STATE OF CALIFORNIA
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STANDARDIZED REGULATORY IMPACT ANALYSIS

WORKERS' COMPENSATION DEDUCTIBLE POLICIES

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Cost/Benefit Analysis of Proposed Major Regulation

Explanation of the Financial Exposure to Insurers Posed by High Deductible Policies

California statutes require insurers issuing workers' compensation deductible policies to pay all claims from the first dollar and seek reimbursement of the deductible amounts from the employer who is the policyholder.[1] This differs from other lines of insurance, in which the insured is directly responsible for paying its portion of the deductible. This requirement is for the protection of the injured worker, to ensure that he or she receives the benefits due to him or her under California's workers' compensation laws. Because the deductible amounts on these high deductible policies are at least $100,000 by industry definition, individual losses can greatly exceed that value and aggregate deductible losses on any one policy often run into the millions. This results in a financial risk to the insurer that the employer will be unable to pay the deductible amounts specified in the policy. If a sufficient number of employers were to default on such obligations, it is possible that the insurer itself could be rendered insolvent. This has in fact happened and has negatively impacted California employers and employees.

Costs of Proposed Regulations

The regulations set standards for credit risk requirements, specifying both a minimum level of capital and surplus, and a minimum credit rating in order for an insurer to issue high deductible policies without being subject to the additional requirements of the proposed regulations. The regulations propose that an insurer maintain at least an A.M. Best Company rating of A, a Standard and Poor's rating of A+ or A, a Moody's Investors Service rating of A1 or A2, or a Fitch Ratings, Inc. rating of A+ or A, or be a member of holding company group that maintains such a rating, while simultaneously maintaining a sum of paid-in capital of at least $500 million. If an insurer does not meet both the credit rating and capital requirements, or is not part of a holding company group that meets those requirements, it must collateralize its California deductible receivables (the sums that the insurer expects the insured to pay as reimbursement for claims payments) or not take credit for such receivables as offsets to its incurred losses. This regulation is meant to allow the more experienced and highly rated insurers, who are best able to

[1] For the purposes of this discussion, "employer", "policyholder", and "insured" all refer to the party that purchases workers' compensation insurance policy from an insurer.

assess and absorb the risk of an insured's failure to reimburse the insurer the deductible amount, to continue to issue high deductible policies, and to require full collateralization of the employers' workers' compensation deductible obligations amongst those insurers who may not be able to adequately assess or absorb a similar risk. The regulation also proposes providing the option to allow the collateral to be applied to deductible workers' compensation losses in all states where it issues such policies, and also to any deductible losses for other lines of insurance such as general liability and commercial auto, as long as these losses are reimbursable under the terms of the same deductible plan that covers the California workers' compensation claims of the employer and all deductible losses under the entire high deductible plan are fully collateralized. By requiring employers to collateralize all their deductible losses across all lines and for employees in all states, an insurer can greatly reduce the risk that an employer will be unable to reimburse the insurer for its deductible obligations; this in turn will protect the solvency of both the employer and the insurer.

The Department reviewed available data for all of the workers' compensation insurers operating in California and determined that only nine insurers (either individual insurers or holding company groups) insuring significant exposures using high deductible policies would currently fall short of the proposed credit risk requirements. While this analysis uses the impact of the regulations on these nine insurers to represent the overall effect of the regulations, it must be realized that other insurers entering the high deductible market may also be affected, as could other insurers who currently meet the credit risk requirements contained in the regulations but may fail to do so in the future. Likewise, the companies that currently fall short of the credit risk requirements could in the future meet those requirements. This analysis assumes that this regulation will only impact employers who have more than 100 employees, whose policies are written by insurers who do not currently meet the credit risk requirements, and who do not provide their insurer with enough collateral to cover their deductible obligations.

To meet the credit risk requirements outlined in section 2509.81(c) of the regulations, these nine insurers could take many different actions including: undertaking mergers or acquisitions; shifting operations to write different lines of insurance and/or phase out high deductible policies; raising capital to meet the $500 million capital threshold; or working to raise their credit rating. Some of those options may be extremely expensive and some may be coupled with varying levels of business risk, making them impractical as a means of becoming compliant with the proposed regulation. These are some of the potential downsides: for smaller insurers a merger or acquisition likely means layoffs and loss of management control. Discontinuing high deductible policies could alienate existing clients or employers who currently hold those policies, potentially hurting the bottom line of both the insurer and the business holding the policy. Meeting the $500 million capital threshold and taking steps to raise their credit rating are both worthwhile goals for an insurance company, but they may be expensive and are more likely achievable over the course of several years. However, if an insurer does not meet the credit risk requirements they can satisfy the collateral and security requirements of the regulation by requiring employers to fully collateralize the deductible receivables as described in 2509.81(a).

The Department has concluded that the most reasonable plan of action for the nine insurers that most likely will fall short of the proposed credit risk requirements is to collateralize their deductible receivables. This represents a straightforward path to compliance that is not subject to the same complications as the potentially more onerous paths discussed above. The Department estimates that these nine insurers, who currently fall short of the credit risk requirements, require some collateral to be posted by their high deductible policyholders, but that not all of them require enough to satisfy the requirement in the new regulation that all high deductibles be fully collateralized. By requiring that employers obtain additional collateral that is set aside specifically for paying workers' compensation deductibles, an insurer may protect its obligations without significantly alienating its client employers who might otherwise have to alter their business operations.

After meeting with insurers to discuss the process and real world implications of the proposed regulation, the Department determined that it is unlikely that an employer with less than 100 employees would have the financial resources or volume of claims to even be considered for a high deductible policy. In order for a high deductible policy to be useful, loss amounts below the deductible should be predictable so that they can be budgeted, while losses above the deductible would be large and variable and thus should be insured. Generally, businesses with less than 100 employees rarely have the volume of loss experience required for a high deductible policy to make economic sense, and sufficient financial resources to fund the potential significant deductible losses.

The Department also learned that the impacts on workers' compensation policies will not be concentrated in any one industry, but instead will be spread throughout all industries. However, federal, state and local governments were determined to not be impacted by the regulation, because they are nearly all self-insured.[2] The regulation is projected to add costs relating to the proper collateralization of high deductible workers' compensation policies for approximately 859 of the nearly 1.5 million business establishments in California, as highlighted in Table 1 and more fully detailed in the Appendices.

The State of California is self-insured for worker's compensation; thus, the regulation will have no fiscal effect on state government, since the regulation specifies standards relating to collateral, accounting, and credit risk that apply only to insurers writing workers' compensation high deductible policies.

[2] Data on the self-insurance plans of public entities can be found on the Department of Industrial Relations website: http://www.dir.ca.gov/osip/PublicEntitiesAndJPA.htm

Table 1. Industry Sectors with the Most Projected Businesses Impacted

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts
Retail trade	3,064	1,057	134
Professional, scientific, and technical services	1,697	585	74
Administrative and support services	1,200	414	53
Construction	1,109	383	49
Wholesale trade	1,012	349	44
Food services and drinking places	1,009	348	44
Ambulatory health care services	919	317	40
Nursing and residential care facilities	902	311	40
Total	**19,612**	**6,766**	**859**

To arrive at this estimate, the Department used the Third Quarter Payroll and Number of Businesses by Size Category data published by the California Employment Development Department, Labor Market Information Division[3], to identify how many business establishments have more than 100 employees. The Department reached out to the California Workers' Compensation Insurance Rating Bureau and learned that for 2015, 34.5 percent of total workers' compensation premiums came from high deductible policies. As a result, the Department used this number as a proxy to estimate that 34.5 percent of all business establishments with more than 100 employees currently utilize high deductible policies. This 34.5 percent figure was chosen as a proxy over other measures, such as the percentage of policies with a deductible program, because only a relative few employers obtain high deductible policies. Since the population has already been narrowed to include only those large employers who are reasonably likely to be using high deductible policies, premiums paid were determined to be a better proxy for estimating which of those businesses would be impacted by the regulation. Then the Department had to account for the fact that most employers would be unaffected, as the proposed regulations are estimated to impact only 12.7 percent of the high deductible workers' compensation insurance market. The Department found that high deductible writers make up 74 percent of the total deductible market (premium written). A subset of 9.4 percent of the total deductible market is high deductible writers who would currently fail one of the credit risk requirements in the regulation. Thus 12.7 percent (9.4/74) is the percentage of the high deductible market that would potentially be impacted by the regulation. This number was then used as a proxy to estimate how many of the businesses that were estimated to use high deductible policies might be insufficiently collateralized. As a result, an estimated 859 businesses are expected to incur costs relating to securing additional collateral.

The nine insurers that currently would fall short of the proposed credit risk requirements have an aggregated $200 million in deductible premium credit for California workers' compensation policies. The Department estimates that the total amount that would need to be collateralized to protect against the risk of potential unpaid future California workers' compensation deductible losses of these nine insurers is approximately $800 million. This amount was determined by assuming the average time it takes all payments on a workers' compensation claim to be paid is

[3] Third Quarter Payroll and Number of Businesses by Size Category, accessed March 2018. http://www.labormarketinfo.edd.ca.gov/LMID/Size_of_Business_Data.html

about four years from the date of claim occurrence, and that, on average, insurers will need to require that employers collateralize about four times the amount of the annual deductible premium credit.

Insurers requested the option to jointly collateralize multi-line policies. To evaluate this option, the Department analyzed aggregated data for the subset of the nine insurers who provided responses to Note 31 of their Annual Statements to determine what percentage of their high deductible business is multi-line. Since that data showed approximately 80 percent of those insurers' all-lines total deductible obligations were in the workers' compensation line, this analysis estimates that for the nine insurers an additional $200 million would likely be collateralized under the multi-line option in the regulation, bringing the total estimated required collateral for all-lines California deductible loss obligations to $1 billion. This is the base amount for the California specific cost impacts calculated in Appendix B-2 and the job and business impact analysis conducted pursuant to Government Code sections 11346.3(c)(1)(A) through (C) below.

Insurers also requested the option to collateralize jointly for policies that cross state lines. Specific data on deductible obligations by state was not available to the Department. Using all nine insurers' loss experience by state as filed in their respective Annual Statements, the Department calculated that the California-specific loss reserves of these insurers represent only 28 percent of their total loss reserves. Using this percentage to represent the percentage of these insurers' deductible amounts that are likely to be collateralized as a result of the regulation, the total amount of collateral needed for these insurers' combined multi-state, multi-line high deductible policies is estimated to be $3.57 billion. Because insurers currently do not separate collateral by state or insurance line, and the proposed regulations provide an option to continue this practice, the Department assumes that the total impact of the regulation will include impacts to California business enterprises that also operate in other states. The Department believes that given the size and complexity of the California economy, it is not reasonable to assume that the potential for adverse economic impact on California business enterprises is limited to only physical locations in the state. The expected outcome of the regulation is that all insurers who will need to require additional collateral will do so for the entire account, including multi-state and multi-line components, in accordance with the current best practices of the industry.

