

Housing market developments – 3rd quarter 2021

Strong house price growth in the province of Flevoland

Average house prices increased the most in the province of Flevoland with 21.3% year on year. The municipality of Bergen (NH.) is currently registering the fastest growth rate of all the municipalities in the Netherlands with 22.8%. The largest cities, Amsterdam and Rotterdam, show average house price increases of respectively 15.1% and 18.5%. The Hague and Utrecht show an average house price increase of resp. 17.9% and 20.3%.

Transactions remain stable and number of homes for sale drops

The annual number of sales increased in seven years from 150.000 to 297.000 houses. The number of homes for sale continues to decline. The ratio between the number of sales and supply has reached a factor 0.1 (sales > supply).

Housing affordability improves

On average, 14.0% of net household income was required to service housing costs, in 2008 the housing affordability peaked with 27.0%. The relatively good affordability is mainly the result of the current low mortgage interest.

CALCASA INDEXES 2021 Q3

Calcasa House Price Index (WOX) (1995Q1=100)	426
Calcasa WOX Top 15 Cities Index (1995Q1=100)	498

Residential price change

WOX price change (year-on-year)	17.6%
WOX price change (quarter-on-quarter)	7.3%
WOX price change corrected for inflation (year-on-year)	15.4%

House price forecast

Yearly price change 2021 Q4	20.4%
Quarterly price change 2021 Q4	4.2%

Housing affordability

Affordability index	14.0%
Yearly change in housing affordability	-6.1%
Quarterly change in housing affordability	-6.3%

Transactions

Number of transactions on a yearly basis (x 1,000)	297
Yearly change in the number of transactions	6.3%
Quarterly change in the number of transactions	-3.4%

*Housing stock January 1st, 2021, municipal reclassification 2020

Content WOX:

Introduction	1
House prices and development	2
Segment analyses and forecast	3
House prices by region	4
Affordability	5
House sales	6
Market liquidity	8
Mortgage market	11
Foreclosures	11
Dutch housing market summary	13
Appendices	14

Table 1

Calcasa key numbers Q3 2021
Source: WOX Monitor Calcasa

Visit calcasa.co.uk for more information

Average house price keeps rising

- The WOX (1995 = 100) currently stands at 426 points.
- Average house price: € 417.000.
 - » Q-O-Q price development: +7.3%.
 - » Y-O-Y price development: +17.6%.
- The current Dutch inflation rate is 2.2% (which is the average rate for Q3 2021 according to Statistics Netherlands). In the third quarter of 2021, inflation-adjusted house prices rose by 15.4% y-o-y.

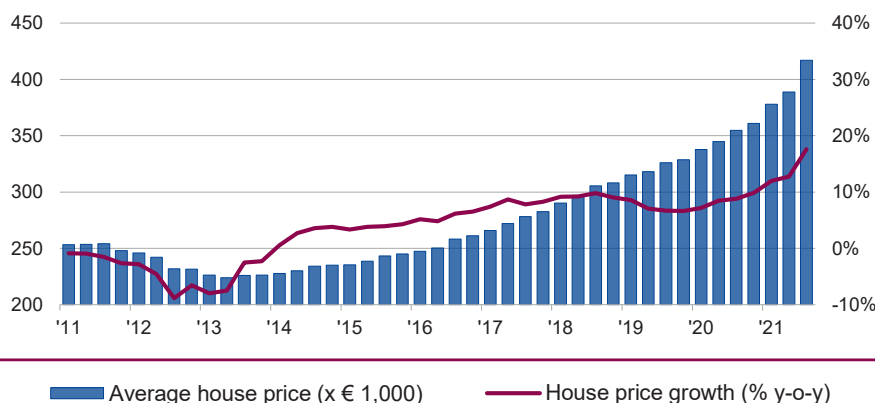


Figure 1

Average house price (x EUR1,000) and yearly price change per quarter in the Netherlands.

Source: WOX Monitor Calcasa

- Average price of a single-family house: € 437.000.
 - » Q-O-Q price development of single-family houses: +7.4%.
 - » Y-O-Y price development of single-family houses: +17.6%.
- Average price for apartments: € 365.000.
 - » Q-O-Q price development of apartments: +7.0%.
 - » Y-O-Y price development of apartments: +17.5%.

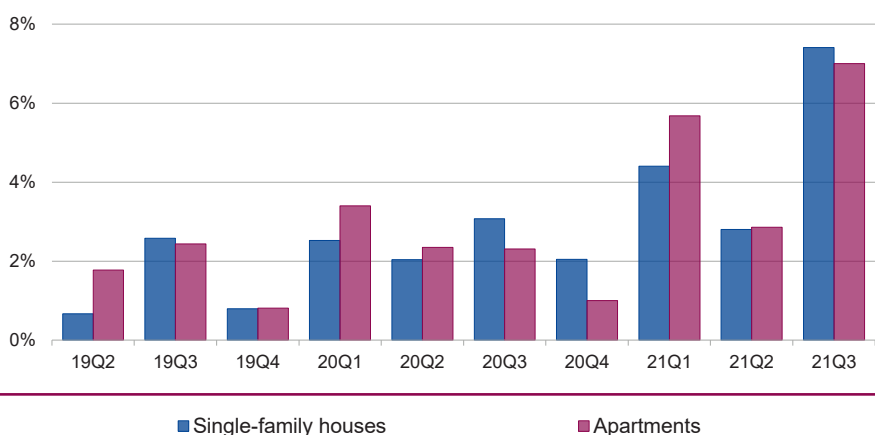


Figure 2

Q-O-Q price change per housing type in the Netherlands.

Source: WOX Monitor Calcasa

Highest price increase for less than € 150,000 class

- Based on house price levels, Calcasa has divided the market into five price classes. Homes in the price class less than € 150.000 performed best with an annual average house price rise of 20.8%.
- The most expensive houses - worth more than 500k - increased the least in value; over the past year these homes increased in value by 16.5%.

Price class (euro)	Price development y-o-y
Less than 150,000	20.8%
150,000 to 250,000	19.5%
250,000 to 350,000	18.0%
350,000 to 500,000	16.7%
More than 500,000	16.5%
All residential properties	17.6%

Apartments (1945-1979) show biggest price increase

- Apartments built between 1945 and 1979 are registering the fastest growth. Their value increased by 19.1% in the past year.
- Apartments built between 1980 and 2000 are registering the slowest growth. Their value increased by 16.1% in the past year.

