Cost of Constructing a Home-2024

January 20, 2025 By: Eric Lynch Economics & Housing Policy National Association of Home Builders (NAHB)

Introduction

Over the years, NAHB has periodically conducted "construction cost surveys" to collect information from builders on the various components that go into the sales price of a typical newly-built single-family home. NAHB's most recent Construction Cost survey (conducted in the Fall of 2024) shows that, on average, 64.4% of the sales price is due to construction costs and 13.7% to finished lot costs. On average, builder profit is 11.0% of the sales price. The following sections describe the methodology of the survey and discuss the results in more detail.

Caveats

The NAHB Construction Cost Survey is designed to show percentage cost breakdowns for a typical home built by a subset of NAHB builders. It is not designed to capture representative characteristics of the average home built during a particular year. Characteristics such as the size or price of homes in the sample may therefore differ significantly from averages reported in the <u>Census Bureau's Survey of</u> <u>Construction (SOC)</u>, which is based on a much larger sample and is designed to produce such averages. Because the NAHB survey does not control for year-to-year differences in the builders or homes in the sample, users should be cautious when comparing results across multiple years and defer to the published SOC data for this purpose when possible.

The survey results published here are national averages; as the survey sample is not large enough for a geographic breakdown. Building practices, the cost of labor, the cost of land, and to some extent the cost of materials can vary from place to place and depend on the nature of the specific home being built. Each category includes all the costs paid by a builder that go into a particular item, including labor costs paid directly by the general contractor, the cost of hiring subcontractors, and the cost of materials, however they are purchased.

Although the survey can provide a broad idea of construction costs for the average new single-family home, it is not a perfect tool for estimating costs for a particular house in a particular location.

Companies that provide more specific cost estimating, usually for a fee, include <u>RSMeans</u> and <u>Marshall</u> <u>& Swift-Core Logic</u>.

Methodology

NAHB's 2024 Construction Cost survey was conducted by emailing a questionnaire to a representative sample of 4,000 home builders. The sample was stratified by the size of the builder (based on the number of 2023 single-family starts) and by region of the country (the sample being proportional to housing starts in each of the four principal Census regions).

Over time, NAHB has modified the survey and its methodology. In 2009, the survey methodology changed to provide a better, more representative sample of single-family construction across the country. In 2013, NAHB developed a different construction cost breakdown that more closely resembles the steps that builders take when building a home. Prior to 2013, the breakdown had 29 sections. In 2013, NAHB created eight subcategories for each of the major stages of construction, with a total of 36 sections grouped under the appropriate construction stage. The new format simplified data collection, greatly reducing the number of follow-up calls needed to clarify and verify builder responses.

Respondents were asked to provide information about the typical single-family home built by their firms during 2024. After examining the data and performing an outlier analysis, usable responses were received from 41 builders. Table 1 shows the detailed results of the 2024 Construction Cost survey.

