

HOUSING NEWSREPORT

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HOUSING PRECOGS: BIG DATA PREDICTIONS BEYOND HEURISTIC HUNCHES

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WILL AMAZON SAVE THE
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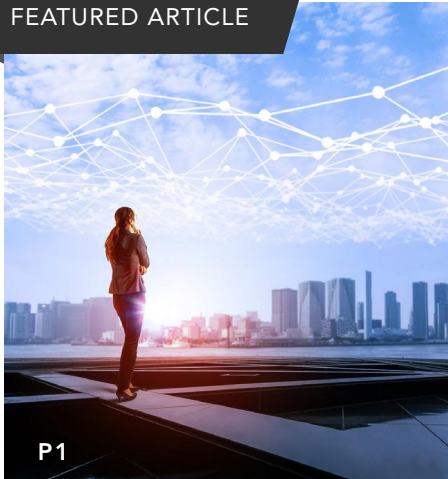
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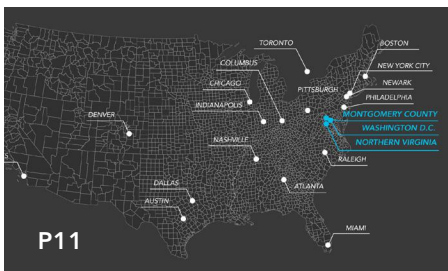


P1 HOUSING PRECOGS: BIG DATA PREDICTIONS BEYOND HEURISTIC HUNCHES

Real estate used to be a game of hunches. People bought and sold property because they had a sense of pricing, timing, and marketplace trends. Mortgages were made in large measure on the basis of past performance. Today hunches are out, big data is in, and the artificial intelligence revolution is taking the real estate world by storm with the promise of better leads and early access to future inventory.

P11 LOCAL MARKET SPOTLIGHT: WILL AMAZON SAVE THE SWAMP?

The nation's capital is eagerly awaiting the selection of a candidate that could dramatically shift its fortunes in 2019 and beyond. Many in the region are hoping that one of three candidates located in the District of Columbia and its surrounding counties will beat out 17 others from around the country to be selected as the new location for Amazon's second company headquarters known as HQ2.



P19 SPLITTING THE ATOM: WITH GREATER DATA ACCESS COMES GREATER DATA RESPONSIBILITY

There has never been greater access to public property record data, but with that unprecedented access comes a greater responsibility in handling that data, particularly for companies that are collecting, curating and licensing the data, argues Nelda Green, vice president of data governance with ATTOM Data Solutions.



P22 MY TAKE: ENCORE PERFORMANCE

America loves a good second act, and one of the least-noticed second acts in America today isn't about an individual — or even about people, at least not directly. It's about mortgage loans. And it's a pretty amazing story, writes Rick Sharga, executive vice president at Carrington Mortgage Holdings, LLC. Sharga explains how many loans that fell into trouble during the housing downturn were able to be saved and are now back performing again.

P26 BIG DATA SANDBOX: TOP 5 SMARTEST DAYS TO SELL YOUR HOME

Home sellers have enjoyed an extended sellers' market over the last seven years, selling at a 2.9 percent premium above estimated market value on average, according to an ATTOM Data Solutions analysis of 14.7 million home sales from 2011 to 2017. But some days are better for sellers than others as this infographic illustrates.



P27 DATA IN ACTION: THE BEST MONTH TO SELL A HOME BY MARKET

Home sellers have enjoyed an extended sellers' market over the last seven years, selling at a 2.9 percent premium above estimated market value on average, according to an ATTOM Data Solutions analysis of 14.7 million home sales from 2011 to 2017. But some days are better for sellers than others as this infographic illustrates.



LEAD ARTICLE

Housing Precogs: Big Data Predictions Beyond Heuristic Hunches

BY PETER MILLER, STAFF WRITER

Real estate used to be a game of hunches. People bought and sold property because they had a sense of pricing, timing, and marketplace trends. Mortgages were made in large measure on the basis of past performance.

Today heuristic hunches are out, big data is in, and the artificial intelligence revolution is taking the real estate world by storm with the promise of

better leads and early access to future inventory — translating into lower costs, less risk and bigger profits for the industry.

The move away from housing market hunches to sophisticated predictive real estate analytics based on big data principles is led by a growing group of housing precogs that are relative newcomers to the industry with strong ties to Silicon Valley and

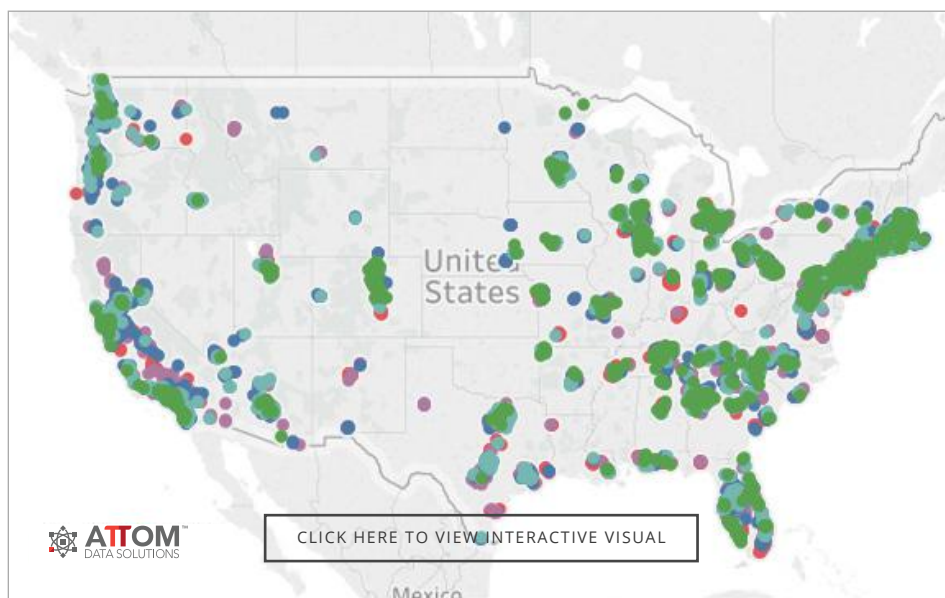
funded largely by venture capital. “We use predictive analytics and machine learning to analyze how likely a homeowner is to sell in the near future,” said Avi Gupta, President and CEO at [SmartZip Analytics](#). “These techniques look at historical data — who has sold in the past — to identify, from several thousand data attributes, which ones may have been a factor in triggering those sales. And then, they



2017 NEIGHBORHOOD HOUSING INDEX

NEIGHBORHOOD HOUSING INDEX GRADE

■ A
 ■ B
 ■ C
 ■ D
 ■ F



look for owners that exhibit similar triggers to predict who is more likely to sell in the future.”

Gupta added that “real estate is truly hyper-local, in that, the triggers that matter in a given neighborhood block can be different from the one next door, or even across the street. And these triggers can change from time to time even for the same neighborhood block. Hence, we have had to build hundreds of predictive models that look for various combinations of triggers to find the one that is the most accurate for each neighborhood across the country.”

Personal Data Dossiers

Back in 1971 — when many MLS brokers carried printed 3×5 cards to show inventory — the playwright Arthur Miller wrote that “too many information handlers seem to measure a man by the number of bits

“We use predictive analytics and machine learning to analyze how likely a homeowner is to sell in the near future. These techniques look at historical data — who has sold in the past — to identify, from several thousand data attributes, which ones may have been a factor in triggering those sales. And then, they look for owners that exhibit similar triggers to predict who is more likely to sell in the future. ... Real estate is truly hyper-local, in that, the triggers that matter in a given neighborhood block can be different from the one next door, or even across the street.”



AVI GUPTA

PRESIDENT & CEO, [SMARTZIP ANALYTICS](#)

of storage capacity his dossier will occupy.” Now such dossiers are far larger, vast electronic collections which detail our preferences in excruciating detail. Not just a tidbit here and there, but encyclopedic volumes of data ceaselessly gathered with clicks, links, cookies, [tracking pixels](#), surveys, cell phone locators, loyalty programs, credit card purchases, and other collection

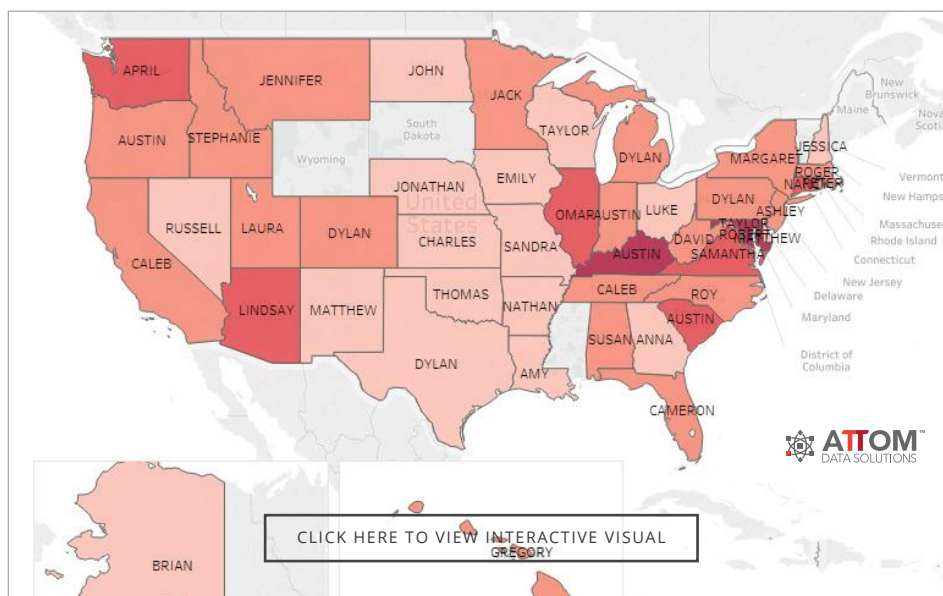
techniques.

Companies, governments, and data brokers are accumulating unheard of volumes of data. Forget about gigabytes, petabytes, and exabytes. We’ve hit zettabytes — a measure equal to one trillion gigabytes.

“By 2025 the global datasphere will grow to 163 zettabytes,” says [IDC](#).

HOTTEST HOMEBUYER NAMES IN 2017

YOY PCT CHANGE IN HOMES PURCHASED IN 2017

1%  184%

“Generally speaking the growth of data across every part of the economy and our personal lives has provided us predictive modelers the ability to better understand how various pieces of a person’s life affect their decision-making. Everything is now on the table, from our social activity to current headline news to the types of products we buy online.”