The anticipated cost of the regulation is equal to the cost of obtaining a surety bond or Letter of Credit (LOC), to collateralize the deductible amount for policies that do not currently have sufficient collateralization. To analyze the cost impacts, the Department ran three scenarios: a lower range (Appendix A), a mid-range (Appendix B), and an upper range (Appendix C), as well as Appendix B-2, which is a subset of Appendix B that calculates California specific job and business impacts at the midrange cost and collateral assumptions. These estimates account for a cost range for securing collateral between 1 and 3 percent and a range of current collateralization between 60 and 80 percent. The lowest cost estimate, seen in Appendix A, assumes that employers are currently 80 percent collateralized and can secure the needed collateral at the lowest estimated cost, 1 percent. Appendix B represents the midpoint estimate, assuming current collateralization of 70 percent and a cost of collateral of 2 percent. Appendix C represents the upper bound and assumes that employers currently collateralize 60 percent and would pay 3 percent to secure the shortfall in collateral. Based on a review of collateralization data for some of the impacted insurers, the Department believes that the mid-range estimate in Appendix B is the most likely to occur. Additionally, it is unlikely all employers will secure collateralization at 1 percent and the competition in financial markets should also limit the number of employers obtaining collateral at the upper range.

A LOC, comparable to what is promulgated in the regulation text, or a surety bond will allow these potentially under-capitalized employers to better secure their workers' compensation deductibles. The Department reviewed LOC terms published online by financial institutions and found that the cost of obtaining a LOC was often between 1 and 2.5 percent of the amount being collateralized. Feedback provided by insurers indicated that the cost of a LOC is between 2 and 3 percent. For surety bonds, the Department estimates that the cost would be between 1 and 2 percent. Therefore, the Department estimated that a reasonable range for the cost of securing collateral is between 1 and 3 percent.

The range of collateral required of employers with high deductible policies by insurers who are very strong financially is usually between 80 and 110 percent. These insurers tend to write policies primarily for the strongest and most credit worthy employers. The regulation will likely impact the next tier of insurers who currently do not have the same collateral requirements or the highest quality employers as clients. For these second-tier companies, represented in the Department's analysis by the nine insurers who currently fall short of meeting the regulation's credit risk requirements, the Department assumes a lower current level of collateralization, between 60 and 80 percent. The Department chose 80 percent for the high end of the range, as that is the current industry average based on additional data from Annual Statement Note 31. The Department conservatively estimates that as a whole the insurers likely to be impacted by the regulation are at least 60 percent collateralized.

Table 2 below, shows which industries are projected to be most impacted by the costs of obtaining collateral. Industry impacts were estimated by determining the impact on an average business and then multiplying by the total number of businesses impacted with more than 100 employees. A full list of all the projected industry impacts can be found in Appendix B. Both Table 2 and Appendix B are calculated using the midpoint of the collateral cost range, 2 percent. Appendix A and Appendix C, display detailed alternative cost calculations with the total direct cost of the regulation to employers estimated to be a range between $7.1 and $42.8 million.

Table 2. Industry Sectors with the Largest Cost Impacts **(Collateralization Cost 2% , includes multi-state impacts)**

Industry	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Loss to Total Output
Retail trade	$167,323,271	$3,346,465	$6,838,502
Professional, scientific, and technical services	$92,672,190	$1,853,444	$4,148,378
Administrative and support services	$65,531,307	$1,310,626	$2,935,016
Construction	$60,561,850	$1,211,237	$2,788,994
Food services and drinking places	$55,100,908	$1,102,018	$2,427,856
Ambulatory health care services	$50,186,060	$1,003,721	$2,349,410
Wholesale trade	$55,264,736	$1,105,295	$2,204,952
Nursing and residential care facilities	$49,257,699	$985,154	$2,202,312
Total	**$1,071,000,000**	**$21,420,000**	**$46,437,866**

Benefits of the proposed regulation

For employers who place a premium on employer safety and have the financial resources to pay larger deductible losses, policies with deductibles of $100,000 or more represent an attractive way to lower workers' compensation insurance costs. As a general rule, it is almost always more economical to pay predictable claims out of pocket than it is to insure them. The use of high deductible policies allows the insurance mechanism to transfer the risk of only those larger claims that exceed the employer's risk tolerance. As employers have sought to cut costs, the prevalence of high deductible policies has grown nationwide. As with the cost section above, because this regulation impacts large employers and insurers who conduct business in many states, it is anticipated that California business enterprises will have additional impacts due to work sites physically located in other states. This is because the insurer treats the employer's high deductible insurance program as a whole, collateralizing it in accordance with the multi-state, multi-line approach outlined in the regulation.

In California, when a workers' compensation insurer becomes insolvent, the California Insurance Guarantee Association (CIGA) takes over the covered claim responsibilities. Guaranty fund payments come from any remaining company assets and special assessments to the remaining pool of solvent insurers. To preserve the benefits of high deductible policies as a lower cost option utilized by nearly 6,800 businesses in California, steps need to be taken to mitigate the risk of a potential insolvency that might saddle the rest of the industry with assessments.

The main benefit of the regulation is lowering the risk of insolvencies to workers' compensation insurers engaged in writing high deductible policies. This should decrease the amount of money that the remaining solvent insurers in the market would have to be assessed to cover the claims that might result from a future insolvency.

Searching back over the last 15 years, the Department was able to identify four insurers who experienced insolvencies involving high deductible policies that might have been prevented by the proposed regulations. The four insolvencies identified were Cascade National Insurance Company (2005), ULLICO Casualty Company (2013), Dallas National Insurance Company (later known as Freestone, 2014), and Lumbermen's Underwriting Alliance (2015).

Nationally, these four companies had an estimated $624 million in combined incurred losses. Since this regulation is anticipated to mitigate the risk of future insolvencies of insurers who write policies for large California business enterprises who conduct business nationally, the Department estimates that the benefit of this regulation will spread to the multi-state locations of California business enterprises. Of these incurred losses 4 percent, or only $24 million out of $624 million were paid using assets of the original insurer. This means that approximately 96 percent of incurred losses were passed to guaranty association members (and eventually their policyholders) in all states through special assessments.[4] When ignoring the multi-state aspect of the regulation to calculate impacts for businesses located in California, these four companies had an estimated $360 million in combined incurred losses that became obligations of CIGA.

[4] 2016 Workers' Compensation Large Deductible Study, National Association of Insurance Commissioners, pages 9 &10: The Role of the Guaranty Funds and Projected Costs of Recent Large Deductible Insolvencies: http://naic.org/prod_serv/WCD-OP-16.pdf

Assuming the national 96 percent of incurred losses being passed to the guaranty association, $345.6 million of the $360 million had to be assessed to CIGA members and eventually passed on to all insured employers.

The liabilities assumed by the guaranty associations of the various states involved in these four insolvencies represent an increase in workers' compensation rates caused by a market imbalance, because the remaining solvent insurers have to cover for the failings of other workers' compensation insurers who had insured employers with insufficient collateral. By mitigating the risk of future insolvencies, the regulation is projected to save guaranty association members (and by extension policyholders) an estimated $624 million over 15 years, or $41.6 million per year. Most of this benefit will automatically accrue to insured employers via the absence of guaranty association assessments. Insurers whose insolvencies are anticipated to be prevented would save an estimated $1.7 million out of $41.6 million annually, since other assets of theirs would not need to be liquidated to pay claims. The Department assumes that the benefits will accrue in the same way under each of the three different cost scenarios (high, middle and low). This is because the regulation was anticipated to mitigate against, and manage the risk of insolvencies. The expected variability is in how much collateral insurers currently require and the cost of securing the necessary collateral.

When an insurer becomes insolvent, this results in the loss of coverage for all of the insurer's policies, absent regulatory action to preserve it. This potential cascading negative impact would jeopardize the medical care of all injured employees covered by policies written by the insolvent insurer. Delays in reimbursement for treatments, while waiting for CIGA to assume claims responsibility, could lead to problems in securing proper treatments or scheduling future appointments. This could potentially lead to poorer health outcomes for injured employees, increased health care costs as untreated injuries worsen, and increased periods where employees might need to draw workers' compensation wage replacement benefits. The regulation is anticipated to alleviate those issues by requiring that insurers stipulate, as terms of a workers' compensation policy, that employers maintain the necessary collateral to secure their high deductible loss obligations.

Economic and Job Impact Analysis

Senate Bill 617 (Chapter 496, Statutes of 2011) requires state agencies to thoroughly assess the potential for significant, statewide adverse economic impact due to the adoption, amendment, or repeal of regulations. The Department is required to assess whether and to what extent the proposed major regulations may affect the creation or elimination of jobs, the creation or elimination of businesses, the competitive advantages of businesses currently in California, and the benefits of the major regulation to the health and welfare of California residents, worker safety, and the state's environment as set forth in Government Code section 11346.3(c)(1).

Results of the Standardized Regulatory Impact Analysis

Below is a summary of the results of the Standardized Regulatory Impact Analysis pursuant to *Government Code sections 11346.3(c)(1)(A) through (F).* Detailed analysis of the conclusions follows.

A) The proposed regulations will likely have a minimal effect, a net gain of 314 jobs, on overall employment within the State of California. The regulation is expected to affect less than two-thousandths of a percent of the total nonfarm employment in California (i.e., 314 / 16,962,379 = 0.0019 percent).
B) Given that the total direct cost, including multi-state impacts, is estimated to be about $24,900 ($21.4 million / 859 firms) to an average impacted business with more than 100 employees, it is not anticipated that the proposed regulation will have a significant impact on the creation of new businesses or the elimination of existing businesses in California. Additionally, the roughly commensurate monetary benefits are similarly unlikely to impact the creation of new businesses or the elimination of existing businesses in California.
C) There is no impact expected on the competitive advantage or disadvantage for businesses currently doing business within the state resulting from the proposed major regulations because all insurers writing high deductible policies for accounts with California exposure would be subject to the regulation.
D) Given the small cost related to obtaining collateral and that the relatively small increase in demand will likely be spread among many financial institutions, it is not expected that the regulation would impact the investment strategy of any business or financial institution in the state.
E) By increasing the stability of the large deductible workers' compensation insurance market, the regulation may lead to innovation in worker safety policies and processes.
F) This regulation will manage the risk of insurer insolvencies, both by reducing the risk of future workers' compensation insurer insolvencies and by increasing the likelihood that workers' compensation insurers that do become insolvent have sufficient funds available in liquidation or conservation to pay outstanding workers' compensation claims, thus ensuring timely medical care for injured employees.

The Department evaluated the changes in a variety of economic variables such as output, employment, and Gross State Product (GSP), also known as state Gross Domestic Product (GDP), which could result from the proposed regulation. Industry employment, GSP and output effects were assessed using standard Regional Input-Output Modeling System (RIMS II) multipliers.[5] Employees are captured in GSP and output through their earnings and/or income. For example, as employees retire or leave their jobs and are not replaced, either due to technological advancements or downsizing, the losses are reflected as reductions in GSP and other measures of output. Job and economic impacts are calculated using the direct cost and benefit estimates and RIMS multipliers. The breakdown of detailed industry specific estimates for businesses physically located in California are displayed in Appendix B-2.