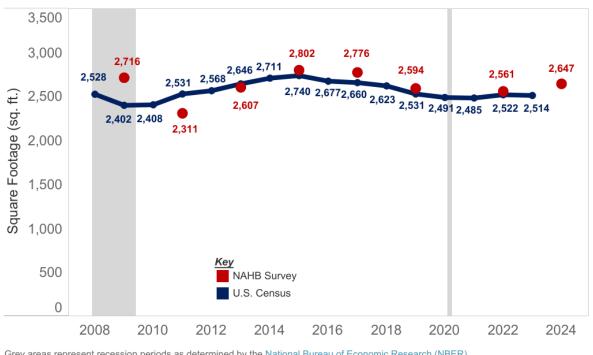
Table 1. SINGLE-FAMILY PRICE AND COST BREAKDOWNS 2024 National Results							
Δνε	Average Lot Size: erage Finished Area:	20.907 2,647					
I. Sale Price Breakdown ¹	Average	Share of Price					
A. Finished Lot Cost (including financing cost)	\$91,057	13.7%					
B. Total Construction Cost	\$428,215	64.4%					
C. Financing Cost	\$10,220	1.5%					
D. Overhead and General Expenses	\$38,248	5.7%					
E. Marketing Cost F. Sales Commission	\$5,633 \$18,955	0.8% 2.8%					
G. Profit	\$72,971	11.0%					
Total Sales Price	\$665,298	100.0%					
		Share of					
II. Construction Cost Breakdown ²	Average	Construction Cost					
I. Site Work (sum of A to E)	\$32,719	7.6%					
A. Building Permit Fees	\$7,640	1.8%					
B. Impact Fee	\$6,367	1.5%					
C. Water & Sewer Fees Inspections D. Architecture, Engineering	\$6,260 \$6,480	1.5% 1.5%					
E. Other	\$5,972	1.4%					
II. Foundations (sum of F to G)	\$44,748	10.5%					
F. Excavation, Foundation, Concrete, Retaining walls, and Backfill	\$43,002	10.0%					
G. Other	\$1,747	0.4%					
III. Framing (sum of H to L)	\$70,982	16.6%					
H. Framing (including roof)	\$49,763	11.6%					
I. Trusses (if not included above)	\$12,903	3.0%					
J. Sheathing (if not included above) K. General Metal, Steel	\$6,513 \$1,718	1.5% 0.4%					
L. Other	\$1,718	0.4%					
IV. Exterior Finishes (sum of M to P)	\$57,510	13.4%					
M. Exterior Wall Finish	\$24,450	5.7%					
N. Roofing	\$16,732	3.9%					
O. Windows and Doors (including garage door)	\$15,990	3.7%					
P. Other	\$338	0.1%					
V. Major Systems Rough-ins (sum of Q to T)	\$82,319	19.2%					
Q. Plumbing (except fixtures)	\$27,180	6.3%					
R. Electrical (except fixtures) S. HVAC	\$27,383 \$26,938	6.4% 6.3%					
T. Other	\$20,938	0.3%					
VI. Interior Finishes (sum of U to AE)	\$103,391	24.1%					
U. Insulation	\$6,992	1.6%					
V. Drywall	\$13,962	3.3%					
W. Interior Trims, Doors, and Mirrors	\$12,920	3.0%					
X. Painting	\$11,150	2.6%					
Y. Lighting	\$5,392	1.3%					
Z. Cabinets, Countertops AA. Appliances	\$19,056 \$7,499	4.5% 1.8%					
AB. Flooring	\$15,388	3.6%					
AC. Plumbing Fixtures	\$7,922	1.9%					
AD. Fireplace	\$2,378	0.6%					
AE. Other	\$732	0.2%					
VII. Final Steps (sum of AF to AJ)	\$27,710	6.5%					
AF. Landscaping AG. Outdoor Structures (deck, patio, porches)	\$9,269 \$4,722	2.2% 1.1%					
AG. Outdoor Structures (deck, patio, porches) AH. Driveway	\$4,722 \$9,635	2.3%					
Al. Clean Up	\$3,183	0.7%					
AJ. Other	\$902	0.2%					
VIII. Other	\$8,835	2.1%					
Total	\$428,215	100.0%					

 ¹ Due to rounding, percentages and averages for categories might not equal grand totals.
² Due to rounding, percentages and averages of components and subcomponents might not equal grand and subtotals.

Home and Lot Size

The average single-family home size in the 2024 NAHB Construction Cost Survey is 2,647 sq. ft. of finished floor space. This is an increase of 86 sq. ft. from 2022 (2,561 sq. ft.), but still below what the average had been in 2015 and 2017. Historically, average square footage in the NAHB survey has tended to move in the same direction as in the Census Bureau's series with a lag, and with wider fluctuations, as you would expect from the smaller sample size.

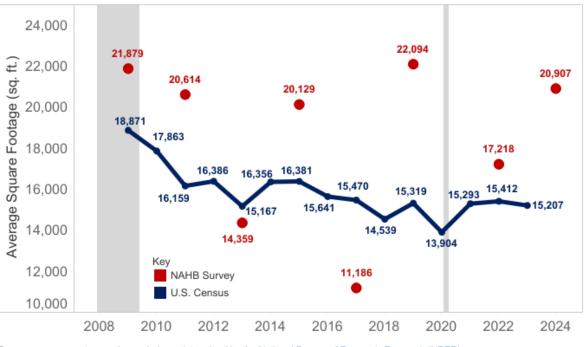
The average home size in the NAHB survey dropped from 2,716 sq. ft. in 2009 to 2,311 sq. ft. in 2011, as demand eroded after the Great Recession. As the economy recovered, it rose steadily and peaked at 2,802 sq. ft. in 2015. From 2015 to 2022, the average square footage trended downward, dropping to 2,776 sq. ft. in 2017, 2,594 sq. ft. in 2019, and 2,561 sq. ft. in 2022. However, the average size rose slightly to 2,647 sq. ft. in 2024 (Graph 1). Data from the Census Bureau corroborates this trend: the average size of new homes completed for-sale peaked in 2015 at 2,740 sq. ft., it then declined steadily from 2016 to 2021 (2,485 sq. ft), before edging up in 2022 (2,522 sq. ft) and remaining essentially unchanged in 2023 (2,514 sq. ft). The <u>smaller square footage in recent years</u> is a response by builders to meet the current housing affordability challenges, especially as the <u>share of first-time new home</u> buyers is falling.



