0.4172	0.4172	0.4172	0.4207	0.4261	0.4285	0.4323	0.4344	0.4371	0.4427	0.4465	0.4611	0.4663	0.4551	0.4560	0.4646	0.4618	0.4756
96	0.3878	0.3878	0.3878	0.3878	0.3837	0.3872	0.3922	0.3944	0.3979	0.3998	0.4023	0.4075	0.4109	0.4244	0.4292	0.4189	0.4197	0.4276	0.4251	0.4378
97	0.4163	0.4163	0.4163	0.4160	0.4145	0.4183	0.4237	0.4260	0.4298	0.4319	0.4345	0.4401	0.4439	0.4585	0.4636	0.4525	0.4534	0.4619	0.4591	0.4729
98	0.4190	0.4190	0.4052	0.4057	0.4042	0.4079	0.4132	0.4155	0.4191	0.4212	0.4238	0.4292	0.4329	0.4471	0.4521	0.4412	0.4421	0.4504	0.4477	0.4611
99	0.4011	0.4073	0.4018	0.4023	0.4008	0.4045	0.4097	0.4119	0.4156	0.4176	0.4202	0.4256	0.4292	0.4433	0.4482	0.4375	0.4384	0.4466	0.4440	0.4572