

Comprehensive Evaluation of California's Dual Wage Classifications

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Comprehensive Evaluation of California's Dual Wage Classifications

Executive Summary

Objective of Study

The study's objective is to conduct a comprehensive review of the dual wage classifications that includes an analysis of the strengths and limitations of these classifications in addressing premium disparities by wage level, a review of potential alternative programs to address disparities by wage level, an analysis of fraud related to dual wage classifications and recommendation as to whether the dual wage classifications should be maintained, modified or eliminated.

Findings and Recommendations

The WCIRB's principal findings are as follows:

1. In all construction classifications reviewed there was a significant differential in loss experience per \$100 of payroll by wage level.
2. Dual wage classifications have generally been effective in addressing the disparity in loss experience by wage level.
3. Combining each pair of dual wage classifications into a single classification, without any additional adjustment for the differential in loss experience by wage level, would likely increase the impact of disparities in loss experience by wage level.
4. Even after the application of dual wage pure premium rates, experience rating and insurer rating plan adjustments, almost one-half of the differential in loss experience by wage level remains.
5. A premium adjustment program that applies premium credits based on the average hourly wage of the construction employer could correct for more of the differential in loss experience by wage level. However, such a program could exacerbate the issues related to fraud and the administrative complexity of the system that gave rise to the study. Further, it could create additional issues related to premium adjustments that occur well after policy expiration once the premium credit applied at policy inception is validated at audit.
6. Further segregation of the dual wage classifications into three or more classifications could increase the extent to which the differential in loss experience by wage level is corrected. However, such segregation could result in classifications that are not statistically credible, increase the administrative burden, and exacerbate the potential for fraud by significantly increasing the pure premium rate for employers in the lowest wage tier.
7. Although relatively few fraud cases involving dual wage classifications are reported to the CDI Fraud Bureau, fraud does appear to be significant in the dual wage classifications, particularly related to smaller employers.
8. There are a number of potential indicators or "red flags" that may be observed at the underwriting or premium audit stages that could be indicative of premium fraud related to the dual wage classifications.

Based on the principal findings discussed above, the WCIRB recommends the following:

1. Since (a) there are significant differentials in loss experience by wage level; (b) dual wage classifications effectively correct for these differentials; and (c) none of the alternative approaches reviewed would improve on dual wage classifications without adding to the administrative burden, increasing the potential for fraud, or delaying the ultimate determination of employer premium levels; the WCIRB recommends that the WCIRB system of dual wage classifications be retained.

2. In order to maintain the integrity of the system of dual wage classifications, the WCIRB recommends that wage thresholds be reviewed regularly and adjusted to reflect wage inflation in construction as well as any structural changes to the construction industry.
3. Since a significant portion of the differential in loss experience by wage level is not corrected, even after application of the dual wage pure premium rates, experience rating and insurer rating plan adjustments, the WCIRB recommends that approaches that allow for further segregation be considered as appropriate on an individual classification basis. Such an evaluation should also consider the potential for any further refinement to increase the administrative burden or potential for premium fraud.
4. The WCIRB recommends augmenting the information and training materials provided to employers and insurers and their representatives to identify indicators of potential fraud.
5. To reduce the potential for fraud, the WCIRB recommends amending the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* to require that all policies in which payrolls are assigned to a high wage dual classification be subject to a physical audit. To minimize the administrative burden, the WCIRB recommends that physical audits on policies with premium levels below the current physical audit threshold of \$10,000 be required only for new business and renewal business that has not been subject to a physical audit by the insurer for the prior two policy years.

Introduction and Background

Effective January 1, 1986, the California Insurance Commissioner adopted six construction/erection classifications that were based not only on the type of construction work performed, but also on the hourly wage paid to the employees. These classifications, now known as "Dual Wage Construction Classifications", were adopted following a WCIRB study initiated in response to complaints from a segment of the construction and erection industry who alleged that the cost of workers' compensation insurance relative to loss experience for employers who paid high wages to their employees was significantly greater than the cost for employers who paid lower wages. The study confirmed that high wage paying employers assigned to certain construction classifications were, on average, paying more premium per loss dollar than low wage paying employers.

As a result, six selected construction classifications were divided into two classifications each, distinguished by the hourly wage paid to the employees. Each classification specified an hourly wage threshold. The payroll and losses of employees whose hourly wage equal or exceed the threshold were assigned to the "high wage" classification and all other employees were assigned to the "low wage" classification. The manual rate for each classification was based on the payroll and loss experience developed by the set of employees to which the classification applied. The classifications selected were large enough to be statistically credible after being divided and had (a) a significant range in hourly wage rates paid by employers and (b) a significant disparity in claim costs per \$100 of payroll between high wage and low wage earners. Since hourly wage rates paid within a single construction activity at a job location can be based upon the worker's skill and experience level, it is not uncommon for a single employer to generate experience in both the high wage and low wage classifications for a particular construction activity. Since 1986, nine construction classifications were added effective January 1992, two were added effective January 1, 1995, and four were added effective January 1, 1996. Effective January 1, 2012, the classifications for carpentry – residential were consolidated with carpentry – commercial and steel framing – light gauge residential were consolidated with steel framing – light gauge commercial. Currently, as shown in Table 1, there are thirty-two dual wage classifications, representing sixteen construction activities.

Table 1
Current Dual Wage Classifications

Construction Dual Wage Classification	Year Created	Class Codes	Original Threshold	2012 Wage Threshold
Plumbing	1986	5183/5187	\$17	\$24
Electrical Wiring	1986	5190/5140	\$18	\$28
Carpentry	1986	5403/5432	\$17	\$26
Sheet Metal Work	1986	5538/5542	\$16	\$25
Painting	1986	5474/5482	\$17	\$24
Masonry	1992	5027/5028	\$17	\$24
Concrete/Cement	1992	5201/5205	\$17	\$24
Wallboard Application	1992	5446/5447	\$19	\$26
Glaziers	1992	5467/5470	\$19	\$26
Plastering/Stucco	1992	5484/5485	\$18	\$25
Roofing	1992	5552/5553	\$17	\$23
Excavation	1992	6218/6220	\$21	\$26
Sewer Construction	1992	6307/6308	\$19	\$26
Water/Gas Main/Connect	1992	6315/6316	\$19	\$26
Automatic Sprinkler	1995	5185/5186	\$21	\$27
Steel Framing — Lt. Gauge	1996	5632/5633	\$20	\$26

Until recently, the wage threshold for each dual wage classification has been regularly updated based on wage inflation in the construction industry. To determine the impact of wage inflation on a classification threshold, the WCIRB reviews wage inflation indicators from several sources, and reviews the distribution of reported payroll between the high wage and low wage classifications. Threshold increases are recommended when necessary to ensure that each classification retains its approximate existing constituency and the experience developed by the low wage classifications remains credible. In 1991, \$1 increases were approved for all of the dual wage construction classifications. At regular intervals since that time, typically annually, \$1 increases in the wage thresholds have been recommended.

The WCIRB has conducted several studies involving dual wage classifications:

- In 1999, a WCIRB review of the wage threshold for the painting classifications resulted in a recommendation that there be no change to the existing wage threshold.
- In 2000, the WCIRB explored adding more construction classifications resulting in a recommendation that no classifications be added.
- In 2003, at the request of an employer association, the WCIRB explored creating a third roofing classification. With the agreement of the employer association requesting the study, the WCIRB recommended retaining the two classifications for the roofing industry to promote rate stability, encourage equitable cost distribution, promote ease of administration and discourage improper reporting or fraudulent underreporting of payroll.
- In 2006, the WCIRB reviewed the wage thresholds for the classifications applicable to excavation, grading land, sewer construction and water or gas main construction. The study found that there should be a common wage threshold for these industries due to the commonality among the employers engaged in all of these construction activities. A common wage threshold was achieved incrementally by holding the wage threshold for excavation and grading land constant while increasing those applicable to sewer construction and water or gas main construction.

Based on concerns that employees were being inappropriately assigned to the high wage classification, in 2007, the Insurance Commissioner adopted amendments to the *California Workers' Compensation Uniform Statistical Reporting Plan—1995 (USRP)* to clarify how to determine the regular hourly wage for dual wage construction or erection classifications. Specifically, the amendments provided that assignment of the high wage classification to any employee (other than a salaried employee) is contingent on a reconciliation of the number of hours worked against actual time cards or time sheets that document the daily start and stop times for each employee. Determination of an employee's regular hourly wage requires employers to produce records to verify the number of actual hours worked as well as actual time cards or time sheets that document the daily start and stop times for each employee. The changes were adopted effective for policies incepting on or after January 1, 2008.

In 2009 and 2010, the WCIRB's Classification and Rating (C & R) Committee recommended \$1 increases in the dual wage thresholds based on the wage inflation based on several sources of information on wages in the construction industry. However, the WCIRB's Governing Committee expressed concerns that (a) due to the economic recession at the time, there had been significant wage reductions among both residential and commercial construction employers and even long-term employees were being paid at wage rates below the current thresholds; (b) prevailing wage data from the Department of Industrial Relations (DIR) might be subject to political considerations and was not necessarily indicative of actual wage levels; and (c) other construction wage indices might not be sensitive to shifts in the mix of construction employment. As a result, the Governing Committee decided not to recommend any increases to the dual wage thresholds in the January 1, 2010 and January 1, 2011 pure premium rate filings.

Given the Governing Committee's concerns as well as concern over the declining exposure share in the low wage classifications, the C & R Committee, at its July 27, 2010 meeting, recommended that the WCIRB survey each of the dual wage classifications over the next several years to determine whether it is still appropriate to split the classifications and, if so, determine the appropriate and optimal thresholds.

As a result, in 2011, the WCIRB commenced a multi-year comprehensive review of the wage thresholds for the construction classifications currently segregated based on hourly wage. In 2011, the WCIRB studied eight of the dual wage classifications. The WCIRB study indicated that the wage thresholds for seven of the eight classifications should be increased by amounts ranging from \$2 to \$5.¹

At its August 10, 2011 meeting, the Governing Committee reviewed the findings of the 2011 WCIRB study. In addition to continuing with the wage level surveys in 2012, the Governing Committee directed the WCIRB to conduct a comprehensive study to determine the continued viability and/or possible modification of dual wage classifications. While this study would include additional wage surveys, the WCIRB was also directed to review programs used in other jurisdictions. At its December 14, 2011 meeting, the Governing Committee further directed the WCIRB to incorporate an exploration of issues raised by potential fraud with respect to the use of dual wage classifications.

¹ The 2011 WCIRB dual wage classification study also included 5645/5697, *Carpentry — private residence*, and 5630/5631, *Steel Framing — light gauge — residential*, which were combined with their respective commercial classifications and approved in the January 1, 2012 Pure Premium Rate Filing.

Objective of Study

The study's objective is to conduct a comprehensive review of the dual wage classifications that includes an analysis of the strengths and limitations of these classifications in addressing premium disparities by wage level, a review of potential alternative programs to address disparities by wage level, an analysis of fraud related to dual wage classifications and recommendation as to whether the dual wage classifications should be maintained, modified or eliminated.

Strengths and Limitations of Dual Wage Classifications

Despite some shortcomings, dual wage classifications have generally been perceived as effective in addressing potential inequities in premium levels by wage levels in construction classifications. The principal strengths and limitations of dual wage classifications are summarized below.

Strengths

Addresses Inequities in Premiums Due to Varying Wage Levels

The promulgation of separate classifications and corresponding pure premium rates based on hourly wage thresholds for a construction operation largely addresses the inequities in premiums that would otherwise exist due to variation in wage levels among employers assigned to the pertinent construction classification.

Wage Differences Reflected in Experience Rating

The collection of payroll and loss data for low wage and high wage classifications within a particular construction operation results in not only separate pure premium rates, but also separate expected loss rates that are integral to the calculation of an individual employer's experience modification. Having dual classifications by wage level provides for a comparison of policyholders' experience to the average experience expected for other employers in their industry who pay similar wage rates to individual employees.

Uniform Application

Since dual wage classifications are part of the Insurance Commissioner's regulations set forth in the USRP, insurers, employers and the WCIRB must apply the pertinent rules uniformly to all employers for classification purposes. Further, any recommended changes to the classifications and rules, such as classification changes and adjustments to wage thresholds, are subject to a public hearing at which interested parties can provide input prior to the changes being adopted by the Insurance Commissioner.

Employer Wage Level Information Subject to Audit

The rules of the USRP provide specific audit requirements for the assignment of a high wage [low rate] dual wage classification. The phraseology for each high wage classification states in part that the "[a]ssignment of this classification is subject to verification at the time of final audit..." In addition, the USRP at Part 3, *Standard Classification System*, Section IV, *Special Industry Procedures*, Rule 2, *Construction or Erection Work*, Subrule a(1) directs that "[f]or all employees, other than salaried employees, determination of the regular hourly wage must be supported by original time cards or time book entries for each employee indicating the operations performed, the time the employee started and ended each work period throughout the workday, and the total hours worked each day." These audit requirements compel insurers to verify the assignment of the high wage classification to each employee at the time of final audit and further assure the proper use of dual wage classifications.

Limitations

Cost of Administration

Dual wage classifications are costly to administer for employers, insurers and the WCIRB. Employers must keep detailed records to support the use of high wage classifications (although in the absence of dual wage classifications, employers still need to keep such records in order to comply with state wage and hour regulations); insurers must devote significant time and effort to complete final audits and to address policyholder complaints associated with dual wage classifications; and the WCIRB must devote resources to respond to issues pertaining to the dual wage classifications and to perform periodic studies of dual wage classifications to ensure that the wage thresholds remain current.

Creates Potential for Fraud and Abuse

The wide disparity in rates between the low wage and high wage classifications has been an incentive to commit fraud and to abuse the proper use of dual wage classifications. This subject is covered in more detail in this report under the section entitled, *Analysis of Fraud in Dual Wage Classifications*.

