Remodeling Market Index: Special Questions

Third Quarter 2017

Economics & Housing Policy Group



Introduction:

Since 2001, the National Association of Home Builders (NAHB) has conducted a quarterly survey of its remodeler members. This survey is used to generate the NAHB Remodeling Market Index (RMI). The main section of the RMI survey asks remodelers to rate market demand for the remodeling market at the present time compared to 3 months earlier, as well as the volume of calls for bids, the amount of work committed for the next 3 months, the backlog of remodeling jobs and the number of proposals at this time compared to 3 months earlier. The results are combined into a single composite index that measures the overall strength of the remodeling market.

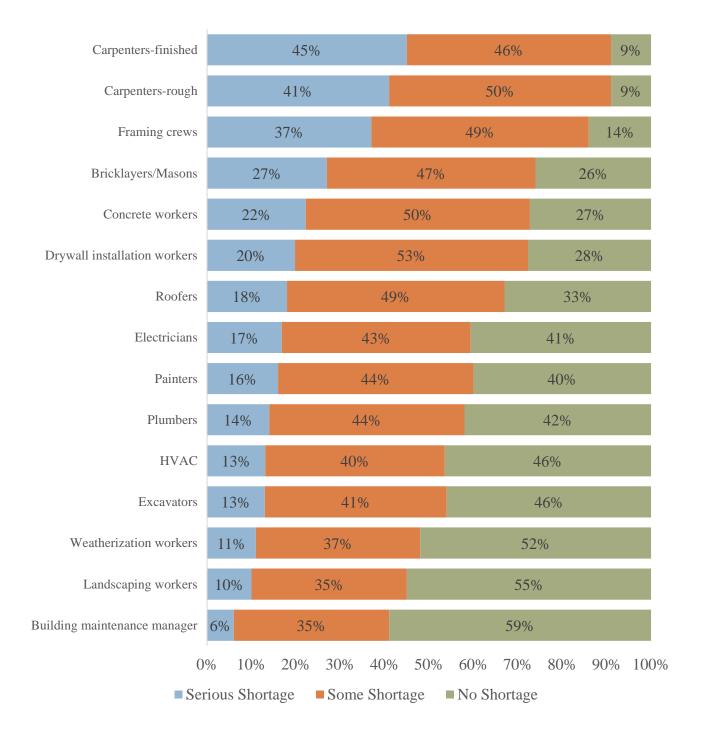
In addition to the questions that provide the data needed to compute the RMI, the survey often also includes a set of "special" questions on a topic of current interest to the housing industry. The third quarter 2017 special questions asked about the availability of labor and subcontractors for different trades e.g. carpenters, electricians, etc. The survey also asked if the cost of direct labor and subcontractors has changed over the past 12 months, and the effect labor shortage has had on business.

The third quarter 2017 survey was sent electronically to 2,032 remodelers and by mail to 17 remodelers. The results in this report are based on 248 responses, a response rate of about 12 percent. Results are broken down by the size of the remodeler as well as by the four Census regions (sample size makes it impossible to produce results with more granular levels of geographic detail).

Q4. How would you rate the availability of the following trades in your area?

| | La | <u>ıbor</u> Availab | oility | 5 | Subcontracto | ors | |
|------------------------------|------------|---------------------|-----------|--------------|--------------|----------|--|
| Type of Labor | Directly (| employed by | your firm | Availability | | | |
| Type of Labor | Serious | Some | No | Serious | Some | No | |
| | Shortage | Shortage | Shortage | Shortage | Shortage | Shortage | |
| Carpenters-rough | 41 | 50 | 9 | 36 | 50 | 14 | |
| Carpenters-finished | 45 | 46 | 9 | 36 | 48 | 16 | |
| Electricians | 17 | 43 | 41 | 16 | 44 | 40 | |
| Excavators | 13 | 41 | 46 | 13 | 44 | 43 | |
| Framing crews | 37 | 49 | 14 | 39 | 44 | 17 | |
| Roofers | 18 | 49 | 33 | 20 | 45 | 36 | |
| Plumbers | 14 | 44 | 42 | 14 | 46 | 39 | |
| Bricklayers/Masons | 27 | 47 | 26 | 26 | 47 | 27 | |
| Painters | 16 | 44 | 40 | 15 | 44 | 41 | |
| Landscaping workers | 10 | 35 | 55 | 9 | 38 | 53 | |
| Drywall installation workers | 20 | 53 | 28 | 17 | 53 | 30 | |
| Concrete workers | 22 | 50 | 27 | 19 | 52 | 29 | |
| Weatherization workers | 11 | 37 | 52 | 10 | 41 | 49 | |
| HVAC | 13 | 40 | 46 | 12 | 43 | 45 | |
| Building maintenance manager | 6 | 35 | 59 | 6 | 37 | 57 | |

