



## Overview

Guidewire Analytics for Workers' Compensation enhances the traditional underwriting process with out-of-the-box models powered by machine learning and non-obvious data—all delivered via a fast API to support straight-through processing.

## Benefits

- Differentiate similar-looking submissions
- Automate declinations and referrals
- Avoid adverse selection
- Gain timely predictive insight on small risks

## Features

- Real-time risk assessment of every small business in the U.S.
- Fast risk assessment with cloud-native API
- Easy to implement: Go live in less than three months
- Easy integration into any underwriting workflow
- Predictive modeling based on billions of dollars of real-world claims and premium

# Guidewire Analytics for Workers' Compensation

- > Grow your small-business book with a 21st-century approach for underwriting small workers' compensation risks

## Harness Predictive Insight from Non-Obvious Data

Underwriting workers' compensation risks in the small and medium-sized enterprise market is difficult. Acquisition costs are high. Classification is imprecise. Submissions are hastily prepared. Many risks are loss-free, and they mostly look the same based on the meager information provided on standardized application forms.

The good news is that a recent and explosive proliferation of data has paved the way for better underwriting of small-business risk. However, this data can be hard to consume—it's often hidden in customer ratings, buried in business websites, obscured in permit filings, or locked away in government databases.

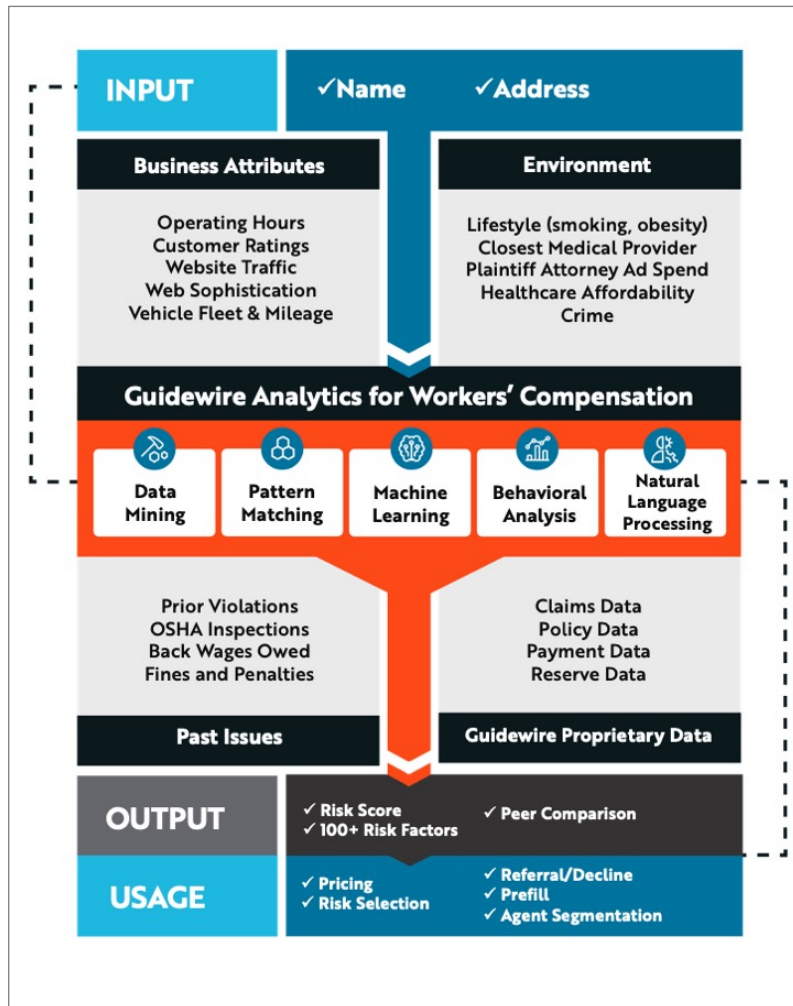
Guidewire calls this “**non-obvious data**,” and it can be highly predictive of loss. Using advanced machine-learning techniques on petabytes of data, back-tested on hundreds of thousands of claims, we harness the predictive power of this data for better underwriting.

Today's underwriting margins are razor thin. Finding predictive signal in the noise of big data is what separates outperforming insurers from those who fall prey to adverse selection. Harness the future of small-commercial underwriting with us.

## Supercharge Small-Commercial Underwriting

Most small workers' compensation risks look the same on paper—even if they carry completely different susceptibility to loss. **Using only the name and address of the business**, the Guidewire Analytics for Workers' Compensation risk-assessment engine enables insurers to address this problem, drawing from hundreds of risk factors that are curated from thousands of third-party databases.

In real time, users receive company-specific **risk ratings**, **100+ risk factors** that explain the rating, **and a peer comparison** for any small businesses. These outputs leverage petabyte-scale data collection to gather relevant, company-specific data—such as company fundamentals, behavioral insights, social-media sentiment, and environmental influences. Augmenting submissions with such non-obvious data yields better underwriting triage and smarter risk selection.