Development (y-o-y)	Construction year				
Housing type	<1944	1945-1979	>1980	>2000	Total
(semi) detached	17.8%	18.0%	16.9%	17.2%	17.6%
Terraced/corner house	17.7%	17.6%	18.6%	16.5%	17.7%
Apartment	17.2%	19.1%	16.1%	16.7%	17.5%
Total	17.5%	18.2%	17.5%	16.7%	17.6%

Forecast house price development in Q4 2021

- Q-O-Q price change: 4.2%.
- Y-O-Y price change: 20.4% (Q4 2020 - Q4 2021).
 - » Y-O-Y price change single-family homes: 21.0%.
 - » Y-O-Y price change apartments: 18.9%.

Calcasa publishes region-specific house price forecasts for four specific areas of the Netherlands, reflecting the diversity and variety displayed across the region.

- Western part: 20.7%
- Northern part: 21.3%
- Eastern part: 22.1%
- Southern part: 17.7%

Table 2a

Netherlands - price development per price class and transaction distribution over the last year.
Source: Calcasa

Table 2b

Netherlands - annual price development per construction year and housing type.
Source: Calcasa

Strong house price growth in Flevoland

- Average house prices increased the most in the province of Flevoland, with an annual increase of 21.3% in value.
- Apartments in Overijssel and Gelderland are in demand, with values going up by 20.8% and 19.8% respectively.
- The lowest price increase was measured for houses in the provinces of North-Brabant (15.5%) and Limburg (14.8%).

Q3 2021	Average price single-family houses	Average price apartments	Price change (year-on-year)
Groningen	310,000	292,000	20.3%
Friesland	364,000	356,000	19.2%
Drenthe	299,000	251,000	19.0%
Overijssel	339,000	295,000	17.2%
Flevoland	359,000	262,000	21.3%
Gelderland	429,000	303,000	19.2%
Utrecht	607,000	405,000	18.6%
North-Holland	572,000	510,000	17.6%
South-Holland	483,000	337,000	17.3%
Zeeland	305,000	292,000	18.6%
North-Brabant	429,000	318,000	15.5%
Limburg	317,000	247,000	14.8%
The Netherlands	437,000	365,000	17.6%

Table 3

Average price and y-o-y price development
on province level
Source: WOX Monitor Calcasa

Alkmaar fastest growing region

- The largest annual price increase of 21.7% is measured for houses in the NUTS III region of Alkmaar. In this region the value of single-family homes rose by 22.4% and the value of apartments by 17.8%.
- Second-largest annual price increase is seen in the NUTS III region Flevoland with an annual growth rate of 21.3%, here the value of single-family homes rose by 21.3% and the value of apartments by 21.2%.
- The NUTS III regions with the smallest price increases are West-North-Brabant (14.2%) and South-Limburg (14.6%).
- In 6 of the 40 NUTS III regions the annual increase for houses prices is more than 20%.

Housing affordability

On average, 14.0% of net household income was required to service housing costs in the third quarter of 2021, compared to mid-2008 when housing costs represented 27.0% of net income.

- Q-O-Q change in net housing costs: 6.3%.
- Y-O-Y change in net housing costs: 6.1%.

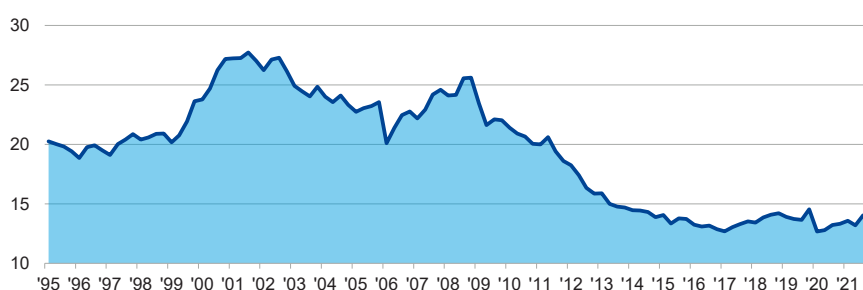


Figure 3

Housing affordability index* (in % of household income) in the Netherlands.
Source: WOX Monitor Calcasa

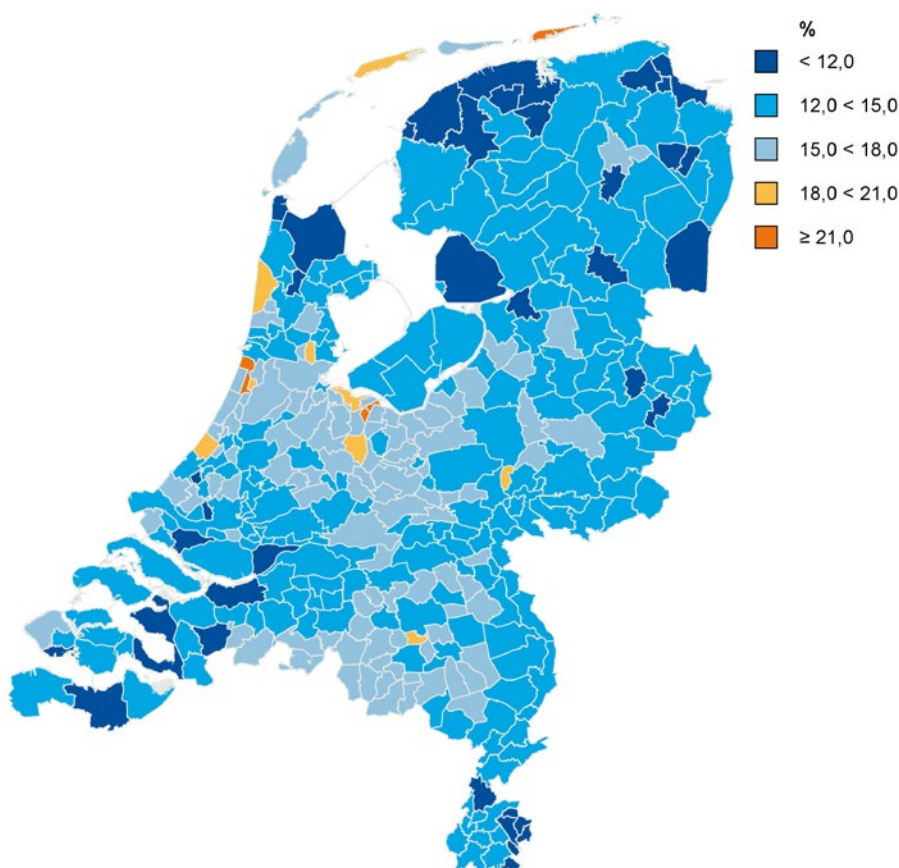


Figure 4

Affordability index per municipality (in %).
Source: WOX Monitor Calcasa

*The index measures the affordability of Dutch owner-occupied houses. It is calculated taking into account net housing costs, current average mortgage costs (current interest rate, maintenance costs, local taxes and fiscal treatment).

