ACCURATE GROUP

Appraisal. Title. Technology. Compliance.

FHFA Appraisal Listening Session Comments
Paul M. Doman, President and CEO
February 11, 2021

Who We Are

Leader in real estate services, delivering technology-driven appraisal, title data, analytics and digital closing solutions to 23 out of the top 25 banks, credit unions, non-banks, servicers and capital market firms.

3 Valuation Businesses

Traditional AMC
leading traditional appraisal management company nationwide

ValueNet™
industry's first & market leader in hybrid appraisal and real estate inspection

AppraisalWorks™
SaaS collaborative appraisal management technology platform

Since 1998, ValueNet™ produced more hybrid appraisals than any other marketplace provider
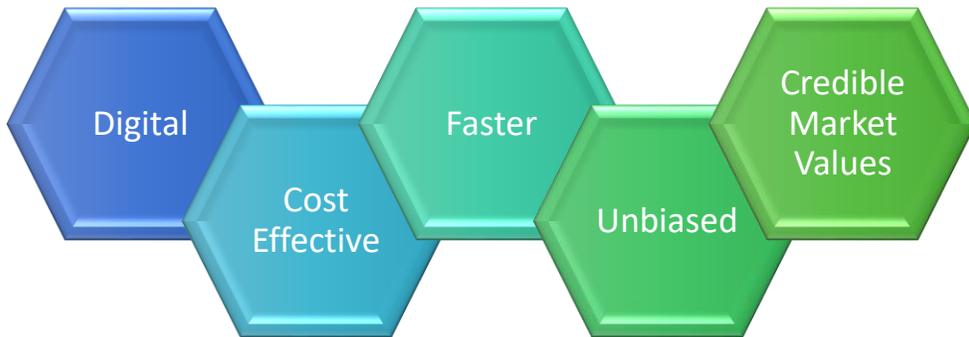
Active participant in both FNMA and FHLMC modernization pilots with technology built to fully support uniform data capture

Appraisal Modernization Helps **All** Industry Participants

Consumers & Lenders
Demand More from Appraisal Experience

Hybrid Process Increases Appraiser
Efficiency 4X + Increased Appraiser Earnings &
Improves Valuation Process for All Stakeholders

Digital

Cost Effective

Faster

Unbiased

Credible Market Values

Hybrids complete in 25% of time of a traditional 1004/70	Hybrid review technology drives post-delivery revision rates >50% lower	Hybrid process is faster >3 business days TAT reduction vs. traditional 1004/70

Appraisers focusing on Hybrids earn more while maintaining
Customary and Reasonable Fees & USPAP Compliance

Mandate to use digital technology to make a limited supply of appraisers more efficient while empowering well qualified & trained third party inspectors to gather data

Bi-furcated data collection helps underserved markets (rural or limited data) and the Hybrid process greatly reduces potential for discriminatory bias

Aggregated value data from transactions indicates Hybrids produce credible values correlated to traditional 1004/70 and pose no additional collateral valuation risk
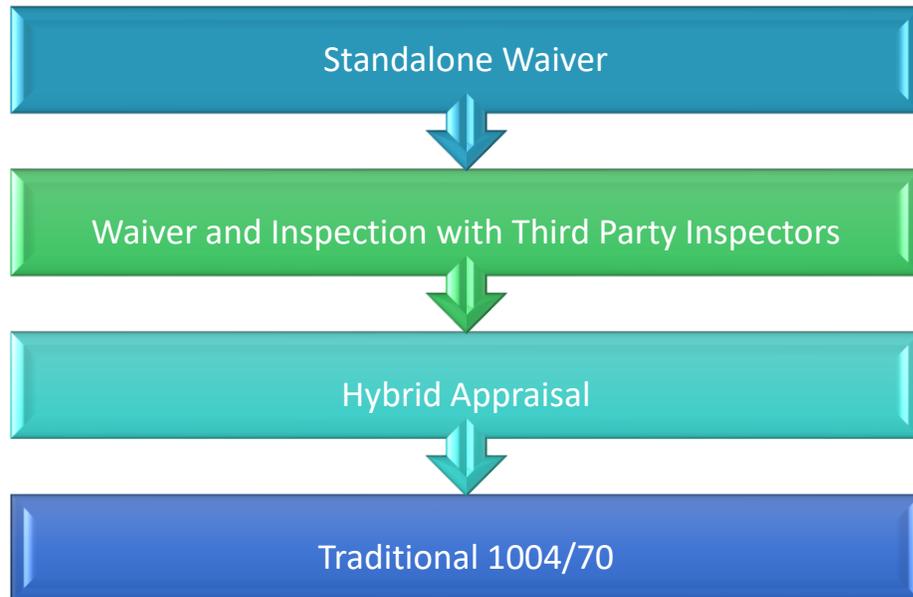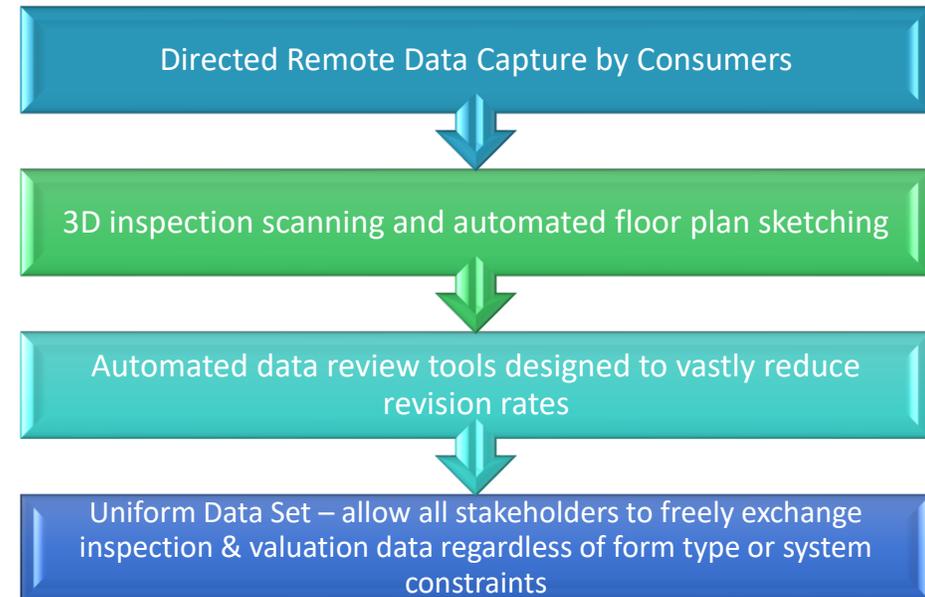
Appraisal Modernization Recommendations

Accurate Group fully supports and is heavily invested in Appraisal Modernization at all levels

Our Recommendation

FHFA authorize faster modernization implementation using a smart risk-based, technology-driven valuation cascade:

Modernization should safely incorporate & authorize the latest technology innovations driven by consumer/lender demand including:

Standalone Waiver
⬇
Waiver and Inspection with Third Party Inspectors
⬇
Hybrid Appraisal
⬇
Traditional 1004/70

Directed Remote Data Capture by Consumers
⬇
3D inspection scanning and automated floor plan sketching
⬇
Automated data review tools designed to vastly reduce revision rates
⬇
Uniform Data Set – allow all stakeholders to freely exchange inspection & valuation data regardless of form type or system constraints

