Webinar Series:
Insurance and Workers Compensation for Construction—Untangling the Mysteries
Webinar 2: How are construction projects insured: Part 1. Large Projects

February 8, 2017

The findings and conclusions in this presentation were developed in partnership with AIG, and they have not been formally disseminated by the National Institute for Occupational Safety and Health, and should not be construed to represent any agency determination or policy.
Moderator
Christine M. Branche, Ph.D., FACE
Principal Associate Director and Director, Office of Construction Safety and Health
National Institute for Occupational Safety and Health

Featured Presenter

Sean M. Coll, CSP, ARM
Assistant Vice President, South Zonal Manager
Liability Risk Consulting- Client Risk Solutions
American International Group, Inc. (AIG)
NIOSH Construction Project Insurance Webinar
Part 1: Large Projects
February 8, 2017

Sean Coll—AIG, South Zonal Manager
Understanding Insurance

Insurance agents vs brokers
Coverage towers
Types of programs
Types of coverage
State rates and class codes
Experience modifiers
Agents vs. Brokers

Insurance Agent
- Usually tied to one or two insurance companies
- Decreased market availability
- Fewer options for their clients
- On the insurance carriers side
- Paid a fee by carriers
Agents vs. Brokers

Insurance Broker

- Works with multiple insurance companies
- Searches market for best offerings and deals
- Can offer wide range of insurance products
- Increased flexibility for their client
  - Able to mix and match for clients needs
- Provides multiple quotes
- On the clients side
- Paid a commission
WC Coverage Towers

Small Contractor

- $50M
- $15M Ins Co D
- $25M Ins Co C
- $8M Ins Co B
- $2M Ins Co A

Large Contractor

- $250M
- $40M
- $50M
- $75M
- $50M
- $25M
- $8M
- $2M

Layers covered by different ins companies
<table>
<thead>
<tr>
<th>Guaranteed Cost</th>
<th>Loss Sensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance company pays from first dollar</td>
<td>Insurance company and insured share in payment of losses</td>
</tr>
<tr>
<td>– Premiums are higher because the insurance company pays everything</td>
<td>– Deductibles (similar to your auto policy)</td>
</tr>
<tr>
<td>– Reduced likelihood of insured caring about safety and reduction of losses</td>
<td>– $250K, $500K, $750K, $1M</td>
</tr>
<tr>
<td></td>
<td>– Insured assumes some of the financial risk</td>
</tr>
<tr>
<td></td>
<td>– More likely to have a stronger safety program and pay attention to losses</td>
</tr>
</tbody>
</table>
Coverage Types

Workers Compensation
  – Covers the injured employee

General Liability
  – Public, third-party liability, completed operations

Automobile
  – Physical damage and bodily injury from auto incidents
## Common Coverages

<table>
<thead>
<tr>
<th>Small Contractor</th>
<th>Large Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers Compensation</td>
<td></td>
</tr>
<tr>
<td>General Liability</td>
<td></td>
</tr>
<tr>
<td>Automobile Liability</td>
<td></td>
</tr>
<tr>
<td>Professional Liability</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers Compensation</td>
<td></td>
</tr>
<tr>
<td>General Liability</td>
<td></td>
</tr>
<tr>
<td>Automobile Liability</td>
<td></td>
</tr>
<tr>
<td>Builders Risk</td>
<td></td>
</tr>
<tr>
<td>Performance Bonds</td>
<td></td>
</tr>
<tr>
<td>Professional Liability</td>
<td></td>
</tr>
<tr>
<td>Directors &amp; Officers Liability</td>
<td></td>
</tr>
<tr>
<td>Architecture &amp; Engineering</td>
<td></td>
</tr>
<tr>
<td>Cyber</td>
<td></td>
</tr>
</tbody>
</table>
## Insurance Rates

<table>
<thead>
<tr>
<th>Class Code</th>
<th>Term Exposure</th>
<th>Georgia Rate</th>
<th>Premium per $100 of Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>5190 (Elect wiring)</td>
<td>11,000,000</td>
<td>6.29</td>
<td>691,900</td>
</tr>
<tr>
<td>5190F</td>
<td>0</td>
<td>9.18</td>
<td>-</td>
</tr>
<tr>
<td>5190V</td>
<td>0</td>
<td>6.29</td>
<td>-</td>
</tr>
<tr>
<td>5606 (Proj Mgr)</td>
<td>750,000</td>
<td>2.57</td>
<td>19,275</td>
</tr>
<tr>
<td>8227 (Const/erection)</td>
<td>100,000</td>
<td>11.35</td>
<td>11,350</td>
</tr>
<tr>
<td>8742 (Salespersons)</td>
<td>650,000</td>
<td>0.51</td>
<td>3,315</td>
</tr>
<tr>
<td>8810 (Clerical)</td>
<td>1,200,000</td>
<td>0.25</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Total = $728,820
Experience Modifiers (EMR)