ALEX VILLACORTA

EVP AND CHIEF ECONOMIST, [HOUSECANARY](#)

“That’s ten times the 16.1ZB of data generated in 2016. All this data will unlock unique user experiences and a new world of business opportunities.”

While data by itself has some innate value, it becomes exponentially more valuable when sorted and analyzed with artificial intelligence.

“Generally speaking,” explains Alex Villacorta, EVP and chief economist

at [HouseCanary](#). “the growth of data across every part of the economy and our personal lives has provided us predictive modelers the ability to better understand how various pieces of a person’s life affect their decision-making. Everything is now on the table, from our social activity to current headline news to the types of products we buy online.”

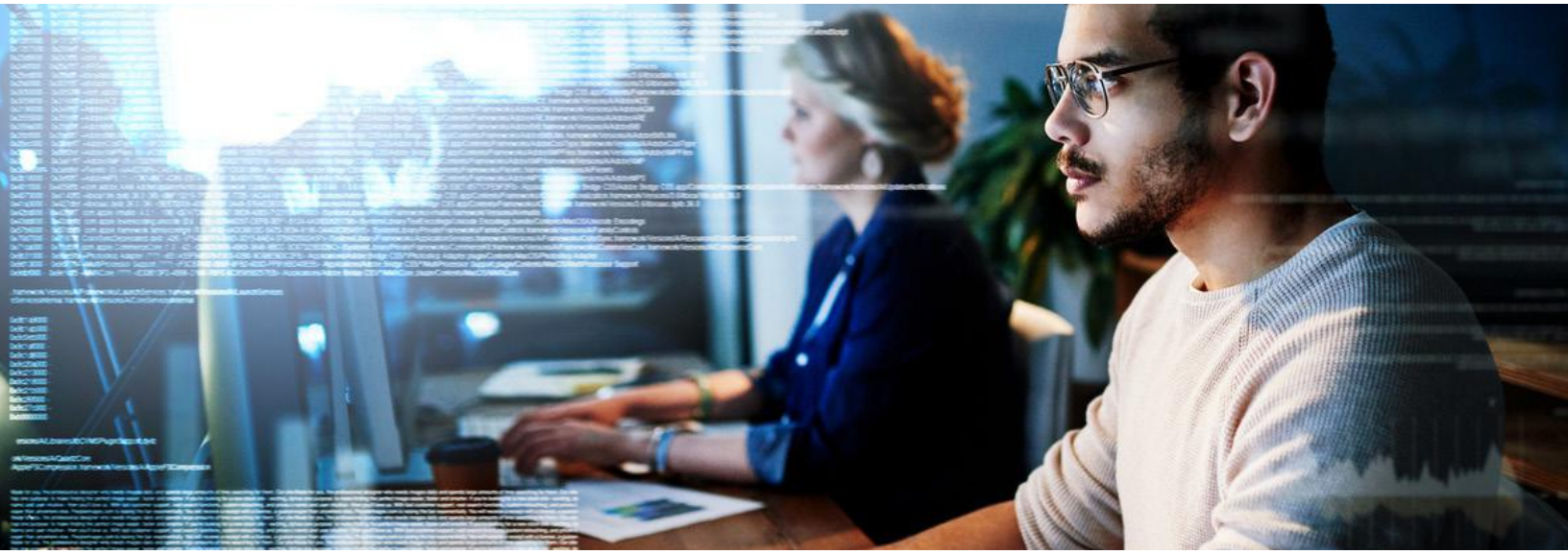
“For a growing number of industries,” says [McKinsey & Company](#), “AI is

tilting the playing field – you’ll need to understand how before your competitors do.”

Proper Care & Feeding of AI

Data is just part of the equation — and a relatively small part at that — when it comes to applying AI principles to predicting future real estate transactions, according to Brad McDaniel Co-Founder and CEO of [Likely.AI](#), a company that provides AI-driven leads to the real estate and mortgage industries.

“With the most advanced version of AI, called deep learning, which is what we use, only 10 percent of the final prediction decision is determined by the data itself,” he said. “That is because 90 percent of the predictive power comes from the extremely complicated interactions between the layers of neurons within the deep



“With the most advanced version of AI, called deep learning, which is what we use, only 10 percent of the final prediction decision is determined by the data itself. That is because 90 percent of the predictive power comes from the extremely complicated interactions between the layers of neurons within the deep neural networks that we have created. We now live in a time where data availability is everywhere, but what you do with it is where the magic happens.”



BRAD MCDANIEL
CO-FOUNDER & CEO, [LIKELY.AI](#)

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Still the data is the foundation of the predictive analytics, and if the data is flawed the predictions based on that data will be flawed, notes HouseCanary’s Alex Villacorta.

“When you have a lot of data and that data is ‘dirty,’ more data isn’t going to yield a better result,” he said. “You need to make sure that the data is

managed and refined in a way that serves your analysis.”

SmartZip’s Gupta pointed out that predictive analytics do not replace the important relationship-building aspect of the real estate business, but allow agents and brokers to better identify which relationships they should be building.

“Real estate remains a relationship business, especially for home sellers, who typically choose agents based on trusted relationships and referrals, not

just based on Internet research,” said SmartZip’s Avi Gupta. “So, agents need to personally get in front of owners and build rapport over a period of time — which is hard to do for more than 300 to 400 owners. If an agent prospects with 400 owners that live next to each other, their chances of getting a listing in the next 12 months are the same as the organic turnover of that neighborhood, which averages 5 percent in the U.S.

“Instead,” he continued, “predictive analytics affords us the opportunity to expand the aperture to about 2,000 homes, and then select the top 20 percent of homes with the highest likelihood to sell over the next year, i.e., the best 400 homes that are on average two to three times more likely to sell than average. This can double or triple the chances of winning listings.”

Predicting Inventory

While the bulk of all real estate inventory resides within local MLS systems, and while most properties

are listed on an exclusive right-to-sell basis, there is non-MLS inventory available for sale. Sales outside the brokerage system can be significant. NAR estimates that “8 percent of recent home sales were FSBO sales.” That’s not a big percentage but it does represent roughly 450,000 properties. Also, pocket listings are effectively outside the MLS system because they discourage, if not eliminate, cooperative sales.

“Real estate is also highly competitive industry, compounded by low inventories across most major markets,” said Avi Gupta with SmartZip Analytics. “Homeowners are inundated with marketing from tens of agents in their area — so, agents have to find ways to cut through the clutter and stand out, be pre-emptive, and relate to the homeowner’s personal situation and needs/desires. Data and analytics are no longer a nice to have, they are essential to focus on the best prospects when it matters most.”

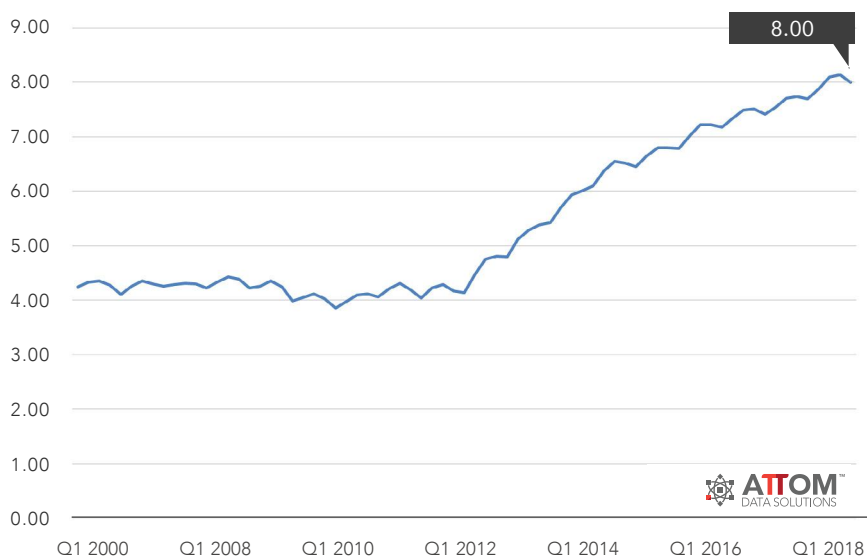
The lack of inventory is pushing up prices and reducing purchase opportunities in many areas. This may be one area where big data can be used to give homeowners a better understanding of the marketplace according to HouseCanary’s Alex Villacorta.

“Many existing homeowners have chosen to remain in their homes in a ‘wait and see’ approach,” Villacorta said. “Big data can play a big role in helping consumers understand their local market and make informed decisions about whether now is indeed a safe time to sell a home, refinance, or make home improvements. In this age of economic and political uncertainty, big data and the insights gleaned from it can help to give context to the headlines and provide assurance to homeowners and buyers that they are making a decision that aligns with their risk appetites.”

One such example is a recent analysis of 14.7 million home sales from 2011 to 2017 that reveals the [best month and day to sell a home](#) based on the average premium above estimated market value sellers get when selling on each month and day. While the results of the analysis at the national level support conventional wisdom of selling in the spring or summer — best month to sell is May and the best day to sell is June 28 — the best times to sell vary by local market influenced by weather, retiree migration and other factors. (See more details in this issue on Page 27.)

Likely.AI’s Brad McDaniel explains that “I don’t think big data will impact inventory shortages in the short term, but combined with AI prediction forecasting tools, it will be a huge help to developers moving forward when conducting feasibility studies to making final decisions about what product mix they should build, and where they

AVERAGE U.S. HOMEOWNERSHIP TENURE (YEARS)



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ALEX VILLACORTA
EVP AND CHIEF ECONOMIST, [HOUSECANARY](#)

will build. This will lead to optimal real estate options tailored to the specific future needs of each area.

“Also, the government on a county level could benefit from AI predictive tools. One example would be predicting future property tax revenues, based off which properties will sell. This will allow them to have more accurate tax revenue forecasts and budgets.”

AI Meets Mortgage Lenders

Mortgage lending — like real estate brokerage — is an enormous business. In 2017, according to the [Urban Institute](#), first lien originations totaled

\$1.8 trillion. That’s a huge number but it’s 14 percent less than the \$2.1 trillion originated in 2016. It also represents a major shift in lender profitability. The Mortgage Bankers Association (MBA) reported that in 2017 “independent mortgage banks and mortgage subsidiaries of chartered banks made an average profit of \$711 on each loan they originated in 2017, down from \$1,346 per loan in 2016.”

The reason for lower profits in 2017 is the combination of reduced volume and fixed costs. Production per company fell from 11,106 loans in 2016 to 8,882 originations in 2017 according

to the MBA. In the same period costs per loan rose from \$7,209 to \$8,082.

