

The Future of Valuation Floorplans and Rich Property Data

April 2022 - RESO

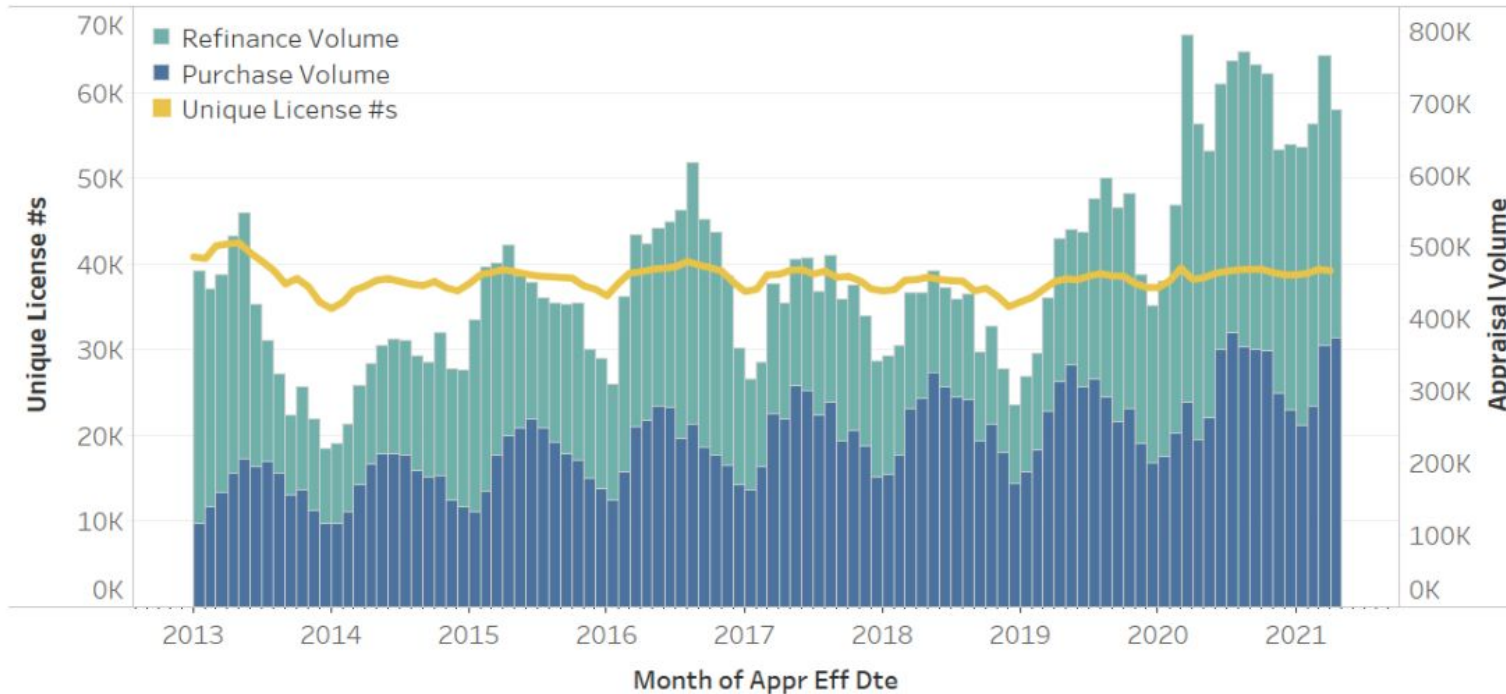
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President, CubiCasa



Appraisal Industry Update

Deteriorating Appraiser Capacity - Delays and Escalating Costs

UCDP Volume and Unique Appraiser Licenses



Unique appraiser license numbers in UCDP, per month. Appraisal and license volume for all form types (not limited to 1004/70).

+ 50%

Growth in number of appraisals needed since 2013, with **no change in the number of active appraisers***

+ 24%

Increase in Average Cost of an Appraisal since 2016. Now up to \$800.

+ 65%

Increase in Average Turntime of an Appraisal since 2018.