Number of sales

The annual number of transactions has increased. 297.000 residential properties were sold during the past year.

- Y-O-Y development, number of annual sales: +6.3%.
- Q-O-Q development, number of annual sales: -3.4%.

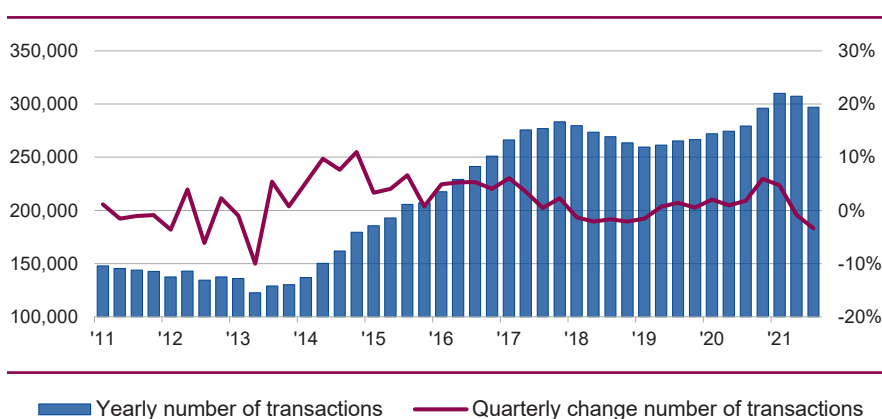


Figure 5

Number of annual sales* and y-o-y change in number of sales in the Netherlands.

Source: Statistics Netherlands, Land Registry, adaptation by Calcasa

* Calcasa shows the number of housing sales on an annual basis for a reliable picture of the long term trend (corrected for seasonal effects).

Number of sales by housing type

- Transactions of detached houses increased with 10.1% in the third quarter of 2021.
- Apartments sales increased the most this quarter with 14.2% year-on-year. Despite a shrinking supply of apartments.

Transaction development y-o-y

Housing type	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Detached	8.6%	18.5%	21.4%	16.1%	10.1%
Semi-detached	8.9%	9.2%	12.7%	7.7%	-0.2%
Corner house	6.8%	6.7%	9.3%	5.8%	0.4%
Terraced house	5.7%	8.1%	12.1%	9.6%	2.7%
Apartment	0.4%	12.5%	14.3%	17.3%	14.2%
Total	5.4%	11.1%	14.0%	11.9%	6.3%

Table 4

Y-o-y transaction development by period and property type

Source: WOX Monitor Calcasa

Sales in expensive price class increased

- The sale of homes in the price range € 350.000 to € 500.000 increased by 19.6% in the past year, whilst homes above € 500.000 increased by 43.9%.
- Especially in the east (54.4%) and in the north (79.7%) of the Netherlands more expensive homes (> € 500.000) were sold.
- In the south the highest increase in sales was measured for houses in the price range above € 500.000 (51.9%).
- The lowest price segment (€ 75.000 to € 150.000) decreased the most in the western part of the Netherlands by 32.7%.

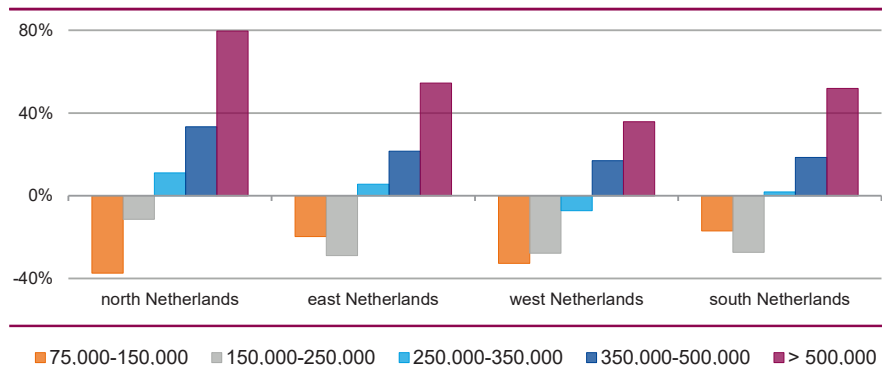


Figure 6

Growth (%) of share of housing sales per price class in North, East, West and South Netherlands in Q3 2021 compared to Q3 2020.

Source: WOX Monitor Calcasa

28% of housing sales within € 250.000 to € 350.000

- In the past year 23% of housing sales were within the price class of € 150.000 to € 250.000.
- The percentage of transactions in the price class € 75.000 to 150.000 decreased in four years time from 18% to 5%.
- The price segment € 350.000 to € 500.000 increased in four years time from 12% to 24%.
- 19% of housing sales were within the price class of € 500.000 or more. Four years ago this was 7%.

Share of housing sales per price class

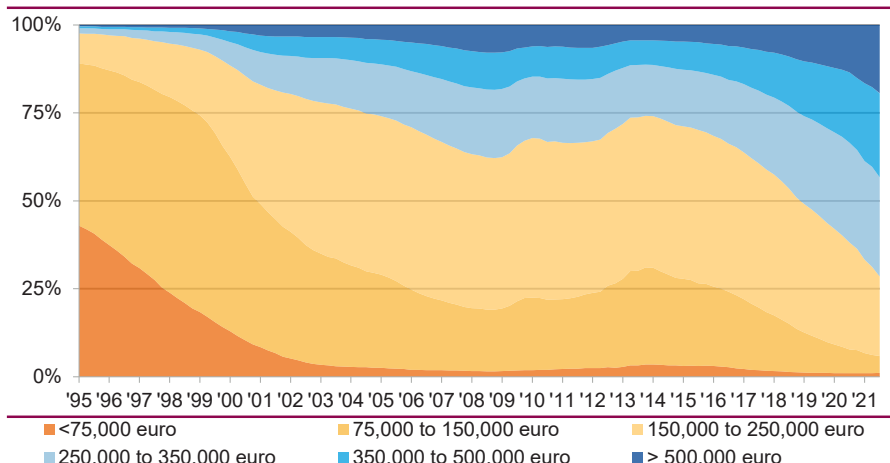


Figure 7

Share of housing sales per price class
Source: WOX Monitor Calcasa

Visit calcasa.co.uk for more information

Groot-Amsterdam highest market liquidity

- In the NUTS III region Groot-Amsterdam 8.1% of the housing supply was sold during the past year. The regions Zeeuwsch-Vlaanderen and The Hague follow with 7.4% and 7.3% respectively.
- The NUTS III region IJmond has the lowest market liquidity: 5.2%.

