Concentration of Large Builders in Metropolitan Markets: 2021 Update

November 1, 2022 By: Eric Lynch Economics & Housing Policy National Association of Home Builders (NAHB)

Introduction

In this study, NAHB analyzes data from Builder Magazine's annual <u>Local Leaders</u> lists. Among its various results, the study finds that:

- The largest markets in the county have generally become more concentrated since 2009, with their four firm concentration ratios on average increasing from 2009 to 2018 and levelling off thereafter.
- The share of the market captured by *large* national builders (those with at least 3,000 closings) ranges from a low of 5.5% in the Oklahoma City market to a high of 82.9% in the Las Vegas market.
- The share of the market captured by *all* national builders (those with at least 1,000 closings) ranges from a low of 7.7% in the El Paso market to a high of 83.9% in the Las Vegas market.
- The two years following the onset of the COVID-19 pandemic brought substantial changes in local market shares captured by larger builders—in both directions.
 - o For example, between 2019 and 2021, the share of the market captured by all national builders *increased* from 13.9% to 26.9% in the Colorado Springs market, but *decreased* from 47.7% to 37.3% in the Atlanta market.
 - Of the 38 metro areas where D.R. Horton had a presence in the top ten for both 2019 and 2021, their market share increased in 23 of them, with the largest increase occurring in the Miami market.
- In 2021, the top four firms in the areas accounted for over 73% of the market in the Cincinnati and Columbia SC metro areas.
- On balance, local markets did not become appreciably more concentrated between 2019 and 2021 (based on the four firm concentration ratio) although larger builders increased their shares of the markets during the period.

The following sections provide background, describe the methodology, and discuss these results in greater detail.

Background

Builder Magazine's annual <u>Local Leaders</u> list ranks the top fifty markets (defined as metropolitan statistical areas or MSAs)ⁱ by number of closings and lists the top ten local leading builders in each MSA. NAHB compiled data from 2009 to 2021 and analyzed how markets have changed since the trough of the Great Recession.

Builders from the <u>Local Leaders</u> rankings are placed into three tiers based on the average annual closings from 2009-2021.

- Tier 1 **à** Builders averaging 3,000+ closings per year
- Tier 2 **à** Builders averaging 1,000-2,999 closings per year
- Tier 3 **à** Builders averaging 500-999 closings per year

To analyze markets and how they've changed over time, NAHB calculated four statistics for each metropolitan area: market share of builders with 1) 3,000+ closings, 2) 1,000+ closings, 3) 500+ closings and a concentration ratio of the 4) top four firms. For convenience, here is how NAHB will label the first three statistics within the report:

- "Large National Builders" = Tier 1 builders (3,000+ closings)
- · "All National Builders" = Tier 1 + Tier 2 builders (1,000+ closings)
- · "National & Regional Builders" = Tier 1 + Tier 2 + Tier 3 builders (500+ closings)

The four firm concentration ratio is simply the market share of the top four builders in the MSA, regardless of their size or recategorization (i.e., tiers). This has historically been a conventional way to measure economic concentration for possible anti-competitive effects in a market.

The Economics & Housing Policy team at NAHB published the <u>initial report</u> back in 2016 and this is an update based on data through 2021.

Overall

NAHB analyzed information published in <u>BuilderOnline Magazine</u> showing the top metropolitan markets in the country through 2021. Besides slight dips in 2015 and 2016, the four firm concentration ratio and share of the market captured by all three categories of builders have trended upward since 2009, although the four firm concentration ratio levelled off and has fluctuated little since 2018 (Figure 1).

60.0% 50.0% 40.0% Market Share (%) 30.0% Key 20.0% Four Firm Large National 10.0% All National National & Regional 0.0% 2015 2009 2011 2013 2017 2019 2021 Year

Figure 1 - Averages for 34 Large MSAs

Date Source: BuilderOnline Top 100, NAHB calculations
Note: MSAs with data for every year between 2009-2021 are included in this analysis

Figure 1 shows the annual average of the four statistics and showcases how these averages changed during the years following the Great Recession. Of the top metropolitan statistical areas, there are 35 MSAs that had closing information for every year (2009-2021). NAHB excluded one of these 35 MSAs due to significant county changes, which would potentially affect the accuracy of the percentages in these marketsⁱⁱ. Therefore, NAHB will be using 34 MSAs for the analysis in this section.