Q4. Availability of following types of labor - LABOR (Directly employed by your firm) (Percent of Respondents)



Q4. Availability of following types of labor – SUBCONTRACTORS' (Percent of Respondents)

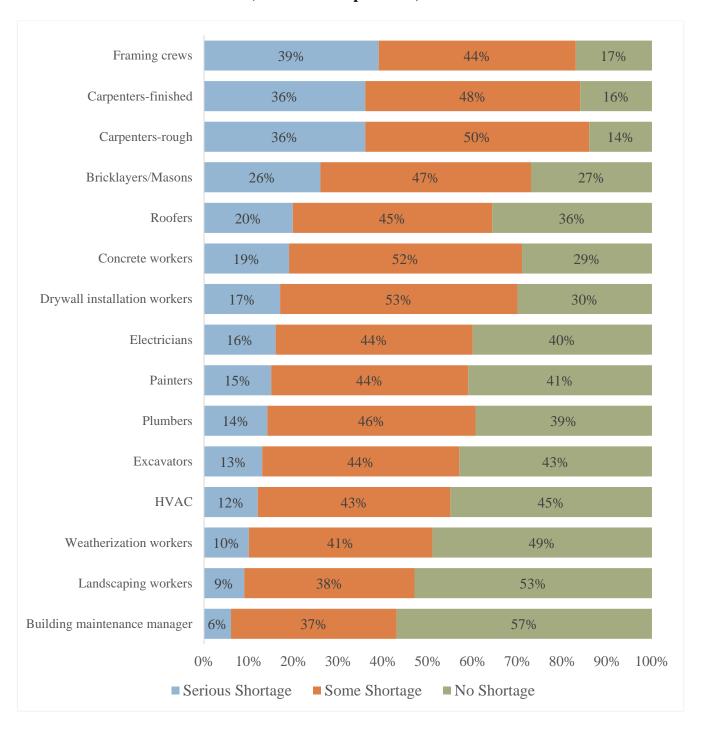


Exhibit 4. Availability of Labor – by Region (Percent of Respondents)

| (2 0 2 0 0 1 1 1 | or Kespona | Region | | | | |
|------------------------------|------------|-----------|----------|-------|----------|--|
| | Total | Northeast | Midwest | South | West | |
| CARPENTERS - FINISHED | | | | | | |
| Serious Shortage | 45 | 36 | 44 | 44 | 53 | |
| Some Shortage | 46 | 46 | 52 | 46 | 39 | |
| No Shortage | 9 | 18 | 5 | 10 | 9 | |
| CARPENTERS - ROUGH | | | | 10 | | |
| Serious Shortage | 41 | 18 | 48 | 37 | 49 | |
| Some Shortage | 50 | 64 | 45 | 54 | 44 | |
| No Shortage | 9 | 18 | 6 | 9 | 7 | |
| FRAMING CREWS | | | | | | |
| Serious Shortage | 37 | 21 | 46 | 33 | 40 | |
| Some Shortage | 49 | 54 | 44 | 55 | 42 | |
| No Shortage | 14 | 25 | 10 | 12 | 17 | |
| BRICKLAYERS/MASONS | | | 10 | | - 7 | |
| Serious Shortage | 27 | 37 | 19 | 31 | 23 | |
| Some Shortage | 47 | 37 | 47 | 49 | 46 | |
| No Shortage | 26 | 26 | 33 | 19 | 31 | |
| PAINTERS | | | 33 | 17 | 31 | |
| Serious Shortage | 16 | 7 | 17 | 13 | 23 | |
| Some Shortage | 44 | 30 | 49 | 45 | 43 | |
| No Shortage | 40 | 63 | 34 | 42 | 34 | |
| ELECTRICIANS | 10 | 03 | 34 | 72 | 34 | |
