



— WHITE PAPER —

ADJUSTER'S DELIGHT:

How data is bringing roof adjusting
into the 21st century





In 2020, the roofing claims process is broken. Online information for quickly estimating the claim amount is non-existent.

Key pieces of information that need to be obtained for the average roof claim such as roofing codes, local tax rates and local permit fees still require a phone call to a local municipality to gather the accurate information. That costs millions of hours per year in wasted time for adjusters, contractors and municipal employees. In the era of data and APIs, this type of inefficiency is incomprehensible and a major problem. It is a result of underinvestment in information digitization by local municipal governments throughout the US over the last twenty years.

The gap in readily available data leads to trust issues, increased settlement times, increased loss costs and less productive employees. It also creates frustration amongst contractors and adjusters who generally lack the time and training needed to do research that most of them do not want to do anyways.

With the revolution in digital automation of roofing data and roofing codes now upon us, **claims departments can enjoy annual savings of tens of millions of dollars in both loss costs and loss adjustment expenses.** Today it is more important than ever for homeowners, insurers, and property adjusters to consider adopting better tools and practices to counter the twin adverse trends of rising catastrophic storms and increasing roof labor and materials costs.

HOW MUCH SHOULD A ROOF REALLY COST?





**\$15.8
BILLION**

average
roof losses
annually

According to the Insurance Information Institute, **annual homeowners' losses in 2018 were around \$55 billion dollars**, while **from 2013-2017, annual wind and hail damage accounted for just over 30% of all residential homeowner's losses leading to homeowners losses from catastrophic damage of approximately \$19 billion**. According to the Insurance Institute for Business and Home Safety (IBHS)¹, roof-related damage is responsible on average for an estimated 70-90 percent of total insured residential catastrophic losses.² When using historical averages, **a reasonable estimate for average annual roof losses is between \$12.3 billion and \$15.8 billion**.

Despite huge investments in insurance technology over the last five years, multiple components of both the underwriting and claims processes in property insurance remain stuck in manual gear with uncertainties about how and when they will ever be automated. One of the most glaring such problems is processing roofing claims where local jurisdiction and codes are administered by municipalities that either cannot afford to make their data accessible to the public or do not know how to do so effectively. The net result of this underinvestment is additional adjustment costs borne by the insurers as their adjusters and external contractors go back and forth endlessly to determine the right jurisdiction, roofing codes, and payment amounts.

Finally there is an easier way now available for both insurers and their partners to streamline the process, ensure that it accounts for local laws and ordinances, and achieve both lower loss costs and lower adjustment costs.

¹ <https://ibhs.org/strategy/roof/>

² Deductibles included in the losses, adjustment costs excluded



A VERY MANUAL PROCESS

Current information available through widely distributed estimating systems does not go far enough to provide key data needed to create an efficient and streamlined roofing claims process for both adjusters and contractors.

Hidden roofing codes, unknown jurisdictional authorities, complex manufacturer specifications, and numerous local tax rates and permit fees all contribute to inefficient processing of roof claims. Online municipal information is often outdated or non-existent which means municipalities have to be called to get accurate information. There is also no guarantee that the information received from a local municipality is accurate either.

Additionally, the lack of readily available data results in transparency and trust issues, which contribute to increased hard and soft costs including but not limited to:



**Increased
settlement time
allocated to research**



**Increased loss costs
due to inaccurate
information**



**Deterioration
of trust between
key stakeholders**



**Reduced employee productivity
related to frustrations and
stakeholder conflict**



**Contractor angst around
seeking a fair payout for
work performed**

Imagine having to drive to the library to research, ask a librarian for help, wait for twenty minutes to two hours, and then have to repeat the process up to six times in order to find four data points of unique information critical to your everyday work. **We all have gotten so used to the availability of information at our fingertips as the norm that we sometimes forget that these antiquated processes still exist and cause untold frustration for those still subject to them as part of their job.**