NUTS III region	Percentage of housing supply sold last year	NUTS III region	Percentage of housing supply sold last year
Groot-Amsterdam	8.1%	IJmond	5.2%
Zeeuwsch-Vlaanderen	7.4%	Zuidwest-Overijssel	5.7%
Agglomeratie 's-Gravenhage	7.3%	Achterhoek	5.7%
Zuidoost-Drenthe	7.1%	Delft en Westland	5.8%
Veluwe	7.1%	Oost-Zuid-Holland	6.0%
Het Gooi en Vechtstreek	7.1%	Midden-Limburg	6.0%
Groot-Rijnmond	7.1%	Twente	6.1%
Flevoland	7.0%	Arnhem/Nijmegen	6.1%
Agglomeratie Haarlem	6.9%	Alkmaar en omgeving	6.1%
Midden-Noord-Brabant	6.9%	Zaanstreek	6.1%

Table 5

Top 10 NUTS III regions with highest and lowest percentage of housing supply sold last year

Source: WOX Monitor Calcasa

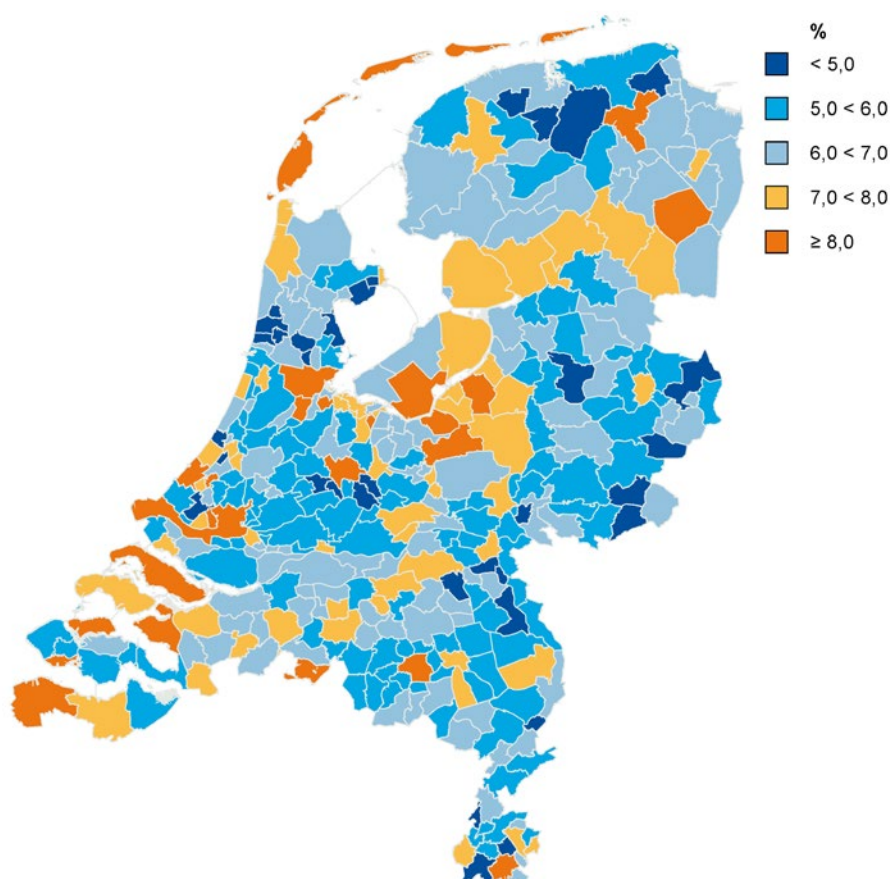


Figure 8

Market liquidity: sold homes as percentage of total number of owner occupied housing stock for previous year per municipality

Source: WOX Monitor Calcasa

Market liquidity: number of sales surpassed supply

- The annual ratio of houses for sale vs. sold has decreased to 0.1. This is an improvement compared to last year when this ratio was still 0.3.
- The annual number of houses sold: 297.000.
» Y-O-Y development: 6.3%
- Homes for sale in Q3 2021: 23.000
» Y-O-Y development: -71.9%
- The market liquidity is best in the municipality of Urk with a factor of 0.03.
- In the municipality of Wassenaar the market liquidity is highest (worst) with a factor of 0.18.

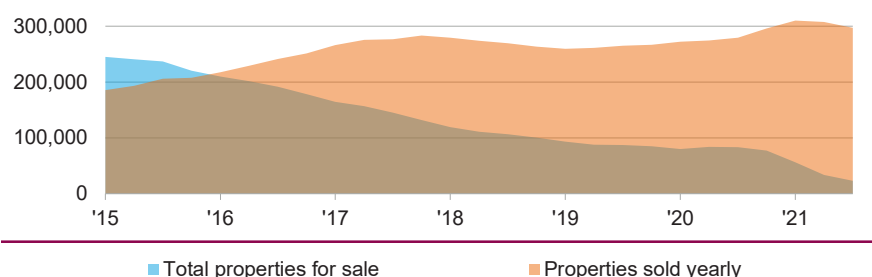


Figure 9a

Annual number of properties for sale versus number of properties sold over the period 2015-2021 in the Netherlands.
Source: Multiple real estate agents, adaptation Calcasa

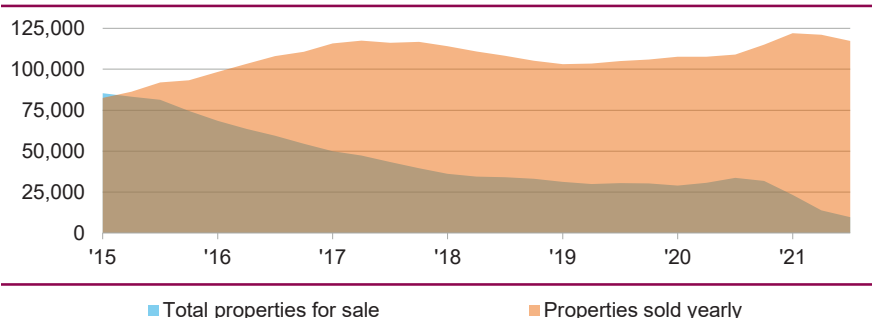


Figure 9b

Annual number of properties for sale versus number of properties sold over the period 2015-2021 in the Randstad.
Source: Multiple real estate agents, adaptation Calcasa

- The relationship between the supply of owner-occupied housing and total owner-occupied housing stock is also a component of market liquidity. The percentage of the total owner-occupied housing stock that sold last year is 6.7% for the Netherlands.
 - o The percentage of family homes sold previous year: 6.9%.
 - o The percentage of apartments sold previous year: 6.1%.
- The share of owner occupied housing stock which was sold last year is highest in the city of Zeewolde with 10.7%.
- In the municipality of Haaksbergen only 3.9% of the existing stock of owner-occupied homes has changed owners.