| Serious Shortage | 17 | 4 | 12 | 24 | 17 | |
| Some Shortage | 43 | 32 | 52 | 33 | 56 | |
| No Shortage | 41 | 64 | 36 | 44 | 27 | |
| ROOFERS | 71 | 04 | 30 | 7-7 | 21 | |
| Serious Shortage | 18 | 11 | 10 | 25 | 21 | |
| Some Shortage | 49 | 50 | 58 | 39 | 55 | |
| No Shortage | 33 | 39 | 32 | 36 | 25 | |
| PLUMBERS | | | 32 | 30 | 23 | |
| Serious Shortage | 14 | 4 | 10 | 17 | 17 | |
| Some Shortage | 44 | 36 | 41 | 47 | 47 | |
| No Shortage | 42 | 61 | 48 | 36 | 36 | |
| EXCAVATORS | 42 | 01 | 40 | 30 | 30 | |
| Serious Shortage | 13 | 4 | 9 | 16 | 16 | |
| Some Shortage | 41 | 31 | 44 | 42 | 41 | |
| No Shortage | 46 | 65 | 47 | 42 | 43 | |
| HVAC | 40 | 0.5 | 47 | 42 | 43 | |
| Serious Shortage | 13 | 11 | 16 | 12 | 13 | |
| Some Shortage | 40 | 22 | 39 | 43 | 48 | |
| No Shortage | 46 | 67 | 46 | 45 | 38 | |
| WEATHERIZATION WORKERS | 40 | 07 | 40 | 43 | 36 | |
| Serious Shortage | 11 | | 10 | 13 | 15 | |
| Some Shortage | 37 | 22 | 41 | 44 | 28 | |
| | 52 | 23 77 | 41 | 44 | 28 57 | |
| No Shortage | 32 | // | 49 | 43 | 3/ | |
| BUILDING MAINTENANCE MANAGER | 6 | 8 | <i>c</i> | 6 | 5 | |
| Serious Shortage | 35 | 25 | 6 38 | 38 | 33 | |
| Some Shortage | | | | | | |
| No Shortage | 59 | 67 | 56 | 56 | 63 | |
| LANDSCAPING WORKERS | 4.0 | | _ | | | |
| Serious Shortage | 10 | | 9 | 14 | 10 | |
| Some Shortage | 35 | 4 | 48 | 32 | 43 | |
| No Shortage | 55 | 96 | 43 | 55 | 47 | |