DIGITAL CONVERSION OF CODE DATA

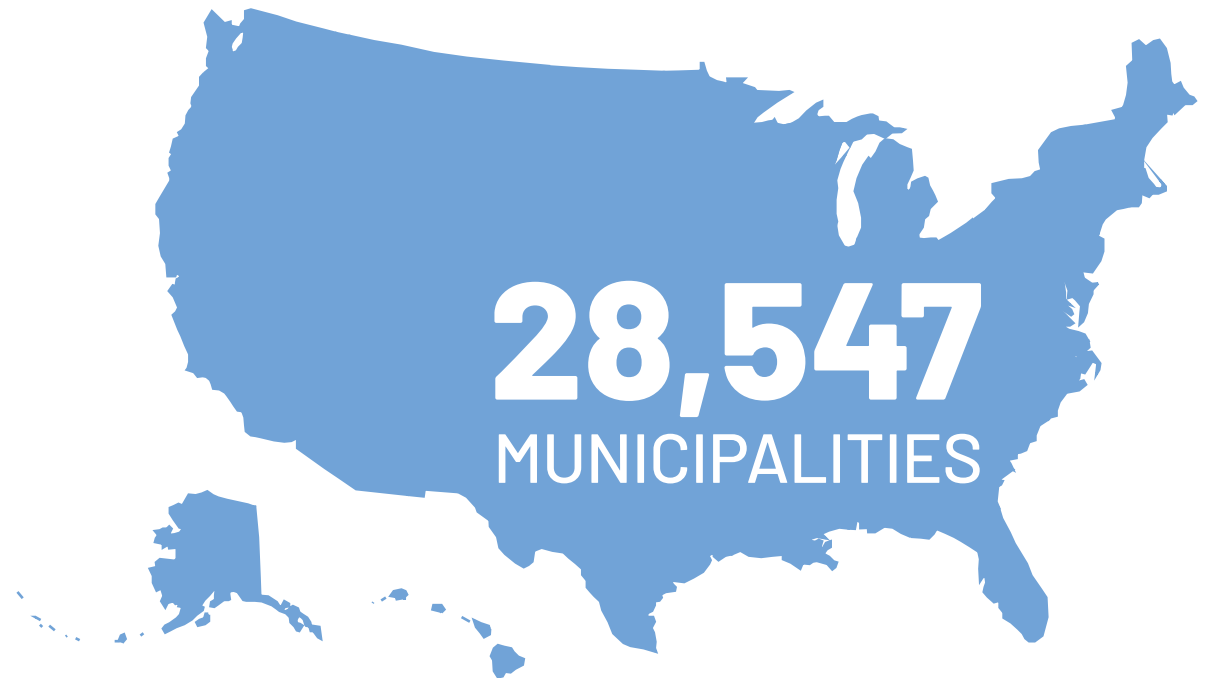
By digitizing the following key data for **28,547 municipalities in the United States**, OneClick Code is pioneering automated roofing code identification and permitting processes:

- Roofing codes
- Municipal jurisdiction authority
- Material tax
- Manufacturer specifications

The resultant data set **eliminates millions of hours spent by adjusters and contractors required in the claims process** by putting the information where it belongs: at the user's fingertips.

Claims departments responsible for settling roofing claims can enjoy enormous potential loss adjustment expense reductions and loss cost savings through quickly considering a very simple set of questions:

- How many roof claims do we settle on average each year?
- What percentage of those claims require roofing code research and review of contractor estimates?
- What is the average time required by an adjuster to research roofing codes and review contractor estimates?
- What is our average adjuster hourly pay rate?





TIME IS MONEY

The process to research the roofing codes and review contractor estimates is more involved than it may seem, including but not limited to the following steps:

- Reviewing supplement
- Identifying jurisdiction
- Searching for roofing codes
- Finding the municipality phone number
- Downloading and uploading related information
- Recording these actions in a claims log
- Adding line items specific to code
- Calling the contractor to discuss approved items
- Reviewing and processing payment

Altogether this typically requires just shy of 120 minutes (two hours) of the adjuster's time. Moreover if there is a supplemental request by the contractor and it is denied in full or in part it may be requested again. **Such an additional request can add anywhere from 30 to 60 minutes to the process** each time an adjuster reopens a claim to review a supplemental request and it is not uncommon for this process to repeat three or four more times after the initial request. Associated labor costs aside, there is no real measure for the amount of frustration experienced by the adjuster or contractor in such a process. To fully appreciate that frustration, we recommend trying to work tomorrow without your mobile phone or computer.

Using a data driven solution instead, this entire initial process takes less than five minutes and any resubmission less than one minute resulting in hours of savings each time. It also eliminates or greatly reduces the frustration experienced by the adjuster and contractor during the initial submission and any subsequent reopening by the adjuster. Most importantly, a data driven approach provides defensibility for the position taken, eliminating ambiguity and underpinning acceptance by all stakeholders. Such clarity increases the fidelity of the indemnity process and by definition reduces the possibility of fraud.