All four percentages have increased since the trough of the Great Recessionⁱⁱⁱ. The four firm concentration ratio started at 30.1% in 2009, peaked in 2020 at 43.7%, and declined slightly to 43.0% in 2021. The large national builders grew their market shares from 30.5% in 2009 to its current peak of 48.4% in 2021. The market share for all national builders went up from 33.8% in 2009 to its current peak of 53.6% in 2021. National and regional builders increased their collective market share on average from 37.3% in 2009 to its peak of 57.5% in 2021.

The share of the market captured by the larger national and regional builders is not strictly speaking a measure of market concentration and possible lack of competition, as many of these larger builders could be present and competing within a market area. From the perspective of smaller local builders,

however, the effects may appear similar, as they could perceive themselves as being squeezed out of the market by appreciable increases in any of the four statistics described above.

Market Share Statistics^{iv} 2021

Large National Builders

Figure 2 shows the top five MSAs in 2021 with the highest large national builder market shares. For reference, the average large national builder market share for all the analyzed MSAs in 2021 is 48.4%.

Las Vegas-Henderson-Paradise, NV had the largest national builder share at 82.9% for 2021. This is unsurprisingly when analyzing the <u>Local Leaders</u> data for this MSA. Nine of the top 10 builders for Las Vegas-Henderson-Paradise, NV are classified as Tier 1 (i.e., 3,000+ closings); this share composition is true for Riverside-San Bernardino-Ontario, CA as well.

Analyzing the bottom MSAs, Oklahoma City, OK had the lowest large national builder market share at 5.5%, followed by Boise City, ID and Kansas City, MO-KS, both at 10.0%.

Figure 2- MSAs with the Highest Large National (3000+ Closings) Builders Market Share (2021)



MSA	Rank	Percent (%)
Las Vegas-Henderson-Paradise, NV	1	82.9%
Indianapolis-Carmel-Anderson, IN	2	75.7%
Riverside-San Bernardino-Ontario, CA	3	74.9%
Orlando-Kissimmee-Sanford, FL	4	70.4%
Baltimore-Columbia-Towson, MD	5	70.0%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

All National Builders

Figure 3 shows the top five MSAs in 2021 with the highest all national builder market shares. For reference, the average all national builder market share for all the analyzed MSAs in 2021 is 53.6%.

Indianapolis-Carmel-Anderson, IN switched places with Las Vegas-Henderson-Paradise, NV when moving from large national builders (Figure 3) to all national builders (Figure 4). The Racing Capital of the World had an all national builders market share of 83.9% for 2021, compared to 82.9% for Sin City. Since there is no change in the percentage for Las Vegas-Henderson-Paradise, NV, this means that there are no Tier 2 (i.e., 1,000-2,999 closings per year) firms within the top ten builders for this MSA. Interestingly, the MSA with the most Tier 2 builders specifically is Port St. Lucie/Fort Pierce, FL at 4.

Analyzing the bottom MSAs, El Paso, TX had the lowest all national builder market share at 7.7%, followed by Boise City, ID and Kansas City, MO-KS, both remaining at 10.0%.

Closings) Builders Market Share (2021)

Indianapolis-Carmel-Anderson, IN

Rank Percent (%)
Indianapolis-Carmel-Anderson, IN

1 83.9%

2

3

4

5

82.9%

81.5%

78.6%

77.7%

Figure 3- MSAs with the Highest National (1000+ Closings) Builders Market Share (2021)

Data Source: BuilderOnline Local Leaders, NAHB Calculations

Las Vegas-Henderson-Paradise, NV

Riverside-San Bernardino-Ontario, CA

Columbia, SC

Jacksonville, FL

National & Regional Builders

Figure 4 shows the top five MSAs in 2021 with the highest national & regional builder market shares. For reference, the average national & regional market share for all the analyzed MSAs in 2021 is 57.5%.

