Tillinghast - Towers Perrin

June 20, 2000

Ms. Denise Lucciola Executive Director Massachusetts Workers Compensation Advisory Council 600 Washington Street Boston, MA 02211

Dear Denise:

The Massachusetts Workers Compensation Advisory Council (the Council) engaged Tillinghast – Towers Perrin (Tillinghast) to evaluate a proposed change to Section 35 of Chapter 152 of the General Laws of the Commonwealth. This analysis represents an update of our prior report, dated December 1, 1997. This prior report should be reviewed for a more complete understanding of the findings presented here. Descriptions of the relevant provisions of Chapter 152 which affect the results are contained in the Executive Summary section of that report.

DISTRIBUTION AND USE

We have prepared this report for the Council to assist it in evaluating the impact of the proposed changes in Section 35. We understand that copies of our report will also be provided to the Joint Committee on Commerce and Labor. In addition, we understand that under the Freedom of Information Act, this report may become public information available on request to anyone. Permission is hereby granted for this distribution on the conditions that the entire report is distributed rather than any excerpt and that Tillinghast be informed of such distributions. Third parties should recognize that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data contained herein that would result in the creation of any duty or liability by Tillinghast to the third party. No further distribution of this report or reference, either oral or written,

Ms. Denise Lucciola June 20, 2000 Page 2.

Tillinghast-Towers Perrin

to Tillinghast, our analysis or findings related to this report may be made without our prior written consent.

Judgments about the conclusions drawn in this report should be made only after considering the report in its entirety. We remain available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

Our conclusions and recommendations are predicated on a number of assumptions as to future conditions and events. Those assumptions, which are documented in subsequent sections of this report, must be understood in order to place our conclusions in their appropriate context. In addition, our work is subject to inherent limitations, which are also discussed in the report.

RELIANCES AND LIMITATIONS

In this review, we relied without verification or audit upon information supplied to us by the Council. We also relied, without verification or audit, upon information collected by the Workers Compensation Rating and Inspection Bureau of Massachusetts (WCRIBM). We did, however, review the information provided to us for reasonableness.

The estimation of future workers compensation claim costs, particularly under scenarios which reflect an expansion of benefits, is subject to potentially large errors of estimation. For example, there are a number of areas where the available data is sparse and where significant judgments had to be made; to the extent that future emergence is different than we assumed, our projections may prove incorrect. In addition, there are a number of behavioral effects associated with revising benefit levels (e.g., "incentives" to extend or

Ms. Denise Lucciola June 20, 2000 Page 3.

Tillinghast-Towers Perrin

reduce duration of benefit). These effects can have a significant impact on costs, but are not considered in our model. In addition, workers compensation costs are subject to overall economic conditions. To the extent that there are significant changes in the Commonwealth's economy prospectively (i.e., changes in employment levels), the results contained in this analysis may be affected. Although we believe we have carried out our analysis using reasonable actuarial methods, it should be recognized that actual future costs may deviate materially from the specific estimates contained herein.

BACKGROUND

The Council asked us to estimate the impact on workers compensation costs with respect to benefits under Sections 35 (permanent partial) and 36k (bodily disfigurement) of Chapter 152 of the Massachusetts General Laws. Specifically, we were asked to estimate the impact of extending Section 35 benefits for 600 weeks or more than doubling the current duration of 260 weeks. We were also asked to estimate the impact of revising the scarring award to its pre c.398 level.

Under Section 35, an injured employee receives 60% of the difference in his/her average weekly wage before injury and after injury; the maximum compensation rate under this section is capped at 75% of the comparable Section 34 (temporary total) benefit. In addition, if Section 35 benefits plus post-injury weekly earnings are greater than twice the Statewide Average Weekly Wage (SAWW), the Section 35 benefit is reduced. These caps were introduced as part of c.398; previously Section 35 benefits were capped at the SAWW. There is no minimum weekly compensation rate under Section 35. The 60% compensation rate was implemented as part of the c.398 revisions in 1991; previously the compensation rate for Section 35 was 663/3%.

Ms. Denise Lucciola June 20, 2000 Page 4.

Tillinghast - Towers Perrin

The maximum duration under Section 35 is 260 weeks, unless an employee has suffered a permanent loss of at least 75% of any bodily function or sense, developed a permanently life threatening physical condition or contracted a permanently disabling occupational disease which is of a physical nature and cause. In these cases, benefits under Section 35 are limited to 520 weeks. Section 35 durations were capped at 600 weeks prior to the implementation of c.398.

In addition, c.398 imposed an aggregate duration of 364 weeks for the combination of Section 34 and 35 benefits, unless an injured worker was eligible for 520 weeks of Section 35 benefits. In that case, the aggregate duration for Section 34 and 35 benefits is capped at 520 weeks.

The scarring benefit payable under Section 36 was restricted to include only compensation for scarring to the hands, neck or face, with a maximum benefit of \$15,000, under c.398. Previously, the benefit for scarring could be up to 32 times the SAWW at the time of injury and it also applied with respect to injuries to the torso or legs.

DEFINITIONS

In the following sections, we define some key terms to assist the reader in following the findings presented in the following section. These items include:

Costs – We use the term costs to refer to expenditures related to workers compensation benefits, in particular, those related to Sections 35 and 36. Since benefit payments represent the most significant part of insurance rates, a projected increase in costs could result in an increase in rates, assuming all other factors are unchanged. Ms. Denise Lucciola June 20, 2000 Page 5.

