

Housing market developments – 4rd quarter 2020

Strong house price growth in the province of Utrecht

Average house prices increased the most in the province of Utrecht with 12.0% year on year. The municipality of Utrecht is currently registering one of the fastest growth rates of all the municipalities in the Netherlands with 12.9%. The two largest cities, Amsterdam and Rotterdam, show average house price increases of respectively 6.9% and 8.3%. The Hague shows an average house price increase of 10.2%.

Transactions remain stable and number of homes for sale drops

The annual number of sales increased in seven years from 137 thousand to 296 thousand houses. The number of homes for sale continues to decline. The ratio between the number of sales and supply has reached a factor 0.2 (sales > supply).

Housing affordability improves

On average, 14.1% 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 2020 Q4

Calcasa House Price Index (WOX) (1995Q1=100)	369
Calcasa WOX Top 15 Cities Index (1995Q1=100)	430
Residential price change	
WOX price change (year-on-year)	10.0%
WOX price change (quarter-on-quarter)	1.8%
WOX price change corrected for inflation (year-on-year)	9.0%
House price forecast	
Yearly price change 2021 Q1	7.3%
Quarterly price change 2021 Q1	2.9%
Housing affordability	
Affordability index	14.1%
Yearly change in housing affordability	8.6%
Quarterly change in housing affordability	-0.8%
Transactions	
Number of transactions on a yearly basis (x 1,000)	296
Yearly change in the number of transactions	11.1%
Quarterly change in the number of transactions	6.0%

*Housing stock January 1st, 2020, municipal reclassification 2019

Content WOX:

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Table 1

Calcasa key numbers Q4 2020
Source: WOX Monitor Calcasa

Average house price keeps rising

- The WOX (1995 = 100) currently stands at 369 points.
- Average house price: 361 thousand euro.
 - » Q-O-Q price development: +1.8%.
 - » Y-O-Y price development: +10.0%.
- The current Dutch inflation rate is 1.0% (which is the average rate for Q4 2020 according to Statistics Netherlands). In the fourth quarter of 2020, inflation-adjusted house prices rose by 9.0% y-o-y.

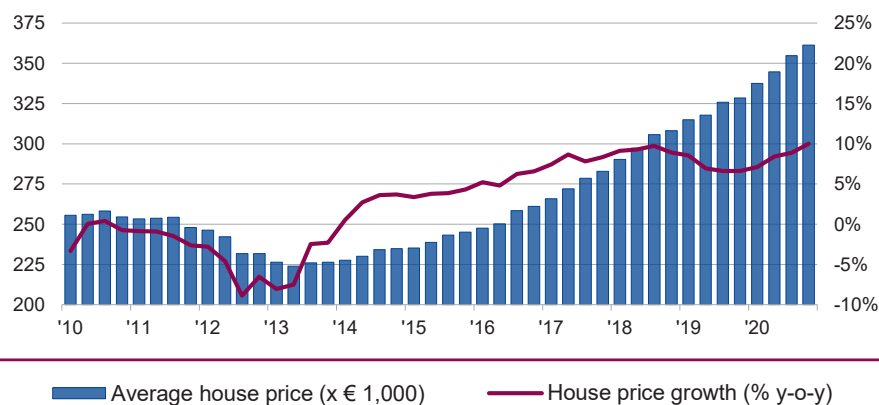


Figure 1

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: 379 thousand euro.
 - » Q-O-Q price development of single-family houses: +2.1%.
 - » Y-O-Y price development of single-family houses: +10.1%.
- Average price for apartments: 314 thousand euro.
 - » Q-O-Q price development of apartments: +1.1%.
 - » Y-O-Y price development of apartments: +9.6%.

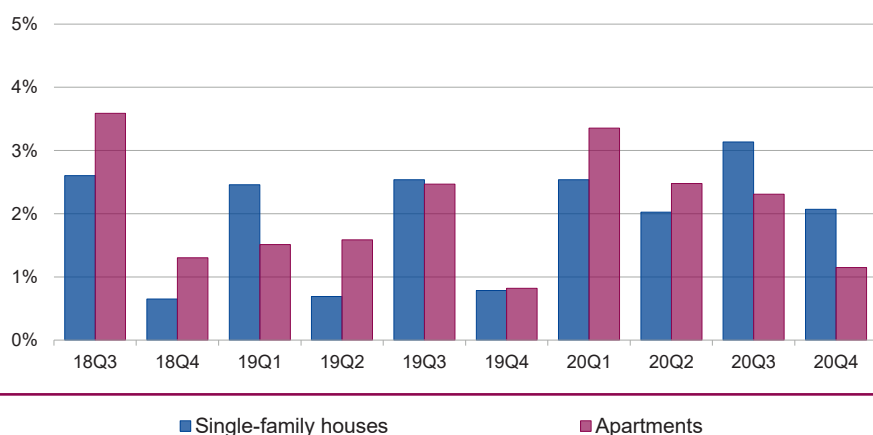


Figure 2

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

Source: WOX Monitor Calcasa

Highest price increase for less than 150,000 euro class

- Based on house price levels, Calcasa has divided the market into five price classes. Homes in the price class less than 150 thousand euros performed best with an annual average house price rise of 13.3%.
- The most expensive houses - worth 500k or more - increased the least in value; over the past year these homes increased in value by 8.4%.

Price class (euro)	Price development y-o-y
Less than 150,000	13.3%
150,000 to 250,000	11.0%
250,000 to 350,000	10.6%
350,000 to 500,000	8.8%
More than 500,000	8.4%
All residential properties	10.0%

Terraced houses show biggest price increase

- The value of terraced houses saw the biggest price growth in the past year; their average price rose by 10.3%.
- (semi) detached houses built between 1945 and 1979 are registering the fastest growth. Their value increased by 10.7% in the past year.

Development (y-o-y)	Construction year				Total
	<1944	1945-1979	>1980	>2000	
(semi) detached	10.0%	10.7%	9.4%	8.7%	9.9%
Terraced/corner house	9.8%	10.6%	10.1%	10.5%	10.3%
Apartment	8.6%	10.3%	9.8%	9.9%	9.6%
Total	9.3%	10.5%	9.8%	9.9%	10.0%

Forecast house price development in Q1 2021

- Q-O-Q price change: +2.9%.
- Y-O-Y price change: 7.3% (Q1 2020 - Q1 2021).
 - » Y-O-Y price change single-family homes: 6.7%.
 - » Y-O-Y price change apartments: 9.1%.