Indianapolis-Carmel-Anderson, IN had the highest national & regional builder market share: 83.9% for 2021, compared to 82.9% for Las Vegas-Henderson-Paradise, NV. Since there is no change in the percentages for both MSAs compared to the all national builders market share (Figure 4), this means that there are no Tier 3 (i.e., 500-999 closings per year) firms within their respective top ten. As a reminder, Las Vegas-Henderson-Paradise, NV also had no Tier 2 firms as well which is not surprising since all but one of their top ten builders are Tier 1. Interestingly, the MSA with the most Tier 3 builders specifically is Colorado Springs, CO at 3.

Analyzing the bottom MSAs, Kansas City, MO-KS had the lowest national & regional builder market share at 10.0%, followed by El Paso, TX at 15.2%.

Figure 4- MSAs with the Highest National & Regional (500+ Closings) Builders Market Share (2021)



MSA	Rank	Percent (%)
Indianapolis-Carmel-Anderson, IN	1	83.9%
Las Vegas-Henderson-Paradise, NV	2	82.9%
Columbia, SC	3	81.5%
Orlando-Kissimmee-Sanford, FL	4	78.9%
Jacksonville, FL	5	78.6%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

The Impact of COVID-19: Comparing 2019 vs 2021 Market Shares Introduction

NAHB calculated the percentage change of the three tier types in the previous section to understand how the COVID-19 pandemic affected these market share levels and which companies "moved the needle" the most within MSAs. For this exercise, NAHB used data specifically from MSAs in 2019 and 2021^v.

2019 Rankings

As a point of reference, Table 1 provides the same rankings as seen in the previous section, but for 2019. While the MSA with highest national & regional market share (Indianapolis-Carmel-Anderson, IN) stayed the same, Baltimore-Columbia, MD had the highest large national builder market share and Jacksonville, FL had the highest all national builder market share in 2019. Nevertheless, while there is some consistency, each category saw the introduction (and subsequently removal) of at least 2 MSAs between 2019 and 2021.

Table 1: 2019 Ranks

Large National Builders

MSA	Rank	Percent (%)
Baltimore-Columbia-Towson, MD	1	72.5%
Las Vegas-Henderson-Paradise, NV	2	70.3%
Cape Coral-Fort Myers, FL	3	66.6%
Tampa-St. Petersburg-Clearwater, FL	4	66.5%
North Port-Sarasota-Bradenton, FL	5	65.7%

All National Builders

MSA	Rank	Percent (%)
Jacksonville, FL	1	80.4%
Cincinnati, OH-KY-IN	2	77.9%
Cape Coral-Fort Myers, FL	3	75.7%
Las Vegas-Henderson-Paradise, NV	4	74.1%
Columbus, OH	5	72.8%

National & Regional Builders

MSA	Rank	Percent (%)
Indianapolis-Carmel-Anderson, IN	1	87.7%
North Port-Sarasota-Bradenton, FL	2	82.3%
Jacksonville, FL	3	80.4%
Las Vegas-Henderson-Paradise, NV	4	79.3%
Cape Coral-Fort Myers, FL	5	79.2%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

Large National Builders

Figure 5 shows the large national builder market shares in 2019 and 2021 along with top five and bottom five MSAs by percent change. Colorado Springs, CO saw the largest positive percent change in large national builder market share, growing over five-fold from 3.7% in 2019 to 19.1% in 2021. All MSAs within the top five have a large national builder market share of less than 50%. Atlanta-Sandy Springs-

Alpharetta, GA experienced the largest negative percent change, falling 12.2% from over 42.5% in 2019 to 37.3% in 2021.

Interestingly, both MSAs in Colorado saw noticeable shifts among specific large national builders. Most of the increase in large national builder market share for Colorado Springs, CO came from the introduction of 2 firms in 2021 to the market: Clayton Properties (9.8%, or 407 closings) and D.R. Horton (3.0%, or 123 closings). M.D.C. Holdings previously had a strong presence within Colorado Springs, CO but fell out of the top ten starting in 2015; however, they remerged in 2021, achieving a market share of 3.2%, or 131 closings, and ranked 8th. As for Greeley, CO, D.R. Horton (+5.6 percentage points to 16.7%, or 630 closings) and LGI Homes (+7.7 percentage points to 11.3%, or 425 closings) were the largest drivers of their increases in large national builder market shares.