Manual Premium x Experience Modifier = Modified Premium

$100,000 \times .67 = 67,000 \text{ or } $100,000 \times 1.21 = 121,000

*EMR is based on the three prior policy periods loss data
Splitting Insurance Costs on Projects

Typical Owner-GC-Subcontractor relationship

Owner Controlled Insurance Program (OCIP)

Contractor Controlled Insurance Program (CCIP)

Captives
Typical Owner-GC-Sub Relationship

New auto plant

GC

Sub

Subs bid work

Subs wins bid

Varying strength of GC safety pgm

All subs provide proof of insurance policies to GC
Owner Controlled Insurance Program (OCIP)

New auto plant

Auto mfg (owner) buys WC & GL insurance for entire project

Owner requires GC enforce a strong site safety pgm for all contractors

Sub

A contractors claims experience on the OCIP will impact their own insurance mod rate!

GC & subs remove WC & GL insurance costs from bid

WC & GL claims from project are handled by the owners insurance policy

$
Contractor Controlled Insurance Program (CCIP)

Contractor buys WC & GL insurance for several projects they will complete

Contractor enforces strong site safety pgm for all contractors

All subs remove WC & GL insurance costs from bids

WC & GL claims from project are handled by the owners insurance policy

A contractors claims experience on the OCIP will impact their own insurance mod rate!
Captives

- Admin
- Premium (funding)
- Loss Control
- Claims Reporting
- Legal
- Claims Handling
- Claims Payments
- Individual Company or Group of Similar Companies
Additional Captive Information

The Captive may purchase external resources such as:

– Loss Control
– Legal
– Excess Policies
– Bonding
– Surety

Type of operation, selective, rules, payout
High $ figures (what’s the low end of a captive to make it work?)
Data Collected by Insureds

Class Codes
- National Council on Compensation Insurance (NCCI)
- States may generate their own rates

Expected Payroll or Revenue

Credits/Debits
- Info about desirable and undesirable behavior
  - E.g. drug testing

Loss Data

<table>
<thead>
<tr>
<th>Class Code</th>
<th>Georgia Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5190 (Elect wiring)</td>
<td>6.29</td>
</tr>
<tr>
<td>5190F</td>
<td>9.18</td>
</tr>
<tr>
<td>5190V</td>
<td>6.29</td>
</tr>
<tr>
<td>5606 (Proj Mgr)</td>
<td>2.57</td>
</tr>
<tr>
<td>8227 (Const/erection)</td>
<td>11.35</td>
</tr>
<tr>
<td>8742 (Salespersons)</td>
<td>0.51</td>
</tr>
<tr>
<td>8810 (Clerical)</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Financial Data Analysis

Based on Contractor’s Performance
- Loss history
- Company’s financials
- Financial performance on prior work

Based on Work Activities (Exposures)
- Steel erector- $20/$100 of payroll
- Demolition contractor- $15/$100 of payroll
- Landscaper- $10/$100 of payroll
- Carpet installer- $7/$100 of payroll
Safety Data Analysis

Exposure Control

- Do they have an effective safety program?
- Do they implement it on all projects?
  - Strong and weak superintendents
- Do they update it regularly?
- Proper equipment provided, stored, serviced, and maintained?
- Do they train their employees for the exposures?

Helps Guide Risk Consulting or Loss Control
Risk Consulting & Use of Data

Loss Runs
- Previous insurance company’s and our own data

OSHA establishment search for citations (www.osha.gov)

Safer System
- Federal Motor Carrier Safety Administration
  - (https://safer.fmcsa.dot.gov/CompanySnapshot.aspx)

Focus on Contractors Problem Areas
Prioritize Our Focus
Contractor Efforts
- May request help from insurance company to effect change
## Sample Loss Data