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: 7.4%
- Northern part: 8.5%
- Eastern part: 7.1%
- Southern part: 6.7%

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 Utrecht

- Average house prices increased the most in the province of Utrecht, with an annual increase of 12.0% in value.
- Apartments in Gelderland and Groningen are in demand, with values going up by 13.4% and 13.0% respectively.
- The lowest price increase was measured for houses in the provinces of Limburg (8.2%) and North-Brabant (9.3%).

Q4 2020	Average price	Average price	Price change (year-on-year)
	single-family houses	apartments	
Groningen	262,000	247,000	11.0%
Friesland	257,000	222,000	10.5%
Drenthe	296,000	237,000	10.9%
Overijssel	299,000	217,000	9.6%
Flevoland	315,000	314,000	10.8%
Gelderland	367,000	262,000	10.1%
Utrecht	524,000	347,000	12.0%
North-Holland	494,000	439,000	9.9%
South-Holland	422,000	289,000	9.8%
Zeeland	270,000	250,000	9.5%
North-Brabant	378,000	279,000	9.3%
Limburg	283,000	216,000	8.2%
The Netherlands	379,000	314,000	10.0%

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 12.8% is measured for houses in the NUTS III region of Alkmaar. In this region the value of single-family homes rose by 13.1% and the value of apartments by 11.6%.
- Second-largest annual price increase is seen in the NUTS III region South-East-Drenthe with an annual growth rate of 12.1%, here the value of single-family homes rose by 12.3% and the value of apartments by 9.3%.
- The NUTS III regions with the smallest price increases are West-North-Brabant (7.2%) and North-Limburg (6.9%).
- In 24 of the 40 NUTS III regions the annual increase for houses prices is more than 10%.

Housing affordability

On average, 14.1% of net household income was required to service housing costs in the fourth quarter of 2020, compared to mid-2008 when housing costs represented 27.0% of net income.

- Q-O-Q change in net housing costs: 0.8%.
- Y-O-Y change in net housing costs: -8.6%.

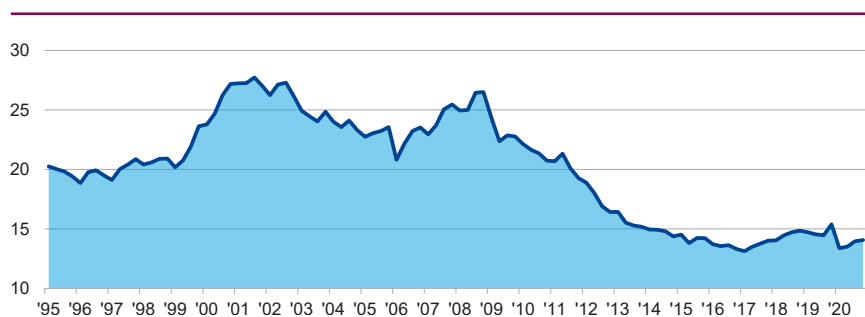


Figure 3

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

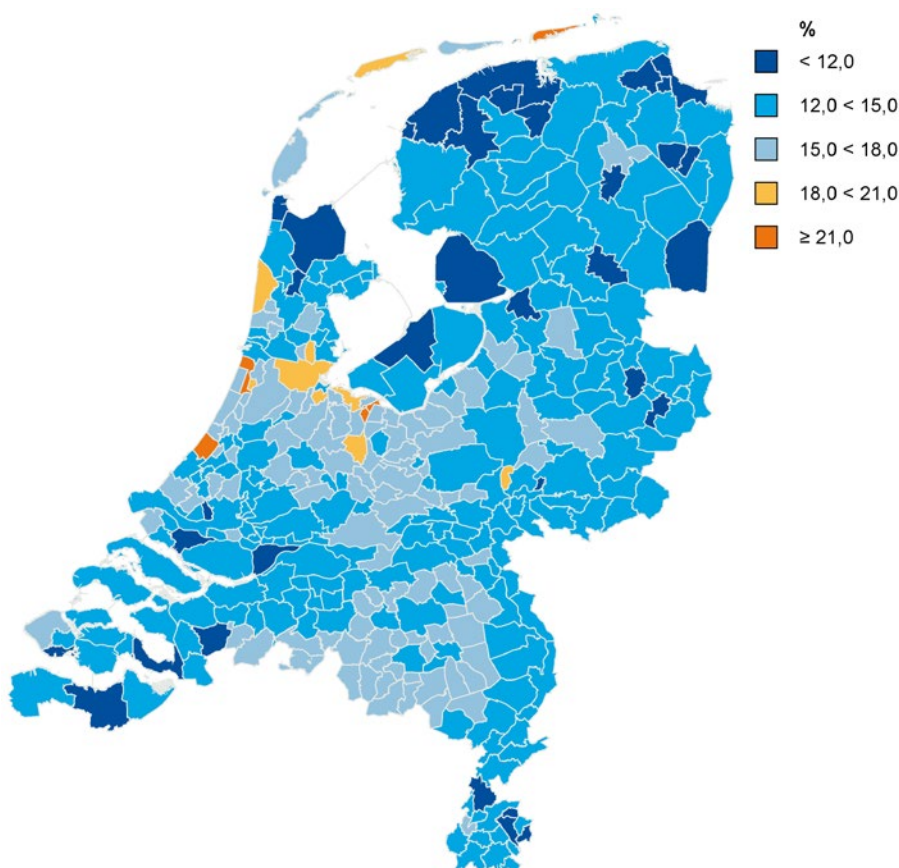


Figure 4

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. 296 thousand residential properties were sold during the past year.

- Y-O-Y development, number of annual sales: +11.1%.
- Q-O-Q development, number of annual sales: +6.0%.