As for the bottom 5 MSAs, North Port-Sarasota-Bradenton, FL saw a major pullback from Lennar Corp., decreasing 10.5 percentage points to 13.3%, or 1,092 closings, and falling to the second highest market share in the MSA (D.R. Horton is top with 14.6% market share, or 1,198 closings).

Figure 5- Large National (3000+ Closings) Builders Market Share Change Rankings by MSAs (2019 vs 2021)

Colorado Springs, CO

MSA	Rank	2019	2021	Percent Change
Colorado Springs, CO	1	3.7%	19.1%	416.2%
Oklahoma City, OK	2	2.7%	5.5%	103.7%
Provo-Orem, UT	3	13.6%	25.5%	87.5%
Nashville-Davidson- Murfreesboro-Franklin, TN	4	21.7%	38.0%	75.1%
Greeley, CO	5	26.8%	46.6%	73.9%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

Bottom 5

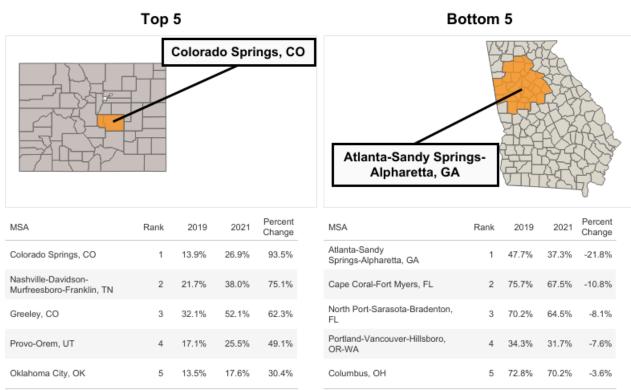


MSA	Rank	2019	2021	Percent Change
Atlanta-Sandy Springs-Alpharetta, GA	1	42.5%	37.3%	-12.2%
North Port-Sarasota-Bradenton, FL	2	65.7%	59.0%	-10.2%
Columbus, OH	3	55.5%	50.3%	-9.4%
Richmond, VA	4	30.2%	27.8%	-7.9%
Cape Coral-Fort Myers, FL	5	66.6%	61.8%	-7.2%

All National Builders

Figure 6 shows the all national builder market shares in 2019 and 2021 along with top five and bottom five MSAs by percent change. Colorado Springs, CO saw the largest positive percent change in all national builder market share, almost two-fold from 13.9% in 2019 to 26.9% in 2021. Atlanta-Sandy Springs-Alpharetta, GA experienced the largest negative percent change, falling 21.8% from over 47.7% in 2019 to 37.3% in 2021.

Figure 6- All National (1000+ Closings) Builders Market Share Change Rankings by MSAs (2019 vs 2021)



Data Source: BuilderOnline Local Leaders, NAHB Calculations

National & Regional Builders

Figure 7 shows the market shares captured by national & regional builders in 2019 and 2021 along with top five and bottom five MSAs by percent change. Deltona-Daytona Beach-Ormond Beach, FL saw the largest positive percent change in national & regional builder market share, increasing 65.4% from 33.8% in 2019 to 55.9% in 2021. St. Louis, MO-IL experienced the largest negative percent change, decreasing 19.3% from 32.6%% in 2019 to about a quarter in 2021.

The change for Deltona-Daytona Beach-Ormond Beach, FL were driven by 2 firms: an increased presence of D.R. Horton (+5.2 percentage points to 21.6%, or 950 closings, and still ranked 1st) and the introduction of Minto Communities into the top ten (12.9%, or 565 closings, ranked 2nd) for the MSA.