Lack of Gradation in Thresholds

Dual wage classifications often involve very disparate pure premium rates and the assignment of an employee's payroll to one of the two classifications is dependent solely on the hourly wage paid to the employee. As a result, two employers, who may be very similar, can be assigned to very different classifications for underwriting and experience rating purposes solely because of a small difference in the hourly wages paid to their employees. Because of the large difference in pure premium rates, in some instances, employees are paid higher wages than would otherwise be the case in order to be assigned to the high wage classification.

Unique to California

Being unique to California, the dual wage classifications require out of state insurance auditors or out of state employers working in California to be informed of the unique classifications and rules, and to audit or maintain records that are not required in other jurisdictions.

Wage Inflation and Threshold Changes

Dual wage classifications require periodic adjustments to the wage thresholds to reflect wage changes. The adjustments to wage thresholds ensure that the percentage of payrolls reported in the low wage and high wage classifications remains relatively even over time which is necessary to maintain statistical credibility of the system. While necessary, adjustments to wage thresholds may result in a significant increase in premium if an employer pays its employees at the current wage threshold for a classification and the wage threshold is adjusted upward. This scenario may also result in significant changes in future experience modifications for the employer. In view of the potential impact on premium due to wage threshold adjustments, the WCIRB attempts to inform all interested parties of such changes when proposed. For various reasons, some employers do not become aware of changes to the classifications applicable to their operations, which may result in unexpected increases to premium.

Limited Application

Currently, there are 76 unique 4-digit construction classification codes for which 16 pairs of dual wage construction classifications (32 unique 4-digit classification codes) exist. Accordingly, there are 44 construction classifications that are not segregated by wage level. The WCIRB's study in 2000 determined that no additional classifications warrant segregation by wage level.

Increased Insurer Pricing Flexibility Reduces the Need for Dual Wage Classifications

Dual wage classifications were initially created in the pre-competitive rating when insurers had very limited flexibility in adjusting the classification rates that were established by the Insurance Commissioner. Since 1995, insurers have had much greater flexibility in establishing their pricing levels and now have the capability to reflect wage differentials in their own pricing and underwriting practices and procedures.

Actuarial Analysis of Disparities in Loss Experience by Wage Level

Description of Analysis

In order to analyze the efficacy of the current dual wage classifications as well as other potential alternative systems in addressing premium disparities by wage level, the WCIRB conducted a survey of several thousand construction employers in 2011 and 2012. Specifically, the employer surveys were used to obtain information on the hourly wage levels paid to their employees in the dual wage classifications. Using the survey information, each surveyed employer was assigned to one of three hourly wage level interval groups based on that employer's average hourly wage paid in the construction classification being analyzed.²

The wage information gathered through the survey process was then linked with historical information on each surveyed employer's payroll, premium, losses and experience modification reported in accordance with the USRP for policies incepting in 2009. Based on the USRP loss and payroll information, average loss to \$100 of payroll ratios by each of the three hourly wage level intervals for each surveyed dual wage classification were computed. The differential in losses per \$100 of payroll by intervals was then evaluated on a basis that reflected (a) adjustment based on pure premium rates – both with dual wage classifications and with imputed pure premium rates if the dual wage classifications were combined, (b) experience modifications – both with dual wage classifications and with experience modifications imputed if the dual wage classifications were combined, and (c) individual insurer rating plan adjustments. Each of the components of the analysis is summarized below.

Wage Level Surveys

The WCIRB conducted two rounds of wage level surveys. The first round of surveys occurred early in 2011 and involved eight sets of dual wage classifications.³ The second round began late in 2011 and involved five additional dual wage classifications⁴ and five construction classifications that were not segregated by wage level.⁵ In total, approximately 5,100 employers employing approximately 77,000 employees in the surveyed construction classifications were surveyed by the WCIRB.

Prior to performing the surveys, the WCIRB contacted the trade associations for the affected classifications and advised when the survey would be conducted. The WCIRB then used the latest available unit statistical payroll by classification to select a random sample of employers stratified by size with reported payroll in the construction classification being studied. WCIRB staff visited the selected policyholders to obtain the hourly wage for each employee assigned to the construction classification for a specified week (October 4-8, 2010 for the first round of surveys and October 17-21, 2011 for the second round of surveys). Survey wages were rounded to the nearest dollar. An average hourly wage rate for each employer in the surveyed classifications was determined from the survey information.

Determination of Loss to \$100 of Payroll Ratios

For each surveyed employer, the reported unit statistical payroll and loss experience in both the studied classifications and other classifications was obtained for policy year 2009, which was the latest available complete year for which unit statistical data was available. The loss information was evaluated at first unit

² Surveyed employers were categorized as (a) average hourly wages \$3 below the threshold or less, (b) between \$3 below and \$5 above the threshold and (c) \$5 or more above the threshold.

³ These included 5403/5432, *Carpentry*; 5645/5697; *Carpentry — private residences*; 5190/5140, *Electrical Wiring*; 5474/5482, *Painting*; 5183/5187, *Plumbing*; 5538/5542; *Sheet Metal Work*; 5630/5631, *Steel Framing — light gauge — residential*; 5632/5633, *Steel Framing — light gauge — commercial*. Effective January 1, 2012 the residential and commercial classification for both carpentry and steel framing light gauge were combined.

⁴ These included 5027/5028, *Masonry*; 5201/5205, *Concrete or Cement Work*; 5446/5447, *Wallboard Application*; 5467/5470, *Glaziers*; and 5552/5553, *Roofing*.

⁵ These included 5102, *Iron or Steel Erection — non-structural*; 5107, *Door or Pre-Glazed Window Installation*; 5146, *Cabinet or Fixtures Installation*; 5213, *Concrete Construction — Foundation*; and 5506, *Street or Road Construction paving*.

statistical report level (18 months from policy inception) and was limited to \$100,000 per claim to minimize distortions in the analysis due to a single large claim.

The unit statistical loss and payroll information aggregated over all surveyed risks was then segregated into three average hourly wage intervals – \$3 or more below the current dual wage threshold for the classification, between \$3 less and \$5 more than the current threshold, and \$5 or more above the current threshold. For the five non-dual wage construction classifications in the study, the threshold was assumed to be \$25 and, therefore, the three hourly wage intervals were \$22 and below, between \$22 and \$30, and \$30 or more. The number and definition of the hourly wage intervals were selected so that results in each interval would be reasonably significant and not fluctuate widely because of a small sample size.

Loss and payroll information was further segregated into two employer size intervals. Specifically, the experience of employers with total policy year 2009 payroll less than \$500,000 was shown separately from the experience of employers with policy year 2009 payroll of \$500,000 or more. As with hourly wage intervals, the number and definition of the employer size intervals were selected to minimize random fluctuations in results due to small sample sizes in a particular interval.

The ratios of losses to \$100 of payroll were determined in each hourly wage interval for all employers, small employers and large employers both in each of the studied classifications separately and then for all classifications on the policy combined. The policy totals shown reflect loss and payroll information for each surveyed employer in the construction and non-construction classifications for which experience has been reported.

Determination of Loss to Pure Premium Ratios

The loss to \$100 of payroll ratio for each employer was converted to a loss to pure premium ratio by applying the 2009 advisory pure premium rates to the policy year 2009 payroll by classification reported for the employer. Results were then aggregated over all employers in each set of dual wage classifications by hourly wage and employer size interval.

To analyze the impact of combining each pair of studied dual wage classifications, an imputed pure premium rate was determined for each pair of dual wage classification by weighting the applicable 2009 advisory pure premium rates by the 2009 payrolls in each of the pair of dual wage classifications. The imputed 2009 pure premium for each surveyed employer was then determined by multiplying the imputed average pure premium rate for the combined pair of dual wage classification by the employer's combined 2009 payroll. If an employer had 2009 payroll in more than one set of dual wage classifications being studied, the imputed pure premium for the employer reflected this process for all applicable pairs of dual wage classifications.

Determination of Loss to Pure Premium Ratios Adjusted by the Applicable Experience Modification

The loss to pure premium ratios for each employer were converted to a loss to modified pure premium level by adjusting the imputed policy year 2009 pure premium by the 2009 experience modification applicable to the employer. For employers that were not experience rated, an adjustment factor of 100% was applied. Results were then aggregated over all employers in each set of dual wage classifications by hourly wage and employer size interval. This adjustment was done only at the policy total level inasmuch as the experience modification is determined and applied at the employer level rather than a classification level.

To analyze the impact of combining each pair of studied dual wage classifications, the imputed modified pure premium for each employer was determined by comparing the actual losses incurred during the three-year experience period underlying 2009 experience modifications to an imputed expected losses for the employer. The imputed expected losses were determined by (a) deriving an imputed combined 2009 expected loss rate for each pair of dual wage classifications, which was computed by weighting the applicable 2009 expected loss rates by the 2009 payrolls in each of the pair of dual wage classifications;

(b) multiplying the imputed combined dual wage expected loss rate by the employer's total experience period payroll in the combined dual wage classifications; and (c) combining the resultant imputed expected losses in the dual wage classifications with the unadjusted actual 2009 expected losses in non-dual wage classifications. If an employer had 2009 payroll in more than one set of dual wage classifications being studied, the imputed experience modification for the employer reflected this process for all applicable pairs of dual wage classifications. The employers' loss and payroll experience for non-dual wage classifications was used in the imputed experience modification without adjustment.

Determination of Loss to Final Premium Ratios

Individual unit statistical reports include a reported "final premium" for each policy. The final premium reported on the policy reflects the insurer's filed rates by classification and all the insurer's rating plan adjustments, with a few exceptions such as deductible credits and retrospective rating adjustments when applicable.

For each surveyed employer, the reported unit statistical loss and final premium for the policy was obtained for policy year 2009. (As before, losses were evaluated at first unit statistical level and limited to \$100,000 to avoid the results of the analysis being distorted by a single large claim.) The loss to final premium ratios were then aggregated for each size and hourly wage interval to assess the impact of insurer rating plan adjustments beyond experience rating on the differential of loss experience by average hourly wage interval. (Since the insurer rating plan adjustments reflected in the reported final premium cannot be imputed, loss to final premium ratios were not projected for the combination of currently segregated dual wage classifications.)

Results of Analysis

Exhibits 1.1 through 1.3 summarize the combined results of the analysis for all ten dual wage construction classifications included in the study. Exhibits 2.1 through 11.5 summarize the separate results for each of these ten dual wage classifications. Exhibits 12.1 through 12.3 summarize the combined results of the analysis for all five non-dual wage construction classifications included in the study. Exhibits 13.1 through 17.3 summarize the separate results for each of these five non-dual wage classifications. The principal findings of the analysis are as follows:

1. In all 15 construction classifications studied, low wage paying employers had significantly higher ratios of losses to payroll than did high wage paying employers, in some cases more than twice as high. The differences at a policy level ranged from \$2.45 in wallboard application (5446/5447) to \$0.32 in concrete construction (5213).
2. Differentials in pure premium rates by wage level in the dual wage classifications significantly corrected for the differentials in loss experience by wage level. In total, approximately 45% of the differential is corrected for by the dual wage system, with a high of 66% in carpentry/steel framing (5403/5432 and 5632/5633) and a low of 14% in glaziers (5467/5470).
3. Since expected loss rates are computed separately for the low wage and high wage classifications, experience rating has a limited impact in correcting for the differences in loss experience by wage level in the dual wage classifications. On average, experience rating corrected for only 6% of the differential by wage level in the dual wage classifications.
4. Insurer rating plan adjustments also had a limited impact in correcting for loss experience differentials by wage level in the dual wage classifications (only 3%).
5. Even after application of experience rating and insurer rating plan adjustments, almost one-half (47%) of the impact of the differentials in loss experience by average wage level in the dual wage classifications remains.

6. If each pair of dual wage classifications is combined into a single classification, experience rating would correct for more of the impact of loss experience differences by wage level (19% compared to 6%). Exhibit 18 shows the distribution of changes in experience modifications that would result from combining the two dual wage classifications. However, even after the impact of experience rating, combining the dual wage classifications corrects for significantly less of the differential in loss experience by wage level than the dual wage classification system.
7. While there was some variability in the results of the analysis by size of employer, in part due to the somewhat smaller number of sampled employers in each size and wage level study cell, the results described above were reasonably consistent across size categories.
8. For the five non-dual wage construction classifications studied, there was generally less differential in loss experience per \$100 of payroll than for the dual wage classifications (an average of \$0.94 per \$100 of payroll compared to \$1.38 per \$100 of payroll for the dual wage classifications studied). However, while some of the differential in loss experience by wage level was adjusted through experience rating (28%) and insurer rating plan adjustments (6%), a significantly greater proportion of the differential was not corrected for (69%) relative to the average of the dual wage classifications studied (47%).

Table 2 below summarizes the results of the analysis

Construction Classifications	Loss/Payroll Difference by Size ¹¹	Dual Wage Classifications Segregated				Dual Wage Classifications Combined			
		% of Difference Eliminated by				% of Difference Eliminated by			
		Pure Premium Rates	Experience Rating	Insurer Rating Adjustments	% of Difference Remaining	Pure Premium Rates	Experience Rating	Insurer Rating Adjustments	% of Difference Remaining
Masonry (5027/5028)	\$1.32	34%	35%	-40%	71%	-8%	47%	-----	61%
Plumbing (5183/5187)	\$1.54	29%	-1%	7%	64%	1%	13%	-----	86%
Electrical Wiring (5190/5140)	\$1.34	38%	18%	3%	41%	16%	25%	-----	58%
Concrete/Cement (5201/5205)	\$0.66	46%	13%	7%	34%	13%	28%	-----	59%
Carpentry/Steel Framing (5403/5432 5632/5633)	\$1.41	66%	-1%	7%	28%	17%	20%	-----	64%
Wallboard Application (5446/5447)	\$2.25	20%	4%	3%	73%	-8%	15%	-----	94%
Glaziers (5467/5470)	\$1.00	14%	6%	-14%	94%	2%	11%	-----	87%
Painting (5474/5482)	\$1.82	20%	-2%	-8%	90%	-11%	7%	-----	104%
Sheet Metal (5538/5542)	\$1.21	36%	-1%	14%	52%	1%	16%	-----	83%
Roofing (5552/5553)	\$0.97	66%	-44%	34%	44%	-42%	-14%	-----	156%
All Dual Wage Classifications	\$1.38	45%	6%	3%	47%	11%	19%		69%
Iron/Steel – non-structural (5102)	\$1.28	-----	-----	-----	-----	22%	26%	15%	37%
Door/Pre-Glazed Window Installation (5107)	\$0.94	-----	-----	-----	-----	-34%	47%	4%	83%
Cabinet/Fixture installation (5146)	\$0.64	-----	-----	-----	-----	79%	44%	40%	-63%
Concrete Construction - foundation (5213)	\$0.32	-----	-----	-----	-----	-26%	8%	46%	71%
Street/Road Construction – paving (5506)	\$0.79	-----	-----	-----	-----	17%	24%	10%	50%
All Non-Dual Wage Classifications	\$0.94	-----	-----	-----	-----	-4%	28%	6%	69%

¹¹ Reflects the policy total ratio of loss to pure premium for the study wage interval \$3 or more below the threshold less the ratio for \$5 or more above the threshold. For the non-dual wage classifications the threshold was assumed to be \$25.