<table>
<thead>
<tr>
<th>Cause Code</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>$</td>
<td>#</td>
<td>$</td>
</tr>
<tr>
<td>Strain</td>
<td>17</td>
<td>411,450</td>
<td>33</td>
<td>236,927</td>
</tr>
<tr>
<td>Struck by</td>
<td>13</td>
<td>280,448</td>
<td>26</td>
<td>4,733,056</td>
</tr>
<tr>
<td>Slip/trip/fall</td>
<td>16</td>
<td>224,233</td>
<td>10</td>
<td>29,669</td>
</tr>
<tr>
<td>Cut/punctured</td>
<td>8</td>
<td>456,035</td>
<td>13</td>
<td>8,817</td>
</tr>
<tr>
<td>Strike against</td>
<td>10</td>
<td>10,265</td>
<td>3</td>
<td>112,539</td>
</tr>
<tr>
<td>Fall</td>
<td>2</td>
<td>2,642</td>
<td>7</td>
<td>203,920</td>
</tr>
<tr>
<td>Caught between</td>
<td>2</td>
<td>5,610</td>
<td>7</td>
<td>19,526</td>
</tr>
<tr>
<td>Foreign body in eye</td>
<td>2</td>
<td>962</td>
<td>8</td>
<td>5,792</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicle incident</td>
<td>2</td>
<td>205,498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat exhaustion</td>
<td>1</td>
<td>716</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat exhaustion</td>
<td></td>
<td></td>
<td>1</td>
<td>490</td>
</tr>
<tr>
<td>Electric shock</td>
<td>1</td>
<td>408</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation exposure</td>
<td>1</td>
<td>144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dehydration</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>1,391,645</td>
<td>111</td>
<td>5,556,868</td>
</tr>
</tbody>
</table>
## Sample Loss Data

<table>
<thead>
<tr>
<th>Contractor</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>Total</th>
<th>Man hours</th>
<th>Freq/10K MH</th>
<th>Sev/10K MH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>$</td>
<td>#</td>
<td>$</td>
<td>T#</td>
<td>T$</td>
<td></td>
</tr>
<tr>
<td>Contractor 1</td>
<td>2</td>
<td>56,346</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>56,346</td>
<td>7,043</td>
</tr>
<tr>
<td>Contractor 2</td>
<td></td>
<td></td>
<td>1</td>
<td>10,214</td>
<td>1</td>
<td>10,214</td>
<td>2,809</td>
</tr>
<tr>
<td>Contractor 3</td>
<td>1</td>
<td>27,445</td>
<td>1</td>
<td>27,445</td>
<td>1</td>
<td>27,445</td>
<td>3,556</td>
</tr>
<tr>
<td>Contractor 4</td>
<td>1</td>
<td>2,014</td>
<td>1</td>
<td>2,014</td>
<td>1</td>
<td>2,014</td>
<td>6,889</td>
</tr>
<tr>
<td>Contractor 5</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>8,506</td>
</tr>
<tr>
<td>Contractor 6</td>
<td>2</td>
<td>2,181</td>
<td>1</td>
<td>1,106</td>
<td>3</td>
<td>3,287</td>
<td>27,541</td>
</tr>
<tr>
<td>Contractor 7</td>
<td>11</td>
<td>176,999</td>
<td>29</td>
<td>190,626</td>
<td>40</td>
<td>367,626</td>
<td>425,230</td>
</tr>
<tr>
<td>Contractor 8</td>
<td>2</td>
<td>11,051</td>
<td>1</td>
<td>370</td>
<td>3</td>
<td>11,422</td>
<td>33,761</td>
</tr>
<tr>
<td>Contractor 9</td>
<td>2</td>
<td>153,238</td>
<td>2</td>
<td>466</td>
<td>4</td>
<td>153,704</td>
<td>45,898</td>
</tr>
<tr>
<td>Contractor 10</td>
<td>35</td>
<td>995,565</td>
<td>35</td>
<td>4,444,621</td>
<td>6</td>
<td>5,918</td>
<td>5,446,104</td>
</tr>
</tbody>
</table>
Risk Consulting & Use of Data

Provide Solutions to Prevent Loss

- Evaluate effectiveness of safety programs
- Engineer out, administrative controls, PPE
- Identify weak links in safety program implementation
  - Superintendents
  - Subcontractors
  - Specific employees
- Train or improve training for employees

If you don’t have losses, you don’t have severity

- Focus on the frequency
NIOSH Directory of Construction Resources
http://www.cdc.gov/niosh/construction/

Follow us on Twitter
http://twitter.com/NIOSHConstruct
Thank you!

Christine Branche, Ph.D., FACE
Principal Associate Director, NIOSH
Director, Office of Construction Safety and Health, NIOSH
cbranche@cdc.gov