Figure 7- Regional (500+ Closings) Builders Market Share Change Rankings by MSAs (2019 vs 2021)

Top 5 Bottom 5 St. Louis, MO-IL Deltona-Daytona Beach-Ormond Beach, FL Percent Percent MSA Rank 2019 2021 MSA Rank 2019 2021 Change Change Deltona-Daytona Beach-Ormond 1 33.8% 55.9% 1 32.6% 26.3% -19.3% 65.4% St. Louis, MO-IL Beach, FL Nashville-Davidson-Atlanta-Sandy 28.6% 45.6% 59.4% 49.9% 43.8% -12.2% Murfreesboro-Franklin, TN Springs-Alpharetta, GA Cape Coral-Fort Myers, Oklahoma City, OK 3 22.7% 31.3% 37.9% 3 79.2% 71.5% -9.7% North Port-Sarasota-Colorado Springs, CO 4 49.8% 68.3% 37.1% 4 82.3% 75.0% -8.9% Bradenton.. Miami-Fort Lauderdale-Pompano 5 57.7% 73.1% 26.7% Richmond, VA 5 54.3% 51.9% -4.4%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

Concentration

Beach, FL

Four Firm (2021)

As mentioned in the Introduction section, the four firm concentration ratio has been a traditional way to quantify the economic concentration of a market or industry. Figure 8 shows the top five MSAs in 2021 with the highest four firm concentration ratio. For reference, the average four firm concentration ratio for all the MSAs in 2021 is 43.0%.

The top two MSAs, Cincinnati, OH-KY-IN and Columbia, SC, are virtually the same, separated by less than a half of a percentage point. Both MSAs have a composition of 2 large national builders (i.e., Tier 1) within their four firm concentration ratio; NVR and M/I Homes within Cincinnati, OH-KY-IN and Clayton Properties Group and D.R. Horton within Columbia, SC. When expanding to the top ten

instead of top five, the state of Florida was represented the most with 4 MSAs, including Jacksonville (58.4%) ranked fifth and Tampa-St. Petersburg-Clearwater (57.8%) ranked sixth.

Examining the ten firm concentration ratio instead of the four firm one, Cincinnati, OH-KY-IN falls to fifth (84.5%) while Columbia, SC rises to the top with an astounding 94.5%. More analysis of the top ten builder share is available in a June 2022 Eye on Housing blog post.

Analyzing the bottom MSAs by their four firm concentration ratio, only one MSA (Kansas City, MO-KS) had a four firm concentration ratio less than 20 percent, which was 18.1%.

Cinncinati, OH-KY-IN

Figure 8- MSAs with the Highest Four Firm Concentration (2021)

MSA	Rank	Percent (%)
Cincinnati, OH-KY-IN	1	73.4%
Columbia, SC	2	73.1%
Miami-Fort Lauderdale-Pompano Beach, FL	3	67.4%
Cape Coral-Fort Myers, FL	4	66.1%
Indianapolis-Carmel-Anderson, IN	5	58.7%

Data Source: BuilderOnline Local Leaders, NAHB Calculations

Four Firm (2019 vs 2021)

Similar to the market share analysis with the three tier types, NAHB calculated the percentage change of the four firm concentration ratio to understand how the COVID-19 pandemic affected it and which companies "moved the needle" the most within MSAs. For this exercise, NAHB used data specifically from MSAs in 2019 and 2021^{vi}. Table 2 provides the same rankings as seen in the previous section, but for 2019. Cincinnati, OH-KY-IN remained the MSA with the highest four firm concentration ratio, even though it decreased by 2.7 percentage points from 2019 (76.1%) to 2021 (73.4%). Cape Coral-Fort

Myers, FL and Indianapolis-Carmel-Anderson, IN also remained within the top five in both years, even though both MSAs fell in their rankings and four firm concentration ratio from 2019 to 2021.

