



# Business Case

## Contents

Executive Summary .....	1
Use Case: Current State .....	2
Use Case: Future State.....	2
Surety Cost.....	4
Risks/Mitigation.....	4
Stakeholders .....	5
Conclusion .....	7

## Executive Summary

Underwriting, producing, and servicing surety bonds requires collecting and transmitting a great deal of data from and between parties. Currently, this process involves time-consuming, error-prone, and redundant manual re-entry. For every bond produced, identical bond details need to be entered into separate systems by every party. In addition, information from financial statements and work-in-progress (WIP) schedules is collected and analyzed several times per year to track exposure and the health of contractor clients. This information is manually re-keyed by various parties throughout the workflow, which can take hours and introduces the potential for errors. The current manual and fragmentary system of data sharing wastes time and inflates costs for all parties.

Sureties, bond producers, and software providers are beginning to eliminate these inefficient processes through the use of industry data standards. ACORD bond request forms that use standardized data fields streamline the bond creation process and allow for automatic upload of bond request details. Using XBRL (eXtensible Business Reporting Language) standards to format WIP schedules and financial statements renders their data computer-readable, allowing for automatic upload into systems.

ACORD data standards are used throughout the insurance industry; ACORD eLabel forms for surety are just an extension. Similarly, XBRL is a financial data standard required by the Securities and Exchange Commission. Using XBRL in the surety industry simply requires adding contractor-specific data fields, like those in a WIP report. The

WIP Taxonomy, a digital dictionary of data fields representing the WIP report, has already been created and is ready for use. Because of XBRL's prevalence, there are numerous XBRL-enabled software tools that can be adapted to work with contractor financials as well. Modifying current producer and surety systems to accept standardized data requires a minimal, one-time investment that is immediately scalable to all account activity. Underwriting is faster and data quality is higher with standardized data, allowing producers and sureties to better serve their clients.

## Use Case: Current State

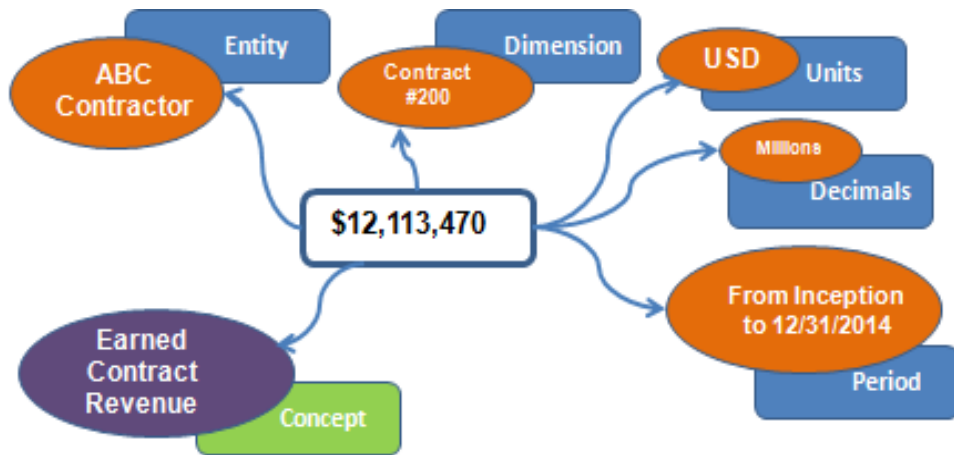
In the current state, principals, producers, and carriers perform duplicate manual labor, keying in details over and over to record the same information. In a typical bond scenario, the principal expresses a bond need from a producer, usually via email. The principal types the bond details into an email or attached document and sends it to the producer. After the producer receives the information, they must first enter it into an agency system to issue the bond and create a report of execution, and then add the entry to their accounting system for billing and reconciliation purposes. During this process, the producer must also upload any supporting documents into the system. After the bond is executed, the producer sends the report of execution and bond to the surety. When the surety receives the package, a surety technician must then enter the bond details and upload those same supporting documents into the surety system. The surety then sends an invoice back to the producer so they can bill the principal.

A similar exercise occurs with financial statements and WIP schedules. Once a principal or their CPA creates a verified financial statement or WIP, they email the documents to the producer. The producer then manually inputs the documents into a producer system, so they can begin analyzing the financial health of the principal. After the producer has completed both tasks, they email the WIP and the financial statements to the surety. Once the surety receives the documents, the surety manually inputs the WIP and the financial statements into a separate system, and then analyzes both documents.