The cost and benefit sections above are more inclusive, accounting for economic impacts to employers who have worksites in other states as well as California. This was necessary because feedback received by the Department indicates that insurers do not separate collateral for California and non-California claims, and the regulations allow for a continuation of this practice. However, to meet the requirements outlined in Government Code sections 11346.3(c)(1)(A) through (C) regarding impacts specific to the state of California, a subset of the

[5] See Regional Multipliers, A User Handbook for the Regional Input-Output Modeling System (RIMS II), https://www.bea.gov/scb/pdf/regional/perinc/meth/rims2.pdf

aggregate impacts calculated in Appendix B was analyzed. The following analysis differs in scope from the total cost and benefit estimates discussed above and is based only on the estimated impacts to California workers' compensation and other commercial policies written for employers physically located in the state. In the following sections about the impact on jobs, GSP, and output the detailed industry data is published in Appendix B-2. Subset of Detailed Industry Breakdown of Costs and Benefits, Mid-Range, Specific to All California Policies (excludes multi-state approach, used for California specific job impact analysis).

The Impact on Jobs. To calculate the estimate of jobs lost, the final demand RIMS II multiplier for each industry was applied to the estimate of the direct costs to each industry. The aggregate employment impact is projected to be a net gain equivalent to 314 full-time jobs (at the collateral cost equal to 2 percent and current collateralization of 70 percent). Appendix B-2 details how the estimated costs would manifest as job losses for each industry, resulting in an aggregate projection of 106 jobs lost in California. However, there is also an estimated benefit of $24 million ($1 million to insurers and an additional $23 million in savings spread to all high deductible workers' compensation policy holders) resulting in an estimated total of 420 jobs gained in California. Absent this regulation, if a major insolvency- one on the scale of ULLICO- were to occur in any future year, approximately 3,300 jobs could be lost (RIMS employment multiplier for insurers, 13.1748 x $250 million estimated incurred losses in California = 3,294 jobs lost). This regulation would likely prevent such large future job loss events.

Table 3. Industry Sectors with the Largest Job Impacts **(Collateralization Cost 2% , All California Policies)**

Industry	Projected Jobs Lost	Projected Jobs Gained
Retail trade	18.6	71.4
Administrative and support services	9.8	37.6
Professional, scientific, and technical services	8.3	31.8
Food services and drinking places	7.4	28.6
Nursing and residential care facilities	7.0	26.9
Construction	5.6	21.5
Ambulatory health care services	5.2	19.9
Insurance carriers and related activities	1.4	18.5
Forestry, fishing, and related activities	4.0	15.5
Wholesale trade	3.7	14.4
Social assistance	3.0	11.4
Educational services	2.7	10.5
Total	***106***	***420***

The proposed regulation is expected to have a minimal effect on total statewide employment. According to the California Department of Finance, the projected total nonfarm employment for 2018 is nearly 17 million in California.[6] When dividing the projected number of net jobs gained in the mid-range scenario by the number of people employed in nonfarm jobs in California, the result is that the proposed regulations would affect less than two-thousandths of a percent of the total nonfarm employment in California (i.e., 314 / 16,962,379 = 0.0019 percent).

[6] http://www.dof.ca.gov/Forecasting/Economics/Eco_Forecasts_Us_Ca/index.html. The Department of Finance economic forecast data was accessed on January 3, 2018.

The Impact on Businesses. GSP analysis is included for reference, as it is the most common measure of economic activity and as such is valuable when analyzing the economic impact of a regulation. However, the Department will refer to the more inclusive measure of output when referring to the total economic impact. It is important to define the difference between GSP (net output) and output (gross output) as they are a different means for valuing intermediate goods and services. GSP includes the value of labor, depreciation, income taxes or government subsidies, and profit. For example, look at a manufacturer who produces widgets. The value of the widget takes into account labor costs, taxes, and profit, all of which represents the widget manufacturer's value-added to the final product, or its GSP. However, making widgets also requires inputs purchased from other sectors, such as processed steel and fuel. Since the steel and fuel are outputs of another industry sector, only their value-added is counted in GSP. Capturing the complete economic impact, including the total value of all goods and services used in the production of widgets would require the use of total or gross output.

Assuming that securing collateral costs 2 percent, and that 70 percent of the total deductible amount is currently collateralized, the estimated total impact on California GSP is a net gain of $22.7 million. As shown in Appendix B-2, the aggregate loss to GSP is $7.5 million, whereas the benefit is $30.2 million, leaving a $22.7 million net gain. This impact was calculated using the RIMS II multipliers and is meant to capture the incremental value added to the California economy.

The Department also calculated the effect of the regulation on output. For example, the RIMS II multiplier for output of 2.2583 represents a $2.26 total economic impact for every $1 direct impact to an insurer (the $2.26 total accounts for all direct, indirect, and induced costs). As detailed in Appendix B-2, the cost estimate of the regulation results in a projected loss to total California economic output of $13 million. However, the regulations are also expected to result in a monetary benefit to all companies with high deductible policies and insurers who would potentially be spared an insolvency who might risk having their remaining assets liquidated to pay outstanding claims. The regulation is projected to result in a gain to total California economic output of $52.1 million. The total projected net impact on California output for the mid-range cost estimate, as calculated in Appendix B-2, is a gain of $39.1 million ($52.1 million – $13 million).

Given that the total direct cost, including multi-state impacts, is estimated to be about $24,900 ($21.4 million / 859 firms, see Appendix B) to an average impacted business with more than 100 employees, it is not anticipated that the proposed regulation will have a significant impact on the creation of new businesses or the elimination of existing businesses in California. However, based on the number of past insolvencies, it is estimated that the regulation will lower the risk of insolvency by approximately one insurer insolvency every four years. This regulation could also lessen the chances that some businesses would go bankrupt due to not having enough collateral, leading to a very small overall decrease in the elimination of existing businesses in California. In the unlikely event an insurer decides to stop writing workers' compensation policies with deductibles of more than $100,000, it is not expected that any insurer would cease doing business altogether. Since high deductible policies represent only about 34.5 percent of premiums in California, the Department assumes that if any insurer stopped writing high deductible policies it would not be eliminated but would instead restructure and focus on other lines that it currently writes.

In the insurance industry, inadequate collateralization by one or more insurers represents a competitive disadvantage for many other more responsible insurers in the marketplace, as failure to require adequate collateral results in a cost advantage similar in concept to that of inadequate pricing. Furthermore, even if an insurer does everything right, it can still be saddled with the insolvency costs of another insurer who became insolvent because it did not require adequate collateralization. Prior to this regulation, an insurer could offer policies that were cheaper to employers (no collateral required) because the insolvency risk would be borne by others. This regulation aims to set standards so that all insurers require enough collateral so they can be properly reimbursed for claims paid. Making insurers responsible for requiring the proper collateral should have an overall positive impact and lead to a more balanced and equitable insurance market. The ultimate cost of inadequate collateralization will be borne by insurers in the form of inability to collect deductible amounts owed from insolvent or recalcitrant employers. This should be considered as an offset to any cost advantage obtained by avoiding the costs of collateralizing the risk. California domiciled insurers would not be at a competitive disadvantage when competing for business solely in other states because they would not be subject to the collateralization requirements in the regulations. Additionally, no competitive advantage is expected because all insurers writing high deductible policies for accounts with California exposure would be subject to the regulation. Any insurer desiring to issue insurance on a high deductible basis to a multi-state, multi-line account with California workers' compensation exposure would be required at a minimum to follow the regulations' requirement to fully collateralize the California workers' compensation deductible receivables. Electing this "California workers' compensation only" option would require the insurer to effectively split the account by collateralizing the non-California workers' compensation exposure separately or choosing not to collateralize that exposure at all. But this approach is permissible to all insurers under the regulations, whether they are California domestic insurers or not. This is an approach that a California insurer could adopt in order to compete for out-of-state accounts against insurers not licensed in California.

For all other industries, because the regulation spreads the impact across many businesses in the state, provides commensurate monetary benefits, and preserves the beneficial option of high deductible policies for credit worthy employers going forward; no other measurable impact on the competitive advantage of businesses currently doing business within the state is anticipated. The relatively small net impacts on both GSP and total output enforce the conclusion that the overall impact of the regulation on most businesses should be minimal.

Impact on Small Businesses

The proposed regulations will directly affect workers' compensation insurance carriers as discussed in the foregoing analysis, but by law, they are not considered small businesses (Government Code section 11342.610(b)(2)).

This regulation will also affect employers who are currently purchasing high deductible workers' compensation insurance policies. As discussed above, the Department anticipates that this regulation will impact larger employers, with more than 100 employees. The 2015 Annual

Survey of Entrepreneurs[7] published data regarding sales, receipts, or values of shipments by firm size. Firms with sales/receipts of $1,000,000 or more, had an average of 71 employees and $22 million in receipts. Given that the average size of those employers is smaller than the businesses anticipated to be impacted by this regulation and the average receipts of those businesses greatly exceed the thresholds set for small businesses in Government Code section 11342.610(c), the Department expects that very few small businesses would be impacted by the proposed regulation. The one industry where small businesses could be impacted is manufacturing. For manufacturing, the law defines a small business as any business with fewer than 250 employees (Government Code section 11342.610(b)(10)), as opposed to the gross receipt threshold. Therefore, any manufacturing business with between 100 and 249 employees would qualify as a small business under that legal definition. Approximately 74 small manufacturing businesses (between 100 and 249 employees) are projected to need additional collateral in accordance with the new requirements. Conversely, 580 small manufacturing businesses (between 100 and 249 employees) would likely benefit from the proposed regulations by experiencing fewer rate increases due to guaranty fund assessments that previously would have been needed to cover the claims of insolvent insurers.

Government Code section 11346.3(c)(1)(D) through (F)
The Department has also assessed whether and to what extent the proposed regulations affect other criteria set forth in Government Code sections 11346.3(c)(1)(D) through (F).

Impact on Investment in the State
This regulation may slightly increase the demand for surety bonds and Letters of Credit, potentially providing more business opportunities for qualified financial institutions in California. However, the LOC only guarantees funds for workers' compensation deductibles and will be set aside for a sole beneficiary, the designated workers' compensation insurer, in the event an employer could not pay the contracted deductible. Given the small cost related to obtaining a LOC and that the relatively small increase in demand will likely be spread among many financial institutions, it is not expected that the regulation would impact the investment strategy of any business or financial institution in the state. Additionally, there is no projected impact on investments relating to equipment, structures or real estate in California (Government Code section 11346.3(c)(1)(D)).