Appraisal Related Policies, Practices, and Processes

Public Listening Session

Edward Pinto (pintoedward1@gmail.com), Director
AEI Housing Center
AEI.org/housing

February 11, 2021

Link to AEI HMIs:
https://www.aei.org/housing/housing-market-indicators/

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AEI's In-depth Study into Alleged Racial Bias by Appraisers on Mortgage Loans

Full report may be found at:

https://www.aei.org/economics/special-briefing-on-appraiser-bias/

Recent Reports Have Alleged Racial Bias by Appraisers on Mortgage Loans

- New York Times examples*
  - $135,000 or 29% difference (Jacksonville FL - appraisal 1: $330,000, appraisal 2: $465,000)
  - $40,000 (% unknown) difference (Hartford, CT suburb)
  - $160,000 or 24% difference (Los Angeles - appraisal 1: $500,000, appraisal 2: $660,000)
- Denver News Channel 7 example**
  - $145,000 or 26% (Denver, CO – appraisal 1: $405,000, appraisal 2: $550,000)
- Chicago Sun Times example***
  - $62,000 or (Chicago, IL – appraisal 1: $278,000, appraisal 2: $340,000)
- For the four examples with sufficient data, appraisal 1 came in an average of about $126,000 or 25% lower than appraisal 2.
- These claims of bias were all based on an allegation that a human appraiser was aware of the applicant(s)' race either from a meeting or photos or other items in the home which indicated race, and as a result, the appraiser underestimated the property's value.
- These allegations of undervaluation commonly occurred in predominantly White neighborhoods.
- The implications of these three stories are that intentional and perhaps unintentional appraisal bias is commonplace and the valuation gaps are large.
- A literature search found no statistical analysis of this type of claim.
- Using big data we conduct the first analysis into whether the alleged practices of intentional racial bias, along with unintentional bias, are common or uncommon.

AVM Approach Results for Refinance Loans

- The media reports all had a common challenged practice: the human appraiser knew the applicant was Black by having met the applicant or from photos in the home and rendered a biased opinion of value that was below the property's correct value.

- The race neutral AVM approach was applied to valuations on: 1. refinance loans generally, 2. purchase loans, and 3. refinance loans with either a human appraisal or a waiver.

  #1 (refinance loans only) includes instances where biased refi valuations have been rendered.

  #2 (purchase loans only) would be much less influenced by bias due to anchoring to the sale price by human appraisers.

  #3. a. (waiver only) has lack of "knowledge" of race and interior condition, or the potential for bias in the selection of comps and should be free of racial bias due to the common practice noted above.

- Our results indicate that for #2 (purchase loans) and #3.a. (non-human valuations), Blacks had nearly identical valuation gaps as Whites (-0.8% and -0.5% respectively), as #1 (-0.7%).

- Thus we conclude allegation that knowing the race of the applicant results in racial bias by appraisers on refinance loans is uncommon and not systemic. This same analysis supports the conclusion that unintentional bias based on race is also uncommon and not systemic.

AVM Approach	Gap between Blacks and Whites
1. For refinance loans only	-0.7%***
2. For purchase loans only	-0.7%***
3. Limited to refinance loans with an Appraisal/Waiver Flag (GSE only)	-0.7%***
a. Waiver only	-0.5%
b. Appraisal only	-0.8%***

Note: The results are differences in property value relative to Whites. ***** denotes significance at the 1% level**. Data for this approach are limited to property value $100,000-$1,000,000, Year built between 2000-2019, Lot sizes of 2,000-20,000 sq. ft., and Building area of 800-3600 sq. ft.

Conclusions Regarding Alleged Racial Bias by Appraisers

We set out to statistically examine the level of racial bias in human performed appraisals.

We relied on a Collateral Risk Network (CRN) survey of lenders and AMCs which suggests that Reconsiderations of Value (ROVs) are infrequent, as are reappraisals based on an ROV. Further, ROVs with an allegation of racial bias on 1st appraisal are also infrequent.

We also relied on HMDA data, which along with the CRN survey, support the conclusion that our data set, consisting entirely of closed loans, does not suffer from a significant level of selection bias.

Thus, the findings from our statistical analysis of big data on closed loans may be relied on in determining the presence and levels of racial bias by appraisers.
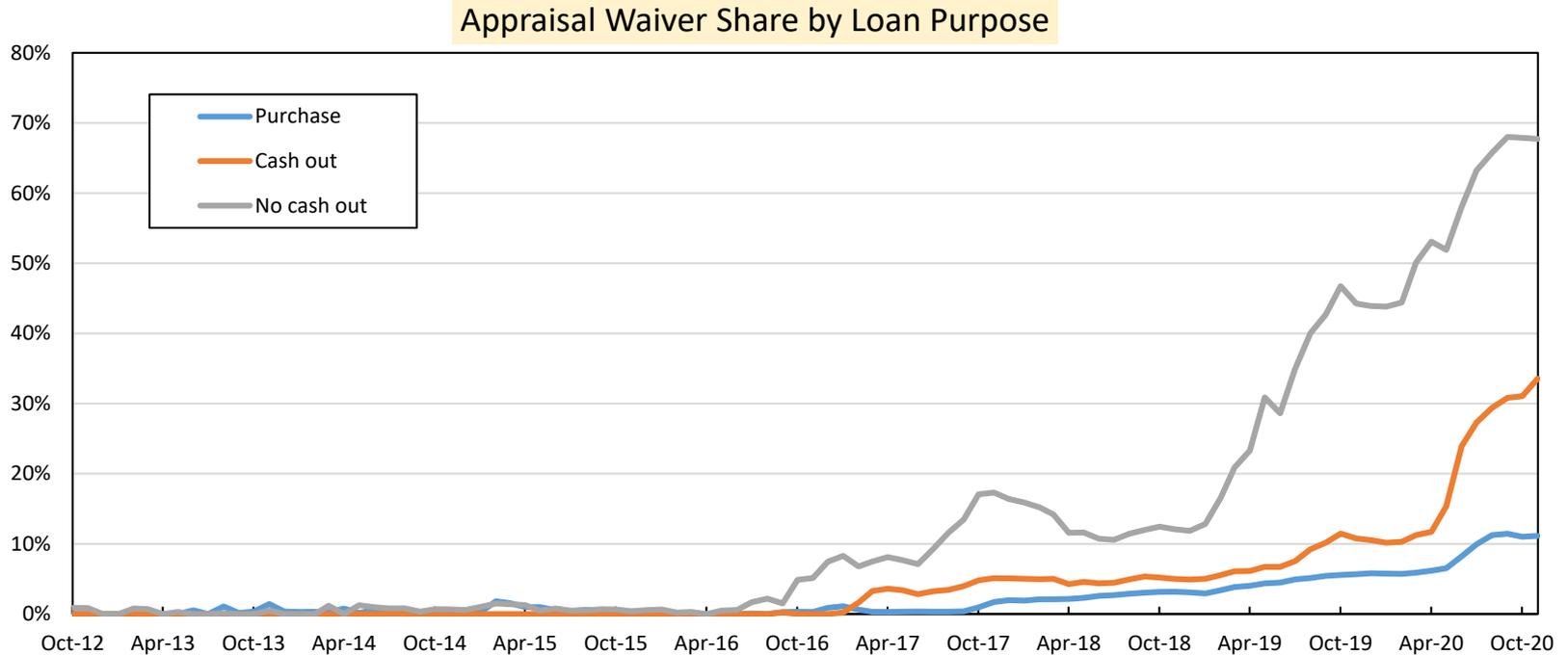
- To the extent a claim of disparate impact is made, it does not need to demonstrate intent or knowledge. However, any challenged practice must be shown to be the substantial cause of the disparate impact.