Not only is this manual re-entry repetitive and prone to error, as previously mentioned, but it also creates dependencies: one party cannot begin until the previous party finishes. If a principal needs a bond quickly, they must fill in a bond details page for the producer, and then wait for the producer and surety to fill in the same information in their respective systems. This process is costly to the principal, both in terms of missed business opportunities and possible adverse effects on producer and surety overhead. Unnecessary overhead especially hurts high volume-low margin commercial surety programs—a market worth nearly \$2B in annual premium. The errors generated by this inefficient process inflate costs even further.

## Use Case: Future State

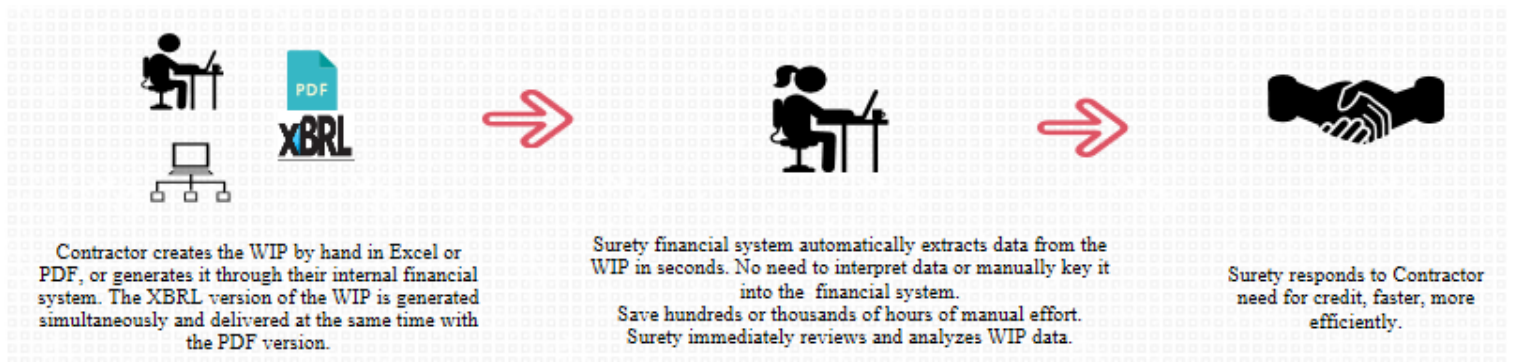
ACORD and XBRL data standards automate data transmission, making it easier, faster, and more reliable. To request a bond, a principal fills out an ACORD eLabel form with tagged fields for pertinent bond information, such as the name of the principal, the bond amount, the obligee, etc. Then the form is sent to their producer or directly to their surety, whose systems can automatically extract the data in the tagged field and use it to create a bond request. The surety's system can also automatically upload supporting documents, allowing for expeditious and informed underwriting decisions. When the bond is created, the same information can be auto-populated into a standard bond form. Time-consuming, costly, and potentially erroneous data entry is eliminated almost entirely.



This diagram shows XBRL tags applied to an instance (the center number); these tags allow computer systems to categorize raw data values automatically.

For XBRL-enabled financial statements and WIP schedules, principals or their CPAs create an XBRL version of the document in question by mapping metadata tags to their current WIP or financial statement—that is, assigning tags to numerical fields in the spreadsheet that will allow computers to read what that information means. This XBRL-enabled document can be created by using a spreadsheet add-in, or by working with the contractor or CPA firm’s existing reporting applications. We expect that contractors will not be required to change their existing process and that there will be zero additional cost to implement. Upon receipt of an XBRL-enabled WIP schedule or financial statement, producers and sureties no longer need to manually re-key line-by-line in order to capture contextual information in their systems. Instead, after a one-time setup process, producer and carrier systems can automatically process these documents in seconds, regardless of the length of each document or the number received. Data is collected and analyzed far more quickly and efficiently, allowing faster and smarter underwriting.

In a WIP automation pilot program, the Hartford set up their system in roughly 60 staff-hours including testing. They were then able to upload WIP information automatically in less than 4 seconds, versus the 30 minutes to 1 hour required to process each individual WIP manually. In a similar way, ACORD eLabel forms for bond requests will save time and effort on each and every bond requested and created. The immediate scalability of surety data standards represents significant savings for sureties and producers and improved response to contractors.