Adjuster's time required to research the roofing codes and review contractor estimates



JURISDICTION MATTERS

Data sourcing processes should be designed around three key values/principals:

RELEVANT

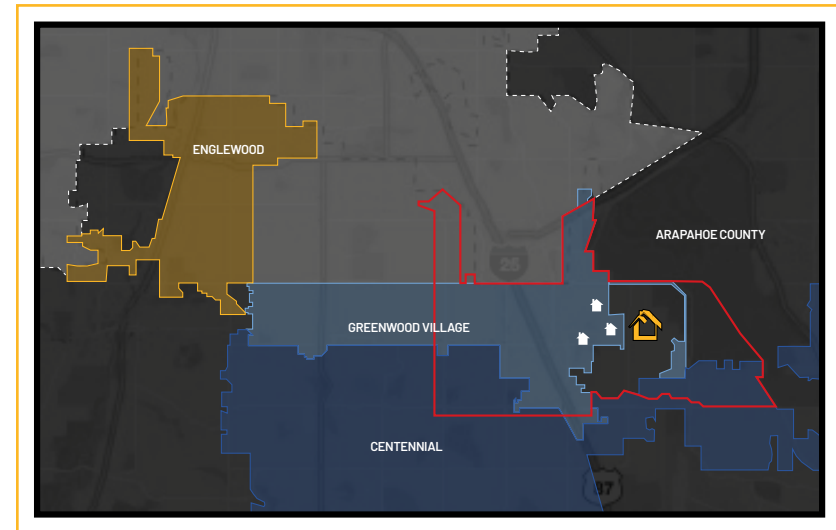
Related to settling roofing claims

PRACTICAL

Straightforward answers to the most commonly asked and important questions (such as whether a local code requires a roof to include drip edge, valley liner, or iced water shield in eaves)

RELIABLE

Updated consistently to ensure accuracy



Same Zip Code **Different Codes** **Different Costs**

OneClick Code targets municipalities based on what the Census Bureau calls CBSA's (Core Based Statistical Areas). A CBSA is a U.S. geographic area defined by the Office of Management and Budget (OMB) that consists of one or more counties (or equivalents) anchored by an urban center of at least 10,000 people, plus adjacent counties that are socioeconomically tied to the urban center by commuting. 95% of the US population lives within 919 CBSA's which encompasses 1,811 Counties. Within those counties are a further 28,547 local municipalities. **Of the 28,547 municipalities, 12,593 issue their own permits. The remaining municipalities require permits, however they submit to the Jurisdictional Authority of an adjacent Municipality or County to obtain those permits.** Additionally, municipalities may choose to outsource permit processing to third-party private companies. OneClick Code has developed a patented process for enabling the geolocation of an address in its geographically defined Jurisdiction of Authority in order to ensure data accuracy.



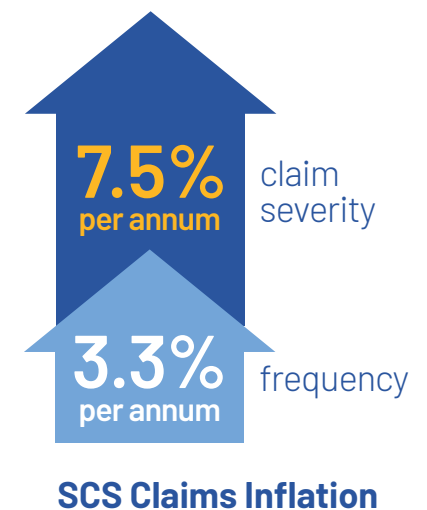
OneClick Code personnel contact each of the 12,593 permit issuing municipalities on an annual basis or semi-annual basis to collect and verify roofing code and sales tax data for digitization involving at least 3,000 different types of documents. **Anytime there is a major storm (hurricane, severe storm, etc.), OneClick Code calls the local municipalities within 72 hours to ensure codes are updated for the ensuing claims process.**

When working to find the correct sales tax estimation, it is important to know that there are often multiple rates per zip code, county, and/or city. Determining tax rates based solely on zip codes will result in inaccuracies. To ensure accuracy, it is necessary to pull the sales tax information based on an address' geolocated latitude and longitude, and not simply the zip code or the city which can lead to incorrect input rates and a possible notice from the local tax collector.³

REPLACING ROOFS IS COSTLIER THAN EVER

In the last two decades, the combination of the **rapid rise in severe convective storm (SCS) frequency and severity** and skyrocketing roofing costs have created a toxic environment that is punishing homeowners and property insurers' alike.

- Between 2001 and 2017, there was a 7.5 percent per annum rise in claim severity and 3.3 percent per annum rise in frequency that combined to produce a growth of total loss, or SCS claims inflation, of 11 percent.⁴
- Sales among privately held roofing contractors increased 13.5 percent and 15 percent in 2017 and 2016, respectively while the average profit margin for roofing contractors grew 4 percent annually from May 2014 to May 2018.⁵



³ Avalara - www.avalara.com/us/en/learn/videos/whiteboard/sales-tax-rates-zip-codes-vs-geolocation.html
www.avalara.com/us/en/learn/whitepapers/zip-codes-dont-mean-zip-for-ecommerce-sellers.html
www.avalara.com/us/en/learn/whitepapers/zip-codes-the-wrong-tool-for-the-job.html