Analysis of Fraud in Dual Wage Classifications

To develop information regarding potential fraud with respect to the use of dual wage classifications, WCIRB staff met with representatives from organized labor, employers, insurers and producers on February 9, 2012. Following this meeting, WCIRB staff consulted with insurers individually to determine what types of fraud are detected by insurers, how fraud is detected and to obtain recommendations for regulatory changes that might assist in deterring fraud. Employer and labor representatives provided the WCIRB with a list of "red flags" that might assist insurers in determining whether an employer is misrepresenting the operations, payroll or hourly wages of its employees. This list is included as Exhibit 19.

While relatively few fraud cases related to dual wage classifications are referred to the CDI Fraud Bureau, employer and insurer representatives expressed concerns with respect to fraud, particularly pertaining to small premium policies. That is, when fraud is discovered related to the dual wage classifications it usually is associated with employers that report a relatively small amount of payroll. The subject of fraud related to the dual wage classifications generally falls into three (3) areas: payroll, claims and timecards.

Payroll

Large Employers

For large accounts, insurers stated that employers typically have very detailed records. Payroll journals or summary reports can be validated to original source documents such as time cards or time book entries. The operations stated to be performed are consistent with the type of license(s) issued by the Contractors State Licensing Board (CSLB) and with information contained in construction contracts and construction job books. Large employers typically have proper information for subcontractors pertaining to licensing and workers' compensation coverage. Payments to employees for business related expenses are reasonable and documented. Other than expense reimbursement, all payments made to employees are shown in the payroll records.

Small Employers

Many small employers do not have detailed records. Often, payroll journals or payroll summary reports do not match original source records and do not balance to a second source, such as State or Federal tax reports. Employers with several different license types may represent that they only perform the lowest cost construction trade. Employers may change their license type or possess a license type that is listed as Exempt, i.e., no employees, by the CSLB. Exempt licensees may claim they have no employees when the work performed indicates otherwise. Insurers find general disbursement payments to employees that cannot be verified as documented business expenses, or they find reimbursed business expenses that are not reasonable. Insurers also find that payments have been made to employees prior to their reported date of employment.

Claims

Insurers stated that virtually all premium fraud related to dual wage classifications is detected following the reporting of a claim, typically when (1) the claimant believes his/her workers' compensation benefit does not reflect his/her average weekly wage; (2) the claimant reports hourly wages on the injury report that is lower than the hourly wage reported by employer; (3) the claimant's date of hire approximates the date of injury; (4) claims not previously reported by the employer are reported to the insurer by a third party, such as a medical provider or attorney; and (5) the description of injury is inconsistent with the type of work allegedly performed by the employer. Again, the claims issues noted herein are most prominent among small employers.

With respect to a claimant's workers' compensation benefit not being reflective of their average weekly wage reported for classification determination, insurers note that at the time of premium audit the employers' records typically represent that the claimant earned at or just above the required wage threshold; however, the injury report declares that the claimant earned an hourly wage that is much lower than hourly wage threshold. With respect to the underreporting of payroll, insurers often find during claims investigations that claimants make additional wages through cash payments or separate checks that are

issued to employees – checks not reflected in payroll records and checks reflected in general cash disbursements journals. Insurers are typically not made aware of these additional payments at the time of audit.

With respect to instances where the claimant's date of hire approximates the date of injury, insurers find that claimants received cash payments or general disbursement checks *prior* to the alleged date of hire. Often, third parties file claims for individuals who were only paid cash and thus, were never included in the premium audit.

Insurers stated that most fraud cases referred to the CDI Fraud Bureau or to local DAs result from a claim being filed. During fraud investigations undertaken by insurers, the insurer usually has limited access to the employer's records. However, when the CDI Fraud Bureau or local District Attorney become involved, these agencies have authority to seize records and often find payroll records that were previously not available to insurers.

Time Cards

Effective January 1, 2008, the USRP was amended to require that the determination of an employee's regular hourly wage must be supported by original time cards or time book entries that indicate the operations performed, the time the employee started and ended each work period throughout the workday and the total hours worked each day. That is, to qualify for assignment of payroll to a high wage dual wage classification, the employer must maintain original time cards or time book entries to support the employee's hourly wage. Insurers encountered difficulty when the rule was first enacted; however, insurers now indicate that almost all employers are in compliance with and understand this requirement.⁶

Even with the strict requirements noted above, insurers expressed concern regarding the following: (1) time cards that become available after the premium audit, (2) uniform time cards, e.g., time cards that show every employee working precisely 8 hours a day, with the same start and stop times, for all work days during the policy period, (3) time cards for piecework or commission-based employees being unreasonable, showing only billable hours or being identical for every work day, and (4) time cards that are not signed by the employee because they are produced electronically or are recorded by a foreman at the employee's job site.

Most issues on the employers' "red flag" list pertain to timecard issues, including; (1) "perfect" time cards that have the same start and stop time for all employees, (2) time cards not readily available at the time of audit, (3) time cards that are not signed by the individual employee, (4) employees whose hourly wage is exactly at or slightly above the specified wage threshold for a dual wage classification that works several decimal points past the hour, e.g., an employee working 23.556 hours in a given week, and (5) employees on public works or prevailing wage jobs who routinely work less than 40 hours a week.

Insurers stated that they may not accept time cards that are provided after the premium audit is conducted, especially in instances where it appears that the time cards were created after the audit was completed and are not *original* source documents. Insurers stated that they can detect that time cards were not prepared when the work was completed if the time cards all have (1) the same handwriting; (2) the same start and stop times for every workday; and (3) no employee signatures. However, insurers stated that it is common practice for foremen to complete time cards for employees and, as such, insurers will accept these time cards as being in compliance with the requirements of the USRP if they are received at the time of final audit. Insurers stated that in some instances they may not accept time cards when an employee is exactly at or slightly above the hourly wage threshold for a classification if the time cards are uniform for all employees or if the time cards show the employees worked several decimal points past the hour.

⁶ Insurers are currently in the process of auditing policies that incepted in 2010. As such, most employers have been subject to the USRP time card audit requirements for three years. Insurers report that employers that were not previously in compliance with the rule have since changed their recordkeeping practices and now maintain time cards as required by the USRP regulations for the assignment of a high wage/lower rate dual wage classification.

While insurers did express concern regarding the time card issues noted above, they reported that the instances of potential fraud related to time cards are limited and not necessarily consistent among all construction trades. Insurers' greatest concern was with small employers in the roofing and wallboard industries and employers that compensate employees on a piecework or commission basis. Some insurers suggested that employees paid on a piecework basis should not be eligible for assignment to a high wage dual wage classification since the records associated with this method of compensation can be easily manipulated. With respect to commissions, insurers are concerned that an employee's classification assignment can vary throughout the policy period.

Other

Insurers also expressed concern with employers that operate in multiple states and assert that their California employees work in other states.

Potential Regulatory Changes

Several insurer and employer representatives suggested that the assignment of any high wage dual classification be allowed only if a *physical audit*⁷ is conducted. For larger employers this requires no change to current procedure as a physical audit is required for policies with a final premium of \$10,000 or more. However, insurers that write policies for small employers expressed concern over added costs. Others suggested that requiring a physical audit if payroll is to be assigned to the high wage classification could be an effective tool in detecting or deterring fraud that might be perpetrated by employers that are or appear to be small.

WCIRB records indicate that there are approximately 20,000 construction policies with premium below \$10,000 for which at least some payroll is assigned to a high wage classification. To mitigate the additional administrative costs of requiring a physical audit on all these policies, the WCIRB is recommending that physical audits on policies with premium levels below \$10,000 be required only with respect to new business or renewal business that has not been subject to a physical audit by the insurer for the prior two policy years. Exhibit 20 shows the WCIRB recommended change to the USRP to facilitate this change to the physical audit requirement.

As noted above, some insurers suggested that employees paid on piecework basis should not be eligible for assignment to a high wage dual wage classification since the records associated with this method of compensation can be easily manipulated. However, given that this change would affect a significant number of employers that legitimately pay high wages on a piecework basis, the WCIRB is not recommending any change to the dual wage classifications with respect to wages paid on a piecework basis.

⁷ The USRP defines a *physical audit* at Part 1, Section II, Rule 15, which reads, "(a)n audit or payroll, whether conducted at the policyholder's location or at a remote site, that is based upon an auditor's examination of the policyholder's books of accounts and original payroll records (in either electronic or hard copy form) as necessary to determine and verify the exposure amounts by classification."

Wage Adjustment Programs in Other States

A number of states offer a Contractor or Construction Premium Adjustment Program (CCPAP), which provides premium credits for employers in the construction industry. These credits recognize wage differentials among employers within the same construction industry. Credits are applied to the entire premium (construction and non-construction classifications). Generally, the basis for determining the credit is the total payroll and hours worked for each construction classification for the third quarter of the calendar year preceding the policy inception date. The CCPAP credit factor is determined by a tiered system, based on the average hourly wage for an employer. The higher the average hourly wage, the higher the credit factor.

In some states, the CCPAP credit affects the experience modification since the expected losses on the experience rating worksheets are lowered by the amount of the CCPAP credit factor. This adjustment to expected losses is at the aggregate level; both the expected losses and the expected primary loss totals are adjusted by the CCPAP credit factor in the experience modification calculation. Other states use the experience modification to offset the CCPAP credit factor to reduce the redundancy in discounts. Some states adjust the pure premium calculation for classifications that are part of the CCPAP.

States differ regarding the fundamental application of the CCPAP. Most states require that at least 50% of the manual premium be developed under a construction classification. A few states require that only one construction-related classification be reported on the policy. To qualify for the program, employers must first be able to prove that the average hourly wage for all employees (even part-time workers) is greater than a specified minimum amount. Should the average wage be less than the set amount, the insured does not qualify for the program. Other eligibility requirements and factors are detailed in Table 3.

**Table 3: State by State Comparison of
Contractor or Construction Premium Adjustment Programs**

State⁸	% of Manual Premium in Qualifying Classes	Min. Hourly Wage Must Be	Must Be Experience Rated	Ex-Mod Requirement	Ex-Mod Affected? Or Additional Adjustment Required?	Percentage Adjustment Factor
<i>AK</i>	50%	\$28.19				1 – 25%
<i>CT</i>	50%	\$29.20	X	≤ 1.00		5 – 25%
<i>FL</i>		\$20.06			Yes	5 – 25%
<i>HI</i>	50%	\$18.63			Yes	12 – 23%
<i>IL</i>	50%	\$23.65	X	≤ 1.00		5 – 40%
<i>MD</i>	50%	\$24.13	X	≤ 1.00	Yes	n/a
<i>MO</i>		\$19.33				n/a
<i>MT</i>	50%	\$16.23				n/a
<i>NE</i>	50%	\$17.75			Yes	n/a
<i>NM</i>		\$18.33			Yes	6 – 20%
<i>OK</i>	50%	\$18.38			Yes	n/a
<i>OR</i>	50%	\$21.06		≤ 1.00	Yes	6 – 20%
<i>VA</i>	50%	\$22.63	X	≤ 1.00		n/a
<i>DE</i>		\$17.64				15 – 25%
<i>MA</i>		\$18.00	X		Yes	5 – 25%
<i>MN</i>		\$23.00			Yes	9 – 25%
<i>NY</i>		\$15.50	X			5 – 35%
<i>NJ</i>		\$24.00	X			5 – 25%
<i>PA</i>		\$26.50				5 – 30%
<i>WI</i>	50%	\$25.48				6 – 10%

Based on the loss to payroll experience ratios of the construction employers surveyed in the WCIRB 2011 and 2012 wage surveys, the WCIRB computed indicated premium credits by wage level based only on the loss experience differentials by wage level in the experience of the sampled construction employers. If the credits were intended to be applied to the entire policy premium, the actual credits to be applied would be less than those indicated based solely on the experience of the sampled construction employers.

Exhibit 21 shows these indicated credits both before and after application of the effect of experience rating. As shown on Exhibit 21, the maximum indicated credit for California would be 60%, with an average credit of 38% prior to application of experience rating, and would be 55% with an average credit of 32% after application of experience rating.

Significant resources are required to administer CCPAPs. The typical processes are listed below:

1. A review committee of the rating organization establishes and monitors classifications subject to the CCPAP.

⁸ NCCI States are italicized. The adjustment percentage factors for NCCI states expire on 12/31/2008, 12/31/2010 or 12/13/2011, depending on the state. NCCI could not provide the adjustment percentage factor for the states that indicate "n/a" since it is not published in the NCCI's Basic Manual for those states. States that use the experience modification to offset the CCPAP credit factor are underlined.

