Bickmore

Actuarial Review of the Self-Insured Workers' Compensation Program

Outstanding Liabilities as of June 30, 2016 and June 30, 2017

Forecast for Fiscal Years 2016-17 and 2017-18

Presented to

Trindel Insurance Fund

December 9, 2016

Bickmore

Friday, December 9, 2016

Mr. David Nelson
Executive Director
Trindel Insurance Fund
P.O. Box 2069
Weaverville, CA 96093

Re: Actuarial Review of the Self-Insured Workers' Compensation Program

Dear Mr. Nelson:

As you requested, we have completed our review of Trindel Insurance Fund's self-insured workers' compensation program. Assuming an SIR of $300,000 per occurrence, we estimate the ultimate cost of claims and expenses for claims incurred during the 2016-17 and 2017-18 program years to be $8,543,000 and $9,130,000, respectively. These figures reflect the additional exposure from Sutter County becoming a member of the program effective July 1, 2015. These amounts include allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE), and a discount for anticipated investment income. ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes). The discount for investment income is calculated based on the likely payout pattern of the Fund's claims, assuming a 1.50% return on investments per year. For budgeting purposes, the expected costs of 2016-17 and 2017-18 claims translate to rates of $3.84 and $3.97 per $100 of payroll, respectively.

In addition, we estimate the program's liability for outstanding claims to be $18,697,000 and $21,718,000 as of June 30, 2016 and June 30, 2017, respectively, again including ALAE and ULAE, and discounted for anticipated investment income. Given estimated program assets of $22,702,000 as of June 30, 2016, the program is currently funded above the 85% confidence level.

The $18,697,000 estimate is the minimum liability to be booked by the Fund at June 30, 2016 for its workers' compensation program, in accordance with Governmental Accounting Standards Board (GASB) Statement #10. GASB #10 requires the Fund to accrue a liability on its financial statements for the ultimate cost of claims and expenses associated with all reported and unreported claims, including ALAE and ULAE. GASB #10 does not prohibit the discounting of losses to recognize investment income.

Our conclusions regarding the Fund's liability for unpaid loss and loss adjustment expenses (LAE) at June 30, 2016 are summarized in the table below.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Estimated Liability for Unpaid Loss and LAE
at June 30, 2016

	Expected	Marginally Acceptable 70% CL	Recommended Range Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	$19,157,000					
ULAE	1,352,000					
Investment Income Offset	(1,812,000)					
Discounted Loss and LAE	$18,697,000	$20,174,000	$20,735,000	$21,389,000	$22,175,000	$23,222,000
Assets as of 6/30/16	22,702,000					
Surplus or (Deficit)	$4,005,000	$2,528,000	$1,967,000	$1,313,000	$527,000	($520,000)

Our conclusions regarding the Fund's liability for unpaid loss and loss adjustment expenses (LAE) at June 30, 2017 are summarized in the table below.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Estimated Liability for Unpaid Loss and LAE
at June 30, 2017

	Expected	Marginally Acceptable 70% CL	Recommended Range Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	$22,320,000					
ULAE	1,504,000					
Investment Income Offset	(2,106,000)					
Discounted Loss and LAE	$21,718,000	$23,434,000	$24,085,000	$24,845,000	$25,758,000	$26,974,000
Assets as of 6/30/17	26,079,000					
Surplus or (Deficit)	$4,361,000	$2,645,000	$1,994,000	$1,234,000	$321,000	($895,000)

GASB #10 does not address an actual funding requirement for the program, but only speaks to the liability to be recorded on the Fund's financial statements.

Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a margin for contingencies. Generally, the amount should be sufficient to bring funding to the 75% to 85% confidence level for primary programs. We consider funding to the 70% confidence level to be marginally acceptable and funding to the 90% confidence level to be conservative.

Furthermore, the CSAC Excess Insurance Authority standard states that based upon the actuarial recommendations, the member should maintain reserves and make funding contributions equal to or exceeding the present value of expected losses and a reasonable margin for contingencies.

The table below shows our funding recommendations for Trindel Insurance Fund for the 2016-17 fiscal year.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Funding Guidelines for 2016-17
Self-Insured Retention (SIR) of $300,000

			Recommended Range			
	Expected	Marginally Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	$8,528,000					
ULAE	742,000					
Investment Income Offset	(727,000)					
Discounted Loss and LAE	$8,543,000	$9,363,000	$9,679,000	$10,047,000	$10,491,000	$11,080,000
Non-claims Related Expenses	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
Indicated Funding	$10,343,000	$11,163,000	$11,479,000	$11,847,000	$12,291,000	$12,880,000
Rate per $100 of 2016-17 Payroll	$4.64	$5.01	$5.15	$5.32	$5.52	$5.78

The funding recommendations shown in the table above do not include any recognition of the existing funding margin at June 30, 2016.

The table below shows our funding recommendations for Trindel Insurance Fund for the 2017-18 fiscal year.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Funding Guidelines for 2017-18
Self-Insured Retention (SIR) of $300,000

	Expected	Marginally Acceptable 70% CL	Recommended Range Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	$9,119,000					
ULAE	788,000					
Investment Income Offset	(777,000)					
Discounted Loss and LAE	$9,130,000	$10,006,000	$10,344,000	$10,737,000	$11,212,000	$11,842,000
Non-claims Related Expenses	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000
Indicated Funding	$11,080,000	$11,956,000	$12,294,000	$12,687,000	$13,162,000	$13,792,000
Rate per $100 of 2017-18 Payroll	$4.82	$5.20	$5.35	$5.52	$5.73	$6.00

The funding recommendations shown in the table above do not include any recognition of the existing funding margin at June 30, 2017.

The loss projections in this report reflect the estimated impact of benefit legislation contained in AB749, AB227, SB228, SB899, SB863, and recent WCAB court decisions based upon information provided by the WCIRB.

The ultimate impact on loss costs of legislated benefit adjustments are generally difficult to forecast in advance because the changes typically take place over a period of several years following enactment. Furthermore, actuarially derived benefit level evaluations often underestimate actual future cost levels. The shortfalls result from a variety of circumstances, including: increases in utilization levels, unanticipated changes in administrative procedures, and cost shifting among benefit categories. Thus, actual cost increases could differ, perhaps substantially, from the WCIRB's estimates.

The report that follows outlines the scope of our study, its background, and our conclusions, recommendations, and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety, including the graphs, attachments, exhibits and appendices. Our report has been developed for the Fund's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to Trindel Insurance Fund in preparing this report. Please feel free to call Robin Davis at (916) 244-1133 or Mike Harrington at (916) 244-1162 with any questions you may have concerning this report.

Sincerely,

Bickmore

Robin M. Davis

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I. BACKGROUND

Trindel Insurance Fund began its self-insured workers' compensation program with two member counties, Trinity and Del Norte, on July 1, 1980. Nine additional members have joined the Fund since that date, with the most recent being Sutter County effective July 1, 2015. The table below shows the date that each member Fund joined:

Member County	Date Joined
Alpine	July 1, 1986
Colusa	July 1, 1986
Del Norte	July 1, 1980
Lassen	July 1, 1986
Modoc	July 1, 1986
Mono	July 1, 2000
Plumas	January 1, 2010
San Benito	March 18, 1993
Sierra	July 1, 1986
Sutter	July 1, 2015
Trinity	July 1, 1980

With the exception of Mono and Plumas Counties, the Trindel Insurance Fund was a member of the CSAC Excess Insurance Authority's Primary Worker's Compensation (PWC) program until July 1, 2008 when it became self-insured. Trindel currently has a self-insured retention of $300,000, and excess coverage is provided by the CSAC Excess Insurance Authority. Claims administration services are provided by the Trindel Insurance Fund. Additional background on the program is given in Appendix K.

The purpose of this review is to provide a guide to the Fund to determine reasonable funding levels for its self-insurance program according to the funding policy the Fund has adopted and to comply with Governmental Accounting Standards Board Statements #10 and #30. The specific objectives of the study are to estimate the Fund's liability for outstanding claims as of June 30, 2016 and June 30, 2017, project ultimate loss costs for 2016-17 and 2017-18, and provide funding guidelines to meet these liabilities and future costs.

II. CONCLUSIONS AND RECOMMENDATIONS

A. LIABILITY FOR OUTSTANDING CLAIMS

Graphs 1a and 1b on the following pages summarize our assessment of the Fund's funding position as of June 30, 2016 and June 30, 2017. The dark-colored bars indicate our estimates of the program's liability for outstanding claims before recognition of the investment income that can be earned on the assets held before the claim payments come due. The horizontal line across each graph indicates the Fund's available assets at June 30th of each year.

Our best estimate of the full value of the Fund's liability for outstanding claims within its self-insured retention (SIR) is $20,509,000 as of June 30, 2016, and $23,824,000 as of June 30, 2017. These amounts include losses, allocated loss adjustment expenses (ALAE), and unallocated loss adjustment expenses (ULAE). ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer claims to final settlement, which may be years in the future (e.g. claims adjusters' salaries, taxes).

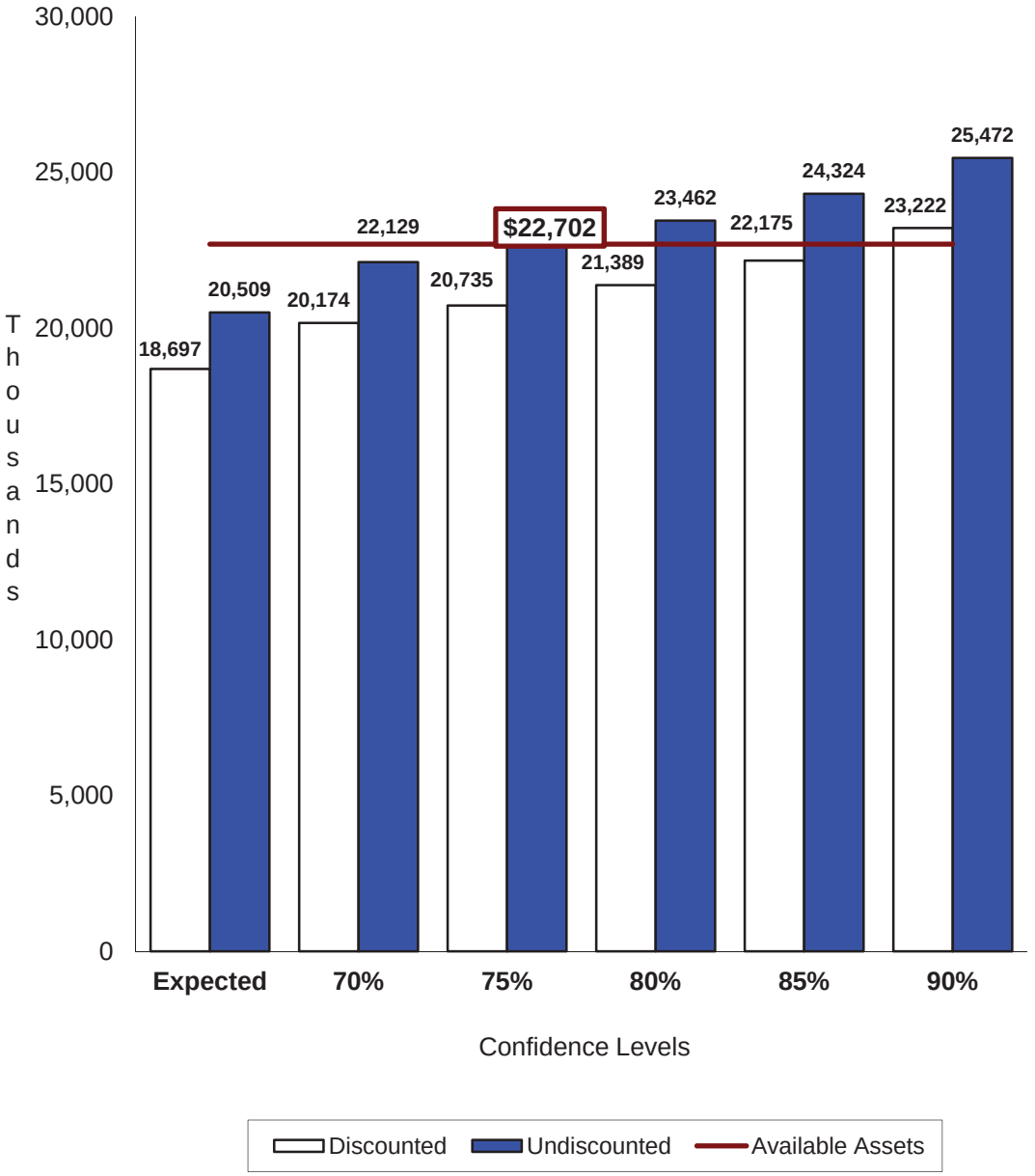
There is some measure of uncertainty associated with our best estimate because of the random nature of much of the process that determines ultimate claims costs. For this reason, we generally recommend that a program such as this include some funding margin for the possibility that actual loss costs will be greater than the best estimate. We generally measure the amount of this margin by thinking in terms of the probability distribution of actual possible results around our best estimate. As the margin grows, the probability that the corresponding funding amount will be sufficient to meet actual claim liabilities increases. We typically refer to this probability as the "confidence level" of funding. Graphs 1a and 1b show the liabilities for outstanding claims at several confidence levels that are typically of interest to risk managers in formulating funding policies for self-insurance programs.

The Fund can earn investment income on the assets it holds until claims payments come due. Assuming a long-term average annual return on investments of 1.50%, we estimate the impact of investment income earnings to be about 8.8% if the program is funded within the range indicated in the graphs, resulting in a discounted liability for outstanding claims of $18,697,000 as of June 30, 2016, and $21,718,000 as of June 30, 2017.

Investment income earnings will be less than this when the program does not maintain sufficient funding, and more when there is excess funding. Thus, thinking in terms of liabilities discounted for investment income can actually mask funding deficiencies and redundancies that might otherwise be obvious. However, the discounted liabilities do represent legitimate funding targets. The light-colored bars on Graphs 1a and 1b show our estimates of the Fund's discounted liability for outstanding claims.

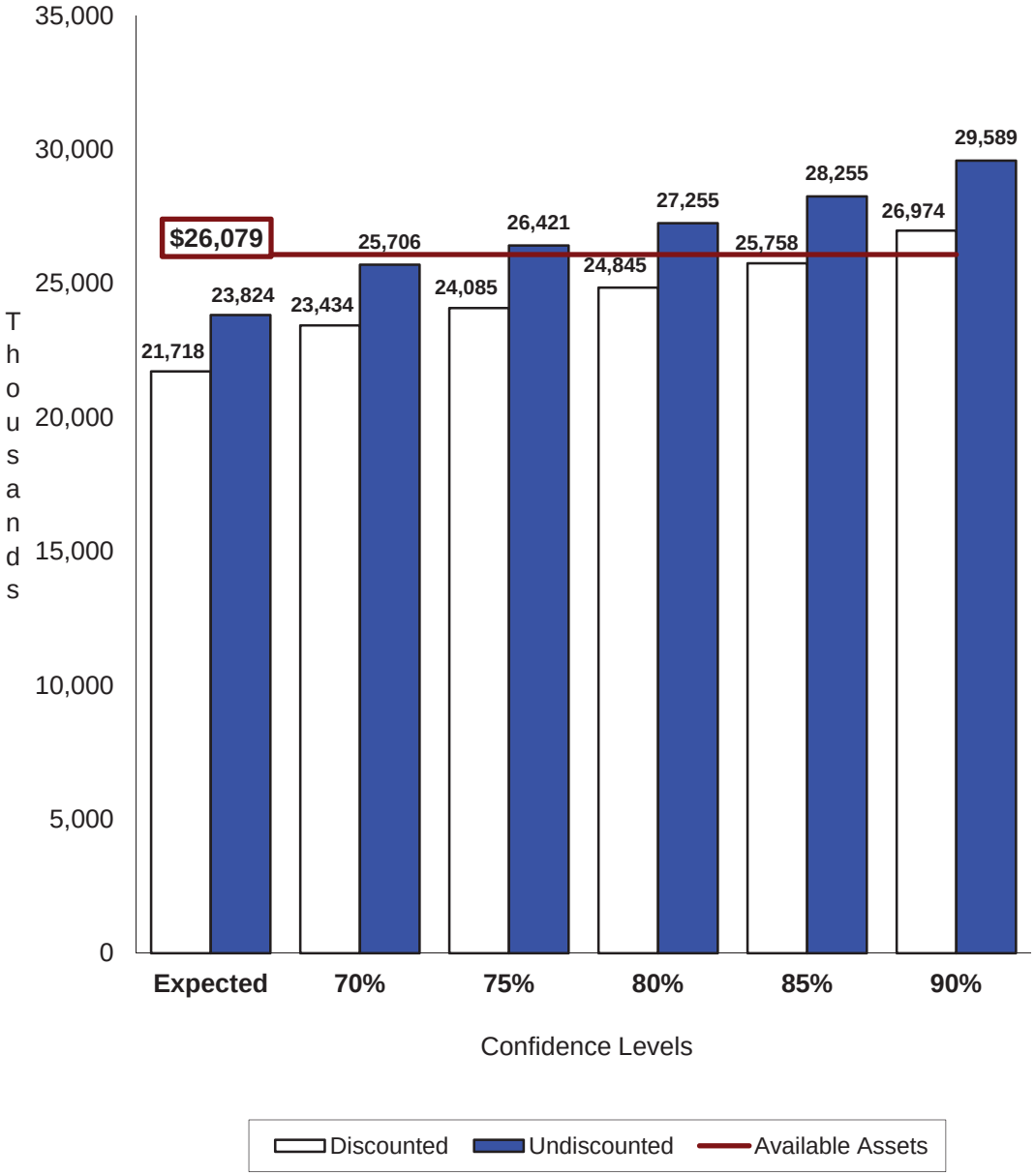
Graph 1a

Trindel Insurance Fund -
Workers' Compensation
Available Assets vs Outstanding Liability ($000's)
at June 30, 2016



Graph 1b

Trindel Insurance Fund -
Workers' Compensation
Available Assets vs Outstanding Liability ($000's)
at June 30, 2017



The table below displays a breakdown of the program's outstanding loss and LAE liabilities into case reserves and incurred but not reported (IBNR) reserves at June 30, 2016, before recognition of investment income.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Estimated Liability for Unpaid Loss and LAE at June 30, 2016

Year	Case Reserves	IBNR Reserves	Total Outstanding
Prior	$60,992	$42,372	$103,364
1996-97	5,500	8,090	13,590
1997-98	41,368	10,673	52,041
1998-99	0	0	0
1999-00	24,700	12,291	36,991
2000-01	37,970	26,647	64,617
2001-02	19,375	23,449	42,824
2002-03	7,404	42,932	50,336
2003-04	0	50,038	50,038
2004-05	41,422	17,790	59,212
2005-06	0	31,455	31,455
2006-07	102,665	31,798	134,463
2007-08	27,313	25,544	52,857
2008-09	96,196	214,400	310,596
2009-10	244,998	278,656	523,654
2010-11	604,191	295,086	899,277
2011-12	576,566	347,052	923,618
2012-13	1,682,117	733,946	2,416,063
2013-14	1,174,555	1,378,253	2,552,808
2014-15	1,938,611	2,009,674	3,948,285
2015-16	2,035,093	4,856,116	6,891,209
Loss and ALAE	$8,721,036	$10,436,262	$19,157,298
ULAE		1,351,524	1,351,524
Total	$8,721,036	$11,787,786	$20,508,822

The table below displays a breakdown of the program's outstanding loss and LAE liabilities into case reserves and incurred but not reported (IBNR) reserves at June 30, 2017, before recognition of investment income.