Effect on Incentives for Innovation in Products, Materials, or Processes
The regulation is meant to reduce the risk of insolvencies for workers' compensation insurers. One of the main benefits of high deductible workers' compensation policies is that they incentivize employers to take an active approach to worker safety. By increasing the stability of the large deductible workers' compensation insurance market, the regulation may lead to innovation in worker safety policies and processes. Promoting financial stability in the high

[7] Statistics for U.S. Employer Firms by Sector, Gender, Ethnicity, Race, Veteran Status, and Receipts Size of Firm for the U.S., States, and Top 50 MSAs: 2015 Annual Survey of Entrepreneurs: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ASE_2015_00CSA03&prodType=table. Accessed February 2018.

deductible workers’ compensation market will further support the business efforts of employers who specialize in innovation.

Worker Safety and Environmental Effects
The changes in the proposed regulations would likely make California workers safer in a few ways. Deductible policies tend to encourage employers to be more active in maintaining a safe work environment because they incur a direct cost if a claim occurs. Increasing the viability of the already expanding workers' compensation high deductible market might lead to more employers taking an even stronger approach to worker safety. Additionally, when a workers' compensation insurer experiences an insolvency, it can negatively affect the care given to an already injured employee and delay reimbursements. The proposed regulation will curtail the possibility of insolvency and the possibility of an employee having to wait for needed care.

There are no environmental impacts anticipated from the regulations.

Health and Welfare Effects
The Department has determined that the proposed regulations will be beneficial to the health and welfare of California residents per Government Code section 11346.3(c)(1)(F). This regulation will manage the risk of insurer insolvencies, both by reducing the risk of future workers' compensation insurer insolvencies and by increasing the likelihood that workers’ compensation insurers that do become insolvent have sufficient funds available in liquidation or conservation to pay outstanding workers’ compensation claims, thus ensuring timely medical care for injured employees.

Analysis of Alternatives to the Proposed Regulation
The Department sought public input through a pre-notice public discussion held on March 16, 2018. Members of the public and stakeholders attended the discussion in two of the Department’s locations, the San Francisco or Sacramento offices, where the interested parties were able to discuss the proposed regulation via video conference. The robust discussion included topics such as the size of impacted employers, insurers preferred types of collateral, the cost of obtaining the different types of collateral and industries that potentially would be impacted. In its invitation to the pre-notice public discussion, the Department listed two alternatives that were discussed and ultimately incorporated into the proposed regulations, and asked for additional alternatives.

Alternative 1: Apply these regulations to all workers’ compensation policies with deductible amounts of all sizes.

Reasons for rejecting Alternative #1
This alternative was presented in the proposed regulation text presented at the pre-notice public discussion and specified that insurers require collateral for all deductible policies written, regardless of the size of the deductible. This alternative would cost more than the regulation because it would require all smaller deductible policies to also be collateralized. Feedback from an insurer indicated that their current business practice is to typically not require collateral for policies with deductibles less than $25,000 and to determine on a case-by-case basis whether collateral is required for deductibles less than $100,000. Furthermore, since these employers have smaller deductible amounts they do not pose the same insolvency threat to insurers. The

Department does not expect any reduction in the risk of insurer insolvencies by requiring additional collateral for all policies with deductibles smaller than $100,000.

High deductible policies account for 34.5 percent of the workers' compensation insurance market. First dollar policies account for 64.5 percent of the market and are not impacted by this regulation. Small deductible policies with deductibles smaller than $100,000 account for the remaining 1 percent. Requiring collateral for all small deductible policies would result in an estimated direct cost 2.9 percent higher than the regulation. As a result, this alternative is estimated to have a direct cost of at least $22 million (Appendix B direct cost of $21.4 million x 102.9 percent), slightly more than the regulation. Requiring collateral for small deductible policies would have led to some additional costs for both insurers and employers, while providing no increase in benefits beyond what the regulation is anticipated to provide.

Alternative 2: Require that the collateral requirements provide protection only for California specific collateral.

<u>Reasons for rejecting Alternative #2</u>
This alternative was also presented in the proposed regulation text presented at the pre-notice public discussion, and would have required that an employer with employees in multiple states would only need to collateralize California deductibles, while dedicating that collateral exclusively to reimbursement of California workers' compensation deductible claims. If that employer then failed to reimburse its insurer for deductible amounts on claims for injured workers in another state, the collateral specifically set aside for California workers' compensation deductibles couldn't be used to pay for those out-of-state deductible obligations on the same policy. As learned in meetings with insurers collateralization is done for the entire policy, insurers do not have different collateral requirements specifically for California claims. Requiring that collateral be dedicated to California would potentially result in increased costs to collateralize deductible obligations in other states and would also create a scenario where collateral dedicated to the employer's California deductible obligations would not be available to cover its deductible obligations in other states under the same policy.

The multi-state, multi-line option detailed in the regulations provides consistency with how insurers currently account for collateral across worksites and different lines of business. Further restricting collateral as described in this alternative imposes administrative difficulties and would ultimately require more collateral, as specific collateral would need to be dedicated for each state. The desired benefit of the regulation is better managing the risk of insurer insolvencies. Failure to include the flexibility for collateral to be used for a loss in a different state could restrict funds needed to pay claims, possibly increasing the risk of insurer insolvency. Due to the smaller levels of collateralization and the restrictions on when collateral could be used, the Department estimates that this alternative would likely only be half as effective as the regulation at managing the risk of future insolvencies.

The direct cost of this alternative would be less than the proposed regulations, initially estimated to be about $4.8 million (see Appendix D), assuming a collateral cost of 2 percent and current collateralization of 70 percent. However, it is also anticipated that the benefits of this alternative would be more limited than the regulation, as it places limits on when collateral could be available for claims and would only provide protection for California policies. There were significant losses nationwide from the four insurers who went insolvent. California was greatly impacted as well, with approximately $360 million in incurred losses over the past 15 years. In fact, by being overly restrictive as to when the collateral could be used, this alternative would eliminate most of the benefits expected as a result of the regulation. Only an estimated $12 million direct benefit would be attained annually by this alternative ($360 million/15 years x 50%, as this alternative is estimated to be only half as effective at mitigating insolvencies). Therefore, it was determined that allowing the option for insurers to expand the deductible collateralization requirements to all lines and/or all states for which exposure to deductible loss exists under the specific deductible policy, without the collateral being restricted to provide reimbursement for only California workers' compensation claims, is a more comprehensive way to protect insured Californians.

Appendices

Appendix A. Detailed Industry Breakdown of Costs and Benefits, Lower Range (Collateral Cost 1 percent)

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Jobs Lost	Projected Loss to Total Output	Projected Loss to GSP	Projected Direct Benefit	Projected Jobs Gained	Projected Benefit to Total Output	Projected Benefit to GSP
Crop and animal production	352	121	15	$12,815,011	$128,150	1.6	$263,592	$117,386	$716,779	9.0	$1,474,343	$656,570
Forestry, fishing, and related activities	532	184	23	$19,368,142	$193,681	4.8	$408,900	$204,276	$1,083,314	26.8	$2,287,092	$1,142,571
Oil and gas extraction	14	5	1	$509,688	$5,097	0.0	$10,588	$5,867	$28,508	0.3	$59,220	$32,813
Utilities	109	38	5	$3,968,285	$39,683	0.3	$74,512	$43,326	$221,957	1.5	$416,769	$242,333
Construction	1109	383	49	$40,374,567	$403,746	6.6	$929,665	$503,067	$2,258,261	37.2	$5,199,873	$2,813,794
Wood product manufacturing	59	20	3	$2,147,971	$21,480	0.3	$44,214	$18,939	$120,142	1.5	$247,300	$105,929
Nonmetallic mineral product manufacturing	65	22	3	$2,366,408	$23,664	0.3	$49,683	$25,074	$132,360	1.5	$277,889	$140,248
Primary metal manufacturing	43	15	2	$1,565,470	$15,655	0.2	$31,668	$13,516	$87,561	1.1	$177,127	$75,600
Fabricated metal product manufacturing	220	76	10	$8,009,382	$80,094	1.0	$171,433	$85,492	$447,987	5.6	$958,871	$478,181
Machinery manufacturing	133	46	6	$4,842,035	$48,420	0.5	$103,334	$49,795	$270,828	2.9	$577,975	$278,520
Computer and electronic product manufacturing	457	158	20	$16,637,671	$166,377	1.6	$374,414	$176,992	$930,591	9.0	$2,094,202	$989,963
Electrical equipment and appliance manufacturing	58	20	3	$2,111,564	$21,116	0.2	$42,658	$21,187	$118,106	1.2	$238,597	$118,507
Motor vehicle, body, trailer, and parts manufacturing	89	31	4	$3,226,722	$32,267	0.3	$60,782	$23,758	$180,479	1.9	$339,969	$132,887
Other transportation equipment manufacturing	104	36	5	$3,799,691	$37,997	0.5	$85,900	$40,945	$212,527	2.5	$480,460	$229,019
Furniture and related product manufacturing	47	16	2	$1,711,095	$17,111	0.2	$35,663	$17,516	$95,706	1.1	$199,471	$97,975
Miscellaneous manufacturing	140	48	6	$5,096,879	$50,969	0.6	$108,135	$57,957	$285,083	3.4	$604,831	$324,167
Food, beverage, and tobacco product manufacturing	475	164	21	$17,292,984	$172,930	1.9	$397,497	$164,525	$967,245	10.5	$2,223,308	$920,236
Textile and textile product mills	17	6	1	$618,907	$6,189	0.1	$11,625	$4,969	$34,617	0.4	$65,021	$27,791
Apparel, leather, and allied product manufacturing	71	24	3	$2,584,846	$25,848	0.4	$56,903	$27,663	$144,578	2.2	$318,273	$154,727
Paper manufacturing	65	22	3	$2,366,408	$23,664	0.2	$44,522	$20,614	$132,360	1.2	$249,022	$115,299
Printing and related support activities	55	19	2	$2,002,346	$20,023	0.3	$41,889	$22,112	$111,997	1.8	$234,297	$123,678
Petroleum and coal products manufacturing	17	6	1	$618,907	$6,189	0.0	$12,038	$3,769	$34,617	0.2	$67,330	$21,082
Chemical manufacturing	144	50	6	$5,242,505	$52,425	0.4	$104,986	$47,282	$293,228	2.2	$587,218	$264,462
Plastics and rubber products manufacturing	94	32	4	$3,422,190	$34,222	0.3	$66,490	$31,094	$191,413	1.9	$371,896	$173,917
Wholesale trade	1,012	349	44	$36,843,157	$368,432	4.4	$734,984	$467,208	$2,060,740	24.9	$4,110,970	$2,613,224
Retail trade	3,064	1057	134	$111,548,848	$1,115,488	22.1	$2,279,501	$1,424,367	$6,239,236	123.7	$12,749,880	$7,966,881
Air transportation	54	19	2	$1,965,939	$19,659	0.3	$46,176	$23,381	$109,960	1.6	$258,275	$130,776
Truck transportation	177	61	8	$6,443,912	$64,439	1.1	$150,556	$78,835	$360,426	6.2	$842,099	$440,945
Transit and ground passenger transportation	94	32	4	$3,422,190	$34,222	0.7	$84,798	$38,643	$191,413	3.7	$474,301	$216,143
Other transportation and support activities	137	47	6	$4,987,661	$49,877	0.9	$113,305	$69,204	$278,974	5.2	$633,745	$387,076
Warehousing and storage	179	62	8	$6,516,724	$65,167	1.3	$147,311	$89,325	$364,498	7.3	$823,949	$499,618
Publishing industries, except Internet	158	55	7	$5,752,193	$57,522	0.7	$123,712	$71,822	$321,736	4.0	$691,958	$401,720
Motion picture and sound recording industries	154	53	7	$5,606,567	$56,066	0.7	$113,875	$67,621	$313,591	3.9	$636,934	$378,222
Broadcasting, except Internet	92	32	4	$3,349,378	$33,494	0.5	$90,661	$48,000	$187,340	2.9	$507,092	$268,477
Telecommunications	133	46	6	$4,842,035	$48,420	0.4	$100,114	$56,841	$270,828	2.5	$559,965	$317,926
Internet and other information services	163	56	7	$5,934,224	$59,342	0.7	$124,275	$75,875	$331,918	3.9	$695,102	$424,390
Federal Reserve banks, credit intermediation and related services	299	103	13	$10,885,478	$108,855	1.1	$210,416	$133,597	$608,855	6.1	$1,176,917	$747,248
Securities, commodity contracts, investments	101	35	4	$3,677,034	$36,770	0.8	$89,286	$52,173	$205,667	4.2	$499,400	$291,821
Insurance carriers and related activities	333	115	15	$12,123,292	$121,233	1.7	$275,465	$155,348	$678,089	9.3	$1,540,755	$868,904
Real estate	163	56	7	$5,934,224	$59,342	0.5	$89,696	$62,648	$331,918	2.7	$501,693	$350,405
Rental and leasing services and lessors of intangible assets	68	23	3	$2,475,627	$24,756	0.2	$43,400	$28,400	$138,469	1.1	$242,749	$158,851
Professional, scientific, and technical services	1,697	585	74	$61,781,460	$617,815	9.9	$1,382,793	$871,304	$3,455,608	55.1	$7,734,343	$4,873,445
Management of companies and enterprises	500	173	22	$18,203,141	$182,031	2.4	$413,867	$251,950	$1,018,152	13.6	$2,314,871	$1,409,224
Administrative and support services	1,200	414	53	$43,687,538	$436,875	11.6	$978,339	$611,582	$2,443,565	65.1	$5,472,120	$3,420,747
Waste management and remediation services	82	28	4	$2,985,315	$29,853	0.3	$60,900	$34,839	$166,977	1.9	$340,633	$194,862
Educational services	417	144	18	$15,181,420	$151,814	3.3	$349,598	$204,843	$849,139	18.3	$1,955,397	$1,145,743
Ambulatory health care services	919	317	40	$33,457,373	$334,574	6.2	$783,137	$481,150	$1,871,364	34.5	$4,380,301	$2,691,208
Hospitals	361	125	16	$13,142,668	$131,427	2.1	$304,095	$176,821	$735,106	12.0	$1,700,888	$989,011
Nursing and residential care facilities	902	311	40	$32,838,466	$328,385	8.3	$734,104	$458,195	$1,836,746	46.6	$4,106,047	$2,562,812
Social assistance	356	123	16	$12,960,636	$129,606	3.5	$291,744	$171,690	$724,924	19.8	$1,631,805	$960,307
Performing arts, spectator sports, museums, zoos, and parks	117	40	5	$4,259,535	$42,595	0.8	$91,618	$55,042	$238,248	4.4	$512,447	$307,864
Amusements, gambling, and recreation	273	94	12	$9,938,915	$99,389	2.4	$209,393	$127,954	$555,911	13.6	$1,171,193	$715,680
Accommodation	475	164	21	$17,292,984	$172,930	2.9	$351,791	$216,992	$967,245	16.3	$1,967,666	$1,213,698
Food services and drinking places	1,009	348	44	$36,733,938	$367,339	8.9	$809,285	$444,958	$2,054,631	49.6	$4,526,558	$2,488,775
Other services	454	157	20	$16,528,452	$165,285	2.6	$370,006	$205,135	$924,482	14.5	$2,069,546	$1,147,375
Total	***19,612***	***6766***	***859***	***$714,000,000***	***$7,140,000***	***126***	***$15,479,289***	***$8,982,864***	***$39,936,000***	***705.40***	***$86,579,953***	***$50,243,648***
		34.5%	**12.7%**		**1.0%**							