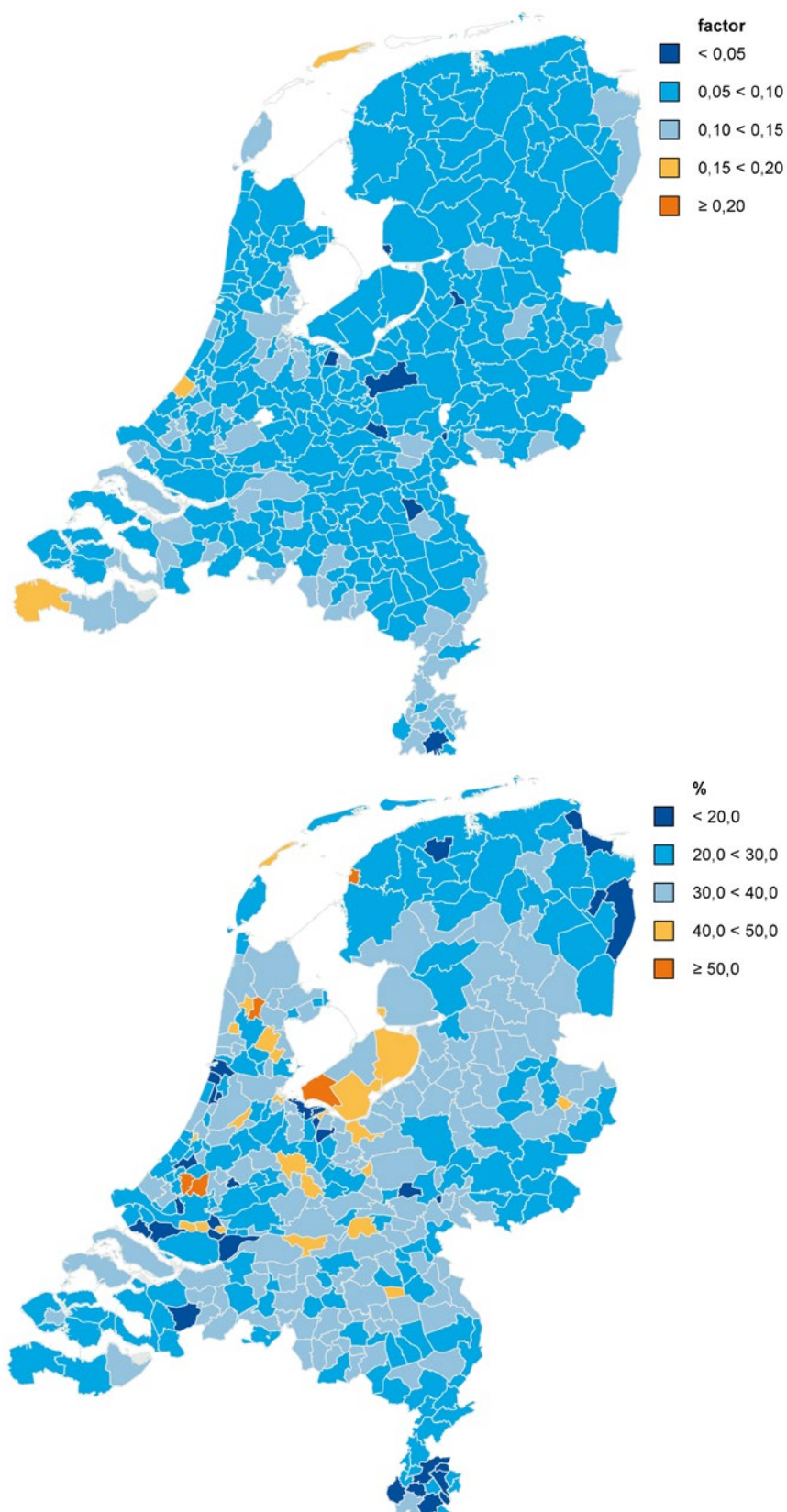


Figure 10

Supply/Sales ratio all properties per municipality

Source: WOX Monitor Calcasa

Figure 11

Percentage of properties with energy label A per municipality

Source: WOX Monitor Calcasa

Mortgage approvals

Approximately 510.000 mortgages were approved last year.

- Y-O-Y development, number of annual mortgages: 11.9%.
- Q-O-Q development, number of annual mortgages: 0.5%.

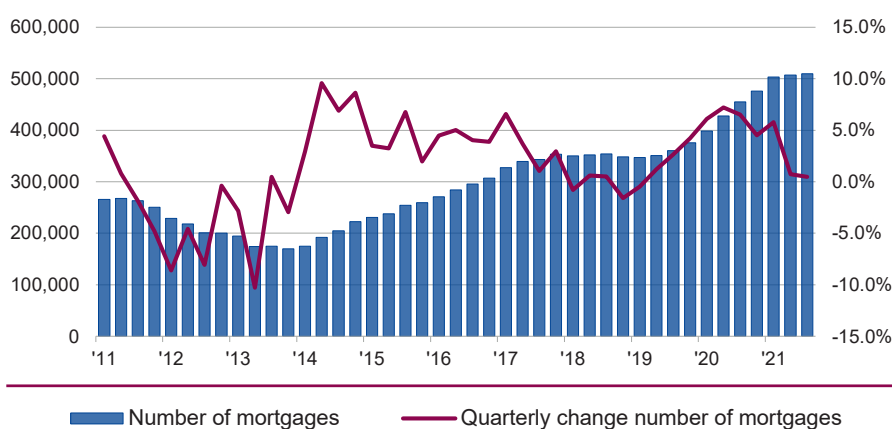


Figure 12

Number of mortgages
Source: Statistics Netherlands, Land Registry and adaptation Calcasa

Number of foreclosures

Over the last four quarters, 350 foreclosures have been registered by the land registry.