Exhibit 4. Availability of Labor – by Region (Continued) (Percent of Respondents)

| | Total | | Region | | |
|------------------------------|--------|-----------|---------|-------|------|
| | 1 Otai | Northeast | Midwest | South | West |
| DRYWALL INSTALLATION WORKERS | | | | | |
| Serious Shortage | 20 | | 17 | 23 | 26 |
| Some Shortage | 53 | 37 | 56 | 54 | 55 |
| No Shortage | 28 | 63 | 27 | 22 | 19 |
| CONCRETE WORKERS | | | | | |
| Serious Shortage | 22 | 18 | 21 | 21 | 29 |
| Some Shortage | 50 | 50 | 51 | 51 | 48 |
| No Shortage | 27 | 32 | 28 | 28 | 23 |

Exhibit 4. Availability of Subcontractors—by Region (Percent of Respondents)

| (2-0-0 | nt of Kespo | Region | | | | |
|--------------------------------|-------------|-----------|---------|-------|------|--|
| | Total | Northeast | Midwest | South | West | |
| CARPENTERS - FINISHED | | | | | | |
| Serious Shortage | 36 | 18 | 43 | 35 | 38 | |
| Some Shortage | 48 | 50 | 43 | 51 | 48 | |
| No Shortage | 16 | 32 | 13 | 14 | 15 | |
| CARPENTERS - ROUGH | | | | | | |
| Serious Shortage | 36 | 14 | 45 | 34 | 40 | |
| Some Shortage | 50 | 55 | 45 | 54 | 48 | |
| No Shortage | 14 | 32 | 9 | 12 | 13 | |
| FRAMING CREWS | 1. | 02 | | | 10 | |
| Serious Shortage | 39 | 18 | 46 | 37 | 44 | |
| Some Shortage | 44 | 50 | 37 | 48 | 42 | |
| No Shortage | 17 | 32 | 17 | 14 | 15 | |
| BRICKLAYERS/MASONS | 1, | 32 | 1, | 17 | 13 | |
| Serious Shortage | 26 | 40 | 21 | 28 | 23 | |
| Some Shortage | 47 | 25 | 45 | 52 | 49 | |
| No Shortage | 27 | 35 | 34 | 20 | 28 | |
| PAINTERS | 21 | 33 | 34 | 20 | 20 | |
| Serious Shortage | 15 | 9 | 11 | 15 | 22 | |
| Some Shortage | 44 | 32 | 46 | 43 | 48 | |
| | 44 | 59 59 | 43 | 43 | 30 | |
| No Shortage | 41 | 39 | 43 | 42 | 30 | |
| ELECTRICIANS Socious Shorts as | 16 | 4 | 16 | 10 | 10 | |
| Serious Shortage | 16 | 4 | 16 | 18 | 18 | |
| Some Shortage | 44 | 35 | 42 | 40 | 57 | |
| No Shortage | 40 | 61 | 42 | 41 | 25 | |
| ROOFERS | • | _ | 4.0 | | | |
| Serious Shortage | 20 | 5 | 18 | 21 | 25 | |
| Some Shortage | 45 | 32 | 46 | 42 | 55 | |
| No Shortage | 36 | 64 | 37 | 37 | 20 | |
| PLUMBERS | | | _ | | | |
| Serious Shortage | 14 | 4 | 9 | 20 | 15 | |
| Some Shortage | 46 | 43 | 44 | 44 | 54 | |
| No Shortage | 39 | 52 | 47 | 36 | 31 | |
| EXCAVATORS | | | | | | |
| Serious Shortage | 13 | | 7 | 20 | 14 | |
| Some Shortage | 44 | 29 | 46 | 41 | 53 | |
| No Shortage | 43 | 71 | 46 | 39 | 33 | |
| HVAC | | | | | | |
| Serious Shortage | 12 | 10 | 11 | 14 | 10 | |
| Some Shortage | 43 | 20 | 39 | 43 | 56 | |
| No Shortage | 45 | 70 | 50 | 42 | 33 | |
| WEATHERIZATION WORKERS | | | | | | |
| Serious Shortage | 10 | | 8 | 13 | 11 | |
| Some Shortage | 41 | 35 | 39 | 47 | 36 | |
| No Shortage | 49 | 65 | 53 | 41 | 53 | |
| BUILDING MAINTENANCE MANAGER | | | | | | |
| Serious Shortage | 6 | | 4 | 8 | 8 | |
| Some Shortage | 37 | 30 | 36 | 41 | 35 | |
| No Shortage | 57 | 70 | 60 | 51 | 58 | |

Exhibit 4. Availability of Subcontractors—by Region (Continued) (Percent of Respondents)

| | Total | | Regio | n | |
|----------------------|-------|-----------|---------|-------|------|
| | Total | Northeast | Midwest | South | West |
| LANDSCAPING WORKERS | | | | | |
| Serious Shortage | 9 | | 8 | 14 | 4 |
| Some Shortage | 38 | 5 | 55 | 31 | 48 |
| No Shortage | 53 | 95 | 38 | 54 | 48 |
| DRYWALL INSTALLATION | | | | | |
| WORKERS | | | | | |
| Serious Shortage | 17 | | 16 | 18 | 22 |
| Some Shortage | 53 | 36 | 48 | 57 | 59 |
| No Shortage | 30 | 64 | 36 | 25 | 18 |
| CONCRETE WORKERS | | | | | |
| Serious Shortage | 19 | 9 | 18 | 17 | 27 |
| Some Shortage | 52 | 52 | 45 | 57 | 52 |
| No Shortage | 29 | 39 | 36 | 27 | 21 |

Exhibit 4. Availability of Labor and Subcontractors—HISTORY (Percent of Respondents)