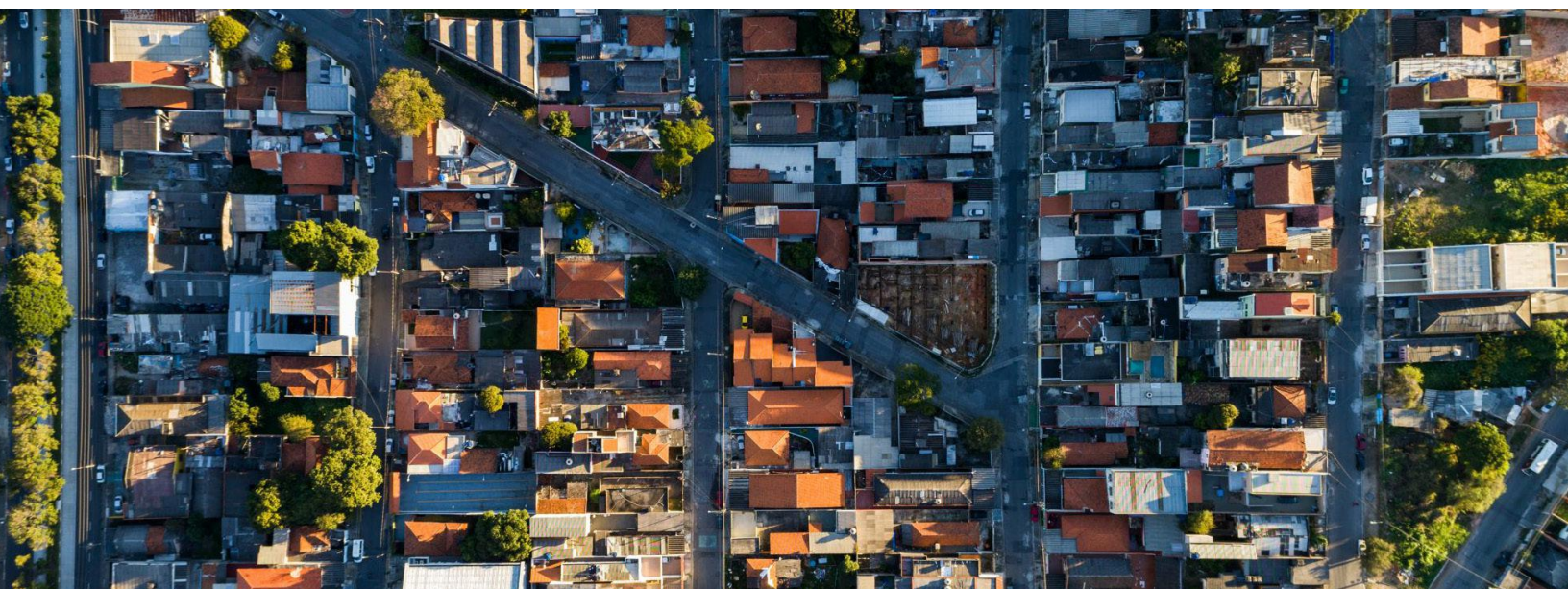
Millions of homes have been financed and refinanced at 4 percent and below during the past few years so why would owners refinance in 2018 when rates are higher? Refinancing represented 49 percent of the market in 2016, a figure which is expected to reach 27 percent this year and even less in 2019 according to the MBA.

Loan originations on residential properties decreased 19 percent in Q4 2017 led by a 34 percent drop in refinance originations, according to [ATTOM Data Solutions](#).

“I don’t think big data will impact inventory shortages in the short term, but combined with AI prediction forecasting tools, it will be a huge help to developers moving forward when conducting feasibility studies to making final decisions about what product mix they should build, and where they will build.”

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CO-FOUNDER & CEO, [LIKELY.AI](#)

While declining volume is a concern for lenders, an equally fundamental issue involves the product they sell. While all real estate is different — in theory it’s indestructible, unmovable, and always unique plus it reflects such psychological and social values as status and ego — that’s not the



case with mortgages. Nobody has a photo of their mortgage. A VA loan is a VA loan. Lenders can originate more of them tomorrow. What counts most for borrowers is low cost and convenience, the ease of application. Increasingly, what counts most for lenders are digital platforms, the use of artificial intelligence, and an ability to overcome clutter, to be the first and only lender with whom borrowers interact.

Lower costs for borrowers

Borrowers want both convenience and lower rates. The coming competition will not be for the fastest loan application but the one which produces the lowest cost, the app that allows borrowers to pick from competing mortgage offers.

"For a typical \$250,000 loan," says [Freddie Mac](#), "the average expected savings from only one additional quote is \$1,435."

It adds that "80 percent of borrowers who obtain one additional rate offer will save between \$966 and \$2,086. The average expected benefit increases to \$2,914 if the borrower receives five rate quotes. Eighty percent of borrowers who obtain five offers will save between \$2,089 and \$3,904."

You can see the disruption opportunity. Well-funded fintech firms will spend \$1 million a week promoting platforms where borrowers save and lenders compete.

Lower costs for lenders

Given origination costs of better than \$8,000 per loan lenders have every



reason to use AI not only to generate more business but also to reduce production expenses. A major target will no doubt be personnel expenses, which according to the MBA averaged \$5,346 per loan in 2017.

Speech recognition software will play an important part in the cost-cutting process. Once clunky and mechanical, such systems have improved greatly in recent years. In India it's estimated that the human-like Google Assistant program has received 450,000 marriage proposals.

For loan officers virtual speech programs and other automated services represent both promise and peril. The promise is that a single loan officer can be more productive because the application process is increasingly automated. The peril is that there are only so many loan

applications to be written. If some loan officers — or fintech systems — are more productive it means large numbers of the nation's 306,000 loan officers are not. Instead, they now represent an expense of almost \$19.5 billion a year (306,000 loan officers x an average salary of \$63,650 according to the Bureau of Labor Statistics). The idea that there will be so many loan officers in five or 10 years is improbable. Ditto for large numbers of mortgage underwriters.

"I don't think targeting marketing using predictive AI will lower a marketer's expense," said Brad McDaniel with Likely.ai. "It will rather have a huge impact on their return on investment. Think about the difference between bombing that occurred in World War II and that happens today. Do you think today

“Artificial intelligence, big data and machine learning are helping us reduce risk and fraud, upgrade service, improve underwriting and enhance marketing across the firm. And this is just the beginning.”



JAMIE DIMON

JP MORGAN CHASE
CHAIRMAN AND CEO IN HIS
2018 SHAREHOLDER LETTER

bombing done from planes in conflict is less costly? No, it is probably more costly, but 1,000 times more effective. I believe the same applies to targeted marketing, rather than spending a little on a lot of people, spend more on the right people. This concept applies to both direct marketing and digital marketing, even though it is somewhat counter intuitive for digital marketers who usually focus on reach rather than depth. As the saying goes ‘you can’t bet too much on the winning horse!’”

Democratizing Disruption

Data-based marketing is now like pollen, it’s everywhere and to make such systems work we have vast and growing armies of technologists.

“Artificial intelligence, big data and machine learning are helping us reduce risk and fraud, upgrade service, improve underwriting and enhance marketing across the firm,” JP Morgan Chase Chairman and CEO [Jamie Dimon](#) explained in his 2018 shareholder letter. “And this is just the beginning.”

BIG DATA DEFINITIONS: DISTINCTIONS WITH A DIFFERENCE

Artificial Intelligence: A term coined in 1955 by computer scientist John McCarthy, “artificial intelligence” can be described as the ability of computer systems to complete tasks historically done by people. Think of speech recognition as well as practical applications such as stock trading, the ability to read x-ray images, or fit eyeglasses.

Data: An old business theorem says “that which can be measured can be managed.” The result of such efforts include measuring, counting, mapping, and numbering. Data may have value by itself (think of the score from one football game) but data becomes powerful when individual items can be processed together to reveal trends, directions, totals, averages, etc.

Deep Learning: “Deep learning,” explains [Mathworks](#), “is a machine learning technique that teaches computers to do what comes naturally to humans: learn by example. Deep learning is a key technology behind driverless cars, enabling them to recognize a stop sign, or to distinguish a pedestrian from a lamppost. It is the key to voice control in consumer devices like phones, tablets, TVs, and hands-free speakers.”

Big Data: One football game by itself has meaning, it’s data. The games played over an entire season represent more data. The results from thousands of games played since 1960 are big data – but only after they have been arranged, examined, compared, poked, and messaged.

Machine Learning: Machine learning can best be compared with the Borg, aliens from the Star Trek franchise who assimilate other cultures. As they explain, “we are the Borg. Your biological and technological distinctiveness will be added to our own.” In a similar sense, machine learning takes what it has learned today and adds that data to what it has accumulated before to create a new data set and what might be called bigger data.

Predictive Modeling: The use of existing data to forecast future trends.

In banking, as one example, McKinsey & Company reports that “AI’s ability to detect anomalies among millions of transactions helps bank risk officers eliminate false positives that are a drain on productivity.”

At first it might seem as though big data is reserved for big players.

JP Morgan has almost 50,000 technologists so where’s the opportunity for small firms?

The answer is that not only is our technological base growing it’s also being democratized. Fintech — financial technology — is everywhere

and you need not be a financial colossus to succeed. Far from Silicon Valley the Millennium Bank of Ooltewah, Tennessee, saw profits grow by 120 percent between 2014 and 2017 through the use of data-based decision-making.

How did this happen?

“The bank can now answer small loan requests in seconds,” reports [American Banker](#). “This speed in decision-making means Millennium’s lenders are spending less time to complete smaller, uncomplicated deals while freeing them up to work on the more complex loan requests.”

“Small firms may find it challenging to build their own data and analytics teams in-house, but there are now a preponderance of analytics- and data- as a service companies that offer turnkey solutions for just about every application,” explains Alex Villacorta with HouseCanary. “In many instances, these services can be paired with pre-curated data sets that allow small firms to marry their own data with large data sets that would have been prohibitively expensive to acquire from their original sources.”

Nimble fintech lenders can utilize AI efficiencies while at the same time avoiding many of the costs faced by traditional lenders — mammoth personnel armies, huge branch systems, ATMs, legacy expenses from past years, etc. Moreover, there’s no reason why massive and well-known online players cannot enter the lending industry. Anyone for a Google mortgage or an Amazon HELOC? •

BEWARE OF THE TECHLASH

It might seem as though fintech players with their computers and math are the wave of the future but not so fast. To make AI work you need data and right now there’s a growing sense that maybe companies know too much. As a result the fintech revolution may be slowed but not stymied by a growing techlash, hurdles which won’t be so easy to overcome.