- o Y-O-Y development amount of annual foreclosures: 7.7%.
- o Q-O-Q development amount of annual foreclosures: 6.4%.
- The share of foreclosure sales versus total sales is 0.1%.
- The highest share of foreclosure sales to total sales is 0.8% in the municipality of Druten.
- 201 municipalities had no foreclosure sales in the past year. The largest municipality without foreclosure sales is Leeuwarden.

Note that many foreclosed properties will be sold via the public market and not via auction. The reason is that proceeds of a sale of a home through a forced auction can be up to 40 percent less compared to a sale via the public market.

Due to the increase in the number of foreclosures after the crisis, the NHG has come up with stricter regulations allowing banks to only sell homes via auction if the selling price is less than 5% below market value. This is to avoid big losses.

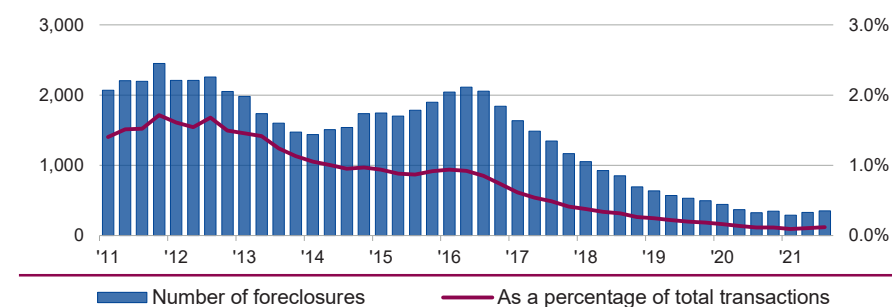


Figure 13

Number of yearly foreclosures and amount of foreclosures as a % of the total number of transactions in the Netherlands.
Source: Statistics Netherlands, Land Registry and adaptation Calcasa

Average price newly built homes increased

- In the second quarter of 2021 the total amount of sales for newly built homes was 9.000. This is a increase of 10.9% year-on-year.
- During the second quarter of 2021 the average price for newly built houses was € 442.000. This is an increase of 7.8% compared to a year ago.

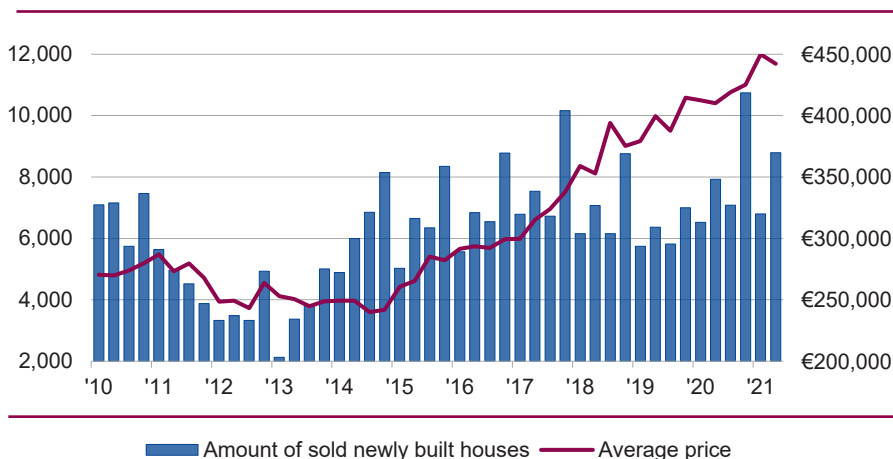


Figure 14

Average sales price for newly built houses per quarter in the Netherlands compared to the quarterly amount of newly built houses sold.

Source: CBS

Amount of households in arrears decreased

- Since 2015 the number of homeowners with payment problems decreased with 65%.
- At the end of 2020 there were 39.000 homeowners who had difficulty paying their mortgage: this is a decrease of 20.4% compared to a year earlier.

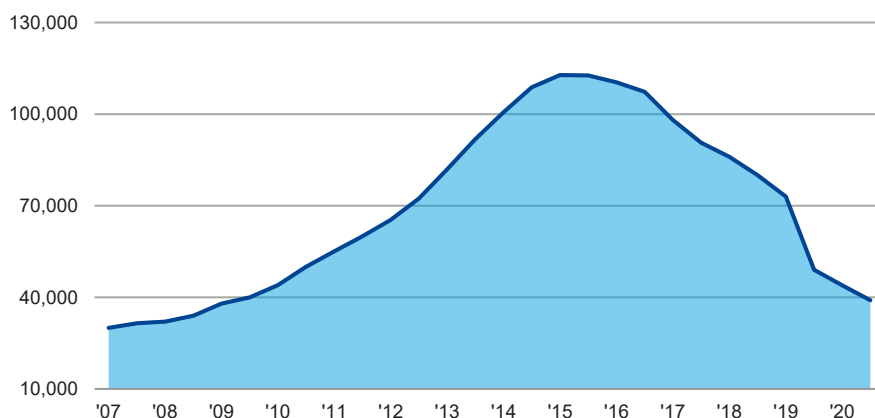


Figure 15

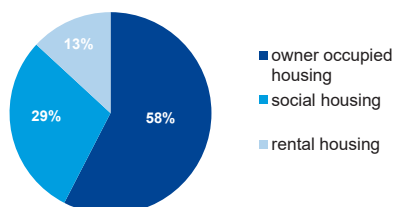
Number of borrowers with mortgage payment arrears