- Our statistical analysis looked for evidence of either intentional racial bias, as cited in media reports, or unintentional.

While we cannot rule out individual cases of bias, our conclusions are (i) contrary to media allegations, racial bias by appraisers on refinance loans is uncommon and not systemic and (ii) a claim of unintentional bias on refinance loans, if to be used as the basis of a disparate impact claim, was also found to be uncommon and not systemic.

General Findings on the Prevalence of GSE Appraisal Waivers

GSE Share of Appraisal Waivers by Loan Type

Waivers are most prevalent for NCOs, but have recently seen a sharp increase in COs. Both the Automated Pricing Model (APM) and a traditional appraisal have built-in statistical ranges of error, potentially giving the borrower two attempts at a higher refinance value. First, from the APM and then, if "too low", from an actual appraisal. The traditional appraisal has the potential for upward bias based on anchoring and subjective factors.

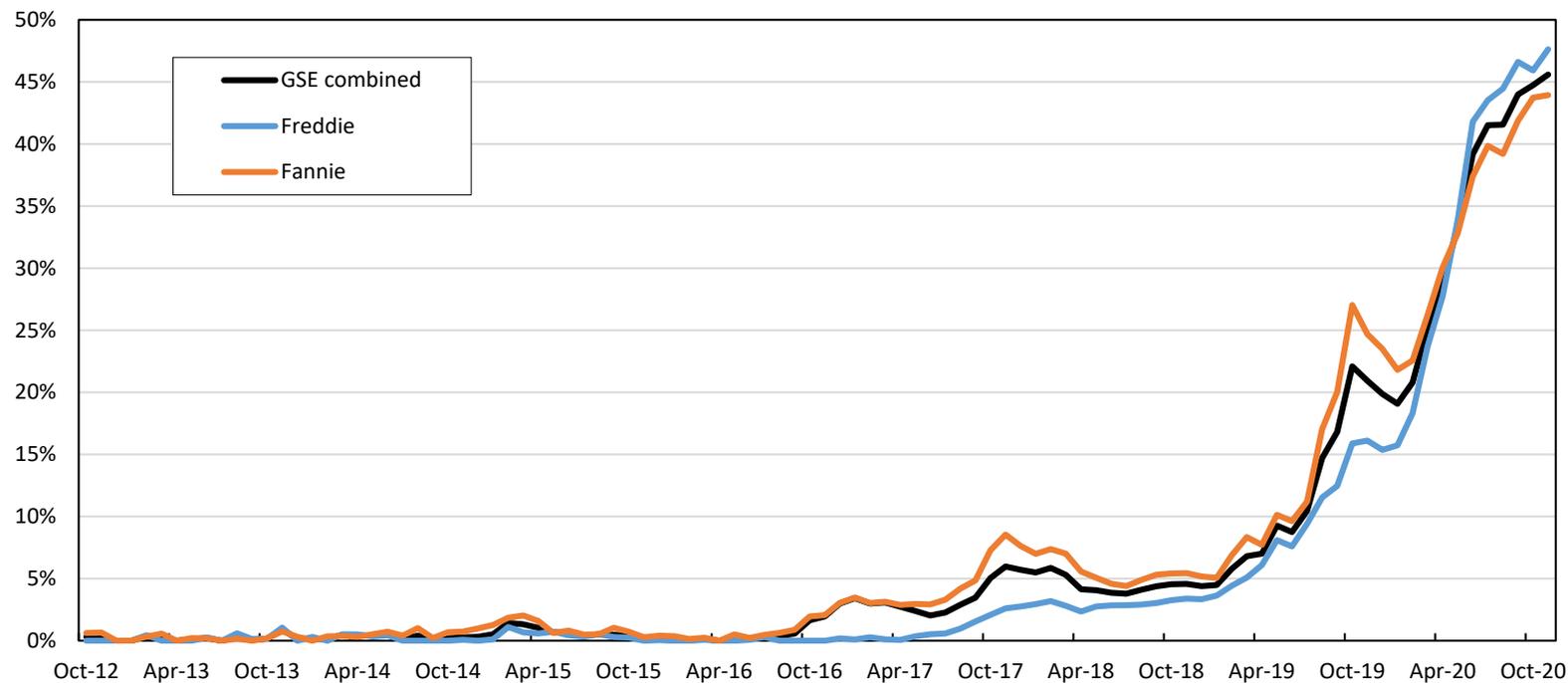### Appraisal Waiver Share by Loan Purpose

Note: For the appraisal waiver charts, we are assuming a one month shift between first payment date and origination date. For all other analysis, we are assuming a two months shift.
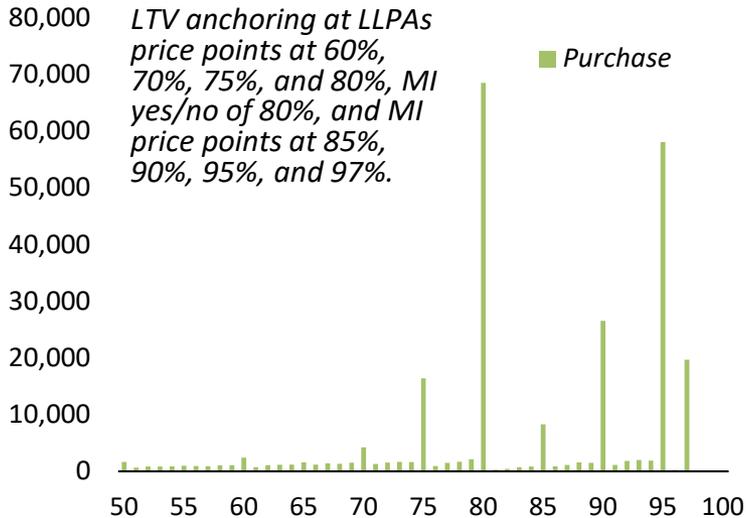
GSE Use of Appraisal Waivers Has Exploded since Mid-2019