Trindel Insurance Fund
Self-Insured Workers' Compensation Program
Estimated Liability for Unpaid Loss and LAE at June 30, 2017

Year	Case Reserves	IBNR Reserves	Total Outstanding
Prior	$51,694	$36,372	$88,066
1996-97	4,850	6,090	10,940
1997-98	37,134	7,673	44,807
1998-99	0	0	0
1999-00	23,150	9,291	32,441
2000-01	35,991	21,647	57,638
2001-02	18,622	19,449	38,071
2002-03	8,817	35,932	44,749
2003-04	2,546	42,038	44,584
2004-05	36,553	15,790	52,343
2005-06	1,037	26,455	27,492
2006-07	91,874	27,798	119,672
2007-08	24,970	21,544	46,514
2008-09	86,129	184,400	270,529
2009-10	211,115	237,656	448,771
2010-11	486,717	256,086	742,803
2011-12	446,926	303,052	749,978
2012-13	933,823	324,946	1,258,769
2013-14	947,472	1,166,253	2,113,725
2014-15	1,677,143	1,390,674	3,067,817
2015-16	2,183,592	3,219,116	5,402,708
2016-17	1,995,144	5,663,000	7,658,144
Loss and ALAE	$9,305,299	$13,015,262	$22,320,561
ULAE		1,503,767	1,503,767
Total	$9,305,299	$14,519,029	$23,824,328

B. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement #60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's statements #10 and #30. These regulations are required to be applied by the Fund.

GASB #10 and #30 do not address funding requirements. They do, however, allow a range of funded amounts to be recognized for accounting purposes; specifically, GASB #10 and #30 which allow recognition of a funding margin for unexpectedly adverse loss experience. Thus, for accounting purposes, it is possible to formulate a funding policy from a range of alternatives. The uncertainty in any estimate of the program's liability for outstanding claims should be taken into consideration in determining funding policy, but it may be offset by recognizing anticipated investment income earnings. This usually means developing a funding program based on discounted claims costs with some margin for unexpected adverse loss experience.

The amount of the margin should be a question of long-term funding policy. We recommend that the margin be determined by thinking in terms of the probability that a given level of funding will prove to be adequate. For example, a reasonable goal might be to maintain a fund at the 85% confidence level.

A key factor to consider in determining funding policy is the degree to which stability is required in the level of contributions to the program from year to year. If you elect to fund at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for current claims. The additional contributions for years by that time long past may be required at the same time that costs are increasing dramatically on then-current claims. The burden of funding increases on past years as well as on current years, may well be prohibitive.

We generally recommend maintaining program funding at the 80% confidence level, after recognition of investment income, with a recommended range of the 75% to 85% confidence levels. We tend to think of the 70% confidence level as marginally acceptable and of the 90% confidence level as conservative. We recommend the 75% to 85% confidence level range because the probabilities are reasonably high that resulting funding will be sufficient to meet claim liabilities, yet the required margins are not so large that they will cause most self-insured entities to experience undue financial hardship. In addition, within this range, anticipated investment income generally offsets the required margin for the most part, which means that it is also reasonable to think of the liabilities as being stated on an undiscounted basis.

We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, the Fund's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short and long-term funding goals, which may be the same in some years, but different in others.

In general, we recommend that you fund each year's claims costs in that year. When surpluses or deficiencies have developed on outstanding liabilities and funding adjustments are necessary, they should be clearly identified as such so that the habit of funding each year's claims costs that year is maintained. We also recommend that you reduce surplus funding more slowly than you would accumulate funding to make up a deficiency.

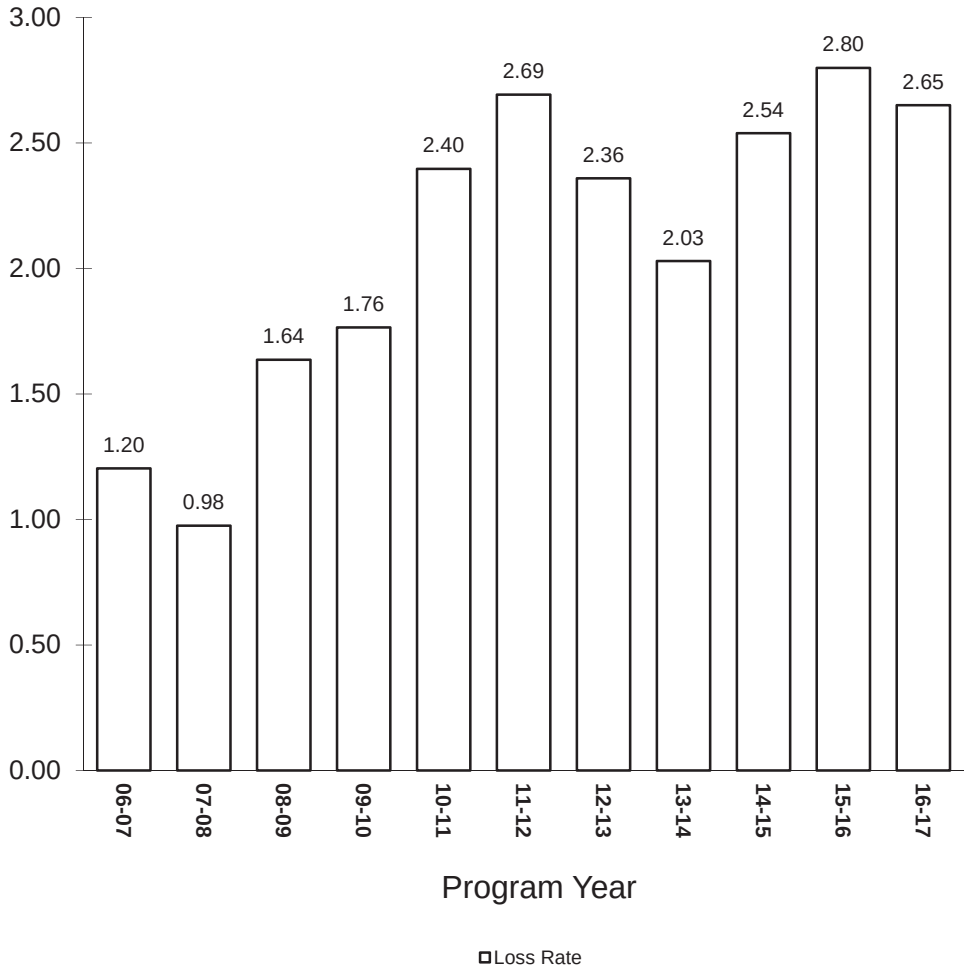
It is estimated that program assets were $22,702,000 at June 30, 2016, resulting in the program being funded above the 85% confidence level, and will be $26,079,000 at June 30, 2017.

C. HISTORICAL TRENDS IN THE SELF-INSURANCE PROGRAM

The Fund's average dollars of loss per $100 of payroll, or loss rate, has fluctuated over the past 6 years from 2010-11 to 2015-16 but tends to be generally increasing. Our projected loss rate of $2.65 per $100 of payroll for the 2016-17 program year is a similar to the average of the most recent four years and reflects a small upward trend. See Graph 2 below.

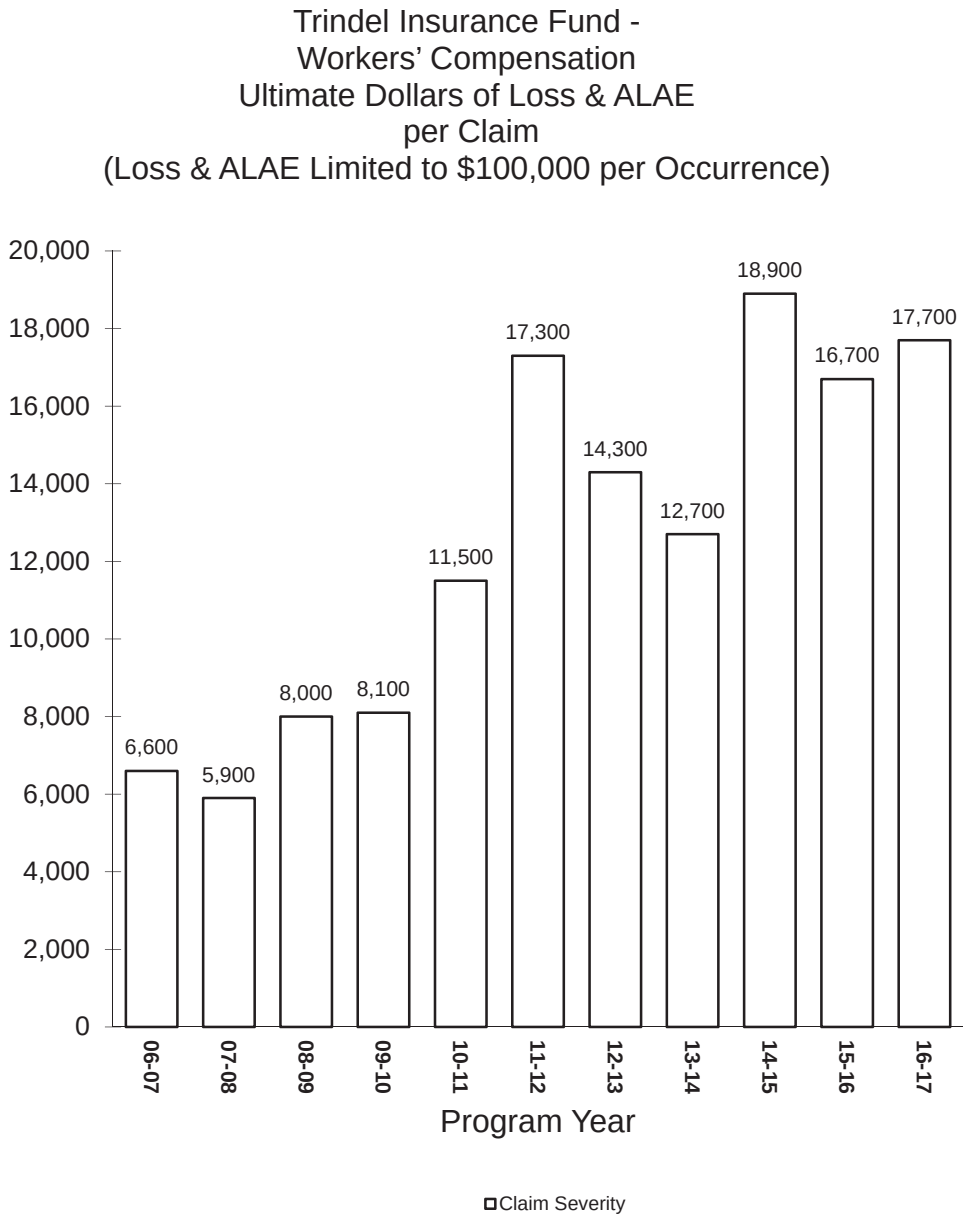
Graph 2

Trindel Insurance Fund -
Workers' Compensation
Ultimate Dollars of Loss & ALAE
per $100 of Payroll
(Loss & ALAE Limited to $100,000 per Occurrence)



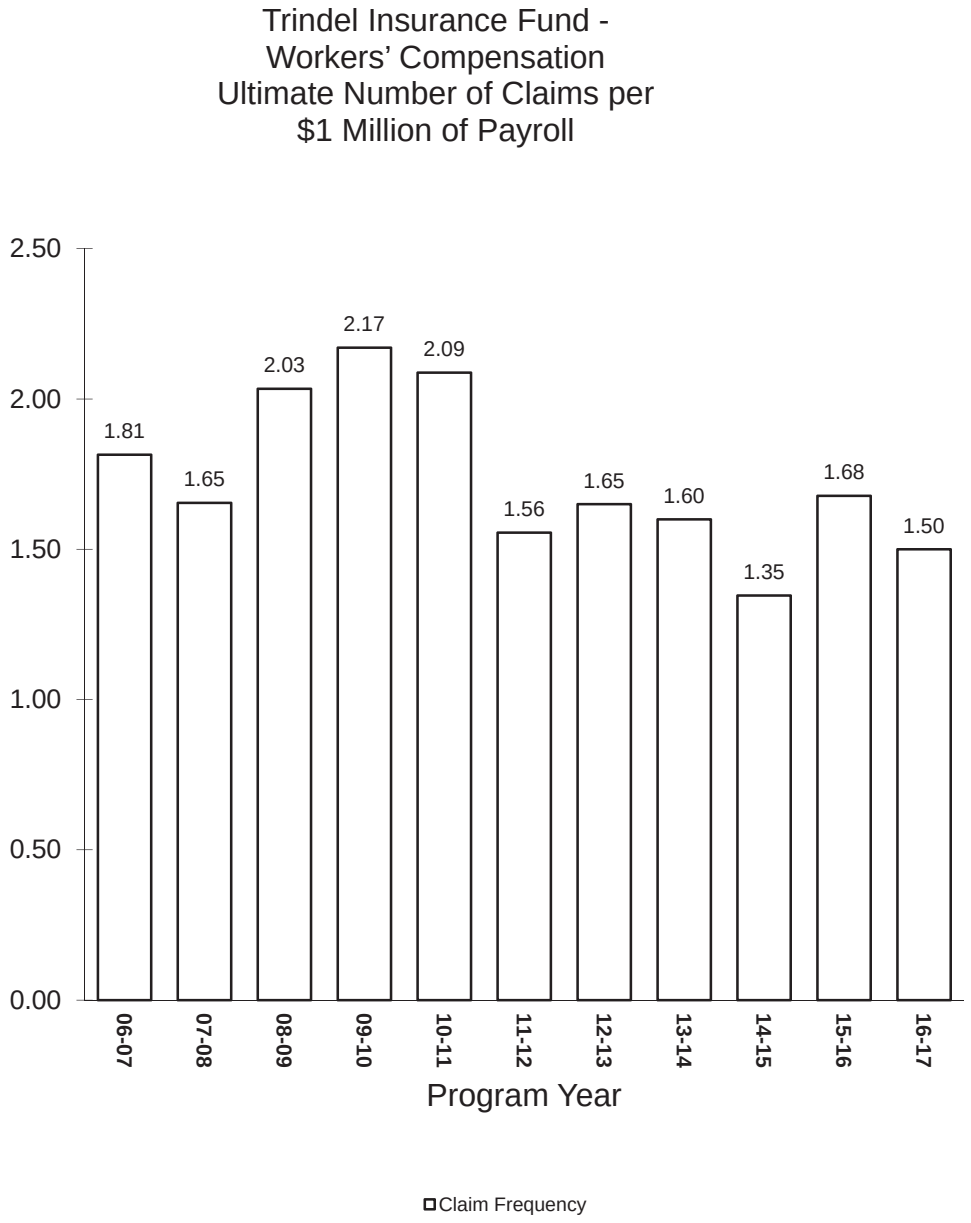
The Fund's average dollars of loss per claim, or claim severity, has been generally increasing over the period shown below. Our projected claim severity of $17,700 for 2016-17 is similar to the average of the five most recent years and reflects this upward trend. See Graph 3 below.

Graph 3



The Fund's number of claims per $1 million of payroll, or claim frequency, has appeared to have decreased since the high of 2.17 in 2009-10. Our projected 2016-17 claim frequency of 1.50 claims per $1 million of payroll reflects the increase in frequency between 2014-15 and 2015-16 and is roughly equal to the prior three year average. See Graph 4 below.

Graph 4



D. COMPARISON WITH PREVIOUS RESULTS

The prior report for Trindel Insurance Fund was dated October 30, 2015. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the 6/30/15 evaluation date of the prior report and the 6/30/16 evaluation date of the current report.

Actual Versus Expected Incurred Loss and ALAE Development

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected
Prior	$14,000	$38,000	$24,000
1996-97	3,000	0	(3,000)
1997-98	0	50,000	50,000
1998-99	0	0	0
1999-00	0	30,000	30,000
2000-01	5,000	12,000	7,000
2001-02	5,000	0	(5,000)
2002-03	7,000	0	(7,000)
2003-04	0	0	0
2004-05	3,000	0	(3,000)
2005-06	0	2,000	2,000
2006-07	5,000	0	(5,000)
2007-08	4,000	(21,000)	(25,000)
2008-09	39,000	(55,000)	(94,000)
2009-10	42,000	(17,000)	(59,000)
2010-11	44,000	112,000	68,000
2011-12	83,000	252,000	169,000
2012-13	572,000	791,000	219,000
2013-14	642,000	625,000	(17,000)
2014-15	1,119,000	1,645,000	526,000
2015-16	2,595,000	2,792,000	197,000
Total	$5,182,000	$6,256,000	$1,074,000

As shown, actual incurred development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses would increase overall by $5,182,000. Actual incurred losses increased by approximately $6,256,000, or about $1,074,000 than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the 6/30/15 evaluation date of the prior report and the 6/30/16 evaluation date of the current report.

Actual Versus Expected Paid Loss and ALAE Development

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
Prior	$9,000	($5,000)	($14,000)
1996-97	4,000	8,000	4,000
1997-98	0	8,000	8,000
1998-99	0	0	0
1999-00	0	5,000	5,000
2000-01	7,000	6,000	(1,000)
2001-02	8,000	19,000	11,000
2002-03	7,000	1,000	(6,000)
2003-04	0	0	0
2004-05	8,000	2,000	(6,000)
2005-06	0	2,000	2,000
2006-07	17,000	2,000	(15,000)
2007-08	10,000	0	(10,000)
2008-09	63,000	8,000	(55,000)
2009-10	106,000	25,000	(81,000)
2010-11	197,000	205,000	8,000
2011-12	242,000	282,000	40,000
2012-13	1,051,000	505,000	(546,000)
2013-14	726,000	550,000	(176,000)
2014-15	1,031,000	971,000	(60,000)
2015-16	748,000	757,000	9,000
Total	$4,234,000	$3,351,000	($883,000)

As shown, actual paid development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses would increase overall by $4,234,000. Actual paid losses increased by approximately $3,351,000, or about $883,000 less than expected. Many individual years have had favorable development, particularly 2012-13.

In the table below we display the change in our estimates of the program's ultimate losses and ALAE by accident year since our prior report.

Change in Ultimate Loss and ALAE

Accident Year	Prior Report	Current Report	Change In Ultimate
Prior	$7,115,000	$7,152,000	$37,000
1996-97	1,017,000	1,014,000	(3,000)
1997-98	884,709	945,000	60,291
1998-99	531,415	531,415	0
1999-00	663,673	706,000	42,327
2000-01	1,285,000	1,292,000	7,000
2001-02	969,000	964,000	(5,000)
2002-03	1,479,000	1,472,000	(7,000)
2003-04	1,400,962	1,451,000	50,038
2004-05	449,000	446,000	(3,000)
2005-06	623,002	656,000	32,998
2006-07	589,000	583,000	(6,000)
2007-08	428,000	401,000	(27,000)
2008-09	3,016,000	2,897,000	(119,000)
2009-10	3,267,000	3,214,000	(53,000)
2010-11	4,161,000	4,222,000	61,000
2011-12	4,289,000	4,551,000	262,000
2012-13	4,858,000	5,228,000	370,000
2013-14	4,444,000	4,446,000	2,000
2014-15	5,139,000	5,494,000	355,000
2015-16	7,632,000	7,648,000	16,000
Total	$54,240,761	$55,313,415	$1,072,654

As shown, overall we have increased our estimated ultimates by $1,073,000 since our prior report. These changes are, in general, in line with the actual versus expected incurred development shown at the beginning of this section.