2. Insurer or rating organization identifies and notifies employers that may qualify for the CCPAP.
3. Employers complete an application showing the wages paid and hours worked by classification and submits the information to the rating organization.
4. Rating organization computes credit, if any, and sends copy of worksheet to insurer.
5. Insurer applies credit factor to policy.
6. Insurer verifies the credit factor upon final audit of policy and reports discrepancies to the rating organization, as required.

CCPAP Advantages

Unlike the dual wage system in California, the CCPAP provides a graduated system of credits that are based on incremental increases in average hourly wages. Employers can receive a credit of up to 40% on the entire premium, not just the premium from construction classes. For some states, the CCPAP credit and the experience modification are applied, resulting in a dual credit.⁹ For some states, employers that report only one construction class are eligible for the CCPAP credit that applies to the entire premium.

Disadvantages

Additional Resources Required

Considerable resources are required by insurers and rating organizations to administer a CCPAP. Rating organizations typically maintain separate units for informing employers of the CCPAP, processing requests for CCPAP credits, and issuing credit factors to employers and insurers. Insurers are required to apply the CCPAP credit, validate the CCPAP credit at the time of final audit, and in some states insurers are responsible for notifying employers of their eligibility to participate in the CCPAP.

Validation of CCPAP Credit

The insurer validates the CCPAP credit at the time of final audit. Therefore, the exact amount of the credit is not known until after the policy expires. If the underlying payroll data is found to be incorrect, a new credit must be developed and the insurer must adjust the final premium accordingly. To complicate the matter, the payroll information that was used in the initial calculation of the credit may be aged and the source payroll records may not be readily available for validation at the time of audit.

Misrepresentation of Payroll

If an insurer finds that the payroll used to calculate the credit factor was misreported, the insurer or the employer (dependent on the state) must resubmit the correct payroll information to compute a new credit factor. The rating organization may withdraw the credit factor if the information is not submitted within the required deadline for recalculation. The withdrawal and/or recalculation of credits may lead to disputes that involve the state agency that oversees the insurance industry.

Perceived Inequities of CCPAP

Not all employers are eligible for a CCPAP credit; most states require that 50% of the premium be developed in construction classifications. Some states require that an employer be experience rated or maintain an experience modification that does not exceed a specific level in order to participate in the CCPAP.

⁹ Several states have viewed the dual credit to be an inequity and have made adjustments to account for it.

Experience Incurred Under Collective Bargaining Agreements

At the recommendation of several employer representatives the WCIRB studied the experience incurred in the dual wage classifications within collective bargaining or “carve-out” agreements made pursuant to the California Labor Code. In 2010, the WCIRB analyzed carve-out experience on behalf of the Division of Workers’ Compensation (DWC) pursuant to Labor Code Section 3201. The analysis suggested that although there was relatively little experience available in the carve-out programs, there was no evidence of significant differentials in experience.

The WCIRB further analyzed policy year 2006 and 2007 experience identified by the DWC as participating in carve-out programs for purposes of evaluating the dual wage classifications. The differential in loss to payroll experience after application of experience rating in the carve-out programs is 118%, which is generally less than that shown for the classifications as a whole.

Findings and Recommendations

1. In all construction classifications reviewed there was a significant differential in loss experience per \$100 of payroll by wage level.
2. Dual wage classifications have generally been effective in addressing the disparity in loss experience by wage level.
3. Combining each pair of dual wage classifications into a single classification, without any additional adjustment for the differential in loss experience by wage level, would likely increase the impact of disparities in loss experience by wage level.
4. Even after the application of dual wage pure premium rates, experience rating and insurer rating plan adjustments, almost one-half of the differential in loss experience by wage level remains.
5. A premium adjustment program that applies premium credits based on the average hourly wage of the construction employer could correct for more of the differential in loss experience by wage level. However, such a program could exacerbate the issues related to fraud and the administrative complexity of the system that gave rise to the study. Further, it could create additional issues related to premium adjustments that occur well after policy expiration once the premium credit applied at policy inception is validated at audit.
6. Further segregation of the dual wage classifications into three or more classifications could increase the extent to which the differential in loss experience by wage level is corrected. However, such segregation could result in classifications that are not statistically credible, increase the administrative burden, and exacerbate the potential for fraud by significantly increasing the pure premium rate for employers in the lowest wage tier.
7. Although relatively few fraud cases involving dual wage classifications are reported to the CDI Fraud Bureau, fraud does appear to be significant in the dual wage classifications, particularly related to smaller employers.
8. There are a number of potential indicators or "red flags" that may be observed at the underwriting or premium audit stages that could be indicative of premium fraud related to the dual wage classifications.

Based on the principal findings discussed above, the WCIRB recommends the following:

1. Since (a) there are significant differentials in loss experience by wage level; (b) dual wage classifications effectively correct for these differentials; and (c) none of the alternative approaches reviewed would improve on dual wage classifications without adding to the administrative burden, increasing the potential for fraud, or delaying the ultimate determination of employer premium levels; the WCIRB recommends that the WCIRB system of dual wage classifications be retained.
2. In order to maintain the integrity of the system of dual wage classifications, the WCIRB recommends that wage thresholds be reviewed regularly and adjusted to reflect wage inflation in construction as well as any structural changes to the construction industry.
3. Since a significant portion of the differential in loss experience by wage level is not corrected, even after application of the dual wage pure premium rates, experience rating and insurer rating plan adjustments, the WCIRB recommends that approaches that allow for further segregation be considered as appropriate on an individual classification basis. Such an evaluation should also consider the potential for any further refinement to increase the administrative burden or potential for premium fraud.
4. The WCIRB recommends augmenting the information and training materials provided to employers and insurers and their representatives to identify indicators of potential fraud.

5. To reduce the potential for fraud, the WCIRB recommends amending the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* to require that all policies in which payrolls are assigned to a high wage dual classification be subject to a physical audit. To minimize the administrative burden, the WCIRB recommends that physical audits on policies with premium levels below the current physical audit threshold of \$10,000 be required only for new business and renewal business that has not been subject to a physical audit by the insurer for the prior two policy years.

Conditions and Limitations

The findings in this report are subject to the following conditions and limitations:

1. The payroll, premium and loss experience on which this analysis is predicated is from policies incepting in 2009, a period in which the California economy was in major turmoil. (Policy year 2009 experience was used because it was the most current complete year of experience available at the time of the study and, in addition, was incurred relatively close to the time period for which the wage survey information was obtained). It is not clear to what extent the findings could be extended to more typical economic periods. However, the findings were not fundamentally inconsistent with WCIRB analyses of loss experience differences by wage level completed at other times.
2. The payroll, premium and loss experience contained in this report is based on a summary of historical data provided to the WCIRB by over 120 insurer groups. While numerous detailed data quality checks are performed, the WCIRB can make no warranty with respect to the information provided by third parties.
3. The employee hourly wage level information used in this report was obtained by WCIRB staff based primarily on in-person surveys of insured employers. The information provided by individual employers in the survey response was not subject to WCIRB audit.
4. The WCIRB was not able to obtain hourly wage information from all employers originally selected for the study. The WCIRB could not assess the extent to which the wage information of non-surveyed employers differed from that of surveyed employers. However, since wage information was received from a very high proportion of those employers selected, the WCIRB believes that the impact of any differences on the overall study results is small.
5. This *Comprehensive Evaluation of California's Dual Wage Classifications* was developed by the Workers' Compensation Insurance Rating Bureau of California (WCIRB) for the convenience of its users. The WCIRB has made reasonable efforts to ensure the accuracy of this Report. You must make an independent assessment regarding the use of this Report based upon your particular facts and circumstances.

Exhibit 1.1

2012 Dual Wage Classification Study

Masonry (5027/5028), Plumbing (5183/5187), Electrical Wiring (5190/5140), Concrete/Cement (5201/5205), Carpentry/Steel Framing (5403/5432/5632/5633), Wallboard Application (5446/5447), Glaziers (5467/5470), Painting (5474/5482), Sheet Metal Work (5538/5542), Roofing (5552/5553)

All Surveyed Employers

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.373	2.918	1.686		3.373	2.918	1.686	
Indexed to Class Average	1.368	1.183	0.684	0.684	1.368	1.183	0.684	0.684
After Pure Premium Rate	1.146	1.101	0.808	0.338	1.370	1.103	0.715	0.655
Policy Level Total								
Loss to \$100 of Payroll	2.671	2.003	1.295		2.671	2.003	1.295	
A. Indexed to Policy Average	1.477	1.108	0.716	0.761	1.477	1.108	0.716	0.761
B. After Pure Premium Rate	1.243	1.028	0.823	0.420	1.431	1.036	0.755	0.676
C. After X-Mod Application	1.219	1.012	0.843	0.376	1.325	1.017	0.797	0.528
D. After Insurer Rating Adjustment	1.222	0.972	0.866	0.355				

Exhibit 1.2

2012 Dual Wage Classification Study

Masonry (5027/5028), Plumbing (5183/5187), Electrical Wiring (5190/5140), Concrete/Cement (5201/5205), Carpentry/Steel Framing (5403/5432/5632/5633), Wallboard Application (5446/5447), Glaziers (5467/5470), Painting (5474/5482), Sheet Metal Work (5538/5542), Roofing (5552/5553)

Survey Sample - Small Size Employers

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.747	3.895	1.544		2.747	3.895	1.544	
Indexed to Class Average	0.967	1.371	0.543	0.424	0.967	1.371	0.543	0.424
After Pure Premium Rate	0.903	1.322	0.642	0.260	1.042	1.245	0.563	0.479
Policy Level Total								
Loss to \$100 of Payroll	2.673	3.256	1.440		2.673	3.256	1.440	
A. Indexed to Policy Average	1.047	1.275	0.564	0.483	1.047	1.275	0.564	0.483
B. After Pure Premium Rate	0.982	1.249	0.644	0.337	1.114	1.177	0.577	0.537
C. After X-Mod Application	0.997	1.242	0.633	0.365	1.104	1.182	0.581	0.523
D. After Insurer Rating Adjustment	0.997	1.219	0.651	0.346				

Exhibit 1.3

2012 Dual Wage Classification Study

Masonry (5027/5028), Plumbing (5183/5187), Electrical Wiring (5190/5140), Concrete/Cement (5201/5205), Carpentry/Steel Framing (5403/5432/5632/5633), Wallboard Application (5446/5447), Glaziers (5467/5470), Painting (5474/5482), Sheet Metal Work (5538/5542), Roofing (5552/5553)

Survey Sample - Large Size Employers

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Max. Span (4)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.507	2.738	1.697		3.507	2.738	1.697	
Indexed to Class Average	1.453	1.134	0.703	0.750	1.453	1.134	0.703	0.750
After Pure Premium Rate	1.196	1.052	0.826	0.370	1.438	1.066	0.732	0.706
Policy Level Total								
Loss to \$100 of Payroll	2.671	1.858	1.288		2.671	1.858	1.288	
A. Indexed to Policy Average	1.531	1.064	0.738	0.793	1.531	1.064	0.738	0.792
B. After Pure Premium Rate	1.285	0.989	0.840	0.445	1.481	1.006	0.772	0.710
C. After X-Mod Application	1.257	0.974	0.859	0.398	1.362	0.987	0.814	0.548
D. After Insurer Rating Adjustment	1.271	0.936	0.875	0.396				

Exhibit 2.1

**2012 Dual Wage Classification Study
Masonry (5027/5028)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.461	4.356	2.032		3.461	4.356	2.032	
Indexed to Class Average	1.115	1.403	0.654	0.460	1.115	1.403	0.654	0.460
After Pure Premium Rate	0.980	1.420	0.758	0.222	1.115	1.403	0.654	0.460
Policy Level Total								
Loss to \$100 of Payroll	3.159	3.056	1.838		3.159	3.056	1.838	
A. Indexed to Policy Average	1.231	1.191	0.717	0.515	1.231	1.191	0.717	0.515
B. After Pure Premium Rate	1.121	1.192	0.781	0.340	1.261	1.179	0.706	0.555
C. After X-Mod Application	1.041	1.115	0.880	0.161	1.123	1.113	0.808	0.315
D. After Insurer Rating Adjustment	1.169	1.055	0.801	0.368				

Exhibit 2.2

**2012 Dual Wage Classification Study
Masonry (5027/5028)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.665	5.587	1.108		3.665	5.587	1.108	
Indexed to Class Average	0.990	1.509	0.299	0.691	0.990	1.509	0.299	0.691
After Pure Premium Rate	0.880	1.557	0.351	0.529	0.990	1.509	0.299	0.691
Policy Level Total								
Loss to \$100 of Payroll	3.535	4.685	0.909		3.535	4.685	0.909	
A. Indexed to Policy Average	1.078	1.428	0.277	0.801	1.078	1.428	0.277	0.801
B. After Pure Premium Rate	0.988	1.436	0.325	0.663	1.100	1.396	0.276	0.824
C. After X-Mod Application	1.002	1.426	0.318	0.684	1.083	1.413	0.279	0.804
D. After Insurer Rating Adjustment	1.020	1.435	0.304	0.716				

Exhibit 2.3

**2012 Dual Wage Classification Study
Masonry (5027/5028)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.399	2.356	2.755		3.399	2.356	2.755	
Indexed to Class Average	1.166	0.809	0.945	0.221	1.166	0.809	0.945	0.221
After Pure Premium Rate	1.022	0.857	1.082	-0.060	1.166	0.809	0.945	0.221
Policy Level Total								
Loss to \$100 of Payroll	3.092	2.062	2.210		3.092	2.062	2.210	
A. Indexed to Policy Average	1.259	0.839	0.899	0.359	1.259	0.839	0.899	0.359
B. After Pure Premium Rate	1.150	0.912	0.884	0.266	1.296	0.871	0.781	0.515
C. After X-Mod Application	1.049	1.024	0.843	0.206	1.132	0.995	0.762	0.369
D. After Insurer Rating Adjustment	1.206	0.885	0.860	0.346				

**2012 Dual Wage Classification Study
Masonry (5027/5028)**

Exhibit 2.4

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	146	13.2%	\$28.00	\$23.55
Large	139	86.8%	\$28.00	\$24.86
Total	285	100.0%		\$24.55