Appraisal waivers now account for 46% of all valuations (the rest consists of traditional appraisals). The hockey stick increase of the last few months seems to be slowing. The small-ish increase from July to August was due to a reduction in the share of refinances, which have much higher waiver usage than purchase loans.
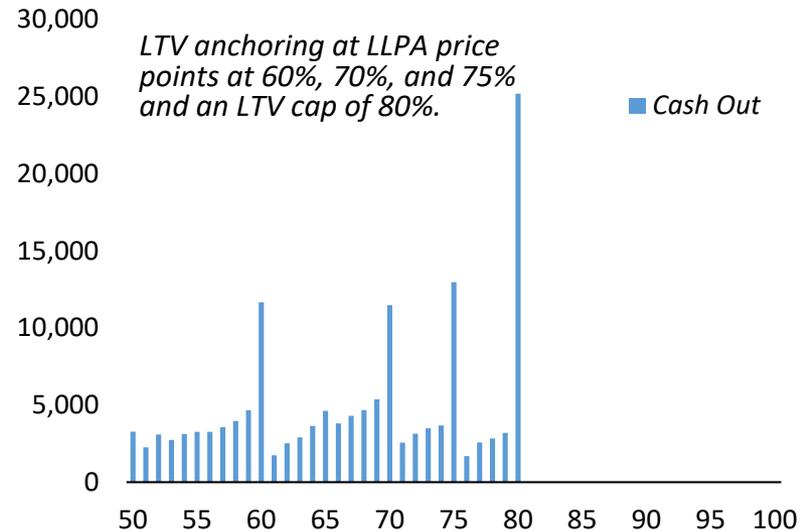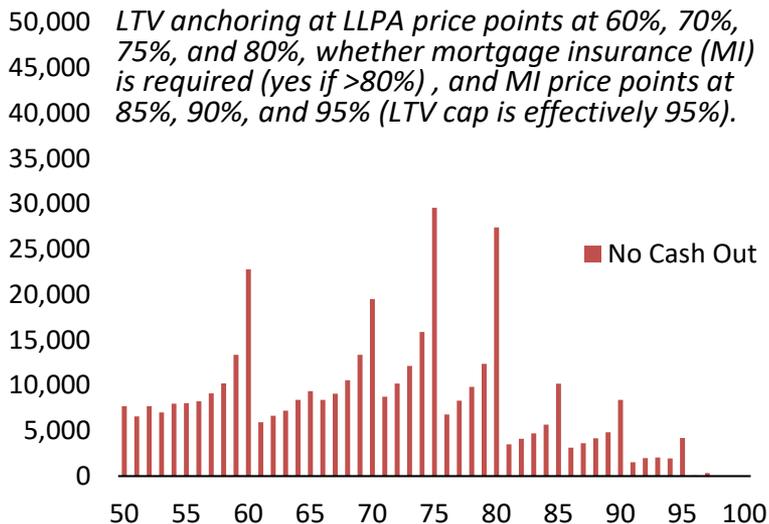

Note: For the appraisal waiver charts, we are assuming a one month shift between first payment date and origination date. For all other analysis, we are assuming a two months shift.
Source: AEI Housing Center, www.AEI.org/housing.

GSE LTV Anchoring

LTV anchoring at LLPAs price points at 60%, 70%, 75%, and 80%, MI yes/no of 80%, and MI price points at 85%, 90%, 95%, and 97%.

■ Purchase

It is well known that LTVs are heavily anchored to certain percentages. Anchoring is the use of a value that ones knows in order to make a decision or value estimate. In the case of refis, these anchor points interact with the applicant's perception of home value and the refinance amount and any cash proposed to be extracted from the home.

LTV anchoring at LLPA price points at 60%, 70%, 75%, and 80%, whether mortgage insurance (MI) is required (yes if >80%), and MI price points at 85%, 90%, and 95% (LTV cap is effectively 95%).

■ No Cash Out

LTV anchoring at LLPA price points at 60%, 70%, and 75% and an LTV cap of 80%.

■ Cash Out

Note: For the appraisal waiver charts, we are assuming a one month shift between first payment date and origination date. For all other analysis, we are assuming a two months shift. Data are for November 2020.
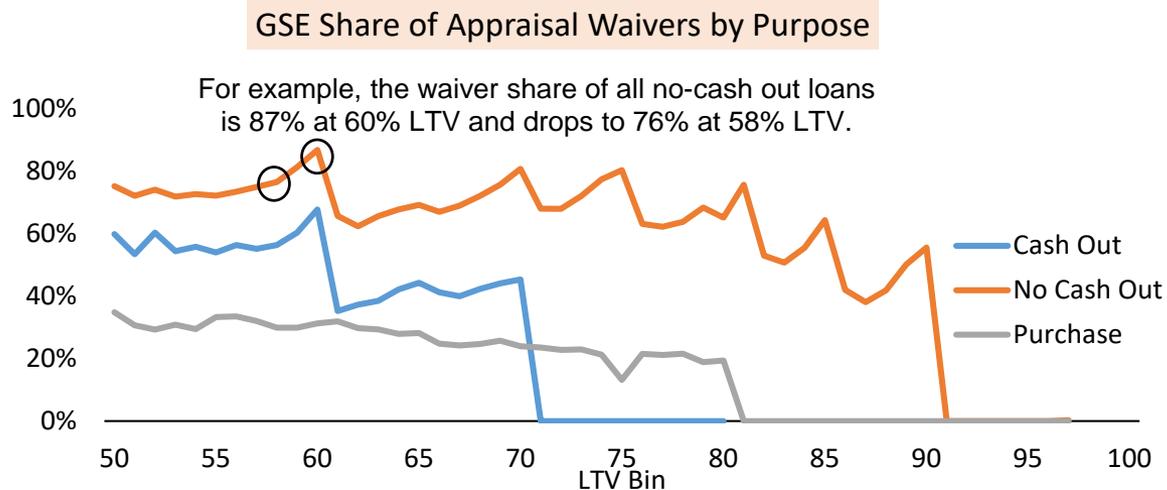Source: Fannie Mae & Freddie Mac, tabulated by the AEI Housing Center, www.AEI.org/housing.

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The Three Bites at the Apple

Waivers are granted using a data-based analysis of the reasonableness of the applicant's self-valuation, which reflects what the applicant needs to land on one of the desired pricing points noted on the prior slide. Being even a dollar less in value would raise the LTV to be above the price point, and thereby add cost. Some of the metrics used in the analysis are an automated pricing model, value confidence bands, historical information, automated underwriting (AU) accept status, and other credit criteria.

Machine based waivers on cash out and no cash out loans are found to have a higher propensity to anchor, as evidenced by the jumps in waiver share at each of the usual LTV related price points. The waiver process institutionalizes the traditional "what do you need?" anchoring approach common to human valuations. Like the AU process, loan originators may increase the odds of getting the desired result by submitting to both GSEs – and the ability to submit a limited number of multiple tries, if a waiver is not offered on the first try.

But if a waiver is not granted, the human appraisal becomes the 3rd bite at the apple. Yet these human appraisals suffer from the same firm anchoring to the usual LTV related price points. Hence the 3rd bite. The potential inflationary impact on prices of this process will be addressed at a later date.