Data value

“Technology innovation in the real estate industry is robust,” said NAR General Counsel Katie Johnson in April.

“The notion that real estate isn’t highly competitive and listing data not readily available is unsubstantiated,” she argued. “To the contrary, a wealth of listing data is available to consumers and technology companies from a multitude of sources, and Realtors provide their clients and consumers with more real estate information today than has ever been available.”

But maybe listing data is “too” widely available, so available that it devalues broker services and worth.

“If information sharing allows consumers to avoid payments to real estate agents for listings they contributed to the MLS or for brokerage services provided, then broker incentives to cooperate and share information are diminished,” says Fredrick Flyer, who has served as an economic expert for Fortune 500 companies as well as the U.S. Federal Trade Commission, Department of Justice, and the Department of Energy.

“Conversely,” he adds, “setting limits on access to brokers’ data by third-party aggregators can enhance broker competition and in turn make consumers better off.”

Translation: listing data has value — and brokers have long felt they should capture more of it. If brokers gain more revenue from their data it also means data users will face higher costs.

Privacy

There is a growing debate regarding what’s private and what isn’t. There is no right to privacy listed in our Founding Documents, instead the concept was outlined in an [1890 article](#) from the Harvard Review by Samuel Warren and Louis Brandeis arguing that “the common law secures to each individual the right of determining, ordinarily, to what extent his thoughts, sentiments, and emotions shall be communicated to others.” Later, in 1928, in a Supreme Court decision, Brandeis famously defined privacy in the Olmstead case as “the right to be let alone – the most comprehensive of rights and the right most valued by civilized men.”

Given Victorian notions of privacy many were outraged when Scott McNealy, then CEO of Sun Microsystems, said in 1999 that “you have zero privacy anyway. Get over it.”

Not everyone agrees.

“Users should be in control of how their data is used,” wrote [Bill Gates](#) in 2002. “Policies for information use should be clear to the user.”

BEWARE OF THE TECHLASH

Users should be in control of when and if they receive information to make best use of their time. It should be easy for users to specify appropriate use of their information including controlling the use of email they send."

"We've never believed that these detailed profiles of people — that has incredibly deep personal information that is patched together from several sources — should exist," said Apple CEO Tim Cook, speaking on [MSNBC](#). He added that "privacy to us is a human right."

Today privacy is making a comeback – in Europe. The General Data Protection Regulation (GDPR) is scheduled to go into effect across the EU in late May and it may impact the privacy debate here.

"Users will have greater control, including the ability to learn what information companies have on them," reports [The Hill](#). "The GDPR will also codify what's known as 'the right to be forgotten,' meaning consumers will be able to order web services to delete their data or stop distributing it to third parties. The rules will also require companies to give users the ability to easily revoke consent for handing over personal information."

The GDPR shows that a practical privacy standard is possible, a concept which may gain traction in the U.S. if the public tires of intrusive data collection efforts.

Regulation

In the same way that credit reports are no longer accorded the status of state secrets, data controls may soon become far more accessible to consumers. The Facebook Russia debacle, the Equifax credit breach involving almost 148 million accounts, the loss of as many as 1 billion Yahoo user database files, and the collection of data from children all suggest that regulation — what is allowed and what isn't — is an emerging issue. Even Facebook founder [Mark Zuckerberg](#) has stated in congressional testimony that it's "inevitable that there will need to be some regulation."

But, right now, that's not the case.

"No federal law spells out what companies trading in personal information can do with user data," says Axios. "No federal agency has clear jurisdiction over writing rules for Internet companies. And public concern about personal data falling into the wrong hands has only recently swelled."

"U.S. adults," says the Pew Research Center, "are roughly twice as likely to express worry (72 percent) as enthusiasm (33 percent) about a future in which robots and computers are capable of doing many jobs that are currently done by humans."

If data regulation is inevitable, if it can get past First Amendment arguments, then it's likely that new rules will make data collection more transparent. Some collection efforts will be restricted or prohibited. Consumers could have a bill of rights which allows them to see and correct data (think of credit reports). Maybe a "do not data" list will evolve.

One thing is certain: with more regulation the cost of data will increase. At the same time we may see a shift from today's standard. Now you can opt out but only if you can find who's collecting data in the first place. In the future there may be a requirement that consumers must opt in before data can be collected.

Errors

As much as artificial intelligence and predictive modeling get things right such systems can produce unwanted results. As an example, a [CNN investigation](#) found that "ads from over 300 companies and organizations — including tech giants, major retailers, newspapers and government agencies — ran on YouTube channels promoting white nationalists, Nazis, pedophilia, conspiracy theories and North Korean propaganda."

Security

The Internet and computers have more security holes than electronic Swiss cheese. Viruses, malware, worms, Trojan horses and hackers are lurking everywhere, sometimes in the employment of foreign governments.

"More than 317 million new pieces of malware — computer viruses or other malicious software — were created last year," reported CNN in 2015. "That means nearly one million new threats were released each day."

Juniper Research [predicts](#) that 5 billion personal data records will be stolen in 2020, up from 2.8 billion last year. •



SPOTLIGHT: DISTRICT OF COLUMBIA

Will Amazon Save the Swamp?

BY JOEL CONE, STAFF WRITER

The nation's capital is eagerly awaiting the selection of a candidate that could dramatically shift its fortunes in 2019 and beyond.

Many in the region are hoping that one of three candidates located in the District of Columbia and its surrounding counties will beat out 17 others from around the country to be selected as the new location for Amazon's second company headquarters known as HQ2.

"We have the kind of talent in the categories they are looking for. It would be good for this economy. It

would diversify it and it would attract other businesses," said economist [Stephen Fuller](#), director of the Stephen S. Fuller Institute for Research on the Washington Region's Economic Future, Schar School of Policy and Government at George Mason University.

The three potential candidates in the metro area are Montgomery County, Maryland; Washington D.C. itself; and Northern Virginia.

Over the past few years Jeff Bezos, founder and CEO of Amazon, has laid the groundwork for selecting the

company's new headquarters, with [Amazon's final top 20 candidates announced in January](#).

Now considered [the world's richest billionaire](#) according to the Forbes 2018 list, Bezos has already established a presence in the D.C. metro area. First he [bought the Washington Post](#) back in 2013 for \$250 million.

He followed that with paying a reported \$23 million to purchase the former Textile Museum in 2016, for the purposes of converting into a

residence. Located in the Kalorama neighborhood, and made up of two homes on the National Register of Historic Places totaling a combined 27,000 square feet, when [renovated](#) it will be [the largest home in the nation's capital](#).

Best for Housing

Not all Amazon employees have a multi-million dollar budget for buying a home, so *Housing News Report* looked at median home prices and six other factors affecting housing and quality of life in each of the three D.C.-area markets to determine which might be most appealing for prospective homebuyers and homeowners.

Among the three HQ2 candidates in the region, Northern Virginia — comprised of 15 counties and cities in the D.C. metropolitan statistical area — had the lowest median home price at \$390,000 followed by Montgomery County, Maryland at \$400,000 and the

District itself at \$520,000, according to ATTOM Data Solutions.

But homes were more affordable in Montgomery County thanks to higher wages there, according to an ATTOM Data Solutions analysis of price-to-income ratios.

Based on all seven factors considered in the housing and quality-of-life analysis — home prices, appreciation, affordability, school scores, crime rates, property taxes and environmental hazards — Montgomery County ranked

highest among the three in the D.C. metro area but was still ninth when compared to all 20 Amazon HQ2 cities, with Raleigh, North Carolina, Atlanta, Georgia, Pittsburgh, Pennsylvania, Nashville, Tennessee, and Austin, Texas ranking as the top five.

If any of the three local venues are chosen to house the new HQ2, it could be a game changer to that area's economy and housing market, bringing as many as 50,000 jobs and increased demand for more housing.

CONTINUED ON NEXT PAGE ▶

“We have the kind of talent in the categories (Amazon is) looking for. It would be good for this economy. It would diversify it and it would attract other businesses.”



STEPHEN FULLER
DIRECTOR, [STEPHEN S. FULLER INSTITUTE FOR RESEARCH](#),
GEORGE MASON UNIVERSITY.

AMAZON HQ2 FINAL 20 CITIES REAL ESTATE MARKET RANKINGS

City	State	Q4 2017 Median Home Price	5-Year Home Price Appreciation	Price to Income Ratio (Affordability)	Avg School Score	Crime Rate to Natl Avg
Raleigh	North Carolina	\$235,000	26%	3.69	1.13	96
Atlanta	Georgia	\$220,000	69%	3.68	0.99	303
Pittsburgh	Pennsylvania	\$150,000	36%	2.55	1.06	215
Nashville	Tennessee	\$275,000	67%	5.16	0.87	126
Austin	Texas	\$361,000	114%	4.93	1.06	98
Denver	Colorado	\$346,500	73%	5.86	0.92	179
Los Angeles	California	\$776,000	88%	14.51	0.85	143
Columbus	Ohio	\$138,000	52%	2.89	0.85	190
Montgomery County	Maryland	\$400,000	8%	3.59	1.17	34
Indianapolis	Indiana	\$130,000	16%	2.60	0.81	287
Dallas	Texas	\$284,619	246%	5.21	0.93	194
Washington	District of Columbia	\$520,000	21%	6.47	1.17	316
North Virginia	Virginia	\$395,000	8.9%	88.5%	1.04	53

CLICK HERE TO SEE THE ENTIRE TABLE



“If (Amazon choosing any of the three D.C.-area markets) happens my job security just got a lot better. We work in every submarket in D.C. and at every price point. It’s a good end result for whatever municipality gets HQ2. The question is how quickly will they see the benefits for the broader market.”



CLINT MANN
PRESIDENT, [URBAN PACE](#)
A REAL ESTATE SERVICES FIRM FOR BUILDERS AND DEVELOPERS

For Clint Mann, president at Urban Pace, a company that provides sales, marketing, leasing and advisory services for builders and developers, the choice of any of the three D.C. venues would be good news.

“If that happens my job security just got a lot better,” said Mann. “We work in every submarket in D.C. and at every price point. It’s a good end result for whatever municipality gets HQ2. The question is how quickly will they see the benefits for the broader market.”

Swamp Drain Diluting Jobs

Although still strong, the broader economy in the D.C. region has been showing some signs of weakness, according to Fuller.

“All the job growth has been in the non-federal sector,” he said. “The job base is diluting in terms of salary. We’re adding more lower-paying jobs and losing higher-paying jobs.” Fuller noted that the D.C. area has the highest share of Ph.Ds. as a percentage of the workforce in the country, but added that outmigration of those Ph.Ds. and others is a problem. While fairly

large numbers of people are moving to the metro area, they tend to move out when they see that the economy is doing better elsewhere. And those outmigration numbers have recently outpaced the in-migration numbers, resulting in a net loss of population, according to Fuller.