## Potential Alternatives

The working group considered a number of alternatives to XBRL and ACORD eLabel forms. For WIP schedules and financial statements, the creation of a standard Excel template for use by principals was considered on the grounds of ease of implementation. However, this solution would not be able to accommodate the vast differences in WIP profiles for the large variety of contractors in need of surety bonds, nor would it allow for the development of validation rules to ensure data quality. Also considered was the use of eXtensible Markup Language (XML), a standard that embeds metadata within the reported values, rather than as a mapped XBRL taxonomy. XML is widely used by many software providers, but it does not have a consistent method to handle financial data characteristics such as currency, time period, legal entity, and financial tables, which are necessary to allow accurate computer-readability. XBRL is based on XML, but adds the consistent methods for handling these critical financial data characteristics. For these reasons, the ACORD eLabel forms and XBRL standards are the most versatile, stable, and open solution for surety industry data standards

## Surety Cost

The main cost associated with standardized bond forms implementation is a licensing fee to ACORD for system vendors distributing their forms. However, carriers and producers who are already members of ACORD will generally have forms licensing as part of their agreement, thus eliminating this cost. In addition, implementing XBRL standards entails only a one-time setup cost and allows a producer's or surety's system to accept the standardized information automatically.

The Hartford's previously-mentioned pilot program provides insight into the possible payback period for XBRL implementation. By cutting the time to process WIPS from up to an hour to 3.5 seconds after a 60 staff-hour setup cost, the Hartford's investment would repay itself after an estimated 110 WIPs. A surety with 50 contractor clients delivering quarterly WIPs would thus recoup its cost in just over 6 months, not accounting for efficiency gains from reduced error rates. Similar setup costs will be faced to automate the extraction of data from XBRL-formatted financial statements. XBRL-formatted financials are already available for publicly traded contractors that must comply with SEC regulatory reporting requirements. Automatic extraction of full financials for these publicly listed companies will also eliminate manual data entry, with corresponding reduction in labor costs and improved ability to respond to contractor need for credit.

## Risks/Mitigation

### ACORD Licensing Cost

The adoption of standards already in existence, such as ACORD Forms, may require a fee to the licensing entities for use of their forms. Prohibitively high fees would negatively impact the rate of adoption and the value of data standards. This risk is mitigated, however, because there is no additional licensing cost to members of ACORD and ACORD has offered a special, very modest licensing fee for purchasers needing only those documents required for surety automation. Given the enormous efficiencies that standardized forms can bring and the relatively low implementation costs faced by potential adopters, these risks are minimal, and are further reduced by the close working relationship that has developed between the working group and ACORD.

Adoption rates for the forms should also be high because once the surety system vendors provide the ACORD e-labeled forms as output, they will automatically be provided to every client and sent sureties as the industry standard form.

## XBRL Implementation Costs

The XBRL data standard for WIP requires no licensing fees from the parties that use it; however, there are upfront costs associated with implementing the ability to extract data from an XBRL-enabled WIP report or financial statement. Each surety will need to map their internal IT systems to the digitized data fields in the XBRL WIP Taxonomy. As noted earlier, The Hartford was able to successfully conduct this implementation in approximately 60 staff-hours. Given the ongoing savings of moving to automated extraction from manual data entry, this one-time implementation is low compared to the benefits that will be gained going forward.

Sureties can also speed adoption by asking for financial statements in Excel format and mapping the files for each customer one time, allowing for import to their analysis systems with a push of a button going forward.

## Costs and Added Steps for Related Parties

The direct benefit of data standards is to sureties and producers, who will be able to streamline their processes. While these parties face a one-time setup cost and in some cases licensing fees from ACORD, ongoing costs might be borne by contractors, who create and format their financial statements and WIP schedules. The risk presented by this distribution of costs and benefits is mitigated by several factors.

First, XBRL capability is already integrated into reporting tools currently in use by public companies. These tools can be leveraged by publicly traded contractors to report WIP data as well. Separately, this standardization initiative is working towards bringing the cost of XBRL creation for contractors down to zero, by working with existing tool providers to embed XBRL capability into their offerings. This goal has already been reached in other markets where XBRL is in use. For example, in the United Kingdom, private companies report financials for tax purposes to the HMRC (Her Majesty's Revenues & Customs) in XBRL format. An estimated 90% of private UK firms using XBRL for tax reporting face no additional costs, as XBRL formatting has been embedded in the reporting software being used. For use in WIP schedules, the working group has already engaged tool providers to create applications that work with the WIP Taxonomy. The potential savings provided by adoption make it likely that this capability will be included in future contractor software packages, effectively eliminating additional costs to the contractor.

Second, surety data standards benefit contractors. Computer-readable data enables sureties and producers to respond more quickly and with better, more current information. This leads to a faster response to contractor needs, allowing contractors to take advantage of new opportunities quickly with the full support of their surety partners.