At the time of the prior report, we estimated the liability for outstanding claims as of June 30, 2015 to be $13,635,000 at the discounted, expected level. Our current estimate as of June 30, 2016, is $18,697,000, an increase in our assessment of the Fund's outstanding liabilities, as shown below:

Outstanding Claim Liabilities for Loss and LAE

	Prior Report at June 30, 2015	Current Report at June 30, 2016	Change
(A) Case Reserves:	$5,818,000	$8,721,000	$2,903,000
(B) IBNR Reserves:	7,985,000	10,436,000	2,451,000
(C) Claims Administration Reserves:	1,132,000	1,352,000	220,000
(D) Total Reserves:	$14,935,000	$20,509,000	$5,574,000
(E) Offset for Investment Income:	(1,300,000)	(1,812,000)	(512,000)
(F) Total Outstanding Claim Liabilities:	$13,635,000	$18,697,000	$5,062,000

As shown, our estimate of outstanding claims liabilities at the discounted, expected level has increased between June 30, 2015 and June 30, 2016 as reflected in our prior and current reports respectively.

Both case reserves and IBNR reserves are higher. Reserves for future claims administration expenses are also expected to be higher due to an increase in the number of open claims. Total reserves, therefore, are estimated to be higher by $5.6 million. This increase in reserves leads to a larger offset for investment income. The net change due to the above factors is an overall increase of $5.1 million in our estimate of outstanding claim liabilities for loss and LAE.

At the time of the prior report, available assets were estimated to be $18,709,000 as of June 30, 2015, which corresponded to the then-estimated discounted liability for outstanding claims above the 90% confidence level. Available assets are currently estimated to be $22,702,000 as of June 30, 2016, which corresponds to the currently estimated liability for outstanding claims above the 85% confidence level. It can be summarized as follows:

Funding Margin

	Prior Report at June 30, 2015	Current Report at June 30, 2016	Change
(A) Outstanding Liability at the Discounted Expected Level:	$13,635,000	$18,697,000	$5,062,000
(B) Estimated Assets At June 30:	18,709,000	22,702,000	3,993,000
(C) Surplus/(Deficit):	$5,074,000	$4,005,000	($1,069,000)

As you can see, our estimate of the program's funding margin at the discounted, expected level has decreased by $1,069,000 between June 30, 2015 (as previously estimated) and June 30, 2016 (as currently estimated). This is driven by an increase in the estimated fund assets between the two points, offset by an increase in the estimated outstanding liability.

At the time of the prior report, our funding estimate for the 2015-16 year was $7,690,000 at the discounted, expected level. That amount included allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE), and a discount for anticipated investment income. Our current estimate for the 2016-17 year is $8,543,000 at the discounted, expected level, an increase in the program's expected loss costs, as shown in the table below:

Comparison of Funding for Loss and LAE

	Prior Report 2015-16 SIR = $300,000	Current Report 2016-17 SIR = $300,000	Change
(A) Ultimate Loss and ALAE:	$7,632,000	$8,528,000	$896,000
(B) Ultimate Claims Administration (ULAE):	692,000	742,000	50,000
(C) Total Claim Costs:	$8,324,000	$9,270,000	$946,000
(D) Offset for Investment Income:	(634,000)	(727,000)	(93,000)
(E) Total Recommended Funding:	$7,690,000	$8,543,000	$853,000
(F) Funding per $100 of Payroll:	$3.58	$3.84	$0.26

As you can see, our funding recommendations at the discounted, expected level have increased between 2015-16 and 2016-17, as shown in our prior and current reports respectively.

Our estimates of ultimate loss and ALAE have increased by $896,000, primarily due to adverse development in the most recent years. In addition, claims administration costs are expected to be slightly higher, resulting in an overall increase in total claim costs of $946,000. Investment income is expected to be higher. The net change due to the above factors is an overall increase of $853,000 in our annual funding estimate for loss and LAE.

E. DATA PROVIDED FOR THE ANALYSIS

Overall, the data utilized in preparing this report appears to be accurate.

Comments and issues regarding the data are as follows:

- We have assumed that the program's self-insured retention will remain at $300,000 per occurrence for 2016-17 and 2017-18 (See Appendix K).
- We estimated the 06/30/17 asset balance by beginning with the 06/30/16 asset balance, and adjusting for anticipated revenue and expense for 2016-17 (see Appendix L).
- We received loss data evaluated as of 06/30/16 (See Appendix M). We also utilized the data from the Fund's most recent actuarial study for our assessment of loss development.
- Roughly 10 claims included subrogation recoveries with negative amounts. Generally they are positive and subtracted from the amounts gross of recoveries. Based on conversations with the Company, we assumed that recoveries were $0 for these claims.
- We have assumed that the Fund's payroll for 2016-17 and 2017-18 will be approximately $222.7 and $229.8 million, respectively, based upon information provided by the Fund (See Appendix N).

The data provided for the analysis appears to be reasonable for use in this actuarial valuation of liabilities and projection of loss costs.

III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by the Fund. We have accepted all of this information without audit.

- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California counties participating in the CSAC Excess Insurance Authority's workers' compensation program.

- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of the CSAC Excess Insurance Authority's workers' compensation program in the aggregate form a reasonable basis of comparison to the patterns from Trindel Insurance Fund's data.

- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial review of the CSAC Excess Insurance Authority's workers' compensation program.

- We have assumed that there is a continuing relationship between past and future loss costs.

- It is not possible to predict future claim costs precisely. Most of the cost of workers' compensation claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.

- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.

- The changes in cost levels associated with benefit increases and administrative changes typically take place over a period of several years following their enactment, and these changes are very difficult to forecast in advance. We have based our benefit level factors on those produced by the Workers' Compensation Insurance Rating Bureau of California (WCIRB). See Appendix E for a display of the benefit level cost indices by fiscal year.

- We have assumed that the loss rate trend associated with claim costs increases at 2.9% per year. We have assumed that claim severity increases at 5.0% per year, and that claim frequency decreases at 2.0% per year.

- We have assumed that payroll and other inflation-sensitive exposure measures increase 2.5% annually due to inflation.

- At the Fund's instruction, we have assumed that assets held for investment will generate an average annual return of 1.50% over the duration of payment of the loss liabilities. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.

- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have included estimates for excess insurance contributions to the CSAC-EIA and other expenses associated with the program based upon information provided by the Fund.

- Our funding recommendations do not include provisions for catastrophic events not in the Fund's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.

- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than the Fund's excess coverage.

- The Fund's assets available for the program are estimated to be $22,702,000 as of June 30, 2016, and $26,079,000 as of June 30, 2017 for use in this report. This is shown in further detail in Appendix L.

IV. GLOSSARY OF ACTUARIAL TERMS

Accident Year - Year during which the accidents that generate a group of claims occurs, regardless of when the claims are reported, payments are made, or reserves are established.

Allocated Loss Adjustment Expenses (ALAE) - Expense incurred in settling claims that can be directly attributed to specific individual claims (e.g., legal fees, investigative fees, court charges, etc.)

Benefit Level Factor - Factor used to adjust historical losses to the current level of workers' compensation benefits.

Case Reserve - The amount left to be paid on a claim, as estimated by the claims administrator.

Claim Count Development Factor - A factor that is applied to the number of claims reported in a particular accident period in order to estimate the number of claims that will ultimately be reported.

Claim Frequency - Number of claims per $1 million of payroll.

Confidence Level - An estimated probability that a given level of funding will be adequate to pay actual claims costs. For example, the 85% confidence level refers to an estimate for which there is an 85% chance that the amount will be sufficient to pay loss costs.

Discount Factor - A factor to adjust estimated loss costs to reflect anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.

Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

Loss Development Factor - A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled (see Section IV).

Loss Rate - Ultimate losses per $100 of payroll.

Non-Claims Related Expenses – Program expenses not directly associated with claims settlement and administration, such as excess insurance, safety program expenses, and general overhead. These exclude expenses associated with loss settlements (Indemnity/Medical, BI/PD), legal expenses associated with individual claims (ALAE), and claims administration (ULAE).

Outstanding Losses - Losses that have been incurred but not paid. This is the ultimate value of losses less any amount that has been paid.

Paid Losses - Losses actually paid on all reported claims.

Program Losses - Losses, including ALAE, limited to the SIR for each occurrence.

Reported Losses - The total expected value of losses as estimated by the claims administrator. This is the sum of paid losses and case reserves.

Self-Insured Retention (SIR) - The level at which an excess insurance policy is triggered to begin payments on a claim. Financially, this is similar to an insurance deductible.

Severity - Average claim cost.

Ultimate Losses - The value of claim costs at the time when all claims have been settled. This amount must be estimated until all claims are actually settled.

Unallocated Loss Adjustment Expenses (ULAE) – Claim settlement expenses that cannot be directly attributed to individual claims (e.g., claims adjusters' salaries, taxes, etc.)

Trindel Insurance Fund - Workers' Compensation

Funding Guidelines Allocated by Member

Funding Guidelines for Fiscal Year 2016-2017
(Without recognition of surplus funding or other expenses)

County	2016-2017 Estimated Payroll	Expected	Marginally Acceptable 70%	Recommended 75%	Recommended 85%	Conservative 90%	% of Payroll
Alpine	5,122,306	$196,000	$215,000	$223,000	$241,000	$255,000	2%
Colusa	22,765,356	873,000	957,000	989,000	1,072,000	1,133,000	10%
Del Norte	22,645,118	869,000	952,000	984,000	1,067,000	1,127,000	10%
Lassen	23,755,685	911,000	999,000	1,032,000	1,119,000	1,182,000	11%
Modoc	9,902,136	380,000	416,000	430,000	466,000	493,000	4%
Mono	20,001,019	767,000	841,000	869,000	942,000	995,000	9%
Plumas	21,346,194	819,000	897,000	928,000	1,006,000	1,062,000	10%
San Benito	31,708,738	1,216,000	1,333,000	1,378,000	1,494,000	1,578,000	14%
Sierra	6,500,000	249,000	273,000	282,000	306,000	323,000	3%
Sutter	42,619,094	1,635,000	1,792,000	1,852,000	2,008,000	2,120,000	19%
Trinity	16,344,394	627,000	687,000	710,000	770,000	813,000	7%
Total	$222,710,040	$8,543,000	$9,363,000	$9,679,000	$10,491,000	$11,080,000	

Note: Funding amounts are allocated to members by proportion of the total
2016-2017 estimated payroll. Provided by the Fund.
The current funding position and non claims related expenses are not considered.
Amounts may not sum due to rounding.

Trindel Insurance Fund - Workers' Compensation

Funding Guidelines Allocated by Member

Funding Guidelines for Fiscal Year 2017-2018
(Without recognition of surplus funding or other expenses)

County	2017-2018 Estimated Payroll	Expected	Marginally Acceptable 70%	Recommended 75%	Recommended 85%	Conservative 90%	% of Payroll
Alpine	5,275,975	$210,000	$230,000	$237,000	$257,000	$272,000	2%
Colusa	23,903,624	950,000	1,041,000	1,076,000	1,166,000	1,232,000	10%
Del Norte	23,342,472	927,000	1,016,000	1,051,000	1,139,000	1,203,000	10%
Lassen	24,467,771	972,000	1,065,000	1,101,000	1,194,000	1,261,000	11%
Modoc	10,000,000	397,000	435,000	450,000	488,000	515,000	4%
Mono	20,101,039	799,000	875,000	905,000	981,000	1,036,000	9%
Plumas	21,773,115	865,000	948,000	980,000	1,062,000	1,122,000	9%
San Benito	33,294,175	1,323,000	1,450,000	1,499,000	1,624,000	1,716,000	14%
Sierra	6,500,000	258,000	283,000	293,000	317,000	335,000	3%
Sutter	43,897,667	1,744,000	1,911,000	1,976,000	2,142,000	2,262,000	19%
Trinity	17,246,734	685,000	751,000	776,000	841,000	889,000	8%
Total	$229,802,572	$9,130,000	$10,006,000	$10,344,000	$11,212,000	$11,842,000	

Note: Funding amounts are allocated to members by proportion of the total
2017-2018 estimated payroll. Provided by the Fund.
The current funding position and non claims related expenses are not considered.
Amounts may not sum due to rounding.

Tirndel Insurance Fund - Workers' Compensation

Funding Guidelines for Outstanding Liabilities at
June 30, 2016

(A)	Estimated Ultimate Losses Incurred through 6/30/16: (From Appendix G)	$55,313,000
(B)	Estimated Paid Losses through 6/30/16: (From Appendix G)	36,156,000
(C)	Estimated Liability for Claims Outstanding at 6/30/16: (From Appendix G)	$19,157,000
(D)	Estimated Liability for Outstanding Claims Administration Fees at 6/30/16: (From Appendix F)	1,352,000
(E)	Total Outstanding Liability for Claims at 6/30/16: ((C) + (D))	$20,509,000
(F)	Reserve Discount Factor (Based on a Discount Rate of 1.5%.): (Appendix I, Page 1, (G))	0.912
(G)	Discounted Outstanding Liability for Claims at 6/30/16: ((E) x (F))	$18,697,000

		Marginally Acceptable		Recommended		Conservative
	Confidence Level of Adequacy:	70%	75%	80%	85%	90%
(H)	Confidence Level Factor: (From Appendix J)	1.079	1.109	1.144	1.186	1.242
(I)	Margin for Adverse Experience: ((G) x [(H) - 1])	1,477,000	2,038,000	2,692,000	3,478,000	4,525,000
(J)	Total Required Assets at 6/30/16: ((G) + (I))	$20,174,000	$20,735,000	$21,389,000	$22,175,000	$23,222,000
(K)	Estimated Total Assets at 6/30/16: (From Appendix L)	$22,702,000	$22,702,000	$22,702,000	$22,702,000	$22,702,000
(L)	Indicated Funding Redundancy/ (Deficiency): ((K) - (J))	$2,528,000	$1,967,000	$1,313,000	$527,000	($520,000)

Tirndel Insurance Fund - Workers' Compensation

Funding Guidelines for Outstanding Liabilities at
June 30, 2017

(A)	Estimated Ultimate Losses Incurred through 6/30/17: (From Appendix G)	$63,841,000
(B)	Estimated Paid Losses through 6/30/17: (From Appendix G)	41,521,000
(C)	Estimated Liability for Claims Outstanding at 6/30/17: (From Appendix G)	$22,320,000
(D)	Estimated Liability for Outstanding Claims Administration Fees at 6/30/17: (From Appendix F)	1,504,000
(E)	Total Outstanding Liability for Claims at 6/30/17: ((C) + (D))	$23,824,000
(F)	Reserve Discount Factor (Based on a Discount Rate of 1.5%.): (Appendix I, Page 1, (H))	0.912
(G)	Discounted Outstanding Liability for Claims at 6/30/17: ((E) x (F))	$21,718,000

		Marginally Acceptable		Recommended		Conservative
	Confidence Level of Adequacy:	70%	75%	80%	85%	90%
(H)	Confidence Level Factor: (From Appendix J)	1.079	1.109	1.144	1.186	1.242
(I)	Margin for Adverse Experience: ((G) x [(H) - 1])	1,716,000	2,367,000	3,127,000	4,040,000	5,256,000
(J)	Total Required Assets at 6/30/17: ((G) + (I))	$23,434,000	$24,085,000	$24,845,000	$25,758,000	$26,974,000
(K)	Estimated Total Assets at 6/30/17: (From Appendix L)	$26,079,000	$26,079,000	$26,079,000	$26,079,000	$26,079,000
(L)	Indicated Funding Redundancy/ (Deficiency): ((K) - (J))	$2,645,000	$1,994,000	$1,234,000	$321,000	($895,000)

Tirndel Insurance Fund - Workers' Compensation

Funding Options for Program Year 2016-2017 (SIR = $300,000)

		Dollar Amount	Payroll Rate
(A)	Estimated Ultimate Losses Incurred in Accident Year 2016-2017: (From Appendix G)	$8,528,000	$3.829
(B)	Estimated Claims Administration Fees Incurred in Accident Year 2016-2017: (From Exhibit 5, Page 1, item (L))	742,000	0.333
(C)	Total Claims Costs Incurred in Accident Year 2016-2017: ((A) + (B))	$9,270,000	$4.162
(D)	Loss Discount Factor (Based on a Discount Rate of 1.5%.): (Appendix I, Page 2, (F))	0.922	
(E)	Discounted Total Claims Costs Incurred in Accident Year 2016-2017: ((C) x (D))	$8,543,000	$3.836

		Marginally Acceptable		Recommended		Conservative
		70%	75%	80%	85%	90%
(F)	Confidence Level Factor: (From Appendix J)	1.096	1.133	1.176	1.228	1.297
(G)	Margin for Adverse Experience: ((E) x [(F) - 1])	820,000	1,136,000	1,504,000	1,948,000	2,537,000
(H)	Recommended Funding in 2016-2017 for Claims Costs and Other Expenses: ((E) + (G))	$9,363,000	$9,679,000	$10,047,000	$10,491,000	$11,080,000
(I)	Budgeted Non Claims Related Expenses: (Provided by the Fund)	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
(J)	Recommended Funding in 2016-2017 for Claims Costs, Other Expenses, and Non Claims Related Expenses: ((H) + (I))	$11,163,000	$11,479,000	$11,847,000	$12,291,000	$12,880,000
(K)	Rate per $100 of Payroll: ((J) / $2,227,100)	$5.012	$5.154	$5.319	$5.519	$5.783

Payroll rates are per hundred dollars of 2016-2017 payroll of $222,710,000.

Tirndel Insurance Fund - Workers' Compensation

Funding Options for Program Year 2017-2018 (SIR = $300,000)
One-Year Funding Plan

		Dollar Amount	Payroll Rate
(A)	Estimated Ultimate Losses Incurred in Accident Year 2017-2018: (From Appendix G)	$9,119,000	$3.968
(B)	Estimated Claims Administration Fees Incurred in Accident Year 2017-2018: (From Exhibit 5, Page 1, item (L))	788,000	0.343
(C)	Total Claims Costs Incurred in Accident Year 2017-2018: ((A) + (B))	$9,907,000	$4.311
(D)	Loss Discount Factor (Based on a Discount Rate of 1.5%.): (Appendix I, Page 2, (F))	0.922	
(E)	Discounted Total Claims Costs Incurred in Accident Year 2017-2018: ((C) x (D))	$9,130,000	$3.973

		Marginally Acceptable		Recommended		Conservative
		70%	75%	80%	85%	90%
(F)	Confidence Level Factor: (From Appendix J)	1.096	1.133	1.176	1.228	1.297
(G)	Margin for Adverse Experience: ((E) x [(F) - 1])	876,000	1,214,000	1,607,000	2,082,000	2,712,000
(H)	Recommended Funding in 2017-2018 for Claims Costs and Other Expenses: ((E) + (G))	$10,006,000	$10,344,000	$10,737,000	$11,212,000	$11,842,000
(I)	Budgeted Non Claims Related Expenses: (Provided by the Fund)	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000
(J)	Recommended Funding in 2017-2018 for Claims Costs, Other Expenses, and Non Claims Related Expenses ((H) + (I))	$11,956,000	$12,294,000	$12,687,000	$13,162,000	$13,792,000
(K)	Rate per $100 of Payroll: ((J) / $2,298,026)	$5.203	$5.350	$5.521	$5.728	$6.002

Payroll rates are per hundred dollars of 2017-2018 payroll of $229,802,600.