In the March issue of the his “[Washington Economy Watch](#)” Fuller noted that the region’s economy is growing in a positive direction. Still there is concern since the federal government had 6,600 fewer jobs between Trump’s inauguration in January 2017 and January 2018.

“These jobs area important because they leverage home buying, buying a nicer car and clothes,” Fuller explained. “The average household income here is \$55,000.”

Although unemployment in the District has [steadily declined](#) in the first three months of 2018 to 5.6 percent in March, job growth in January 2018



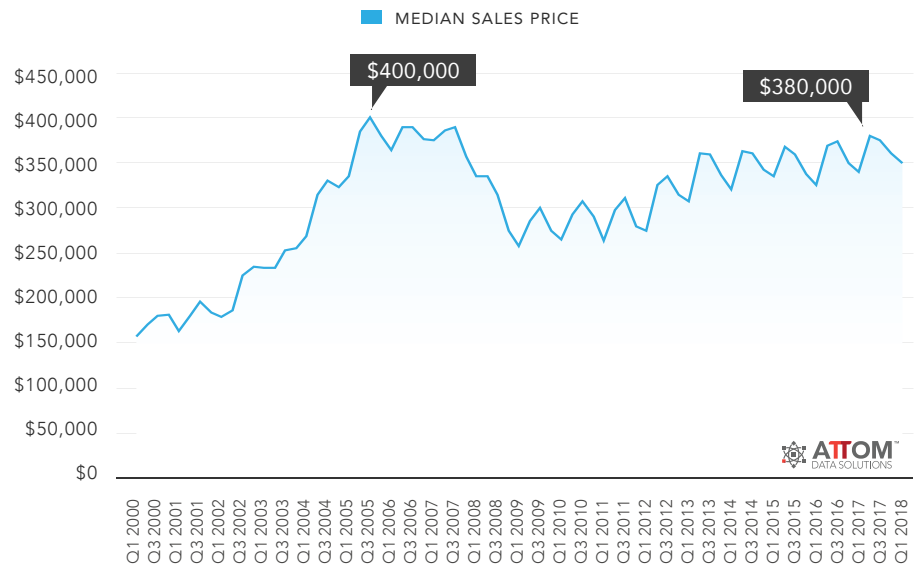
was primarily due to the dominance of the area's three private sectors: professional and business services, education and health services, and leisure and hospitality services. It's a job mix that favors lower value-added jobs, Fuller said.

Housing Stretched Thin

Like nearly everywhere else in the country, housing inventory is stretched thin while home prices continue to rise in the Washington, D.C. market. For March, the Greater Capital Area Association of Realtors reported a 1.6-month supply of inventory and a 9 percent decrease in the total number of homes for sale from a year ago. The median days on market was 13 days or less, four days quicker than a year ago.

Median home prices in the metro area hit a new post-recession peak of \$380,000 in Q2 2017 — although still 5 percent below the pre-recession peak of \$400,000 in Q3 2005 according to [ATTOM Data](#)

D.C. METRO HOME SALES PRICE TRENDS



“If the property is priced right and in a desirable area, it is not uncommon to have multiple offers. It’s overwhelming for a lot of buyers.”



KENT FOWLER

SALES ASSOCIATE, LOGAN CIRCLE OFFICE OF [COMPASS](#)

[Solutions](#), and median home prices increased 2.9 percent from a year ago in Q1 2018 — the eighth consecutive quarter with a year-over-year increase.

The Northern Virginia Association of Realtors reported that days on market are down more than 19 percent to 42 days and the inventory level is down to a 1.64-month supply, an almost 21 percent decline from the year before.

Low inventory translates into bidding wars on the best properties, despite the escalating prices, according to [Kent Fowler](#), sales associate with the Logan Circle office of Compass in

Washington, D.C., covering the District, Northern Virginia and Montgomery County, Maryland.

“If the property is priced right and in a desirable area, it is not uncommon to have multiple offers,” he said. “It’s overwhelming for a lot of buyers. I think D.C. has become a more desirable place to live in the past 12 to 15 years, but it’s also more expensive to live. We’re seeing people moving here who wouldn’t have considered it 15 years ago.”

Off-Market Condo Conversions

Fowler said he is seeing a lot of

investors coming into the D.C. area, trying to buy off-market properties.

"My experience is that most of them are looking for single family or what we call fee simple. They're buying at the right price that works for them," he said. "What they're trying to do is find it and have more control over it to renovate it."

He sees investors looking to turn row homes into condo conversions, and depending on the size of the row home, Fowler said an investor may be

able to get as many as two or three condos out of it.

Fowler said one of the main concerns for end buyers in any transaction is whether the appraisal will come in at the sales price. Most of the time it does. Also, he is seeing a fair amount of all-cash transactions, although the majority of properties are still sold with financing.

Banking on Baltimore

A longtime investor, property manager and consultant, [Tammy Phelps](#) is

directly involved in the gentrification of the D.C. metro area. Focused on multi-unit commercial properties including mobile home communities, assisted living and self-storage, she spends a lot of time revitalizing properties.

"We're taking distressed assets and re-positioning them," Phelps said.

As executive director and founder of the [Capital Cities Real Estate Investment Association](#), Phelps said her group's members are playing an active role in improving neighborhoods, particularly in Baltimore, a very strong market for revitalization because of Johns Hopkins University and the University of Maryland.

Phelps also noted that Baltimore City ranked first in rental yields during the first quarter of 2018 at 28.6 percent, according to the [ATTOM Data Solutions Q1 2018 Single Family Rental Report](#).

"There's a lot of flipping going on there. Baltimore is still affordable for first-time homebuyers, but is only 30 minutes from D.C. It still has some rough blighted areas but investors are revitalizing them."



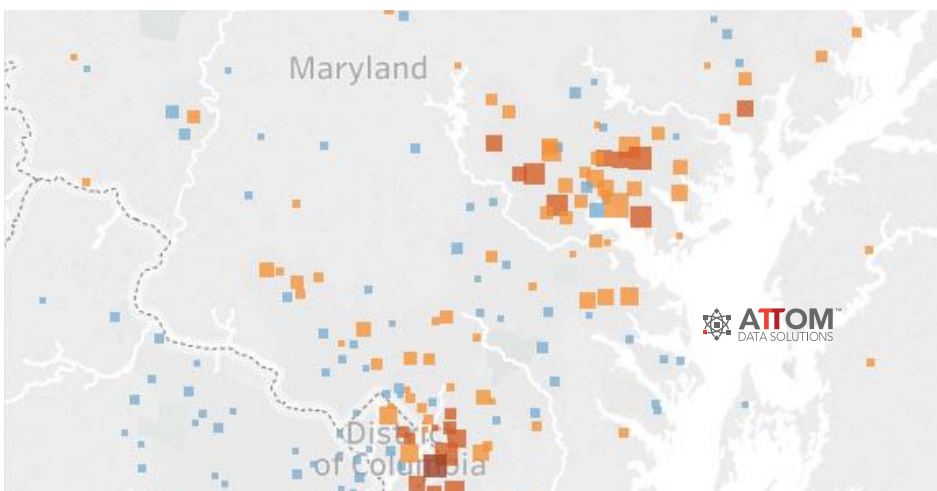
TAMMY PHELPS

FOUNDER, [CAPITAL CITIES REAL ESTATE INVESTMENT ASSOCIATION](#)

2017 HOME FLIPS BY ZIP HEAT MAP

HOME FLIPPING RATE (PCT OF TOTAL SALES)

-2.5% 31.5%



[CLICK HERE TO VIEW INTERACTIVE VISUAL](#)

"There's a lot of flipping going on there. Baltimore is still affordable for first-time homebuyers, but is only 30 minutes from D.C.," she said. "It still has some rough blighted areas but investors are revitalizing them."

There are other neighborhoods in the metro area such as [Deanwood](#) (the northeastern corner of the District) that were once considered to be ghettos but are now seeing a lot of rebuilding, she said.

ATTOM reported that the 21239 zip code in Baltimore City was one of the 50 top zip codes for home flipping rate in 2017, with flips accounting for 19.4 percent of all home sales during the

year, although down 11.4 percent from 2016. With a median purchase price of \$70,218 in 2017 and a flipped price of \$165,000, investors earned a 135 percent gross return on investment per flip. The average days to flip there were 218 days in 2017.

"Baltimore was one of only a dozen counties in the country in which a buyer would need less than 15 percent of their income in order to purchase a home using conventional financing," Phelps noted in a recent presentation.

Two zip codes in the District also made the top 50 markets for home flipping rate in 2017. The 20032 zip was highest in the metro area with flips accounting for 26.5 percent of the homes sold during the year, while in the 20019 zip, flips were 25.7 percent of the homes sold. Investors in the 20032 zip realized a 112.4 percent ROI in 2017 while those in the 20019 zip realized a 108.7 percent ROI.

Prince George's County, Maryland had three zips in the top 50 for home flipping rate in 2017. Those were the 20710 zip where flips accounted for 21.0 percent of all home sales, the 20748 zip where flips accounted for 20.3 percent of all home sales, and the 20746 zip where flips accounted for 20.1 percent of all home sales.

Construction's Slow Comeback

Cranes dot the skyline of the nation's capital these days, but economist Fuller said construction is not back to where it once was.

"Our building permits are not anywhere near where they were before the recession," he noted. "It

may have even slowed down a bit in the past year. We're a little overbuilt in rentals. Vacancy rates have gone to 5 percent from 3.5 percent. It's different by submarket."

Still, area homebuilders remain confident in the market's potential, according to Mann.

"Builder confidence is strong in that we are still a very undersupplied market. The bigger challenge in D.C. is construction costs. And land costs have

gone up, making it more difficult to get projects off the ground," he said.

Plus, although there is demand for new housing, it is for a smaller portion of the market. Due to lack of land, building in the District is constrained, affecting affordability.

Uber-Fueled Construction

There is development happening further out, and thanks to Uber, Lyft and other ride sharing platforms, Mann

"It's a challenge and an opportunity for us if we're willing to build in the fringe neighborhoods and offer everything buyers are looking for. Then we're able to attract buyers from all across the city. Affordability is still driving many of these decisions."