Graph 1- Average Square Footage

Grey areas represent recession periods as determined by the <u>National Bureau of Economic Research (NBER)</u> Data Sources: <u>Survey of Construction- Characteristics of New Housing</u>, Construction Cost Surveys Analysis: NAHB Economics & Housing Policy The average lot size in the 2024 NAHB Construction Cost Survey is 20,907 sq. ft., or slightly less than a half-acre (1 acre is equivalent to 43,560 sq. ft.). There have been high levels of volatility in average lot size over the years. It exceeded 20,000 sq. ft. in both 2009 and 2011, dropped to 14,359 sq. ft. in 2013, rebounded to 20,129 sq. ft. in 2015, but dropped again to 11,186 sq. ft. in 2017 (the smallest lot size since the inception of the survey). In 2019, average lot size jumped up to 22,094 sq. ft., the largest lot size recorded in this series, before declining to 17,218 sq. ft. in 2022.

In general, lot size in the NAHB survey has tended to move in the same direction as the Census series, but as mentioned previously, with increased volatility from year to year (Graph 2). The Census data show a downward trend in lot size between 2009 and 2013, dropping from an average of 18,871 sq. ft. to a low of 15,167 sq. ft. in 2013. It rebounded to 16,381 sq. ft. in 2015, dropped steadily from 2016 to 2018, before see-sawing from 2019 to 2021. After reaching 15,293 sq. ft. in 2021, the average lot size of homes completed for sale has stabilized in 2022 (15,412 sq. ft.) and 2023 (15,207 sq. ft.) However, lot availability has been a major headwind for homebuilders over the last decade.



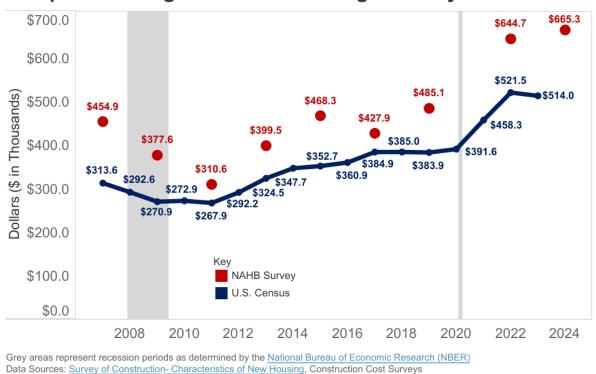
Graph 2- Lot Size of Single-Family Homes

Grey areas represent recession periods as determined by the <u>National Bureau of Economic Research (NBER)</u> Data Sources: <u>Survey of Construction- Characteristics of New Housing</u>, Construction Cost Surveys Analysis: NAHB Economics & Housing Policy

Sales Price

The average single-family home sales price in the 2024 NAHB Construction Cost Survey is \$665,298, the highest average sales price (not adjusted for inflation) in the survey's history. The Census Bureau's series shows the average price for new single-family homes sold increasing steadily after the Great Recession, going from \$267,900 in 2011 to \$385,000 in 2018, dropping slightly in 2019, before rising for three consecutive years to reach \$521,500 in 2022 (Graph 3). Even though the average sales price declined by 1.4% in 2023 to \$514,000, it has remained above \$500,00 for two consecutive years. The surge in demand for housing during and after the COVID-19 pandemic, which has exacerbated the <u>shortage of the current housing supply</u>, helps to explain average home prices above \$500,000 and the resulting <u>decrease in housing affordability</u>.

Compared to the Census series, the NAHB survey shows a similar upward trend, but with generally higher prices. The \$665,298 reported by NAHB in 2024 is roughly \$150,000 higher than the latest average price reported by the Census Bureau. Recall that the NAHB survey is not designed to generate a national average home price. For one thing, the NAHB survey does not control for the number of homes a builder builds, which gives more weight to smaller builders who may tend to build higher-priced homes. Timing is also a factor in the spread between the average prices reported by NAHB and the Census Bureau. The NAHB survey was conducted toward the end of 2024. The latest annual average price of \$514,000 available from the Census Bureau is for calendar year 2023. Subsequent monthly data from the <u>Census</u> Bureau show the average price falling to a preliminary number of \$484,800 as of November 2024.



Graph 3- Average Price of New Single-Family Homes Sold

Sales Price Breakdown

Analysis: NAHB Economics & Housing Policy

A key feature of the NAHB survey is that it asks builders to break down the sales price of their homes into seven categories: finished lot cost, total construction cost, financing cost, overhead and general expenses, marketing costs, sales commission, and profit. Table 2 contains historical information on the sales price breakdown of a single-family home. It is important to remind readers to use caution when comparing data across years in Table 2, as trends may be affected by the survey's sample size limitations and the fact that a different set of builders responds to the survey each time.