Tirndel Insurance Fund - Workers' Compensation

IBNR as of 6/30/17 at Expected Claims Level

Accident Year	Estimated Ultimate (A)	Reported as of 6/30/16 (B)	Estimated IBNR as of 6/30/16 (C)	Estimated Percent of IBNR Reported Between 7/1/16 and 6/30/17 (D)	Estimated IBNR Reported (E)	Estimated IBNR as of 6/30/17 (F)
Prior	$7,152,000	$7,109,628	$42,372	15.0%	$6,000	$36,372
1996-1997	1,014,000	1,005,910	8,090	24.9%	2,000	6,090
1997-1998	945,000	934,327	10,673	27.1%	3,000	7,673
1998-1999	531,415	531,415	0	15.2%	0	0
1999-2000	706,000	693,709	12,291	23.2%	3,000	9,291
2000-2001	1,292,000	1,265,353	26,647	18.7%	5,000	21,647
2001-2002	964,000	940,551	23,449	15.7%	4,000	19,449
2002-2003	1,472,000	1,429,068	42,932	16.3%	7,000	35,932
2003-2004	1,451,000	1,400,962	50,038	16.2%	8,000	42,038
2004-2005	446,000	428,210	17,790	13.8%	2,000	15,790
2005-2006	656,000	624,545	31,455	15.4%	5,000	26,455
2006-2007	583,000	551,202	31,798	13.1%	4,000	27,798
2007-2008	401,000	375,456	25,544	13.9%	4,000	21,544
2008-2009	2,897,000	2,682,600	214,400	14.0%	30,000	184,400
2009-2010	3,214,000	2,935,344	278,656	14.6%	41,000	237,656
2010-2011	4,222,000	3,926,914	295,086	13.2%	39,000	256,086
2011-2012	4,551,000	4,203,948	347,052	12.6%	44,000	303,052
2012-2013	5,228,000	4,494,054	733,946	55.7%	409,000	324,946
2013-2014	4,446,000	3,067,747	1,378,253	15.4%	212,000	1,166,253
2014-2015	5,494,000	3,484,326	2,009,674	30.8%	619,000	1,390,674
2015-2016	7,648,000	2,791,884	4,856,116	33.7%	1,637,000	3,219,116
2016-2017	8,528,000			33.6%	2,865,000	5,663,000
Totals	$63,841,415	$44,877,153	$10,436,262		$5,949,000	$13,015,262

Notes:

(A) From Exhibit 4, Page 1.
(B) Provided by the Fund. These losses exclude amounts incurred above the Fund's SIR for each year.
(C) (A) - (B).
(D) Percentage of incurred but not reported (IBNR) expected to be reported between 7/1/16 and 6/30/17. The percentage is based on the development pattern selected in Appendix A.
(E) ((A) - (B)) x (D).
(F) (A) - (B) - (E).

This exhibit shows the calculation of the amount of incurred but not reported losses we expect as of 6/30/17. This amount is dependent on both the strength of the case reserves and the average frequency and severity of the losses incurred.

Tirndel Insurance Fund - Workers' Compensation

Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Estimate of Ultimate Losses (F)
Prior	$7,152,286	$7,217,803			$7,216,336	$7,152,000
1996-1997	1,013,957	1,030,422	$1,013,921	$1,029,450	1,001,306	1,014,000
1997-1998	944,605	924,213	944,449	924,244	920,080	945,000
1998-1999	538,323	553,203	538,405	552,385	537,557	531,415
1999-2000	705,502	700,452	705,981	701,494	721,768	706,000
2000-2001	1,291,925	1,292,434	1,292,444	1,291,885	1,290,153	1,292,000
2001-2002	964,065	976,447	962,503	973,311	914,661	964,000
2002-2003	1,471,940	1,518,337	1,470,486	1,513,070	1,428,308	1,472,000
2003-2004	1,451,397	1,508,836	1,447,255	1,494,870	1,322,393	1,451,000
2004-2005	446,195	420,825	447,145	425,132	473,100	446,000
2005-2006	655,772	688,249	653,876	681,374	611,008	656,000
2006-2007	583,172	500,567	578,971	501,045	505,307	583,000
2007-2008	400,987	394,794	402,614	398,215	424,378	401,000
2008-2009	2,897,208	2,992,469	2,892,052	2,971,343	2,830,185	2,897,000
2009-2010	3,214,202	3,196,131	3,204,328	3,178,846	3,091,574	3,214,000
2010-2011	4,362,801	4,110,208	4,326,607	4,090,133	4,000,032	4,222,000
2011-2012	4,746,257	4,748,243	4,645,033	4,540,505	3,537,378	4,551,000
2012-2013	6,057,985	5,137,409	5,831,941	5,161,018	5,264,424	5,228,000
2013-2014	4,414,488	4,176,382	4,582,126	4,609,145	5,116,881	4,446,000
2014-2015	6,229,975	5,213,697	5,848,001	5,319,019	4,858,784	5,494,000
2015-2016	8,319,814	7,403,686	7,840,277	7,584,286	8,988,003	7,648,000
Totals						$55,313,415

Projected Losses for the Year 2016-2017 (G)	$8,528,000
Projected Losses for the Year 2017-2018 (H)	$9,119,000

Notes:

(A) From Appendix A, Page 1, Column (G).
(B) From Appendix B, Page 1, Column (G).
(C) From Appendix C, Page 1, Column (G).
(D) From Appendix C, Page 2, Column (G).
(E) From Appendix D, Page 1, Column (C).
(F) Selected averages of (A), (B), (C), (D), and (E).
(G) From Exhibit 5, Page 1, Line (K).
(H) From Exhibit 5, Page 1, Line (K).

This exhibit summarizes the results of the actuarial methods we have applied to estimate ultimate losses for each year. It is important to apply a number of estimation methods because each one relies on specific assumptions about the claims process that tend to hold generally true, but that may be violated in specific situations. Thus, the more estimation methods that can be applied, the better.

Tirndel Insurance Fund - Workers' Compensation

Estimated Ultimate Limited Losses Capped at $100,000 per Claim

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Ultimate Limited Losses (F)
Prior	$6,827,871	$6,815,636			$6,827,744	$6,828,000
1996-1997	945,654	954,098	$945,716	$954,229	945,987	946,000
1997-1998	867,920	860,661	868,009	861,190	868,000	868,000
1998-1999	512,492	519,075	512,494	518,572	506,451	506,415
1999-2000	678,740	662,685	678,895	663,022	679,023	679,000
2000-2001	1,211,779	1,191,564	1,212,168	1,192,377	1,212,009	1,212,000
2001-2002	858,203	873,332	858,569	873,155	858,033	858,000
2002-2003	1,337,724	1,363,438	1,337,145	1,362,259	1,337,944	1,338,000
2003-2004	1,237,092	1,265,974	1,236,799	1,264,016	1,237,048	1,237,000
2004-2005	442,341	409,995	442,354	411,982	441,975	442,000
2005-2006	570,428	588,013	570,635	586,595	569,984	570,000
2006-2007	471,055	430,818	470,977	433,849	471,014	471,000
2007-2008	394,604	380,868	394,811	382,114	395,032	395,000
2008-2009	2,631,415	2,690,886	2,632,119	2,684,641	2,631,042	2,631,000
2009-2010	2,869,697	2,784,582	2,870,981	2,795,599	2,869,890	2,870,000
2010-2011	3,826,151	3,584,377	3,816,856	3,602,886	3,708,040	3,708,000
2011-2012	4,072,628	4,097,072	4,030,184	4,001,543	3,274,596	4,050,000
2012-2013	3,778,778	3,426,257	3,768,715	3,497,804	3,748,954	3,618,000
2013-2014	2,815,459	2,882,455	2,908,566	3,116,239	3,616,767	2,931,000
2014-2015	3,996,178	3,689,494	3,933,874	3,732,890	3,410,860	3,753,000
2015-2016	6,068,756	5,205,965	5,652,946	5,286,487	6,263,397	5,555,000
Totals						$45,466,415

Projected Losses for the Year 2016-2017 (G)	$5,903,000
Projected Losses for the Year 2017-2018 (H)	$6,266,000

Notes:

(A) From Appendix A, Page 1, Column (D).
(B) From Appendix B, Page 1, Column (D).
(C) Based on results in Appendix C, Page 1.
(D) Based on results in Appendix C, Page 2.
(E) Based on results in Appendix D, Page 1.
(F) Selected averages of (A), (B), (C), (D), and (E).
(G) From Exhibit 5, Page 1, Line (K) / Line (G).
(H) From Exhibit 5, Page 1, Line (K) / Line (G).

This exhibit summarizes the results of the actuarial methods we have applied to estimate limited losses for each year. These results are used to select a limited loss rate for future years.

Tirndel Insurance Fund - Workers' Compensation

Selection of Projected Limited Loss Rate
and Projection of Program Losses and ULAE

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended Payroll ($00) (D)	Trended Limited Loss Rate (E)
1996-1997	$946,000	2.397	$2,267,562	$322,609	$7.029
1997-1998	868,000	2.018	1,751,624	325,030	5.389
1998-1999	506,415	1.748	885,213	353,982	2.501
1999-2000	679,000	1.524	1,034,796	382,559	2.705
2000-2001	1,212,000	1.390	1,684,680	527,621	3.193
2001-2002	858,000	1.351	1,159,158	539,619	2.148
2002-2003	1,338,000	1.384	1,851,792	444,374	4.167
2003-2004	1,237,000	1.693	2,094,241	475,088	4.408
2004-2005	442,000	2.113	933,946	468,228	1.995
2005-2006	570,000	2.177	1,240,890	483,056	2.569
2006-2007	471,000	1.996	940,116	500,882	1.877
2007-2008	395,000	1.793	708,235	505,770	1.400
2008-2009	2,631,000	1.613	4,243,803	1,960,132	2.165
2009-2010	2,870,000	1.421	4,078,270	1,933,567	2.109
2010-2011	3,708,000	1.323	4,905,684	1,794,758	2.733
2011-2012	4,050,000	1.284	5,200,200	1,702,977	3.054
2012-2013	3,618,000	1.238	4,479,084	1,692,984	2.646
2013-2014	2,931,000	1.197	3,508,407	1,555,507	2.255
2014-2015	3,753,000	1.115	4,184,595	1,553,567	2.694
2015-2016	5,555,000	1.037	5,760,535	2,034,520	2.831
Totals	$38,638,415		$52,912,831	19,556,830	$2.706
11/12-14/15	14,352,000		17,372,286	6,505,035	2.671
12/13-15/16	15,857,000		17,932,621	6,836,578	2.623
				(F) Selected Limited Rate:	$2.650
				Prior:	$2.525

Program Year:	2016-2017	2017-2018
(G) Factor to SIR:	1.445	1.455
(H) Trend Factor:	1.000	1.029
(I) Program Rate:	$3.829	$3.968
(J) Trended Payroll ($00):	2,227,100	2,298,026
(K) Projected Program Losses:	8,528,000	9,119,000
(L) Projected ULAE:	742,000	788,000
(M) Projected Loss and ULAE:	$9,270,000	$9,907,000

Notes appear on the next page.

Tirndel Insurance Fund - Workers' Compensation

Selection of Projected Limited Loss Rate
and Projection of Program Losses and ULAE

Notes:

(A) From Exhibit 4, Page 2, Column (F).
For purposes of projecting future losses, losses are capped at $100,000 per occurrence.
(B) From Appendix E, Page 1, Column (B).
(C) (A) x (B).
(D) From Appendix N, Column (C).
(E) (C) / (D).
(F) Selected based on (E).
(G) Based on a Weibull distribution, a mathematical model of claim sizes.
(H) From Appendix E.
(I) (F) x (G) x (H).
(J) From Appendix N, Column (C).
(K) (I) x (J).
(L) Based on an estimated claim closing pattern and the Fund's historical claims administration expenses.
(M) (K) + (L).

This exhibit shows the calculation of future loss costs based on the past loss rates per $100 of payroll. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Tirndel Insurance Fund - Workers' Compensation

Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 6/30/16 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 6/30/16 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
Prior	$6,787,148	1.006	$6,827,871	$7,109,628	1.006	$7,152,286
1996-1997	938,149	1.008	945,654	1,005,910	1.008	1,013,957
1997-1998	859,327	1.010	867,920	934,327	1.011	944,605
1998-1999	506,415	1.012	512,492	531,415	1.013	538,323
1999-2000	668,709	1.015	678,740	693,709	1.017	705,502
2000-2001	1,190,353	1.018	1,211,779	1,265,353	1.021	1,291,925
2001-2002	840,551	1.021	858,203	940,551	1.025	964,065
2002-2003	1,306,371	1.024	1,337,724	1,429,068	1.030	1,471,940
2003-2004	1,203,397	1.028	1,237,092	1,400,962	1.036	1,451,397
2004-2005	428,210	1.033	442,341	428,210	1.042	446,195
2005-2006	549,545	1.038	570,428	624,545	1.050	655,772
2006-2007	451,202	1.044	471,055	551,202	1.058	583,172
2007-2008	375,456	1.051	394,604	375,456	1.068	400,987
2008-2009	2,484,811	1.059	2,631,415	2,682,600	1.080	2,897,208
2009-2010	2,684,469	1.069	2,869,697	2,935,344	1.095	3,214,202
2010-2011	3,542,732	1.080	3,826,151	3,926,914	1.111	4,362,801
2011-2012	3,732,931	1.091	4,072,628	4,203,948	1.129	4,746,257
2012-2013	3,329,320	1.135	3,778,778	4,494,054	1.348	6,057,985
2013-2014	2,431,312	1.158	2,815,459	3,067,747	1.439	4,414,488
2014-2015	2,925,460	1.366	3,996,178	3,484,326	1.788	6,229,975
2015-2016	2,776,192	2.186	6,068,756	2,791,884	2.980	8,319,814
Totals	$40,012,060		$46,414,965	$44,877,153		$57,862,856

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Fund. These losses exclude amounts over $100,000 per occurrence.
(C) From Appendix A, Page 2.
(D) (B) x (C). These estimated losses exclude amounts over $100,000 per occurrence.
(E) Losses capped at the Fund's SIR. Amounts are provided by the Fund.
(F) Derived from factors on Appendix A, Page 4.
(G) (E) x (F).

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses and case reserves as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

Tirndel Insurance Fund - Workers' Compensation
Reported Loss Development

Limited Losses Reported as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										3,964,549
2000-2001									3,686,887	3,730,627
2001-2002								2,736,450	2,749,488	2,769,344
2002-2003							4,064,830	4,086,026	4,111,016	
2003-2004						5,283,838	5,297,382	5,271,895		
2004-2005					2,136,585	2,196,828	2,365,277			
2005-2006				2,126,272	2,294,688	2,295,930				
2006-2007			2,815,929	2,981,828	2,917,626					
2007-2008		2,127,318	2,654,684	2,822,551						
2008-2009	1,702,206	2,394,938	2,681,607	2,880,390	2,801,712	2,620,516	2,508,575	2,484,811		
2009-2010	1,690,024	2,163,514	2,585,236	2,483,014	2,722,152	2,697,828	2,684,469			
2010-2011	1,522,454	2,677,355	3,232,612	3,327,527	3,478,076	3,542,732				
2011-2012	1,688,257	3,002,294	3,714,182	3,559,434	3,732,931					
2012-2013	1,474,731	2,735,630	3,031,178	3,329,320						
2013-2014	1,859,875	2,166,596	2,431,312							
2014-2015	1,726,979	2,925,460								
2015-2016	2,776,192									

Reported Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										0.995
2000-2001									1.012	1.002
2001-2002								1.005	1.007	
2002-2003							1.005	1.006		
2003-2004						1.003	0.995			
2004-2005					1.028	1.077				
2005-2006				1.079	1.001					
2006-2007			1.059	0.978						
2007-2008		1.248	1.063							
2008-2009	1.407	1.120	1.074	0.973	0.935	0.957	0.991			
2009-2010	1.280	1.195	0.960	1.096	0.991	0.995				
2010-2011	1.759	1.207	1.029	1.045	1.019					
2011-2012	1.778	1.237	0.958	1.049						
2012-2013	1.855	1.108	1.098							
2013-2014	1.165	1.122								
2014-2015	1.694									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average	1.563	1.177	1.034	1.037	0.995	1.008	0.997	1.006	1.010	0.999
Dollar-weighted Averages										
3-yr	1.546	1.161	1.024	1.060	0.984					
4-yr	1.604	1.173	1.011	1.040						
CSAC Factors	1.470	1.120	1.025	1.015	1.010	1.010	1.009	1.008	1.007	1.006
Prior	1.600	1.190	1.025	1.035	1.010	1.010	1.009	1.008	1.007	1.006
Selected	1.600	1.180	1.020	1.040	1.010	1.010	1.009	1.008	1.007	1.006
Cumulated	2.186	1.366	1.158	1.135	1.091	1.080	1.069	1.059	1.051	1.044

Tirndel Insurance Fund - Workers' Compensation
Reported Loss Development

Accident Year	Limited Losses Reported as of: 132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1995-1996				1,897,271	1,896,694						
1996-1997			2,414,816	2,424,816							
1997-1998		2,984,496	3,019,001								
1998-1999	3,183,106	3,187,372									
1999-2000	3,945,269	6,587,471									
2000-2001	3,736,791										
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
1995-1996				1.000							
1996-1997			1.004								
1997-1998		1.012									
1998-1999	1.001										
1999-2000	1.670										
2000-2001											
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
Average	1.336	1.012	1.004	1.000							
Dollar-weighted Averages											
3-yr											
4-yr											
CSAC Factors	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.006
Prior	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.006
Selected	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.006
Cumulated	1.038	1.033	1.028	1.024	1.021	1.018	1.015	1.012	1.010	1.008	1.006

Tirndel Insurance Fund - Workers' Compensation
Reported between $100,000 and $500,000 Loss Development

Losses Reported as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1,940,318
2000-2001									2,246,586	2,283,853
2001-2002								477,269	493,110	466,515
2002-2003							1,472,882	1,469,793	1,668,583	
2003-2004						2,198,822	2,678,819	2,981,936		
2004-2005					175,962	261,782	286,539			
2005-2006				501,449	825,191	841,526				
2006-2007			887,251	772,437	1,025,387					
2007-2008		183,348	260,384	556,300						
2008-2009	118,926	267,532	440,492	632,985	1,271,939	1,597,858	1,837,922	1,905,882		
2009-2010	36,489	781,056	983,414	1,348,331	2,103,688	1,899,750	1,683,109			
2010-2011		560,715	572,083	1,261,936	1,677,272	2,377,139				
2011-2012		469,135	1,501,018	1,610,479	1,995,323					
2012-2013	133,856	523,910	671,928	1,347,194						
2013-2014	24,447	276,590	636,435							
2014-2015	112,262	558,866								
2015-2016	15,692									