## Stakeholders

### Producers

Processes for producers will not change significantly from data standards implementation. Producers will continue serving principals' day-to-day needs by passing bond requests to carriers and giving carriers information from principals through WIP schedules and financial statements. What data standards will change is the time and effort required for these tasks. After setting up their systems to allow for automatic processing of ACORD eLabel forms and XBRL-enabled WIPs and financial statements, producers will be able to significantly streamline their operations with the elimination of manual rekeying. Automatically populated bond requests and forms will improve responsiveness to contractor clients. In addition, easier processing of contractor information will allow for more informed responses to contractor bonding needs.

## Vendors

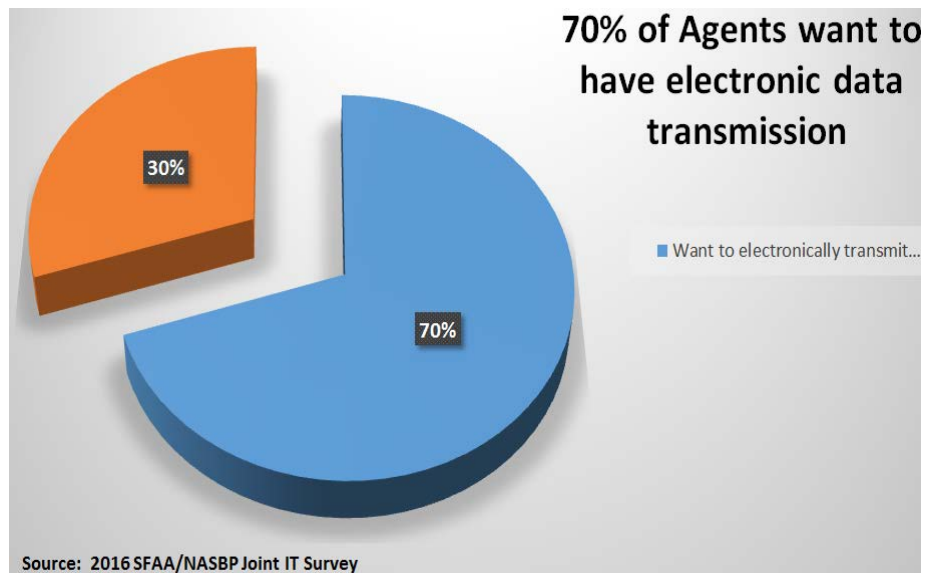
Vendors play an important role in the implementation of data standards by adding ACORD e-label and XBRL functionality to the tools used by principals, producers, and carriers. These tools speed adoption by reducing cost and time investment for the creation and processing of data-standardized documents. As such, vendor contributions are especially important in attracting the interest of producers and principals, who are reluctant to implement changes in process from which they may not see an immediate benefit. Work is ongoing with several vendors in the development of add-ons that will allow principals to generate XBRL documents from existing spreadsheets with little or no additional effort. Discussions are ongoing with other vendors that currently serve the contractor market to embed XBRL and ACORD capability into their tools.

## Carriers

Carriers are the most direct beneficiary of surety data standards and will see the greatest change to their processes from the implementation of XBRL functionality. Setup of surety systems capable of automatic processing of data standards requires an initial investment that will quickly pay itself back through workflow streamlining and the shortening of response times. In addition, the reduction of effort required to present and interpret financial and WIP data will lead to more advanced analysis of that data, further enhancing carriers' understanding of the risks presented.

## Principals/CPAs

Principals will also need to implement the data standards herein discussed as they request bonds and create financial statements and WIP schedules. Tools currently being developed by the working group and its partners will ensure that this change is seamless and requires minimal disruption of processes for clients. For bond requests, this entails only a change in the form used, with the information required remaining the same. In the case of financial statements and the WIP, the principal or their CPA will create an XBRL-enabled financial statement in addition to the traditional spreadsheet or PDF. XBRL creation can be performed by using a spreadsheet add-in or by generating the XBRL version from an existing reporting-writing software. The participation of principals in these processes is key to widespread implementation of these standards. As mentioned before, costs for creation of XBRL financial statements and WIPs are expected to be low and to decrease over time, while the time and cost efficiencies of surety automation will allow producers and sureties to be more responsive partners for principals, allowing them more rapid access to credit and ensuring that contractor financials are evaluated based on the most current information.



## Conclusion

Data standards can radically streamline surety operations, reducing costs and allowing for faster and more informed decision-making. By eliminating manual re-entry of information at every step of the process, data standards allow for improved data quality and faster processing. Construction operations have grown larger and more complex, as have the agencies, brokerages and surety operations supporting them. The automation allowed by the adoption of data standards will enable sureties and producers to grow along with their accounts without dramatically increasing processing costs all while increasing the quality of information available to them. Implementing these standards is the next step for the surety industry, and any organization on the surety supply chain is welcome to participate in the working group.