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

**2012 Dual Wage Classification Study
Masonry (5027/5028)**

Exhibit 2.5

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	15.2%	2,248	542	1,078	628
Large	84.8%	350	61	96	193
Total	100.0%	2,598	603	1,174	821

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 3.1

**2012 Dual Wage Classification Study
Plumbing (5183/5187)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.563	2.649	1.240		3.563	2.649	1.240	
Indexed to Class Average	1.752	1.303	0.610	1.142	1.752	1.303	0.610	1.142
After Pure Premium Rate	1.489	1.290	0.650	0.839	1.752	1.303	0.610	1.142
Policy Level Total								
Loss to \$100 of Payroll	2.557	1.941	1.022		2.557	1.941	1.022	
A. Indexed to Policy Average	1.616	1.227	0.646	0.970	1.616	1.227	0.646	0.970
B. After Pure Premium Rate	1.394	1.186	0.702	0.691	1.607	1.222	0.649	0.959
C. After X-Mod Application	1.416	1.117	0.720	0.696	1.523	1.131	0.690	0.833
D. After Insurer Rating Adjustment	1.375	1.068	0.751	0.624				

Exhibit 3.2

**2012 Dual Wage Classification Study
Plumbing (5183/5187)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.391	1.164	1.124		2.391	1.164	1.124	
Indexed to Class Average	1.610	0.784	0.757	0.853	1.610	0.784	0.757	0.853
After Pure Premium Rate	1.425	0.794	0.827	0.599	1.610	0.784	0.757	0.853
Policy Level Total								
Loss to \$100 of Payroll	2.563	0.785	1.487		2.563	0.785	1.487	
A. Indexed to Policy Average	1.650	0.506	0.958	0.693	1.650	0.506	0.958	0.693
B. After Pure Premium Rate	1.464	0.515	1.043	0.421	1.656	0.516	0.938	0.718
C. After X-Mod Application	1.492	0.499	1.058	0.435	1.644	0.500	0.972	0.672
D. After Insurer Rating Adjustment	1.467	0.480	1.122	0.345				

Exhibit 3.3

**2012 Dual Wage Classification Study
Plumbing (5183/5187)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.772	2.877	1.248		3.772	2.877	1.248	
Indexed to Class Average	1.801	1.374	0.596	1.205	1.801	1.374	0.596	1.205
After Pure Premium Rate	1.522	1.357	0.634	0.889	1.801	1.374	0.596	1.205
Policy Level Total								
Loss to \$100 of Payroll	2.557	2.058	1.000		2.557	2.058	1.000	
A. Indexed to Policy Average	1.614	1.299	0.631	0.983	1.614	1.299	0.631	0.983
B. After Pure Premium Rate	1.393	1.254	0.684	0.709	1.609	1.295	0.633	0.976
C. After X-Mod Application	1.417	1.180	0.700	0.718	1.520	1.195	0.673	0.847
D. After Insurer Rating Adjustment	1.380	1.132	0.726	0.654				

Exhibit 3.4

**2012 Dual Wage Classification Study
Plumbing (5183/5187)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	259	6.6%	\$24.00	\$25.54
Large	400	93.4%	\$24.00	\$29.65
Total	659	100.0%	\$24.00	\$29.17

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 3.5

**2012 Dual Wage Classification Study
Plumbing (5183/5187)**

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	8.6%	8,830	1,971	4,069	2,790
Large	91.4%	1,732	246	302	1,184
Total	100.0%	10,562	2,217	4,371	3,974

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 4.1

**2012 Dual Wage Classification Study
Electrical Wiring (5190/5140)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.519	1.020	1.244		2.519	1.020	1.244	
Indexed to Class Average	1.688	0.683	0.834	0.854	1.688	0.683	0.834	0.854
After Pure Premium Rate	1.492	0.678	0.914	0.578	1.688	0.683	0.834	0.854
Policy Level Total								
Loss to \$100 of Payroll	2.322	0.899	0.985		2.322	0.899	0.985	
A. Indexed to Policy Average	1.679	0.650	0.712	0.966	1.679	0.650	0.712	0.966
B. After Pure Premium Rate	1.396	0.707	0.796	0.600	1.537	0.700	0.726	0.811
C. After X-Mod Application	1.283	0.733	0.856	0.427	1.367	0.721	0.802	0.565
D. After Insurer Rating Adjustment	1.274	0.723	0.875	0.399				

Exhibit 4.2

**2012 Dual Wage Classification Study
Electrical Wiring (5190/5140)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.810	0.843	0.721		2.810	0.843	0.721	
Indexed to Class Average	1.621	0.487	0.416	1.205	1.621	0.487	0.416	1.205
After Pure Premium Rate	1.497	0.495	0.478	1.019	1.621	0.487	0.416	1.205
Policy Level Total								
Loss to \$100 of Payroll	2.174	0.654	0.659		2.174	0.654	0.659	
A. Indexed to Policy Average	1.570	0.473	0.476	1.094	1.570	0.473	0.476	1.094
B. After Pure Premium Rate	1.456	0.476	0.552	0.904	1.569	0.472	0.477	1.092
C. After X-Mod Application	1.440	0.473	0.572	0.868	1.526	0.469	0.507	1.019
D. After Insurer Rating Adjustment	1.381	0.493	0.606	0.775				

Exhibit 4.3

**2012 Dual Wage Classification Study
Electrical Wiring (5190/5140)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.437	1.038	1.287		2.437	1.038	1.287	
Indexed to Class Average	1.669	0.711	0.882	0.788	1.669	0.711	0.882	0.788
After Pure Premium Rate	1.472	0.701	0.959	0.512	1.669	0.711	0.882	0.788
Policy Level Total								
Loss to \$100 of Payroll	2.342	0.917	1.003		2.342	0.917	1.003	
A. Indexed to Policy Average	1.693	0.663	0.725	0.968	1.693	0.663	0.725	0.968
B. After Pure Premium Rate	1.394	0.725	0.806	0.587	1.537	0.717	0.739	0.798
C. After X-Mod Application	1.273	0.753	0.866	0.407	1.356	0.741	0.815	0.540
D. After Insurer Rating Adjustment	1.278	0.738	0.878	0.400				

**2012 Dual Wage Classification Study
Electrical Wiring (5190/5140)**

Exhibit 4.4

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	245	7.7%	\$28.00	\$26.00
Large	263	92.3%	\$28.00	\$30.85
Total	508	100.0%		\$30.22

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

**2012 Dual Wage Classification Study
Electrical Wiring (5190/5140)**

Exhibit 4.5

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	5.9%	8,926	1,550	5,108	2,268
Large	94.1%	1,481	163	350	968
Total	100.0%	10,407	1,713	5,458	3,236

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 5.1

**2012 Dual Wage Classification Study
Concrete/Cement (5201/5205)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.614	2.023	1.625		2.614	2.023	1.625	
Indexed to Class Average	1.300	1.006	0.808	0.492	1.300	1.006	0.808	0.492
After Pure Premium Rate	1.100	1.004	0.913	0.187	1.300	1.006	0.808	0.492
Policy Level Total								
Loss to \$100 of Payroll	2.029	1.214	1.366		2.029	1.214	1.366	
A. Indexed to Policy Average	1.405	0.841	0.946	0.459	1.405	0.841	0.946	0.459
B. After Pure Premium Rate	1.249	0.808	1.002	0.247	1.354	0.849	0.953	0.401
C. After X-Mod Application	1.228	0.762	1.040	0.187	1.271	0.802	1.000	0.272
D. After Insurer Rating Adjustment	1.219	0.734	1.065	0.154				

Exhibit 5.2

**2012 Dual Wage Classification Study
Concrete/Cement (5201/5205)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.975	5.048	1.374		2.975	5.048	1.374	
Indexed to Class Average	0.882	1.497	0.408	0.475	0.882	1.497	0.408	0.475
After Pure Premium Rate	0.797	1.608	0.471	0.326	0.882	1.497	0.408	0.475
Policy Level Total								
Loss to \$100 of Payroll	3.672	3.410	0.840		3.672	3.410	0.840	
A. Indexed to Policy Average	1.244	1.155	0.285	0.959	1.244	1.155	0.285	0.959
B. After Pure Premium Rate	1.112	1.266	0.313	0.799	1.216	1.199	0.280	0.936
C. After X-Mod Application	1.151	1.213	0.309	0.842	1.231	1.170	0.284	0.947
D. After Insurer Rating Adjustment	1.155	1.244	0.295	0.860				

Exhibit 5.3

**2012 Dual Wage Classification Study
Concrete/Cement (5201/5205)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.543	1.565	1.636		2.543	1.565	1.636	
Indexed to Class Average	1.369	0.842	0.881	0.488	1.369	0.842	0.881	0.488
After Pure Premium Rate	1.152	0.834	0.988	0.164	1.369	0.842	0.881	0.488
Policy Level Total								
Loss to \$100 of Payroll	1.877	1.104	1.373		1.877	1.104	1.373	
A. Indexed to Policy Average	1.351	0.794	0.988	0.363	1.351	0.794	0.988	0.363
B. After Pure Premium Rate	1.222	0.761	1.039	0.183	1.320	0.803	0.990	0.330
C. After X-Mod Application	1.199	0.717	1.077	0.122	1.237	0.759	1.036	0.201
D. After Insurer Rating Adjustment	1.197	0.688	1.102	0.095				

**2012 Dual Wage Classification Study
Concrete/Cement (5201/5205)**

Exhibit 5.4

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	132	3.5%	\$24.00	\$23.16
Large	344	96.5%	\$24.00	\$26.69
Total	476	100.0%		\$26.43

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

**2012 Dual Wage Classification Study
Concrete/Cement (5201/5205)**

Exhibit 5.5

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	13.8%	7,485	1,722	3,271	2,492
Large	86.2%	1,425	322	253	850
Total	100.0%	8,910	2,044	3,524	3,342

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 6.1

**2012 Dual Wage Classification Study
Carpentry/Steel Framing (5403/5432/5632/5633)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.806	2.947	2.274		3.806	2.947	2.274	
Indexed to Class Average	1.389	1.076	0.830	0.559	1.389	1.076	0.830	0.559
After Pure Premium Rate	1.000	1.040	0.974	0.026	1.389	1.076	0.830	0.559
Policy Level Total								
Loss to \$100 of Payroll	2.673	2.191	1.266		2.673	2.191	1.266	
A. Indexed to Policy Average	1.541	1.264	0.730	0.811	1.541	1.264	0.730	0.811
B. After Pure Premium Rate	1.131	1.140	0.860	0.272	1.446	1.173	0.771	0.675
C. After X-Mod Application	1.141	1.137	0.858	0.284	1.319	1.148	0.804	0.515
D. After Insurer Rating Adjustment	1.108	1.107	0.883	0.224				

Exhibit 6.2

**2012 Dual Wage Classification Study
Carpentry/Steel Framing (5403/5432/5632/5633)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	1.309	3.595	2.511		1.309	3.595	2.511	
Indexed to Class Average	0.490	1.346	0.940	-0.450	0.490	1.346	0.940	-0.450
After Pure Premium Rate	0.382	1.427	1.043	-0.661	0.490	1.346	0.940	-0.450
Policy Level Total								
Loss to \$100 of Payroll	2.041	3.122	2.317		2.041	3.122	2.317	
A. Indexed to Policy Average	0.799	1.221	0.907	-0.108	0.799	1.221	0.907	-0.108
B. After Pure Premium Rate	0.670	1.280	0.980	-0.310	0.833	1.206	0.895	-0.061
C. After X-Mod Application	0.671	1.304	0.962	-0.291	0.801	1.234	0.896	-0.096
D. After Insurer Rating Adjustment	0.646	1.258	1.031	-0.384				

Exhibit 6.3

**2012 Dual Wage Classification Study
Carpentry/Steel Framing (5403/5432/5632/5633)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	4.280	2.803	2.249		4.280	2.803	2.249	
Indexed to Class Average	1.556	1.019	0.818	0.739	1.556	1.019	0.818	0.739
After Pure Premium Rate	1.104	0.966	0.966	0.137	1.556	1.019	0.818	0.739
Policy Level Total								
Loss to \$100 of Payroll	2.749	2.078	1.213		2.749	2.078	1.213	
A. Indexed to Policy Average	1.647	1.245	0.727	0.920	1.647	1.245	0.727	0.920
B. After Pure Premium Rate	1.202	1.114	0.852	0.350	1.544	1.164	0.762	0.781
C. After X-Mod Application	1.218	1.111	0.849	0.369	1.402	1.136	0.795	0.606
D. After Insurer Rating Adjustment	1.192	1.090	0.866	0.326				

Exhibit 6.4

**2012 Dual Wage Classification Study
Carpentry/Steel Framing (5403/5432/5632/5633)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	399	7.3%	\$26.00	\$27.34
Large	426	92.7%	\$26.00	\$28.40
Total	825	100.0%	\$26.00	\$28.26

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 6.5

**2012 Dual Wage Classification Study
Carpentry/Steel Framing (5403/5432/5632/5633)**

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	8.9%	15,171	4,316	6,539	4,316
Large	91.1%	1,722	414	284	1,024
Total	100.0%	16,893	4,730	6,823	5,340

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 7.1

**2012 Dual Wage Classification Study
Wallboard Application (5446/5447)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	4.014	3.679	1.665		4.014	3.679	1.665	
Indexed to Class Average	1.558	1.428	0.646	0.912	1.558	1.428	0.646	0.912
After Pure Premium Rate	1.329	1.401	0.696	0.633	1.558	1.428	0.646	0.912
Policy Level Total								
Loss to \$100 of Payroll	3.843	2.977	1.598		3.843	2.977	1.598	
A. Indexed to Policy Average	1.583	1.226	0.658	0.924	1.583	1.226	0.658	0.924
B. After Pure Premium Rate	1.433	1.193	0.698	0.735	1.650	1.209	0.649	1.001
C. After X-Mod Application	1.411	1.145	0.714	0.697	1.543	1.159	0.679	0.864
D. After Insurer Rating Adjustment	1.390	1.153	0.719	0.671				