Percent Currently Collateralized	**80.0%**	Additional Insurance Company Benefits	***$1,664,000***	**22.76**	**$3,780,941**	**$2,132,250**
Total Collateral Needed	***$3,570,000,000***	Total Annual Benefits	***$41,600,000***	**728**	***$90,360,894***	**$52,375,897**

Net Job Change **602**

Cost per typical business ***$8,307***

Appendix B. Detailed Industry Breakdown of Costs and Benefits, Mid-Range (Collateral Cost 2 percent)

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Jobs Lost	Projected Loss to Total Output	Projected Loss to GSP	Projected Direct Benefit	Projected Jobs Gained	Projected Benefit to Total Output	Projected Benefit to GSP
Crop and animal production	352	121	15	$19,222,517	$384,450	4.8	$790,776	$352,157	$716,779	9.0	$1,474,343	$656,570
Forestry, fishing, and related activities	532	184	23	$29,052,213	$581,044	14.4	$1,226,701	$612,827	$1,083,314	26.8	$2,287,092	$1,142,571
Oil and gas extraction	14	5	1	$764,532	$15,291	0.1	$31,763	$17,600	$28,508	0.3	$59,220	$32,813
Utilities	109	38	5	$5,952,427	$119,049	0.8	$223,537	$129,977	$221,957	1.5	$416,769	$242,333
Construction	1109	383	49	$60,561,850	$1,211,237	19.9	$2,788,994	$1,509,201	$2,258,261	37.2	$5,199,873	$2,813,794
Wood product manufacturing	59	20	3	$3,221,956	$64,439	0.8	$132,641	$56,816	$120,142	1.5	$247,300	$105,929
Nonmetallic mineral product manufacturing	65	22	3	$3,549,612	$70,992	0.8	$149,048	$75,223	$132,360	1.5	$277,889	$140,248
Primary metal manufacturing	43	15	2	$2,348,205	$46,964	0.6	$95,004	$40,549	$87,561	1.1	$177,127	$75,600
Fabricated metal product manufacturing	220	76	10	$12,014,073	$240,281	3.0	$514,298	$256,476	$447,987	5.6	$958,871	$478,181
Machinery manufacturing	133	46	6	$7,263,053	$145,261	1.5	$310,002	$149,386	$270,828	2.9	$577,975	$278,520
Computer and electronic product manufacturing	457	158	20	$24,956,506	$499,130	4.8	$1,123,242	$530,975	$930,591	9.0	$2,094,202	$989,963
Electrical equipment and appliance manufacturing	58	20	3	$3,167,347	$63,347	0.6	$127,973	$63,562	$118,106	1.2	$238,597	$118,507
Motor vehicle, body, trailer, and parts manufacturing	89	31	4	$4,840,082	$96,802	1.0	$182,345	$71,275	$180,479	1.9	$339,969	$132,887
Other transportation equipment manufacturing	104	36	5	$5,699,536	$113,991	1.4	$257,699	$122,836	$212,527	2.5	$480,460	$229,019
Furniture and related product manufacturing	47	16	2	$2,566,643	$51,333	0.6	$106,988	$52,549	$95,706	1.1	$199,471	$97,975
Miscellaneous manufacturing	140	48	6	$7,645,319	$152,906	1.8	$324,406	$173,870	$285,083	3.4	$604,831	$324,167
Food, beverage, and tobacco product manufacturing	475	164	21	$25,939,476	$518,790	5.7	$1,192,490	$493,576	$967,245	10.5	$2,223,308	$920,236
Textile and textile product mills	17	6	1	$928,360	$18,567	0.2	$34,875	$14,906	$34,617	0.4	$65,021	$27,791
Apparel, leather, and allied product manufacturing	71	24	3	$3,877,269	$77,545	1.2	$170,708	$82,989	$144,578	2.2	$318,273	$154,727
Paper manufacturing	65	22	3	$3,549,612	$70,992	0.6	$133,565	$61,841	$132,360	1.2	$249,022	$115,299
Printing and related support activities	55	19	2	$3,003,518	$60,070	1.0	$125,667	$66,336	$111,997	1.8	$234,297	$123,678
Petroleum and coal products manufacturing	17	6	1	$928,360	$18,567	0.1	$36,113	$11,307	$34,617	0.2	$67,330	$21,082
Chemical manufacturing	144	50	6	$7,863,757	$157,275	1.2	$314,959	$141,846	$293,228	2.2	$587,218	$264,462
Plastics and rubber products manufacturing	94	32	4	$5,133,286	$102,666	1.0	$199,469	$93,282	$191,413	1.9	$371,896	$173,917
Wholesale trade	1,012	349	44	$55,264,736	$1,105,295	13.3	$2,204,952	$1,401,624	$2,060,740	24.9	$4,110,970	$2,613,224
Retail trade	3,064	1057	134	$167,323,271	$3,346,465	66.4	$6,838,502	$4,273,102	$6,239,236	123.7	$12,749,880	$7,966,881
Air transportation	54	19	2	$2,948,909	$58,978	0.9	$138,528	$70,143	$109,960	1.6	$258,275	$130,776
Truck transportation	177	61	8	$9,665,868	$193,317	3.3	$451,667	$236,504	$360,426	6.2	$842,099	$440,945
Transit and ground passenger transportation	94	32	4	$5,133,286	$102,666	2.0	$254,395	$115,930	$191,413	3.7	$474,301	$216,143
Other transportation and support activities	137	47	6	$7,481,491	$149,630	2.8	$339,914	$207,611	$278,974	5.2	$633,745	$387,076
Warehousing and storage	179	62	8	$9,775,087	$195,502	3.9	$441,932	$267,974	$364,498	7.3	$823,949	$499,618
Publishing industries, except Internet	158	55	7	$8,628,289	$172,566	2.1	$371,137	$215,466	$321,736	4.0	$691,958	$401,720
Motion picture and sound recording industries	154	53	7	$8,409,851	$168,197	2.1	$341,625	$202,862	$313,591	3.9	$636,934	$378,222
Broadcasting, except Internet	92	32	4	$5,024,067	$100,481	1.6	$271,983	$144,000	$187,340	2.9	$507,092	$268,477
Telecommunications	133	46	6	$7,263,053	$145,261	1.3	$300,342	$170,522	$270,828	2.5	$559,965	$317,926
Internet and other information services	163	56	7	$8,901,336	$178,027	2.1	$372,824	$227,625	$331,918	3.9	$695,102	$424,390
Federal Reserve banks, credit intermediation and related services	299	103	13	$16,328,217	$326,564	3.3	$631,249	$400,792	$608,855	6.1	$1,176,917	$747,248
Securities, commodity contracts, investments	101	35	4	$5,515,552	$110,311	2.3	$267,857	$156,520	$205,667	4.2	$499,400	$291,821
Insurance carriers and related activities	333	115	15	$18,184,938	$363,699	5.0	$826,396	$466,044	$678,089	9.3	$1,540,755	$868,904
Real estate	163	56	7	$8,901,336	$178,027	1.5	$269,087	$187,943	$331,918	2.7	$501,693	$350,405
Rental and leasing services and lessors of intangible assets	68	23	3	$3,713,441	$74,269	0.6	$130,201	$85,201	$138,469	1.1	$242,749	$158,851
Professional, scientific, and technical services	1,697	585	74	$92,672,190	$1,853,444	29.6	$4,148,378	$2,613,912	$3,455,608	55.1	$7,734,343	$4,873,445
Management of companies and enterprises	500	173	22	$27,304,711	$546,094	7.3	$1,241,600	$755,849	$1,018,152	13.6	$2,314,871	$1,409,224
Administrative and support services	1,200	414	53	$65,531,307	$1,310,626	34.9	$2,935,016	$1,834,746	$2,443,565	65.1	$5,472,120	$3,420,747
Waste management and remediation services	82	28	4	$4,477,973	$89,559	1.0	$182,701	$104,516	$166,977	1.9	$340,633	$194,862
Educational services	417	144	18	$22,772,129	$455,443	9.8	$1,048,793	$614,529	$849,139	18.3	$1,955,397	$1,145,743
Ambulatory health care services	919	317	40	$50,186,060	$1,003,721	18.5	$2,349,410	$1,443,451	$1,871,364	34.5	$4,380,301	$2,691,208
Hospitals	361	125	16	$19,714,002	$394,280	6.4	$912,285	$530,464	$735,106	12.0	$1,700,888	$989,011
Nursing and residential care facilities	902	311	40	$49,257,699	$985,154	25.0	$2,202,312	$1,374,585	$1,836,746	46.6	$4,106,047	$2,562,812
Social assistance	356	123	16	$19,440,955	$388,819	10.6	$875,232	$515,069	$724,924	19.8	$1,631,805	$960,307
Performing arts, spectator sports, museums, zoos, and parks	117	40	5	$6,389,302	$127,786	2.4	$274,855	$165,125	$238,248	4.4	$512,447	$307,864
Amusements, gambling, and recreation	273	94	12	$14,908,372	$298,167	7.3	$628,179	$383,861	$555,911	13.6	$1,171,193	$715,680
Accommodation	475	164	21	$25,939,476	$518,790	8.7	$1,055,374	$650,977	$967,245	16.3	$1,967,666	$1,213,698
Food services and drinking places	1,009	348	44	$55,100,908	$1,102,018	26.6	$2,427,856	$1,334,875	$2,054,631	49.6	$4,526,558	$2,488,775
Other services	454	157	20	$24,792,678	$495,854	7.8	$1,110,018	$615,404	$924,482	14.5	$2,069,546	$1,147,375
Total	***19,612***	***6766***	***859***	***$1,071,000,000***	***$21,420,000***	***378***	***$46,437,866***	***$26,948,591***	***$39,936,000***	***705***	***$86,579,953***	***$50,243,648***
		34.5%	***12.7%***		***2.0%***							