⁴ Risk Management Solutions - www.rms.com/blog/2018/08/03/us-severe-convective-storm-claims-going-through-the-roof

⁵ Forbes - www.forbes.com/sites/sageworks/2018/06/03/the-roofing-industry-continues-its-upward-slope/#1fb0f8692c8c



Incredibly in 2020, no one in the roofing value chain can confidently answer how much it should precisely cost to replace a roof. **Below we highlight a hypothetical example of where an incorrect set of roof data inputs can swing the claim payout by 21%.** Perhaps most astonishing in this example is the fact that the payment could be wrong in either direction, i.e. the insurer may end up paying too much or too little based on the data as depicted.

SMALL CHANGES, BIG DIFFERENCE:

Example: **Avg. Residential Roofing Job:**

Item	Left Form (Arapahoe County)	Right Form (City of Englewood)
REPORT #	52468	52857
TOTAL	\$1,198.50	\$11,105.88 (+21%)
BUILDING PERMIT ISSUED BY	ARAPAHOE COUNTY	CITY OF ENGLEWOOD
WEBSITE	720-874-6605	303-762-2300
PROPERTY ADDRESS	10694 E Powers Dr Englewood CO 80111	Englewood CO 80110
SALES TAX	\$170 4.25%	\$345 7.75%
Code Enforcement?	YES	YES
Install Per Roofing Manufacturer Specifications?	YES	YES
2015 IRC	\$178 permit fee	\$411 permit fee
DRIP EDGE	\$500 YES	\$500 YES
VALLEY LINER	\$300 YES	\$300 YES
UNDERLAYMENT	\$1000 YES	\$1000 YES
ICE & WATER SHIELD ON EAVES	NO	\$1500 YES

With savings in loss costs and loss adjustment expenses combined, **the homeowners insurance industry could save over \$1 billion annually** while simultaneously helping their adjusters and contractor partners avoid frustration, save time, get clear answers and save out on recurrent overpayments due to systematic errors in code identification and managed services implementation.

SAMPLE REPORT

ROOFING CODE REPORT



Google Earth, U.S. Geological Survey, USDA Farm Service Agency



ZESTIMATE® \$ 663,581

HOME SIZE 2,890 SF

DATE BUILT 1974

FLOORS 2

See more details for 10694 E Powers Dr on Zillow



CEILING 200 FT

RESTRICTED AREA NO

FAA AUTHORIZATION YES

FEEDBACK

BUILDING PERMIT ISSUED BY ARAPAHOE COUNTY

WEBSITE

720-874-8500

PROPERTY ADDRESS
10694 E Powers Dr
Englewood CO 80111

SALES TAX
4.25%

Code Enforcement?

YES

Install Per Roofing Manufacturer Specifications?

YES

2015 IRC

DRIP EDGE	YES
VALLEY LINER	YES
UNDERLAYMENT	YES
ICE & WATER SHIELD ON EAVES†	NO

2015 IBC

DRIP EDGE	YES
VALLEY LINER	YES
UNDERLAYMENT	YES
ICE & WATER SHIELD ON EAVES†	NO

2009 IECC

RESIDENTIAL		COMMERCIAL	
CEILING	R-38	INSULATION ABOVE	R-20CI
WOOD FRAME WALL	R-20 OR R-13 + R-5	ATTIC/OTHER	R-38
ELEVATION 5,707 FEET		CLIMATE ZONE ZONE 5 DRY	HAIL ZONE MODERATE 1.5 - 5.0 IN

REPORT CREATED 5/16/2020

† We have not confirmed that there is a history of ice damming per IRC Table R301.2(1). Please check with Arapahoe County for additional details.

Roof systems shall be designed and installed in accordance with Arapahoe County and the approved manufacturer's installation instructions such that roof system shall serve to protect the building or structure. The professional performing the repairs shall act in accordance with the standard of care to ensure today's methods, standards and practices are adhered to. Deviation from such or instructing one to deviate can result in a defect and is subject to a violation of Arapahoe County building codes.

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ABOUT ONECLICK CODE

OneClick Code is the trusted data partner for all stakeholders throughout the construction and restoration process, dedicated to increasing efficiency and transparency for all of our partners and customers. OneClick Code has over 7,000 users and generated over 50,000 code reports to date. The OneClick Code application is currently available on iOS, Android and via the Website.

With over a decade of experience in the roofing restoration industry, OneClick Code Founder and CEO Garrett Kurtt understands the time and resource challenges associated with finding the right roofing code information when you need it. OneClick Code was founded to provide a solution to that problem.

To find out more about how OneClick Code can help your organization,
please email code@oneclickcode.com or call +720.340.7644