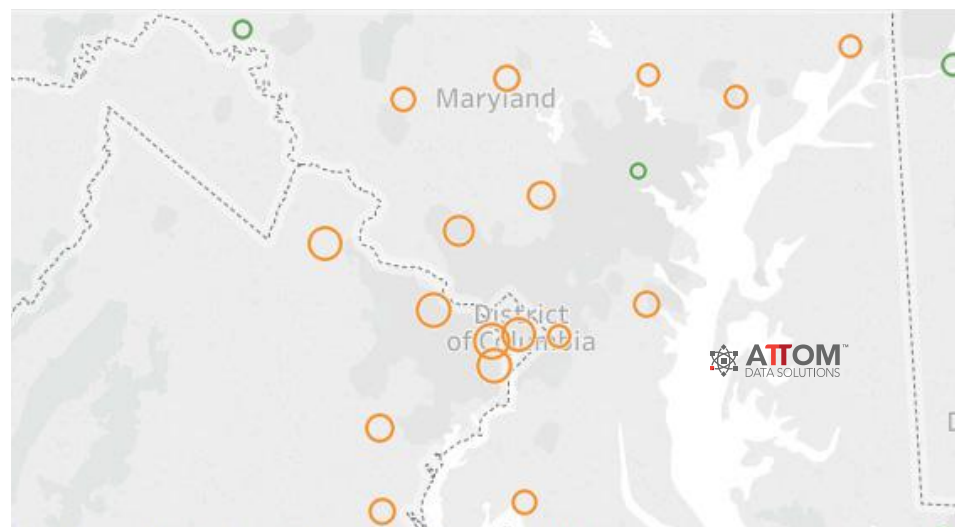
CLINT MANN

PRESIDENT, **URBAN PACE**, A REAL ESTATE SERVICES FIRM FOR BUILDERS AND DEVELOPERS

WHERE HOME PRICES ARE AFFORDABLE (OR NOT) FOR AVERAGE WAGE EARNERS

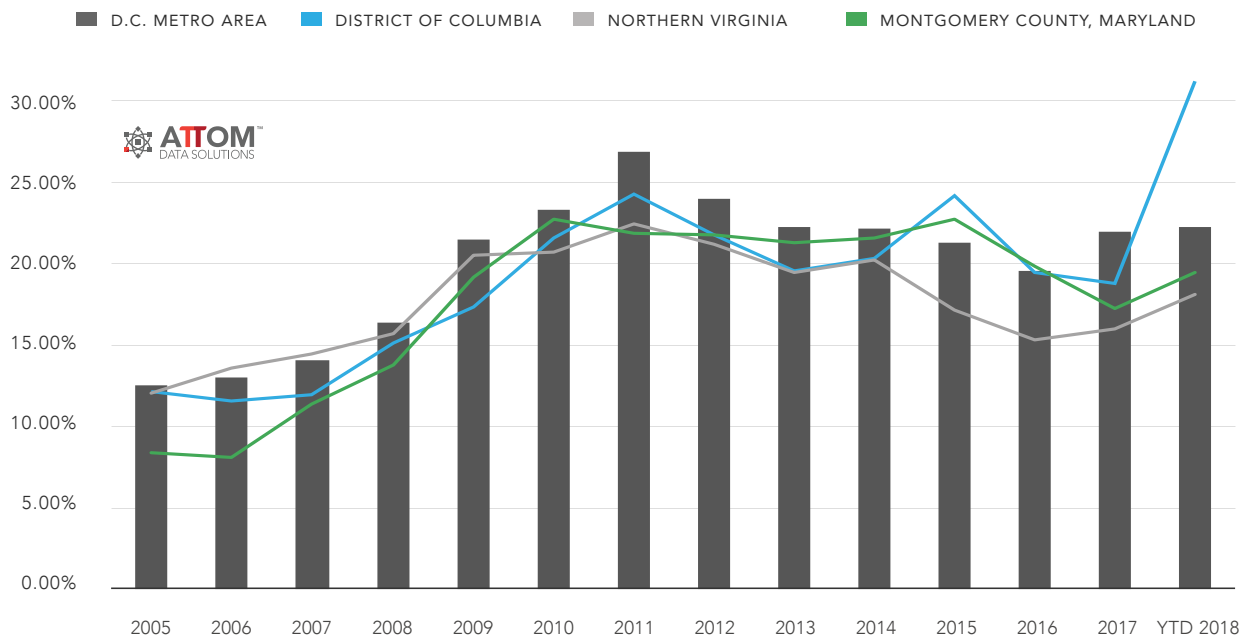
MEDIAN HOME PRICE AFFORDABLE FOR AVERAGE WAGE EARNERS?

NO YES



[CLICK HERE TO VIEW INTERACTIVE VISUAL](#)

WASHINGTON-AREA CASH SALES SHARE



said consumers are now willing to go to other areas further from the capital.

"It's a challenge and an opportunity for us if we're willing to build in the fringe neighborhoods and offer everything buyers are looking for," he said. "Then we're able to attract buyers from all across the city. Affordability is still driving many of these decisions."

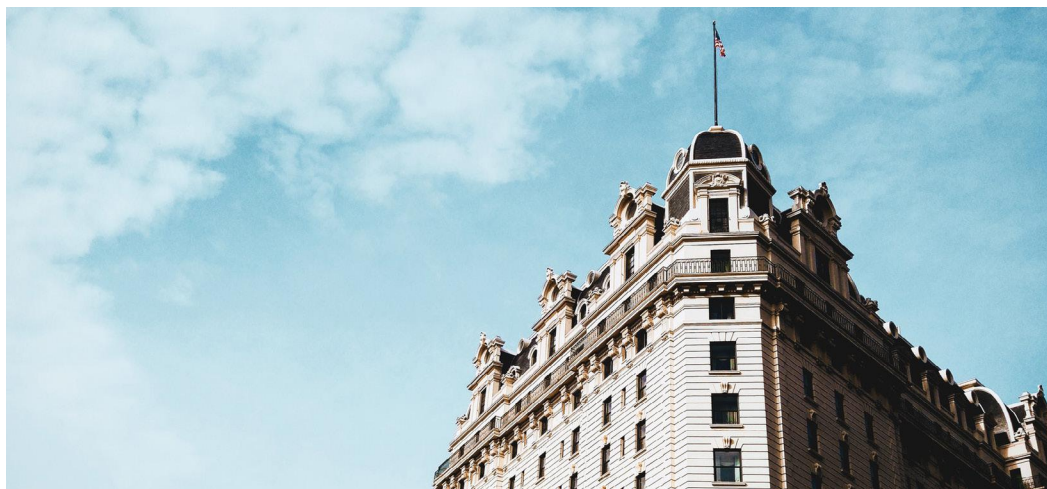
Additionally, there is new residential construction going up around the metro stations, particularly the new silver line that will service Dulles International Airport. High rise residential development is planned for [Tysons Corner](#) in Fairfax County, Virginia, and there is plenty of residential already built and being built around the Reston town center in Reston, Virginia.

In order to draw millennials and young professionals away from the District,

"Washington has a housing market where the demand for housing is harder to measure because so much of the population is transient. As for the homebuying market, the more expensive homes in the \$800,000 plus category, a significant portion is purchased with foreign money. We have a lot more than most markets because we have 180 foreign consulates here."

STEPHEN FULLER

DIRECTOR, [STEPHEN S. FULLER INSTITUTE FOR RESEARCH](#), GEORGE MASON UNIVERSITY.





builders need to offer the same amenities in their new housing that they have in the city, according to Mann.

“Builders have to build further out because of available land, and people are not willing to commute two hours each way. You have to drive 40 miles to find developable land that is relatively cheap,” said Fuller. “The concentration of jobs is still around the beltway and inside the beltway. High-paying jobs are concentrated inside the beltway and along the major corridors.”

Converting Churches to Condos

With available land too far for many to build, and rising construction costs, material costs and more expensive entitlements, builders are either tearing down old buildings and putting up new ones, or converting older buildings, according to Mann.

“We do everything,” he said. “Adaptive reuse, conversions. Last year we converted two churches to condos. We’ve also done school houses and office buildings.”

Currently Urban Pace has three projects in the NoMa district (an area north of Massachusetts Avenue) with modern developments replacing old industrial lots. One project is completed while the other two are set to start construction at year’s end.

Overall, Fuller believes the Washington D.C. economy is in reasonably good shape — substantially better than last year with an expectation that 2019 will be even better.

“Washington has a housing market where the demand for housing is harder to measure because so much of the population is transient. As for the homebuying market, the more expensive homes in the \$800,000 plus category, a significant portion is purchased with foreign money. We have a lot more than most markets because we have 180 foreign consulates here,” he said.

Overall, Fuller said that uncertainty is not good for either the area economy or its real estate market, and there is sense of uncertainty

Doing Business Beyond the Amazon Distraction

While the whole Amazon conundrum has been a distraction for DC and the rest of the cities vying for HQ2, other major companies have already chosen to make the move to the metro area.

Hilton Hotels Corporation moved from Beverly Hills, California, to McLean, Virginia, opening its new worldwide headquarters there in 2009. In early 2017 Nestle USA relocated its corporate headquarters from Glendale, California, to Rosslyn, Virginia. Just recently Gerber, a subsidiary of Nestle, moved its headquarters from Florham Park, New Jersey to the District, joining its parent corporation in the same building in Rosslyn.

The DC metro area is also home to a number of Fortune 500 public companies including Fannie Mae, Freddie Mac, General Dynamics Corp., Lockheed Martin Corp., Capital One Financial, Danaher, Marriott International, Host Hotels & Resorts and Hilton Worldwide Holdings.

right now associated with the Trump administration and the budget decisions it is making. •



SPLITTING THE ATOM

With Greater Data Access Comes Greater Data Responsibility



BY NELDA GREEN

VICE PRESIDENT OF DATA GOVERNANCE, ATTOM DATA SOLUTIONS

There has never been greater access to public record property data.

More widely accessible public record property data advances two worthy objectives — increased transparency in the real estate market and a strengthened legal property system, which famed economist Hernando de Soto argued in [The Mystery of Capital](#) is the key to capitalism succeeding in Western countries and failing elsewhere.

The increasing access to public record property data is clear to me in the context of my 25 years operating in various roles and various companies involved in the world of real estate information. In my current role as director of data governance at [ATTOM Data Solutions](#), I come face-to-face with this reality on a regular basis.

Competition-Bred Innovation

The first trend driving wider access

to public record real estate data is increased competition in the marketplace from companies like ATTOM, a relative newcomer to the space that is willing to think outside of the box when it comes to how it collects, curates and delivers the data.

For example, instead of depending on just one source for the tax, deed, mortgage, foreclosure and

“Greater access to public record property data is all very exciting for the industry and our clients, but with that greater access comes greater responsibility ... As the data becomes more widely available to virtually anyone with an Internet connection, it’s more important than ever that the data is easily understandable, accurate and current.”



neighborhood data, we [multi-source](#) that data from various national and regional vendors — including our own extensive network of local data abstractors. This multi-sourced approach presents a bit of a challenge for us on the data management side but ultimately is good for our customers because it allows us to deliver the most accurate and complete data picture of a property and its neighborhood.