GSE Share of Appraisal Waivers by Purpose

For example, the waiver share of all no-cash out loans is 87% at 60% LTV and drops to 76% at 58% LTV.
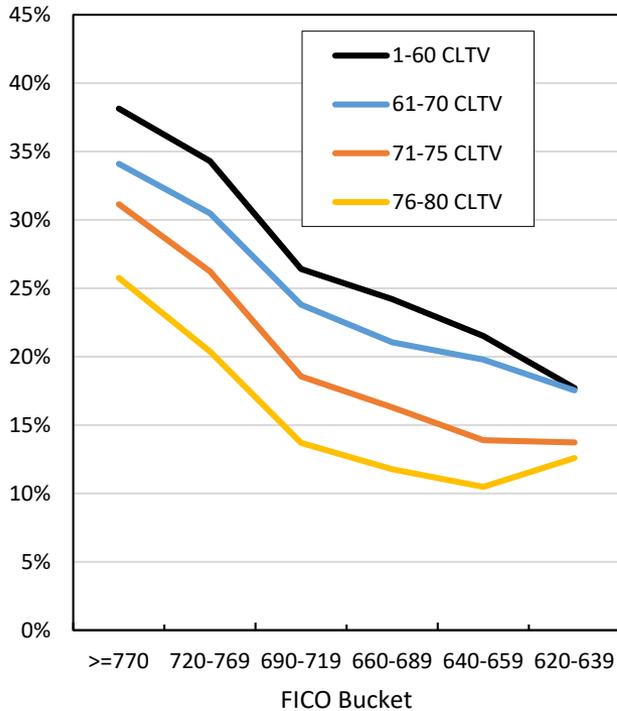

Note: For the appraisal waiver charts, we are assuming a one month shift between first payment date and origination date. For all other analysis, we are assuming a two months shift. Data are for November 2020.
Source: Fannie Mae & Freddie Mac, tabulated by the AEI Housing Center, www.AEI.org/housing.
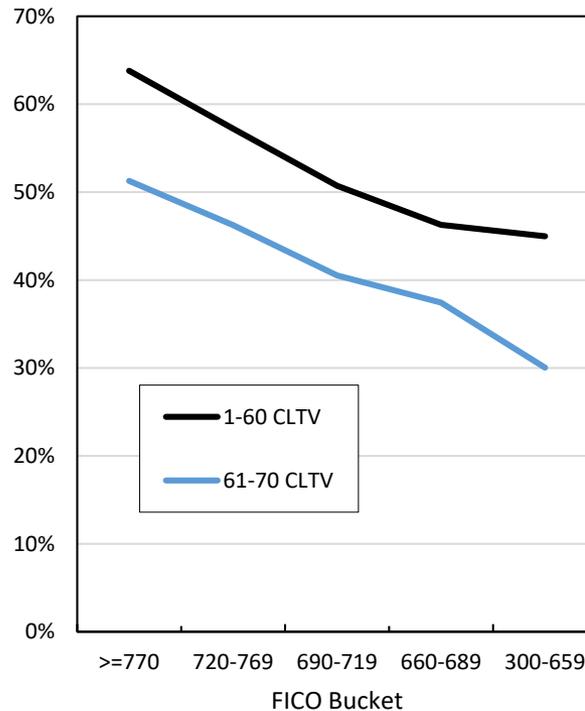
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Prevalence of Waivers by CLTV and Credit Score Bin

Waivers are more prevalent with the least risky loans and decline as CLTVs rise and credit scores fall. There appear to be no cliffs based on credit scores. DTI appears not to be a determining factors for waivers (not shown).
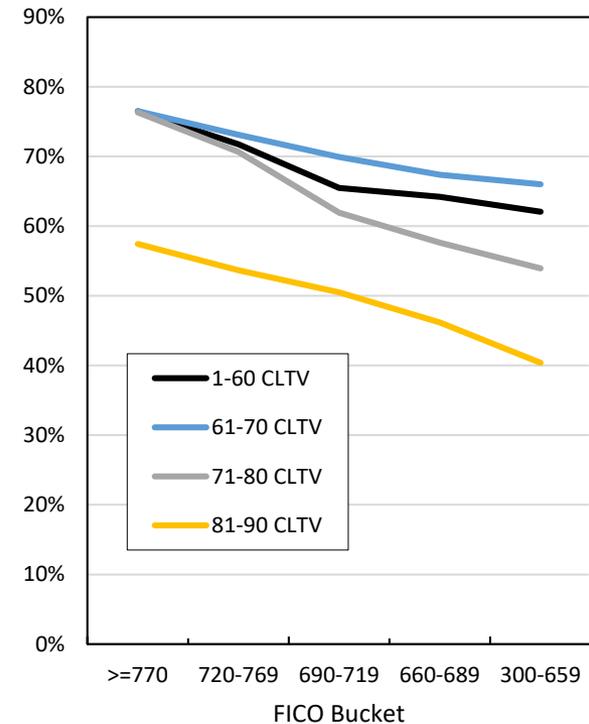
Purchase

Cash Out

No Cash Out

Note: Data are for 30-yr, fixed-rate, Primary Owner Occupied loans. For the appraisal waiver charts, we are assuming a one month shift between first payment date and origination date. For all other analysis, we are assuming a two months shift.
Source: AEI Housing Center, www.AEI.org/housing.

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Comparative Price Inflationary Aspects of the Waiver and Appraisal Process

- *Preliminary work seems to suggest that appraisals performed by humans tend to receive a average a premium over appraisal waivers done by algorithm.*
  - *The premium for human appraisals applies to all loan purposes, but appears to be greatest for cash-out refinances and purchase loans.*
  - *Based on this preliminary work, we estimate the human appraisal premium at around 1.5-2.5 ppts. over waivers.*
- *The increase in appraisal waivers thus seems to have had a slight salutary effect on tamping down price inflation.*
- *We are still investigating the opportunities for gaming the waiver process by the parties involved:*
  - *Buyer*
  - *Real estate agent*
  - *Lender*
  - *Fannie Mae*
  - *Freddie Mac*

Scot Rose
Chief Innovation Officer

CLASS VALUATION

- Certified Real Estate Appraiser

- 25 Years in Appraisal Industry

- Two terms on the Colorado Board
  of Real Estate Appraisers

- Committed to the health and
  longevity of the appraisal industry
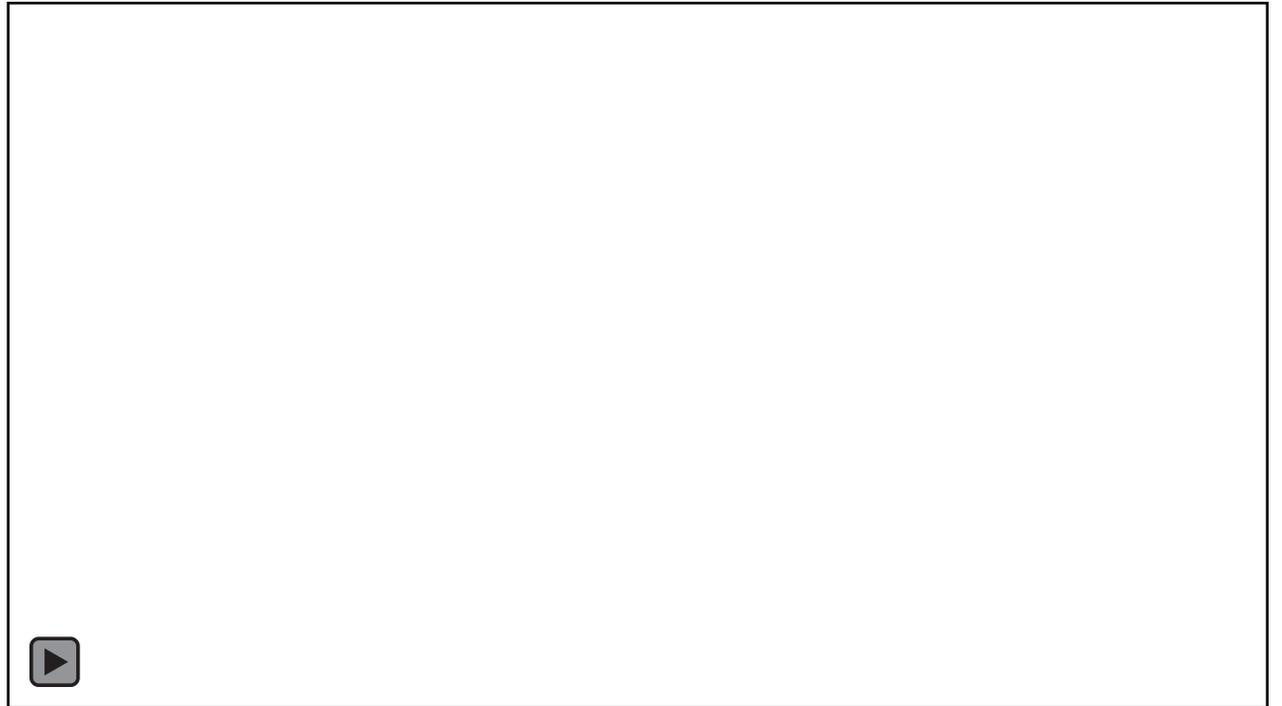
Thoughtful Change