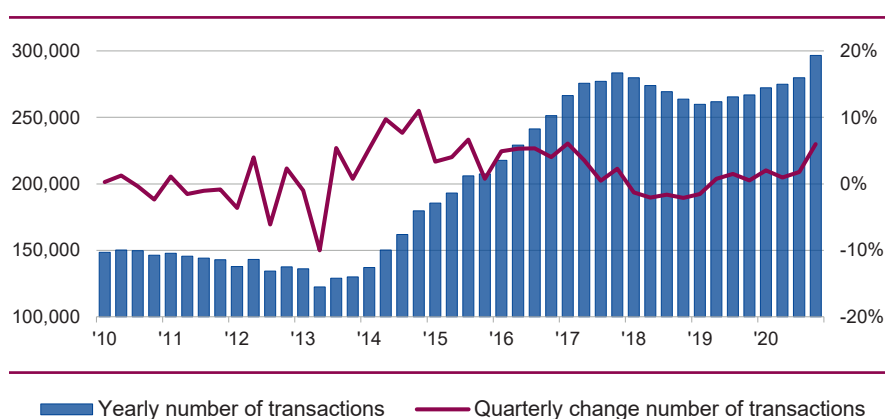


Figure 5

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 18.5% in the last quarter of 2020.
- Apartments sales increased this quarter with 12.5% year-on-year. Despite a shrinking supply of apartments.

Transaction development y-o-y

Housing type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4
Detached	3.3%	5.9%	7.7%	8.7%	18.5%
Semi-detached	6.3%	9.3%	9.0%	8.9%	9.3%
Corner house	3.3%	8.4%	7.6%	6.8%	6.8%
Terraced house	0.3%	4.5%	5.4%	5.7%	8.1%
Apartment	-2.7%	0.7%	-0.1%	0.4%	12.5%
Total	1.2%	4.8%	5.1%	5.4%	11.1%

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 to 500 thousand euros increased by 16.5% in the past year, whilst homes above 500 thousand euros increased by 29.1%.
- Especially in the east (35.2%) and in the north (48.8%) of the Netherlands more expensive homes (>500 thousand euros) were sold.
- In the south the highest increase in sales was measured for houses in the price range above 500 thousand euros (36.3%).
- The lowest price segment (75 to 150 thousand euros) decreased the most in the western part of the Netherlands by 29.7%.

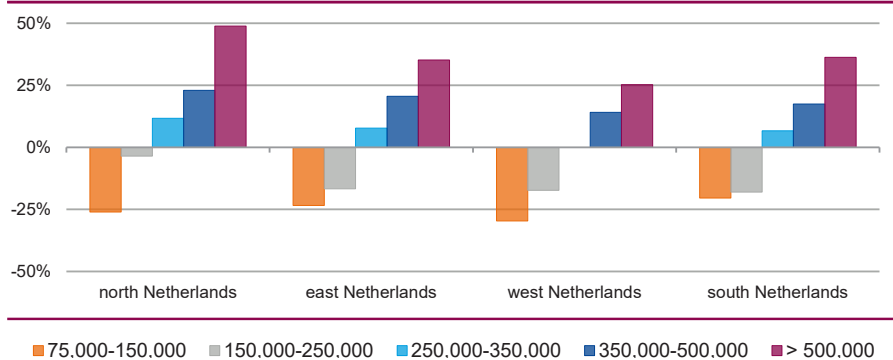


Figure 6

Growth (%) of share of housing sales per price class in North, East, West and South Netherlands in Q4 2020 compared to Q4 2019.

Source: WOX Monitor Calcasa

29% of housing sales within 150 to 250 thousand euros

- In the past year 29% of housing sales were within the price class of 150 to 250 thousand euros.
- The percentage of transactions in the price class 75 to 150 thousand euros decreased in four years time from 21% to 7%.
- The price segment 350 to 500 thousand euros increased in four years time from 10% to 21%.
- 15% of housing sales were within the price class of 500 thousand euros or more. Four years ago this was 6%.

Share of housing sales per price class

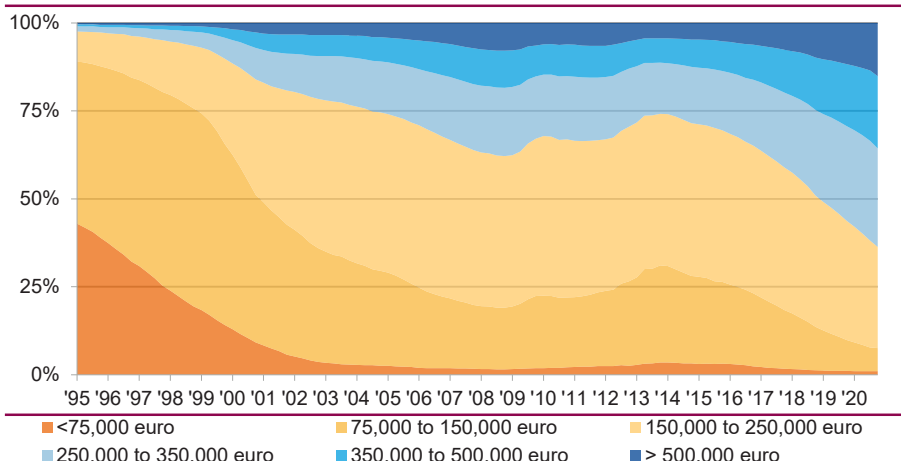


Figure 7

Share of housing sales per price class

Source: WOX Monitor Calcasa

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Groot-Amsterdam highest market liquidity

- In the NUTS III region Groot-Amsterdam 7.7% of the housing supply was sold during the past year. The regions of The Hague and Overig Groningen follow with 7.6% and 7.4% respectively.
- The NUTS III region IJmond has the lowest market liquidity: 5.5%.