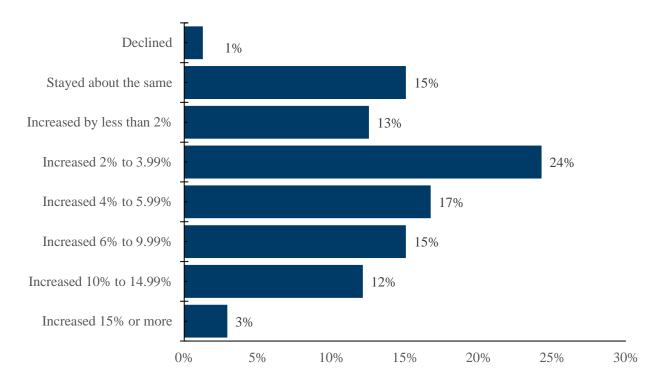
| | | | Labor | iit of Kes | 1 | | Sub | ocontract | tors | |
|---------------------|----------|-----------------|-----------------|-----------------|-----------------|----------|-----------------|-----------------|-----------------|-----------------|
| | 1st | 3 rd | 3 rd | 3 rd | 3 rd | 1st | 3 rd | 3 rd | 3 rd | 3 rd |
| | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr |
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2013 | 2014 | 2015 | 2016 | 2017 |
| CARPENTERS - | | | | | | | | | | |
| FINISHED | | | | | | | | | | |
| Serious Shortage | 10 | 30 | 41 | 45 | 45 | 8 | 27 | 36 | 36 | 36 |
| Some Shortage | 34 | 42 | 39 | 35 | 46 | 35 | 47 | 50 | 45 | 48 |
| No Shortage | 56 | 29 | 20 | 20 | 9 | 57 | 25 | 14 | 18 | 16 |
| CARPENTERS - | | | | | | | | | | |
| ROUGH | | | | | | | | | | |
| Serious Shortage | 6 | 24 | 29 | 35 | 41 | 6 | 25 | 29 | 30 | 36 |
| Some Shortage | 34 | 46 | 49 | 43 | 50 | 35 | 49 | 57 | 54 | 50 |
| No Shortage | 60 | 30 | 23 | 22 | 9 | 59 | 26 | 14 | 16 | 14 |
| FRAMING | | | | | | | | | | |
| CREWS | | | | | | | | | | |
| Serious Shortage | 7 | 18 | 25 | 26 | 37 | 7 | 25 | 30 | 29 | 39 |
| Some Shortage | 28 | 45 | 45 | 45 | 49 | 32 | 47 | 47 | 50 | 44 |
| No Shortage | 64 | 36 | 30 | 29 | 14 | 60 | 28 | 23 | 21 | 17 |
| BRICKLAYERS/ | | | | | | | | | | |
| MASONS | | | | | | | | | | |
| Serious Shortage | 4 | 10 | 15 | 19 | 27 | 5 | 15 | 19 | 22 | 26 |
| Some Shortage | 23 | 38 | 32 | 34 | 47 | 25 | 44 | 41 | 44 | 47 |
| No Shortage | 73 | 52 | 53 | 47 | 26 | 70 | 41 | 40 | 33 | 27 |
| PAINTERS | | | | | | | | | | |
| Serious Shortage | 2 | 7 | 9 | 11 | 16 | 3 | 9 | 11 | 14 | 15 |
| Some Shortage | 16 | 31 | 37 | 38 | 44 | 19 | 37 | 45 | 42 | 44 |
| No Shortage | 82 | 62 | 54 | 51 | 40 | 78 | 54 | 44 | 44 | 41 |
| ELECTRICIANS | _ | _ | | | | _ | _ | | | |
| Serious Shortage | 3 | 5 | 11 | 11 | 17 | 3 | 6 | 13 | 12 | 16 |
| Some Shortage | 13 | 32 | 33 | 34 | 43 | 16 | 40 | 42 | 43 | 44 |
| No Shortage | 84 | 63 | 56 | 55 | 41 | 81 | 54 | 46 | 45 | 40 |
| ROOFERS | 4 | 0 | 10 | 10 | 10 | 2 | 0 | | 10 | 20 |
| Serious Shortage | 4 | 8 | 10 | 12 | 18 | 3 | 9 | 11 | 12 | 20 |
| Some Shortage | 15 | 27 | 35 | 34 | 49 | 19 | 35 | 41 | 41 | 45 |
| No Shortage | 81 | 65 | 55 | 54 | 33 | 78 | 55 | 48 | 47 | 36 |
| PLUMBERS | 2 | | 10 | 1.1 | 1.4 | 2 | 0 | | 1.5 | 1.4 |
| Serious Shortage | 3 | 6 | 10 | 11 | 14 | 2 | 8 | 11 | 15 | 14 |
| Some Shortage | 15 | 27 | 32 | 33 | 44 | 17 | 34 | 38 | 44 | 46 |
| No Shortage | 82 | 67 | 58 | 56 | 42 | 81 | 58 | 50 | 41 | 39 |
| EXCAVATORS | 1 | _ | 7 | 0 | 12 | 1 | | 0 | 10 | 12 |
| Serious Shortage | 1 | 5 | 7 | 9 | 13 | 1 | 6 25 | 9 | 12 | 13 |
| Some Shortage | 13 | 28 | 28 | 32 | 41 | 13 | 35 50 | 33 | 37 51 | 44 |
| No Shortage | 85 | 67 | 65 | 59 | 46 | 86 | 59 | 58 | 51 | 43 |
| HVAC | 1 | 3 | o | 7 | 13 | 2 | 5 | 9 | 9 | 12 |
| Serious Shortage | 1 | | 8 | | | 2 14 | | | | 12 |
| Some Shortage | 11 88 | 22 74 | 27 66 | 32 61 | 40 | 14 85 | 30 66 | 34 56 | 40 51 | 43 |
| No Shortage | 00 | /4 | 00 | 01 | 46 | 65 | 00 | 30 | 31 | 45 |