**Gain competitive advantage with specialized data and machine learning**

## Guidewire Analytics — Predictive Risk Factors

|                                |   |                                  |
|--------------------------------|---|----------------------------------|
| Consumer ratings               | Plaintiff attorney ad spending            | Area lifestyle behaviors         |
| Employee ratings               | Attorney prevalence                       | Alcohol and drug dependency      |
| Social media sentiment         | Voting patterns                           | Child poverty rate               |
| Hours of operation             | Local sentiment—business friendliness     | Healthcare accessibility         |
| Web marketing sophistication   | Neighborhood sentiment—racial equality    | Healthcare cost index            |
| Web reputability               | Neighborhood sentiment—workplace equality | Property to income ratio         |
| Web front complexity           | Regional disability rate                  | Proximity to urgent care         |
| Prior safety violations        | Violent crime                             | Proximity to fire station        |
| Prior wage practice violations | Property crime                            | Proximity to police station      |
| Prior safety inspections       | Auto vehicle theft                        | Proximity to hazardous chemicals |
| Prior fines and penalties paid | Civic engagement                          | ... +170 more                    |

## Gain a Competitive Edge Through Risk Differentiation

Imagine a Commercial lines insurance landscape where all information about a risk is available on demand: information that is not only “black and white,” like hours of operations and services provided, but also intangibles such as consumer sentiment and policy compliance.

For example, two ordinary hardware stores of similar size will often look like similar risks, as shown in the table below. But Guidewire Analytics for Workers' Compensation leverages non-obvious data to provide more-granular risk differentiation. **Using only a name and address** input into the Guidewire API, the risk-assessment engine retrieves hundreds of data points from commercial, government, geospatial, and propriety sources in real time to show differentiation between the risks. This new insight can be used to improve pricing and quoting decisions.

|   |   | Grandview Hardware   | Thomson Tools   |
|---|---|--|---|
| Most WC Applications  | <b>Payroll</b><br><b>Employees</b><br><b>% off-premises work</b><br><b>Experience modification</b><br><b>Work done &gt;15 ft</b><br><b>Seasonal employees</b> | <ul style="list-style-type: none"> <li>\$1.1M</li> <li>20</li> <li>7%</li> <li>1.0</li> <li>None</li> <li>None</li> </ul>      | <ul style="list-style-type: none"> <li>\$1.0M</li> <li>18</li> <li>8%</li> <li>0.98</li> <li>None</li> <li>None</li> </ul>                                      |
| Guidewire Analytics for WC API (Uses ONLY name and address) | <b>Past issues</b><br><b>Services provided</b><br><b>Level of activity</b><br><b>Lifestyle index</b><br><b>Nearest medical facility</b>                       | <ul style="list-style-type: none"> <li>None</li> <li>Key cutting</li> <li>Quiet</li> <li>Healthy</li> <li>0.5 miles</li> </ul> | <ul style="list-style-type: none"> <li>Wage, work violations</li> <li>Home delivery, installs</li> <li>Very busy</li> <li>Unhealthy</li> <li>4 miles</li> </ul> |



## Realize Immediate Benefits Across the Insurance Lifecycle

### Proven Predictive Value

Guidewire Analytics for Workers' Compensation provides real business value with curated risk factors that deliver underwriting insight and predictive ability. Given the opportunity to back-test your historical claims with these risk factors, we can prove it out.

| Use Case         | Examples  | Benefits  |
|------------------|---|---|
| Pricing          | <ul style="list-style-type: none"> <li>Modify target pricing using predictive risk factors</li> <li>Reduce credit allowance for riskiest deciles</li> </ul>                                     | <ul style="list-style-type: none"> <li>Enable granular, accurate pricing</li> <li>Optimize capital usage</li> </ul>                           |
| Decline/Referral | <ul style="list-style-type: none"> <li>Automatic referral for any past wage or hour violation</li> <li>Automatic decline for safety violations on file above a permissible threshold</li> </ul> | <ul style="list-style-type: none"> <li>Adhere to underwriting guidelines</li> <li>Enable consistent risk appetite</li> </ul>                  |
| Automation       | <ul style="list-style-type: none"> <li>Straight-through processing (i.e., for risk scoring below the 30th percentile)</li> </ul>  | <ul style="list-style-type: none"> <li>Lower acquisition costs</li> </ul>   |
| Prefill          | <ul style="list-style-type: none"> <li>Ask fewer questions to arrive at a quote/decline decision</li> <li>Minimize keystrokes by populating data entry fields</li> </ul>                        | <ul style="list-style-type: none"> <li>Increase submission flow</li> <li>Improve data quality</li> <li>Improve customer experience</li> </ul> |