Now is the time for responsible innovation to protect consumers and ensure the long-term success for lenders, appraisers, and all other industry stakeholders.

There is technology available to us today that can solve many of our current problems – but we must innovate responsibly.

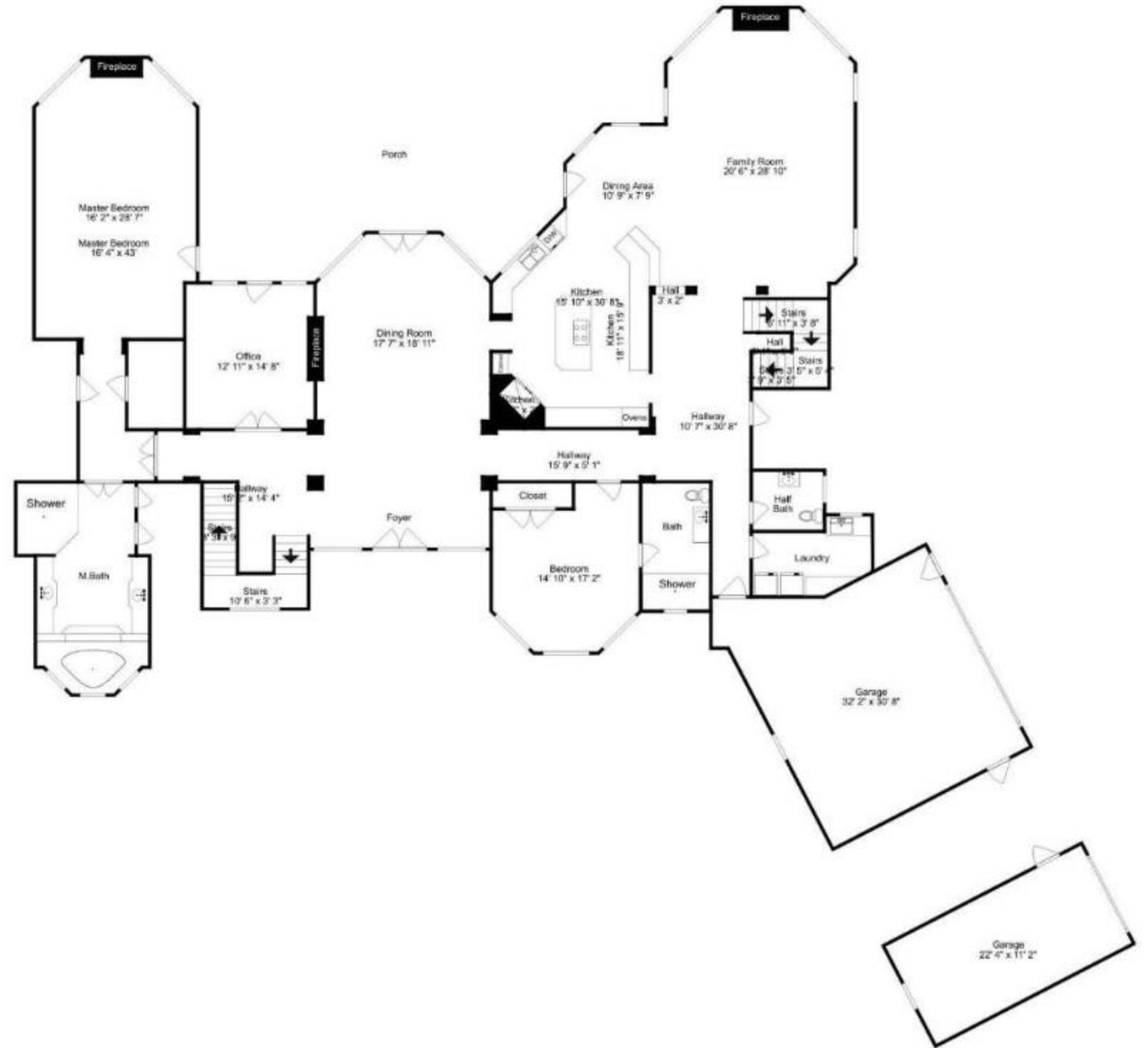**So, how can tech support the valuation process?**