Exhibit 4. Availability of Labor and Subcontractors—HISTORY (Continued) (Percent of Respondents)

| | | | Labor | iit of Ke | 1 0 1 1 1 1 | | Sul | ocontract | tors | |
|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|-----------------|-----------------|-----------------|
| | 1 st | 3 rd | 3 rd | 3 rd | 3 rd | 1st | 3 rd | 3 rd | 3 rd | 3 rd |
| | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr | Qtr |
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2013 | 2014 | 2015 | 2016 | 2017 |
| WEATHERIZAT | | | | | | | | | | |
| ION WORKERS | | | | | | | | | | |
| Serious Shortage | 3 | 2 | 8 | 5 | 11 | 2 | 4 | 8 | 4 | 10 |
| Some Shortage | 17 | 23 | 27 | 32 | 37 | 15 | 26 | 31 | 38 | 41 |
| No Shortage | 80 | 75 | 66 | 64 | 52 | 83 | 70 | 61 | 58 | 49 |
| BUILDING | | | | | | | | | | |
| MAINTENANCE | | | | | | | | | | |
| MANAGER | | | | | | | | | | |
| Serious Shortage | 2 | 2 | 6 | 3 | 6 | 2 | 3 | 6 | 3 | 6 |
| Some Shortage | 13 | 15 | 22 | 22 | 35 | 10 | 19 | 24 | 27 | 37 |
| No Shortage | 84 | 83 | 72 | 75 | 59 | 88 | 78 | 70 | 70 | 57 |
| LANDSCAPING | | | | | | | | | | |
| WORKERS | | | | | | | | | | |
| Serious Shortage | na | na | na | na | 10 | na | na | na | na | 9 |
| Some Shortage | na | na | na | na | 35 | na | na | na | na | 38 |
| No Shortage | na | na | na | na | 55 | na | na | na | na | 53 |
| DRYWALL | | | | | | | | | | |
| INSTALLATION | | | | | | | | | | |
| WORKERS | | | | | | | | | | |
| Serious Shortage | na | na | na | na | 20 | na | na | na | na | 17 |
| Some Shortage | na | na | na | na | 53 | na | na | na | na | 53 |
| No Shortage | na | na | na | na | 28 | na | na | na | na | 30 |
| CONCRETE | | | | | | | | | | |
| WORKERS | | | | | | | | | | |
| Serious Shortage | na | na | na | na | 22 | na | na | na | na | 19 |
| Some Shortage | na | na | na | na | 50 | na | na | na | na | 52 |
| No Shortage | na | na | na | na | 27 | na | na | na | na | 29 |
| ACROSS | | | | | | | | | | |
| ORIGINAL 12 | | | | | | | | | | |
| TRADES ¹ | | | | | | | | | | |
| Serious Shortage | 4 | 10 | 15 | 17 | 22 | 4 | 12 | 16 | 17 | 20 |
| Some Shortage | 19 | 31 | 34 | 35 | 44 | 21 | 37 | 41 | 42 | 45 |
| No Shortage | 77 | 59 | 51 | 48 | 34 | 75 | 51 | 43 | 41 | 35 |

 $^{^{1}}$ Data for "Across Original 12 Trades" includes all trades with the exception of landscaping workers, drywall installation workers, and concrete workers.

Q5. Overall, how have total costs of labor (directly employed by your firm) for the same project changed over the past 12 months?



| | /D 4 1 | | Region | | |
|---------------------------|--------|-----------|---------|-------|------|
| | Total | Northeast | Midwest | South | West |
| Declined | 1 | 4 | 2 | 1 | |
| Stayed about the same | 15 | 37 | 6 | 19 | 9 |
| Increased by less than 2% | 13 | 11 | 14 | 11 | 14 |
| Increased 2% to 3.99% | 24 | 4 | 27 | 27 | 26 |
| Increased 4% to 5.99% | 17 | 22 | 14 | 16 | 17 |
| Increased 6% to 9.99% | 15 | 11 | 22 | 12 | 14 |
| Increased 10% to 14.99% | 12 | 11 | 13 | 11 | 14 |
| Increased 15% or more | 3 | | 2 | 2 | 7 |
| Average* | 4.8% | 3.6% | 5.2% | 4.4% | NA |
| Responses | 239 | 27 | 63 | 91 | 58 |