*Source: Freddie Mac

The New Desktop Appraisal Option

The New Desktop Appraisal

The Biggest Appraisal Industry News in Years

In response to industry negativity around appraisal experiences, on Jan 19th, [Fannie Mae and Freddie Mac announced](#) that a **Desktop Appraisal** can be used instead of a full traditional appraisal on eligible Purchase Loans.



So long as the appraiser can access:

- A recent MLS Listing with required exterior and interior property photos
- An accurate floorplan with interior walls, and detailed calculations showing how Gross Living Area (GLA) was calculated.

This new product went into effect for lenders at the end of March.

Traditional Appraisals Require the Appraiser to Do Everything

Property Data Collection

- Schedule Appointments
- Drive to Properties
- Take Photos
- Collect Data



Value Conclusion

- Neighborhood Research
- Select Comparables
- Make Value Adjustments
- Conclude + Explain Final Value

Average appraisal turntime: 2–3 weeks

Desktop Appraisals

No Inspection, Appraiser Focuses on Value Conclusion

Property Data Collection

MLS Data + Floorplan



Value Conclusion

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Minimum Required Photos for the Desktop

Exterior Photos

Clear, descriptive color photographs showing the front, back, and a street scene of the subject property.

At a minimum, the report must include photographs of the following:

Interior Photos

- the kitchen;
- all bathrooms;
- main living area;
- examples of physical deterioration, if present; and
- examples of recent updates, such as restoration, remodeling, and renovation, if present.

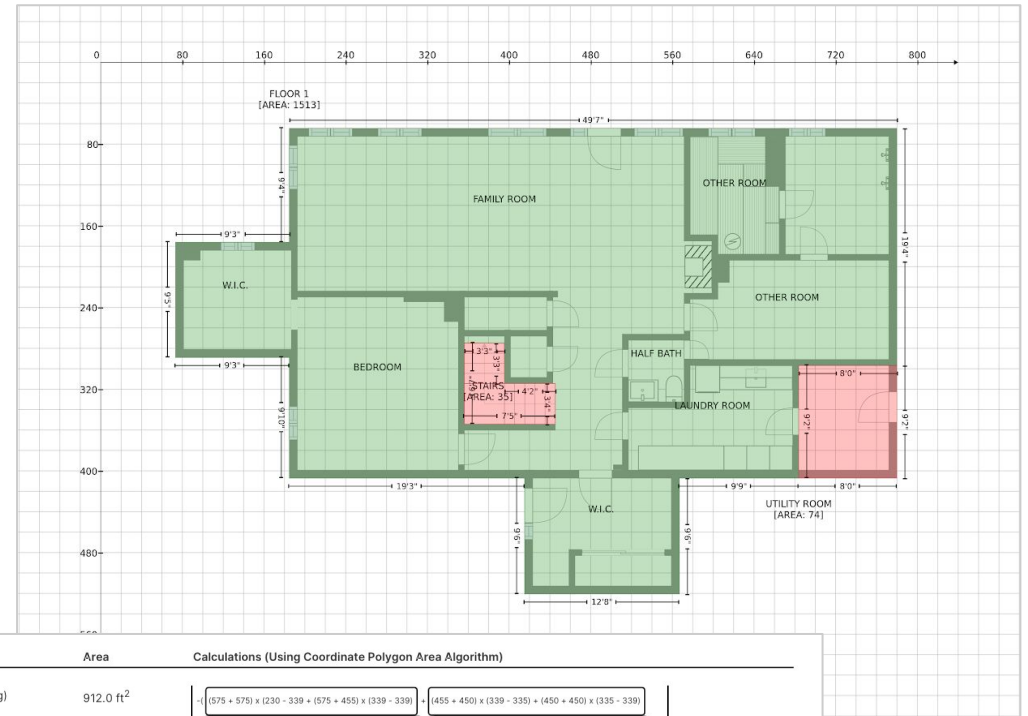
Floorplan Requirements for the Desktop

“A footprint sketch or floor plan must be software-generated (not hand drawn) and indicate dimensions and calculations that demonstrate how the estimate for gross living area was derived. The sketch must include the subject’s exterior footprint with dimensions.

All levels of the dwelling unit(s) must be part of the exhibit.

In addition, a separate footprint sketch including dimensions must be provided for each additional structure with room labels, when applicable.