Reported Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.021
2000-2001									1.017	0.916
2001-2002								1.033	0.946	
2002-2003							0.998	1.135		
2003-2004						1.218	1.113			
2004-2005					1.488	1.095				
2005-2006				1.646	1.020					
2006-2007			0.871	1.327						
2007-2008		1.420	2.136							
2008-2009	2.250	1.647	1.437	2.009	1.256	1.150	1.037			
2009-2010	21.405	1.259	1.371	1.560	0.903	0.886				
2010-2011		1.020	2.206	1.329	1.417					
2011-2012		3.200	1.073	1.239						
2012-2013	3.914	1.283	2.005							
2013-2014	11.314	2.301								
2014-2015	4.978									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average	8.772	1.733	1.586	1.518	1.217	1.087	1.049	1.084	0.982	0.969
Dollar-weighted Averages										
3-yr	5.024	2.213	1.537	1.369	1.163					
4-yr		1.847	1.493	1.452						
CSAC Factors	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Prior	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Selected	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Cumulated	18.101	6.582	3.464	2.510	1.976	1.749	1.590	1.472	1.376	1.304

Tirndel Insurance Fund - Workers' Compensation
Reported between $100,000 and $500,000 Loss Development

Accident Year	Losses Reported as of: 132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1995-1996				356,652	337,896						
1996-1997			466,516	431,236							
1997-1998		2,007,951	1,925,958								
1998-1999	991,085	834,160									
1999-2000	1,981,766										
2000-2001	2,091,692										
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
1995-1996				0.947							
1996-1997			0.924								
1997-1998		0.959									
1998-1999	0.842										
1999-2000											
2000-2001											
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
Average	0.842	0.959	0.924	0.947							
Dollar-weighted											
Averages											
3-yr											
4-yr											
CSAC											
Factors	1.040	1.029	1.030	1.026	1.024	1.020	1.015	1.011	1.008	1.005	1.010
Prior	1.040	1.029	1.030	1.026	1.024	1.020	1.015	1.011	1.008	1.005	1.010
Selected	1.040	1.030	1.030	1.025	1.025	1.020	1.015	1.011	1.008	1.005	1.010
Cumulated	1.242	1.194	1.159	1.125	1.098	1.071	1.050	1.034	1.023	1.015	1.010

Tirndel Insurance Fund - Workers' Compensation

Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 6/30/16 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 6/30/16 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
Prior	$6,728,170	1.013	$6,815,636	$7,048,636	1.024	$7,217,803
1996-1997	938,149	1.017	954,098	1,000,410	1.030	1,030,422
1997-1998	842,959	1.021	860,661	892,959	1.035	924,213
1998-1999	506,415	1.025	519,075	531,415	1.041	553,203
1999-2000	644,009	1.029	662,685	669,009	1.047	700,452
2000-2001	1,152,383	1.034	1,191,564	1,227,383	1.053	1,292,434
2001-2002	840,551	1.039	873,332	921,176	1.060	976,447
2002-2003	1,304,725	1.045	1,363,438	1,421,664	1.068	1,518,337
2003-2004	1,203,397	1.052	1,265,974	1,400,962	1.077	1,508,836
2004-2005	386,788	1.060	409,995	386,788	1.088	420,825
2005-2006	549,545	1.070	588,013	624,545	1.102	688,249
2006-2007	398,537	1.081	430,818	448,537	1.116	500,567
2007-2008	348,143	1.094	380,868	348,143	1.134	394,794
2008-2009	2,424,222	1.110	2,690,886	2,586,404	1.157	2,992,469
2009-2010	2,459,878	1.132	2,784,582	2,690,346	1.188	3,196,131
2010-2011	3,058,342	1.172	3,584,377	3,322,723	1.237	4,110,208
2011-2012	3,328,247	1.231	4,097,072	3,627,382	1.309	4,748,243
2012-2013	2,508,241	1.366	3,426,257	2,811,937	1.827	5,137,409
2013-2014	1,803,789	1.598	2,882,455	1,893,192	2.206	4,176,382
2014-2015	1,539,213	2.397	3,689,494	1,545,715	3.373	5,213,697
2015-2016	756,791	6.879	5,205,965	756,791	9.783	7,403,686
Totals	$33,722,494		$44,677,245	$36,156,117		$54,704,807

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Fund. These losses exclude amounts over $100,000 per occurrence.
(C) From Appendix B, Page 2.
(D) (B) x (C). These estimated losses exclude amounts over $100,000 per occurrence.
(E) Losses capped at the Fund's SIR. Amounts are provided by the Fund.
(F) Derived from factors on Appendix B, Page 4.
(G) (E) x (F).

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

Tirndel Insurance Fund - Workers' Compensation
Paid Loss Development

Limited Losses Paid as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										3,825,846
2000-2001									3,470,387	3,486,620
2001-2002								2,606,441	2,616,607	2,663,654
2002-2003							3,712,093	3,826,367	3,863,934	
2003-2004						4,754,852	4,845,299	4,954,496		
2004-2005					1,903,091	1,987,471	2,206,897			
2005-2006				1,676,766	1,909,554	1,978,990				
2006-2007			2,112,824	2,329,587	2,440,040					
2007-2008		1,131,777	1,690,014	2,014,697						
2008-2009	436,908	1,288,925	1,852,766	2,073,373	2,259,705	2,358,047	2,419,085	2,424,222		
2009-2010	631,165	1,438,622	1,903,057	2,056,848	2,270,943	2,436,580	2,459,878			
2010-2011	393,760	1,365,723	2,113,789	2,466,321	2,867,641	3,058,342				
2011-2012	498,240	1,664,691	2,525,222	3,103,126	3,328,247					
2012-2013	407,781	1,303,509	2,103,373	2,508,241						
2013-2014	568,754	1,343,163	1,803,789							
2014-2015	575,072	1,539,213								
2015-2016	756,791									

Paid Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.007
2000-2001									1.005	1.004
2001-2002								1.004	1.018	
2002-2003							1.031	1.010		
2003-2004						1.019	1.023			
2004-2005					1.044	1.110				
2005-2006				1.139	1.036					
2006-2007			1.103	1.047						
2007-2008		1.493	1.192							
2008-2009	2.950	1.437	1.119	1.090	1.044	1.026	1.002			
2009-2010	2.279	1.323	1.081	1.104	1.073	1.010				
2010-2011	3.468	1.548	1.167	1.163	1.067					
2011-2012	3.341	1.517	1.229	1.073						
2012-2013	3.197	1.614	1.192							
2013-2014	2.362	1.343								
2014-2015	2.677									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average	2.896	1.468	1.155	1.103	1.053	1.041	1.019	1.007	1.012	1.006
Dollar-weighted Averages										
3-yr	2.698	1.492	1.198	1.110	1.061					
4-yr	2.854	1.505	1.172	1.106						
CSAC Factors	2.500	1.400	1.170	1.090	1.050	1.033	1.020	1.015	1.012	1.010
Prior	3.050	1.515	1.160	1.110	1.050	1.035	1.020	1.015	1.012	1.010
Selected	2.870	1.500	1.170	1.110	1.050	1.035	1.020	1.015	1.012	1.010
Cumulated	6.879	2.397	1.598	1.366	1.231	1.172	1.132	1.110	1.094	1.081

Tirndel Insurance Fund - Workers' Compensation
Paid Loss Development

Accident Year	Limited Losses Paid as of: 132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1995-1996				1,783,228	1,794,717						
1996-1997			2,325,928	2,336,451							
1997-1998		2,918,420	2,920,228								
1998-1999	3,028,537	3,059,863									
1999-2000	3,851,366	5,357,893									
2000-2001	3,499,624										
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
1995-1996				1.006							
1996-1997			1.005								
1997-1998		1.001									
1998-1999	1.010										
1999-2000	1.391										
2000-2001											
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
Average	1.201	1.001	1.005	1.006							
Dollar-weighted Averages											
3-yr											
4-yr											
CSAC Factors	1.009	1.008	1.007	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.013
Prior	1.009	1.008	1.007	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.013
Selected	1.009	1.008	1.007	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.013
Cumulated	1.070	1.060	1.052	1.045	1.039	1.034	1.029	1.025	1.021	1.017	1.013

Tirndel Insurance Fund - Workers' Compensation
Paid between $100,000 and $500,000 Loss Development

Losses Paid as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1,128,457
2000-2001									1,608,580	1,630,487
2001-2002								150,465	169,980	182,512
2002-2003							796,481	862,805	932,469	
2003-2004						1,447,197	1,614,695	1,875,575		
2004-2005					35,193	93,263	129,406			
2005-2006				96,889	151,411	226,901				
2006-2007			225,182	310,651	345,319					
2007-2008		3,219	62,544	180,621						
2008-2009		62,853	209,651	257,320	435,515	530,808	679,362	916,092		
2009-2010		106,615	276,662	388,771	538,325	848,282	1,037,291			
2010-2011		5,913	117,644	338,928	801,845	1,135,479				
2011-2012			502,629	757,569	1,100,634					
2012-2013		41,579	203,873	422,856						
2013-2014			89,403							
2014-2015		6,502								
2015-2016										

Paid Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.052
2000-2001									1.014	1.012
2001-2002								1.130	1.074	
2002-2003							1.083	1.081		
2003-2004						1.116	1.162			
2004-2005					2.650	1.388				
2005-2006				1.563	1.499					
2006-2007			1.380	1.112						
2007-2008		19.430	2.888							
2008-2009		3.336	1.227	1.693	1.219	1.280	1.348			
2009-2010		2.595	1.405	1.385	1.576	1.223				
2010-2011		19.896	2.881	2.366	1.416					
2011-2012			1.507	1.453						
2012-2013		4.903	2.074							
2013-2014										
2014-2015										

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average		10.032	1.909	1.595	1.672	1.252	1.198	1.106	1.044	1.032
Dollar-weighted Averages										
3-yr			1.844	1.643	1.416					
4-yr			1.733	1.651						
CSAC Factors	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Prior	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Selected	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Cumulated	331.020	82.755	26.695	11.123	6.356	4.237	3.259	2.607	2.219	2.017

Tirndel Insurance Fund - Workers' Compensation
Paid between $100,000 and $500,000 Loss Development

Accident Year	Losses Paid as of: 132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1995-1996				126,168	136,263						
1996-1997			309,438	312,252							
1997-1998		1,054,323	1,098,755								
1998-1999	569,434	496,014									
1999-2000	1,187,165										
2000-2001	1,650,067										
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
1995-1996				1.080							
1996-1997			1.009								
1997-1998		1.042									
1998-1999	0.871										
1999-2000											
2000-2001											
2001-2002											
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-Ult. Months
Average	0.871	1.042	1.009	1.080							
Dollar-weighted											
Averages											
3-yr											
4-yr											
CSAC											
Factors	1.070	1.055	1.045	1.035	1.035	1.030	1.030	1.030	1.030	1.030	1.275
Prior	1.070	1.055	1.045	1.035	1.035	1.030	1.030	1.030	1.030	1.030	1.275
Selected	1.070	1.055	1.045	1.035	1.035	1.030	1.030	1.030	1.030	1.030	1.275
Cumulated	1.868	1.746	1.655	1.584	1.530	1.478	1.435	1.393	1.352	1.313	1.275

Tirndel Insurance Fund - Workers' Compensation

Exposure and Development Method
Based on Reported Losses

Accident Year	Trended Payroll ($00) (A)	Reported Losses as of 6/30/16 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Reported (D)	Program Rate (E)	Incurred but not Reported (IBNR) (F)	Ultimate Program Losses (G)
1996-1997	$322,609	$1,005,910	1.008	0.008	$3.104	$8,011	$1,013,921
1997-1998	325,030	934,327	1.011	0.011	2.831	10,122	944,449
1998-1999	353,982	531,415	1.013	0.013	1.519	6,990	538,405
1999-2000	382,559	693,709	1.017	0.017	1.887	12,272	705,981
2000-2001	527,621	1,265,353	1.021	0.021	2.445	27,091	1,292,444
2001-2002	539,619	940,551	1.025	0.024	1.695	21,952	962,503
2002-2003	444,374	1,429,068	1.030	0.029	3.214	41,418	1,470,486
2003-2004	475,088	1,400,962	1.036	0.035	2.784	46,293	1,447,255
2004-2005	468,228	428,210	1.042	0.040	1.011	18,935	447,145
2005-2006	483,056	624,545	1.050	0.048	1.265	29,331	653,876
2006-2007	500,882	551,202	1.058	0.055	1.008	27,769	578,971
2007-2008	505,770	375,456	1.068	0.064	0.839	27,158	402,614
2008-2009	1,960,132	2,682,600	1.080	0.074	1.444	209,452	2,892,052
2009-2010	1,933,567	2,935,344	1.095	0.087	1.599	268,984	3,204,328
2010-2011	1,794,758	3,926,914	1.111	0.100	2.227	399,693	4,326,607
2011-2012	1,702,977	4,203,948	1.129	0.114	2.272	441,085	4,645,033
2012-2013	1,692,984	4,494,054	1.348	0.258	3.063	1,337,887	5,831,941
2013-2014	1,555,507	3,067,747	1.439	0.305	3.192	1,514,379	4,582,126
2014-2015	1,553,567	3,484,326	1.788	0.441	3.450	2,363,675	5,848,001
2015-2016	2,034,520	2,791,884	2.980	0.664	3.737	5,048,393	7,840,277
Totals	19,556,830	$37,767,525				$11,860,890	$49,628,415

Notes:

(A) From Appendix N, Column (C).
(B) Provided by the Fund. These losses exclude amounts incurred above the Fund's SIR for each year.
(C) From Appendix A, Page 1, Column (F).
(D) 1 - 1/(C).
(E) From Appendix C, Page 3, Column (H).
(F) (A) x (D) x (E).
(G) (B) + (F).

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and payroll that changes in regular ways over time. The method relies on the premise that the losses that are currently unreported will cost what this relationship would suggest.

Tirndel Insurance Fund - Workers' Compensation

Exposure and Development Method
Based on Paid Losses

Accident Year	Trended Payroll ($00) (A)	Paid Losses as of 6/30/16 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Paid (D)	Program Rate (E)	Incurred but not Paid (F)	Ultimate Program Losses (G)
1996-1997	$322,609	$1,000,410	1.030	0.029	$3.104	$29,040	$1,029,450
1997-1998	325,030	892,959	1.035	0.034	2.831	31,285	924,244
1998-1999	353,982	531,415	1.041	0.039	1.519	20,970	552,385
1999-2000	382,559	669,009	1.047	0.045	1.887	32,485	701,494
2000-2001	527,621	1,227,383	1.053	0.050	2.445	64,502	1,291,885
2001-2002	539,619	921,176	1.060	0.057	1.695	52,135	973,311
2002-2003	444,374	1,421,664	1.068	0.064	3.214	91,406	1,513,070
2003-2004	475,088	1,400,962	1.077	0.071	2.784	93,908	1,494,870
2004-2005	468,228	386,788	1.088	0.081	1.011	38,344	425,132
2005-2006	483,056	624,545	1.102	0.093	1.265	56,829	681,374
2006-2007	500,882	448,537	1.116	0.104	1.008	52,508	501,045
2007-2008	505,770	348,143	1.134	0.118	0.839	50,072	398,215
2008-2009	1,960,132	2,586,404	1.157	0.136	1.444	384,939	2,971,343
2009-2010	1,933,567	2,690,346	1.188	0.158	1.599	488,500	3,178,846
2010-2011	1,794,758	3,322,723	1.237	0.192	2.227	767,410	4,090,133
2011-2012	1,702,977	3,627,382	1.309	0.236	2.272	913,123	4,540,505
2012-2013	1,692,984	2,811,937	1.827	0.453	3.063	2,349,081	5,161,018
2013-2014	1,555,507	1,893,192	2.206	0.547	3.192	2,715,953	4,609,145
2014-2015	1,553,567	1,545,715	3.373	0.704	3.450	3,773,304	5,319,019
2015-2016	2,034,520	756,791	9.783	0.898	3.737	6,827,495	7,584,286
Totals	19,556,830	$29,107,481				$18,833,289	$47,940,770

Notes:

(A) From Appendix N, Column (C).
(B) Provided by the Fund. These losses exclude amounts paid above the Fund's SIR for each year.
(C) From Appendix B, Page 1, Column (F).
(D) 1 - 1/(C).
(E) From Appendix C, Page 3, Column (H).
(F) (A) x (D) x (E).
(G) (B) + (F).

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and payroll that changes in regular ways over time. The method relies on the premise that the losses that are currently unpaid will cost what this relationship would suggest.

Tirndel Insurance Fund - Workers' Compensation

Exposure and Development Method

Accident Year	Trended Payroll ($00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
1996-1997	$322,609	$946,000	2.397	$2,267,562	$7.029	$2.932	1.059	$3.104
1997-1998	325,030	868,000	2.018	1,751,624	5.389	2.671	1.060	2.831
1998-1999	353,982	506,415	1.748	885,213	2.501	1.431	1.062	1.519
1999-2000	382,559	679,000	1.524	1,034,796	2.705	1.775	1.063	1.887
2000-2001	527,621	1,212,000	1.390	1,684,680	3.193	2.297	1.065	2.445
2001-2002	539,619	858,000	1.351	1,159,158	2.148	1.590	1.066	1.695
2002-2003	444,374	1,338,000	1.384	1,851,792	4.167	3.011	1.068	3.214
2003-2004	475,088	1,237,000	1.693	2,094,241	4.408	2.604	1.069	2.784
2004-2005	468,228	442,000	2.113	933,946	1.995	0.944	1.071	1.011
2005-2006	483,056	570,000	2.177	1,240,890	2.569	1.180	1.072	1.265
2006-2007	500,882	471,000	1.996	940,116	1.877	0.940	1.073	1.008
2007-2008	505,770	395,000	1.793	708,235	1.400	0.781	1.074	0.839
2008-2009	1,960,132	2,631,000	1.613	4,243,803	2.165	1.342	1.076	1.444
2009-2010	1,933,567	2,870,000	1.421	4,078,270	2.109	1.484	1.077	1.599
2010-2011	1,794,758	3,705,000	1.323	4,901,715	2.731	2.064	1.079	2.227
2011-2012	1,702,977	4,085,000	1.284	5,245,140	3.080	2.103	1.080	2.272
2012-2013	1,692,984	3,603,000	1.238	4,460,514	2.635	2.181	1.404	3.063
2013-2014	1,555,507	2,849,000	1.197	3,410,253	2.192	2.256	1.415	3.192
2014-2015	1,553,567	3,843,000	1.115	4,284,945	2.758	2.422	1.425	3.450
2015-2016	2,034,520	5,422,000	1.037	5,622,614	2.764	2.604	1.435	3.737
Total/Avg	19,556,830	$38,530,415		$52,799,507	$2.700			
10/11-14/15	8,299,793	18,085,000		22,302,567	$2.687			
11/12-15/16	8,539,555	19,802,000		23,023,466	$2.696			
				Selected Limited Rate:	$2.700			
				Prior:	$2.525			

Notes:

(A) From Appendix N, Column (C).
(B) Selected average of results from Appendices A and B.
(C) From Appendix E, Page 1, Column (B).
(D) (B) x (C).
(E) (D) / (A).
(F) Selected Limited Rate / (C). For 2010-2011 and prior (B) / (A).
(G) Based on a Weibull distribution, a mathematical model of claim sizes.
(H) (F) x (G).