Exhibit 7.2

**2012 Dual Wage Classification Study
Wallboard Application (5446/5447)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	4.081	7.012	1.309		4.081	7.012	1.309	
Indexed to Class Average	0.928	1.594	0.297	0.630	0.928	1.594	0.297	0.630
After Pure Premium Rate	0.841	1.709	0.334	0.506	0.928	1.594	0.297	0.630
Policy Level Total								
Loss to \$100 of Payroll	3.263	6.852	1.104		3.263	6.852	1.104	
A. Indexed to Policy Average	0.835	1.754	0.283	0.553	0.835	1.754	0.283	0.553
B. After Pure Premium Rate	0.759	1.855	0.327	0.432	0.833	1.728	0.290	0.543
C. After X-Mod Application	0.801	1.808	0.296	0.505	0.858	1.690	0.282	0.576
D. After Insurer Rating Adjustment	0.817	1.766	0.293	0.524				

Exhibit 7.3

**2012 Dual Wage Classification Study
Wallboard Application (5446/5447)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.997	3.041	1.679		3.997	3.041	1.679	
Indexed to Class Average	1.677	1.276	0.704	0.973	1.677	1.276	0.704	0.973
After Pure Premium Rate	1.421	1.237	0.755	0.667	1.677	1.276	0.704	0.973
Policy Level Total								
Loss to \$100 of Payroll	3.939	2.391	1.614		3.939	2.391	1.614	
A. Indexed to Policy Average	1.709	1.038	0.700	1.009	1.709	1.038	0.700	1.009
B. After Pure Premium Rate	1.557	1.002	0.737	0.820	1.797	1.024	0.689	1.107
C. After X-Mod Application	1.523	0.964	0.755	0.768	1.665	0.984	0.720	0.946
D. After Insurer Rating Adjustment	1.507	0.984	0.754	0.753				

Exhibit 7.4

**2012 Dual Wage Classification Study
Wallboard Application (5446/5447)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	118	7.8%	\$23.00	\$23.92
Large	194	92.2%	\$23.00	\$27.35
Total	312	100.0%	\$23.00	\$27.03

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 7.5

**2012 Dual Wage Classification Study
Wallboard Application (5446/5447)**

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	13.5%	5,267	1,153	2,691	1,423
Large	86.5%	847	110	207	530
Total	100.0%	6,114	1,263	2,898	1,953

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 8.1

**2012 Dual Wage Classification Study
Glaziers (5467/5470)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	1.030	2.831	1.692		1.030	2.831	1.692	
Indexed to Class Average	0.605	1.661	0.992	-0.388	0.605	1.661	0.992	-0.388
After Pure Premium Rate	0.571	1.662	1.021	-0.450	0.605	1.661	0.992	-0.388
Policy Level Total								
Loss to \$100 of Payroll	2.261	1.686	1.257		2.261	1.686	1.257	
A. Indexed to Policy Average	1.360	1.014	0.756	0.604	1.360	1.014	0.756	0.604
B. After Pure Premium Rate	1.301	1.010	0.781	0.520	1.343	1.058	0.751	0.592
C. After X-Mod Application	1.283	0.978	0.799	0.484	1.302	1.021	0.777	0.525
D. After Insurer Rating Adjustment	1.361	0.897	0.795	0.566				

Exhibit 8.2

**2012 Dual Wage Classification Study
Glaziers (5467/5470)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	0.858	2.964	3.514		0.858	2.964	3.514	
Indexed to Class Average	0.493	1.703	2.019	-1.526	0.493	1.703	2.019	-1.526
After Pure Premium Rate	0.477	1.768	2.197	-1.721	0.493	1.703	2.019	-1.526
Policy Level Total								
Loss to \$100 of Payroll	1.739	2.466	2.837		1.739	2.466	2.837	
A. Indexed to Policy Average	0.834	1.183	1.361	-0.527	0.834	1.183	1.361	-0.527
B. After Pure Premium Rate	0.782	1.341	1.482	-0.699	0.810	1.288	1.355	-0.545
C. After X-Mod Application	0.799	1.297	1.422	-0.623	0.821	1.259	1.330	-0.510
D. After Insurer Rating Adjustment	0.774	1.423	1.439	-0.666				

Exhibit 8.3

**2012 Dual Wage Classification Study
Glaziers (5467/5470)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	1.237	2.781	1.548		1.237	2.781	1.548	
Indexed to Class Average	0.731	1.642	0.914	-0.184	0.731	1.642	0.914	-0.184
After Pure Premium Rate	0.694	1.624	0.928	-0.234	0.731	1.642	0.914	-0.184
Policy Level Total								
Loss to \$100 of Payroll	2.421	1.543	1.189		2.421	1.543	1.189	
A. Indexed to Policy Average	1.510	0.963	0.742	0.768	1.510	0.963	0.742	0.768
B. After Pure Premium Rate	1.484	0.939	0.755	0.729	1.518	0.999	0.731	0.787
C. After X-Mod Application	1.451	0.911	0.774	0.677	1.460	0.963	0.756	0.705
D. After Insurer Rating Adjustment	1.663	0.808	0.753	0.909				

**2012 Dual Wage Classification Study
Glaziers (5467/5470)**

Exhibit 8.4

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	129	12.5%	\$26.00	\$22.77
Large	113	87.5%	\$26.00	\$28.18
Total	242	100.0%		\$27.29

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

**2012 Dual Wage Classification Study
Glaziers (5467/5470)**

Exhibit 8.5

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	18.4%	1,017	146	639	232
Large	81.6%	189	21	56	112
Total	100.0%	1,206	167	695	344

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 9.1

**2012 Dual Wage Classification Study
Painting (5474/5482)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.860	2.831	1.066		3.860	2.831	1.066	
Indexed to Class Average	1.355	0.994	0.374	0.981	1.355	0.994	0.374	0.981
After Pure Premium Rate	1.164	1.095	0.465	0.699	1.355	0.994	0.374	0.981
Policy Level Total								
Loss to \$100 of Payroll	2.815	2.259	0.993		2.815	2.259	0.993	
A. Indexed to Policy Average	1.249	1.003	0.441	0.808	1.249	1.003	0.441	0.808
B. After Pure Premium Rate	1.168	1.007	0.519	0.649	1.329	0.919	0.430	0.898
C. After X-Mod Application	1.191	0.964	0.523	0.669	1.300	0.911	0.456	0.844
D. After Insurer Rating Adjustment	1.222	0.961	0.491	0.731				

Exhibit 9.2

**2012 Dual Wage Classification Study
Painting (5474/5482)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.868	2.033	1.485		2.868	2.033	1.485	
Indexed to Class Average	1.214	0.860	0.629	0.585	1.214	0.860	0.629	0.585
After Pure Premium Rate	1.086	0.927	0.800	0.286	1.214	0.860	0.629	0.585
Policy Level Total								
Loss to \$100 of Payroll	2.281	1.518	1.392		2.281	1.518	1.392	
A. Indexed to Policy Average	1.198	0.797	0.731	0.467	1.198	0.797	0.731	0.467
B. After Pure Premium Rate	1.070	0.873	0.948	0.122	1.183	0.807	0.744	0.439
C. After X-Mod Application	1.085	0.852	0.938	0.147	1.178	0.802	0.765	0.413
D. After Insurer Rating Adjustment	1.094	0.871	0.861	0.233				

Exhibit 9.3

**2012 Dual Wage Classification Study
Painting (5474/5482)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	4.012	2.958	1.029		4.012	2.958	1.029	
Indexed to Class Average	1.376	1.015	0.353	1.024	1.376	1.015	0.353	1.024
After Pure Premium Rate	1.176	1.122	0.438	0.738	1.376	1.015	0.353	1.024
Policy Level Total								
Loss to \$100 of Payroll	2.861	2.327	0.971		2.861	2.327	0.971	
A. Indexed to Policy Average	1.254	1.020	0.425	0.828	1.254	1.020	0.425	0.828
B. After Pure Premium Rate	1.178	1.016	0.497	0.681	1.344	0.927	0.414	0.931
C. After X-Mod Application	1.203	0.972	0.500	0.703	1.313	0.919	0.439	0.874
D. After Insurer Rating Adjustment	1.239	0.966	0.468	0.771				

Exhibit 9.4

**2012 Dual Wage Classification Study
Painting (5474/5482)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	194	7.5%	\$24.00	\$21.64
Large	287	92.5%	\$24.00	\$21.26
Total	481	100.0%	\$24.00	\$21.31

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 9.5

2012 Dual Wage Classification Study
Painting (5474/5482)

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	12.0%	10,228	2,096	5,646	2,486
Large	88.0%	1,228	160	338	730
Total	100.0%	11,456	2,256	5,984	3,216

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 10.1

**2012 Dual Wage Classification Study
Sheet Metal (5538/5542)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	2.845	2.841	1.650		2.845	2.841	1.650	
Indexed to Class Average	1.292	1.291	0.750	0.543	1.292	1.291	0.750	0.543
After Pure Premium Rate	1.066	1.265	0.831	0.235	1.292	1.291	0.750	0.543
Policy Level Total								
Loss to \$100 of Payroll	2.456	1.751	1.247		2.456	1.751	1.247	
A. Indexed to Policy Average	1.490	1.062	0.757	0.733	1.490	1.062	0.757	0.733
B. After Pure Premium Rate	1.297	1.013	0.828	0.470	1.497	1.012	0.770	0.727
C. After X-Mod Application	1.296	1.048	0.815	0.480	1.400	1.030	0.789	0.611
D. After Insurer Rating Adjustment	1.240	0.991	0.859	0.381				

Exhibit 10.2

**2012 Dual Wage Classification Study
Sheet Metal (5538/5542)
Survey Sample - Small Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	1.442	4.600	1.685		1.442	4.600	1.685	
Indexed to Class Average	0.531	1.695	0.621	-0.089	0.531	1.695	0.621	-0.089
After Pure Premium Rate	0.455	1.761	0.750	-0.295	0.531	1.695	0.621	-0.089
Policy Level Total								
Loss to \$100 of Payroll	1.851	3.432	1.378		1.851	3.432	1.378	
A. Indexed to Policy Average	0.840	1.558	0.626	0.215	0.840	1.558	0.626	0.215
B. After Pure Premium Rate	0.779	1.699	0.634	0.145	0.840	1.572	0.620	0.220
C. After X-Mod Application	0.757	1.675	0.669	0.088	0.810	1.571	0.651	0.159
D. After Insurer Rating Adjustment	0.753	1.703	0.664	0.089				

Exhibit 10.3

**2012 Dual Wage Classification Study
Sheet Metal (5538/5542)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	3.071	2.546	1.649		3.071	2.546	1.649	
Indexed to Class Average	1.427	1.183	0.766	0.661	1.427	1.183	0.766	0.661
After Pure Premium Rate	1.173	1.151	0.845	0.329	1.427	1.183	0.766	0.661
Policy Level Total								
Loss to \$100 of Payroll	2.513	1.611	1.243		2.513	1.611	1.243	
A. Indexed to Policy Average	1.554	0.997	0.769	0.785	1.554	0.997	0.769	0.785
B. After Pure Premium Rate	1.355	0.944	0.839	0.516	1.572	0.949	0.780	0.792
C. After X-Mod Application	1.357	0.981	0.824	0.532	1.467	0.968	0.798	0.669
D. After Insurer Rating Adjustment	1.302	0.925	0.865	0.437				

Exhibit 10.4

**2012 Dual Wage Classification Study
Sheet Metal (5538/5542)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	160	5.4%	\$25.00	\$24.88
Large	308	94.6%	\$25.00	\$28.02
Total	468	100.0%	\$25.00	\$27.70

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 10.5

**2012 Dual Wage Classification Study
Sheet Metal (5538/5542)**

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	7.1%	3,296	662	1,562	1,072
Large	92.9%	980	125	169	686
Total	100.0%	4,276	787	1,731	1,758

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 11.1

**2012 Dual Wage Classification Study
Roofing (5552/5553)
All Surveyed Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	6.353	6.200	3.477		6.353	6.200	3.477	
Indexed to Class Average	1.103	1.076	0.604	0.499	1.103	1.076	0.604	0.499
After Pure Premium Rate	0.963	1.096	0.725	0.238	1.103	1.076	0.604	0.499
Policy Level Total								
Loss to \$100 of Payroll	3.893	4.349	2.927		3.893	4.349	2.927	
A. Indexed to Policy Average	0.977	1.091	0.734	0.243	0.977	1.091	0.734	0.243
B. After Pure Premium Rate	0.895	1.111	0.813	0.082	1.023	1.092	0.679	0.344
C. After X-Mod Application	0.928	1.119	0.739	0.189	1.033	1.100	0.654	0.379
D. After Insurer Rating Adjustment	0.937	1.077	0.830	0.107				

Exhibit 11.2

2012 Dual Wage Classification Study
Roofing (5552/5553)
Survey Sample - Small Size Employers

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	4.303	5.715	0.361		4.303	5.715	0.361	
Indexed to Class Average	0.900	1.195	0.075	0.825	0.900	1.195	0.075	0.825
After Pure Premium Rate	0.765	1.256	0.085	0.679	0.900	1.195	0.075	0.825
Policy Level Total								
Loss to \$100 of Payroll	3.350	4.788	0.310		3.350	4.788	0.310	
A. Indexed to Policy Average	0.844	1.206	0.078	0.766	0.844	1.206	0.078	0.766
B. After Pure Premium Rate	0.716	1.278	0.084	0.632	0.838	1.218	0.075	0.763
C. After X-Mod Application	0.739	1.284	0.075	0.664	0.845	1.233	0.068	0.776
D. After Insurer Rating Adjustment	0.762	1.265	0.075	0.687				