The floor plan must include the following: interior walls, doorways, staircases, exterior ingress/egress, labels for each room, and provide the dimensions of all exterior walls.”



Structure	Area	Calculations (Using Coordinate Polygon Area Algorithm)
FLOOR 1 (Living)	912.0 ft ²	$\frac{1}{2} \left[\begin{aligned} &-(575 + 575) \times (230 - 339) + (575 + 455) \times (339 - 339) + (455 + 450) \times (339 - 335) + (450 + 450) \times (335 - 339) \\ &+ (450 + 445) \times (339 - 339) + (445 + 445) \times (339 - 355) + (445 + 455) \times (355 - 355) + (455 + 455) \times (355 - 502) \\ &+ (455 + 240) \times (502 - 502) + (240 + 240) \times (502 - 574) + (240 + 60) \times (574 - 574) + (60 + 60) \times (574 - 371) \\ &+ (60 + 70) \times (371 - 371) + (70 + 70) \times (371 - 240) + (70 + 60) \times (240 - 240) + (60 + 60) \times (240 - 234) \\ &+ (60 + 120) \times (234 - 234) + (120 + 130) \times (234 - 230) + (130 + 126) \times (230 - 234) + (126 + 130) \times (234 - 234) \\ &+ (130 + 130) \times (234 - 240) + (130 + 186) \times (240 - 240) + (186 + 186) \times (240 - 230) + (186 + 575) \times (230 - 230) \end{aligned} \right]$
STAIRS (AREA: 35)		
UTILITY ROOM (AREA: 74)		
STORAGE (Non-Living)	51.0 ft ²	$\frac{1}{2} \left[\begin{aligned} &-(130 + 130) \times (129 - 230) + (130 + 120) \times (230 - 234) + (120 + 60) \times (234 - 234) + (60 + 60) \times (234 - 129) \\ &+ (60 + 130) \times (129 - 129) \end{aligned} \right]$

Strategic Implications of the Desktop Appraisal for MLSs

Major opportunity to enhance the relevancy of the MLS model - puts it at the epicenter of the organized real estate market

Opportunity to collect rich, automated and standardized property data up front in the listing process

What is CubiCasa?

CubiCasa technology allows anybody with a smartphone to perform a **5-minute** property scan, and receive back a accurate floorplan and robust property data

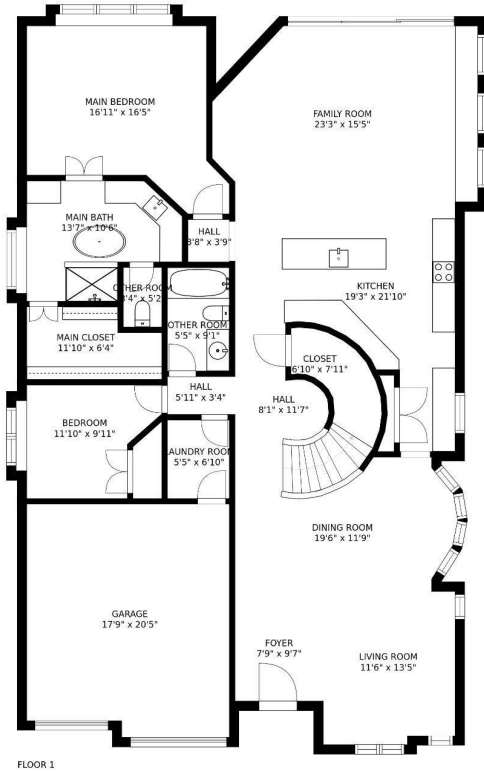
Training or special equipment not required