Percent Currently Collateralized	**70.0%**	Additional Insurance Company Benefits	***$1,664,000***	**23**	**$3,780,941**	**$2,132,250**
Total Collateral Needed	***$3,570,000,000***	Total Annual Benefits	***$41,600,000***	**728**	***$90,360,894***	**$52,375,897**
		Net Job Change		**350**		
		Cost per typical business		***$24,922***		

Appendix B-2. Subset of Detailed Industry Breakdown of Costs and Benefits, Mid-Range, Specific to All California Policies (excludes multi-state approach, used for California specific job impact analysis)

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Jobs Lost	Projected Loss to Total Output	Projected Loss to GSP	Projected Direct Benefit	Projected Jobs Gained	Projected Benefit to Total Output	Projected Benefit to GSP
Crop and animal production	352	121	15	$5,384,458	$107,689	1.4	$221,506	$98,643	$413,526	5.2	$850,582	$378,790
Forestry, fishing, and related activities	532	184	23	$8,137,875	$162,757	4.0	$343,614	$171,660	$624,989	15.5	$1,319,476	$659,176
Oil and gas extraction	14	5	1	$214,155	$4,283	0.0	$8,897	$4,930	$16,447	0.2	$34,166	$18,931
Utilities	109	38	5	$1,667,347	$33,347	0.2	$62,616	$36,408	$128,052	0.9	$240,444	$139,807
Construction	1109	383	49	$16,964,104	$339,282	5.6	$781,231	$422,745	$1,302,843	21.5	$2,999,927	$1,623,343
Wood product manufacturing	59	20	3	$902,509	$18,050	0.2	$37,154	$15,915	$69,313	0.9	$142,673	$61,113
Nonmetallic mineral product manufacturing	65	22	3	$994,289	$19,886	0.2	$41,750	$21,071	$76,361	0.9	$160,321	$80,913
Primary metal manufacturing	43	15	2	$657,761	$13,155	0.2	$26,612	$11,358	$50,516	0.6	$102,189	$43,616
Fabricated metal product manufacturing	220	76	10	$3,365,287	$67,306	0.8	$144,061	$71,842	$258,454	3.2	$553,195	$275,874
Machinery manufacturing	133	46	6	$2,034,469	$40,689	0.4	$86,835	$41,845	$156,247	1.7	$333,447	$160,685
Computer and electronic product manufacturing	457	158	20	$6,990,618	$139,812	1.3	$314,634	$148,732	$536,879	5.2	$1,208,194	$571,132
Electrical equipment and appliance manufacturing	58	20	3	$887,212	$17,744	0.2	$35,847	$17,805	$68,138	0.7	$137,652	$68,370
Motor vehicle, body, trailer, and parts manufacturing	89	31	4	$1,355,765	$27,115	0.3	$51,077	$19,965	$104,123	1.1	$196,136	$76,666
Other transportation equipment manufacturing	104	36	5	$1,596,509	$31,930	0.4	$72,185	$34,408	$122,612	1.5	$277,189	$132,127
Furniture and related product manufacturing	47	16	2	$718,948	$14,379	0.2	$29,969	$14,720	$55,215	0.7	$115,079	$56,524
Miscellaneous manufacturing	140	48	6	$2,141,546	$42,831	0.5	$90,870	$48,703	$164,471	2.0	$348,941	$187,020
Food, beverage, and tobacco product manufacturing	475	164	21	$7,265,960	$145,319	1.6	$334,031	$138,257	$558,026	6.1	$1,282,678	$530,906
Textile and textile product mills	17	6	1	$260,045	$5,201	0.1	$9,769	$4,175	$19,971	0.2	$37,512	$16,033
Apparel, leather, and allied product manufacturing	71	24	3	$1,086,070	$21,721	0.3	$47,817	$23,246	$83,410	1.3	$183,619	$89,266
Paper manufacturing	65	22	3	$994,289	$19,886	0.2	$37,413	$17,323	$76,361	0.7	$143,666	$66,518
Printing and related support activities	55	19	2	$841,322	$16,826	0.3	$35,201	$18,581	$64,614	1.0	$135,171	$71,353
Petroleum and coal products manufacturing	17	6	1	$260,045	$5,201	0.0	$10,116	$3,167	$19,971	0.1	$38,844	$12,163
Chemical manufacturing	144	50	6	$2,202,733	$44,055	0.3	$88,224	$39,733	$169,170	1.3	$338,780	$152,574
Plastics and rubber products manufacturing	94	32	4	$1,437,895	$28,758	0.3	$55,874	$26,129	$110,430	1.1	$214,555	$100,337
Wholesale trade	1,012	349	44	$15,480,318	$309,606	3.7	$617,634	$392,612	$1,188,888	14.4	$2,371,714	$1,507,629
Retail trade	3,064	1057	134	$46,869,264	$937,385	18.6	$1,915,547	$1,196,947	$3,599,559	71.4	$7,355,700	$4,596,277
Air transportation	54	19	2	$826,025	$16,520	0.2	$38,803	$19,648	$63,439	0.9	$149,005	$75,448
Truck transportation	177	61	8	$2,707,526	$54,151	0.9	$126,517	$66,248	$207,938	3.6	$485,826	$254,391
Transit and ground passenger transportation	94	32	4	$1,437,895	$28,758	0.6	$71,259	$32,473	$110,430	2.2	$273,635	$124,698
Other transportation and support activities	137	47	6	$2,095,656	$41,913	0.8	$95,214	$58,154	$160,946	3.0	$365,622	$223,313
Warehousing and storage	179	62	8	$2,738,120	$54,762	1.1	$123,790	$75,063	$210,288	4.2	$475,355	$288,241
Publishing industries, except Internet	158	55	7	$2,416,888	$48,338	0.6	$103,960	$60,355	$185,617	2.3	$399,206	$231,761
Motion picture and sound recording industries	154	53	7	$2,355,701	$47,114	0.6	$95,693	$56,824	$180,918	2.2	$367,462	$218,205
Broadcasting, except Internet	92	32	4	$1,407,302	$28,146	0.4	$76,186	$40,336	$108,081	1.7	$292,553	$154,891
Telecommunications	133	46	6	$2,034,469	$40,689	0.4	$84,129	$47,765	$156,247	1.4	$323,057	$183,419
Internet and other information services	163	56	7	$2,493,371	$49,867	0.6	$104,432	$63,760	$191,491	2.2	$401,020	$244,840
Federal Reserve banks, credit intermediation and related services	299	103	13	$4,573,730	$91,475	0.9	$176,820	$112,267	$351,262	3.5	$678,990	$431,104
Securities, commodity contracts, investments	101	35	4	$1,544,972	$30,899	0.6	$75,030	$43,843	$118,654	2.4	$288,115	$168,358
Insurance carriers and related activities	333	115	15	$5,093,820	$101,876	1.4	$231,484	$130,544	$391,205	5.4	$888,897	$501,291
Real estate	163	56	7	$2,493,371	$49,867	0.4	$75,375	$52,645	$191,491	1.6	$289,439	$202,157
Rental and leasing services and lessors of intangible assets	68	23	3	$1,040,179	$20,804	0.2	$36,471	$23,866	$79,886	0.6	$140,048	$91,645
Professional, scientific, and technical services	1,697	585	74	$25,958,597	$519,172	8.3	$1,162,011	$732,188	$1,993,620	31.8	$4,462,121	$2,811,603
Management of companies and enterprises	500	173	22	$7,648,379	$152,968	2.0	$347,787	$211,722	$587,395	7.9	$1,335,502	$813,014
Administrative and support services	1,200	414	53	$18,356,109	$367,122	9.8	$822,133	$513,934	$1,409,749	37.6	$3,156,992	$1,973,508
Waste management and remediation services	82	28	4	$1,254,334	$25,087	0.3	$51,177	$29,276	$96,333	1.1	$196,519	$112,420
Educational services	417	144	18	$6,378,748	$127,575	2.7	$293,780	$172,137	$489,888	10.5	$1,128,114	$661,006
Ambulatory health care services	919	317	40	$14,057,720	$281,154	5.2	$658,098	$404,328	$1,079,633	19.9	$2,527,097	$1,552,620
Hospitals	361	125	16	$5,522,129	$110,443	1.8	$255,542	$148,589	$424,100	6.9	$981,281	$570,584
Nursing and residential care facilities	902	311	40	$13,797,675	$275,953	7.0	$616,894	$385,038	$1,059,661	26.9	$2,368,873	$1,478,546
Social assistance	356	123	16	$5,445,646	$108,913	3.0	$245,163	$144,277	$418,226	11.4	$941,426	$554,023
Performing arts, spectator sports, museums, zoos, and parks	117	40	5	$1,789,721	$35,794	0.7	$76,990	$46,254	$137,451	2.6	$295,642	$177,614
Amusements, gambling, and recreation	273	94	12	$4,176,015	$83,520	2.0	$175,961	$107,524	$320,718	7.8	$675,689	$412,892
Accommodation	475	164	21	$7,265,960	$145,319	2.5	$295,623	$182,347	$558,026	9.4	$1,135,192	$700,211
Food services and drinking places	1,009	348	44	$15,434,428	$308,689	7.4	$680,072	$373,914	$1,185,364	28.6	$2,611,476	$1,435,831
Other services	454	157	20	$6,944,728	$138,895	2.2	$310,929	$172,382	$533,355	8.3	$1,193,969	$661,947
Total	***19,612***	***6766***	***859***	***$300,000,000***	***$6,000,000***	***106***	***$13,007,806***	***$7,548,625***	***$23,040,000***	***407***	***$49,949,973***	***$28,986,720***
		34.5%	***12.7%***		***2.0%***							