Exhibit 11.3

**2012 Dual Wage Classification Study
Roofing (5552/5553)
Survey Sample - Large Size Employers**

Summary Measure	Dual Wage Classifications				Dual Wage Classifications Combined			
	\$3 or More Below Threshold (1)	Between \$3 less to \$5 Above Threshold (2)	\$5 or More Above Threshold (3)	Span (4)=(1)-(3)	\$3 or More Below Threshold (5)	Between \$3 less to \$5 Above Threshold (6)	\$5 or More Above Threshold (7)	Span (8)=(5)-(7)
Dual Wage Classes								
Loss to \$100 of Payroll	6.709	6.313	3.821		6.709	6.313	3.821	
Indexed to Class Average	1.128	1.061	0.642	0.486	1.128	1.061	0.642	0.486
After Pure Premium Rate	0.990	1.071	0.780	0.210	1.128	1.061	0.642	0.486
Policy Level Total								
Loss to \$100 of Payroll	3.963	4.269	3.161		3.963	4.269	3.161	
A. Indexed to Policy Average	0.994	1.070	0.793	0.201	0.994	1.070	0.793	0.201
B. After Pure Premium Rate	0.919	1.085	0.874	0.045	1.045	1.076	0.722	0.323
C. After X-Mod Application	0.952	1.096	0.792	0.161	1.054	1.085	0.696	0.358
D. After Insurer Rating Adjustment	0.956	1.054	0.895	0.061				

Exhibit 11.4

**2012 Dual Wage Classification Study
Roofing (5552/5553)**

Survey Sample

<u>Employer Size</u>	<u>Employer Counts by Size</u>	<u>Payroll Share by Size</u>	<u>Current Dual Wage Threshold</u>	<u>Employer Average Hourly Dual Wage</u>
Small	147	13.1%	\$23.00	\$22.79
Large	195	86.9%	\$23.00	\$22.26
Total	342	100.0%	\$23.00	\$22.33

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 11.5

**2012 Dual Wage Classification Study
Roofing (5552/5553)**

Entire Class

<u>Employer Size</u>	<u>Payroll Share by Size</u>	<u>Employer Counts by Size</u>	<u>Number of Employers Low Wage Only</u>	<u>Number of Employers High Wage Only</u>	<u>Number of Employers with Both Classes</u>
Small	9.9%	2,712	923	850	939
Large	90.1%	370	43	32	295
Total	100.0%	3,082	966	882	1,234

Notes

Employer size is determined by annual payroll by policy. A small employer has annual payroll less than \$500,000, a large size employer has annual policy payroll of \$500,000 or more.

Exhibit 12.1

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102), Door/Pre-Glazed Window Installation (5107), Cabinet/Fixture
Installation (5146), Concrete Construction - Foundation (5213),
Street/Road Construction - Paving (5506)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.749	2.731	1.864	
Indexed to Class Average	1.419	1.033	0.705	0.713
After Pure Premium Rate	1.417	1.036	0.705	0.712
Policy Level Total				
Loss to \$100 of Payroll	2.231	1.897	1.290	
A. Indexed to Policy Average	1.354	1.151	0.783	0.571
B. After Pure Premium Rate	1.398	1.048	0.807	0.592
C. After X-Mod Application	1.246	1.143	0.816	0.431
D. After Insurer Rating Adjustment	1.219	1.145	0.824	0.395

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102), Door/Pre-Glazed Window Installation (5107), Cabinet/Fixture
Installation (5146), Concrete Construction - Foundation (5213),
Street/Road Construction - Paving (5506)
Survey Sample - Small Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.695	4.464	1.232	
Indexed to Class Average	1.100	1.329	0.367	0.733
After Pure Premium Rate	1.099	1.341	0.364	0.734
Policy Level Total				
Loss to \$100 of Payroll	2.723	2.887	1.681	
A. Indexed to Policy Average	1.060	1.124	0.655	0.405
B. After Pure Premium Rate	1.073	1.116	0.636	0.436
C. After X-Mod Application	1.060	1.132	0.649	0.411
D. After Insurer Rating Adjustment	1.052	1.119	0.676	0.376

Exhibit 12.3

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102), Door/Pre-Glazed Window Installation (5107), Cabinet/Fixture
Installation (5146), Concrete Construction - Foundation (5213),
Street/Road Construction - Paving (5506)
Survey Sample - Large Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.762	2.527	1.895	
Indexed to Class Average	1.471	0.988	0.741	0.730
After Pure Premium Rate	1.469	0.990	0.741	0.728
Policy Level Total				
Loss to \$100 of Payroll	2.182	1.862	1.285	
A. Indexed to Policy Average	1.352	1.154	0.796	0.556
B. After Pure Premium Rate	1.424	1.046	0.816	0.608
C. After X-Mod Application	1.265	1.144	0.822	0.443
D. After Insurer Rating Adjustment	1.254	1.147	0.824	0.430

Exhibit 13.1

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.759	3.496	1.241	
Indexed to Class Average	1.513	1.408	0.500	1.013
After Pure Premium Rate	1.510	1.422	0.498	1.012
Policy Level Total				
Loss to \$100 of Payroll	2.446	1.895	1.164	
A. Indexed to Policy Average	1.509	1.169	0.718	0.791
B. After Pure Premium Rate	1.379	1.127	0.760	0.619
C. After X-Mod Application	1.218	1.134	0.808	0.410
D. After Insurer Rating Adjustment	1.140	1.122	0.845	0.295

Exhibit 13.2

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102)
Survey Sample - Small Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	6.382	6.078	0.205	
Indexed to Class Average	1.299	1.237	0.042	1.257
After Pure Premium Rate	1.298	1.239	0.042	1.256
Policy Level Total				
Loss to \$100 of Payroll	3.396	3.634	1.952	
A. Indexed to Policy Average	1.072	1.147	0.616	0.456
B. After Pure Premium Rate	1.110	1.092	0.568	0.542
C. After X-Mod Application	1.092	1.179	0.566	0.525
D. After Insurer Rating Adjustment	1.084	1.073	0.626	0.458

Exhibit 13.3

2012 Dual Wage Classification Study
Iron/Steel - Non-Structural (5102)
Survey Sample - Large Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.269	3.054	1.340	
Indexed to Class Average	1.171	1.577	0.692	0.479
After Pure Premium Rate	1.168	1.595	0.690	0.478
Policy Level Total				
Loss to \$100 of Payroll	2.232	1.827	1.147	
A. Indexed to Policy Average	1.468	1.201	0.754	0.713
B. After Pure Premium Rate	1.340	1.153	0.795	0.546
C. After X-Mod Application	1.175	1.152	0.842	0.333
D. After Insurer Rating Adjustment	1.117	1.136	0.868	0.249

Exhibit 14.1

2012 Dual Wage Classification Study
Door/Pre-Glazed Window Installation (5107)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	5.790	3.431	1.718	
Indexed to Class Average	1.375	0.815	0.408	0.967
After Pure Premium Rate	1.369	0.814	0.412	0.957
Policy Level Total				
Loss to \$100 of Payroll	2.817	2.105	1.876	
A. Indexed to Policy Average	1.214	0.907	0.809	0.405
B. After Pure Premium Rate	1.305	0.884	0.761	0.544
C. After X-Mod Application	1.190	0.875	0.837	0.354
D. After Insurer Rating Adjustment	1.192	0.820	0.856	0.336

Exhibit 14.2

2012 Dual Wage Classification Study
Door/Pre-Glazed Window Installation (5107)
Survey Sample - Small Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.774	5.972	1.877	
Indexed to Class Average	0.951	1.505	0.473	0.478
After Pure Premium Rate	0.950	1.506	0.474	0.476
Policy Level Total				
Loss to \$100 of Payroll	2.533	3.377	1.295	
A. Indexed to Policy Average	0.989	1.319	0.506	0.484
B. After Pure Premium Rate	1.025	1.241	0.484	0.541
C. After X-Mod Application	1.014	1.261	0.492	0.522
D. After Insurer Rating Adjustment	1.009	1.260	0.504	0.505

Exhibit 14.3

2012 Dual Wage Classification Study
Door/Pre-Glazed Window Installation (5107)
Survey Sample - Large Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	6.775	2.262	1.686	
Indexed to Class Average	1.573	0.525	0.391	1.182
After Pure Premium Rate	1.564	0.525	0.395	1.168
Policy Level Total				
Loss to \$100 of Payroll	2.867	1.833	1.898	
A. Indexed to Policy Average	1.251	0.800	0.828	0.423
B. After Pure Premium Rate	1.363	0.795	0.771	0.591
C. After X-Mod Application	1.229	0.789	0.845	0.385
D. After Insurer Rating Adjustment	1.245	0.739	0.852	0.392

Exhibit 15.1

2012 Dual Wage Classification Study
Cabinet/Fixture Installation (5146)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.477	1.937	1.998	
Indexed to Class Average	1.238	0.689	0.711	0.526
After Pure Premium Rate	1.235	0.691	0.714	0.522
Policy Level Total				
Loss to \$100 of Payroll	2.225	2.426	1.583	
A. Indexed to Policy Average	1.087	1.185	0.773	0.314
B. After Pure Premium Rate	1.092	0.782	1.025	0.067
C. After X-Mod Application	1.008	0.891	1.080	-0.072
D. After Insurer Rating Adjustment	0.960	0.941	1.159	-0.199

**2012 Dual Wage Classification Study
Cabinet/Fixture Installation (5146)
Survey Sample - Small Size Employers**

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	1.762	2.966	1.763	
Indexed to Class Average	0.888	1.495	0.888	0.000
After Pure Premium Rate	0.887	1.491	0.891	-0.004
Policy Level Total				
Loss to \$100 of Payroll	3.019	1.816	2.409	
A. Indexed to Policy Average	1.159	0.697	0.925	0.234
B. After Pure Premium Rate	1.146	0.724	0.921	0.226
C. After X-Mod Application	1.139	0.701	0.953	0.186
D. After Insurer Rating Adjustment	1.147	0.696	0.944	0.203

Exhibit 15.3

**2012 Dual Wage Classification Study
Cabinet/Fixture Installation (5146)
Survey Sample - Large Size Employers**

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	3.660	1.827	2.047	
Indexed to Class Average	1.256	0.627	0.702	0.554
After Pure Premium Rate	1.253	0.628	0.705	0.549
Policy Level Total				
Loss to \$100 of Payroll	2.193	2.457	1.555	
A. Indexed to Policy Average	1.083	1.214	0.768	0.315
B. After Pure Premium Rate	1.090	0.783	1.032	0.057
C. After X-Mod Application	1.001	0.900	1.089	-0.088
D. After Insurer Rating Adjustment	0.950	0.954	1.180	-0.230

Exhibit 16.1

2012 Dual Wage Classification Study
Concrete Construction - Foundation (5213)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.887	2.561	2.057	
Indexed to Class Average	1.259	1.117	0.897	0.362
After Pure Premium Rate	1.270	1.116	0.896	0.374
Policy Level Total				
Loss to \$100 of Payroll	1.435	1.619	1.114	
A. Indexed to Policy Average	1.134	1.279	0.880	0.254
B. After Pure Premium Rate	1.188	1.307	0.868	0.320
C. After X-Mod Application	1.145	1.436	0.845	0.299
D. After Insurer Rating Adjustment	1.021	1.542	0.841	0.181

**2012 Dual Wage Classification Study
Concrete Construction - Foundation (5213)
Survey Sample - Small Size Employers**

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	4.090	5.785	0.108	
Indexed to Class Average	0.976	1.380	0.026	0.950
After Pure Premium Rate	0.975	1.382	0.026	0.950
Policy Level Total				
Loss to \$100 of Payroll	4.046	3.531	0.171	
A. Indexed to Policy Average	1.138	0.993	0.048	1.090
B. After Pure Premium Rate	1.144	0.961	0.051	1.094
C. After X-Mod Application	1.137	0.961	0.053	1.084
D. After Insurer Rating Adjustment	1.114	1.009	0.054	1.061

**2012 Dual Wage Classification Study
Concrete Construction - Foundation (5213)
Survey Sample - Large Size Employers**

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.607	2.409	2.066	
Indexed to Class Average	1.180	1.090	0.935	0.245
After Pure Premium Rate	1.193	1.089	0.933	0.259
Policy Level Total				
Loss to \$100 of Payroll	1.240	1.599	1.115	
A. Indexed to Policy Average	0.998	1.286	0.897	0.100
B. After Pure Premium Rate	1.083	1.316	0.881	0.202
C. After X-Mod Application	1.062	1.449	0.856	0.206
D. After Insurer Rating Adjustment	0.967	1.558	0.847	0.120

Exhibit 17.1

2012 Dual Wage Classification Study
Street/Road Construction - Paving (5506)
All Surveyed Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.634	3.014	1.800	
Indexed to Class Average	1.167	1.336	0.798	0.369
After Pure Premium Rate	1.159	1.326	0.802	0.357
Policy Level Total				
Loss to \$100 of Payroll	1.897	1.934	1.107	
A. Indexed to Policy Average	1.441	1.469	0.841	0.600
B. After Pure Premium Rate	1.379	1.280	0.878	0.501
C. After X-Mod Application	1.226	1.372	0.869	0.356
D. After Insurer Rating Adjustment	1.193	1.265	0.894	0.299

Exhibit 17.2

2012 Dual Wage Classification Study
Street/Road Construction - Paving (5506)
Survey Sample - Small Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.236	2.149	0.065	
Indexed to Class Average	1.158	1.113	0.034	1.124
After Pure Premium Rate	1.158	1.113	0.034	1.124
Policy Level Total				
Loss to \$100 of Payroll	1.668	1.488	0.104	
A. Indexed to Policy Average	1.216	1.084	0.076	1.140
B. After Pure Premium Rate	1.159	1.125	0.083	1.076
C. After X-Mod Application	1.156	1.142	0.081	1.075
D. After Insurer Rating Adjustment	1.148	1.205	0.075	1.073