3D Property Tour

❑ Walk through the subject as if you were there

❑ Improved appraisal data quality

❑ Increased transparency

❑ Functional utility readily detected

❑ Beneficial or adverse location or views easily observed

❑ Damage and deficiencies no longer hidden

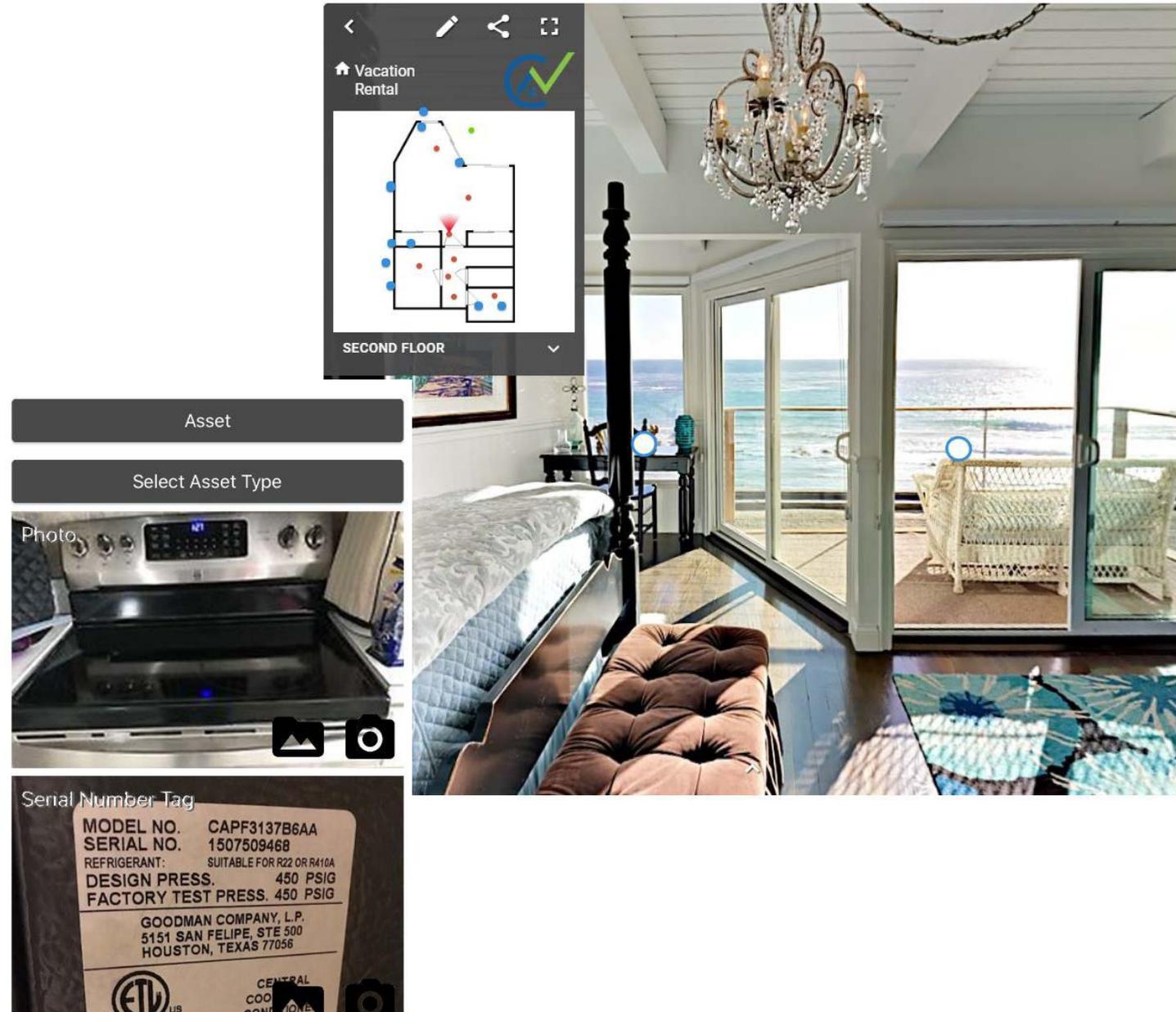❑ Fraud prevention

❑ Stakeholder confidence

Detailed Floor Plans

❑ Rooms automatically labeled

❑ Interior dimensions

❑ Spatial Context

❑ Windows and doors

❑ Counters and fixtures

❑ Appliances

❑ FPs and other amenities

❑ Columns and dead spaces

Asset Capture & Smart Tagging

❑ Identify appliance dimensions, manufacturer, serial number, age, and life expectancy.

❑ Highlight beneficial views or external obsolescence.

❑ Provide spatial context of contributory value.

❑ Point out damages, odors, sounds, or other details not visible in photography.

Comprehensive Data & Reporting

- ❏ High-res interior and exterior images
- ❏ Interior and exterior dimensions
- ❏ Windows and doors
- ❏ Counters and fixtures
- ❏ Appliances
- ❏ Geocoded
- ❏ Date/time stamped
- ❏ Floor area
- ❏ Floor material
- ❏ Room Volume
- ❏ Ceiling type
- ❏ Avg height

Single Family	Gross Living Area: 7425ft²		3 Floors	6 Bedrooms		5.5 Bathrooms	4 Garage Spaces

Floor Area

First Floor	Room	Floor area (ft²)	Floor Material	Volume (ft³)	Wall area (ft²)	Ceiling Type	Avg Height (ft)
	Bathroom	88.1	Tile	810.5	338.9	Flat	9' 2"
	Bedroom	214.9	WoodFloor	1912.6	365.8	Flat	8' 10"
	Cabinet	3.5	Tile	28.0	47.0	Flat	8'
	Closet	19.3	WoodFloor	154.4	126.9	Flat	8'
	Dining Room	303.1	Tile	2697.6	331.2	Flat	8' 10"
	Family Room	522.2	WoodFloor	5117.6	514.7	Flat	9' 10"
	Foyer	228.5	Tile	2033.7	272.4	Flat	8' 10"
	Half Bath	42.3	Tile	401.8	222.8	Flat	9' 5"
	Hall	0.7	WoodFloor	5.6	17.2	Flat	8'
	Hall	5.0	WoodFloor	40.0	65.4	Flat	8'
	Hallway	234.0	WoodFloor	2035.8	453.4	Vaulted	8' 7"
	Hallway	79.2	Tile	704.9	270.7	Flat	8' 10"
	Hallway	139.6	Tile	1242.4	330.1	Flat	8' 10"
	Kitchen	360.3	Tile	3206.7	445.3	Flat	8' 10"
	Kitchen	7.3	Tile	58.4	69.1	Flat	8'
	Laundry Room	78.5	Tile	745.8	337.5	Flat	9' 6"
	Master Bathroom	234.6	Tile	2017.6	454.6	Flat	8' 7"
	Master Bedroom	503.2	WoodFloor	4679.8	911.2	Flat	9' 3"
	Office	185.2	WoodFloor	1648.3	400.2	Flat	8' 10"
	Stairs	34.8	WoodFloor	278.4	142.2	Flat	8'
	Stairs	18.8	WoodFloor	150.4	95.4	Flat	8'
	Stairs	13.2	WoodFloor	105.6	95.3	Flat	8'

In Conclusion

A responsible solution must achieve the following:

❑ Address process and capacity issues

❑ Bolster appraiser independence and protect their value and expertise

❑ Comprehensive, authenticated source data

❑ Standardized, scalable data reporting

❑ Improve risk for downstream stake-holders

Please consider the following:

❑ Not all solutions should be viewed as equal.

❑ Solutions that only solve process but have potential to degrade risk must not be considered.