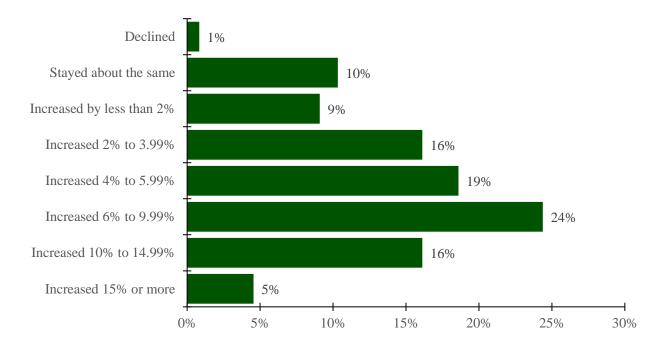
^{*} Average is calculated assuming the midpoint of the ranges, with the values bounded at the 2^{nd} and 98^{th} percentile of the distribution to eliminate the open-ended ranges (a technique usually called "Winsorising")

Overall, how have total costs of labor (directly employed by your firm) for the same project changed over the past 12 months? - HISTORY

| | 3 rd Qtr 2015 | 3 rd Qtr 2016 | 3 rd Qtr 2017 |
|---------------------------|-----------------------------|-----------------------------|-----------------------------|
| Declined | 1 | 1 | 1 |
| Stayed about the same | 28 | 23 | 15 |
| Increased by less than 2% | 8 | 12 | 13 |
| Increased 2% to 3.99% | 21 | 21 | 24 |
| Increased 4% to 5.99% | 19 | 19 | 17 |
| Increased 6% to 9.99% | 10 | 13 | 15 |
| Increased 10% to 14.99% | 9 | 7 | 12 |
| Increased 15% or more | 3 | 4 | 3 |
| Average* | 4.0% | 4.1% | 4.8% |
| Responses | 295 | 257 | 239 |

Q6. How have total costs of subcontractors for the same house changed over the past 12 months?

(Percent of Respondents)



| | Total | | Region | | | | | | |
|---------------------------|---|-----------|---------|-------|-------|--|--|--|--|
| | 1 10 9 16 19 24 16 5 | Northeast | Midwest | South | West | | | | |
| Declined | 1 | | | 2 | | | | | |
| Stayed about the same | 10 | 32 | 6 | 8 | 9 | | | | |
| Increased by less than 2% | 9 | 7 | 8 | 11 | 9 | | | | |
| Increased 2% to 3.99% | 16 | 7 | 19 | 15 | 19 | | | | |
| Increased 4% to 5.99% | 19 | 14 | 17 | 22 | 17 | | | | |
| Increased 6% to 9.99% | 24 | 25 | 28 | 24 | 21 | | | | |
| Increased 10% to 14.99% | 16 | 11 | 17 | 16 | 17 | | | | |
| Increased 15% or more | 5 | 4 | 5 | 2 | 9 | | | | |
| Average* | 6.0% | 4.7% | 6.5% | 5.9% | 6.5%* | | | | |
| Responses | 242 | 28 | 64 | 92 | 58 | | | | |

^{*} Average is calculated assuming the midpoint of the ranges, with the values bounded at the 96^{rd} and 4^{th} percentile of the distribution to eliminate the open-ended ranges (a technique usually called "Winsorising").

How have total costs of subcontractors for the same house changed over the past 12 months?

(Percent of Respondents) -HISTORY

| | 3 rd Qtr 2015 | 3 rd Qtr 2016 | 3 rd Qtr 2017 |
|---------------------------|-----------------------------|-----------------------------|-----------------------------|
| Declined | | | 1 |
| Stayed about the same | 16 | 13 | 10 |
| Increased by less than 2% | 10 | 13 | 9 |
| Increased 2% to 3.99% | 19 | 22 | 16 |
| Increased 4% to 5.99% | 21 | 16 | 19 |
| Increased 6% to 9.99% | 13 | 15 | 24 |
| Increased 10% to 14.99% | 14 | 13 | 16 |
| Increased 15% or more | 6 | 7 | 5 |
| Average* | 5.4% | 5.3% | 6.0% |
| Responses | 299 | 263 | 242 |

Q7. Please indicate if labor shortages over the past 12 months have had any of the following effects on your business.