This exhibit shows the calculation of the underlying historical relationship between losses and payroll that is needed to apply the estimation methods shown on pages 1 and 2 of this Appendix.

Tirndel Insurance Fund - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
Prior	$5,534	1,304	$7,216,336
1996-1997	9,358	107	1,001,306
1997-1998	8,215	112	920,080
1998-1999	5,219	103	537,557
1999-2000	8,696	83	721,768
2000-2001	11,623	111	1,290,153
2001-2002	9,239	99	914,661
2002-2003	12,313	116	1,428,308
2003-2004	13,093	101	1,322,393
2004-2005	5,700	83	473,100
2005-2006	9,547	64	611,008
2006-2007	7,117	71	505,307
2007-2008	6,334	67	424,378
2008-2009	8,655	327	2,830,185
2009-2010	8,758	353	3,091,574
2010-2011	12,384	323	4,000,032
2011-2012	15,117	234	3,537,378
2012-2013	20,808	253	5,264,424
2013-2014	22,151	231	5,116,881
2014-2015	24,416	199	4,858,784
2015-2016	26,991	333	8,988,003
Total		4,674	$55,053,616

Notes:

(A) From Appendix D, Page 2, Column (H).
(B) From Appendix D, Page 2, Column (B).
(C) (A) x (B).

This exhibit shows the calculation of the estimated ultimate losses for each year based on the observed average frequency and severity of claims.

Tirndel Insurance Fund - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Limited Losses (A)	Adjusted Ultimate Claims (B)	Ultimate Limited Severity (C)	Trend Factor (D)	Trended Limited Severity (E)	Limited Severity (F)	Factor to SIR (G)	Program Severity (H)
Prior	$6,828,000	1,304	$5,236	4.206	$22,023	$5,236	1.057	$5,534
1996-1997	946,000	107	8,841	3.592	31,757	8,841	1.059	9,358
1997-1998	868,000	112	7,750	2.963	22,963	7,750	1.060	8,215
1998-1999	506,415	103	4,917	2.516	12,371	4,917	1.062	5,219
1999-2000	679,000	83	8,181	2.149	17,581	8,181	1.063	8,696
2000-2001	1,212,000	111	10,919	1.921	20,975	10,919	1.065	11,623
2001-2002	858,000	99	8,667	1.831	15,869	8,667	1.066	9,239
2002-2003	1,338,000	116	11,534	1.838	21,199	11,534	1.068	12,313
2003-2004	1,237,000	101	12,248	2.204	26,995	12,248	1.069	13,093
2004-2005	442,000	83	5,325	2.696	14,356	5,325	1.071	5,700
2005-2006	570,000	64	8,906	2.722	24,242	8,906	1.072	9,547
2006-2007	471,000	71	6,634	2.447	16,233	6,634	1.073	7,117
2007-2008	395,000	67	5,896	2.154	12,700	5,896	1.074	6,334
2008-2009	2,631,000	327	8,046	1.898	15,271	8,046	1.076	8,655
2009-2010	2,870,000	353	8,130	1.639	13,325	8,130	1.077	8,758
2010-2011	3,708,000	323	11,480	1.495	17,163	11,480	1.079	12,384
2011-2012	4,050,000	234	17,308	1.422	24,612	13,994	1.080	15,117
2012-2013	3,618,000	253	14,300	1.343	19,205	14,818	1.404	20,808
2013-2014	2,931,000	231	12,688	1.271	16,126	15,657	1.415	22,151
2014-2015	3,838,000	199	19,286	1.161	22,391	17,140	1.425	24,416
2015-2016	5,378,000	333	16,150	1.058	17,087	18,809	1.435	26,991

Average Limited Severity:	$19,259
Average 10/11-14/15 Limited Severity:	$19,899
Average 11/12-15/16 Limited Severity:	$19,884
Selected Limited Severity:	$19,900
Prior:	$17,500

Notes:

(A) Selected average of results from Appendices A, B, and C.
(B) Appendix D, Page 3, Column (C).
(C) (A) / (B).
(D) From Appendix E, Page 1, Column (J).
(E) (C) x (D).
(F) Selected Limited Severity / (D).
(G) Based on a Weibull distribution, a mathematical model of claim sizes.
(H) (F) x (G).

This exhibit shows the calculation of the historical average cost per claim, or severity. The observed average severity is used in the method shown on page 1 of this Appendix.

Tirndel Insurance Fund - Workers' Compensation

Frequency and Severity Method
Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Trended Payroll ($000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
Prior	1,304	1,304	1,304	0.0		0.655	
1996-1997	107	107	107	32.3	3.317	0.668	2.216
1997-1998	112	112	112	32.5	3.446	0.682	2.350
1998-1999	103	104	103	35.4	2.910	0.696	2.025
1999-2000	83	82	83	38.3	2.170	0.710	1.541
2000-2001	111	110	111	52.8	2.104	0.725	1.525
2001-2002	99	97	99	54.0	1.835	0.740	1.358
2002-2003	116	114	116	44.4	2.610	0.755	1.971
2003-2004	101	101	101	47.5	2.126	0.769	1.635
2004-2005	83	82	83	46.8	1.773	0.785	1.392
2005-2006	64	62	64	48.3	1.325	0.801	1.061
2006-2007	71	69	71	50.1	1.417	0.817	1.158
2007-2008	67	68	67	50.6	1.325	0.834	1.105
2008-2009	327	327	327	196.0	1.668	0.851	1.419
2009-2010	353	354	353	193.4	1.826	0.868	1.585
2010-2011	323	314	323	179.5	1.800	0.886	1.595
2011-2012	234	223	234	170.3	1.374	0.904	1.242
2012-2013	253	240	253	169.3	1.494	0.922	1.377
2013-2014	231	233	231	155.6	1.485	0.942	1.399
2014-2015	199	190	199	155.4	1.281	0.961	1.231
2015-2016	333	325	333	203.5	1.637	0.980	1.604
Total	4,674	4,618	4,674	1,955.7			1.472
10/11-14/15	1,240	1,200	1,240	830.0			1.373

(H) Selected 2016-2017 Frequency:	1.500
Prior:	1.450

	Program Year:	2016-2017	2017-2018
(I)	Trend Factor:	1.000	0.980
(J)	Selected Frequency:	1.500	1.470
(K)	Estimated Payroll ($000,000)	222.7	229.8
(L)	Ultimate Claims:	334	338

Notes:

(A) From Appendix D, Page 4, (C).
(B) From Appendix D, Page 5, (C).
(C) Selected from (A) and (B).
(D) From Appendix N, Column (C) divided by 10,000.
(E) (C) / (D).
(F) From Appendix E, Page 1, Column (H).
(G) (E) x (F).
(H) The selected frequency of 1.500 is based on (G).
(I) From Appendix E, Page 1, Column (H).
(J) (H) x (I).
(K) From Appendix N, Column (C) divided by 10,000.
(L) (J) x (K).

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per $1,000,000 of trended payroll.

Tirndel Insurance Fund - Workers' Compensation

Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 6/30/2016 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
Prior	1,304	1.000	1,304	
1996-1997	107	1.000	107	2.216
1997-1998	112	1.000	112	2.350
1998-1999	103	1.000	103	2.025
1999-2000	83	1.000	83	1.540
2000-2001	111	1.000	111	1.525
2001-2002	99	1.000	99	1.358
2002-2003	116	1.000	116	1.971
2003-2004	101	1.000	101	1.635
2004-2005	83	1.000	83	1.392
2005-2006	64	1.000	64	1.061
2006-2007	71	1.000	71	1.158
2007-2008	67	1.000	67	1.105
2008-2009	327	1.000	327	1.420
2009-2010	353	1.001	353	1.585
2010-2011	322	1.002	323	1.595
2011-2012	233	1.004	234	1.242
2012-2013	251	1.007	253	1.378
2013-2014	228	1.014	231	1.399
2014-2015	194	1.027	199	1.231
2015-2016	295	1.130	333	1.604
Total	4,624		4,674	1.472

Notes:

(A) Provided by the Fund.
(B) From Appendix D, Page 6.
(C) (A) x (B).
(D) (C) / [Appendix D, Page 3, (D)] x [Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the Fund. These numbers of claims tend to "develop" or change from period to period as more claims are filed. This development tends to follow quantifiable patterns over time.

Tirndel Insurance Fund - Workers' Compensation

Frequency and Severity Method
Closed Claim Count Development

Accident Year	Claims Closed as of 6/30/2016 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
Prior	1,298	1.005	1,304	
1996-1997	106	1.006	107	2.216
1997-1998	111	1.007	112	2.350
1998-1999	103	1.008	104	2.045
1999-2000	81	1.009	82	1.522
2000-2001	109	1.010	110	1.512
2001-2002	96	1.011	97	1.330
2002-2003	113	1.012	114	1.937
2003-2004	100	1.013	101	1.635
2004-2005	81	1.015	82	1.375
2005-2006	61	1.018	62	1.028
2006-2007	68	1.022	69	1.125
2007-2008	66	1.027	68	1.121
2008-2009	316	1.035	327	1.420
2009-2010	339	1.045	354	1.589
2010-2011	296	1.061	314	1.550
2011-2012	204	1.091	223	1.184
2012-2013	214	1.123	240	1.307
2013-2014	195	1.193	233	1.411
2014-2015	144	1.316	190	1.175
2015-2016	135	2.408	325	1.565
Total	4,236		4,618	1.446

Notes:

(A) Provided by the Fund.
(B) From Appendix D, Page 7.
(C) (A) x (B).
(D) (C) / [Appendix D, Page 3, (D)] x [Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the Fund. These numbers of closed claims tend to "develop" or change from period to period as more claims are closed. This development tends to follow quantifiable patterns over time.

Tirndel Insurance Fund - Workers' Compensation
Reported Claim Count Development

Claims Reported as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months	132 Months	144 Months	156 Months
1995-1996													
1996-1997													367
1997-1998												440	440
1998-1999											419	419	
1999-2000										430	430		
2000-2001									452	452	452		
2001-2002								413	413	413			
2002-2003							447	447	448				
2003-2004						424	424	439					
2004-2005					366	366	374						
2005-2006				291	292	293							
2006-2007			346	349	349								
2007-2008		333	336	340									
2008-2009	310	316	325	327	327	327	328	327					
2009-2010	312	345	350	352	353	353	353						
2010-2011	287	310	320	324	324	322							
2011-2012	208	232	232	233	233								
2012-2013	229	251	252	251									
2013-2014	206	227	228										
2014-2015	175	194											
2015-2016	295												

Reported Claim Count Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
1995-1996													
1996-1997													1.000
1997-1998												1.000	
1998-1999											1.000		
1999-2000										1.000			
2000-2001									1.000	1.000			
2001-2002								1.000	1.000				
2002-2003							1.000	1.002					
2003-2004						1.000	1.035						
2004-2005					1.000	1.022							
2005-2006				1.003	1.003								
2006-2007			1.009	1.000									
2007-2008		1.009	1.012										
2008-2009	1.019	1.028	1.006	1.000	1.000	1.003	0.997						
2009-2010	1.106	1.014	1.006	1.003	1.000	1.000							
2010-2011	1.080	1.032	1.013	1.000	0.994								
2011-2012	1.115	1.000	1.004	1.000									
2012-2013	1.096	1.004	0.996										
2013-2014	1.102	1.004											
2014-2015	1.109												

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
Average	1.090	1.013	1.007	1.001	0.999	1.006	1.011	1.001	1.000	1.000	1.000	1.000	1.000
Claim-weighted Averages													
3-yr	1.102	1.003	1.005	1.001	0.998								
4-yr	1.105	1.012	1.005	1.001									
CSAC Factors	1.100	1.007	1.004	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.100	1.015	1.008	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.100	1.013	1.007	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.130	1.027	1.014	1.007	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000

Tirndel Insurance Fund - Workers' Compensation
Closed Claim Development

Claims Closed as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months	132 Months	144 Months	156 Months
1995-1996													
1996-1997													363
1997-1998												430	429
1998-1999											410	410	
1999-2000										416	416		
2000-2001									432	432	433		
2001-2002								401	400	402			
2002-2003							431	430	431				
2003-2004						395	394	411					
2004-2005					351	354	365						
2005-2006				267	271	275							
2006-2007			304	312	324								
2007-2008		270	286	300									
2008-2009	179	266	284	295	297	308	314	316					
2009-2010	194	293	303	314	322	336	339						
2010-2011	153	235	257	274	288	296							
2011-2012	79	159	178	200	204								
2012-2013	86	184	210	214									
2013-2014	110	183	195										
2014-2015	75	144											
2015-2016	135												

Closed Claim Count Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
1995-1996													
1996-1997													0.997
1997-1998												0.998	
1998-1999											1.000		
1999-2000										1.000			
2000-2001									1.000	1.002			
2001-2002								0.998	1.005				
2002-2003							0.998	1.002					
2003-2004						0.997	1.043						
2004-2005					1.009	1.031							
2005-2006				1.015	1.015								
2006-2007			1.026	1.038									
2007-2008		1.059	1.049										
2008-2009	1.486	1.068	1.039	1.007	1.037	1.019	1.006						
2009-2010	1.510	1.034	1.036	1.025	1.043	1.009							
2010-2011	1.536	1.094	1.066	1.051	1.028								
2011-2012	2.013	1.119	1.124	1.020									
2012-2013	2.140	1.141	1.019										
2013-2014	1.664	1.066											
2014-2015	1.920												

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
Average	1.753	1.083	1.051	1.026	1.026	1.014	1.016	1.000	1.003	1.001	1.000	0.998	0.997
Claim-weighted Averages													
3-yr	1.886	1.108	1.067	1.033	1.036								
4-yr	1.914	1.104	1.057	1.026									
CSAC Factors	1.600	1.080	1.050	1.030	1.025	1.015	1.010	1.008	1.005	1.004	1.003	1.002	1.001
Prior	1.780	1.115	1.075	1.030	1.030	1.015	1.010	1.008	1.005	1.004	1.003	1.002	1.001
Selected	1.830	1.103	1.062	1.029	1.028	1.015	1.010	1.008	1.005	1.004	1.003	1.002	1.001
Cumulated	2.408	1.316	1.193	1.123	1.091	1.061	1.045	1.035	1.027	1.022	1.018	1.015	1.013

Tirndel Insurance Fund - Workers' Compensation

Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2016-2017 Loss Rate Level (B)	Factor to 2017-2018 Loss Rate Level (C)	Factor to 2018-2019 Loss Rate Level (D)	Factor to 2019-2020 Loss Rate Level (E)	Factor to 2016-2017 Frequency Level (F)	Factor to 2017-2018 Frequency Level (G)	Factor to 2018-2019 Frequency Level (H)	Factor to 2019-2020 Frequency Level (I)	Factor to 2016-2017 Severity Level (J)
Prior	1.509	2.750	2.830	2.913	2.997	0.655	0.642	0.629	0.616	4.206
1996-1997	1.354	2.397	2.467	2.539	2.612	0.668	0.655	0.642	0.629	3.592
1997-1998	1.172	2.018	2.077	2.137	2.199	0.682	0.669	0.655	0.642	2.963
1998-1999	1.045	1.748	1.799	1.851	1.905	0.696	0.682	0.668	0.655	2.516
1999-2000	0.937	1.524	1.569	1.614	1.661	0.710	0.696	0.682	0.668	2.149
2000-2001	0.880	1.390	1.431	1.472	1.515	0.725	0.710	0.696	0.682	1.921
2001-2002	0.880	1.351	1.391	1.431	1.473	0.740	0.725	0.710	0.696	1.831
2002-2003	0.928	1.384	1.424	1.466	1.509	0.755	0.740	0.724	0.710	1.838
2003-2004	1.168	1.693	1.743	1.794	1.846	0.769	0.754	0.739	0.724	2.204
2004-2005	1.500	2.113	2.175	2.238	2.303	0.785	0.770	0.754	0.739	2.696
2005-2006	1.591	2.177	2.241	2.306	2.373	0.801	0.785	0.769	0.754	2.722
2006-2007	1.501	1.996	2.055	2.115	2.176	0.817	0.801	0.785	0.769	2.447
2007-2008	1.387	1.793	1.846	1.900	1.955	0.834	0.818	0.801	0.785	2.154
2008-2009	1.284	1.613	1.660	1.708	1.758	0.851	0.834	0.817	0.801	1.898
2009-2010	1.164	1.421	1.462	1.505	1.549	0.868	0.851	0.834	0.817	1.639
2010-2011	1.115	1.323	1.362	1.402	1.442	0.886	0.869	0.851	0.834	1.495
2011-2012	1.114	1.284	1.322	1.361	1.400	0.904	0.886	0.868	0.851	1.422
2012-2013	1.104	1.238	1.274	1.311	1.349	0.922	0.904	0.886	0.868	1.343
2013-2014	1.098	1.197	1.232	1.267	1.304	0.942	0.923	0.904	0.886	1.271
2014-2015	1.052	1.115	1.148	1.181	1.215	0.961	0.942	0.922	0.904	1.161
2015-2016	1.007	1.037	1.067	1.098	1.130	0.980	0.960	0.941	0.922	1.058
2016-2017	1.000	1.000	1.029	1.059	1.090	1.000	0.980	0.960	0.941	1.000
2017-2018	1.000	--	1.000	1.029	1.059	--	1.000	0.980	0.960	--
2018-2019	1.000	--	--	1.000	1.029	--	--	1.000	0.980	--
2019-2020	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

(A)	Based on WCIRB.
(B) - (E)	(A) adjusted for a 2.9% annual loss rate trend.
(F) - (I)	(A) adjusted for a -2.0% annual frequency trend.
(J)	(A) adjusted for a 5.0% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in statutory workers' compensation benefit levels and changes in actual claims costs in excess of changes in payroll. Changes in the ways in which claims are filed as a result of greater awareness of workers' compensation benefits are not generally reflected in the statutory benefit level factors shown above, but may be part of the reason for changes in actual claims costs in excess of payroll changes.