Advanced proprietary computer vision technology developed in Finland

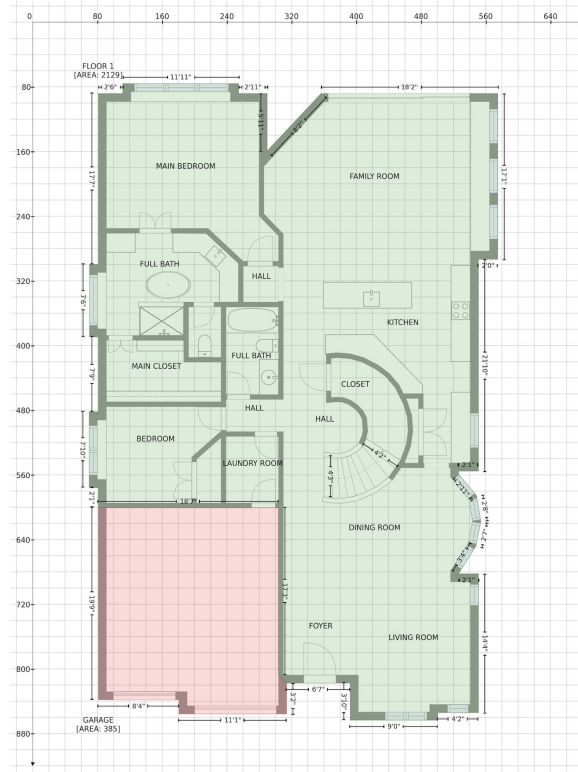
Our tech helps power the FBS FloPlan product, and is also available for direct integration with other customers



What are the Outputs of each CubiCasa Scan?



Black and White Marketing Floorplan



GLA Floorplan w/ Required GSE Calculations

Home report

Powered by CUBICASA

3160 Barefoot Lane
Prosper

Highlights

🏠 1 Kitchen
🛋️ 2 Living room
🛏️ 3 Bedroom

Appendix 1: Data sheet

Hall - 4	Kitchen - 1	LivingRoom - 2
LivingRoom - Family - 1	Entry - 1	Entry - Foyer - 1
Dining - 1	Garage - 1	Bedroom - 3
Bath - 4	Bath - Toilet - 1	Utility - 1
Utility - Laundry - 1	MediaRoom - 2	MediaRoom - Game - 1
OpenToBelow - 1		

Property Data BETA

A panoramic view of a city skyline at sunset, with various skyscrapers and buildings silhouetted against a warm, orange and blue sky. The water in the foreground reflects the light from the sky.

Class Valuation & DataMaster RESO 2022

Inspiring Confidence in Valuation



About desktop appraisals

Leveraging the wealth of data and the power of advanced analytics and the speed of technology, appraisers can perform desktop appraisals without physically inspecting the property.¹

Desktop appraisal benefits

- ✔ Supports digital transmission of the mortgage origination
- ✔ Cost- and time-efficient benefits borrowers and lenders
- ✔ May reduce confirmation and follow-up costs
- ✔ Mitigates appraiser capacity constraints.
- ✔ Rigorous testing shows lower risk performance compared to traditional appraisals
- ✔ Improves disaster/preparedness response time.

Appraiser conducts analysis and develops opinion of value.

- Use Form 1004 Desktop.
- No physical inspection of the subject property; data may be provided by various parties (buyer/seller agent, homeowner, builder, appraiser files, etc.) and through secondary data sources (public records, MLS, internet, etc.).
- Must include floor plan with interior walls.
- If the appraiser does not have sufficient information to complete a credible appraisal, they must refuse the assignment.
- Data provided by parties with a financial interest in the sale or financing of the subject property must be verified by a disinterested source.
- The appraiser must have sufficient information to develop a credible report.

Desktop Appraisal Fact Sheet – 01/19/2022

Freddie Mac
Single-Family

Desktop appraisal

Effective for new L
resubmissions on

Based on the success
and a market apper

inspections, Freddie Mac is intro
purchase transaction Mortgage
desktop appraisal can help addi
reduce appraisal turn-times. Its use also has the
reduce Borrower costs.

Q9. May an appraiser make assumptions regarding the characteristics of the property such as condition, quality, room count, amenities, finished basement, etc. without a data source?

It is unacce
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appraisal (F

Q10. When completing a desktop appraisal, should the appraiser use the GLA reported by public records if the building sketch provided by a third-party reflects a significantly different GLA?

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GLA. The same wi
appraiser must an
available, then the

Q11. Can an appraiser complete a desktop appraisal if they are aware of the existence of minor repairs, deficiencies, or deferred maintenance?

Yes. Freddie Mac allows an appraisal to be completed "as is" for an existing property when there are minor repairs or deficiencies, or deferred maintenance. The appraiser must make appropriate and supported adjustments for these conditions in the appraisal report, when necessary. However, it is up to the appraiser to determine whether additional information, that may include the appraiser's personal inspection of the subject property, is necessary to assess the impact of the conditions.