Percent Currently Collateralized	**70.0%**	Additional Insurance Company Benefits	***$960,000***	**13.1**	**$2,181,312**	**$1,230,144**
Total Collateral Needed	***$1,000,000,000***	Total Annual Benefits	***$24,000,000***	**420**	***$52,131,285***	**$30,216,864**
		Net Job Change		**314**		
		Cost per typical business		***$6,981***		

Appendix C. Detailed Industry Breakdown of Costs and Benefits, Upper Range (Collateral Cost 3 percent)

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Jobs Lost	Projected Loss to Total Output	Projected Loss to GSP	Projected Direct Benefit	Projected Jobs Gained	Projected Benefit to Total Output	Projected Benefit to GSP
Crop and animal production	352	121	15	$25,630,022	$768,901	9.7	$1,581,552	$704,313	$716,779	9.0	$1,474,343	$656,570
Forestry, fishing, and related activities	532	184	23	$38,736,284	$1,162,089	28.8	$2,453,401	$1,225,655	$1,083,314	26.8	$2,287,092	$1,142,571
Oil and gas extraction	14	5	1	$1,019,376	$30,581	0.3	$63,526	$35,199	$28,508	0.3	$59,220	$32,813
Utilities	109	38	5	$7,936,569	$238,097	1.6	$447,075	$259,954	$221,957	1.5	$416,769	$242,333
Construction	1109	383	49	$80,749,133	$2,422,474	39.9	$5,577,989	$3,018,403	$2,258,261	37.2	$5,199,873	$2,813,794
Wood product manufacturing	59	20	3	$4,295,941	$128,878	1.6	$265,283	$113,632	$120,142	1.5	$247,300	$105,929
Nonmetallic mineral product manufacturing	65	22	3	$4,732,817	$141,984	1.6	$298,096	$150,447	$132,360	1.5	$277,889	$140,248
Primary metal manufacturing	43	15	2	$3,130,940	$93,928	1.2	$190,007	$81,098	$87,561	1.1	$177,127	$75,600
Fabricated metal product manufacturing	220	76	10	$16,018,764	$480,563	6.0	$1,028,597	$512,953	$447,987	5.6	$958,871	$478,181
Machinery manufacturing	133	46	6	$9,684,071	$290,522	3.1	$620,003	$298,773	$270,828	2.9	$577,975	$278,520
Computer and electronic product manufacturing	457	158	20	$33,275,342	$998,260	9.6	$2,246,485	$1,061,949	$930,591	9.0	$2,094,202	$989,963
Electrical equipment and appliance manufacturing	58	20	3	$4,223,129	$126,694	1.3	$255,947	$127,125	$118,106	1.2	$238,597	$118,507
Motor vehicle, body, trailer, and parts manufacturing	89	31	4	$6,453,443	$193,603	2.1	$364,691	$142,550	$180,479	1.9	$339,969	$132,887
Other transportation equipment manufacturing	104	36	5	$7,599,382	$227,981	2.7	$515,398	$245,673	$212,527	2.5	$480,460	$229,019
Furniture and related product manufacturing	47	16	2	$3,422,190	$102,666	1.2	$213,976	$105,099	$95,706	1.1	$199,471	$97,975
Miscellaneous manufacturing	140	48	6	$10,193,759	$305,813	3.6	$648,812	$347,740	$285,083	3.4	$604,831	$324,167
Food, beverage, and tobacco product manufacturing	475	164	21	$34,585,968	$1,037,579	11.3	$2,384,979	$987,153	$967,245	10.5	$2,223,308	$920,236
Textile and textile product mills	17	6	1	$1,237,814	$37,134	0.4	$69,750	$29,812	$34,617	0.4	$65,021	$27,791
Apparel, leather, and allied product manufacturing	71	24	3	$5,169,692	$155,091	2.4	$341,417	$165,978	$144,578	2.2	$318,273	$154,727
Paper manufacturing	65	22	3	$4,732,817	$141,984	1.3	$267,130	$123,683	$132,360	1.2	$249,022	$115,299
Printing and related support activities	55	19	2	$4,004,691	$120,141	1.9	$251,334	$132,671	$111,997	1.8	$234,297	$123,678
Petroleum and coal products manufacturing	17	6	1	$1,237,814	$37,134	0.2	$72,226	$22,615	$34,617	0.2	$67,330	$21,082
Chemical manufacturing	144	50	6	$10,485,009	$314,550	2.3	$629,918	$283,693	$293,228	2.2	$587,218	$264,462
Plastics and rubber products manufacturing	94	32	4	$6,844,381	$205,331	2.1	$398,938	$186,564	$191,413	1.9	$371,896	$173,917
Wholesale trade	1,012	349	44	$73,686,315	$2,210,589	26.7	$4,409,905	$2,803,248	$2,060,740	24.9	$4,110,970	$2,613,224
Retail trade	3,064	1057	134	$223,097,695	$6,692,931	132.7	$13,677,004	$8,546,203	$6,239,236	123.7	$12,749,880	$7,966,881
Air transportation	54	19	2	$3,931,878	$117,956	1.8	$277,056	$140,285	$109,960	1.6	$258,275	$130,776
Truck transportation	177	61	8	$12,887,824	$386,635	6.7	$903,333	$473,009	$360,426	6.2	$842,099	$440,945
Transit and ground passenger transportation	94	32	4	$6,844,381	$205,331	4.0	$508,791	$231,860	$191,413	3.7	$474,301	$216,143
Other transportation and support activities	137	47	6	$9,975,321	$299,260	5.5	$679,828	$415,223	$278,974	5.2	$633,745	$387,076
Warehousing and storage	179	62	8	$13,033,449	$391,003	7.8	$883,863	$535,948	$364,498	7.3	$823,949	$499,618
Publishing industries, except Internet	158	55	7	$11,504,385	$345,132	4.3	$742,274	$430,931	$321,736	4.0	$691,958	$401,720
Motion picture and sound recording industries	154	53	7	$11,213,135	$336,394	4.2	$683,250	$405,725	$313,591	3.9	$636,934	$378,222
Broadcasting, except Internet	92	32	4	$6,698,756	$200,963	3.1	$543,966	$288,000	$187,340	2.9	$507,092	$268,477
Telecommunications	133	46	6	$9,684,071	$290,522	2.6	$600,684	$341,044	$270,828	2.5	$559,965	$317,926
Internet and other information services	163	56	7	$11,868,448	$356,053	4.2	$745,647	$455,250	$331,918	3.9	$695,102	$424,390
Federal Reserve banks, credit intermediation and related services	299	103	13	$21,770,957	$653,129	6.6	$1,262,498	$801,585	$608,855	6.1	$1,176,917	$747,248
Securities, commodity contracts, investments	101	35	4	$7,354,069	$220,622	4.5	$535,715	$313,041	$205,667	4.2	$499,400	$291,821
Insurance carriers and related activities	333	115	15	$24,246,584	$727,398	10.0	$1,652,793	$932,087	$678,089	9.3	$1,540,755	$868,904
Real estate	163	56	7	$11,868,448	$356,053	2.9	$538,175	$375,886	$331,918	2.7	$501,693	$350,405
Rental and leasing services and lessors of intangible assets	68	23	3	$4,951,254	$148,538	1.2	$260,401	$170,402	$138,469	1.1	$242,749	$158,851
Professional, scientific, and technical services	1,697	585	74	$123,562,921	$3,706,888	59.1	$8,296,756	$5,227,824	$3,455,608	55.1	$7,734,343	$4,873,445
Management of companies and enterprises	500	173	22	$36,406,282	$1,092,188	14.6	$2,483,200	$1,511,698	$1,018,152	13.6	$2,314,871	$1,409,224
Administrative and support services	1,200	414	53	$87,375,076	$2,621,252	69.9	$5,870,032	$3,669,491	$2,443,565	65.1	$5,472,120	$3,420,747
Waste management and remediation services	82	28	4	$5,970,630	$179,119	2.0	$365,403	$209,032	$166,977	1.9	$340,633	$194,862
Educational services	417	144	18	$30,362,839	$910,885	19.6	$2,097,586	$1,229,057	$849,139	18.3	$1,955,397	$1,145,743
Ambulatory health care services	919	317	40	$66,914,746	$2,007,442	37.0	$4,698,820	$2,886,903	$1,871,364	34.5	$4,380,301	$2,691,208
Hospitals	361	125	16	$26,285,336	$788,560	12.9	$1,824,570	$1,060,929	$735,106	12.0	$1,700,888	$989,011
Nursing and residential care facilities	902	311	40	$65,676,932	$1,970,308	50.0	$4,404,623	$2,749,171	$1,836,746	46.6	$4,106,047	$2,562,812
Social assistance	356	123	16	$25,921,273	$777,638	21.2	$1,750,464	$1,030,137	$724,924	19.8	$1,631,805	$960,307
Performing arts, spectator sports, museums, zoos, and parks	117	40	5	$8,519,070	$255,572	4.8	$549,710	$330,250	$238,248	4.4	$512,447	$307,864
Amusements, gambling, and recreation	273	94	12	$19,877,830	$596,335	14.6	$1,256,358	$767,722	$555,911	13.6	$1,171,193	$715,680
Accommodation	475	164	21	$34,585,968	$1,037,579	17.5	$2,110,747	$1,301,954	$967,245	16.3	$1,967,666	$1,213,698
Food services and drinking places	1,009	348	44	$73,467,877	$2,204,036	53.2	$4,855,712	$2,669,749	$2,054,631	49.6	$4,526,558	$2,488,775
Other services	454	157	20	$33,056,904	$991,707	15.5	$2,220,036	$1,230,808	$924,482	14.5	$2,069,546	$1,147,375
Total	***19,612***	***6766***	***859***	***$1,428,000,000***	***$42,840,000***	***757***	***$92,875,731***	***$53,897,182***	***$39,936,000***	***705***	***$86,579,953***	***$50,243,648***
		34.5%	***12.7%***		***3.0%***							