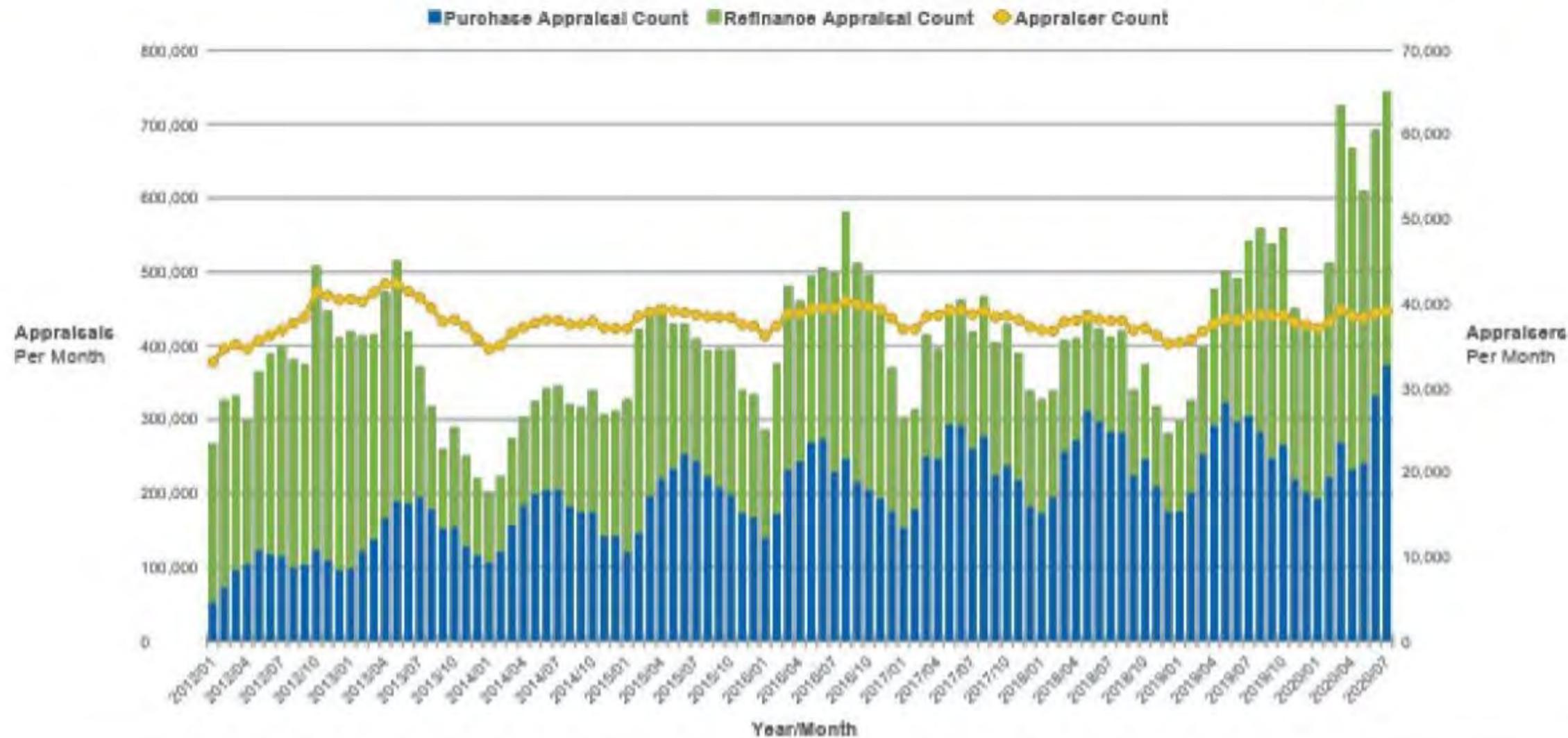❑ Today's modern technologies provide us with the ability to solve process, while significantly improving risk.

Appraiser Capacity Constraints - Something Has to Give

+ 50% Growth in appraisal volume since 2012, with **no change in the number of active appraisers**

+ 24% Increase in Average Cost of an **Appraisal** since 2016

+ 65% Increase in Average Turntime of an **Appraisal** since 2018

*Source: Freddie Mac

Hybrid Appraisal Model Emphasizes the Appraiser's Expertise
Segments the Process Into Two Distinct Roles

RELIABLE
Property Data Collection

➔ Inspection scheduling

➔ Driving

➔ Onsite property data collection

FOCUSED
Value Conclusion

➔ Market analysis

➔ Comp selection and value adjustment

➔ Final value conclusion

ClearCapital®

Non-Appraisers Can Perform High-Quality Property Data Collection
Real Estate Agents Are Especially Well-Suited...

Accountable to very similar licensing and regulatory standards as appraisers

Knowledgeable about local real estate

Already proven to deliver high-quality Property Data for the appraisal process at scale

ClearCapital®

Appraisers Want to Perform Hybrid Assignments

Statistics

+205%   Growth in Appraiser Participation in Clear Capital Hybrid Program since May 2019

5X   How Much Faster Appraisers Accept 1004 Hybrid compared to Traditional Assignments
0.38 days compared to 1.99 days - stats from December 2020

Why Appraisers Like the 1004 Hybrid

"**I have been able to provide a complete appraisal report much more quickly,** usually in less than half the time. As a result, the number of appraisal reports I am able to complete on a daily and weekly basis is significantly higher."

"I have been able to change my practice to 100% desktop. Because I do more reports this way, my overall income has increased, my costs have gone down, **I rarely have to interact with the borrower and I am not out in the heat, rain, snow or frigid temperatures**."

"With less interaction with the borrower, **I feel that I can be more independent**."

ClearCapital®

Hybrid Appraisals in Appraisal Modernization

120,000+
Completed Loans by Clear Capital

Nationwide Coverage

Faster *
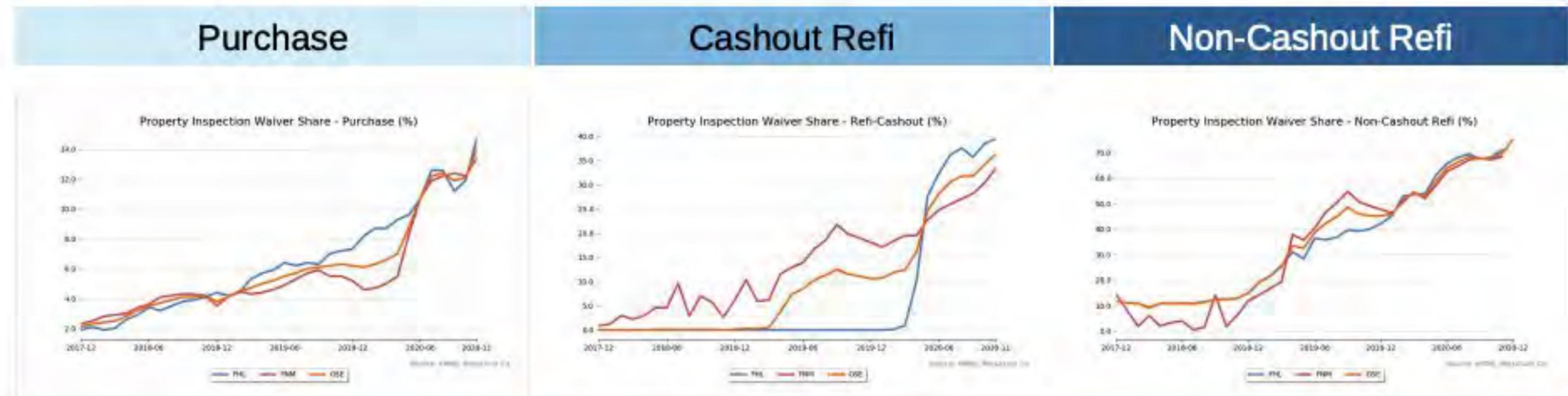4.4 days faster, 7.8 days compared to 12.2 for a traditional refi appraisal

Less Expensive *
Average Cost Savings of 26 percent compared to a traditional appraisal

Even greater improvement could be seen if the "Data and Done" program was to return.

ClearCapital®

"Blind Waivers" Are Saving Industry Capacity Today, But With Risk

*Source: Recursion

Record-setting levels of ACE/PIW is helping address appraiser capacity constraints

Lender is blind to current condition; GSE data models go un-replenished

Securing a Property Data Collection before determining Waiver eligibility ("Data and Done") can:

- reduce systematic risk
- ensure GSE data models remain up-to-date
- deliver the same capacity benefits as Blind Waivers

Technology Creates Increased Transparency and Standardization