Table 2: MSAs with the Highest Four Firm Concentration (2019)

MSA	Rank	Percent (%)
Cincinnati, OH-KY-IN	1	76.1%
Cape Coral-Fort Myers, FL	2	66.3%
Richmond, VA	3	64.1%
Indianapolis-Carmel-Anderson, IN	4	64.0%
North Port-Sarasota-Bradenton, FL	5	63.4%

Data Source: BuilderOnline Top 100, NAHB Calculations

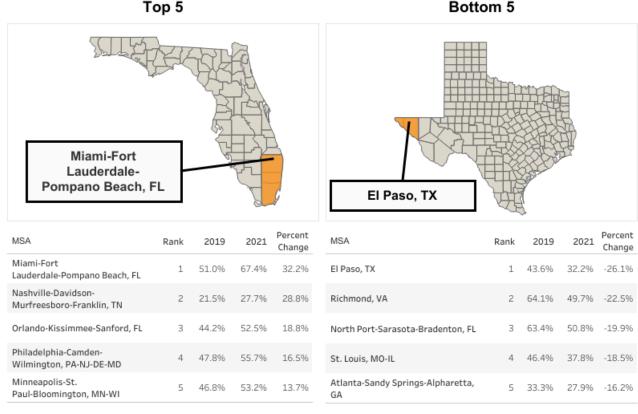
Figure 9 shows the four firm builder concentration ratio in 2019 and 2021 along with top five and bottom five MSAs by percent change. Miami-Fort Lauderdale-Pompano Beach, FL saw the largest positive percent change in four firm builder concentration, growing 32.2% from 51.0% in 2019 to 67.4% in 2021. This is one of the reasons why it is now the third-highest concentrated MSA as of 2021 (See Figure 1). All MSAs (except for Nashville-Davidson-Murfreesboro-Franklin, TN) within the top five now have a four firm builder concentration ratio of greater than 50%. El Paso, TX experienced the largest negative percent change, falling 26.1% from over 43% in 2019 to less than a third in 2021.

There were noticeable shifts when examining specific builders within the Miami-Fort Lauderdale-Pompano Beach, FL MSA. While PulteGroup and Related Group were prevalent in 2019 combining for 14.0%, or 1,309 closings, both firms were not within the top four in 2021 (PulteGroup fell to fifth while The Related Group was outside the top ten). However, this decline was outweighed by two firms combining for 25.0% of the market in 2021: Alta Developers (14.3%, or 1,349 closings) and D.R. Horton (10.7%, or 1,013 closings). While D.R. Horton has consistently been within the top ten builders for the Miami-Fort Lauderdale-Pompano Beach, FL MSA across all years (2009-2021), this is the first instance of Alta Developers as a top ten builder within the MSA.

D.R. Horton also increased its presence as a top four firm in Nashville (+3.8 percentage points to 7.7%, or 827 closings, and changing ranks from 4th to 1st), Orlando (+5.9 percentage points to 15.0%, or 2,022 closings, and still ranked 2nd), and Minneapolis (+1.3 percentage points to 10.8%, or 800 closings, and changing ranks from 2nd to 3rd). Additionally, D.R. Horton emerged as a top four firm in Philadelphia (4.9%, or 310 closings, and now ranked 4th) for the first time in 5 years.

Richmond, VA experienced some noticeable shifts as well, but in the opposite direction. NVR (-8.5 percentage points to 21.7%, but still ranked 1st) and StyleCraft Homes (-4.4 percentage points and changed ranks from 3rd to 5th) were major contributors to the decrease in four firm concentration for this MSA. However, Eastwood Homes emerged within the top four for the first time in 2021 for Richmond, VA (increased 1.5 percentage points to 6.5%, or 249 closings, and ranked 4th).

Figure 9- Four Firm Builders Concentration Change Rankings by MSAs (2019 vs 2021)



Data Source: BuilderOnline Local Leaders, NAHB Calculations

Conclusion

Based on local leader data compiled from <u>BuilderOnline</u> and NAHB calculations, there were increases of more than 40% across all four local market percentages calculated by NAHB from 2009 to 2021, with the largest percentage change occurring with the large national builders; their market share increased 58.7% on average, from 30.5% in 2009 to 48.4% in 2021. Using BuilderOnline's <u>Local Leaders</u> data, NAHB also analyzed how individual builders "moved the needle" for the market share of a specific MSA by comparing the market percentages before and after the emergence of the COVID-19 virus within the United States. Most notably, of the 38 MSAs where D.R. Horton had a presence in the top ten for both 2019 and 2021, their market share increased in 23 of them, with the largest increase

occurring in Miami-Fort Lauderdale, FL which, unsurprisingly, had the highest four firm concentration in 2021.