Desktop Appraisal Fact Sheet – 02/02/2022

Traditional Appraisal vs Digital (i.e. Desktop)

Appraisal turn time improvements

First Pass Revisions (from us back to the appraiser)



Second Pass Revisions (from the lender back to us)



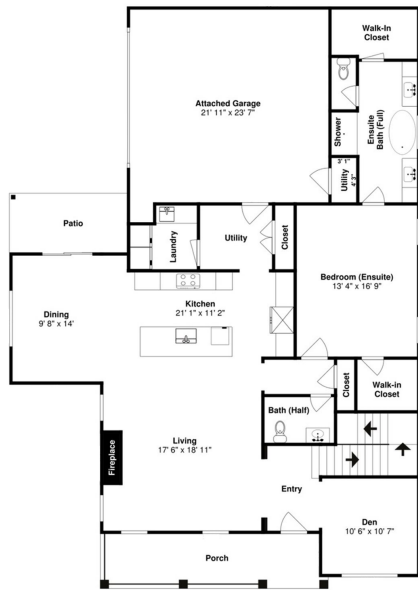
Region	State	County	Avg. Order to Delivery (Innovation)	Avg. Order to Delivery (traditional)	Delta (Days)	Delta (%)
West	CA	KINGS	2.39	14.01	11.62	82.9%
West	CA	SOLANO	2.09	8.42	6.34	75.2%
Southwest	TX	BELL	4.32	16.65	12.33	74.0%
West	CA	MERCED	2.17	7.96	5.79	72.7%
Southeast	GA	COWETA	3.71	12.51	8.80	70.4%
Southeast	GA	BIBB	4.69	15.12	10.42	69.0%
Southeast	FL	MANATEE	3.94	11.21	7.27	64.9%
Southwest	TX	WILLIAMSON	6.32	12.60	6.28	49.8%
Southeast	GA	CHEROKEE	3.68	7.27	3.59	49.4%
South	AL	MADISON	6.05	11.81	5.76	48.8%
West	CA	KERN	4.81	9.37	4.56	48.7%
Southwest	TX	TRAVIS	6.17	11.84	5.66	47.8%
Southeast	FL	SARASOTA	6.13	11.73	5.59	47.7%
Northwest	UT	SALT LAKE	4.12	7.67	3.55	46.3%
Southeast	FL	ESCAMBIA	5.30	9.80	4.49	45.9%
Southeast	FL	PINELLAS	5.10	9.14	4.04	44.2%
South	AL	JEFFERSON	5.96	9.16	3.19	34.9%
West	CA	STANISLAUS	4.87	7.43	2.56	34.4%
Southeast	FL	NASSAU	6.21	9.40	3.19	33.9%
Southwest	TX	GALVESTON	6.26	9.48	3.22	33.9%
Northeast	PA	BEAVER	4.37	6.58	2.21	33.6%

Property Fingerprint

- ❑ Class Valuation's proprietary technology stitches together **high-quality 360° images from the property scan** to create a **virtual tour** that works for marketing as well as a full **virtual inspection** for the appraiser.
- ❑ **Nationwide Pro Scanner** network is a dedicated team trained for consistent data capture that is background checked and customer service oriented.



Deliverables of each Class Valuation Scan




Marketing Floorplan



Appraisal Floorplan

Property Fingerprint Report

123 Beach Dr, Little Neck, GA 00000



Report Date: March 3, 2022 Location: 33°11'15.936"N 96°53'38.04"W

Property Features and Characteristics

Gross Living Area (SF): 2,566	Below Grade Total/Finished (SF): 0
Rooms: 9 Bedrooms: 3 Bathrooms: 2.5	Rooms: 0 Bedrooms: 0 Bathrooms: 0
Lot Size (SF): 7,500	Garage Spaces: 2
Heating: Central	Cooling: Central
Appliances: Cooktop Gas, Dishwasher, Disposer, Dryer, Microwave, Refrigerator	
Features: Deck (Covered), Porch (Enclosed), Porch (Open), Inground Pool	

Property Fingerprint Report



Rich Property Dataset Available via API



Thank you

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