NUTS III region	Percentage	NUTS III region	Percentage
	of housing supply sold last year		of housing supply sold last year
Groot-Amsterdam	7.7%	IJmond	5.5%
's-Gravenhage	7.6%	Noord-Limburg	5.8%
Overig Groningen	7.4%	Delft en Westland	5.9%
Veluwe	7.4%	Midden-Limburg	5.9%
Groot-Rijnmond	7.4%	Achterhoek	6.0%
Overig Zeeland	7.3%	Leiden en Bollenstreek	6.0%
Zuidoost-Drenthe	7.2%	Zaanstreek	6.1%
Zeeuwsch-Vlaanderen	7.2%	Zuid-Limburg	6.1%
Midden-Noord-Brabant	7.2%	Zuidoost-Zuid-Holland	6.2%
Flevoland	7.2%	Twente	6.3%

Table 5

Top 10 NUTS III regions with highest and lowest percentage of housing supply sold last year
Source: WOX Monitor Calcasa

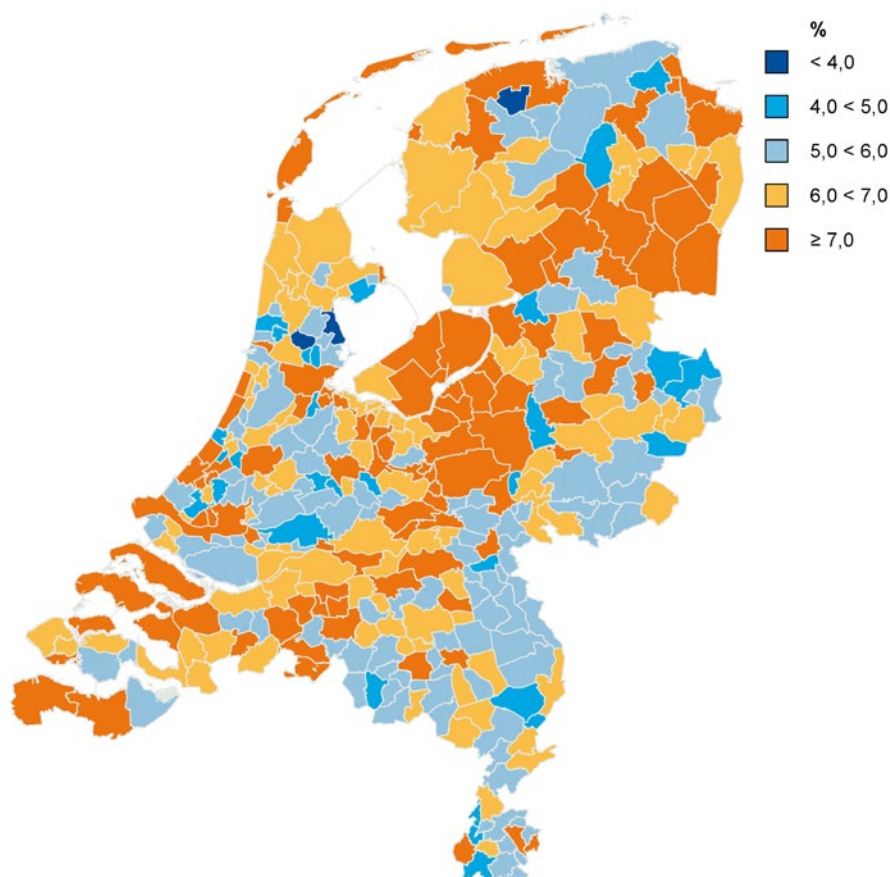


Figure 8

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 0.2. This is an improvement compared to last year when this ratio was still 0.3.
- The annual number of houses sold: 296 thousand.
 - » Y-O-Y development: 11.1%
- Homes for sale in Q4 2020: 73 thousand
 - » Y-O-Y development: -14.1%
- The market liquidity is best in the municipality of Den Helder with a factor of 0.13.
- In the municipality of Wassenaar the market liquidity is highest (worst) with a factor of 0.52.

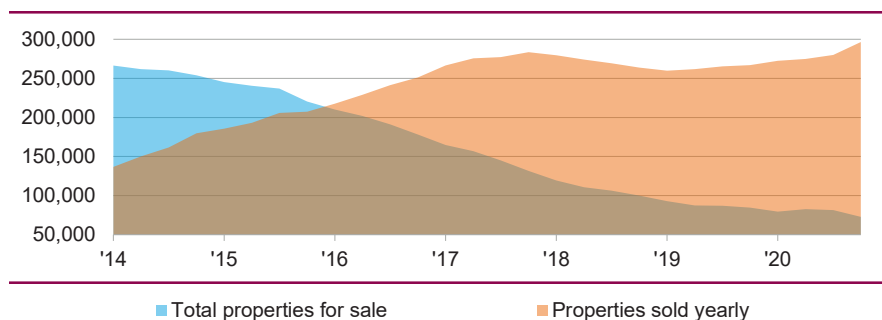


Figure 9a

Annual number of properties for sale versus number of properties sold over the period 2014-2020 in the Netherlands. Source: Multiple real estate agents, adaptation Calcasa

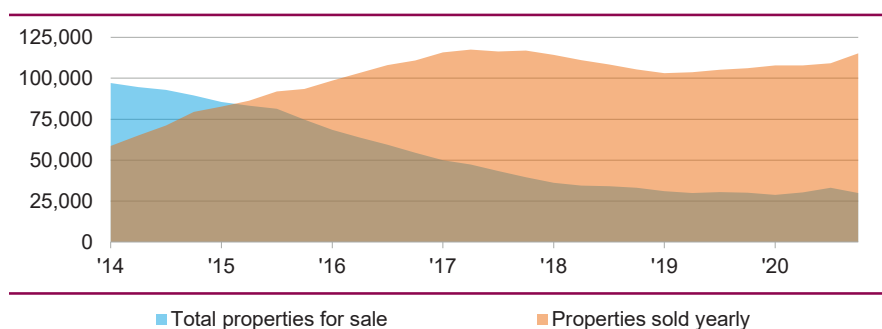


Figure 9b

Annual number of properties for sale versus number of properties sold over the period 2014-2020 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: 7.0%.
 - 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 14.2%.
- In the municipality of Dantumadiel only 3.9% of the existing stock of owner-occupied homes has changed owners.