Percent Currently Collateralized	**60.0%**	Additional Insurance Company Benefits	***$1,664,000***	**23**	**$3,780,941**	**$2,132,250**
Total Collateral Needed	***$3,570,000,000***	Total Annual Benefits	***$41,600,000***	**728**	***$90,360,894***	**$52,375,897**
		Net Job Change		**-29**		
		Cost per typical business	***$49,844***			

Appendix D. Alternative 2: Detailed Industry Breakdown of Costs (Collateralization Cost 2 percent)

Industry	Businesses with more than 100 Employees	Businesses with High Deductible Policies	Businesses With Estimated Cost Impacts	Deductible Premium Credit Needing Collateralization	Projected Direct Cost	Projected Jobs Lost	Projected Loss to Total Output	Projected Loss to GSP	Projected Direct Benefit	Projected Jobs Gained	Projected Benefit to Total Output	Projected Benefit to GSP
Crop and animal production	352	121	15	$4,307,567	$86,151	1.1	$177,205	$78,915	$206,763	2.6	$425,291	$189,395
Forestry, fishing, and related activities	532	184	23	$6,510,300	$130,206	3.2	$274,891	$137,328	$312,494	7.7	$659,738	$329,588
Oil and gas extraction	14	5	1	$171,324	$3,426	0.0	$7,118	$3,944	$8,224	0.1	$17,083	$9,465
Utilities	109	38	5	$1,333,877	$26,678	0.2	$50,092	$29,127	$64,026	0.4	$120,222	$69,904
Construction	1109	383	49	$13,571,283	$271,426	4.5	$624,985	$338,196	$651,422	10.7	$1,499,963	$811,671
Wood product manufacturing	59	20	3	$722,007	$14,440	0.2	$29,724	$12,732	$34,656	0.4	$71,337	$30,556
Nonmetallic mineral product manufacturing	65	22	3	$795,431	$15,909	0.2	$33,400	$16,857	$38,181	0.4	$80,160	$40,456
Primary metal manufacturing	43	15	2	$526,208	$10,524	0.1	$21,289	$9,087	$25,258	0.3	$51,094	$21,808
Fabricated metal product manufacturing	220	76	10	$2,692,229	$53,845	0.7	$115,249	$57,474	$129,227	1.6	$276,597	$137,937
Machinery manufacturing	133	46	6	$1,627,575	$32,551	0.3	$69,468	$33,476	$78,124	0.8	$166,724	$80,342
Computer and electronic product manufacturing	457	158	20	$5,592,494	$111,850	1.1	$251,707	$118,986	$268,440	2.6	$604,097	$285,566
Electrical equipment and appliance manufacturing	58	20	3	$709,770	$14,195	0.1	$28,678	$14,244	$34,069	0.3	$68,826	$34,185
Motor vehicle, body, trailer, and parts manufacturing	89	31	4	$1,084,612	$21,692	0.2	$40,862	$15,972	$52,061	0.6	$98,068	$38,333
Other transportation equipment manufacturing	104	36	5	$1,277,207	$25,544	0.3	$57,748	$27,526	$61,306	0.7	$138,594	$66,063
Furniture and related product manufacturing	47	16	2	$575,158	$11,503	0.1	$23,975	$11,776	$27,608	0.3	$57,540	$28,262
Miscellaneous manufacturing	140	48	6	$1,713,237	$34,265	0.4	$72,696	$38,962	$82,235	1.0	$174,471	$93,510
Food, beverage, and tobacco product manufacturing	475	164	21	$5,812,768	$116,255	1.3	$267,225	$110,605	$279,013	3.0	$641,339	$265,453
Textile and textile product mills	17	6	1	$208,036	$4,161	0.0	$7,815	$3,340	$9,986	0.1	$18,756	$8,017
Apparel, leather, and allied product manufacturing	71	24	3	$868,856	$17,377	0.3	$38,254	$18,597	$41,705	0.6	$91,810	$44,633
Paper manufacturing	65	22	3	$795,431	$15,909	0.1	$29,930	$13,858	$38,181	0.3	$71,833	$33,259
Printing and related support activities	55	19	2	$673,057	$13,461	0.2	$28,161	$14,865	$32,307	0.5	$67,586	$35,676
Petroleum and coal products manufacturing	17	6	1	$208,036	$4,161	0.0	$8,093	$2,534	$9,986	0.1	$19,422	$6,081
Chemical manufacturing	144	50	6	$1,762,186	$35,244	0.3	$70,579	$31,786	$84,585	0.6	$169,390	$76,287
Plastics and rubber products manufacturing	94	32	4	$1,150,316	$23,006	0.2	$44,699	$20,904	$55,215	0.6	$107,278	$50,169
Wholesale trade	1,012	349	44	$12,384,255	$247,685	3.0	$494,107	$314,089	$594,444	7.2	$1,185,857	$753,815
Retail trade	3,064	1057	134	$37,495,411	$749,908	14.9	$1,532,437	$957,558	$1,799,780	35.7	$3,677,850	$2,298,139
Air transportation	54	19	2	$660,820	$13,216	0.2	$31,043	$15,718	$31,719	0.5	$74,502	$37,724
Truck transportation	177	61	8	$2,166,021	$43,320	0.7	$101,214	$52,998	$103,969	1.8	$242,913	$127,196
Transit and ground passenger transportation	94	32	4	$1,150,316	$23,006	0.4	$57,007	$25,979	$55,215	1.1	$136,818	$62,349
Other transportation and support activities	137	47	6	$1,676,525	$33,530	0.6	$76,171	$46,524	$80,473	1.5	$182,811	$111,657
Warehousing and storage	179	62	8	$2,190,496	$43,810	0.9	$99,032	$60,050	$105,144	2.1	$237,678	$144,121
Publishing industries, except Internet	158	55	7	$1,933,510	$38,670	0.5	$83,168	$48,284	$92,808	1.2	$199,603	$115,881
Motion picture and sound recording industries	154	53	7	$1,884,560	$37,691	0.5	$76,555	$45,459	$90,459	1.1	$183,731	$109,102
Broadcasting, except Internet	92	32	4	$1,125,841	$22,517	0.4	$60,949	$32,269	$54,040	0.8	$146,277	$77,445
Telecommunications	133	46	6	$1,627,575	$32,551	0.3	$67,303	$38,212	$78,124	0.7	$161,528	$91,709
Internet and other information services	163	56	7	$1,994,697	$39,894	0.5	$83,546	$51,008	$95,745	1.1	$200,510	$122,420
Federal Reserve banks, credit intermediation and related services	299	103	13	$3,658,984	$73,180	0.7	$141,456	$89,813	$175,631	1.8	$339,495	$215,552
Securities, commodity contracts, investments	101	35	4	$1,235,978	$24,720	0.5	$60,024	$35,075	$59,327	1.2	$144,058	$84,179
Insurance carriers and related activities	333	115	15	$4,075,056	$81,501	1.1	$185,187	$104,436	$195,603	2.7	$444,448	$250,645
Real estate	163	56	7	$1,994,697	$39,894	0.3	$60,300	$42,116	$95,745	0.8	$144,719	$101,078
Rental and leasing services and lessors of intangible assets	68	23	3	$832,144	$16,643	0.1	$29,177	$19,093	$39,943	0.3	$70,024	$45,822
Professional, scientific, and technical services	1,697	585	74	$20,766,877	$415,338	6.6	$929,609	$585,751	$996,810	15.9	$2,231,060	$1,405,801
Management of companies and enterprises	500	173	22	$6,118,703	$122,374	1.6	$278,230	$169,378	$293,698	3.9	$667,751	$406,507
Administrative and support services	1,200	414	53	$14,684,887	$293,698	7.8	$657,707	$411,147	$704,875	18.8	$1,578,496	$986,754
Waste management and remediation services	82	28	4	$1,003,467	$20,069	0.2	$40,941	$23,421	$48,166	0.5	$98,260	$56,210
Educational services	417	144	18	$5,102,998	$102,060	2.2	$235,024	$137,710	$244,944	5.3	$564,057	$330,503
Ambulatory health care services	919	317	40	$11,246,176	$224,924	4.1	$526,478	$323,463	$539,816	9.9	$1,263,548	$776,310
Hospitals	361	125	16	$4,417,703	$88,354	1.4	$204,434	$118,872	$212,050	3.5	$490,641	$285,292
Nursing and residential care facilities	902	311	40	$11,038,140	$220,763	5.6	$493,515	$308,030	$529,831	13.5	$1,184,437	$739,273
Social assistance	356	123	16	$4,356,516	$87,130	2.4	$196,130	$115,422	$209,113	5.7	$470,713	$277,012
Performing arts, spectator sports, museums, zoos, and parks	117	40	5	$1,431,776	$28,636	0.5	$61,592	$37,003	$68,725	1.3	$147,821	$88,807
Amusements, gambling, and recreation	273	94	12	$3,340,812	$66,816	1.6	$140,768	$86,019	$160,359	3.9	$337,844	$206,446
Accommodation	475	164	21	$5,812,768	$116,255	2.0	$236,498	$145,877	$279,013	4.7	$567,596	$350,105
Food services and drinking places	1,009	348	44	$12,347,542	$246,951	6.0	$544,057	$299,132	$592,682	14.3	$1,305,738	$717,916
Other services	454	157	20	$5,555,782	$111,116	1.7	$248,743	$137,906	$266,678	4.2	$596,984	$330,974
Total	**19,612**	**6766**	**859**	**$240,000,000**	***$4,800,000***	***85***	***$10,406,244***	***$6,038,900***	***$11,520,000***	***203***	***$24,974,987***	***$14,493,360***
		34.5%	**12.7%**		**2.0%**							

Percent Currently Collateralized	**70.0%**	Additional Insurance Company Benefits	***$480,000***	**7**	**$1,090,656**	**$615,072**
Total Collateral Needed	***$800,000,000***	Total Annual Benefits	***$12,000,000***	**210**	***$26,065,643***	**$15,108,432**
		Net Job Change		**125**		
		Cost per typical business		***$5,585***		