We also assign a unique, persistent ID for each of the 155 million U.S. properties in our database, allowing us to efficiently link all transactional records (sales, mortgages, foreclosures) associated with a property across multiple sources. This ATTOM ID also helps our data licensing clients more easily manage the data — keep in mind some clients receive daily updates to the data as new transactions and assessor records are added — and blend it with other datasets.

Democratizing Big Data

Along with increased competition in

the property data industry, advances in technology such exponential leaps in database storage capacity and democratized big data and analytic tools are also facilitating broader access to public record real estate data.

One example is in the realm of property data APIs (Application Programming Interfaces), which are evolving from static and limited in terms of volume of calls to highly customizable and virtually unlimited when it comes to the volume and speed of calls. ATTOM is proud to be on the forefront of this evolution, with an end goal of allowing our clients to [stream their own custom property data playlist](#) with our APIs.

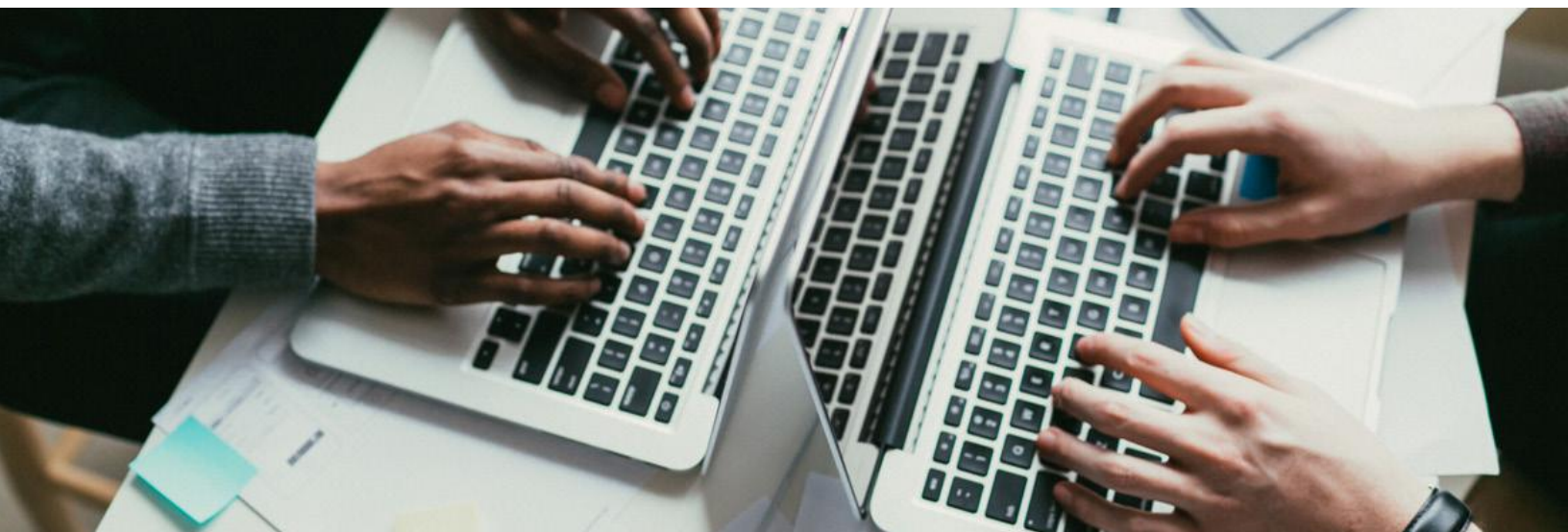
Responsible Data Governance

Greater access to public record property data is all very exciting for the industry and our clients, but with that greater access comes greater responsibility — particularly for those of us in the industry collecting, curating and licensing the data.

As the data becomes more widely available to virtually anyone with

an Internet connection, it’s more important than ever that the data is easily understandable, accurate and current. Here are some examples of how we’re implementing data governance best practices to accomplish these data responsibility objectives at ATTOM:

- **Data translation:** because we’re multi-sourcing the data, we often end up with a variety of different names for different fields of data, or the same name for different fields. We carefully translate the naming conventions and their meanings so that ultimately our clients can be confident that the field names consistently represent the same underlying data throughout the thousands of jurisdictions we cover nationwide.
- **Data integrity:** we run manual and automated checks of individual property records to identify and correct inconsistencies in a property’s data story. For example, if we receive a property record with 20 bathrooms that



is categorized as a single-family home, most likely one of those fields is not correct so we check back with the original source to verify or correct.

- **Data currency:** outdated data means risky data, so we run weekly coverage reports checking the currency of data in the more than 3,000 jurisdictions we collect from nationwide. If currency falls behind in a jurisdiction we prompt the source to bring the data up to date, and if needed secure a new source for that jurisdiction.

The Transparency-Privacy Tension

Given the limited government regulation around public record real estate data, it falls largely to the property data industry to take responsibility for the governance of the data — so that an important, but delicate, balance between [data transparency](#) and data privacy can be maintained.

The biggest change I've seen in my more than two decades in the property data industry is a heightened sensitivity

to privacy concerns. This of course is a natural response to the greater visibility of the public record property data, particularly on consumer-facing real estate portals such as Zillow, Trulia, Realtor.com and [RealtyTrac](#), which is owned and powered by ATTOM Data Solutions.

Homeowners have understandably become more pro-active in providing feedback on the accuracy of the data pertaining to their home and — in some cases where public individuals or law enforcement are involved — requesting that data be suppressed. This is forcing the industry to up the ante when it comes to data accuracy and quality. The 90 percent accuracy rate that was acceptable in the industry when I first started will no longer cut it; minimum acceptable accuracy rates now are 95 to 96 percent. Our tolerance for error as an industry has decreased, and that's a good thing for our clients and ultimately for consumers.

Plug-and-Play Property Data

Robust data governance is mission

critical for organizations like ATTOM that are collecting, curating and licensing public record property and neighborhood data. For us, data governance is not a siloed department, but is implemented company-wide, fully integrated into each pillar of our data infrastructure:

1. Data security
2. Data compliance
3. Data storage
4. Data management
5. Data delivery

This fully integrated approach to data governance ensures that data licensing clients are ingesting premium property and neighborhood data that they can confidently plug into their products, software and applications with little or no additional data management on their end. Plug-and-play data, grounded in responsible data governance, allows clients to reduce risk while also elevating the experience for their end-users. •



MY TAKE

Encore Performance



RICK SHARGA

EXECUTIVE VICE PRESIDENT, [CARRINGTON MORTGAGE HOLDINGS, LLC](#)

America loves a good second act.

This is especially true when the first act was depressing, or an individual suffered unfairly, only to come out on top during the process of rebirth.

Usually, a second act has to do with a person who's spent a lifetime doing one thing and has now found an opportunity or a calling to pursue something he or she is passionate about, or can achieve great success doing. But one of the least-noticed second acts in America today isn't

about an individual — or even about people, at least not directly. It's about mortgage loans. And it's a pretty amazing story.

Act One: The Great Recession

The housing boom of the early 2000s, you may recall, was followed immediately — and rather unceremoniously — by what may have been the most rapid and most severe housing bust in U.S. history. During the boom, homeownership rates, fueled by reckless lending, approached 70 percent. The number

of homes sold peaked at over 7.2 million existing home sales and nearly 1.4 million new home sales in 2005. Home prices soared — the median existing home price peaked at \$230,400 in July of 2006, up 57 percent from July of 2000 — and new home prices peaked at \$250,400 in October of the same year. A home was no longer just a place to park your car — increasingly, it was a place to park your money, and everyone wanted to become a real estate investor.

Unfortunately, the real estate boom turned out to be a house of cards. Far too many unqualified borrowers purchased overvalued homes with loans that turned out to be ticking time bombs. What happened next — in retrospect — was unsurprising, but still historically unprecedented: the largest wave of foreclosure activity ever in the U.S. housing market.

As chronicled by ATTOM Data Solutions (known at the time as RealtyTrac), foreclosure activity soared. Historically, about 1 percent of loans in a given year are in some stage of foreclosure; another 4 percent are delinquent, but not yet in foreclosure. At the peak of

the crisis, about 4 percent of loans were in foreclosure and between 11 and 12 percent were delinquent. This, remember, at a time when the number of homeowners — and the number of active mortgages — was at an all-time high. So what ultimately happened to all of these loans?

According to a [report](#) from [Hope Now](#), nearly 5.3 million of those loans were ultimately foreclosed on between 2009 and 2016, with the peak happening in 2010, when there were almost 1.1 million foreclosure sales.¹ These numbers, and the financial and human damage they caused, were widely reported. Less-widely reported was

what happened to millions of other loans that had become distressed: they were modified, in an attempt to help borrowers retain homeownership.

Second Act: From Non-Performing to Re-Performing

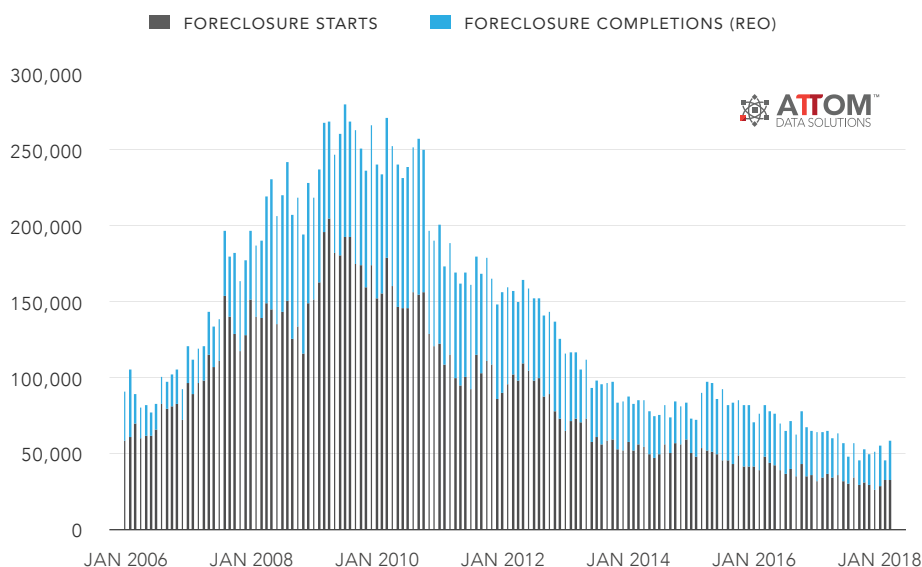
While the number of foreclosures was staggering, the number of foreclosures prevented by loan modification programs was equally remarkable. Between the second half of 2007 and 2017, over 8.4 million permanent loan modifications were completed, either through the government's Making Homes Affordable Program (HAMP) or mortgage servicers' proprietary modifications. In addition, lenders provided borrowers with other workout plans — repayment plans, payment reductions, forbearance programs, etc. — on another 16.4 million loans.