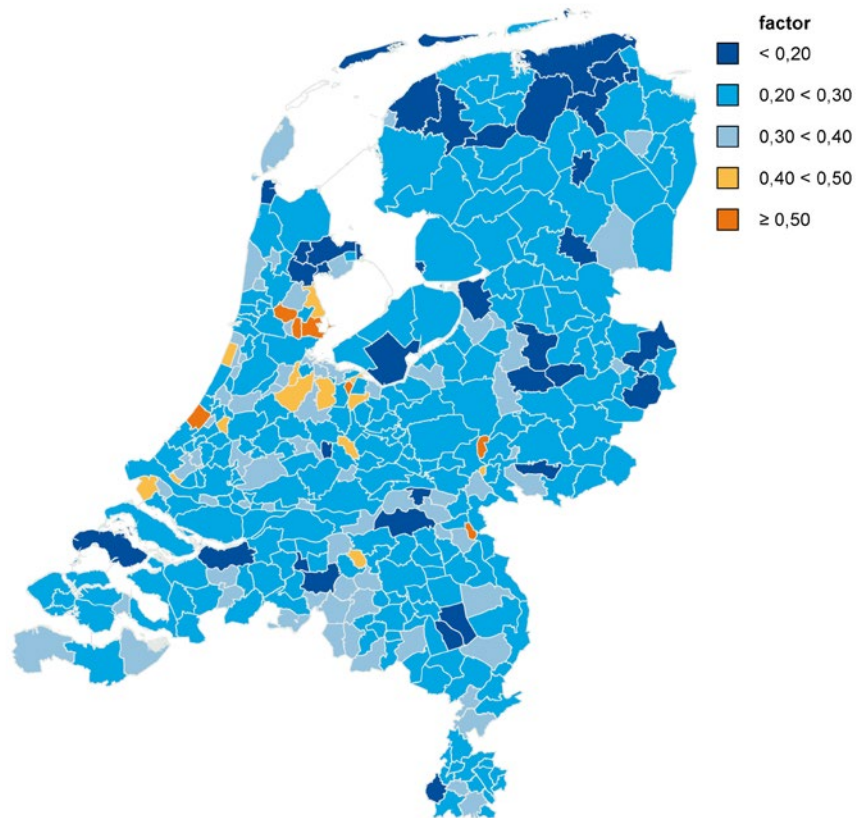


Figure 10

Supply/Sales ratio all properties per municipality

Source: WOX Monitor Calcasa

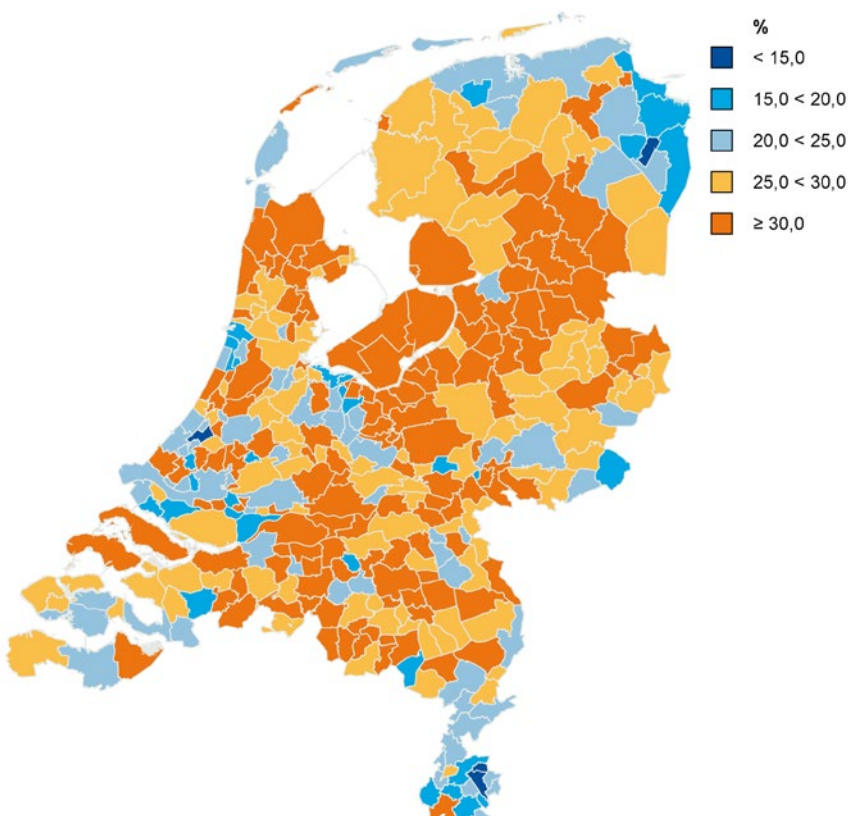


Figure 11

Percentage of properties with energy label A per municipality

Source: WOX Monitor Calcasa

Mortgage approvals

Approximately 452 thousand mortgages were approved last year.

- Y-O-Y development, number of annual mortgages: 20.3%.
- Q-O-Q development, number of annual mortgages: 3.1%.

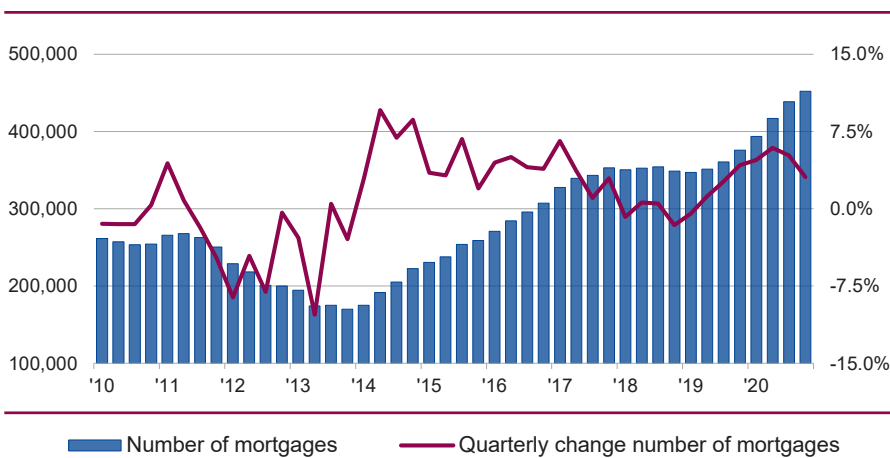


Figure 12

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

Number of foreclosures

Over the last four quarters, 345 foreclosures have been registered by the land registry.