Even though there were general increases from 2019 to 2021, NAHB wanted to determine whether this overall trend was continuing along a similar path or was exacerbated by the COVID-19 pandemic. When analyzing the change in percentages across the four statistics, the average annual change was +1.5 percentage points (with a range of 1.2 to 1.7 percentage points). This means that starting in 2009, on average, each statistic would increase approximately 1.5 percentage points every year. Table 3 provides the percentages and percentage point differences between the four statistics from 2019 to 2021.

Table 3- Percentage Point Difference By Statistic 2019 vs 2021

Statistic	Year	Percentage	Difference
Four Firm	2019	42.6%	
Four Filli	2021	43.0%	0.3%
Largo National	2019	42.7%	
Large National	2021	48.4%	5.6%
All National	2019	49.2%	
All National	2021	53.6%	4.5%
National & Basianal	2019	54.4%	
National & Regional	2021	57.5%	3.1%

Date Source: BuilderOnline Top 100, NAHB calculations

Note: MSAs with data for every year between 2009-2021 are included in this analysis

While the four firm concentration ratio was essentially unchanged over this period, the three market share statistics experienced at least a 3-percentage point increase from 2019 to 2021 which is more than 2 times higher than the historical average, especially for large national builders (+ 5.6 percentage points). This evidence suggests that the environment created by the COVID-19 pandemic did have a noticeable impact on local markets, not by appreciably increasing overall market concentrations, but by increasing the share of the markets captured by larger builders.

¹ Metropolitan Statistical Areas, or MSAs, are aggregations of counties defined by the U.S. Office of Management and Budget (OMB), based largely on cross-county commuting patterns. MSA names change as OMB releases updates, and NAHB used the most recent MSA definitions and names published March 6, 2020.

ⁱⁱ As mentioned in endnote #1, OMB posts periodic updates for the definitions of MSAs. NAHB compared these bulletins, noting county changes for the MSAs in this analysis. If the MSA had counties added or subtracted, NAHB compared the single-family permits in those counties for year of the updated bulletin to the total single-family permits in the MSA in the year of the updated bulletin. If the new counties added or subtracted greater than 10% of total single-family permits in the MSA, that MSA was excluded. Here are the MSAs excluded for this reason:

- Between 2009 & 2013: Charlotte-Concord-Gastonia, NC-SC, Cincinnati, OH-KY-IN, Greenville-Anderson-Mauldin, SC, and Myrtle Beach-Conway-North Myrtle Beach, SC-NC.
- Between 2013 & 2015: None
- Between 2015 & 2017: None
- Between 2017 & 2018: None
- Between 2018 & 2020: None

However, only Charlotte-Concord-Gastonia, NC-SC was excluded from the analysis in this section because the other three MSAs (Cincinnati, OH-KY-IN, Greenville-Anderson-Mauldin, SC, and Myrtle Beach-Conway-North Myrtle Beach, SC-NC.) had years with missing data (i.e., did not have data for every year between 2009 and 2021). In total, there are 34 MSAs for the Aggregate National Averages in Figure 1.

- 1) Since the tier type is calculated by taking the average number of closings over a different period (2009-2015 vs 2009-2021), some firms might have changed since the last update in 2015 which means that some of percentages within this report might be different than the initial one.
- 2) As the number of years with data increases, the number of MSAs within the analysis decreased from 37 in the 2016 report to 34 for this update.

However, when analyzing the consolidation trends, these discrepancies do not impact the overall analysis presented in this report nor any of the conclusions.

iii There are two main reasons why some of the percentages in the 2016 report might differ from this update:

^{iv} There are 50 MSAs for the 2021 Rankings which includes any MSA that NAHB had closings data for in 2021.

^v For this section, NAHB 1) included MSAs that had data available in 2019 and 2021 and 2) excluded the MSAs mentioned in Endnote #2. In total, there are 44 MSAs that were used for analysis in this section.

vi Ibid.