Tillinghast-Towers Perrin

- Major and Minor Permanent Partial Insurers do not always compile data in a way that exactly coincides with the statutory language. This combined group of claimants approximates the group of injured workers receiving Section 35 benefits. The two categories are distinguished by the severity of the injury.
- Cost Impacts We estimate the cost impact of changing the compensation rate and/or the benefit durations by comparing the projected average cost of a claim under the revised benefit structure relative to the average cost of a claim under the current law. There are four points to consider in reviewing these results.
 - ✓ We calculate a combined cost impact, which is a weighted average of the change in costs for each injury type reviewed (i.e., major and minor permanent partial)
 - ✓ We also calculate an overall effect by weighting the Section 35 cost changes and assuming no cost change for death claims, permanent totals or Section 34 claims.
 - ✓ Although we show result by injury type, the results are not independent. For example, if only Section 35 benefits were changed, the actual cost impact would probably be greater than projected because there would likely be increased utilization (i.e., higher claims frequency) of these benefits.
 - ✓ This analysis was based on data from the 1997 WCRIBM filing. The incorporation of more recent data may have a material impact of these estimates.

Ms. Denise Lucciola June 20, 2000 Page 6.

Tillinghast - Towers Perrin

FINDINGS

The following sections detail our findings.

1. Section 35 Proposed Changes

The cost impacts of the proposed scenarios, relative to the current law, are as follows:

CHANGE IN COSTS (RELATIVE	E TO CURRENT	LAW)		
Scenario	Major Permanent Partial (Section 35)	Minor Permanent Partial (Section 35)	Combined	Overall Effect
600 weeks, 60% replacement rate	18.9%	0.5%	18.3%	7.5%
600 weeks, 66¾% replacement rate	22.5%	10.1%	22.1%	9.0%

The combined change in costs is based on a weighting of the Section 35 cost changes; the overall effect is calculated by weighting these changes and no change to any other benefit types (i.e., fatals, permanent totals or Section 34).

Some key points to note in reviewing these results are as follows:

- Extending durations has a more significant impact on costs than changing the compensation rate.
- The overall cost estimates are dependent on the weights applied to each section. These weights are based on the 1997 WCRIBM filing. To the extent that the prospective

Ms. Denise Lucciola June 20, 2000 Page 7.

Tillinghast-Towers Perrin

distribution by injury type is consistent with the 1989-1991 level, our estimates will be understated.

- We did not reflect any aggregate duration cap on Section 34 and 35 benefits in the two scenarios modeled.
- c.398 eliminated cost-of-living adjustments (COLA's) for permanent partial claims. (Section 34 claimants never received COLA's). Our analysis does not contemplate the restoration of COLA's under any scenario.
- An increase in benefit levels may have an impact on utilization levels (i.e., claim frequency) of the workers compensation system. This is not considered in our results.
- There are a number of key assumptions underlying our results, which are discussed in the Methodology section of our December 1, 1997 report. This report should be reviewed for a more complete understanding of the findings presented here.

2. Section 36k Proposed Changes

The Council asked us to evaluate the potential cost impact of restoring scarring awards to their pre c.398 level. However, we were unable to quantify the impact of this proposed revision, because data is not compiled at this level of detail by either the DIA, the WCRIBM or the NCCI. It appears that data is not collected at this level because the cost of such data collection is believed to potentially be more significant than the amount of benefits paid. To the extent this assumption is true, it suggests that restoring the pre c.398 scarring benefit would have a relatively minimal impact on system costs. Ms. Denise Lucciola June 20, 2000 Page 8.

Tillinghast - Towers Perrin

3. Quantification of Impacts

The Council also requested that we convert the above percentage estimates into a dollar amount. Given the complexities of the workers compensation system and the interactions of its various elements, there is no absolute measure of annual system costs, so we use calendar year benefit payments as a proxy for system costs. The WCRIBM reported \$515 million in benefit payments for calendar year 1999. If we assume 2% annual growth and adjust the WCRIBM data to reflect the impact of self-insurance, estimated 2001 payments would be approximately \$750 million. Assuming that any proposed statutory changes would be prospective in nature, the initial impact of the changes would be relatively small, because only claimants with accident dates subsequent to the law revision would be eligible for the expanded benefits. It would take several years before over the majority of loss payments were subject to the revised statute, based on historic Massachusetts payment patterns.

The combination of these assumptions results in the following:

	Estimated Costs* \$ in Millions		
Scenario	Initial	Ultimate**	
Section 35, 600 weeks, 60% Replacement Rate	13	56	
Section 35, 600 weeks, 66¾% Replacement Rate	16	68	
Scarring	2	8	

* Assumes legislation effective January 1, 2001

** Expressed in 2001 Dollars.

Ms. Denise Lucciola June 20, 2000 Page 9.

Tillinghast-Towers Perrin

Note that the ultimate cost levels shown above are expressed in 2001 dollars; actual expenditures will likely be higher than those estimates reflecting payroll growth and loss trend.

* * * * *

It has been a pleasure to work on this analysis for the Council. Do not hesitate to call if you have any questions.

Sincerely,

and S

Ann M. Conway, FCAS, MAAA Consulting Actuary

AMC/jas