Source: BKR

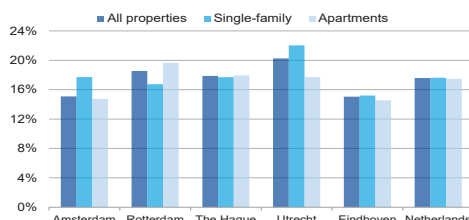
Dutch Housing Market Summary

	Largest cities	All properties	Single-family	Apartments	Owner occupied	Rental	Total population	Total households	Annual sales	Current supply
Amsterdam	441,000	60,000	381,000	30%	70%	872,760	475,370	13,754		
Rotterdam	312,000	86,000	226,000	35%	64%	651,160	328,280	9,178		
The Hague	259,000	59,000	200,000	43%	57%	545,840	268,310	9,009		
Utrecht	154,000	67,000	87,000	46%	54%	357,600	181,670	5,843		
Groningen	115,000	47,000	68,000	42%	58%	232,870	136,380	3,979		
Eindhoven	111,000	67,000	44,000	45%	55%	234,390	120,980	4,087		
Provinces										
Groningen	280,000	184,000	96,000	55%	44%	585,870	295,470	10,304	718	
Friesland	300,000	244,000	57,000	62%	37%	649,960	294,470	11,958	777	
Drenthe	222,000	183,000	39,000	66%	34%	493,680	219,300	9,742	648	
Overijssel	505,000	386,000	119,000	61%	39%	1,162,410	508,410	18,979	1,345	
Flevoland	169,000	133,000	36,000	65%	35%	423,020	176,620	7,671	563	
Gelderland	903,000	679,000	224,000	61%	39%	2,085,950	931,490	35,077	2,402	
Utrecht	579,000	366,000	212,000	59%	41%	1,354,830	610,330	22,241	1,526	
North-Holland	1,334,000	673,000	662,000	51%	49%	2,879,530	1,376,230	47,766	3,862	
South-Holland	1,676,000	826,000	849,000	52%	47%	3,708,700	1,719,990	58,998	5,091	
Zeeland	187,000	152,000	35,000	66%	32%	383,490	175,700	8,530	837	
North-Brabant	1,129,000	850,000	279,000	62%	38%	2,562,960	1,157,460	46,176	3,693	
Limburg	531,000	390,000	141,000	60%	39%	1,117,200	532,320	19,558	1,958	
Netherlands	7,815,000	5,066,000	2,749,000	57%	42%	17,407,580	7,997,800	297,000	23,418	

Housing stock



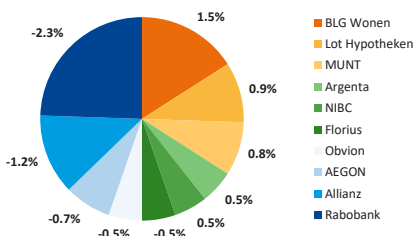
Y-O-Y price development largest cities



Mortgage developments

	Amount	Change
Sales with NHG	20,300	-9.8%
Execution sales with losses	8	-66.7%
Households in arrears	39,000	-20.4%
Sold mortgages	509,718	11.9%
Total mortgage debt	765B	3.3%

Top mortgage lenders: increase/decrease market share



Macro-economic figures

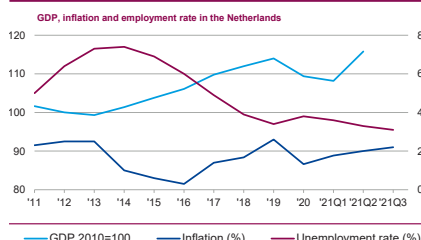


Table 6

Key figures for the Dutch housing market
Source: Statistics Netherlands, Land Registry

Figures 16 & 17

Source figure left: Statistics Netherlands
Source figure right: Calcasa

Table 7 & Figure 18

Source table left: Statistics Netherlands, NHG, BKR, Land Registry
Source figure right: Calcasa, IG&H

Figures 19 & 20

Source figure left: DNB, Statistics Netherlands
Source figure right: Calcasa, Statistics Netherlands

Municipalities	Highest	Municipalities	Lowest
	property values (x 1,000)		property values (x 1,000)
Bloemendaal	1,016	Delfzijl	217
Wassenaar	840	Heerlen	229
Heemstede	761	Oldambt	230
Gooise Meren	678	Kerkrade	231
De Bilt	640	Brunssum	233
Wijdmeren	623	Veendam	240
Bergen (NH.)	604	Terneuzen	242
Zeist	602	Leeuwarden	249
Utrechtse Heuvelrug	586	Noardeast-Fryslân	254
Huizen	579	Waadhoeke	256

Table 8

Top 10 highest and lowest property values, per municipality containing over 5,000 owner-occupied dwellings.
Source: Calcasa

Municipalities	Highest	Municipalities	Lowest
	annual price development		annual price development
Bergen (NH.)	22.8%	Breda	14.1%
Langedijk	22.3%	Horst aan de Maas	14.1%
Heiloo	22.2%	Etten-Leur	14.2%
Almere	21.8%	Bergen op Zoom	14.2%
Zaltbommel	21.8%	Roosendaal	14.2%
Het Hogeland	21.7%	Drimmelen	14.2%
Westerkwartier	21.5%	Peel en Maas	14.2%
Westerveld	21.4%	Woensdrecht	14.3%
Culemborg	21.4%	Halderberge	14.3%
West Maas en Waal	21.4%	Steenbergen	14.3%

Table 9

Top 10 highest and lowest price developments, per municipality with over 5,000 owner-occupied dwellings.
Source: Calcasa