- o Y-O-Y development amount of annual foreclosures: -30.6%.
- o Q-O-Q development amount of annual foreclosures: 6.2%.
- 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 Brunssum.
- 202 municipalities had no foreclosure sales in the past year. The largest municipality without foreclosure sales is Amersfoort.

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.

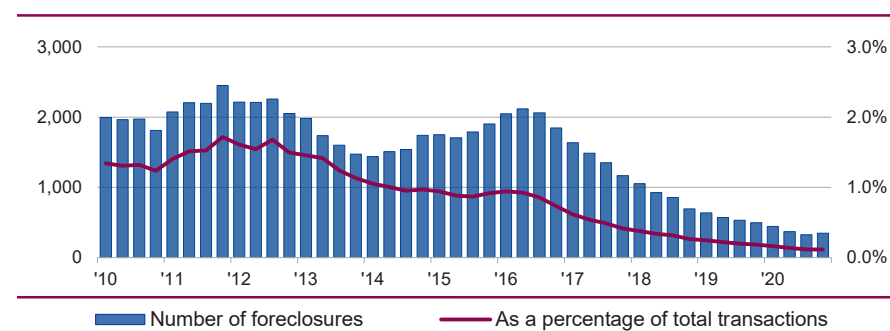


Figure 13

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 third quarter of 2020 the total amount of sales for newly built homes was 7 thousand. This is an increase of 21.9% year-on-year.
- During the third quarter of 2020 the average price for newly built houses was 420 thousand euros. This is an increase of 8.3% compared to a year ago.

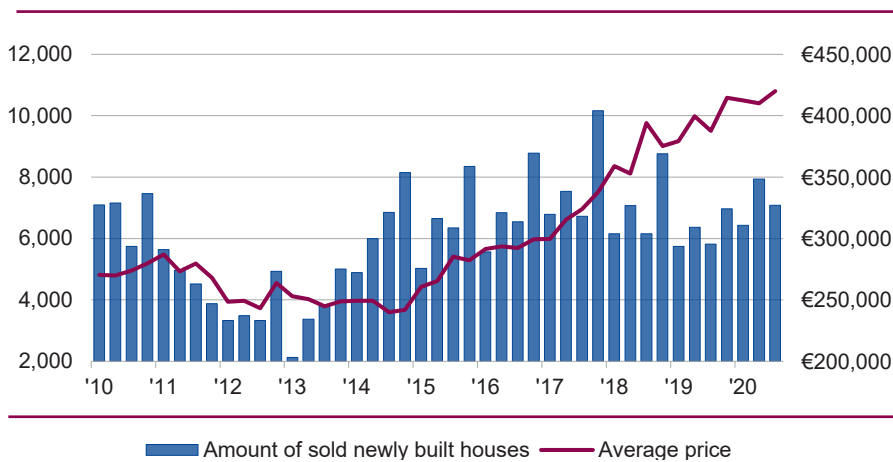


Figure 14

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 38%.
- On 1 October 2019 there were 70 thousand homeowners who had difficulty paying their mortgage: this is a decrease of 12.5% compared to a year earlier.

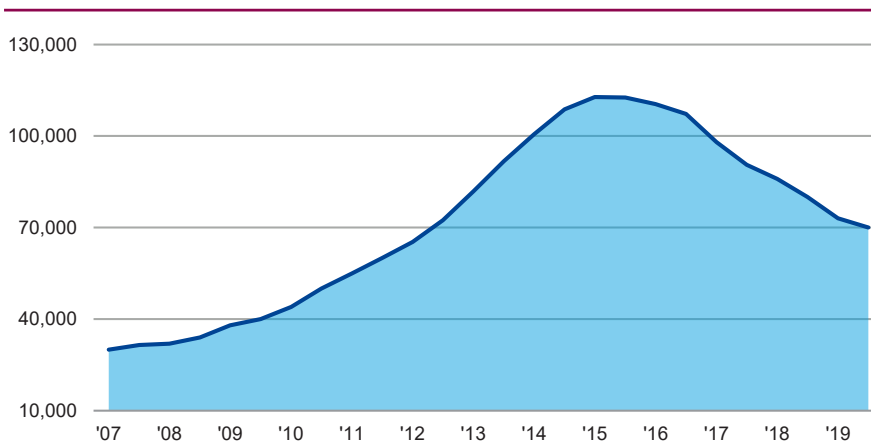


Figure 15

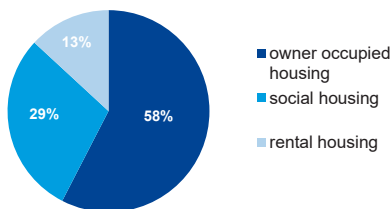
Number of borrowers with mortgage payment arrears