| | Total | | Region | ıs | |
|--|-------|-----------|---------|-------|------|
| | Total | Northeast | Midwest | South | West |
| Caused you to pay higher wages/subcontractor bids | 76 | 54 | 79 | 81 | 76 |
| Caused you to raise prices | 71 | 46 | 68 | 80 | 72 |
| Created difficulty in completing projects on time | 68 | 67 | 77 | 64 | 64 |
| Caused you to turn down some projects | 51 | 46 | 53 | 48 | 55 |
| Slowed the rate you accept incoming orders | 45 | 33 | 42 | 44 | 53 |
| Made some projects unprofitable | 40 | 50 | 42 | 40 | 34 |
| Caused you to seek labor/subcontractors from wider | 38 | 21 | 44 | 40 | 34 |
| geography | | | | | |
| Lost/cancelled sales | 35 | 21 | 45 | 36 | 28 |
| Other | 3 | 8 | 2 | 1 | 5 |
| | | | | | |
| Responses | 233 | 24 | 62 | 89 | 58 |

Please indicate if labor shortages over the past 12 months have had any of the following effects on your business. – (HISTORY)

| | 3 rd Qtr 2015 | 3 rd Qtr 2016 | 3 rd Qtr 2017 |
|--|-----------------------------|-----------------------------|-----------------------------|
| Caused you to pay higher wages/subcontractor bids | 66 | 70 | 76 |
| Caused you to raise prices | 61 | 61 | 71 |
| Created difficulty in completing projects on time | 65 | 70 | 68 |
| Caused you to turn down some projects | 46 | 44 | 51 |
| Slowed the rate you accept incoming orders | 39 | 39 | 45 |
| Made some projects unprofitable | 32 | 36 | 40 |
| Caused you to seek labor/subcontractors from wider geography | 38 | 42 | 38 |
| Lost/cancelled sales | 27 | 25 | 35 |
| Other | 4 | 2 | 3 |
| Responses | 289 | 243 | 233 |

Remodeling Market Index

Third Quarter 2017 – Special Questions

Q4. How would you rate the availability of the following trades in your area?

| Two of lobor | <u>Labor</u> Availability Directly employed by your firm | | | <u>Subcontractors</u> Availability | | | | |
|---|---|------------------|-------------------|---------------------------------------|------------------|----------------|--|--|
| Type of labor | Serious Shortage | Some shortage | No shortage | Serious Shortage | Some shortage | No shortage | | |
| Carpenters-rough | | | | | | | | |
| Carpenters-finished | | | | | | | | |
| Electricians | | | | | | | | |
| Excavators | | | | | | | | |
| Framing crews | | | | | | | | |
| Roofers | | | | | | | | |
| Plumbers | | | | | | | | |
| Bricklayers/Masons | | | | | | | | |
| Painters | | | | | | | | |
| Landscaping workers | | | | | | | | |
| Drywall Installation workers | | | | | | | | |
| Concrete workers | | | | | | | | |
| Weatherization workers | | | | | | | | |
| HVAC | | | | | | | | |
| Building Maintenance Manager | | | | | | | | |
| Q5. Overall, how have total costs of labor (directly employed by your firm) for the same project changed over the past 12 months? Declined Increased 4% to 5.99% Stayed about the same Increased 6% to 9.99% Increased by less than 2% Increased 10% to 14.99% | | | | | | | | |
| ☐ Increased 2% | · | | | | | | | |
| Q6. How have total costs of <u>subcontractors</u> for the same project changed over the past 12 months? | | | | | | | | |
| □ Declined | | | | eased 4% to 5.9 | - | | | |
| | | | eased 6% to 9.99% | | | | | |
| • | | | | eased 10% to 14.99% | | | | |
| | 1 2% to 3.99% | | | | | | | |
| Q7. Please indicate if labor sho | rtages over 1 | the past 12 r | nonths have l | nad any of th | e following effe | cts on your | | |
| business. (Check all that apply). | von to mov hio | han wa aaa /awh | aantuaatau hida | | | | | |
| □ Caused you to pay higher wages/subcontractor bids □ Caused you to seek labor/subcontractors from wider geography | | | | | | | | |
| Caused you to raise prices | | | | | | | | |
| ☐ Created difficulty in completing projects on time | | | | | | | | |
| Slowed the rate you accept incoming orders | | | | | | | | |
| | | | | | | | | |
| ☐ Made some projects unprofitable☐ Caused you to turn down some projects | | | | | | | | |
| | Please specify | | ~ | | | | | |