Exhibit 17.3

2012 Dual Wage Classification Study
Street/Road Construction - Paving (5506)
Survey Sample - Large Size Employers

Summary Measure	Classification Average Hourly Wage			
	\$22 or Less (1)	Greater than \$22 and Less than or Equal to \$30 (2)	More than \$30 (3)	Span (4)=(1)-(3)
Classification Level Total				
Loss to \$100 of Payroll	2.753	3.090	1.826	
Indexed to Class Average	1.208	1.355	0.801	0.407
After Pure Premium Rate	1.199	1.345	0.805	0.393
Policy Level Total				
Loss to \$100 of Payroll	1.930	1.945	1.110	
A. Indexed to Policy Average	1.467	1.479	0.844	0.624
B. After Pure Premium Rate	1.433	1.284	0.879	0.554
C. After X-Mod Application	1.276	1.380	0.869	0.408
D. After Insurer Rating Adjustment	1.283	1.270	0.890	0.393

Exhibit 18

Impact of Dual Wage Classifications Combined on Experience Modification

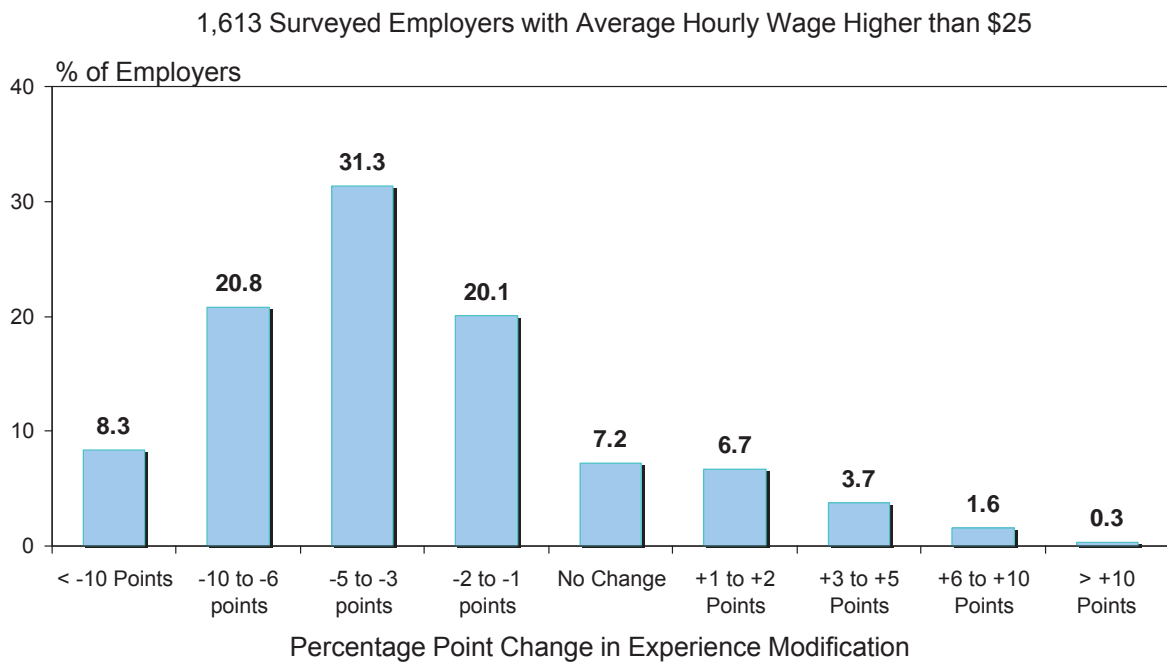
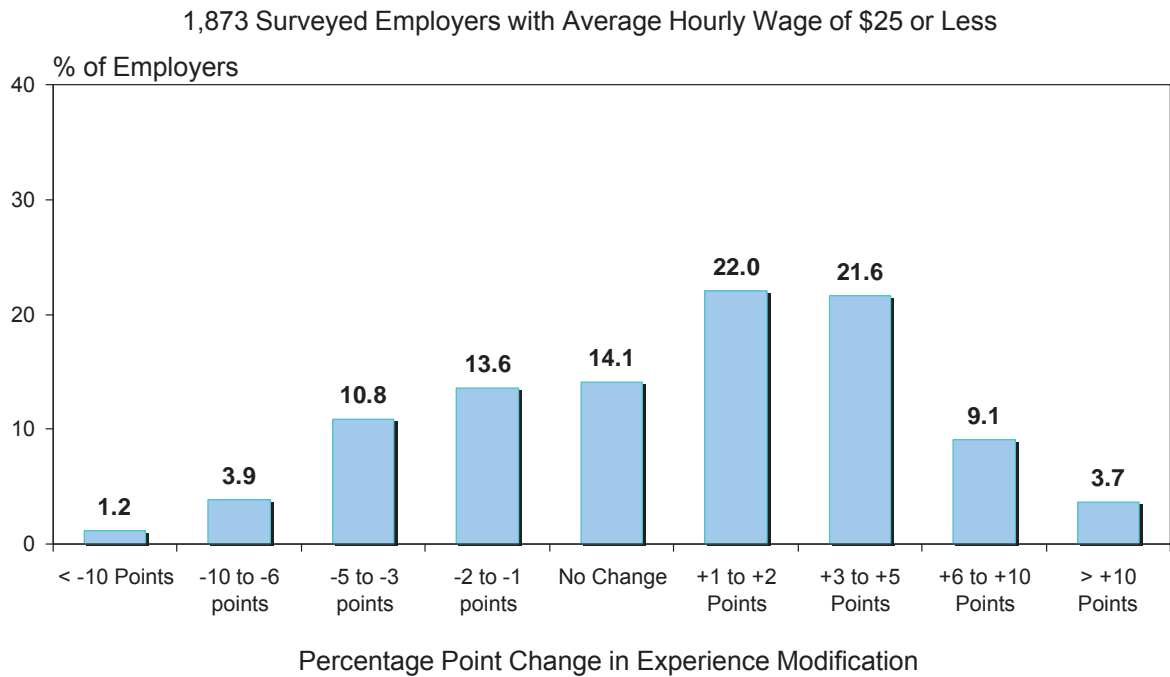


Exhibit 19

Potential Fraud Indicators Provided By Employer and Labor Representatives

List of possible situations that could alert an auditor that a construction employer might be committing dual wage classification fraud, or other worker's compensation fraud. This list is focused on construction employers.

1. An auditor could review the certificate list for the employer. While some of the time certificates are issued for jobs not awarded to the insured, most of the certificates will be for jobs the insured actually worked on. If most of the certificates are for public works projects, one would expect a high percentage of high wage employees. If most of the certificates are for private works but heavy commercial, one would also expect a significant number of higher wage employees. If most of the certificates are for private works with light commercial or residential construction, the percentages of high wage employees would be lower still. If there are few certificates, or mostly to homeowners, you would expect a smaller percentage of high wage employees.
2. Upon a review of time cards or time sheets, the following would be possible red flags.
 - a. "Perfect" time cards, where every employee starts and stops at the same time.
 - b. An employer not having time cards or sheets readily available for the auditor. Especially if they are sent after the fact.
 - c. Time cards or sheets that are not signed off by the individual employee.
3. Upon reviewing wage stubs, employees who worked several decimal points past the nearest hour may be a tip that the employers is taking their total wages, and backing in a number of hours to achieve the wage threshold. An example would be an employee who works 23.556 hours.
4. Upon reviewing time cards and comparing with wage stubs, a dual wage fraud in public works is typically when the employee works less than 40 hours per week. For many classifications, between 25 and 32 hours per week being shown; could allow a cheating employer to pay less than prevailing wage, but just stay above the wage threshold for dual wage credits.
5. For prevailing wage work, hours worked less than 40 is a rarity, except for when a contractor is just starting or just finishing their work on the project.
6. The construction employer has an unusually low proportion of employee payroll in construction classifications.

Proposed Change to Physical Audit Requirements of USRP

4. Audit of Payroll

The audit and assignment of payroll shall be governed by the rules, classifications and pure premium rates contained herein, subject to the following specific requirements:

- a. The insurer shall audit the employer's records for the purpose of determining the payroll in accordance with the following (See Part 1, Section II, *General Definitions*, for the definition of "Physical Audit" and "Voluntary Audit" and Part 4, Section II, *Definitions*, for the definition of "Final Premium"):
 - (1) Each policy producing a final premium of \$10,000 or more shall be subject to a physical audit at least once a year. (~~See Part 1, Section II, *General Definitions*, for the definition "Physical Audit" and Part 4, Section II, *Definitions*, for the definition of "Final Premium".~~) On policies subject to monthly, quarterly, or semiannual interim audits, voluntary audits may be accepted in lieu of interim physical audits. The last audit of the policy shall be a physical audit of the complete policy period.
 - (2) Each policy producing a final premium of less than \$10,000 shall be physically audited at sufficient intervals to ensure determination of proper payrolls. (~~See Part 1, Section II, *General Definitions*, for the definition "Physical Audit" and Part 4, Section II, *Definitions*, for the definition of "Final Premium".~~) For each policy that is not physically audited, a voluntary audit shall be performed. (~~See Part 1, Section II, *General Definitions*, for the definition "Voluntary Audit".~~)
 - (3) Each policy producing a final premium of less than \$10,000 and developing exposure in a dual wage construction or erection classification that requires the regular hourly wage to equal or exceed a specified amount shall be physically audited, unless the policy is a renewal and the insurer physically audited one of the two immediately preceding policy periods.
 - (34) Notwithstanding ~~subsections (1) and (2) the above~~, a physical audit shall be conducted on the complete policy period of each policy insuring the holder of a C-39 license from the Contractors State License Board.
 - (45) In every instance, the audit report shall show the source or sources from which the payrolls were obtained.
- b. If a policy is not audited as required by this Rule, the insurer shall comply with the rules for reporting unaudited exposure on unit statistical reports found in Part 4, Section III, Rule 20d, *Estimated Audit Code (Estimated Exposure)*, and Section IV, Rule 4, *Exposure Amount (Exposure Amount)*, of this Plan.

**Construction Classification Premium Credit
All Surveyed Risks with 50% or more Total Payroll in the Construction Classifications**

Hourly Wage Range	Surveyed Risks		All Classifications Payroll (\$00)	Construction Classifications Payroll (\$00)	X-Mod (4)	Before X-Mod Application			After X-Mod Application		
	Average Hourly Wage (1)	Hourly Wage (1)				Loss to \$100 Payroll (5)	Indicated Credit(+)/Debit(-) (6)	Smoothed Credits (7)	Loss to \$100 Payroll (8)	Indicated Credit(+)/Debit(-) (9)	Smoothed Credits (10)
Below \$20.00	\$16.87	\$16.87	8,712,084	6,828,466	0.94	3,119	0.0%	0%	3,314	0.0%	0%
\$20.00 - \$20.99	\$20.23	\$20.23	2,214,196	1,747,545	0.87	2,230	28.5%	25%	2,566	22.6%	20%
\$21.00 - \$21.99	\$21.49	\$21.49	2,601,401	1,947,284	0.86	1,593	48.9%	27%	1,851	44.1%	22%
\$22.00 - \$22.99	\$22.49	\$22.49	2,281,158	1,725,194	0.93	2,579	17.3%	28%	2,785	16.0%	23%
\$23.00 - \$23.99	\$23.50	\$23.50	1,572,961	1,200,665	0.93	2,978	4.5%	30%	3,214	3.0%	25%
\$24.00 - \$24.99	\$24.35	\$24.35	2,034,325	1,662,626	0.79	1,873	39.9%	32%	2,384	28.1%	27%
\$25.00 - \$25.99	\$25.60	\$25.60	2,539,337	1,972,355	0.89	2,609	16.3%	34%	2,946	11.1%	29%
\$26.00 - \$26.99	\$26.40	\$26.40	1,484,559	1,185,188	0.91	1,612	48.3%	35%	1,765	46.7%	30%
\$27.00 - \$27.99	\$27.53	\$27.53	2,107,843	1,518,428	0.88	1,860	40.4%	37%	2,120	36.0%	32%
\$28.00 - \$28.99	\$28.61	\$28.61	1,647,191	1,268,845	0.92	1,907	38.9%	39%	2,084	37.1%	34%
\$29.00 - \$29.99	\$29.36	\$29.36	2,009,838	1,528,767	0.75	1,833	41.2%	41%	2,455	25.9%	36%
\$30.00 - \$30.99	\$30.79	\$30.79	3,815,099	3,015,827	0.73	1,310	58.0%	42%	1,793	45.9%	37%
\$31.00 - \$31.99	\$31.50	\$31.50	2,495,303	1,923,967	0.85	1,300	58.3%	44%	1,533	53.8%	39%
\$32.00 - \$32.99	\$32.51	\$32.51	2,274,621	1,775,298	0.94	1,635	47.6%	46%	1,741	47.5%	41%
\$33.00 - \$33.99	\$33.54	\$33.54	3,274,585	2,581,543	0.77	1,166	62.6%	48%	1,523	54.0%	43%
\$34.00 - \$34.99	\$34.44	\$34.44	2,453,967	1,963,200	0.87	1,647	47.2%	49%	1,898	42.7%	44%
\$35.00 - \$35.99	\$35.34	\$35.34	2,927,047	2,422,386	0.81	1,676	46.3%	51%	2,072	37.5%	46%
\$36.00 - \$36.99	\$36.36	\$36.36	2,305,203	1,831,225	0.79	1,111	64.4%	53%	1,409	57.5%	48%
\$37.00 - \$37.99	\$37.69	\$37.69	2,505,564	1,854,782	0.82	1,026	67.1%	55%	1,259	62.0%	50%
\$38.00 - \$38.99	\$38.32	\$38.32	1,720,375	1,284,174	0.87	1,231	60.5%	56%	1,415	57.3%	51%
\$39.00 - \$39.99	\$39.45	\$39.45	1,487,897	1,160,912	0.87	1,303	58.2%	58%	1,494	54.9%	53%
\$40 and UP	\$44.17	\$44.17	6,093,853	4,783,786	0.80	1,170	62.5%	60%	1,465	55.8%	55%
Average/Total	\$29.74	\$29.74	60,558,406	47,182,463	0.85	1,840	41.0%	38%	2,161	34.8%	32%

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