Source: BKR

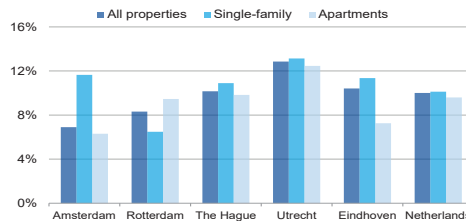
Dutch Housing Market Summary

	Largest cities	All properties	Singles-family	Apartments	Owner occupied	Rental	Total population	Total households	Annual sales	Current supply
Amsterdam	433,000	60,000	373,000	30%	70%	862,960	470,220	12,760		
Rotterdam	311,000	86,000	225,000	34%	64%	644,620	324,540	9,562		
The Hague	257,000	59,000	198,000	42%	56%	537,830	263,370	9,318		
Utrecht	151,000	66,000	85,000	45%	54%	352,870	180,370	5,627		
Groningen	113,000	46,000	67,000	42%	57%	231,300	135,080	4,316		
Eindhoven	109,000	66,000	43,000	45%	54%	231,640	119,540	4,136		
Provinces										
Groningen	277,000	182,000	95,000	55%	44%	583,990	293,740	10,911	2,328	
Friesland	298,000	243,000	56,000	61%	37%	647,670	292,170	12,314	2,536	
Drenthe	221,000	182,000	38,000	65%	33%	492,170	217,830	9,918	2,351	
Overijssel	500,000	383,000	117,000	60%	38%	1,156,430	503,840	19,685	4,243	
Flevoland	166,000	132,000	35,000	64%	35%	416,550	173,590	7,645	1,611	
Gelderland	894,000	674,000	220,000	60%	39%	2,071,970	923,360	35,557	8,635	
Utrecht	572,000	363,000	209,000	58%	41%	1,342,160	604,570	21,673	5,418	
North-Holland	1,318,000	667,000	651,000	50%	49%	2,853,360	1,362,850	46,314	12,620	
South-Holland	1,663,000	822,000	841,000	51%	48%	3,673,890	1,701,650	58,829	14,764	
Zeeland	185,000	151,000	34,000	65%	34%	383,030	175,080	8,832	2,191	
North-Brabant	1,116,000	844,000	273,000	61%	38%	2,544,810	1,146,310	45,889	11,263	
Limburg	529,000	389,000	140,000	60%	39%	1,116,140	529,710	18,920	4,742	
Netherlands	7,741,000	5,031,000	2,710,000	57%	42%	17,282,160	7,924,690	296,487	72,701	

Housing stock



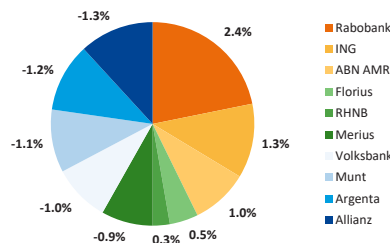
Y-O-Y price development largest cities



Mortgage developments

	Amount	Change
Sales with NHG	19,600	-14.8%
Execution sales with losses	27	-62.0%
Households in arrears	70,000	-12.5%
Sold mortgages	451,981	20.3%
Total mortgage debt	745B	1.5%

Top mortgage lenders: increase/decrease market share



Macro-economic figures

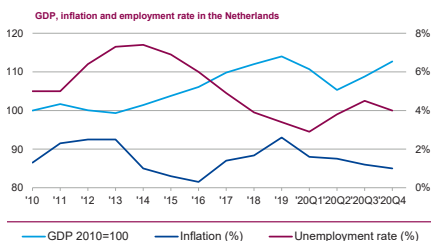


Table 6

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

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Appendices

Provinces	Detached houses	Semi-detached	Corner houses	Terraced houses	All single-family dwellings
Groningen	298,000	244,000	219,000	217,000	262,000
Friesland	337,000	246,000	208,000	187,000	257,000
Drenthe	381,000	267,000	224,000	199,000	296,000
Overijssel	435,000	288,000	258,000	235,000	299,000
Flevoland	531,000	346,000	272,000	251,000	315,000
Gelderland	515,000	357,000	303,000	266,000	367,000
Utrecht	820,000	570,000	426,000	393,000	524,000
North-Holland	651,000	527,000	416,000	372,000	494,000
South-Holland	644,000	490,000	378,000	346,000	422,000
Zeeland	373,000	256,000	222,000	205,000	270,000
North-Brabant	552,000	373,000	321,000	285,000	378,000
Limburg	408,000	265,000	247,000	226,000	283,000
Netherlands	490,000	362,000	327,000	305,000	379,000

Table 8

Average house price for single-family dwellings, per property type and per province in the Netherlands (in euros).
Source: Calcasa

Provinces	Porch flat	Gallery flat	Maison-nette	Up/downstairs apartment	All apartments
Groningen	223,000	198,000	216,000	229,000	247,000
Friesland	220,000	184,000	196,000	198,000	222,000
Drenthe	227,000	194,000	195,000	230,000	237,000
Overijssel	206,000	201,000	222,000	219,000	217,000
Flevoland	275,000	228,000	255,000	226,000	314,000
Gelderland	249,000	218,000	242,000	269,000	262,000
Utrecht	320,000	280,000	331,000	345,000	347,000
North-Holland	320,000	291,000	376,000	405,000	439,000
South-Holland	254,000	241,000	288,000	293,000	289,000
Zeeland	282,000	285,000	227,000	234,000	250,000
North-Brabant	275,000	239,000	263,000	275,000	279,000
Limburg	210,000	187,000	214,000	214,000	216,000
Netherlands	266,000	244,000	293,000	320,000	314,000

Table 9

Average house price for apartments, per property type and per province in the Netherlands (in euros).
Source: Calcasa

Municipalities	Highest	Municipalities	Lowest
	property values (x 1,000)		property values (x 1,000)
Bloemendaal	906	Delfzijl	190
Wassenaar	747	Oldambt	200
Heemstede	683	Heerlen	207
Gooise Meren	602	Kerkrade	210
De Bilt	573	Veendam	210
Wijdmeren	553	Brunssum	212
Zeist	539	Terneuzen	217
Bergen (NH.)	538	Leeuwarden	219
Utrechtse Heuvelrug	527	Noardeast-Fryslân	224
Huizen	514	Waadhoeke	225

Municipalities	Highest	Municipalities	Lowest
	annual price development		annual price development
Bergen (NH.)	14.8%	Peel en Maas	6.6%
Heiloo	13.6%	Horst aan de Maas	6.6%
Langedijk	13.1%	Venray	6.9%
Utrecht	12.9%	Amsterdam	6.9%
Heerhugowaard	12.8%	Breda	7.1%
Coevorden	12.4%	Venlo	7.1%
Tilburg	12.3%	Zundert	7.1%
Borger-Odoorn	12.3%	Drimmelen	7.1%
Alkmaar	12.2%	Woensdrecht	7.2%
Nieuwegein	12.1%	Rucphen	7.2%