“Unfortunately, the real estate boom turned out to be a house of cards. Far too many unqualified borrowers purchased overvalued homes with loans that turned out to be ticking time bombs. What happened next — in retrospect — was unsurprising, but still historically unprecedented: the largest wave of foreclosure activity ever in the U.S. housing market.”

If this were a Hollywood screenplay, we could wish our actors a “happily ever after” and exit the movie theater. Unfortunately, many of the borrowers who held these modified and re-worked loans subsequently became delinquent again, and some defaulted, and fell back into foreclosure. This created a large number of what the industry refers to as non-performing loans (NPLs). As the U.S. economy slowly recovered from the Great Recession, investors began to purchase portfolios of these NPLs, mostly from large financial institutions or government agencies looking to get the loans off their books.

These loans were purchased at a discount, and represented an attractive investment opportunity for companies who knew how to manage them.

U.S. FORECLOSURE ACTIVITY





U.S. MEDIAN SALES PRICES



While a few of these investors bought NPLs with plans to quickly execute foreclosures and either sell off or rent out the properties attached to the loans, others found a more lucrative approach that constituted a win/win scenario for the investor and the delinquent borrower.

It turns out that in many cases, the best outcome is to turn an NPL into an RPL — a re-performing loan. Many of the companies who bought NPLs (including my employer, Carrington) have mortgage servicing operations that specialize in helping borrowers with financial challenges. They share a mutual goal with the customer: to keep the borrower in the home. While this provides the borrower with another chance at homeownership, it also provides the investor with multiple opportunities for return — holding the loan in its portfolio and collecting interest over time, or packaging and reselling

“While a few of these investors bought NPLs with plans to quickly execute foreclosures and either sell off or rent out the properties attached to the loans, others found a more lucrative approach that constituted a win/win scenario for the investor and the delinquent borrower.”

the loan, either to investors who buy whole loans, or as part of a securitized transaction.

To help ensure success, NPL purchasers very often offer principal balance reduction to borrowers who successfully make on-time payments during a trial period. Companies who are successful with this approach often help as many as two-thirds of these borrowers avoid foreclosure — quite an outcome, considering that typically almost 100 percent of the loans in an NPL pool are already in foreclosure when they're purchased by the investor.

A decade after the bankruptcy of Lehman Brothers marked the unofficial beginning of the financial market meltdown, the pipeline of NPLs is finally drying up — unsurprising, since delinquency levels are back to normal levels, and the number of loans in the foreclosure process is roughly a third lower than normal. Many of the formerly non-performing loans are now performing nicely, and RPLs are becoming a hot commodity in the institutional investment community. By Carrington's estimation, RPL purchases now surpass NPLs.

In 2017 there were roughly \$30 billion in RPL sales compared to \$12 billion in NPL sales, and the trend has continued into 2018, with first quarter sales leaning towards RPLs by a margin of about \$8 billion vs. \$5 billion for NPLs.

RPL buyers tend to be different types of investors than NPL buyers — they have different (longer) time horizons for their investments and different yield profiles. And the risk/reward ratio tends to also differ, which means “safer” loans like RPLs typically don’t sell at the kind of discounts that characterized NPL sales. In fact, seasoned RPLs (clean payment records for 24+ months) with high equity often sell at par or even above. But the availability of these loans — both as whole loans and in securities — has attracted interest from a variety of funds looking for longer-term investment opportunities.

The presence of these RPLs is bringing back institutional investors to the mortgage securities market, perhaps an early sign that private capital will begin to lessen the industry’s dependence on the overwhelming amount of government funding that’s poured into mortgages over the past 10 years. And every RPL represents a borrower who was in some sort of financial distress but was able to correct course and maintain homeownership. In addition to the obvious benefit to these borrowers,

RPLs kept hundreds of thousands of properties from flooding the market as distressed homes (the long-rumored “shadow inventory”), which would have further depressed home prices, and prolonged an already interminably long recovery in the housing market.

As second acts go, RPL performance has been nothing short of a true American success story. •

1. [http://www.hopenow.com/industry-data/HopeNow.FullReport.Updated\(Feb2018\).pdf](http://www.hopenow.com/industry-data/HopeNow.FullReport.Updated(Feb2018).pdf)

RICK SHARGA

Rick Sharga, executive vice president for Carrington Mortgage Holdings, serves as the primary spokesman for Carrington and is responsible for directing public relations and communications, as well as branding and marketing strategies for all of the Carrington Companies.



SMARTEST DAYS TO SELL A HOME

MAY AND JUNE DAYS DOMINATE THE LIST

Analysis of 14.7 Million Home Sales in Last Seven Years



Home sellers have enjoyed an extended sellers' market over the last seven years, selling at a 2.9 percent premium above estimated market value on average, according to an ATTOM Data Solutions analysis of 14.7 million home sales from 2011 to 2017. Home sellers selling in the late spring and early summer are realizing the biggest premiums — 5.9 percent on average in May and 5.8 percent on average in June, with 17 of the 20 best days to sell in those two months.

TOP 5 SMARTEST DAYS TO SELL

	MEDIAN SALE PRICE	MEDIAN ESTIMATED VALUE	SELLER PREMIUM
#1. JUNE 28	\$204,000	\$187,000	9.1% ABOVE MARKET
#2. FEB 15	MEDIAN HOME PRICE \$169,000 MEDIAN ESTIMATED VALUE \$155,000		9.0% ABOVE MARKET
#3. MAY 31	MEDIAN HOME PRICE \$207,000 MEDIAN ESTIMATED VALUE \$191,189		8.3% ABOVE MARKET
#4. MAY 29	MEDIAN HOME PRICE \$199,000 MEDIAN ESTIMATED VALUE \$183,910		8.2% ABOVE MARKET
#5. JUNE 21	MEDIAN HOME PRICE \$200,000 MEDIAN ESTIMATED VALUE \$184,970		8.1% ABOVE MARKET

METHODOLOGY

ATTOM Data Solutions analyzed 14,729,578 single family home and condo sales between 2011 and 2017, comparing median prices for those homes — based on recorded sales deed data — with the estimated market value of those homes in the month they were sold — based on an automated valuation model (AVM) that takes into account recent, nearby sales of similar homes. The seller premium was the percentage the median sale price was above (or below) the estimated market value at time of sale.



DATA IN ACTION

The Best Month to Sell a Home in Your Local Market

May is the best month to sell a home, according to a new ATTOM Data Solutions analysis of 14.7 million home sales from 2011 to 2017, which shows that homeowners selling in May realized the biggest premiums above estimated market value — 5.9 percent on average — of any month.

The best day of the year to sell a home is June 28, with an average seller premium of 9.1 percent, according to the analysis. See Big Data Sandbox on Page 26 for the top five smartest days to sell.

The best month to sell varied from market to market, with warmer weather markets such as Miami (January) and Phoenix (November) bucking

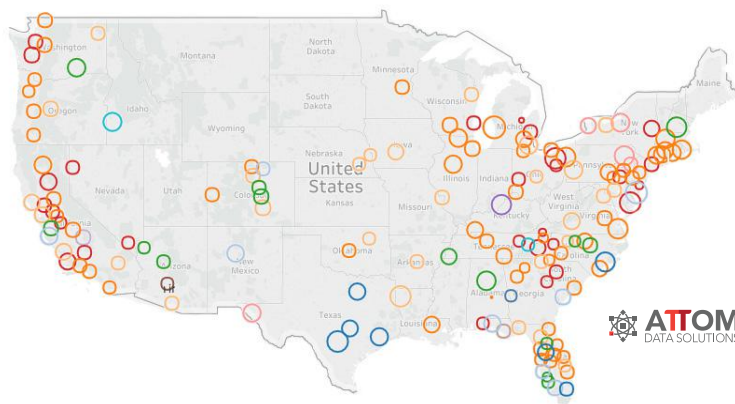
the national trend, according to the analysis. Use the interactive map below

to find out the best month for selling a home in your local market. •

SMARTEST MONTH TO SELL A HOME BY METRO

SMARTEST MONTH TO SELL

- NULL
- JAN
- FEB
- MAR
- APR
- MAY
- JUN
- JUL
- AUG
- SEP
- OCT
- NOV
- DEC



ATTOM
DATA SOLUTIONS

[CLICK HERE TO VIEW INTERACTIVE VISUAL](#)



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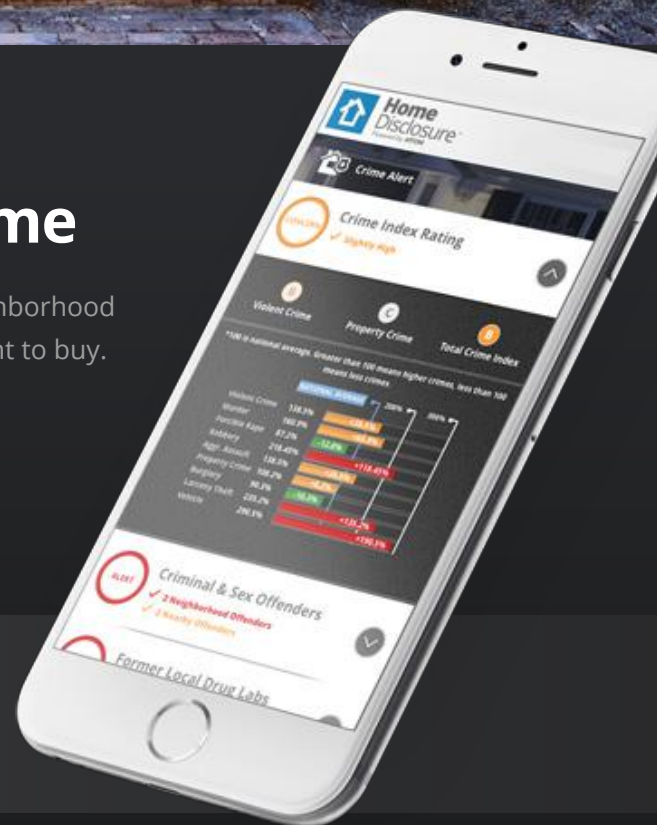
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