On average in the 2024 NAHB survey, 64.4% of the final house price was attributable to construction costs, 13.7% to the cost of the finished lot, 5.7% to overhead and general expenses, 2.8% to sales commissions, 1.5% to financing costs, 0.8% to marketing costs, leaving 11.0% for profit (prior to taxes). Since 1998, the long-run average in the pre-tax profit share stands at 9.8%.

As a share of the average sales price, total construction costs saw the largest increase, going from 60.8% in 2022 to 64.4% in 2024. Meanwhile, finished lot costs dropped from 17.8% in 2022 to 13.7% in 2024. All other component categories changed by less than 1 percentage point between 2022 and 2024: profit (from 10.1% to 11.0%), overhead and general expenses (5.1% to 5.7%), and marketing costs (0.7% to

0.8%) edged higher, while sales commission (3.6% to 2.8%) and financing cost (1.9% to 1.5%) slipped when compared to the previous survey.

Table 2. SINGLE-FAMILY HOMES SALES PRICE BREAKDOWN HISTORY ³											
Sale Price Breakdown	1998	2002	2004	2007	2009	2011					
1. Finished Lot Cost	23.6%	23.5%	26.0%	24.5%	20.3%	21.7%					
2. Total Construction Cost	54.8%	50.8%	51.7%	48.1%	58.9%	59.3%					
3. Financing Cost	1.9%	2.1%	1.8%	2.4%	1.7%	2.1%					
4. Overhead and General Expenses	5.7%	5.5%	5.8%	7.0%	5.4%	5.2%					
5. Marketing Cost	1.4%	2.4%	1.9%	2.5%	1.4%	1.5%					
6. Sales Commission	3.4%	3.7%	3.0%	4.3%	3.4%	3.3%					
7. Profit	9.2%	12.0%	9.8%	11.2%	8.9%	6.8%					
8. Total Sales Price (\$)	\$ 226,680	\$ 298,412	\$ 373,349	\$ 454,906	\$ 377,624	\$ 310,619					
Sale Price Breakdown	2013	2015	2017	2019	2022	2024					
1. Finished Lot Cost	18.6%	18.2%	21.5%	18.5%	17.8%	13.7%					
2. Total Construction Cost	61.7%	61.8%	55.6%	61.1%	60.8%	64.4%					
3. Financing Cost	1.4%	1.3%	1.8%	1.7%	1.9%	1.5%					
4. Overhead and General Expenses	4.3%	5.6%	5.1%	4.9%	5.1%	5.7%					
5. Marketing Cost	1.1%	0.8%	1.2%	1.0%	0.7%	0.8%					
6. Sales Commission	3.6%	3.2%	4.1%	3.7%	3.6%	2.8%					
7. Profit	9.3%	9.0%	10.7%	9.1%	10.1%	11.0%					
8. Total Sales Price (\$)	\$ 399,532	\$ 468,318	\$ 427,892	\$ 485,128	\$ 644,750	\$ 665,298					

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Source: NAHB Construction Cost Surveys, 1998-2024

Construction Costs

The average construction cost of a typical single-family home in the 2024 survey is \$428,215 (Table 3), or about \$162 per square foot – the highest in the history of this series. The cost of construction per square foot was \$80 in 2011, \$95 in 2013, \$103 in 2015, \$86 in 2017, \$114 in 2019, and \$153 in 2022⁴.

Even though inflation has been trending downward toward the Federal Reserve's target of 2% recently, ongoing shortages off construction labor have led to elevated wage growth in the home building industry. Overall building material prices explained much of the cost increase in 2022, but these prices have been relatively well-behaved more recently.

Of the eight major stages of construction, interior finishes, at 24.1%, remains the largest component share of construction costs, followed by major system rough-ins (19.2%), framing (16.6%), exterior

³ Due to rounding, percentages of components might not equal 100%.

⁴ These figures are not adjusted for inflation.

finishes (13.4%), foundations (10.5%), site work (7.6%), final steps (6.5%), and other costs (2.1%) (See Table 3 for a full breakdown).

Exterior Finishes and major systems rough-ins had the largest percentage point increases from 2022 to 2024, rising from 11.8% to 13.4% and from 17.9% to 19.2%, respectively. On the other hand, framing experienced the largest percentage point decrease from 2022 to 2024, falling from 20.5% to 16.6% (the lowest since first measured in 2013).