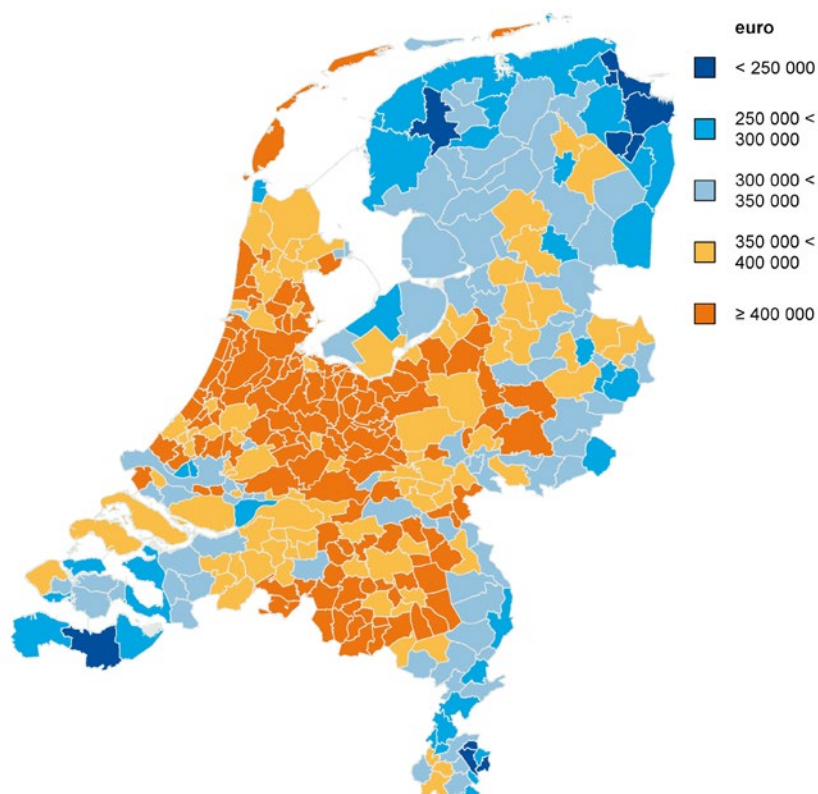


Figure 21

Average house price per municipality (EUR).
Source: Calcasa

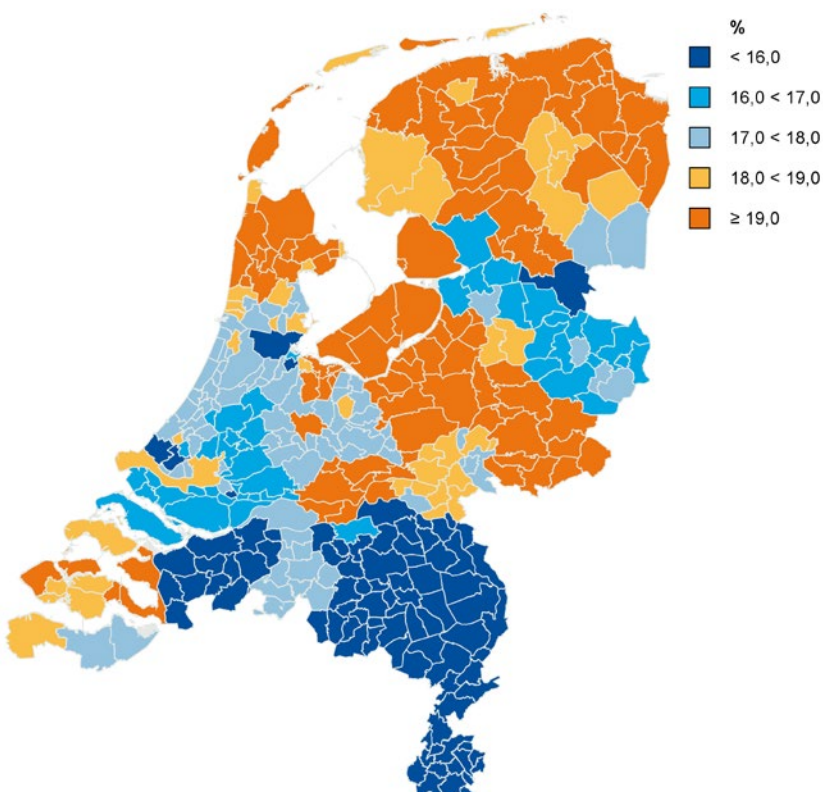
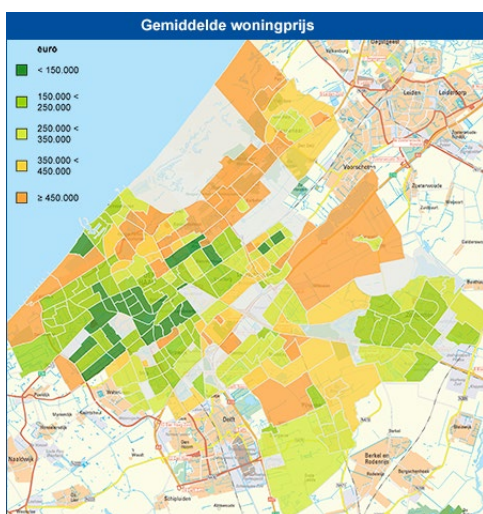


Figure 22

Year-on-year price change per municipality (%).
Source: Calcasa

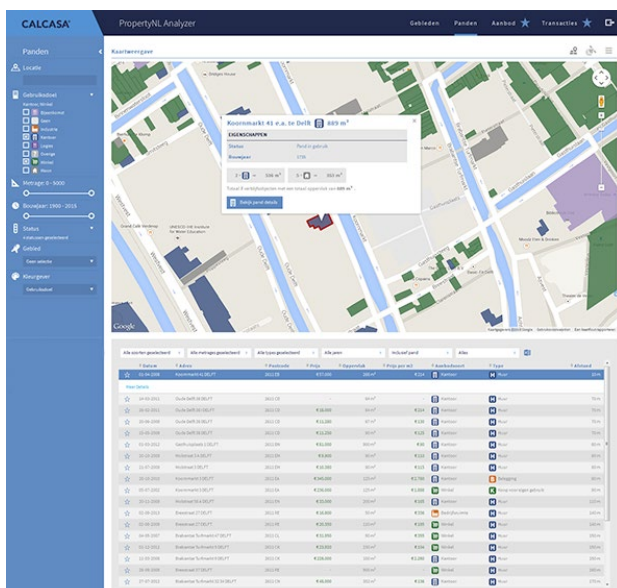
The WOX Monitor: All housing market data for every neighborhood

More information on price developments in various regional levels (neighborhood, municipality, province) is available via the WOX monitor.



Calcasa PropertyNL Analyzer

Analyzing the commercial real estate market is possible through the Calcasa PropertyNL Analyzer (“CPA”). CPA is an online application with information that is easily accessible for the office, retail and industrial markets. This tool increases the transparency in the property market.



About Calcasa

Calcasa is an independent technology company specializing in the statistical analysis and valuation of real estate. The Calcasa Automated Valuation Model (AVM) for valuation of individual homes is unique due to its high coverage and accuracy. It is internationally recognized by the three major rating agencies and regulators. Mortgage lenders, investors, intermediaries, validation institutes, housing corporations, consumer organizations, real estate companies, broker organizations, government agencies and regulators rely daily on the solutions Calcasa. www.calcasa.co.uk

Calcasa WOX: A reliable house price index

Calcasa WOX is demonstrably the most reliable house price index in the Netherlands. Every quarter, Calcasa calculates a reliable house price index for each province, municipality, borough and neighborhood in the Netherlands. The house price index is calculated using the national data on transactions starting from 1993 and additional house and location characteristics from the database. The source data is screened for integrity, such that non-representative data is omitted for the index calculation. The developed methodology takes into account any over or under representation of sold properties, compared to the existing housing stock in that area. Unlike most house price indices, the Calcasa WOX does not simply calculate the coincidental development of sales for a specific area; rather it calculates the development of prices of the total housing stock.

European AVM Alliance (EAA)

Calcasa is a founding member of the EEA which was launched as a pan-European initiative at the end of 2012. The mission is to promote and standardize the usage of AVM's resulting in a consistent approach to automated valuations in Europe. Other members include Hometrack (UK), Eiendomsverdi (Norway), Värderingsdata (Sweden), CRIF (Italy), Tinsa (Spain), On-Geo (Germany) and On-Geo (Austria).

Calcasa

Koornmarkt 41

2611 EB Delft

The Netherlands

T 0031 15 214 88 34

Visit calcasa.co.uk for more information