Tirndel Insurance Fund - Workers' Compensation

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll ($00) (E)	Ultimate Frequency (F)
Prior	$6,828,000	1,304	1.509	7,902		
1996-1997	946,000	107	1.354	11,968	322,609	3.317
1997-1998	868,000	112	1.172	9,085	325,030	3.446
1998-1999	506,415	103	1.045	5,138	353,982	2.910
1999-2000	679,000	83	0.937	7,669	382,559	2.170
2000-2001	1,212,000	111	0.880	9,607	527,621	2.104
2001-2002	858,000	99	0.880	7,629	539,619	1.835
2002-2003	1,338,000	116	0.928	10,701	444,374	2.610
2003-2004	1,237,000	101	1.168	14,308	475,088	2.126
2004-2005	442,000	83	1.500	7,990	468,228	1.773
2005-2006	570,000	64	1.591	14,166	483,056	1.325
2006-2007	471,000	71	1.501	9,955	500,882	1.417
2007-2008	395,000	67	1.387	8,179	505,770	1.325
2008-2009	2,631,000	327	1.284	10,331	1,960,132	1.668
2009-2010	2,870,000	353	1.164	9,468	1,933,567	1.826
2010-2011	3,705,000	323	1.115	12,794	1,794,758	1.800
2011-2012	4,085,000	234	1.114	19,445	1,702,977	1.374
2012-2013	3,603,000	253	1.104	15,726	1,692,984	1.494
2013-2014	2,849,000	231	1.098	13,540	1,555,507	1.485
2014-2015	3,843,000	199	1.052	20,323	1,553,567	1.281
2015-2016	5,422,000	333	1.007	16,402	2,034,520	1.637

	Severity Trend Factors	Frequency Trend Factors
Latest 10 x 2015-2016	1.068	1.000
Latest 5 x 2015-2016	1.058	0.942
Prior	1.025	0.980
Default	1.025	0.980
Selected Residual Trend	1.050	0.980

Notes:

(A) Selected average of results from Appendices A and B.
(B) Appendix D, Page 3, Column (C).
(C) Appendix E, Page 1, (A).
(D) (A) x (C) / (B).
(E) From Appendix N, Column (C).
(F) (B) / (E) x 10,000.

Tirndel Insurance Fund - Workers' Compensation

Outstanding Liability for
Unallocated Loss Adjustment Expenses
as of 6/30/16

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2016-2017	389.6	$860	1.000	$860	$335,056
2017-2018	220.8	860	1.050	903	199,382
2018-2019	158.9	860	1.103	949	150,796
2019-2020	117.4	860	1.158	996	116,930
2020-2021	90.6	860	1.216	1,046	94,768
2021-2022	68.6	860	1.277	1,098	75,323
2022-2023	54.3	860	1.341	1,153	62,608
2023-2024	44.4	860	1.408	1,211	53,768
2024-2025	36.9	860	1.478	1,271	46,900
2025-2026	31.5	860	1.552	1,335	42,053
2026-2027	27.4	860	1.630	1,402	38,415
2027-2028	23.9	860	1.712	1,472	35,181
2028-2029	19.7	860	1.798	1,546	30,456
2029-2030	14.7	860	1.888	1,624	23,873
2030-2031	10.8	860	1.982	1,705	18,414
2031-2032	7.3	860	2.081	1,790	13,067
2032-2033	4.9	860	2.185	1,879	9,207
2033-2034	2.7	860	2.294	1,973	5,327

(G) Total ULAE Outstanding as of 6/30/16: $1,351,524

Notes:

(A) We assume fiscal years will be 7/1 to 6/30.
(B) Based on an estimated claim closing pattern.
(C) Based on claims administration payment information provided by the Fund.
(D) We assume ULAE costs will increase at 5.0% per year.
(E) (C) x (D).
(F) (B) x (E).
(G) Total of Column (F).

This exhibit shows the calculation of the outstanding ULAE based on the expected pattern of claims closings and assumptions about future claims administration costs per open claim.

Tirndel Insurance Fund - Workers' Compensation

Outstanding Liability for
Unallocated Loss Adjustment Expenses
as of 6/30/17

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2017-2018	407.0	$860	1.050	$903	$367,521
2018-2019	234.2	860	1.103	949	222,256
2019-2020	169.6	860	1.158	996	168,922
2020-2021	126.2	860	1.216	1,046	132,005
2021-2022	96.4	860	1.277	1,098	105,847
2022-2023	73.3	860	1.341	1,153	84,515
2023-2024	58.6	860	1.408	1,211	70,965
2024-2025	48.0	860	1.478	1,271	61,008
2025-2026	40.1	860	1.552	1,335	53,534
2026-2027	34.4	860	1.630	1,402	48,229
2027-2028	29.6	860	1.712	1,472	43,571
2028-2029	24.5	860	1.798	1,546	37,877
2029-2030	18.9	860	1.888	1,624	30,694
2030-2031	14.7	860	1.982	1,705	25,064
2031-2032	10.9	860	2.081	1,790	19,511
2032-2033	8.2	860	2.185	1,879	15,408
2033-2034	5.7	860	2.294	1,973	11,246
2034-2035	2.7	860	2.409	2,072	5,594

(G) Total ULAE Outstanding as of 6/30/17: $1,503,767

Notes:

(A) We assume fiscal years will be 7/1 to 6/30.
(B) Based on an estimated claim closing pattern.
(C) Based on claims administration payment information provided by the Fund.
(D) We assume ULAE costs will increase at 5.0% per year.
(E) (C) x (D).
(F) (B) x (E).
(G) Total of Column (F).

This exhibit shows the calculation of the outstanding ULAE based on the expected pattern of claims closings and assumptions about future claims administration costs per open claim.

Tirndel Insurance Fund - Workers' Compensation

Outstanding Liability for
Unallocated Loss Adjustment Expenses
as of 6/30/18

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2018-2019	423.0	$860	1.103	$949	$401,427
2019-2020	245.9	860	1.158	996	244,916
2020-2021	179.1	860	1.216	1,046	187,339
2021-2022	132.5	860	1.277	1,098	145,485
2022-2023	101.5	860	1.341	1,153	117,030
2023-2024	77.8	860	1.408	1,211	94,216
2024-2025	62.3	860	1.478	1,271	79,183
2025-2026	51.3	860	1.552	1,335	68,486
2026-2027	43.1	860	1.630	1,402	60,426
2027-2028	36.7	860	1.712	1,472	54,022
2028-2029	30.3	860	1.798	1,546	46,844
2029-2030	23.7	860	1.888	1,624	38,489
2030-2031	18.9	860	1.982	1,705	32,225
2031-2032	14.8	860	2.081	1,790	26,492
2032-2033	11.8	860	2.185	1,879	22,172
2033-2034	9.0	860	2.294	1,973	17,757
2034-2035	5.7	860	2.409	2,072	11,810
2035-2036	2.7	860	2.529	2,175	5,873

(G) Total ULAE Outstanding as of 6/30/18: $1,654,192

Notes:

(A) We assume fiscal years will be 7/1 to 6/30.
(B) Based on an estimated claim closing pattern.
(C) Based on claims administration payment information provided by the Fund.
(D) We assume ULAE costs will increase at 5.0% per year.
(E) (C) x (D).
(F) (B) x (E).
(G) Total of Column (F).

This exhibit shows the calculation of the outstanding ULAE based on the expected pattern of claims closings and assumptions about future claims administration costs per open claim.

Tirndel Insurance Fund - Workers' Compensation

Payment and Reserve Forecast

		Calendar Period	
Accident Year	As of 6/30/2016	7/1/2016 to 6/30/2017	7/1/2017 to 6/30/2018
Prior			
Ultimate Loss	$10,348,415	$10,348,415	$10,348,415
Paid in Calendar Period	-	29,732	28,052
Paid to Date	10,142,429	10,172,161	10,200,213
Outstanding Liability	205,986	176,254	148,202
2000-2001			
Ultimate Loss	$1,292,000	$1,292,000	$1,292,000
Paid in Calendar Period	-	6,979	7,089
Paid to Date	1,227,383	1,234,362	1,241,451
Outstanding Liability	64,617	57,638	50,549
2001-2002			
Ultimate Loss	$964,000	$964,000	$964,000
Paid in Calendar Period	-	4,753	4,112
Paid to Date	921,176	925,929	930,041
Outstanding Liability	42,824	38,071	33,959
2002-2003			
Ultimate Loss	$1,472,000	$1,472,000	$1,472,000
Paid in Calendar Period	-	5,587	4,967
Paid to Date	1,421,664	1,427,251	1,432,218
Outstanding Liability	50,336	44,749	39,782
2003-2004			
Ultimate Loss	$1,451,000	$1,451,000	$1,451,000
Paid in Calendar Period	-	5,454	4,949
Paid to Date	1,400,962	1,406,416	1,411,365
Outstanding Liability	50,038	44,584	39,635
2004-2005			
Ultimate Loss	$446,000	$446,000	$446,000
Paid in Calendar Period	-	6,869	5,705
Paid to Date	386,788	393,657	399,362
Outstanding Liability	59,212	52,343	46,638
2005-2006			
Ultimate Loss	$656,000	$656,000	$656,000
Paid in Calendar Period	-	3,963	3,189
Paid to Date	624,545	628,508	631,697
Outstanding Liability	31,455	27,492	24,303

Tirndel Insurance Fund - Workers' Compensation

Payment and Reserve Forecast

		Calendar Period	
Accident Year	As of 6/30/2016	7/1/2016 to 6/30/2017	7/1/2017 to 6/30/2018
2006-2007			
Ultimate Loss	$583,000	$583,000	$583,000
Paid in Calendar Period	-	14,791	15,079
Paid to Date	448,537	463,328	478,407
Outstanding Liability	134,463	119,672	104,593
2007-2008			
Ultimate Loss	$401,000	$401,000	$401,000
Paid in Calendar Period	-	6,343	5,117
Paid to Date	348,143	354,486	359,603
Outstanding Liability	52,857	46,514	41,397
2008-2009			
Ultimate Loss	$2,897,000	$2,897,000	$2,897,000
Paid in Calendar Period	-	40,067	32,463
Paid to Date	2,586,404	2,626,471	2,658,934
Outstanding Liability	310,596	270,529	238,066
2009-2010			
Ultimate Loss	$3,214,000	$3,214,000	$3,214,000
Paid in Calendar Period	-	74,883	57,891
Paid to Date	2,690,346	2,765,229	2,823,120
Outstanding Liability	523,654	448,771	390,880
2010-2011			
Ultimate Loss	$4,222,000	$4,222,000	$4,222,000
Paid in Calendar Period	-	156,474	106,221
Paid to Date	3,322,723	3,479,197	3,585,418
Outstanding Liability	899,277	742,803	636,582
2011-2012			
Ultimate Loss	$4,551,000	$4,551,000	$4,551,000
Paid in Calendar Period	-	173,640	130,496
Paid to Date	3,627,382	3,801,022	3,931,518
Outstanding Liability	923,618	749,978	619,482
2012-2013			
Ultimate Loss	$5,228,000	$5,228,000	$5,228,000
Paid in Calendar Period	-	1,157,294	236,649
Paid to Date	2,811,937	3,969,231	4,205,880
Outstanding Liability	2,416,063	1,258,769	1,022,120

Tirndel Insurance Fund - Workers' Compensation

Payment and Reserve Forecast

		Calendar Period	
Accident Year	As of 6/30/2016	7/1/2016 to 6/30/2017	7/1/2017 to 6/30/2018
2013-2014			
Ultimate Loss	$4,446,000	$4,446,000	$4,446,000
Paid in Calendar Period	-	439,083	1,012,474
Paid to Date	1,893,192	2,332,275	3,344,749
Outstanding Liability	2,552,808	2,113,725	1,101,251
2014-2015			
Ultimate Loss	$5,494,000	$5,494,000	$5,494,000
Paid in Calendar Period	-	880,468	527,665
Paid to Date	1,545,715	2,426,183	2,953,848
Outstanding Liability	3,948,285	3,067,817	2,540,152
2015-2016			
Ultimate Loss	$7,648,000	$7,648,000	$7,648,000
Paid in Calendar Period	-	1,488,501	1,204,804
Paid to Date	756,791	2,245,292	3,450,096
Outstanding Liability	6,891,209	5,402,708	4,197,904
2016-2017			
Ultimate Loss	-	$8,528,000	$8,528,000
Paid in Calendar Period	-	869,856	1,654,159
Paid to Date	-	869,856	2,524,015
Outstanding Liability	-	7,658,144	6,003,985
2017-2018			
Ultimate Loss	-	-	$9,119,000
Paid in Calendar Period	-	-	930,138
Paid to Date	-	-	930,138
Outstanding Liability	-	-	8,188,862
Totals			
Ultimate Loss	$55,313,415	$63,841,415	$72,960,415
Paid in Calendar Period	-	5,364,737	5,971,219
Paid to Date	36,156,117	41,520,854	47,492,073
Outstanding Liability	19,157,298	22,320,561	25,468,342
Total Outstanding ULAE	1,351,524	1,503,767	1,654,192
Outstanding Liability plus ULAE	20,508,822	23,824,328	27,122,534

Notes appear on the next page.

Tirndel Insurance Fund - Workers' Compensation

Payment and Reserve Forecast

Notes to previous page:

- Accident Year is associated with date of loss. Calendar Period is associated with date of transaction. For example, for the losses which occurred during 2014-2015, $880,468 is expected to be paid between 7/1/16 and 6/30/17, $2,426,183 will have been paid by 6/30/17, and the reserve for remaining payments on these claims should be $3,067,817.

- Ultimate Losses for each accident year are from Exhibit 4, Page 1.

- Paid in Calendar Period is a proportion of the Outstanding Liability from the previous calendar period. These proportions are derived from the paid loss development pattern selected in Appendix B. For example, $527,665 = $3,067,817 x 17.2%.

- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example, $2,953,848 = $527,665 + $2,426,183.

- Outstanding Liability is Ultimate Loss minus Paid to Date. For example, $3,067,817 = $5,494,000 - $2,426,183.

This exhibit shows the calculation of the liability for outstanding claims as of the date of evaluation, the end of the current fiscal year, and the end of the coming fiscal year. It also shows the expected claims payout during the remainder of the current fiscal year and the coming fiscal year. Refer to the Totals at the end of the exhibit for the balance sheet information. The top parts of the exhibit show information for each program year.

Tirndel Insurance Fund - Workers' Compensation

Short- and Long-Term Liabilities

		Expected	Discounted
Liabilities as of 6/30/16:			
Current (Short Term)	Loss and ALAE:	$4,494,881	$4,461,544
	ULAE:	335,056	332,571
	Short-Term Loss and LAE:	$4,829,937	$4,794,115
Non-Current (Long Term)	Loss and ALAE:	$14,662,417	$13,003,568
	ULAE:	1,016,468	899,571
	Long-Term Loss and LAE:	$15,678,885	$13,903,139
Total Liability	Loss and ALAE:	$19,157,298	$17,465,112
	ULAE:	1,351,524	1,232,142
	Total Loss and LAE:	$20,508,822	$18,697,254
Liabilities as of 6/30/17:			
Current (Short Term)	Loss and ALAE:	$5,041,081	$5,003,693
	ULAE:	367,521	364,795
	Short-Term Loss and LAE:	$5,408,602	$5,368,488
Non-Current (Long Term)	Loss and ALAE:	$17,279,480	$15,343,610
	ULAE:	1,136,246	1,006,031
	Long-Term Loss and LAE:	$18,415,726	$16,349,641
Total Liability	Loss and ALAE:	$22,320,561	$20,347,303
	ULAE:	1,503,767	1,370,826
	Total Loss and LAE:	$23,824,328	$21,718,129

		Discounted with a Margin for Contingencies				
		70% Confidence	75% Confidence	80% Confidence	85% Confidence	90% Confidence
Liabilities as of 6/30/16:						
Current (Short Term)	Loss and ALAE:	$4,814,006	$4,947,852	$5,104,006	$5,291,391	$5,541,238
	ULAE:	358,844	368,821	380,461	394,429	413,053
	Short-Term Loss and LAE:	$5,172,850	$5,316,673	$5,484,467	$5,685,820	$5,954,291
Non-Current (Long Term)	Loss and ALAE:	$14,030,850	$14,420,957	$14,876,082	$15,422,232	$16,150,431
	ULAE:	970,637	997,625	1,029,110	1,066,891	1,117,267
	Long-Term Loss and LAE:	$15,001,487	$15,418,582	$15,905,192	$16,489,123	$17,267,698
Total Liability	Loss and ALAE:	$18,844,856	$19,368,809	$19,980,088	$20,713,623	$21,691,669
	ULAE:	1,329,481	1,366,446	1,409,571	1,461,320	1,530,320
	Total Loss and LAE:	$20,174,337	$20,735,255	$21,389,659	$22,174,943	$23,221,989
Liabilities as of 6/30/17:						
Current (Short Term)	Loss and ALAE:	$5,398,985	$5,549,096	$5,724,225	$5,934,380	$6,214,587
	ULAE:	393,614	404,558	417,325	432,647	453,075
	Short-Term Loss and LAE:	$5,792,599	$5,953,654	$6,141,550	$6,367,027	$6,667,662
Non-Current (Long Term)	Loss and ALAE:	$16,555,755	$17,016,063	$17,553,090	$18,197,521	$19,056,763
	ULAE:	1,085,507	1,115,688	1,150,900	1,193,153	1,249,491
	Long-Term Loss and LAE:	$17,641,262	$18,131,751	$18,703,990	$19,390,674	$20,306,254
Total Liability	Loss and ALAE:	$21,954,740	$22,565,159	$23,277,315	$24,131,901	$25,271,350
	ULAE:	1,479,121	1,520,246	1,568,225	1,625,800	1,702,566
	Total Loss and LAE:	$23,433,861	$24,085,405	$24,845,540	$25,757,701	$26,973,916

Note: Current (short term) liabilities are the portion of the total estimated liability shown on Appendix G that is expected to be paid out within the coming year. Totals may vary from Exhibit 1, due to rounding.

Tirndel Insurance Fund - Workers' Compensation

Discount Factors to be Applied to Overall Reserves

Accident Year	Full Value of Reserve at 6/30/16 (A)	Discount Factor (B)	Discounted Reserve at 6/30/16 (C)	Full Value of Reserve at 6/30/17 (D)	Discount Factor (E)	Discounted Reserve at 6/30/17 (F)
Prior	$103,364	0.993	$102,597	$88,066	0.993	$87,413
1996-1997	13,590	0.979	13,311	10,940	0.993	10,859
1997-1998	52,041	0.968	50,369	44,807	0.979	43,888
1998-1999	0	0.957	0	0	0.968	0
1999-2000	36,991	0.947	35,027	32,441	0.957	31,042
2000-2001	64,617	0.937	60,572	57,638	0.947	54,577
2001-2002	42,824	0.929	39,784	38,071	0.937	35,688
2002-2003	50,336	0.921	46,351	44,749	0.929	41,572
2003-2004	50,038	0.914	45,747	44,584	0.921	41,054
2004-2005	59,212	0.909	53,817	52,343	0.914	47,855
2005-2006	31,455	0.904	28,446	27,492	0.909	24,987
2006-2007	134,463	0.900	121,056	119,672	0.904	108,224
2007-2008	52,857	0.897	47,398	46,514	0.900	41,876
2008-2009	310,596	0.896	278,317	270,529	0.897	242,590
2009-2010	523,654	0.896	469,243	448,771	0.896	402,132
2010-2011	899,277	0.897	806,460	742,803	0.896	665,622
2011-2012	923,618	0.898	829,529	749,978	0.897	672,570
2012-2013	2,416,063	0.902	2,180,312	1,258,769	0.898	1,130,538
2013-2014	2,552,808	0.906	2,311,962	2,113,725	0.902	1,907,475
2014-2015	3,948,285	0.914	3,607,365	3,067,817	0.906	2,778,382
2015-2016	6,891,209	0.920	6,337,449	5,402,708	0.914	4,936,204
2016-2017	0	-	-	7,658,144	0.920	7,042,755
Totals	$19,157,298		$17,465,112	$22,320,561		$20,347,303

(G) Discount Factor at 6/30/16 for Overall Reserve:	0.912
(H) Discount Factor at 6/30/17 for Overall Reserve:	0.912

Notes:

(A) From Appendix G, Outstanding Liability at 6/30/16.
(B) Based on Appendix I, Page 2, Column (E).
(C) (A) x (B).
(D) From Appendix G, Outstanding Liability at 6/30/17.
(E) Based on Appendix I, Page 2, Column (E).
(F) (D) x (E).
(G) Total of (C) / Total of (A).
(H) Total of (F) / Total of (D).