Of the detailed items (i.e., subcomponents) in the NAHB survey, framing (including roofing), at 11.6%, and excavation, foundation, concrete, retaining walls, and backfill, at 10.0%, had the largest shares of construction costs. Together, these two subcomponents account for just over a fifth (21.7%) of 2024's construction costs, falling about four percentage points from 25.6% in 2022.

Table 3. SINGLE-FAMILY HOMES CONSTRUCTION COST BREAKDOWN HISTORY⁵

Construction Cost Breakdown	1998	2002	2004	2007	2009	2011	2013	2015	2017	2019	2022	2024
I. Site Work (sum of A to E)							6.8%	5.6%	6.7%	6.2%	7.4%	7.6%
A. Building Permit Fees	0.9%	1.3%	0.8%	1.7%	1.9%	1.7%	1.5%	1.2%	1.7%	1.7%	2.1%	1.8%
B. Impact Fee	1.0%	1.6%	1.1%	1.4%	1.4%	1.5%	1.3%	0.6%	0.9%	1.3%	1.3%	1.5%
C. Water & Sewer Fees Inspections	1.0%	1.4%	1.2%	1.6%	1.7%	1.6%	1.8%	1.4%	2.0%	1.5%	1.5%	1.5%
D. Architecture, Engineering							1.5%	1.6%	1.4%	1.5%	1.2%	1.5%
E. Other							0.7%	0.7%	0.7%	0.2%	1.3%	1.4%
II. Foundations (sum of F to G)							9.5%	11.6%	10.8%	11.8%	11.0%	10.5%
F. Excavation, Foundation, Concrete, Retaining walls, and Backfill	9.6%	6.9%	9.9%	7.0%	7.1%	9.3%	9.3%	11.3%	10.7%	11.3%	10.1%	10.0%
G. Other							0.2%	0.3%	0.1%	0.5%	0.9%	0.4%
III. Framing (sum of H to L)							19.1%	18.0%	17.3%	17.4%	20.5%	16.6%
H. Framing (including roof)	20.2%	18.4%	21.3%	15.8%	15.6%	13.5%	14.8%	15.4%	15.0%	13.7%	15.5%	11.6%
I. Trusses (if not included above)							2.2%	1.3%	1.6%	2.1%	2.9%	3.0%
J. Sheathing (if not included above)	NA	0.9%	1.4%	1.6%	1.7%	1.2%	0.9%	0.4%	0.3%	1.1%	1.4%	1.5%
K. General Metal, Steel	1.1%	0.8%	0.3%	0.8%	0.7%	0.5%	0.7%	0.4%	0.3%	0.3%	0.3%	0.4%
L. Other							0.5%	0.3%	0.1%	0.2%	0.4%	0.0%
IV. Exterior Finishes (sum of M to P)							14.4%	15.0%	13.9%	14.1%	11.8%	13.4%
M. Exterior Wall Finish							6.8%	7.2%	6.5%	6.5%	5.0%	5.7%
N. Roofing	2.6%	2.6%	2.2%	3.2%	3.8%	2.9%	3.2%	3.5%	3.3%	3.4%	2.9%	3.9%
O. Windows and Doors (including garage door)							4.1%	4.2%	3.9%	4.0%	3.4%	3.7%
P. Other							0.2%	0.2%	0.3%	0.2%	0.4%	0.1%
V. Major Systems Rough-ins (sum of Q to T)							13.4%	13.1%	13.8%	14.7%	17.9%	19.2%
Q. Plumbing (except fixtures)	5.9%	5.4%	5.3%	5.4%	5.3%	6.0%	4.8%	4.3%	4.6%	5.0%	5.8%	6.3%
R. Electrical (except fixtures)	3.8%	3.3%	3.4%	3.9%	3.7%	4.4%	4.0%	4.2%	4.2%	4.6%	6.1%	6.4%
S. HVAC	4.1%	4.2%	3.7%	3.9%	4.0%	4.8%	4.5%	4.4%	4.7%	4.8%	5.6%	6.3%
T. Other							0.1%	0.3%	0.2%	0.3%	0.4%	0.2%

Source: NAHB Construction Cost Surveys, 1998-2024

⁵ Due to rounding, percentages of components and subcomponents might not equal grand and subtotals.

Table 3. SINGLE-FAMILY HOMES CONSTRUCTION COST BREAKDOWN HISTORY⁶

Continued

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S S S	\$ 289,4 \$ 246,4	\$ 237,7	\$ 296,7	\$ 392,2	\$ 428,215
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Source: NAHB Construction Cost Surveys, 1998-2024

⁶ Due to rounding, percentages of components and subcomponents might not equal grand and subtotals.