Table 10

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

Table 11

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

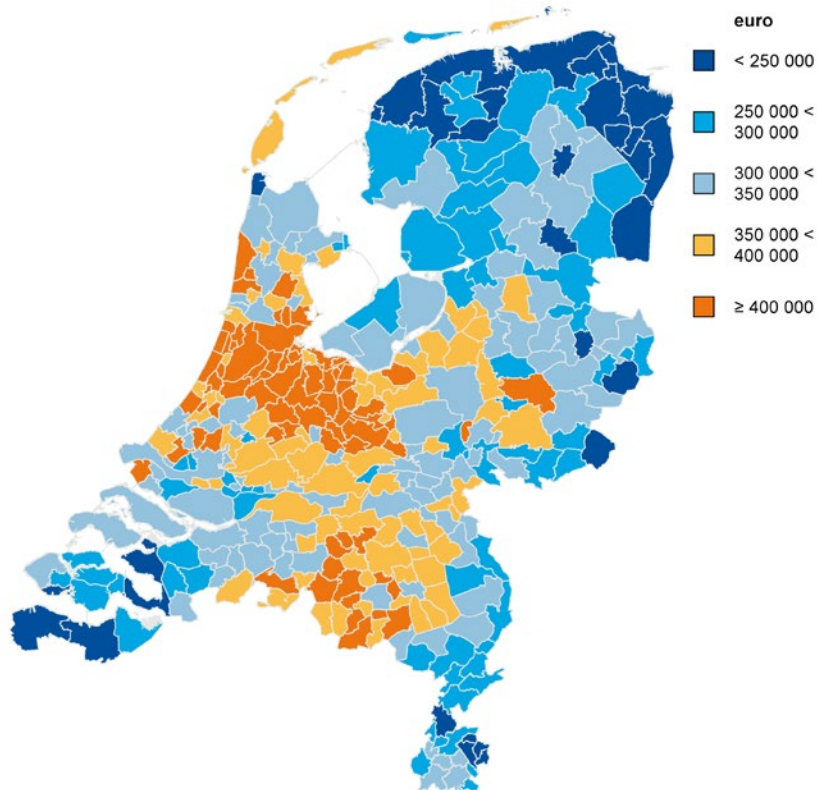


Figure 21

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

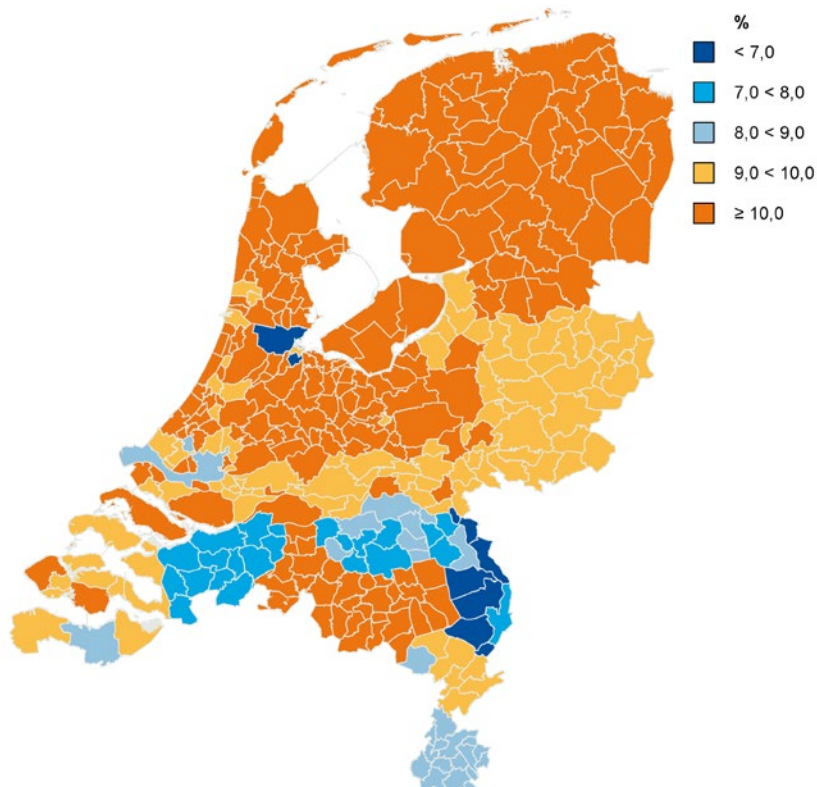
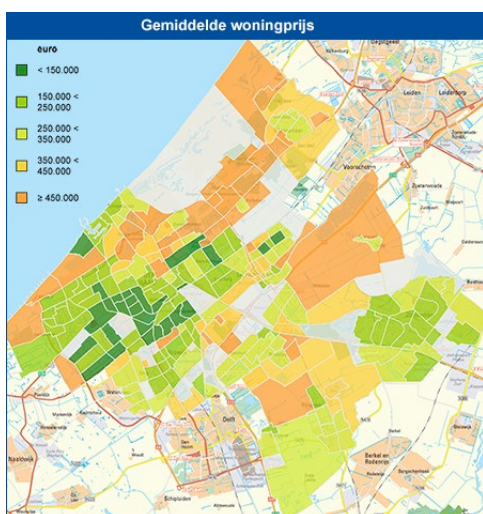


Figure 22

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

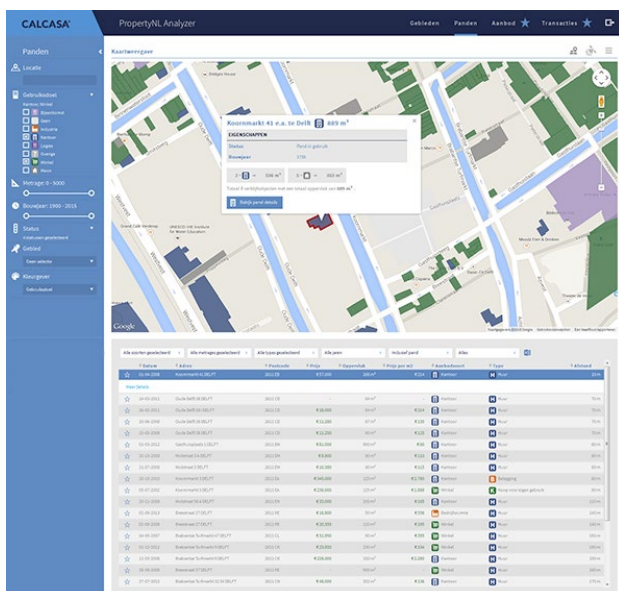
The WOX Monitor: All housing market data for every neighborhood

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).

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