This exhibit shows the expected impact of anticipated investment income on the liability for outstanding claims at the date of evaluation and the end of the current fiscal year. For example, if the discount factor in item (G) is 0.912, the discounted liability for outstanding claims is 91.2% of the full value.

Tirndel Insurance Fund - Workers' Compensation

Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted* Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	7.7%	1.5%	0.076	0.077	0.993
21	0.9%	1.5%	0.084	0.086	0.979
20	1.0%	1.5%	0.093	0.096	0.968
19	0.9%	1.5%	0.100	0.105	0.957
18	1.0%	1.5%	0.108	0.114	0.947
17	0.9%	1.5%	0.116	0.124	0.937
16	1.1%	1.5%	0.125	0.134	0.929
15	1.0%	1.5%	0.133	0.145	0.921
14	1.3%	1.5%	0.144	0.158	0.914
13	1.5%	1.5%	0.157	0.173	0.909
12	1.7%	1.5%	0.172	0.190	0.904
11	1.9%	1.5%	0.189	0.209	0.900
10	2.1%	1.5%	0.207	0.231	0.897
9	3.0%	1.5%	0.234	0.261	0.896
8	3.6%	1.5%	0.266	0.297	0.896
7	4.3%	1.5%	0.305	0.340	0.897
6	5.3%	1.5%	0.352	0.392	0.898
5	7.6%	1.5%	0.423	0.469	0.902
4	8.9%	1.5%	0.506	0.558	0.906
3	15.1%	1.5%	0.648	0.710	0.914
2	19.0%	1.5%	0.827	0.899	0.920
1	10.1%	1.5%	0.915	1.000	0.915

(G) Discount Factor for Future Funding: 0.922

Notes:

(A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.

(B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B, Page 2.

(C) Assumed Investment Income Rates.

(D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2, 82.7% = [64.8% / 1.015] + [19.0% / (1.007)].

(E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.

(F) (D) / (E).

(G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item (F) is 0.92, on a discounted basis, $0.92 must be budgeted for every $1 that will actually be paid on claims that will be incurred in the next fiscal year.

Tirndel Insurance Fund - Workers' Compensation

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.406	1.330
90%	1.297	1.242
85%	1.228	1.186
80%	1.176	1.144
75%	1.133	1.109
70%	1.096	1.079
65%	1.063	1.051
60%	1.033	1.027
55%	1.004	1.003
50%	0.976	0.981
45%	0.950	0.959
40%	0.923	0.938
35%	0.896	0.916
30%	0.869	0.894
25%	0.841	0.870

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.297 times the average expected amount of losses.

This exhibit shows the loads that must be applied to bring estimated losses at the expected level to the various indicated confidence levels.

Tirndel Insurance Fund - Workers' Compensation

Program History

Policy Year Start Date	Policy Year End Date	Policy Year	Self-Insured Retention Per Occurrence	Self-Insured Retention Aggregate
7/1/1995	6/30/1996	Prior	$125,000	(none)
7/1/1996	6/30/1997	1996-1997	125,000	(none)
7/1/1997	6/30/1998	1997-1998	125,000	(none)
7/1/1998	6/30/1999	1998-1999	125,000	(none)
7/1/1999	6/30/2000	1999-2000	125,000	(none)
7/1/2000	6/30/2001	2000-2001	125,000	(none)
7/1/2001	6/30/2002	2001-2002	125,000	(none)
7/1/2002	6/30/2003	2002-2003	125,000	(none)
7/1/2003	6/30/2004	2003-2004	125,000	(none)
7/1/2004	6/30/2005	2004-2005	125,000	(none)
7/1/2005	6/30/2006	2005-2006	125,000	(none)
7/1/2006	6/30/2007	2006-2007	125,000	(none)
7/1/2007	6/30/2008	2007-2008	125,000	(none)
7/1/2008	6/30/2009	2008-2009	125,000	(none)
7/1/2009	6/30/2010	2009-2010	125,000	(none)
7/1/2010	6/30/2011	2010-2011	125,000	(none)
7/1/2011	6/30/2012	2011-2012	125,000	(none)
7/1/2012	6/30/2013	2012-2013	300,000	(none)
7/1/2013	6/30/2014	2013-2014	300,000	(none)
7/1/2014	6/30/2015	2014-2015	300,000	(none)
7/1/2015	6/30/2016	2015-2016	300,000	(none)
7/1/2016	6/30/2017	2016-2017	300,000	(none)
7/1/2017	6/30/2018	2017-2018	300,000	(none)

Third Party Claims Administrator	Begin Date	End Date
Trindel*	4/1/2012	Current
York	8/1/2004	3/31/2012
ICS	1/1/1997	7/31/2004
RMS	7/1/1983	12/31/1996
* Sutter's admnistrator is LWP.	7/1/2015	Current

This exhibit summarizes some of the key facts about the history of the program.

Tirndel Insurance Fund - Workers' Compensation

Estimated Total Assets as of 6/30/17

(A)	Total Assets as of 6/30/16:	$22,702,000
(B)	Total Income to Fund during 2016-2017	
	Contributions:	$11,115,000
	Interest:	10,000
	Other:	0
	Total Income:	$11,125,000
(C)	Total Payments from Fund during 2016-2017	
	Loss and ALAE:	$5,365,000
	Additional Allocated Loss Adjustment Expense:	0
	In-House Unallocated Loss Adjustment Expense:	583,000
	Fees to Outside Administrator (TPA):	0
	Excess Insurance:	1,400,000
	Other:	400,000
	Total Payments:	$7,748,000
(D)	Estimated Total Assets as of 6/30/17:	$26,079,000

Notes:

(A) Provided by the Fund.
(B) Provided by the Fund.
(C) Provided by the Fund. Loss and ALAE paid is estimated in Appendix G.
(D) (A) + (B) - (C).

Tirndel Insurance Fund - Workers' Compensation

Incurred Losses as of 6/30/16

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over $100,000 (G)	Incurred Capped at $100,000 (H)	Incurred $100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
Prior	$8,333,970	$0	$263,038	$8,070,932	$961,304	$1,283,784	$6,787,148	$322,480	$7,109,628	$7,109,628
1996-1997	1,155,823	0	43,957	1,111,866	105,956	173,717	938,149	67,761	1,005,910	1,005,910
1997-1998	1,343,946	0	158,335	1,185,611	251,284	326,284	859,327	75,000	934,327	934,327
1998-1999	604,350	0	56,151	548,200	16,784	41,784	506,415	25,000	531,415	531,415
1999-2000	898,875	0	26,325	872,550	178,841	203,841	668,709	25,000	693,709	693,709
2000-2001	1,640,334	0	45,289	1,595,045	329,692	404,692	1,190,353	75,000	1,265,353	1,265,353
2001-2002	1,154,159	0	22,902	1,131,257	190,705	290,705	840,551	100,000	940,551	940,551
2002-2003	2,467,133	0	29,066	2,438,067	1,008,999	1,131,696	1,306,371	122,697	1,429,068	1,429,068
2003-2004	2,344,220	0	19,574	2,324,646	923,684	1,121,249	1,203,397	197,565	1,400,962	1,400,962
2004-2005	432,296	0	4,086	428,210	0	0	428,210	0	428,210	428,210
2005-2006	1,650,484	0	12,960	1,637,524	1,012,980	1,087,980	549,545	75,000	624,545	624,545
2006-2007	1,121,812	0	13,797	1,108,015	556,812	656,812	451,202	100,000	551,202	551,202
2007-2008	383,137	0	7,681	375,456	0	0	375,456	0	375,456	375,456
2008-2009	5,134,498	0	191,341	4,943,157	2,260,557	2,458,346	2,484,811	197,789	2,682,600	2,682,600
2009-2010	4,508,197	0	140,619	4,367,578	1,432,233	1,683,109	2,684,469	250,875	2,935,344	2,935,344
2010-2011	6,484,309	0	137,359	6,346,950	2,420,036	2,804,218	3,542,732	384,182	3,926,914	3,926,914
2011-2012	5,918,793	0	190,538	5,728,255	1,524,307	1,995,323	3,732,931	471,017	4,203,948	4,203,948
2012-2013	4,802,958	0	126,444	4,676,514	182,459	1,347,194	3,329,320	1,164,735	4,494,054	4,494,054
2013-2014	3,191,240	0	123,493	3,067,747	0	636,435	2,431,312	636,435	3,067,747	3,067,747
2014-2015	3,652,821	0	168,495	3,484,326	0	558,866	2,925,460	558,866	3,484,326	3,484,326
2015-2016	2,949,051	0	157,167	2,791,884	0	15,692	2,776,192	15,692	2,791,884	2,791,884
2016-2017	0	0	0	0	0	0	0	0	0	0
Total	$60,172,407	$0	$1,938,617	$58,233,790	$13,356,634	$18,221,729	$40,012,061	$4,865,095	$44,877,156	$44,877,156

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Fund.
(C)
(D) 4850s.
(E) (B) + (C) - (D).
(F) Sum of incurred losses in excess of SIR.
(G) Sum of incurred losses in excess of $100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Tirndel Insurance Fund - Workers' Compensation

Paid Losses as of 6/30/16

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over $100,000 (G)	Paid Capped at $100,000 (H)	Paid $100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
Prior	$7,838,212	$0	$263,038	$7,575,173	$526,537	$847,003	$6,728,170	$320,466	$7,048,636	$7,048,636
1996-1997	1,048,370	0	43,957	1,004,413	4,003	66,264	938,149	62,261	1,000,410	1,000,410
1997-1998	1,227,719	0	158,335	1,069,384	176,425	226,425	842,959	50,000	892,959	892,959
1998-1999	604,350	0	56,151	548,200	16,784	41,784	506,415	25,000	531,415	531,415
1999-2000	840,818	0	26,325	814,492	145,483	170,483	644,009	25,000	669,009	669,009
2000-2001	1,602,364	0	45,289	1,557,076	329,692	404,692	1,152,383	75,000	1,227,383	1,227,383
2001-2002	999,043	0	22,902	976,141	54,965	135,590	840,551	80,625	921,176	921,176
2002-2003	1,959,086	0	29,066	1,930,020	508,356	625,296	1,304,725	116,939	1,421,664	1,421,664
2003-2004	2,257,292	0	19,574	2,237,718	836,757	1,034,321	1,203,397	197,565	1,400,962	1,400,962
2004-2005	390,874	0	4,086	386,788	0	0	386,788	0	386,788	386,788
2005-2006	1,004,194	0	12,960	991,234	366,689	441,689	549,545	75,000	624,545	624,545
2006-2007	533,585	0	13,797	519,788	71,251	121,251	398,537	50,000	448,537	448,537
2007-2008	355,824	0	7,681	348,143	0	0	348,143	0	348,143	348,143
2008-2009	3,531,221	0	190,907	3,340,314	753,911	916,092	2,424,222	162,182	2,586,404	2,586,404
2009-2010	3,637,788	0	140,619	3,497,169	806,823	1,037,291	2,459,878	230,468	2,690,346	2,690,346
2010-2011	4,331,180	0	137,359	4,193,820	871,097	1,135,479	3,058,342	264,381	3,322,723	3,322,723
2011-2012	4,618,029	0	189,148	4,428,881	801,498	1,100,634	3,328,247	299,136	3,627,382	3,627,382
2012-2013	3,043,921	0	112,824	2,931,097	119,160	422,856	2,508,241	303,696	2,811,937	2,811,937
2013-2014	2,011,308	0	118,116	1,893,192	0	89,403	1,803,789	89,403	1,893,192	1,893,192
2014-2015	1,674,127	0	128,412	1,545,715	0	6,502	1,539,213	6,502	1,545,715	1,545,715
2015-2016	825,442	0	68,651	756,791	0	0	756,791	0	756,791	756,791
2016-2017	0	0	0	0	0	0	0	0	0	0
Total	$44,334,747	$0	$1,789,197	$42,545,549	$6,389,431	$8,823,054	$33,722,495	$2,433,623	$36,156,118	$36,156,118

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Fund.
(C)
(D) 4850s.
(E) (B) + (C) - (D).
(F) Sum of paid losses in excess of SIR.
(G) Sum of paid losses in excess of $100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Tirndel Insurance Fund - Workers' Compensation

Case Reserves as of 6/30/16

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over $100,000 (G)	Reserves Capped at $100,000 (H)	Reserves $100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
Prior	$495,758	$0	$0	$495,758	$434,767	$436,780	$58,978	$2,014	$60,992	$60,992
1996-1997	107,453	0	0	107,453	101,953	107,453	0	5,500	5,500	5,500
1997-1998	116,227	0	0	116,227	74,859	99,859	16,368	25,000	41,368	41,368
1998-1999	0	0	0	0	0	0	0	0	0	0
1999-2000	58,058	0	0	58,058	33,358	33,358	24,700	0	24,700	24,700
2000-2001	37,970	0	0	37,970	0	0	37,970	0	37,970	37,970
2001-2002	155,116	0	0	155,116	135,741	155,116	0	19,375	19,375	19,375
2002-2003	508,047	0	0	508,047	500,643	506,401	1,646	5,758	7,404	7,404
2003-2004	86,928	0	0	86,928	86,928	86,928	0	0	0	0
2004-2005	41,423	0	0	41,423	0	0	41,423	0	41,423	41,423
2005-2006	646,290	0	0	646,290	646,290	646,290	0	0	0	0
2006-2007	588,227	0	0	588,227	485,562	535,562	52,665	50,000	102,665	102,665
2007-2008	27,313	0	0	27,313	0	0	27,313	0	27,313	27,313
2008-2009	1,603,277	0	434	1,602,843	1,506,646	1,542,254	60,589	35,608	96,197	96,197
2009-2010	870,409	0	0	870,409	625,411	645,818	224,591	20,407	244,999	244,999
2010-2011	2,153,130	0	0	2,153,130	1,548,938	1,668,739	484,390	119,801	604,191	604,191
2011-2012	1,300,764	0	1,390	1,299,374	722,808	894,689	404,685	171,881	576,566	576,566
2012-2013	1,759,036	0	13,620	1,745,416	63,299	924,338	821,078	861,039	1,682,117	1,682,117
2013-2014	1,179,932	0	5,377	1,174,555	0	547,033	627,522	547,033	1,174,555	1,174,555
2014-2015	1,978,694	0	40,083	1,938,611	0	552,365	1,386,246	552,365	1,938,611	1,938,611
2015-2016	2,123,609	0	88,516	2,035,093	0	15,692	2,019,401	15,692	2,035,093	2,035,093
2016-2017	0	0	0	0	0	0	0	0	0	0
Total	$15,837,660	$0	$149,419	$15,688,241	$6,967,203	$9,398,675	$6,289,566	$2,431,472	$8,721,038	$8,721,038

Notes:

(A) Years are 7/1 to 6/30.
(B) Appendix M, Page 1, Column (B) - Appendix M, Page 2, Column (B).
(C) Appendix M, Page 1, Column (C) - Appendix M, Page 2, Column (C).
(D) Appendix M, Page 1, Column (D) - Appendix M, Page 2, Column (D).
(E) (B) + (C) - (D).
(F) Sum of case reserves in excess of SIR.
(G) Sum of case reserves in excess of $100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Tirndel Insurance Fund - Workers' Compensation

Claim Counts as of 6/30/16

Accident Year (A)	Reported Claims (B)	Additions to Reported Claims (C)	Subtractions from Reported Claims (D)	Adjusted Reported Claims (E)	Closed Claims (F)	Additions to Closed Claims (G)	Subtractions from Closed Claims (H)	Adjusted Closed Claims (I)	Open Claims (J)	Adjusted Open Claims (K)
Prior	1,304	0	0	1,304	1,298	0	0	1,298	6	6
1996-1997	107	0	0	107	106	0	0	106	1	1
1997-1998	112	0	0	112	111	0	0	111	1	1
1998-1999	103	0	0	103	103	0	0	103	0	0
1999-2000	83	0	0	83	81	0	0	81	2	2
2000-2001	111	0	0	111	109	0	0	109	2	2
2001-2002	99	0	0	99	96	0	0	96	3	3
2002-2003	116	0	0	116	113	0	0	113	3	3
2003-2004	101	0	0	101	100	0	0	100	1	1
2004-2005	83	0	0	83	81	0	0	81	2	2
2005-2006	64	0	0	64	61	0	0	61	3	3
2006-2007	71	0	0	71	68	0	0	68	3	3
2007-2008	67	0	0	67	66	0	0	66	1	1
2008-2009	327	0	0	327	316	0	0	316	11	11
2009-2010	353	0	0	353	339	0	0	339	14	14
2010-2011	322	0	0	322	296	0	0	296	26	26
2011-2012	233	0	0	233	204	0	0	204	29	29
2012-2013	251	0	0	251	214	0	0	214	37	37
2013-2014	228	0	0	228	195	0	0	195	33	33
2014-2015	194	0	0	194	144	0	0	144	50	50
2015-2016	295	0	0	295	135	0	0	135	160	160
2016-2017	0	0	0	0	0	0	0	0	0	0
Total	4,624	0	0	4,624	4,236	0	0	4,236	388	388

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Fund.
(C)
(D)
(E) (B) + (C) - (D).
(F) Provided by the Fund.
(G)
(H)
(I) (F) + (G) - (H).
(J) (B) - (F).
(K) (E) - (I).

Tirndel Insurance Fund - Workers' Compensation

Exposure Measures

Accident Year	Trended Payroll ($00) (A)	Inflation Trend Factor (B)	Trended Payroll ($00) (C)
1996-1997	196,953	1.638	322,609
1997-1998	203,398	1.598	325,030
1998-1999	227,057	1.559	353,982
1999-2000	251,518	1.521	382,559
2000-2001	355,540	1.484	527,621
2001-2002	372,665	1.448	539,619
2002-2003	314,490	1.413	444,374
2003-2004	344,516	1.379	475,088
2004-2005	348,125	1.345	468,228
2005-2006	368,183	1.312	483,056
2006-2007	391,314	1.280	500,882
2007-2008	404,940	1.249	505,770
2008-2009	1,607,984	1.219	1,960,132
2009-2010	1,626,213	1.189	1,933,567
2010-2011	1,547,205	1.160	1,794,758
2011-2012	1,504,397	1.132	1,702,977
2012-2013	1,533,500	1.104	1,692,984
2013-2014	1,444,296	1.077	1,555,507
2014-2015	1,478,180	1.051	1,553,567
2015-2016	1,984,898	1.025	2,034,520
2016-2017	2,227,100	1.000	2,227,100
2017-2018	2,298,026	1.000	2,298,026

Notes:

(A) Provided by the Fund.
(B) Based on WCIRB.
(C) (A) x (B).